

**Gender differences in reading and listening comprehension of South African
primary school English language learners**

by

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Declaration

I, Tshepiso Promise Thibedi, 17080241, declare that the dissertation/thesis, which I hereby submit for the degree Magister Education at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.



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The author, whose name appears on the title page of this thesis, has obtained, for the research described in this work, the applicable research ethics approval. The author declares that she has observed the ethical standards required in terms of the University of Pretoria's code of ethics for researchers and the policy guidelines for responsible research.

Dedication

This study is dedicated to my two little sisters, Tshiamo and Tshegofasto Thibedi as Sesotho home language speakers; one sibling is currently in high school and has English as a second language, and the youngest one is currently in primary school and has English as a home language. To my supervisor and co-supervisor, writing this brings back a lot of bittersweet moments I have had in this journey, and I am emotional as words fail me simply because I cannot express how grateful and thankful I am for your support and believing in me. This study is a token of my appreciation to you.

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With earnest gratitude

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Abstract

This study examines the relationship between reading comprehension (RC) and listening comprehension (LC) of Grade 4 Sesotho home language (HL) learners in English while examining gender differences in these two comprehension skills. English serves as the Language of Learning and Teaching (LoLT) in many South African schools, leading to a transition for learners to study all subjects in English from Grade 4. The Simple View of Reading model, which posits that language is essential for the success of RC and LC, was employed as the theoretical framework. This study is based on the post-positivism paradigm, uses a cross-sectional quantitative approach, and is deductive in nature. The study sample comprised 84 male ($n = 38$) and female ($n = 46$) Grade 4 Sesotho HL learners in two schools in the Gauteng province. Data was collected using the Annual National Assessments chosen for their validity and reliability in assessing learners. The Spearman correlation and the Mann-Whitney tests were utilised, and they indicated a significant positive correlation between RC and LC. At the same time, gender differences in RC and LC were found to be statistically insignificant. The research has revealed a gap in existing literature as there are no prior studies on the relationship between RC and LC of Grade 4 South African Sesotho HL learners and the role that gender plays in this relationship. Future recommendations include conducting longitudinal studies on the RC and LC development of Grade 4 Sesotho HL learners to establish causation, which will help to understand the underlying factors that impact comprehension skills over time.

Keywords:

Reading Comprehension, Listening Comprehension, Gender Differences, Decoding, Phonological Awareness, Reading Fluency.

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TO WHOM IT MAY CONCERN

The dissertation titled "Gender differences in reading and listening comprehension of South African primary school English language learners" by Tshepiso Promise Thibedi has been proofread and edited for language by me.

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Kind regards



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List of Abbreviations

BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language Proficiency
CAPS	Curriculum and Assessment Policy Statement
HL	Home Language
ISAL	Indigenous South African Languages
LoLT	Language of Learning and Teaching
LC	Listening Comprehension
PIRLS	Progress in International Reading Literacy Study
PRQ	Primary Research Question
RC	Reading Comprehension
SL	Second Language
SPSS	Statistical Package for the Social Sciences
SRQ	Secondary Research Question
SVR	Simple View of Reading
ANA	Annual National Assessment
ANC	African National Congress
DBE	Department of Basic Education
ESL	English Second Language
FP	Foundation Phase
IK	Indigenous Knowledge
IP	Intermediate Phase
LiEP	Language in Education Policy
MW	Mann-Whitney
NAEP	National Assessment of Educational Progress

NCS	National Curriculum Statement
OBE	Outcome Based Education
PanSALB	Pan South African Language Board
PoPI	Protection of Personal Information
RDM	Research Data Management
<i>SD</i>	Standard Deviation
<i>SES</i>	Socio-Economic Status
SL	Second Language
T&L	Teaching and Learning

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Chapter 1: Introduction

1.1. Introduction and Background

South Africa has 12 official languages (Posel et al., 2022), and most children are exposed to more than one language during their early development years. Typically, their first spoken language is their home language (HL), which they acquire within their family. In addition to the HL, South African children are often exposed to other official South African languages at their preschool and within the broader community (C. Venter, 2019). Language is connected to most of what learners learn in their first years of life (Golinkoff et al., 2019). Many South African learners attend schools where the Language of Learning and Teaching (LoLT) is not their HL and are forced to learn in English from Grade 4 onwards, which might be their second or third language (Dolean et al., 2019). The twin challenges of academic language and language of instruction remain one of the most important barriers to success (van Rooy & Coetzee-van Rooy, 2015). The authors contend that some learners are disadvantaged as they must learn in their second or third language rather than their home language. Some learners find it hard to learn to read in a second language (SL) simply because they are not proficient in the language, which makes it harder for them to utilise the academic material in the first place (van Rooy & Coetzee-van Rooy, 2015). Moreover, in South Africa, most schools offer instruction in the Indigenous South African Languages (ISAL) of the school in the Foundation Phase (FP)¹ and the language of instruction switches to English in most schools at Grade 4, which is the beginning of the Intermediate Phase (IP)² (Taylor & von Fintel, 2016). Therefore, the learners' reading achievements worsen as they cannot read with comprehension (Manten et al., 2020). Consequently, many English Second Language (ESL) learners who are also known as ISAL speakers come from low socio-economic status (SES) backgrounds and tend to drop out of school because of their poor academic results, which in turn exacerbates the increase in the unemployment rate, poverty, and illiteracy (Boakye, 2015; Demie, 2018; Vadivel et al., 2023). According to Mokoena and van Breda (2021), in 2017, up to 60% of South African learners dropped out of secondary school due to various reasons while learners who finish secondary school and go to tertiary have a better chance of

¹ Grades 1-3

² Grades 4-6

finding employment than those who drop out in secondary school. Learners with low reading literacy levels tend to drop out of secondary school (Demie, 2018).

South African Grade 4 learners' reading literacy levels are very low (Department of Basic Education [DBE], 2023a), depicting that 81% of learners in Grade 4 cannot read with understanding and having a HL different from the LoLT may contribute to challenges in reading comprehension (RC) and listening comprehension (LC) of learners (C Venter, 2019). The Curriculum and Assessment Policy Statement (CAPS)³ states that learners in the IP should be highly proficient in English and learn all subjects in it, although for most of them, English is not their HL, and they are not yet proficient in it (Thobejane, 2018). Consequently, the learners' language proficiency, which is important for learning to listen and read with comprehension in any language, becomes low, affecting their decoding, which is important for achieving RC and LC skills (Nation, 2019). Decoding can be affected by reading and listening comprehension when learners struggle to link speech sounds and printed words correctly and when they cannot understand text or the words spoken on their own (Pretorius & Spaul, 2022). The current study focused on learners taught in Sesotho HL in the FP, who then had to switch to English SL in Grade 4, and the role gender played in these comprehension skills. These learners are also referred to as ISAL speakers who were previously disadvantaged groups (Boayke, 2015).

Exploring the differences in RC and LC between male (boys) and female (girls) learners is important for understanding potential disparities in academic achievement between boys and girls. Previous research has shown that gender differences in education may manifest in different levels of education (Zuze & Beku, 2019). According to Q. Wang (2015), girls have a developmental advantage in reading compared to boys; thus, girls tend to produce higher RC and LC scores than boys in English. In supporting this view, several studies found that girls generally outperform boys in RC because they tend to be more intrinsically motivated to read and to read for enjoyment (see McGeown et al., 2016; Reilly et al., 2019; Şuteu et al., 2021). Gender differences in RC are a challenge in the educational system (Şuteu et al., 2021). Furthermore, the educational system faces challenges related to gender disparities in RC, as evidenced by the overrepresentation of boys identified as

³ CAPS is a guideline used in South African schools based on what learners should be taught (E. du Plessis & Marais, 2015).

struggling readers compared to girls (Mari et al., 2021). However, the literature on gender differences in comprehension skills is not unanimous. While some studies indicate that girls have an edge in reading comprehension (see Reynolds et al., 2015; Salehi et al., 2014), other research reports show no significant differences between boys and girls (see Cekiso, 2016; Mari et al., 2021). Hyde (2014) noted that many studies have not provided a good explanation in regards to the differences in reading comprehension between boys and girls. Moreover, while effective English language learning depends on a solid foundation, including extensive memory activities and high-quality learning materials (Q. Wang, 2015), it remains unclear how these factors might interact with or influence gender differences in comprehension skills. Taken together, the current evidence suggests that although some research tends to favour girls in reading comprehension, the overall picture of gender differences in RC and LC is ambiguous and warrants further investigation.

Reading comprehension is defined as an act of thinking and establishing meanings before, during and after reading (Bulut, 2017). It is an important cognitive skill for children to engage and contribute to global society (Gao et al., 2019). Reading comprehension is not only important for comprehending text, but it is also essential for social activities that people engage in daily, such as sending emails, texting, and web applications (Oakhill et al., 2019). For learners to be able to read with understanding, they need to be familiar with the words written in a text or spoken out loud. This skill is known as decoding, and it has been linked with successful reading comprehension (Nation, 2019).

It is important to note that RC cannot occur without decoding, defined as the ability to recognise words written in text and read them swiftly, correctly, and silently (Duke & Cartwright, 2021). Decoding assists learners in extracting known words and singling out unknown words (Vaz, 2024). In the current study, decoding is understood as word reading proficiency/fluency, understanding the meaning of the text and understanding oral language (linguistic comprehension) (Kim & Piper, 2019). It is a skill that can be taught as it includes letters, sounds, and words that, once mastered, will lead to fast and accurate word recognition (Farrell et al., 2019). In other words, for learners to be able to read with comprehension, they should master the skill of decoding. The success of RC depends on successful decoding (Lonigan et al., 2018). Urquhart and Weir (2014) define reading as decoding, being able to change

written words into spoken words. As such, reading consists of decoding written symbols to sounds, which is how LC is introduced, as the readers listen to themselves decoding. Reading, decoding and listening skills work together, and listening may be an important predictor of reading development (He et al., 2022).

Listening comprehension is an action of establishing the meaning of spoken words and processing auditory information to make sense of the message (Anderssen et al., 2019). The process entails cognitive and linguistic components, which include knowledge of vocabulary, morphology, phonology and syntax (Gottardo et al., 2018). Of the three above-mentioned linguistic components, knowledge of vocabulary is highly favoured by studies because of its strong connection to LC and is comparatively simpler to measure (Gottardo et al., 2018; Hwaider, 2017; Susoy & Tanyer, 2019). As a result, vocabulary knowledge was integrated into the current study to measure the LC skills of Sesotho learners. Listening comprehension is the capability to comprehend written text being read audibly, and learners who struggle with RC have shown a deficiency in LC as it influences their RC skills (Hogan et al., 2014). Listening skill is a prerequisite for learning and understanding any language (Gilakjani & Sabouri, 2016); however, it is not the most valued skill and has been disregarded in SL learning, research, and teaching globally (Ahmadi, 2016). In general practice, linguistic comprehension has been cited as LC (Hogan et al., 2014), and linguistic comprehension can also be explained as understanding spoken words (Talwar et al., 2021). In addition, linguistic comprehension aims to speed up the development of learners' vocabulary (Rodge et al., 2019).

Vocabulary is an imperative feature of LC (Hwaider, 2017). He et al. (2022) showed that vocabulary knowledge is important as it strongly affects the RC of SL learners, and insufficient vocabulary in the SL will hamper the learners' reading skills. Therefore, it is important to use vocabulary to measure learners' LC when they are tested. A well-developed vocabulary, listening and reading skills are important for RC, as poor language skills may appear as RC problems in SL learners (Rodge et al., 2019). Vocabulary in association with LC plays a role in the development of early reading achievement and RC (Sparapani et al., 2018; Susoy & Tanyer, 2019). The link between vocabulary knowledge and RC skills of ESL learners (Masrai, 2019), specifically ISAL learners, which within the current context are Sesotho learners, has not been extensively researched.

A prerequisite and foundation to reading skills and comprehension is understanding the vocabulary of any written text (Susoy & Tanyer, 2019). Therefore, vocabulary knowledge can predict the reading achievements of learners (van Staden, 2016). Vocabulary is a fundamental feature of language that assists in obtaining adequate comprehension in reading and listening (Ha, 2021). It is also defined as the total number of words in a language required to communicate effectively (Alqahtani, 2015). Vocabulary is a basis for communication (Dakhi & Fitria, 2019), and ESL learners must master it to allow successful communication (Alqahtani, 2015). Vocabulary can be divided into two important features; it is (i) *productive*, which refers to the words that learners often use in writing or speaking and (ii) *receptive*, which refers to the words that can be received while reading and listening (Alkhofi, 2015). A *receptive* vocabulary is highly connected to listening and reading (Dakhi & Fitria, 2019); therefore, SL learners need support to develop their receptive vocabulary because they cannot control the type of words/vocabulary they will receive when learning or writing a test (Alkhofi, 2015). Vocabulary is an important aspect of LC and RC (Hwaider, 2017) and a strong predictor of children's reading development (Bowyer-Crane et al., 2017).

According to Wolf et al. (2019), RC and LC are seen as identical both in comprehension theory and educational practice and their specific varieties are not taken into account, causing LC to get much less attention, resulting in LC problems, for example, in ESL learners. Listening comprehension and RC are highly related, specifically in opaque languages, where the influence of LC on RC gets stronger over time. In contrast, the anticipated strength of word reading fluency (decoding) on RC decreases. On the other hand, for transparent languages, LC is a stronger predictor of RC than decoding because decoding is learnt at an early age (Wolf et al., 2019). Lervåg et al. (2018) contribute to the understanding of the development by highlighting that RC relies heavily on word decoding and LC. However, in older children with proficient decoding skills, RC will be more influenced by LC and not decoding. This phenomenon means that decoding is stronger in children in the FP, and as age increases, it gets weaker, and LC gets stronger. Moreover, when the decoding skills of learners are stronger, LC will have more control over the RC of learners (Lervåg et al., 2018).

The relationship between RC and LC is based on the format of the comprehension tests, for example, whether it is a cloze test⁴ or a question-and-answer task or whether a test is timed or not, including long or short paragraphs (Wolf et al., 2019). Therefore, it is important to use tests with a similar format when testing the relationship between RC and LC. Studies that use the same format have found the relationship between the two skills to be higher. Listening comprehension is important because it can impact learners' RC (He et al., 2022) and learners with poor RC skills tend to have poor LC skills (Hogan et al., 2014). The ability to read and listen with comprehension nurtures academic success and well-functioning individuals who can keep up with modern challenges in society, such as the ability to read and fill out online applications (Gao et al., 2019).

The current study investigated the relationship between RC and LC skills of Grade 4 Sesotho HL learners in ESL and the role gender plays. The investigation aimed to understand the connection, if any, between the two skills and whether gender differences existed. In the current literature, there is hardly any focus on the relationship between the RC and LC skills of Sesotho HL learners in association with SL proficiency.

1.2. Problem Statement

The root of the problem is that in most South African schools, the LoLT is English, and most learners who attend schools do not have English as their HL (Dolean et al., 2019; C. Venter, 2019). English and Sesotho are distinct languages therefore, may contribute to the challenges Sesotho learners face when developing reading and listening comprehension skills in English, especially when English becomes the LoLT in Grade 4. Consequently, if learners do not master the LoLT in their first years of schooling, they will likely experience significant academic difficulties. Younger et al. (2019) emphasise that “language development is essential to social, cognitive, and academic growth” (p. 1), underscoring the importance of early proficiency in the language of instruction. Without strong English language skills, learners may struggle academically, leading to increased dropout rates and diminished self-esteem (Vadivel et al., 2023).

⁴ Cloze test is a test of a learner's ability in a language where the learner needs to complete a task by filling in the blanks in a passage of text.

Most learners use their HL in social interactions, for example, in the playground, face-to-face interactions, and in the classroom (Thobejane, 2018). The learners' Basic Interpersonal Communication Skills (BICS) (see Cummins, 2013) are in their HL and not English, as encouraged by CAPS, but speaking in English may help develop their English skills. Both BICS and Cognitive Academic Language Proficiency (CALP) are important for developing learners' reading and listening comprehension skills. Without sufficient proficiency in English, learners may struggle to acquire the advanced language skills encompassed by CALP, ultimately hindering their academic success (Kosho, 2024; Öngören & Volodina, 2024). Moreover, strong proficiency in a learner's home language is essential for effective second language acquisition. Mastery of the HL provides a solid foundation for transferring cognitive and literacy skills to a new language, thereby facilitating more successful language learning (Dolean et al., 2019).

Challenges tend to arise when teachers and parents accept that their children are proficient in English mainly because they can show BICS in ESL (Cummins, 2013), ignoring that ESL learners need more assistance in obtaining CALP in English (Manten et al., 2020). Consequently, parents and teachers may not provide sufficient support needed by learners and recommend programmes that could help them have a better chance at learning and improving their reading and listening comprehension skills in both English and HL (Racca & Lasaten, 2016). In other words, some basic content knowledge that is a prerequisite to developing learners' CALP, may be overlooked or ignored simply because learners show BICS. Learners' CALP improves when they are listening to their teachers' presentations, which is why it is important that teachers have sufficient learning material and deliver the instructions properly in the classroom to help develop learners' CALP and improve their RC and LC (Kosho, 2024). South Africa struggles with equal distribution of resources in schools, which hampers children's academic success (Mfeka-Nkabinde et al., 2023) and sufficient distribution of resources in schools contributes to academic success.

In the FP, Grades 1 to 3, where instruction is in ISAL, there have been cases of insufficient resources such as time to teach academic content, material, and teacher skills to make teaching and learning (T&L) meaningful and effective, resulting in learners not being adequately and effectively trained to develop their vocabulary to be literate in ESL which in turn hampers their RC and LC (Howie et al., 2017). Kosho

(2024) argues that teachers may not be using the instructional materials properly to improve the RC and LC of learners in schools. Most teachers are not adequately trained to deliver CAPS content in the classroom because, in most ISAL classes, teachers continue to use the traditional method of teaching, which includes teaching through repetition rather than an approach that is more learner-centred as required by CAPS to address the imbalances of past curriculums (Pretorius & Spaul, 2022). In other words, teachers' struggles in content knowledge delivery and insufficient learning materials in schools are detrimental to learners' developing their RC and LC skills to succeed academically (Sibanda et al., 2024). Moreover, worldwide, it is generally accepted that to achieve academically, one should be skillful in reading, listening, comprehending, writing and speaking in English (Anderssen et al., 2019).

In South Africa, ESL learners lack a well-balanced top-down and bottom-up ability for processing listening, which means they may lack listening skills, which, in turn, challenges their LC skills (Anderssen et al., 2019; C. Venter, 2019). Bottom-up processing entails understanding spoken words and making sense of them, whereas top-down processing uses prior knowledge to understand the spoken words or vocabulary (Anderssen et al., 2019). However, the top-down approach in South Africa is generally used as learners are expected to use prior knowledge to learn (C. Venter, 2019). Most Sesotho learners in South Africa commence formal schooling without the necessary skills to comprehend the LoLT and are expected to use prior knowledge to understand the new content (Sibanda, 2018; C. Venter, 2019).

1.3. Rationale

Language proficiency is fundamental to effective reading and listening comprehension; without it, both skills will likely falter (Nation, 2019). Once decoding is mastered, LC becomes especially critical to reading development (Edele & Stanat, 2016). However, ESL learners often struggle with LC if they lack sufficient linguistic resources, such as vocabulary and relevant experiential knowledge (Wang & Treffers-Daller, 2017). Therefore, developing BICS and CALP is essential for academic success (Sebole et al., 2019).

In South Africa, this issue is particularly pressing. The Progress in International Reading Literacy Study (PIRLS) 2021 revealed that 81% of Grade 4 learners cannot read with understanding (DBE, 2023b). A possible reason for the poor performance

could be inadequate vocabulary (Brook et al., 2021). Although research has demonstrated a positive correlation between RC and LC in various languages (Atas, 2018; Hogan et al., 2014; Kim, 2016), there is a notable gap in studies focusing on Sesotho language learners. Prior investigations in African languages have predominantly examined Northern Sotho, Xitsonga, Nguni languages, and Setswana (Ardington et al., 2021; Sebole et al., 2019; Spaul et al., 2020) leaving Sesotho under-researched.

This study aims to address these gaps by examining the relationship between RC and LC among Grade 4 Sesotho HL learners, with particular attention to gender differences. By exploring the interplay between these comprehension skills in a context that has received little attention in the literature, the research seeks to inform instructional practices and policy decisions. The findings are expected to encourage educators, parents, and policymakers to fully integrate listening comprehension into literacy instruction and emphasise vocabulary development in both the home language and English during the Foundation Phase.

1.4. Aim and Objectives

The current study aimed to investigate whether there is a relationship between reading and listening comprehension skills of Grade 4 Sesotho HL learners in ESL and the role gender plays in RC and LC. The objectives are:

- To determine the correlation between reading and listening comprehension for Grade 4 Sesotho HL learners. The researcher tested Grade 4 Sesotho HL learners' reading and listening comprehension in English. The reading comprehension test was retrieved from the Annual National Assessment (ANA) 2013, and the listening comprehension tests were obtained from the ANA 2012.
- To determine reading and listening comprehension performance patterns of Grade 4 Sesotho boys and girls HL learners. The researcher was only interested in unpacking the relationship between reading and listening comprehension of Grade 4 Sesotho HL learners. As such, the research was expanded into looking at gender differences in these two comprehension skills because of the importance of gender differences in educational research.

1.5. Research Questions

The current study will investigate the following primary research question (PRQ):

What is the relationship between reading comprehension and listening comprehension skills of Grade 4 Sesotho HL learners in English, and how are these skills distributed across boys and girls?

To address the PRQ, two secondary research questions (SRQs) were developed:

- SRQ1: What is the correlation between RC and LC for Grade 4 Sesotho HL learners in English?
- SRQ2: What are the RC and LC performance patterns of Grade 4 Sesotho HL boys and girls in English?

1.6. Research Approach and Design

The current study utilised a quantitative research method. The advantage of a quantitative method is that it is suitable when there is a possibility of collecting quantifiable measures of variables and inferences from samples of the population (Queirós et al., 2017). Data is gathered objectively and systematically, and it is focused on acquiring precise and reliable measurements that allow a statistical analysis (Queirós et al., 2017). The disadvantages are that it fails to discover fundamental meanings and explanations in depth, and it ignores the common meanings of social phenomena (Rahman, 2020). A deductive approach was incorporated in the current study because the researcher utilised the existing theory to raise questions and collect data to investigate the relationship between Sesotho HL learners' RC and LC and the role gender plays (Melnikovas, 2018). The correlation research design was incorporated into the current study, and it was suitable because its nature is based on describing the relationship between variables (Baikiliza, 2019). The comparative research design was also employed in order to investigate gender differences in RC and LC of the Grade 4 Sesotho HL learners with the intention of comparing their results (Miri, 2019). The current study is a cross-sectional study because the researcher gathered information at a single point in time. Therefore, causation cannot be established (X. Wang & Cheng, 2020).

1.7. Research Philosophy

The current study relied on the post-positivist paradigm. The post-positivist paradigm is adjustable, which allows the researcher to be instinctive and investigate a problem

in many ways, and it supports human-centred research (Maksimovic & Evtimov, 2023). The post-positivist paradigm was applied to the current study because it inspected and explained events that occurred and the knowledge that could be obtained from them (Roux, 2015). The current study investigated the relationship between the RC and LC skills of Sesotho HL learners with English, the SL, as LoLT and the differences in RC and LC between boys and girls. Also, it was important for the researcher to be objective and present the truth in their study and to gain explanatory connections that lead to predictions in the end, in most cases relying on a quantitative approach (Y. S. Park et al., 2020) through the utilisation of assessments.

1.8. Research Site and Sampling

The current study used a purposive sampling method. The advantage of purposive sampling is that researchers can justify selections based on analytical, logical or theoretical grounds (Berndt, 2020). The researcher was able to select respondents that were beneficial to the study, cost efficient, and employed various strategies (Gill, 2020). However, there were disadvantages as the researcher could be biased, especially if rules or criteria for selection were not well explained (Berndt, 2020). Moreover, it could have been difficult to find information-rich respondents (Gill, 2020). Two schools in the Gauteng province were involved in the study. In each school, three classes were picked, and there were only 14 learners per class. The criteria included 84 Sesotho HL learners with English as an SL.

1.9. Data Collection

In order to determine the relationship between RC and LC of Grade 4 Sesotho HL learners and the role gender plays, the Annual National Assessment (ANA) tests were used as the data collection tools. The ANA tests were developed by a panel of subject experts who can be subject advisers or teachers who are chosen as test developers (DBE, 2012). The panel consists of two test developers, editors and moderators who develop the test in English and then migrate it to ten other languages for the FP as well as Afrikaans for intermediate and senior phases (DBE, 2012). Thereafter, the tests are edited in each language, and these editors meet to consider the changes as a standardisation measure and to ensure that the test frameworks are grade-appropriate (DBE, 2012).

The RC and LC skills were tested using comprehension tests taken from the ANA exemplar from the DBE. The ANA is a state-mandated tool to enhance the quality of instruction in South Africa and to measure learners' proficiency in chosen subjects such as language, mathematics and science for learners in Grades 1 to 6 and Grade 9 (Maphalala & Dhlamini, 2017). The government introduced it to solve the observed educational problems (Maphalala & Dhlamini, 2017). The ANA exemplar can be accessed on the DBE 2013 website (DBE, 2013). The DBE has valid and reliable assessments since they are set within the standards of the curriculum, and some questions and exemplar texts are intentionally linked to grade-relevant workbooks (DBE, 2013). One comprehension test was used for RC (see Appendix A for the test and Appendix B for the memorandum).

The LC assessment had two tests (Test 1 included a short passage and Test 2 a short poem) (DBE, 2013), which were also derived from the ANA exemplar. The two LC tests were read aloud twice to learners by the test administrator to allow them to grasp the information they could have missed the first time. The LC test consisted of two stories incorporated with multiple-choice questions, true or false questions, add or fill in the missing word, complete the sentence, and give a reason for your answer (see Appendix C and Appendix D for Test 1 and Test 2, respectively, and Appendix E for the memoranda).

1.10. Data Analysis

The Statistical Package for the Social Sciences (SPSS) version 28 was utilised to compute descriptive and inferential statistics. Continuous variables were tested for normality using the Shapiro-Wilk test (González-Estrada et al., 2022). Parametric Pearson's correlations are applicable if the data is normally distributed; however, if the data is non-normal, nonparametric Spearman correlations are applicable. Therefore, it is necessary to determine whether relationships are statistically significant so that the right correlation test can be chosen. In the current study, the data differed significantly from normality, and, thus, the nonparametric Spearman correlation tests were used. The guidelines by Akoglu (2018) were used to interpret the strength of the correlation, as this article provided guidelines on how to interpret correlations for different disciplines; in contrast, most literature just gave an overall recommendation for all disciplines.

1.11. Advantages of the Study

The current study focused on a single language, namely Sesotho; it is one of the 12 official languages in South Africa. The focus made it easier to narrow down and point out individual constraints in reading literacy in a particular group to open solutions and recommendations to mitigate the reading crisis in South Africa (see DBE, 2023b). The study hoped that it might enlighten educators to understand that LC is also just as important as RC. Furthermore, the study hoped to highlight the importance of developing a learner's vocabulary from early childhood and how RC, LC, and vocabulary are interlinked and necessary for academic success.

1.12. Limitations

The current study did not conduct a pilot study for data collection. The researcher chose reliable and valid assessments to test the RC and LC of Grade 4 Sesotho HL learners. This study specifically focused only on Sesotho HL learners, allowing for more attention and accurate generalisation within this group rather than across heterogeneous groups. The data did not encompass other language groups, so it is uncertain whether they encounter the same constraints as the Sesotho group; therefore, it may be unlikely that the same recommendations would apply to other ISAL groups. Also, the current study did not examine the learners' auditory skills or explore additional investigations on other reading challenges, such as dyslexia, as a constraint in a learner's RC and LC. Lastly, no casual relationships were hypothesised or explored, as the study was cross-sectional.

1.13. Quality Assurance Criteria

To ensure the reliability and validity of the ANA tests, they were piloted and pre-tested to ensure the fairness of the test items (DBE, 2012). A sample of learners was tested across the nine provinces, and the teachers were selected as test administrators and monitored by DBE officials (DBE, 2012). According to Maphalala and Dhlamini (2017), the reliability and validity of standardised tests (ANA) refer to how assessments are designed and administered to learners. At the developmental stage, standardisation should follow uniform assessment procedures so that equipment, observation, administration, material and scoring rules are the same for all test takers.

Standardisation aids in achieving objective assessment results to improve meaningfulness and trustworthiness when the results are used to measure the assessed qualities of learners (Maphalala & Dhlamini, 2017). Lastly, standardisation seeks to control external factors to improve the reliability of the instrument and the validity of the following test results (Maphalala & Dhlamini, 2017). Appropriate and reliable tools to test the variables play an essential role in gathering the information needed to determine if there is a possible relationship between the two variables. However, this would not have been possible and effective without the accurate sample from which to obtain data. An accurate sample was needed in order to obtain reliable and valid results. It is unreasonable to conduct a correlational study when there is little chance or thought that the variables investigated could be related (Asamoah, 2014).

1.14. Ethical Considerations

The researcher sought and obtained permission from the Ethics Committee of the Faculty of Education at the University of Pretoria to undertake the research (Ethical Clearance EDU088/23). Prior to contacting the principals of the two schools, the researcher also obtained clearance from the Gauteng Department of Education. After obtaining all the necessary permissions, the researcher contacted the principals of the participating schools to make the necessary arrangements regarding setting the date and time for doing this research in their schools. The consent forms were shown to the principals before they were provided to the teachers, who then distributed them to learners so that the parents could sign them to acknowledge and give permission to have their children participate in the current study. The participants were permitted to retreat from the research at any given time without incurring any penalties. There were no rewards or payments for learners participating in the current study. Lastly, arrangements were made so that the respondents' personal information would be kept confidential and protected. The data obtained would be safely stored at UP for ten years.

1.15. Structure of the Dissertation

Chapter 2 explores the essence and the nature of LoLT in the South African context to understand the policies that have been put in place in the educational system and how ESL learners respond to them. Discussing the history behind LoLT aids in understanding the background in the management of the schools and enhances the

understanding of how and why learners are currently taught. The chapter further touches on the orthographic differences between the English and Sesotho languages, showing the distinction of skills required in learning to read in these two languages, respectively. Moreover, the factors that contribute to the relationship between RC and LC are explored, as well as gender differences in RC and LC of Sesotho HL learners. The chapter starts as a broad discussion and then narrows down to the relationship between RC and LC of Sesotho HL learners and the differences in RC and LC between male and female learners.

Chapter 3 focuses on the methodology of the study, highlighting the quantitative approach, and the correlational and comparative design adopted to carry out the research. The post-positivist paradigm is examined as a basis on which this study was conducted and how a deductive approach was employed as conclusions were made based on the results. The chapter further discusses the assessments used to test the RC and LC of Grade 4 Sesotho HL learners and their validity and reliability for this study. The chapter further discusses the time horizon, which is cross-sectional because of its nature, as it does not determine cause and effect. Lastly, the ethical considerations followed in the commencement and completion of the study are discussed.

Chapter 4 discusses the results that are drawn from the study post-data collection. The explanation of the utilisation of the appropriate software for data analysis, as well as the statistical tests considered suitable for the study, are fully discussed in this chapter. As data was found to be normally distributed, the Shapiro-Wilk test was used to test for normality, the Mann-Whitney (MW) test for differences in RC and LC between boys and girls and the non-parametric Spearman correlation was used to test for correlation between RC and LC. Moreover, the results for the secondary research questions are addressed respectively.

Chapter 5 concludes the study with the discussions and the results of the current study, including methodological reflections, limitations, and recommendations. The chapter starts by providing a summary of the entire study, relying on the results found in addressing the research questions. A comprehensive summary is presented, and the importance of the study is discussed. This chapter also provides methodological reflections concluding on the role they played in the completion of

the study. The limitations of the study are presented in this chapter. The chapter explicitly explains why the focus was on one language group and the importance thereof. Moreover, recommendations based on the results of the study are highlighted. Recommendations for policy and practice are discussed, followed by future research recommendations that can contribute to the literature that explores the relationship between the RC and LC of Sesotho HL learners.

Chapter 2: Literature Review

2.1. Introduction

This chapter presents the study's theoretical framework in Section 2.2 and outlines factors that interlink with the RC and LC skills of ESL learners. Section 2.3 explores the historical context of language in South Africa, specifically following the events that occurred and constituted the introduction and application of LoLT in many schools in South Africa. Section 2.4 discusses educational policies during apartheid, while Language in Education Policy (LiEP) is introduced in Section 2.5, and the BICS and the CALP in South Africa are explored in Section 2.6. Many learners in South Africa are bilingual and have ESL; thus, Section 2.7 moves from a general discussion of language and the LoLT in South Africa and focuses on the introduction of orthography between Sesotho and English languages to explore the depth of these two orthographies as they may contribute to Grade 4 Sesotho HL learners' low RC and LC skill levels. Section 2.8 highlights reading literacy, and Section 2.9 explains the importance of comprehension in reading and listening in depth by looking at factors that contribute to and are necessary for the expansion of these two skills. Lastly, Section 2.10 concludes with the literature findings of the current study. Together, these sections provide a comprehensive understanding of the multifaceted influences on RC and LC among ESL learners in South Africa.

2.2. Theoretical Framework

Perfetti and Stafura (2014) note that no single theory of reading has achieved universal acceptance. Nonetheless, this study adopts the Simple View of Reading (SVR) model pioneered by Gough and Tunmer (1986), which posits that reading comprehension (R) is the product of decoding (D) and linguistic comprehension (C), expressed as $R = D \times C$. This multiplicative relationship implies that if either decoding or linguistic comprehension is absent, overall reading comprehension will be severely compromised (Joshi & Aaron, 2000; Foorman et al., 2018). The model further suggests that while decoding plays a crucial role in early reading, its direct correlation with reading comprehension diminishes as linguistic comprehension becomes more influential over time (Foorman et al., 2018; Lonigan et al., 2018). In other words, RC cannot occur without decoding, and linguistic comprehension (Kim & Piper, 2019; Talwar et al., 2021).

The SVR aims to show that these two skills are prominent for readers to read with understanding, and should either of them be lacking, it would be impossible for comprehension to occur (Lonigan et al., 2018). The model alludes to the fact that correlations between decoding and RC will decrease with development, whereas correlations between linguistic comprehension and RC will increase (Foorman et al., 2018). The SVR is the most referenced model for children in primary schools, and it is also used in research for children in high schools (Hansen, 2016; Lervåg et al., 2018). The SVR only acknowledges RC as a product of decoding and linguistic or LC, and the two-factor reading construct (i.e., decoding and linguistic comprehension) has transformed over the years into a three-factor reading construct (i.e., decoding, reading fluency and linguistic comprehension) (Kang & Shin, 2019). Despite the alterations made four years ago, the SVR model stands by decoding and linguistic comprehension as relatively independent domains that predict RC. Language and vocabulary are essential for RC (Hansen, 2016).

Although subsequent research has expanded the original two-factor framework to include reading fluency (thereby forming a three-factor model: decoding, reading fluency, and linguistic comprehension; Kang & Shin, 2019), the core premise that both decoding and linguistic comprehension are indispensable and relatively independent predictors of reading comprehension, remains central (Hansen, 2016). This study focuses on the two-factor model to explore the relationship between Grade 4 Sesotho home language learners' reading comprehension in English and their linguistic comprehension. While linguistic comprehension is a broader construct than listening comprehension, the two are highly correlated, and listening comprehension is frequently used as a proxy measure in research.

The SVR model is particularly applicable in ESL contexts. For instance, van Staden (2016) demonstrated its utility in guiding instructional strategies for Sesotho Grade 4 learners in Lesotho, where vocabulary instruction was integral to enhancing reading comprehension. In line with this approach, the current study employs vocabulary assessments to evaluate learners' LC skills, reinforcing the SVR emphasis on the crucial role of language and vocabulary (Duke & Cartwright, 2021; Nation, 2019). Furthermore, the model's effectiveness across a wide age range from preschool to Grade 5 (Snow, 2018) underscores its suitability for the study's sample of Grade 4 learners.

In the SVR theory, decoding and linguistic comprehension are pivotal, and neither is solely sufficient for RC (Hansen, 2016). The authors of SVR put forward that decoding and linguistic comprehension are two basic features of RC (Gough & Tunmer, 1986).

In the SVR Model, *RC* is the outcome of decoding and linguistic comprehension (Kim, 2017). *Decoding* is the ability to recognise words in print (Duke & Cartwright, 2021) and is related to the current study, as RC cannot occur without understanding or interpreting a written text or word recognition. The SVR model identifies a skilled reader as someone who can decode (Nation, 2019). In other words, learners who struggle with comprehension lack either decoding or linguistic comprehension skills or both (Nation, 2019). Decoding is the ability to change letters into sounds, and it is assessed by utilising tasks with word and pseudoword reading, and utilising measures of accuracy and speed (Urquhart & Weir, 2014). The ability to read regular pseudowords orthographically does not guarantee word recognition because sight-to-sound correspondences in English are not regular or consistent, e.g., *though* and *thought* but start with 'thou' but produce different phonological representations of /ou/ sounds when pronounced (Z. Wang et al., 2019). Decoding allows learners to convert unrecognisable printed letters into sounds they recognise from their HL. This decoding process allows readers to incorporate orthographic features of new words, which is a key process in learning to read (Ecalte et al., 2021). The SVR has been used as a guide in reading acquisition in English HL and for non-English learners (Lonigan et al., 2018) who are Sesotho HL learners in the current study. In the SVR model, decoding is measured by timed or untimed reading of words, and some researchers use phonological awareness measures to accommodate struggling readers and have found that decoding and phonological awareness constitute the same construct (Foorman et al., 2018).

Z. Wang et al. (2019) conducted two studies in America, which alludes that the relationship between decoding and RC becomes unpredictable when decoding falls below a threshold. The decoding hypothesis threshold posits that the correlation between RC and decoding can only be accurately observed beyond a certain decoding threshold (Vaz, 2024). In Study 1, learners' decoding skills were tested with a sample of 10,000 Grade 5 to Grade 10 learners, and they found that there was no relationship between decoding and RC. In Study 2, 30,000 learners in

Grades 5 to 10 were tested, and they scored below the decoding threshold, which was linked to their stagnant RC growth. Furthermore, the authors argued that the decoding threshold can explain differences in reading theories in terms of the role of decoding in RC. The decoding threshold helps identify learners whose RC might remain poor unless their decoding improves above the decoding threshold (Z. Wang et al., 2019). When learners acquire decoding skills, they are able to read words and passages precisely, and decoding can predict learners' RC (Kang & Shin, 2019). *Decoding* and *linguistic comprehension* are good determiners of RC, but linguistic comprehension (for the most part, vocabulary), increases RC and influences word decoding (Lonigan et al., 2018).

The relationship between RC and linguistic comprehension increases when children's decoding levels increase as they get older (Nation, 2019). *Linguistic comprehension* is the ability to comprehend spoken and written words you encounter while reading (Talwar et al., 2021). In other words, learners must be able to recognise spoken and written words and their meanings to comprehend them. The phenomenon is that once children's decoding skills are well-developed, their ability to read with comprehension is then dependent on how well they understand the spoken language. Tobia and Bonifacci (2015) state that the linguistic component incorporates the processing and understanding of information that has been bestowed orally, such as words, sentences, or discourses and could be assessed with LC tasks, where children are given an oral activity and expected to answer some questions. The understanding of linguistics is often measured with LC; however, it is much more conceptually complex than LC, as it includes a wider set of oral language, such as vocabulary and oral reasoning (Lonigan et al., 2018). In the SVR, linguistic comprehension is identified as LC abilities, which are skills used to understand written text spoken or read by others, which can be assessed using instruments that measure vocabulary (Apel, 2022). The definition of LC matches the one of *linguistic comprehension* in the current study. Reading comprehension and LC have several components, and to be proficient in word reading, one should be familiar with, for example, morphological and orthographic awareness (Kim, 2017).

2.3. Historical Context of Language in South Africa

South African languages have a long history that goes as far back as 120,000 years, and the Khoe and San people, the natives who were considered the first settlers,

spoke the KhoeKhoe language. As time progressed, new languages were developed around 600 BC, and were recognised as Bantu languages, which are known today as Indigenous South African languages (ISAL) (Makalela, 2017). The Khoe, the San and Bantu people were part of the same language group that diversified and died out when the Europeans arrived in the mid-1,600s (Makalela, 2018). The Bantu language speakers are the largest family group, the word “Bantu” means “Native”, which refers to any persons from an indigenous race in South Africa who are believed to follow a value system which is called “*ubuntu*” or “*botho*”, and means “I am because you are, you are because we are” (Gallo, 2020, p. 16).

According to Makalela (2018), there are no records of the Bantu language history prior to colonialism, including their writing systems, due to systematic exclusion from the colonial education system. It is believed that foreign linguists and anthropologists intentionally removed the records to maintain the notion that the people of Africa had not acquired the ability to construct written accounts of what could have transpired. Despite this, there was informative knowledge found in craft, mythology, and printings of native people that were literacy conformations in distinct languages, architecture, and the bartering of resources (Challis & Sinclair-Thomson, 2022). According to Makalela (2017), the drawing of maps, writings of long messages using tallies and the makings of trademarks serve as sufficient proof that orthography, such as trademarks and representations, had already developed by the time Africans encountered Europeans.

The Khoe and San people encountered Europeans in 1652 when the Dutch settled and colonised the Cape of Good Hope until 1795 when the British colonists took over (Rijpma et al., 2020). The British turned the Cape over to the Dutch for three years and demanded it back in 1806. In 1814, the Cape of Good Hope was declared a British colony, which caused discontent between the two parties and ignited the dominance of Afrikaans in South Africa (Coffi, 2017). The English people sought to take over the Dutch by applying control over the people that lived in the particular area and to cause a change in the cultural landscape; the constant fight over resources between English and Dutch people led to the Anglo-Boer war from 1889-1902 (Mutekwe & Sedibe, 2015; Smit & Janse van Rensburg, 2014). South Africa signed a formal agreement in 1902 to end the Anglo-Boer war and to give a sign of awareness to the growing number of Afrikaners that formed part of a movement

called Afrikaner Broederbond (L. E. Venter, 2023). After the indigenous people were noticeably prohibited from the union, the African National Congress (ANC) was established to stand up for their cultural and political ambitions.

Because the Afrikaners needed political self-determination, they formed their own protest movement that would make Afrikaans an official language of the Union of South Africa (Makalela, 2017). The South African political union was dilated into a cultural union where Dutch and English were reviewed as the official languages, and the national language policy was outdated as it did not consider the increase in Afrikaans HL speakers who grew weary of Dutch as their HL (Redelinghuys, 2022). The Black Africans rose up and fought against colonialism and threatened the hegemony of both British and Dutch people. Afrikaans replaced Dutch as the official language during the First World War (1914-1919) and was acknowledged under the prime minister of the Union of South Africa, James Barry Hertzog, from 1924 to 1939. In 1948, Afrikaans was reconfirmed as an official language alongside English (Makalela, 2017; Redelinghuys, 2022; van Rooy, 2019). Thus, the British did not prevail in replacing the Afrikaners, and eventually, both colonies were united, and English and Afrikaans became the official languages. When apartheid emerged in 1948, it became compulsory for all White children to go to public schools and have English and Afrikaans as LoLT (Coffi, 2017). The South African Union's linguistic outcome made English and Afrikaans LoLT between the years (1918-1959) where schools were separated into Afrikaans or English schools with either one of the languages used as LoLT and both languages taught as a subject (Makalela, 2018). Despite this, before the colonists settled, the indigenous people would educate themselves through indigenous practices and knowledge.

The following section briefly explains how indigenous people would educate themselves prior to the colonisation by European colonists and how education transformed after they came to power in South Africa.

2.4. Educational Policies and Practices During Apartheid in South Africa

Prior to the arrival of colonists, Black people in South Africa used indigenous knowledge (IK) daily, which is known as the community's knowledge or knowledge of the past acquired from experiences (Tondi, 2019). It is the knowledge that includes a set of technological, economic, social, and philosophical learning passed down from

generation-to-generation (Mawere et al., 2022). Indigenous knowledge was affected by colonialism and apartheid, and a vast majority of Africans were forced to relinquish their IK by their colonists as it was seen as barbaric and backwards (Khumalo, 2023). Although South Africa continues to disregard the IK and follows Western knowledge, it fails to yield the same results as the Western countries, meaning it has not achieved the level of academic success the Western countries have achieved through the utilisation of their Western knowledge (Mawere et al., 2022). Colonial hegemony required a new way of how things were perceived, and everything that was up to standard and advanced was to be defined and measured in European terms (Heleta, 2016).

Prior to apartheid, schools were run by missionaries and then claimed by the apartheid government (Tibbitts & Weldon, 2017). In 1948, the apartheid system was introduced with the intention of oppressing Black South Africans (Gallo, 2020). Education under apartheid was viewed as a science with the intention of making White and Black South Africans develop conformity and obedience (Tibbitts & Weldon, 2017). Education under apartheid was a tool used to oppress and create division between Black and White citizens with the intention of entrenching the concept of White superiority and Black inferiority (Khumalo, 2023). Bantu Education affected the economic opportunities of Black people as it restricted them from acquiring proper training and quality education to secure good jobs because Black people were taught to be unskilled labourers such as gardeners and seamstresses (Tibbitts & Weldon, 2017). Black people were considered inferior to White people, thus resulting in the development of the Bantu Education Policy, which was implemented in 1953 to deprive Black South Africans of receiving the same quality education, employment and other socio-economic opportunities as White South Africans (Tibbitts & Weldon, 2017).

During 1975-1976, the minister of Bantu Education demanded English and Afrikaans to be the LoLT, which became unbearable for most Black people as they felt contempt for Afrikaans and viewed it as the language of the oppressor (Mutekwe & Sedibe, 2015) and they became resentful and frustrated at learning all subjects in Afrikaans (Makalela, 2017). The Bantu Education curriculum dedicated more time to English and Afrikaans, which were taught as subjects for 205 minutes per week, more than any other subject (Gallo, 2020). All schools were coerced to teach English

and Afrikaans as subjects; however, the Afrikaner government limited access to English by adding the nine African languages (Sesotho, Sepedi, Setswana, isiZulu, isiXhosa, Tshivenda, XiTsonga, isiNdebele, SiSwati) to be used as LoLT from Grade 1 to Grade 8 in Black schools although, English and Afrikaans remained compulsory (Wildsmith-Cromarty & Balfour, 2019).

The old policy of learners being taught in their HL in the first three years was reintroduced after the liberation movement disputed the policy of the separate development programme, which perpetuated that learners would learn in their HL for eight years of school instead of the first three years of schooling (Makalela, 2017). Black schools had a policy in which learners were taught in their HL in the first three years of school and, at Grade 4, switched to English as LoLT (Thobejane, 2018), and the ISAL languages had not been progressed for educational purposes. Although African languages were used as LoLT in some primary schools and taught as subjects, they were restricted, and the apartheid government had no intentions of advancing them into fully standardised languages (Mabiletja, 2015). Black schools followed different bilingual programmes where learners learnt their HL, English and Afrikaans; in contrast, white children would only learn white languages (Wildsmith-Cromarty & Balfour, 2019). Learners were taught history according to nationalist history, and the entire curriculum was based on the method of teaching learners to memorise the content through repetition (Tibbitts & Weldon, 2017). The only official languages in education prior to 1994 in South Africa were English and Afrikaans (Mabiletja, 2015); however, post-apartheid, the government embraced the use of multiple indigenous languages as a national policy (Nwammuo & Salawu, 2018). In South Africa, English is seen as an instrument to help improve economic mobility and a prerequisite to a better education; this view was established post-apartheid (Thobejane, 2018). When South Africa became a democratic nation, educational changes were embraced, which will be discussed in the following section.

2.4.1 Post-Apartheid Changes in Education and Introduction of New Curriculum

In 1994, following the development of a non-racial democratic South Africa, education was viewed as a critical instrument for transforming society from its apartheid past to a new democratic society that prioritised human rights and equality (Tibbitts & Weldon, 2017). The educational reforms had academic goals that they

aimed to achieve nationally to ensure a shift from the apartheid design of the education system to the post-apartheid era (Ajani, 2021).

The education policy document called the 1995 White Paper on Education and Training contained visions of what an ideal education system would look like with the hopes of addressing the imbalances of the past (Engelbrecht et al., 2016). In 1996, a draft called Curriculum Framework for General and Further Education Training for a new curriculum was issued with a vision for transitioning through outcome-based education (OBE) (Molapo & Pillay, 2018). Then, a new curriculum, Curriculum 2005 (C2005), was put into motion in 1997, and its vision included creating citizens who would be able to support democracy, build social cohesion and commit to the economic success of the country (Tibbitts & Weldon, 2017). In 1999, after the second democratic election, a new curriculum was introduced. It was called the National Curriculum Statements (NCS), released in 2002 and included new content and pedagogies (Ajani, 2021).

Curriculums are important in ensuring a quality education system. The CAPS is a document that guides and explains pedagogy and how learners are to be assessed in the education system of South Africa at both primary and secondary schools (Ajani, 2021), and it is currently implemented in South African schools (Molapo & Pillay, 2018). CAPS came to fruition in 2012 to alter educational imbalances of the past by focusing on providing the same template for teachers' classroom practices regardless of where a school may be situated (Maharajh et al., 2016). CAPS expects all learners in the IP to be skilled in English and learn all subjects in it, regardless of whether it was their HL or the language they were taught in the FP (Thobejane, 2018). CAPS is learner-centred because it hopes to equip learners with problem-solving skills and knowledge they can use in their everyday lives and in response to any challenges they may encounter in their environments (Ajani, 2021). It focuses on what is taught rather than how it is taught and aims to fill in gaps, minimising repetition and providing clarity where necessary to minimise the administrative load on teachers by ensuring clarity and guidance on how to go about teaching and learning (Maharajh et al., 2016).

Learning areas are now subjects, and learning outcomes and assessment standards are stated as general aims of the South African curriculum and specific aims for each

subject (Khumalo, 2023; Maharajh et al., 2016). Subjects have been reduced from eight to six from the IP to the Senior Phase, with the following subjects combined to form one subject: a) Natural Sciences and Technology, and b) Life Orientation and Arts and Culture; other subjects include HL and second language (SL), mathematics, and social sciences (Ajani, 2021). Each of these subjects in all grades has a brief and clear guide on how learners should be taught and what they should be assessed daily (Maharajh et al., 2016). Khumalo (2023) posits that the current curriculum is still very much connected to the colonists as it does not address the issues that South African people face, such as the African Indigenous system, humanity, and caring and adds that something is profusely wrong for learners to be taught more Western education than of Africa.

Despite its benefits, CAPS has faced challenges in implementation in classrooms that hamper its potency and efficiency. CAPS is under scrutiny and in need of modifications as teachers are frustrated and do not have adequate training on how to deliver it in the classroom (Khumalo, 2023; Molapo & Pillay, 2018). Many South African schools are not equipped with sufficient resources such as adequate teaching and learning support materials, adequate classrooms, libraries, and laboratories needed to carry out some of the tasks as indicated in the CAPS document (Ajani, 2021).

Additionally, insufficient resources, insufficient training of educators and too much paperwork and English as LoLT in many South African schools are said to hamper the application of CAPS (Maharajh et al., 2016; Molapo & Pillay, 2018). Lack of resources restricts the proper delivery and implementation of the curriculum. Teachers are frustrated as they feel they have not been prepared and thoroughly trained to incorporate the curriculum into their classroom practices, seeing that it is more learner-centred, meaning teachers must adapt to new classroom practices and move from old methods of teacher-centred approaches (Ajani, 2021). When teachers are well acquainted with the CAPS document and have all the necessary resources they need, their efforts to deliver the curriculum in the classroom will improve (Ajani, 2021; Maharajh et al., 2016; Molapo & Pillay, 2018). Teachers are expected to deliver their lessons taking into consideration the application of LoLT and LiEP adopted in South Africa.

The following section explores the LiEP in South Africa, what it stands for and its limitations. There are 12 official languages in South Africa; however, only two of those, namely English and Afrikaans, have been adopted as the LoLT in South African schools from Grade 4 onwards, with English being prevalent (Posel et al., 2022). Moreover, CAPS in South Africa assumes that bilingual children are already proficient in their HL and can transfer these skills from their HL into learning an additional language without considering the disparities in orthography as the main issue in languages (Sibanda, 2018).

2.5. Language in Education Policy in South Africa

Prior to 1994, inclusiveness in education was not held in high regard, particularly for Black and Coloured people, which led to the development of new policies such as LiEP post-apartheid to reform educational shortcomings.

2.5.1. Overview of Language in Education Policy in South Africa

The LiEP was established to reform the educational system to accommodate everyone, especially former indigenous Africans who were suppressed by the apartheid system (Mabiletja, 2015). The LiEP was introduced with hopes of encouraging multilingualism through acknowledgement of the 11 official languages of South Africa to address linguistic imbalances of the past and to support LoLT in education with hopes that all learners in the Foundation Phase be taught in their HL (Roux, 2020). The LiEP focuses on language (Robertson & Graven, 2020) and seeks to make room for all South African official languages to be recognised and to have everyone learn in the language that they prefer (Mutekwe & Sedibe, 2015).

The introduction of the LiEP means that the formerly excluded languages will also be used as the LoLT, at least in the FP; after that, learners' LoLT changes to English in the IP (Mabiletja, 2015). The LiEP acknowledges the official status of 11⁵ languages and states the fundamental principle is to keep home language(s) while learners effectively acquire additional language(s); because, learners who learn in their HL tend to do better in reading over time (Mabiletja, 2015; Nwammuo & Salawu, 2018).

Historically, the policy in South Africa was based on racial discrimination by the White government against the Black South Africans (Mwaniki et al., 2017). The main

⁵ Sign language was added in 2023 making a total of 12 official languages in South Africa (T. du Plessis, 2023).

reason for the development of the LiEP was to address the imbalance of the past in education and empower learners and educators to have a choice of language in education (Mutekwe & Sedibe, 2015). The LiEP was introduced by the Constitution (Section 29, Act 108 of 1996), which states that everyone has a right to receive education in the official language of their choice in public educational institutions (Mabiletja, 2015). The policy has been successful in promoting HL instruction in the first three years of primary school, and the utilisation of HL as the language of instruction in the first three years of primary school increased from 51% in 1998 to 76% in 2007, with a difference of 25% (Posel & Zeller, 2016). It is important that children first acquire their home language skills, which would make it easier for them to acquire language skills in an SL. South Africa embraced the LiEP, which promotes bilingualism through the utilisation of the HL alongside English as an SL for learners to have a certain level of language proficiency in their HL prior to acquiring and learning in a SL (Saneka & de Witt, 2019).

2.5.2. Limitations of Language in Education Policy

The challenges of the LiEP include ideological separation from policy management decisions within the DBE, disregarding curriculum planning, and delays in completing the LiEP document and regulations (Chitapi, 2018). According to researchers, the LiEP in South Africa has not been fully implemented in all schools as intended (Engelbrecht et al., 2016; Seeko & Mathebula, 2023). The transition from HL as the LoLT to English often occurs without taking into consideration the learners' level of competence in English, raising concerns about the learners' right to the language of choice and broader language rights (Mabiletja, 2015). The preference for education in the home language is particularly significant given that education policymakers and stakeholders generally favour it in the best interest of learners (Mutekwe & Sedibe, 2015). The persistent dominance of English and Afrikaans restricts the language rights of other citizens and undermines the principle of additive multilingualism, as encouraged in the constitution, LiEP, and other legislative frameworks (Mkhize & Balfour, 2017). The hegemony of English and Afrikaans overpowers minoritised languages such as indigenous languages, and bilingual education programmes pay attention to dominant languages instead of creating a balance in the power of languages (Stoop, 2017). The ongoing dominance of English

and the related hidden practice of elite closure continue to prevent the implementation of the LiEP (Chitapi, 2018).

The education system in South Africa has not managed to offer support for learning and opportunities to many learners in more than one language throughout schooling (Mkhize & Balfour, 2017). At a management level, public attitudes are against the extended use of African languages (Chitapi, 2018). The other policy advocates more for English and Afrikaans than other official languages, but mostly English because of its global status and being viewed as the language of upward mobility; thus, demanding learners to be taught in English so that they may be able to get jobs, and gain admission into schools abroad (Taylor & von Fintel, 2016). In South Africa, English is a dominant language used in public and businesses, yet it is not the HL of many ISAL speakers (Posel & Zeller, 2016), although a few ISAL learners may have English as HL. English is offered as a SL in the FP for those who do not have it as HL (Wilsenach, 2015).

The addition of English in the FP was incorporated so that the shift to English LoLT in Grade 4 would not be as overwhelming for learners (Wilsenach, 2015). However, the implementation of English in the Foundation Phase does not undo the reading crisis (Makalela, 2018) in ESL learners who did not have the opportunity to benefit from the recent addition of English in the FP. The LiEP has caused division between languages and encouraged the hegemony of English and Afrikaans in its efforts to include all official languages in South Africa. Moreover, understanding bilingual education has become important in promoting HL instruction in primary schools to aid learners' academic success (Ball et al., 2022). The application of HL language instruction has not been the easiest, even in the FP, because learners do not all speak the same language; there is vast diversity in the number of official languages in South Africa (Stoop, 2017).

2.5.3. Promoting Bilingualism in South Africa

South Africa has adopted multilingualism in society, which is the ability to communicate in other languages other than dominant languages by embracing ISAL (Ndimande-Hlongwa & Ndebele, 2017). Despite this, the education system remains bilingual, with only English and Afrikaans used as LoLT from the Intermediate Phase (Stoop, 2017). Bilingual education is explained as the utilisation of two languages in

education, often used with the intention to teach learners to be able to read and write in two languages and sometimes to teach language minorities people to improve their comprehension and expand their linguistic skills in a prominent language (García & Lin, 2017). Bilingual education is connected to social, political and economic factors, especially of the political state in which it functions, and its attempts are challenged by the societal hierarchisation of languages, which is interconnected to the political power of the state or people who speak different languages (Ball et al., 2022).

The term bilingual education means languages are used for instruction in a classroom and subsequently produce learners that are both bilingual and bi-literate (Wright & Baker, 2017). On the other hand, multilingual education is defined as a strategy to include a minimum of two languages in education instruction with the aim of teaching linguistic skills to learners who do not speak the language they are taught in or to encourage bilingualism to achieve societal, individual, community-based, or political goals (Ball et al., 2022). Bilingual education is good for education and learning a language, and it is good for minorities and majorities (García & Lin, 2017).

The Language Plan Task Group (LANGTAG) was established in 1995 to govern matters in relation to the application of a multilingual policy, and in 1996, the Pan-South African Language Board (PanSALB) was put in place to promote the utilisation of ISAL as official languages to encourage national unity (Posel & Zeller, 2016). García and Lin (2017) state that although South Africa has employed a multilingual language policy since 1994, classroom practices still show monolingual preference, which puts ISAL learners at risk of performing poorly in academics in comparison to English and Afrikaans HL learners. Monolingual education includes the teaching of one language, which is detrimental to a child's academic development and creates identity and linguistic timidness and incapability to benefit from metalinguistic awareness that allows learners to be users of language in a community (García & Lin, 2017). South Africa has also taken part in notable projects such as the South Africa-Norway Tertiary Development Programme (SANTED) from 2007 to 2009 to promote the utilisation of ISAL and enhance SL acquisition (Ndimande-Hlongwa & Ndebele, 2017). The distinction between BICS and CALP is important in bi-/multilingual contexts, such as South Africa, since English is the LoLT in most South African schools, and ESL learners need both BICS and CALP to excel inside and

outside the classroom (Khatib & Taie, 2016). The distinction between BICS and CALP is considered in the next section.

2.6. Basic Interpersonal Communication Skills and Cognitive Academic Language Proficiency

Bilingual education helps learners develop knowledge of school subjects and background knowledge, which aids in understanding English content instruction and enhances comprehension; BICS and CALP difference ascribes linguistic and cognitive status to the language of schooling, relating in both first and second language contexts (Cummins, 2013; Rolstad, 2017). In other words, learners are expected to precisely and appropriately adopt different linguistic means to transfer conversational (BICS) and academic (CALP) ideas using relevant styles of communication (Vovk, 2023). The distinction between these concepts will be considered next, starting with BICS. The concepts of BICS and CALP refer to the linguistic skills that have to be incorporated to enhance learning and teaching in bilingual contexts (Vovk, 2023).

According to Mozayan (2015), it is important to note the difference between BICS and CALP because failure to do so has resulted in discriminatory psychological assessment of bilingual learners and premature exit from language proficiency programmes (e.g., bilingual education in the United States) into mainstream classes. BICS and CALP were both initiated by Cummins (1979), who believed that BICS is associated with knowledge of speech and basic fluency, whereas CALP, on the other hand, had to do with a high level of cognitive skills needed for academic subjects and tasks (Mozayan, 2015). Second language learners need both BICS and CALP to engage in daily activities in the classroom and outside the classroom. BICS are language skills that are used in social contexts, such as at a park, airport, playground, and many other daily social interactions with other people (van As & Ankiewicz, 2022). BICS refers to colloquial fluency in a language (Khatib & Taie, 2016), and it is not cognitively demanding because it may entail informal speech and restricted vocabulary, unlike CALP, which is cognitively demanding because it is used for academic purposes (Mozayan, 2015).

Second language learners' BICS should be developed swiftly on average for a period of five to seven years in order to catch up with grade norms in academic

aspects of English (Khatib & Taie, 2016). BICS is important as it may boost a child's language by holding a simple conversation with a shopkeeper. The difference between BICS and CALP was highlighted to grab the educators' attention on how ESL learners would struggle to catch up with learners that have English as HL in academic aspects of the school language (van As & Ankiewicz, 2022). BICS is the first level of communicative competence, and it takes two to three years of being engaged in a language to develop BICS (van der Westhuizen, 2016). BICS incorporates face-to-face conversations, allows learners to express themselves daily and entails a range of contextual cues, gestures, and facial expressions (van der Westhuizen, 2016).

CALP refers to the ability of a learner to communicate and understand both oral and written manners, ideas, and concepts that are necessary for academic success (Khatib & Taie, 2016). It is the second level of communicative competence that is required in higher order thinking skills such as analysis (van der Westhuizen, 2016). CALP has to do with being able to combine words to express comprehensive ideas, the ability to have in-depth content knowledge and being able to share it with others; it is not only about learning and understanding the terms and concepts related to a specific subject (van As & Ankiewicz, 2022). CALP is derived from the academic context that integrates abstract vocabulary and concepts (Alsubaie, 2017). For SL learners, CALP may take up to six to seven years to obtain, and it refers to skills that learners require to cope with academic tasks that are not in their HL, most likely English (van der Westhuizen, 2016).

It is evident that in South Africa, learners from Grade 4 upwards switch to English as LoLT, which has a significant effect on learners' performances and poses academic challenges for them (van As & Ankiewicz, 2022). Second language learners experience different academic achievements even if they learn the language using the same strategy or method (Alsubaie, 2017). The way learners learn a new language is important, and language learning strategies are important and are part of the cognitive factors learners need to acquire in order to learn an SL (Alsubaie, 2017). Language proficiency plays an important role in a child's RC and LC and many learners have an African language as HL in South Africa (van As & Ankiewicz, 2022). If a child is not proficient in a language, it would be hard for them to acquire RC and LC skills in an SL (O'Brien & Wallot, 2016). It is important that children first

master their HL before imparting SL knowledge to be able to transfer the skills they used to learn their HL to learning an SL. The high risk of poor English reading skills could be partly due to the writing system used and different orthographies (He et al., 2022). English as an SL has a vast number of learners in South Africa, which means learners must use it to learn all subjects regardless of their proficiency in it (van As & Ankiewicz, 2022); hence, exploring its orthography and that of Sesotho learners is important in the current study. Moreover, the discussion of orthographic differences between Sesotho and English is important to enhance the readers' understanding of the challenges Sesotho HL learners inevitably encounter when transitioning to learn all their subjects in English from Grade 4 upwards; accordingly, this is considered next.

2.7. Orthography

Orthographic skills refer to the ability to recognise, manipulate and examine grapheme patterns (Scheepers, 2020). The current study does not look at the orthographic differences per se, but it is still valuable to unpack it as the two languages investigated have orthographic differences. The section highlights the importance of orthography because it characterises the writing system and plays a role in learners' ability to read with comprehension in an SL (Nam, 2018). It further goes into exploring English and Sesotho orthographies to draw an understanding of why it could be challenging for ESL learners to read with comprehension. The orthography of a language plays an important role in the development of reading skills (Scheepers, 2020). Orthographic knowledge refers to understanding how spoken words can be displayed in a text or print (Apel et al., 2019).

2.7.1. Orthographic Differences as a Challenge to Read in English as a Second Language

Orthographic knowledge is necessary to understand and to be able to write in any language; even so, without sufficient phonological knowledge of words existing in the orthographic form, the potential to comprehend language while listening may be immensely obstructed (Cheng & Matthews, 2018). The Orthographic Depth Hypothesis has put forward that poor SL abilities may result from not correctly meeting the demands of the SL (Gao et al., 2019). In other words, a learner should master their HL before attempting an SL (Salmon, 2014). However, ESL learners commence Grade 1 without being skilled in reading in their HL, making it challenging

to transfer the skills into learning an SL (Manten et al., 2020). Orthographic vocabulary knowledge is highly connected with LC and RC (Cheng & Matthews, 2018); however, the learner's comprehension skills depend on language proficiency. Orthography means to write, read or spell words accurately. It consists of two levels, sublexical and lexical, and has been important in aiding reading success (Querido et al., 2020).

2.7.2. Sublexical and Lexical Orthography

The difference between sublexical and lexical levels is that when a person possesses adequate lexical orthographic knowledge, the ability to write and read effortlessly occurs, and the lexical orthographic knowledge also enables them to recognise or produce written words with little cognitive effort (Apel et al., 2019). In a case where a person does not have adequate lexical representation of a word, the individual must use their sublexical orthographic knowledge as part of the process of reading (Araújo et al., 2015).

Sublexical orthographic knowledge is interlinked to the capability of a person to process the general features of a writing system, for example, letter position frequencies, i.e., consonant doublets (e.g., *puzzle*, *shuttle*, *puppy*) and sequential dependencies, for example, which letter can or cannot follow (Querido et al., 2020). Sublexical orthographic knowledge grows before lexical orthographic knowledge because learners pass different developmental stages and obtain more letter-sound knowledge, which produces word-specific representations, for example, lexical orthographic knowledge (Araújo et al., 2015). Sublexical orthographic knowledge is a skill that must be developed first to phonologically recode and develop lexical orthographic knowledge (Apel et al., 2019). Phonological recoding which is the process of changing written words into sounds by utilising knowledge of letter-sound relationships (Li et al., 2020) encourages orthographic knowledge, influencing both its levels, especially the development of word-specific representations, which is the lexical orthographic knowledge and the repetition of phonological recoding promotes the acquisition of lexical orthographic knowledge, allowing learners to build and store lexical orthographic knowledge (Querido et al., 2020).

2.7.3. Orthography and Language Structure of Sesotho and English

Orthography is referred to as a system of rules used across different languages for how to spell a spoken word (Matlosa, 2017). The writing systems can either be explained as being “opaque” or “transparent”, depending on if the spelling of a word can determine its pronunciation (Scheepers, 2020). English has an opaque orthography, whereas Sotho has a transparent orthography (Manten et al., 2020). In Sesotho, a linguistic word may match a number of orthographic words, for example, “*ke a ba rata*” (*I like them*) (Probert & De Vos, 2016). The disjunctive nature of Sesotho is reflected in its orthography by the way it separates what are, in spoken language, tightly bound morphemes into distinct written words. English orthography has multiple words with irregular and unpredictable spelling, leading to a deep orthography where readers depend more on word processing and less on grapheme-phoneme representation (Probert & De Vos, 2016).

Although Sesotho and English may use the same Roman script, the differences in orthography make it challenging, and it can take a lot of time for learners to decode texts in English (Manten et al., 2020). English requires learners to be taught sight words (for example, *play*, *see*), and it has many irregular words which are not pronounced as they are spelt (for example, *xenophobia*), which makes decoding challenging (Probert & De Vos, 2016). It is imperative to develop children’s basic reading skills in the first six years of their lives in preschool so that by the time they commence Grade 1, their segmentation and blending skills would have developed, making them prepared for reading acquisition (Manten et al., 2020).

The current study focuses on Grade 4 Sesotho HL learners because many South African learners switch to English as LoLT at Grade 4 and, as a result are expected to gain sufficient cognitive-linguistic skills in English to excel academically (Wilsenach & Makaure, 2018). A novice reader of any language that uses an alphabetic system is required to learn to connect letters with sounds to obtain whole-word phonological representations of known words. Once lexical representations have been developed, there will be no need to depend on phonics when encountering the same word again, which, in turn, increases the efficiency and speed of the reading process (Borleffs et al., 2019). In addition, He et al. (2022) state that reading and listening may not be related, especially if the HL is alphabetic and the SL is non-alphabetic or vice versa.

Although Sesotho and English use the Roman script, they have different orthographies as Sesotho has a transparent orthography and English an opaque orthography, which may cause challenges when learning to read in English (Manten et al., 2020). Marjou (2019) states that “an alphabet is a standard set of letters that represent the basic significant sounds of the spoken language it is used to write” (p. 1). When an orthography systematically utilises consistency between its sounds and letters, the encoding of a phoneme (sound) into a grapheme (letter) results in a single possibility; also, the decoding of a grapheme into a phoneme leads to a single possibility (Marjou, 2019). The author further adds that such orthography is transparent due to phonemes disfavoured ambiguity when reading or writing the letters of the words. Sesotho with a transparent orthography means the phoneme-grapheme association rules are dependable, and graphemes, in most cases, stand for only one grapheme (Scheepers, 2020). With a reliable phoneme-grapheme association, this means that it is consistent, and letters are pronounced the same in different words, for example, /o/ in “*lerato*” (*love*), “*nako*” (*time*), “*Nyoko*” (*bile*), and “*monyako*” (*door*). Thus, the straightforward rule of the Sesotho phoneme-grapheme makes learners’ reading and decoding skills less challenging as they are less cognitively demanding (Scheepers, 2020). The Sesotho language consists of vowels such as “*ya*”, “*wa*”, which can be used in sentences such as “*nku ya ka*” (*my sheep*), “*ngwana wa ka*” (*my child*) and “*ntlo ya ka*” (*my house*); and consonants such as the letters /tjh/ in the word “*setjhaba*” (*nation*), /kg/ in the word “*kgomo*” (*cow*) and /tsh/ in the word “*lefatshe*” (*earth or world*) (Makutoane, 2022). In the South African Sesotho orthography, the general rule is that when the letter /o/ occurs at the beginning of a syllable for a vowel, it should be depicted as a /w/ (e.g., *wa*) which can be shown such as “*lefshwa*” which means *pay* and “*bopjwa*” which means *made of clay or created by God* (Makutoane, 2022; Mofammere, 2023).

Matlosa (2017) argues that the Sesotho orthography is questionable because it makes it difficult for Basotho people and people from other countries to pronounce some words in Sesotho accurately. In addition, in the Sotho orthography, the use of the vowel /e/ to stand for both vowel /e/ and /eh/ to, thus making the word “*letsela*” (*one who crosses*) written the same way as “*letsela*” (*one who pours*) but have different meanings in a sentence. Sesotho is a language spoken in South Africa and Lesotho; however, the orthographies are not similar; for example, the consonant /d/

in the word “*dimpho*” (*gifts*) is found in the South African Sesotho orthography (Motjope-Mokhali et al., 2020). For the consonant // for the same word, “*limpho*” (*gifts*), in the Lesotho orthography, the pronunciation remains the same. However, it may be confusing for readers, especially those who do not know the difference between the orthographies in South Africa and Lesotho (Matlosa, 2017). The confusion in the pronunciation may pose challenges for some readers who may have no idea what pronunciation the author could have had in mind. Sesotho has numerous consonants, and these consonants are believed to contain click sounds. Arguably, one click sound has distinct variations, which is the letter /q/ for example, /q/ (*qeta* means finish) /qh/ (*qhitsa* means drip) /qhw/ (*qhwaya* means wave) and /nq/ (*nqosa* means *accuse*) (Setaka, 2018).

English is an alphabetic language that uses Roman script (alphabet) where letters represent speech-sound. English is an opaque language, meaning it consists of numerous ways to pronounce the same grapheme; the letters are not pronounced as they sound, for example, (/c/ *cat*, *colonel*, *audience*) (Scheepers, 2020). In opaque orthographies, orthography-phonology relationships include different interpretations; for instance, English is not consistent as the pronunciation of letters may vary in different words, for example, the /a/ in “*bag*”, “*lake*”, “*was*” and “*raw*”, and some letters do not correlate with the sound, for example, /w/ in “*answer*”. Thus, several English words cannot be called out precisely should they not form part of a reader’s vocabulary (Borleffs et al., 2019).

Reading in opaque orthographies supports the utilisation of lexical representations while reading in transparent orthographies requires the use of both lexical and sublexical processing (Kwok et al., 2017). For example, when reading in an opaque language, learners ought to pay attention to the form of the whole word, whereas in a transparent language, learners only have to pay attention to parts of the words, such as phonological segments and the whole form of the words. Reading in an opaque orthography requires one to put prominence on lexical mappings between orthography and phonology, while transparent orthography uses both lexical and sublexical mappings (Kwok et al., 2017).

According to Tobia and Bonifacci (2015), opaque orthographies’ decoding is stronger in predicting RC in the early stages of learning, with oral comprehension having a

small effect but persists to be influential after three to five years of instruction. On the other hand, in transparent orthographies, oral comprehension has more effect, even in novice readers with one to two years of instruction, than decoding. Many factors can contribute to challenges in reading across different languages, and one of them is the different writing systems.

The differences in the orthographies of English and Sesotho illustrate how challenging it may be for Sesotho HL learners to master RC in English as an SL. English is one of the languages that have been assigned as LoLT, and CAPS expects every learner in Grade 4 to be proficient in it (Sibanda, 2018). There are numerous factors to consider in terms of learning a new language, as it has been shown that although languages may share the same writing systems, it does not ultimately guarantee reading development and comprehension. For instance, English is different from Sesotho because they do not have the same orthography even though both languages use alphabets. Learners need to learn some language skills to be successful in mastering SL, such as phonetics, memory abilities (Alsubaie, 2017).

The differences in the orthographies of Sesotho and English may contribute to challenges in reading. Reading in an SL is not an easy process, as this entails an interaction between languages (Manten et al., 2020). As such, the following section briefly highlights the reading literacy of learners as reported by the previous reports of the PIRLS study, to note the reading crisis in South Africa.

2.8. Unpacking Reading Literacy in South Africa

Reading literacy is defined as the ability to comprehend and utilise those written languages as expected by societal conventions (Koyuncu & Firat, 2020). Early reading literacy skills are fundamental and should be embedded in all children in their first years of school, especially ESL learners, because most of these learners learn to read in a second language, which is often English at Grade 4 (Nel & Brink, 2019). The reading literacy skills of South African learners have been a major concern as PIRLS consistently shows that learners perform below the international benchmark (DBE, 2023a). PIRLS is an international study that assesses the reading comprehension of learners in Grade 4 in primary schools and has been conducted in South Africa since 2006 (Howie et al., 2017).

The first time South Africa participated in PIRLS was in 2006, when Grade 4 and 5 learners were sampled and expected to reach the midpoint of 500, which depicts good reading comprehension skills. However, these learners reached 250 score points which was far below the international benchmark indicating that most learners struggle with RC (Zimmerman & Smit, 2014). South African learners participated in PIRLS again in 2011, where Grade 4 learners were sampled and tested with an easier and shorter test known as prePIRLS, yet they still performed poorly compared to their peers in international countries (Zimmerman & Smit, 2014).

The reading literacy of learners has been declining over the years in South Africa. In PIRLS 2016, it was depicted that 78% of South African learners failed to read with comprehension (Howie et al., 2017). In 2021 results showed that 81% of learners struggle to read with comprehension (DBE, 2023a). PIRLS shows a decline in the reading literacies of South African learners from 2016 at 320 points to 288 points in 2021; with children in the 10% of richest schools performing better in reading by Grade 4 than children in the poorest 70% of schools in South Africa (Böhmer & Wills, 2023).

The following section explores reading as a fundamental skill, with particular attention to the observed decline in reading proficiency across populations over the years. This decline has been partly attributed to the increasing availability of alternative forms of entertainment that may divert attention away from reading (Miyamoto, 2024; Sadiku, 2015). The decline in learners' reading comprehension is cause for concern given the significant implications of inadequate reading abilities. Being able to read in both HL and English remains essential. As such, the next section highlights the importance of reading as a skill.

Reading as a Skill in English

The ability to read English with understanding is an essential skill for one to possess because of the impact English has internationally (Borleffs et al., 2019). Reading is an important skill as it helps children excel academically and influences their personal development. Reading achievements aid in alleviating poverty and unemployment and, in turn, increase a learners' self-esteem and interest in learning (Chen et al., 2018). Reading English requires a lot of practice and time to master as it is challenging (Manten et al., 2020). Reading is important because it improves your

conversational English and helps with understanding how English speakers talk. It is a fun way to learn because you can improve by just reading a story, and it does not have to feel like you are studying. However, for some learners, reading is a challenge rather than an enjoyment (Gao et al., 2019). There are three stages of reading skills that learners ought to possess to be successful in reading comprehension.

Stages of Reading

Gough et al. (2017) used the terms logographic, alphabetic and orthographic to explain the three stages of reading skills acquisition; logographic reading is referred to when a child uses cue(s) to read without using insights into the mapping of letters and sounds; in the second stage which is the alphabetic stage, the child has learnt simple grapheme-phoneme connections and utilises them in reading and the last stage orthographic occurs when a child uses letter groups to recognise words, typically by correlation to morphemic units. Reading skills are important for language skill acquisition and improve the reader's vocabulary, which in turn enhances their LC, writing, and speaking skills because they know more words to choose from when speaking or writing (Sadiku, 2015). Additionally, exploring reading and listening comprehension will enhance the understanding of the multifaceted influences of RC and LC.

2.9. Importance of Comprehension in Reading and Listening

This study focuses on RC and LC of Grade 4 Sesotho HL learners. Comprehension, which means understanding, is an occurrence that is indirectly observed as people can only notice the signs of understanding when the reader is able to summarise and retell a story without changing the context (Flores et al., 2020). In other words, it is the signs of understanding that help conclude that the reader has indeed comprehended the text they have read. For many children, comprehension skills begin to develop prior to learning how to read; this occurs when a picture book is read to them, which then helps them to associate the words they hear with the pictures in the book, which ultimately creates an idea of what the text could be about (Flores et al., 2020). According to Ahmadi (2016), "comprehension is the speech reception of the syntactic, lexical, pragmatic and discourse levels" (p. 2). It is the last component of listening comprehension that incorporates distinct steps such as

providing context, utilising previous knowledge to envisage the ideas a message may have, predicting the content of the message lastly, to generate meaning from the message. Madani (2016) states that comprehension can improve with time, and it is one of the most challenging skills to acquire and requires skills in order to be achieved. It is both interactive and strategic, meaning learners interact with the words in a text by relating them to their reality and make use of reading strategies to make sense of the meaning of the words to enhance their comprehension (Flores et al., 2020; Madani, 2016). Building upon the importance of comprehension, aids in understanding how essential it is for learners to develop and display signs of understanding when reading and listening, because comprehension leads to successful academic achievement.

2.9.1. Exploring Reading Comprehension

Reading comprehension is the ability to obtain meaning from reading texts in which a reader is expected to establish a mental representation of the text (Swart et al., 2017). It is about understanding what the text is about and the message that the author is trying to relay (Kang & Shin, 2019). Reading comprehension is not only about decoding and understanding text but also about employing certain strategies in order to read efficiently (Madani, 2016). It is important for several reasons in our daily lives, such as keeping up with current news in the form of reports, understanding how to fill in applications or forms, learning other subjects like mathematics, history or science, engaging with other people and many more other reasons (Borleffs et al., 2019). In the RC process, one is expected to use their working memory capacity to preserve existing knowledge while making sense of the written words and their meanings to produce a rational representation of the text (Slattery et al., 2021). Acceptable RC requires an individual to understand the text read, obtain meaning from it and use prior knowledge to make sense of what has been read; however, to be able to process text and understand it requires and is dependent on certain skills a reader must possess (Flores et al., 2020). It is a strategic and interactive process because it requires several distinct parts of the brain to work together, and one must be able to maneuver through multiple layers of context and meaning (Banditvilai, 2020). In order to understand a text, the human brain must process the words and the context behind them, the relationship between

the words used, how the usage of language and vocabulary influence the emotion in the text, and lastly, how the text has been put together as a whole (Hansen, 2016).

According to de Deyne et al. (2016) and Hansen (2016), reading comprehension strategies are the diverse, integrated methods readers employ to understand and interpret written texts. Unlike individual skills, such as word recognition or sentence parsing, which are fundamental components of reading, strategies require the coordinated use of these skills along with additional techniques and insights. In effect, when readers learn not only to apply their basic skills but also to recognise the appropriate contexts for their use and limitations, these skills can evolve into effective strategies. Moreover, reading approaches are commonly organised into three phases: pre-reading activities, which prepare the reader for engagement; during-reading activities, which facilitate active processing of the text; and post-reading activities, which help consolidate understanding and reflect on their material.

Pre-reading activities include activities that a reader is engaged in prior to the commencement of reading. This pre-reading activity includes anticipating what the text could be about, usage of vocabulary and arousal of prior knowledge which refers to using existing knowledge to make sense of new information and is vital in aiding comprehension of texts. Prior knowledge may be aroused by discussing the topic in question, drawing mind maps, and perusing keywords, which might help anticipate what the text could be about and the chances of encountering new vocabulary (Banditvilai, 2020).

Activities during reading include taking notes, underlining keywords, and understanding what the text is about. Active reading and making assumptions while reading enhances RC, as does seeking help where necessary. Using a dictionary for unfamiliar words is meaningful as it enhances comprehension and distinguishes good readers from readers with poorer comprehension (Hansen, 2016).

According to Flores et al. (2020), comprehension can be called a dispositional concept because it works in many contexts. For instance, when we say someone understands the text they just read, we do not refer to behaviour or an occurrence, but it simply means the person will be expected to do certain things to show understanding of what they have read. Comprehension is not a process as it improves over time and reveals itself in how people do things; for example, when

they read aloud, they pause for suspense, emphasise certain words, change their voice to show different characters and use emotionally rich tones when reading (Sadoski, 2018). Comprehension is the final goal of reading, but it is a complicated task that includes several integral skills (e.g., reading and listening) (Tobia & Bonifacci, 2015). Post-reading activities, such as summarising texts, discussing what the passage is about, answering questions about it, and drawing mind maps, are some of the things that help readers understand what they have read. Adding new knowledge to existing or personal experiences helps readers evaluate and comprehend the context of the text. Reading comprehension is also manipulated by working memory, which varies among individuals (Schurer et al., 2020).

2.9.1.1. Working Memory in Reading Comprehension

Working memory is a concurrent process of reserving information while processing it (Nouwens et al., 2017). It is the extent to which a reader can store information in a short-term memory while engaging in cognitively demanding activities; for example, when reading with comprehension, the reader first visually processes the text and links it to orthographic, phonological and semantic representations in long-term memory and assemble these representations with the setting to extract comprehension of the passage (Peng et al., 2018). The quality of representation is high when three mental lexicon components, orthographic information, phonological information and semantic information, are well established (Swart et al., 2017).

The development of orthographic information leads to phonological information, which is involved in spoken-word recognition (Qu et al., 2018). Readers can revisit the orthographic form (spelling) of a word; however, spoken words are temporarily available and have a short period of time to be processed, which makes LC activities more challenging than RC activities, given they both require similar lexical demands (Ha, 2021). Orthographic input is restricted by phonological information in processing visual word recognition (Qu et al., 2018).

Readers may be able to identify visually presented words easily, and the process that presents orthography onto phonology and semantics is complicated (Pattamadilok et al., 2017; Slattery et al., 2021). Phonological processes aid in maintaining the identity of words so they can be viewed precisely (Rastle, 2016). Phonological and semantic processing is involved in reading development and is

supported by two complementary mechanisms, which include an automatic mechanism in which orthography is linked to phonology and semantics and the tuning of high-level language areas to the sensory input (Nouwens et al., 2017; Pattamadilok et al., 2017).

Semantic representation refers to how one understands the meaning of the text (Abend & Rappoport, 2017), and children who struggle with RC do not have the advantage of using long-term semantic representations (Nouwens et al., 2017). Semantic representation is a study of meaning in language and includes semantic signifiers, which are words, phrases and sentences. In order to explain complex words, it is important to understand the meaning and semantic relations of the words (Liu et al., 2019). It also allows various tasks such as image-text retrieval and visual question answering (G. Park et al., 2020). In the process of understanding a language, semantic representations are drawn out and combined into the mental lexicon. When readers understand the text, the meanings of words, phrases, and sentences are stored in their mental lexicon (Barron, 2017).

The mental lexicon is crucial for RC and can be explained as a place where mental representations are stored in long-term memory (Swart et al., 2017). For instance, what we receive visually is mentally encoded as visuals, and what we receive audibly is encoded as auditory (Sadoski, 2018). Readers with a large lexicon and high-quality representations understand written texts better than those with low-quality representations, and comprehension challenges may be a result of mental lexicon problems (Swart et al., 2017). A large lexicon means that a reader possesses a vast vocabulary acquired in a lifetime of using a language; thus, they understand most of what they read due to recognition of words and their meanings and how they relate (de Deyne et al., 2016). High-quality representations include orthographic, semantic and phonological representations, which allow for efficient retrieval of information, which in turn leads to successful RC (Nouwens et al., 2018).

2.9.1.2. Lexical Knowledge in Reading Comprehension

Lexical and grammatical knowledge are connected to both RC and LC in different ways, with lexical knowledge appearing to be more important for RC than for LC (Atas, 2018). The reason lexical knowledge appears to be more important for reading is that it can be expressed in words and representations. Lexical coverage

refers to the quantity and quality (the words known by readers and listeners) of words a learner should possess for adequate comprehension (Tegge, 2017). There is an assumption that in languages, a mental lexicon is divided into two parts: the orthographic half, where words are stored and the phonological half, where representations are stored (Ha, 2021). Information from the lexicon presents itself as an input source for comprehension-related processes, where single words are put together into passages, and as an output source, where orthographic and phonological pieces of information are assembled into single words (Swart et al., 2017).

In practicality, when people read, they need both information flowing upward from the bottom to the top and information flowing downward to the bottom in order to comprehend text; for example, the knowledge of letters results in word recognition, from which people draw out meanings, inferences and general knowledge influence working memory at lower levels (Birch & Fulop, 2020). Top-down flow is connected to a teaching and learning approach called whole language instruction, whereas the bottom-up flow of information has to do with a phonics approach (Anderssen et al., 2019; Birch & Fulop, 2020).

Hansen (2016) states that reading takes place in a setting, and the reader has the responsibility of making sense of the words within the text using prior knowledge stored in the reader's mind.

The above statement shows that decoding words and letters is not sufficient, as the reader is also required to add knowledge and meaning to what has been read. Although decoding on its own is not enough, it plays an important role in RC. Moreover, the reading ability can be explained as the integration of decoding skills and LC skills (Gough et al., 2017). According to Zimmerman and Smit (2014), depending on the LoLT of the school, reading skills are developed in the Foundation Phase with more emphasis on teaching decoding skills which is mostly done at superficial levels. In practicality, a person needs to understand what is read and decode it, which refers to putting words together with understanding, the result of explaining linguistic elements (Hansen, 2016). Decoding and other reading comprehension components are discussed in the following section because of the strong relation to reading comprehension.

2.9.1.3. Decoding

Teaching children to decode is mainly done in primary schools because it is the basis for reading development; it is also one of the predictors of RC, and if learners cannot decipher a word, then the meaning of the word cannot be formed (Veenendaal et al., 2015). In a study utilising a latent variable approach, researchers observed that there was a decrease in the contribution of decoding to RC from Grade 3 to 10 learners, and the sum of decoding and linguistic comprehension envisaged the RC factor better than the product of the two (Foorman et al., 2018). Notably, the amalgamation of decoding and linguistic comprehension provided a more nuanced understanding of the RC factor than the mere product of the two components. According to Urquhart and Weir (2014), reading is also defined as decoding because the speaker transforms written words into spoken words, and it is impractical to view the decoding process as futile by the time other linguistic cognitive processes commence. Decoding is not only important in RC but also for LC, text reading fluency because individual words need to be interpreted to read connected text (Veenendaal et al., 2015).

Listening and speaking have a strong relationship and work concurrently daily, whereas reading and writing are important in ensuring successful communication (Sadiku, 2015). Reading and writing are not emergent skills, meaning children must be deliberately taught these skills and learn them through instruction and practice as opposed to listening and speaking (Birch & Fulop, 2020). Listening and speaking with reading and writing aid learners in becoming good readers, listeners, speakers and writers to be able to communicate effectively (Sadiku, 2015).

Listening and speaking are emergent skills because they are based on the environment in which children are and emerge naturally as they develop when children hear people speak (Birch & Fulop, 2020). According to Gough and Tunmer (1986), decoding is the ability to recognise and read isolated words correctly and silently. For example, English has an alphabetic writing system that represents both sounds and meaning (Marjou, 2019). Therefore, developing phonological awareness helps readers understand letters and how they correspond to sounds, e.g., the word “cat” has three sounds /k/ /æ/ and /t/, which are represented by letters c, a and t, respectively (Kim, 2020). Moreover, phonological awareness is discussed because learners need to recognise and understand the sounds of the words when learning to

read in English. Therefore, phonological awareness is discussed in the following section.

2.9.1.4. Phonological Awareness in Reading and Listening Comprehension

Cárnio et al. (2017) define “phonological awareness as a metalinguistic skill characterised by the ability to perceive that speech can be segmented into words, syllables and phonemes, and these can be consciously manipulated by an individual” (p. 1). Phonological awareness is the awareness of the sounds that form a word in a language and the ability to influence them, which allows readers to decode words which involve corresponding speech-sounds with alphabets to acquire their meaning, syntactic processing, inference-making and blending of prior knowledge to understand the meaning of the text (Míguez-Álvarez et al., 2022).

Phonological decoding skills play an important role when children start to read and write (Nicholson & McIntosh, 2020); a learner’s phonological awareness is important for the success later of RC, and when it is well-developed at an early age, it can accurately determine reading achievement at 92% (Skibbe et al., 2016). Our long-term memory allows us to recall the meaning of words by storing speech-sound information and theoretical sound features of words uttered (Wong et al., 2017). Phonological representations that are explicitly identified include more detailed, different and smaller-sized chunks of phonological information, which eases learners’ listening skills (Wong et al., 2017). Phonological awareness plays a primary role in reading acquisition. It is the ability to recognise and manipulate the sound units (e.g., /ph/, /iel/, /ey/) of oral language and the sounds which may refer to syllables (e.g., *ba-na-na*, *zeb-ra*) and phonemes (e.g., /c/, /a/, /t/) (Zugarramurdi et al., 2022).

According to Cheng and Matthews (2018), phonological word knowledge is strongly and highly connected to LC in a SL. Phonological awareness is associated with later literacy outcomes such as decoding, spelling, and comprehension in early primary school (Weiland et al., 2014). Phonological awareness tends to grow smaller over time, whereas the capability of manipulating phonemes becomes more developed (Wong et al., 2017), and it incorporates syllabic and phonemic skills (Cárnio et al., 2017).

Syllabic skills are important for the development of phonemic skills, meaning they develop before phonemic skills because they are the basis for learning to recognise and manipulate a language's sound structure (Cárnio et al., 2017). Syllabic awareness is the ability to segment words, divide them, combine, recognise and influence the syllables included in a word (Míguez-Álvarez et al., 2022). Phonemic awareness is important in reading acquisition and may indirectly elevate the LC of ESL learners who may have listening challenges and rely on subtitles when watching movies or television programmes (Wong et al., 2017). Phonemic awareness refers to the ability of a learner to differentiate individual sounds in a language, and it is important for children to enhance their understanding of how letters of the alphabet align with sounds in English (Skibbe et al., 2016). For example, children need to understand that the word *cat* can be broken down into *c/a/t*, which forms the word C-A-T. Ehri (2020) found that for learners to remember how to read words using grapheme-phoneme associations, they need to know the shape of the letters, names and sounds and also need the phonemic segmentation skill to detect the separate phonemes to be linked to graphemes in the pronunciations. The results showed that learners learned the letter sounds more willingly when they were linked to letter shapes and sound pictures than with pictures in which letters were not shaped like the object (e.g., the letter /s/ taught with a snake stretched out). In addition, picture mnemonics that include both letter shapes and sounds have proven to be more successful in aiding reading beginners to learn letter-sound associations, such as the letter /s/ drawn as a snake and taught as representing its sound. There must be some correspondence in the letter sounds and learning shapes for it to enhance beginning readers' reading skills. Learning spelling enhances phonological processes and memory for spoken words (Ehri, 2020). Children tend to struggle with phonics because many phonemes in English correspond with different letters (e.g., *cat*, *key*) (Skibbe et al., 2016).

Phonics helps learners master reading faster as it involves the process of understanding letters and sounds of the alphabet and aids in reading and writing in English (Torgerson et al., 2019). Typically, phonics is learnt through the knowledge of the alphabet first, then the names of letters and the sounds they make in order to combine the letters and sounds to form a word (Paris, 2019). Phonics shows that there is a relationship between phonemes, which refer to the sounds of a spoken

language, and graphemes, which are letters and spelling that stand for those sounds in written language (Skibbe et al., 2016). Phonics helps children understand the sounds of the letters in reading and spelling and how to pronounce them accurately in reading (Paris, 2019). Teaching learners phonics helps them to assimilate the sounds made by letters and allows them to combine the letters to read or write, which in turn helps learners decode written letters by sound based on the grapheme (Ehri, 2020). It is advantageous for learners learning to read at an early age because it aids with learning patterns of the words, including pronunciation and the rules of letters which facilitates reading (Paris, 2019). When learners learn to read at an early age, their pronunciation improves, which is also good for improving their reading fluency. The following section builds on the importance of reading fluency in RC.

2.9.1.5. Reading Fluency

Reading fluency is found to be a bridge between RC and decoding and connects to the relation between RC and LC (O'Brien & Wallot, 2016). Fluent reading is eased by automatic word recognition which requires practice in acquiring the knowledge of letter sounds in words and words as wholes, which in turn helps with recognising words quicker and effortlessly decoding them (Vaz, 2024). Reading fluency is seen as the ability to decode by focusing only on oral skills; however, some children may face constant problems with reading fluency, such as the inability to interpret words, which may hinder the comprehension of connected texts regardless of accurate decoding ability and creates doubt in the fluency concept (Kang & Shin, 2019). Reading fluency is highly related to RC for learners in primary schools (Kim & Wagner, 2015); it is intertwined with decoding or word recognition and has been considered to close a gap between word recognition and comprehension (Duke & Cartwright, 2021). Reading fluency is a complex construct that includes accuracy, automaticity, and oral reading prosody, which together enhance the readers' construction of meanings (Ecalte et al., 2021). According to Aldhanhani and Abu-Ayyash (2020), 90% of comprehension challenges are due to inadequate oral fluency, which is commonly defined as the ability to read a text aloud and precisely at a natural speed and oral reading fluency has been shown to be a strong predictor of RC (Pretorius & Spaul, 2016).

Oral fluency includes recognising different aspects at a particular time, such as the number of correct and incorrect words, repetition of words, pauses and the length of

utterances. It encompasses three main components: accuracy, automaticity, and prosody (Aldhanhani & Abu-Ayyash, 2020). According to Spaul (2015), the majority of children in South Africa cannot read with understanding, prosody, fluency, and accuracy; whether they are tested in their HL or in ESL, the results always come out the same, showing that children at the end of Grade 4 cannot read with comprehension in their HL or in English by the end of Grade 6. Accuracy is the capacity of the reader to decode words accurately, and this involves being well acquainted with the alphabetic principles, which include letters (graphemes) and sounds (phonemes). Prior knowledge is important as it contributes to the ability to decode isolated words, such as sight words and irregular words (Veenendaal et al., 2015).

Accuracy is a prerequisite of automaticity, which refers to the ability to identify and decode words easily (Aldhanhani & Abu-Ayyash, 2020; Pretorius & Spaul, 2016). Accuracy and automaticity are interconnected because they both improve effective RC; however, they both need to work together because they cannot determine a learner's oral reading fluency separately (Kim & Wagner, 2015; Spaul, 2015). The last component is prosody, which refers to the ability of a learner to read effortlessly, paying attention to the punctuation marks in the text and making use of expressions in relation to the context of the text, using the appropriate tone, pitch, volume and emphasising certain words (Veenendaal et al., 2015). Learners may be unable to improve their comprehension levels should they read swiftly, ignoring the tone, pitch, and expressions that are linked to the text, but prosody has been proven to be capable of helping learners improve their RC skills (Nevo et al., 2020). When a learner reads connected texts fast and accurately, their cognitive resources, such as attention and working memory, are released to be used for higher-order comprehension processes, which in turn enhances RC (Kim & Wagner, 2015). When learners are unskilled in reading, it causes them to rely on conscious and automatic activation processes for word recognition, whereas skilled readers rely less on conscious processes (e.g., attention) for word processes (Nevo et al., 2020).

Oral reading fluency is preferred over silent reading fluency because it is a more dependable measure of reading speed, which is basically the ability of a person to read the written text at a specific unit of time, whereas silent reading fluency can only be observed through behaviour (Ciuffo et al., 2017). Ardington et al. (2021) add that

oral reading fluency and word reading fluency are highly connected in the early stages of learning to read. Oral reading fluency is calculated either by the number of syllables read per second or by the number of words read per minute, and silent reading cannot be measured easily by the number of words a reader is able to decode in a text (Ciuffo et al., 2017). Oral reading and silent reading fluency are highly connected, and both are interrelated to RC (O'Brien & Wallot, 2016). Silent reading is typically used by skilled readers daily, and it is a faster style of reading (Ciuffo et al., 2017). Reading experience often occurs in silent mode (Mano & Guerin, 2018); mature readers usually read silently rather than orally. In most cases, children in lower grades tend to read orally (Ciuffo et al., 2017). Silent reading is considered to be the best way to decode a text for skilled readers in both primary and high school (O'Brien & Wallot, 2016). Authors such as Ashby et al. (2012) state that silent reading may contain the same processes as oral reading except for the fact that it does not demand readers to articulate the words they read. However, according to van den Boer et al. (2014), silent and oral reading may require different cognitive mechanisms; for example, in oral reading, comprehension is not the main goal, but rather the pronunciation of words and this process focuses on the letters-to-sounds rules in the sublexical route. In contrast, silent reading focuses on the main goal, which is the comprehension of the text, which depends on the grapheme-to-semantic decoding in the lexical route (van den Boer et al., 2014).

Reading fluency is important for RC, and so is receptive vocabulary, as it is also the strongest predictor of RC. Building on the overview of receptive vocabulary aids in understanding how it is strongly linked and connected to the development of RC and LC. The following section discusses receptive vocabulary to understand the role it plays in both RC and LC of ESL learners.

2.9.2. Overview of Receptive Vocabulary in Reading and Listening Comprehension

Learners' vocabulary knowledge can be divided into dimensions: (i) *breadth*, which refers to the number of words a learner knows and (ii) *depth*, the quality of the vocabulary knowledge (Masrai, 2019; Susoy & Tanyer, 2019). In 1989, Laufer was the first researcher to propose that sufficient reading comprehension occurs when a reader recognises 95% of the words in a text. A few years later, in 1992, Laufer highlighted that it was important to know how many words a reader has in their

lexicon to read in the SL and that a vocabulary of 3,000 words was not enough for comprehension. According to Alkhofi (2015), knowledge of 4,000-word families, such as *-ill* (for example, *spill, skill*) and *-ing* (for example, *ping, king*), in English would produce a score of 63% and knowledge of 5,000 words such as: *-all* (for example, *ball, hall*) and *-ell* (for example, *bell, yell*) a score of 70% in reading. However, it was concluded that 98% of vocabulary knowledge is suitable for comprehension, meaning a learner needs to possess 7,000 words such as *-oy* (for example, *ploy, joy*) and *-ub* (for example, *stub, scrub*) and a minimum of 95% was standard for comprehension (Alkhofi, 2015; Schmitt et al., 2017).

Vocabulary is an important predictor of LC, and both are also the strongest predictors of RC (Hogan et al., 2014). In opaque languages such as English, the power of LC measured as linguistic comprehension in RC increases over time, whereas the power of word reading fluency in RC decreases (Wolf et al., 2019). Vocabulary is commonly researched in teaching and learning and can be simply defined as the basis for language skills and development (Uchihara & Clenton, 2020). Vocabulary is learnt through speaking or writing and through non-verbal communication or signs (Moyle & Manjarrés, 2013). A good vocabulary is required in communicating with others and has been linked with later positive reading outcomes (Weiland et al., 2014).

Vocabulary has been defined by multiple researchers (Alqahtani, 2015; Dakhi & Fitria, 2019; Ha, 2021) in various ways, and Maskor and Baharudin (2016) define it as lexical organisation, fluency, mastery, knowledge of components of vocabulary, *receptive* and *productive* vocabulary. Vocabulary encompasses various features, some of which have been listed above, and the other two are receptive vocabulary and productive vocabulary (Alkhofi, 2015). Productive vocabulary refers to the words that learners understand very well, can pronounce, and use in their daily lives and writing (Maskor & Baharudin, 2016). It can also be defined as the knowledge necessary for writing and speaking (Uchihara & Clenton, 2020).

Receptive vocabulary is the collection of words that individuals recognise. They are words that learners first receive; they know the words, and after intentional learning, they become available for productive use (Faraj, 2015). For instance, when learners learn more about the word, it is only then available for productive use. In addition,

receptive vocabulary is defined as the ability to understand words in RC and LC (Li & Hafner, 2022) and can be seen as interpreting and processing information received (Nalom et al., 2015). Lastly, receptive vocabulary is also understood as the knowledge required for reading and listening (Uchihara & Clenton, 2020). Receptive vocabulary knowledge is recognising the form of a word and extracting meaning while reading and listening, and both incorporate receptive vocabulary knowledge (Karakoç & Köse, 2017).

Both receptive and productive vocabulary are important for learners' academic development (Djaborova, 2020) because they acquire knowledge of vocabulary items receptively and then use them for productive use (Faraj, 2015). Receptive vocabulary is bigger or utilised more than productive vocabulary because when learners hear or see the words, it is receptive recognition; they are considered productive only when they use them in writing and speaking (Atas, 2018). When learners understand how to use the words in speaking and writing, it shows that intentional learning has taken place; hence, receptive vocabulary is bigger because learners can recognise certain words but still be unable to use them in writing or speaking. In many instances, when learners are in the process of learning a new language, they commence with the receptive understanding of a new item (word) and then move on to productive use. For example, learners first learn the word and its meaning before they can use it in writing and speaking, e.g., fall, favour, hello (Masduqi, 2016). Reading comprehension and LC are receptive skills that learners receive and understand but are not existing knowledge to learners (Atas, 2018; Djaborova, 2020; Masduqi, 2016). Receptive vocabulary knowledge is crucial for LC as it is for RC, and vocabulary knowledge is related to academic LC (Atas, 2018).

Typically, bilingual learners' receptive vocabulary is lower than monolingual learners even after a few years of exposure to it, and this is understandable given that they are exposed to one language for the first few years of their lives and when they are eventually introduced to the second language; the English monolingual learners had already been exposed to English (Roch et al., 2023). English SL learners should know about 8,000 to 9,000 words in order to read a variety of texts with comprehension, but English first-language learners know about twice as many words as ESL learners (Wilsenach, 2015). The vocabulary size of learners is closely linked

to the amount of exposure to a language (Haman et al., 2017). Generally, it is known that language proficiency influences bilingual children's vocabulary development (Smolander et al., 2021). Children who are exposed to a LoLT at an early age tend to perform better academically than children who are exposed to it later. The amount of exposure to a language impacts the performance of learners in school (Thordardottir, 2019) because understanding a language is the basis of RC and LC, and without being skilled in a language, RC and LC will fail (Nation, 2019).

2.9.3. Exploring Listening Comprehension

Listening comprehension is seen as the basis for learning and acquiring language, providing learners with both linguistic (pertaining to language) and non-linguistic information (gestures, written symbols) and helping them to obtain meaning through these sources to identify phonological, lexical and general knowledge of the world (Atas, 2018). It includes understanding speech in conversations and stories and understanding what has been said on television or radio. Both RC and LC are discourse-level skills because they both seek to get an understanding of words in a context (Kim, 2020). Listening comprehension is further defined as the ability to process spoken words automatically in real-time, comprehend the linguistic information that is clearly included in the text, and make inferences based on the content of the passage (Vandergrift & Baker, 2015). Listening comprehension is more important in RC as children's reading skills grow (Kim, 2016). Furthermore, it is perceived as a receptive use of language with the intention of deriving meaning from speech, and it is comparatively simple for English HL learners but frustrating for SL learners (Rahmat, 2018). Listening comprehension is the capability to comprehend written text and read audibly; learners who struggle with RC have shown a deficiency in LC as it influences their RC skills (Hogan et al., 2014). Listening comprehension is an important predictor of RC, just as decoding is for beginning readers in transparent languages such as Sesotho because decoding is already acquired at a younger age (Wolf et al., 2019). Moreover, LC is an important part of learning a language which aids in comprehensible input (Gilakjani, 2016). In other words, for learners to learn a language, they need to hear it and be able to generate meanings from the spoken words and this skill is taught at an early age.

Most ESL learners present challenges in acquiring the English language, academic reading literacy and content knowledge (Yi, 2014). Therefore, the early years of a

child's life (3-6 years) are seen as years important to develop their abilities and some life-long skills such as oral language skills, RC and LC skills in their HL so they may succeed academically (Wildova & Kropáčková, 2015).

Bloom and Lahey (1978) identify four components of oral language (semantics pragmatics, grammar, and morphology) that play an integral role in LC. *Semantics* addresses the meaning of words and the relationship between linguistic form and meaning (Kearns, 2017; Kroeger, 2023), while *pragmatics* concerns how context shapes word use and facilitates the communication of intentions (Kroeger, 2023; Taguchi, 2025). In addition, strategy-based listening leverages pragmatic knowledge through pre-listening activities in practicality (Corsetti, 2014). *Morphology*, a metalinguistic skill, involves forming accurate word structures, such as compound words (Gottardo et al., 2028), and *grammar* underpins language processing by providing the rules for morphology, semantics, phonology, and syntax, which supports all stages of second language listening (Cai & Min, 2024). However, as O'Connell et al. (2017) note, researchers remain divided on the relationship between oral language and LC, as they argue that they are unrelated such as (Carrow-Woolfolk, 2011), while (Lepola et al., 2012) see LC as a broader component of oral language; no study has tested that LC and oral language are unrelated when vocabulary, grammar and LC are clearly tested. Therefore, LC consists of different variables which are highlighted below.

Listening comprehension consists of various components and draws on a large number of language and cognitive component skills and abilities, including vocabulary and comprehension monitoring (Kim, 2017). Researchers (see Adnan et al., 2020; Ahmadi, 2016; Bingol, 2017) state that Chastain (1988), identified four LC components, the first being the ability to distinguish between all sounds, tones, and voice qualities in a SL and to be able to differentiate them between the same sounds in a HL. The second component is comprehending the spoken words and the third one being able to store spoken words in the auditory memory so they may be processed. The last component is comprehension, which is the ability to understand spoken words. Listening requires effort and concentrated focus, unlike hearing, which can be explained as a physical process in which your ears receive sounds, provided that the person does not have a hearing problem (Djaborova, 2020). Listening provides a direction in acquiring knowledge of language structures,

metacognition development, phonological awareness, and lexical units. It is also important to produce oral development as it allows learners to have good language models to communicate effectively (Mart, 2020).

In this study, linguistic comprehension is defined as synonymous with listening comprehension, that is, the ability to understand language as it is heard, including texts read aloud. O'Connell et al. (2017) explain within the framework of the Simple View of Reading (SVR) that both listening and linguistic comprehension involve understanding words presented orally. Similarly, Kim (2020) characterises linguistic comprehension as the ability to use lexical information to interpret sentences and larger discourse structures. Moreover, Rodge et al. (2019) describe linguistic comprehension as the capacity to understand oral language, a construct commonly assessed through measures of listening comprehension and vocabulary. Consequently, this study employs vocabulary tests as a proxy to evaluate the listening (and thus linguistic) comprehension of Grade 4 Sesotho HL learners.

The study of Hogan et al. (2014) showed that the influence of LC increases over time in RC from early primary school grades and that learners fail to develop acceptable RC skills due to the insufficient possession of LC skills. Over 500 learners' LC and contributions of word recognition to RC were tested in Grades 2, 4, and 8. The word recognition variance decreased from 27% in Grade 2, to 13% in Grade 4 and to 2% in Grade 8. In comparison, the LC variance showed an increase from 9% in the second grade to 21% in the fourth grade and to 36% in the eighth grade. The increment in the influence of LC as a child goes into a higher grade shows that the LC factor could explain the variance in RC. Listening comprehension is important for reading development because the basis for good LC includes building an understanding of single words and sentences in a story, whether being read aloud or shared at a dinner table (Hogan et al., 2014). Learners would have to have a well-developed vocabulary in order to understand the words in a text regardless of whether they are being read to them aloud or if they read them on their own (Wolf et al., 2019).

2.9.3.1. Working Memory in Listening Comprehension

Working memory is a basic and low mind-centred skill that supports higher-level logical skills such as observing perception, which is the capability to check and

review one's own comprehension (Kim, 2016). Working memory includes the duality of reserving and controlling information and has a distinct contribution to the RC and LC of children in primary schools (Kim, 2015). It is important for processing and storing information simultaneously (Lervåg et al., 2018). For children to extract initial propositions (i.e., the text base representation), they ought to store linguistic information for a short period while processing and combining it with new linguistic input (Kim, 2015). Typically, male learners' linguistic skills in terms of reading are weaker than those of female learners (Wilsenach & Makaure, 2018). Linguistic input, exact wording, and phrases need to be represented as this is the basis for instituting primary and literal propositions, as shown by the text-textbase representation (Kim, 2016). These are listening variables that contribute to SL LC (Vandergrift & Baker, 2015).

In a study by Vandergrift and Baker (2018), Grade 4 learners' LC was tested, and the emphasis was that LC is important in learning SL, and the variables that aid in enhancing LC include SL vocabulary, which predicts LC. The Simple View Reading (SVR) model posits that LC and decoding are two domains that predict RC, and when learners' decoding skills are robust, LC positively impacts RC (Kim, 2016). Additionally, as children get older, the relationship between RC and LC becomes more prominent (Lervåg et al., 2018). In other words, the role of decoding in RC decreases as children get older, thus supporting the ongoing increase of LC. Although LC appears to be more important for RC, it is important to look at the basis of language skills that help develop LC (Lervåg et al., 2018).

Language skills are what build LC, with vocabulary knowledge standing out as an important factor in its development because the size of a learner's vocabulary predicts their LC; however, vocabulary is not sufficient on its own (Kim, 2015). Vocabulary is important, as LC cannot occur if children do not understand the meaning of the words (Kim, 2016). Vocabulary size and lexical coverage needed for LC tend to differ in accordance with the type of spoken texts used (Atas, 2018).

2.9.3.2. Lexical Knowledge in Listening Comprehension

Lexical knowledge in SL and LC shows that vocabulary is vital for effective LC, and vocabulary size and lexical coverage needed for LC tend to differ in accordance with the type of spoken texts used (Atas, 2018). For learners to acquire sufficient

comprehension in reading and listening, they should at least know 95% and preferably 98% of the words in a text or spoken (Nation, 2019). In addition, the linear relationship between lexical coverage and comprehension is reported as 98%, which is advantageous and indicates a positive relation (for sufficient comprehension, 95% is acceptable) (Ha, 2021; Schmitt et al., 2017). Furthermore, 95% is suitable for good LC (Nurmukhamedov & Webb, 2019). Vocabulary plays an important role in SL and LC among listeners at different levels of listening abilities (Vafae & Suzuki, 2020). A noteworthy study by Mecartty (2000), as cited by Vandergrift and Baker (2015), delved into the contribution of SL vocabulary and syntactic knowledge to SL, RC and LC and found that vocabulary was successful in predicting about 25% of reading ability and 14% of listening ability. Other language skills that are considered to aid with the growth of LC include syntax, working memory, and the ability to use inference skills (Lervåg et al., 2018).

Syntax refers to understanding the rules of how words are put together to pass on different messages and is one of the predictors of LC (Lervåg et al., 2018). Syntactic knowledge is paramount in processing the meaning of the words in a text to extract meaning; therefore, children need it to be able to encode the meaning through the arrangement of words and phrases (Kim, 2015). Syntax is not only prominent in LC but in RC as well because it represents a lexicon that is pivotal for comprehension processes (Lervåg et al., 2018). Syntactic knowledge is perceived as playing an essential role in understanding the interpretation of SL and LC (Vafae & Suzuki, 2020). In addition, it is important to separate and explain how speech flows and to envision what listeners will hear next while listening and processing spoken words (Vafae & Suzuki, 2020).

Inference skill refers to the ability of a child to make sense of words in a text without the meaning being in a text (Kim, 2016). This skill is important later to LC beyond vocabulary. It is mandatory for the expansion of LC, and the inference skill is important for RC due to its effect on LC (Lervåg et al., 2018) because it enables children to use prior knowledge to link to new information for extracting meaning and has been shown to relate to LC after considering vocabulary and working memory (Kim, 2016).

Now that the language history of South Africa was considered, and RC and LC were considered in general, the literature review now narrows the focus to the RC and LC of Grade 4 Sesotho HL learners in a South African context.

2.9.4 Reading and Listening Comprehension of Grade 4 Sesotho HL Learners in a South African Context

Reading and listening skills work together, and listening skills may be an important predictor of reading development (He et al., 2022). Therefore, exploring the relationship between RC and LC of Grade 4 Sesotho HL learners is of utmost importance because no literature covers such in this particular language. This section briefly discusses the results based on the exploration of the relationship between the RC and LC of Grade 4 Sesotho HL learners. It explains that a search was done using relevant keywords to find literature that clearly explores the relationship between these two comprehension skills of Sesotho Grade 4 HL learners.

A search was conducted using certain keywords in Web of Science and Scopus, both returning zero hits, and accordingly, a gap in the literature was identified.

A search was conducted on 27 June 2024 using Web of Science and Scopus using the following search under “Abstract”, “Title” and “Keywords”:

("Southern Sotho" OR "Sesotho" OR "Sotho" OR "Basuto people") AND ("reading comprehension" OR "reading" OR "reading literacy" OR "reading skills") AND ("listening comprehension" OR "listening" OR "listening skills") AND ("Grade 4" OR "Intermediate Phase" OR "Primary school") AND ("South Africa" OR "South African context") AND ("home language").

No results were found for either Web of Science or Scopus. After iteratively removing one “AND” category at a time, for example, the search was conducted with “home language” removed; thereafter, “home language” was returned, but “South Africa” OR “South African context” was removed and so forth. All hits remained zero, except when removing the following from the search:

("Southern Sotho" OR "Sesotho" OR "Sotho" OR "Basuto people")

When removing the above from the search, one article was listed by both Web of Science and Scopus: “Basson and le Cordeur (2013)”.

In the study of Basson and le Cordeur (2013), the aim was to establish a literacy intervention programme to help improve the vocabulary and RC of Grades 4 to 6 isiXhosa HL learners in Afrikaans and to learn if the literacy programme would aid in the improvement of the RC and vocabulary of isiXhosa HL learners. This one publication in my search shows the current study is warranted because there is a gap in the literature, which we have now established with this search. The chapter is followed by factors that affect RC and LC, which must be discussed to enhance understanding of the relation of the two skills, as some factors that affect one skill are prone to affect another skill as well.

2.9.5. Factors Affecting Reading Comprehension and Listening Comprehension

There are factors that may contribute to learners' low reading levels and possibly affect their reading achievements. For learners to be able to read with comprehension, they ought to learn a few skills before they can master reading. These skills are important to learn in early developmental stages as each stage requires learners to learn a new set of skills. Listening comprehension is a skill that needs to be mastered before other skills because it is important for learning, and having a good listening skill depends on the amount of information an individual obtains in the listening process (Syahreza et al., 2019). Listening comprehension needs to be learnt at an early age as it influences the amount of comprehension a child or learner will acquire in the reading and listening process. The process of listening does not only stop at hearing the words; an individual must make sense of the words in order to enhance their listening skills and comprehension (Syahreza et al., 2019). The current study has established the importance of both skills and how they can be enhanced. An explanation of how RC and LC can be affected is reflected below.

One of the skills that can deter a learner's reading success is phonemic awareness, which is the ability to recognise the sounds of letters and how they operate (Sanford, 2015). Vocabulary is another factor that affects reading comprehension because if learners have poor vocabulary skills, they will not be able to understand what they are reading. Building a child's vocabulary is important for them to become skilled readers. Learners who recognise 98% of the words they read are regarded as good readers and thus read with understanding (Iqbal et al., 2015). Working memory plays

an essential role in learners recalling information stored in their short-term memories, and this information allows them to use prior knowledge when reading or learning new things (Sanford, 2015). Good existing knowledge helps learners link prior knowledge to new knowledge to make sense of what they are learning. Therefore, without good existing knowledge, a learner's reading success may be hampered. Reading speed plays an important role in RC because learners who are fluent in reading can read approximately 200 to 300 words a minute (Iqbal et al., 2015).

Various factors affect LC, and some of them are similar to those that affect RC, such as vocabulary, speed rate, and more examples which include poor pronunciation, a distinct accent and other physical factors that can be associated with factors affecting LC, such as hearing loss (Syahreza et al., 2019). Learners with poor vocabulary tend to struggle with listening comprehension because they are not familiar with most words and thus cannot generate meanings to make sense of the words. Learners need to hear and also understand the words that are spoken to them to enhance their LC. In addition, learners cannot manage or control the speed at which the words are delivered, and the accent could also deter the LC process (Afriani, 2019). Other factors include poor contextual knowledge because if learners are not knowledgeable about the content being taught, they may lose interest and concentration, which in turn hampers their LC. Furthermore, different expressions, such as facial expressions, may be misinterpreted in different cultures, and that might cause confusion in how learners interpret the message that was delivered to them (Afriani, 2019). The shortage of material may also affect learners' development of LC because if they do not have sufficient and appropriate materials to utilise for their LC activities, then they run a risk of having poor LC skills (Xuan, 2017).

The factors that affect RC are also common in LC. Developing these two skills should be mandatory from early childhood as this may help to eliminate the reading crisis in South Africa. Listening comprehension is one of the skills that receive little to no attention in schools because most teachers perceive it as a skill that has already been taught at home and that learners have developed it well (Xuan, 2017).

However, in most cases, that is not true, as there are quite a few learners who struggle with LC and RC. There is no doubt that learners need to be taught these skills, and an extensive amount of time should be invested in teaching these two skills.

The following section delves into gender differences in RC and LC between male and female learners. Exploring the RC and LC differences in a sample of Grade 4 Sesotho HL learners is of interest in the current study as it is one of the objectives. Now that factors affecting RC and LC have been covered, exploring the differences in gender when it comes to the two skills may aid in enhancing the role RC and LC play when it comes to gender. The chapter discusses different results acquired from other studies in terms of the role gender plays in RC and LC. The findings in other studies and the results of the current study are interesting because some studies oppose the results that have been found in the current study; on the other hand, some studies have found the same results. The current study explores the differences in RC and LC between female and male learners, as it is an important part of the study to address the research questions and to enhance understanding.

2.9.6. Differences in Reading Comprehension and Listening Comprehension Between Female and Male Learners

Gender differences in language learning are often perceived as the variances female and male learners show in learning activities. Typically, in the early stages of learning a language, female learners are considered to have better language abilities and are often seen as having an advantage in learning an SL faster than male learners (Retelsdorf et al., 2015). In terms of SL acquisition, female learners are said to possess both image-thinking and abstract logical thinking abilities, thus resulting in female learners producing higher scores in English than male learners (Q. Wang, 2015). Psychology depicts that the partial sides of the two brain hemispheres in women and men develop at different speeds and in uniquely different ways, where the female's left hemisphere of the brain is stronger than the male's, which aids in women being better in language expression and short-term memory (Reilly et al., 2019; Wilsenach & Makaure, 2018). In contrast, males' right side of the brain is stronger than females, making males better in analysis, comprehensive ability, spatial perception and experimental observation. In addition, female learners' SL word memory ability is significantly better than male learners' memory in learning an SL (Nouwens et al., 2017). Memory is typically divided into image, mood, logical and motion memory. Male learners have been shown to have good logical memory, and female learners have been shown to have good emotional, image and motion memory (Q. Wang, 2015). Memory is important in learning an SL because a good

memory will help SL learners acquire rich knowledge in the SL, which in turn will increase their RC and LC (Nouwens et al., 2017).

Female learners' LC is often perceived to be better than that of male learners due to advantages in the auditory perception of voice recognition and positioning. In contrast, males excel in visual and spatial perception (graph of observation) (Q. Wang, 2015). Women's pronunciation and organs develop much earlier than men's, which in turn results in female learners being stronger than male learners in hearing, verbal expression and auditory perception (Wilsenach & Makaure, 2018). However, a study by Namaziandost et al. (2018) may show some discrepancies in the notion that female learners perform better in LC tests than male learners, as the results showed that male learners performed better than female learners in LC tests. Gender differences are generally perceived for specific cognitive abilities such as visual and spatial ability (Reilly et al., 2019). Female and male learners show no significant difference in reading, but the difference may appear in how well children can memorise, pay attention and the quality of thinking (Q. Wang, 2015). In South Africa, a study by Wilsenach and Makaure (2018) showed that female learners outperformed male learners in fluent reading tasks, non-word reading, exceptional word reading, and regular word reading.

According to Q. Wang (2015), female learners have the advantage of being better readers than male learners; thus, female learners tend to produce higher scores than male learners in English. However, Reilly et al. (2019) argue that male and female learners are the same in terms of intelligence, which can be defined as a blend of attention, observation, memory and thinking ability. Female and male learners are more alike than they are different, which means that gender differences are statistically insignificant (close to zero) in size (Reilly et al., 2019). Within a South African context, some studies (Limbrick et al., 2011; Martino & Kehler, 2007; Rutter et al., 2004) have shown female learners being the ones that typically perform better than male learners in RC (Wilsenach & Makaure, 2018).

Male learners tend to perform poorly in RC because of lower motivation in reading than female learners (Şuteu et al., 2021). In the institutional context, more male learners are poor readers than female learners. However, epidemiological studies investigating reading impairments in the community show that male and female

learners perform the same way, which means that the reading impairment in female learners may be underreported and that female learners are favoured more than male learners (Reilly et al., 2019). de Waal et al. (2018) posit that male learners tend to suffer more from Development Coordination Disorder (a condition that affects the development of motor skills) than female learners, which could be the contributing factor to female learners outperforming male learners in RC activities. Hedges and Nowell (1995) stated that the largest study of gender differences in achievement scores conducted from 1971 to 1992 by the “National Assessment of Educational Progress” (NAEP); found that female learners attained significantly higher scores in reading tests each than male learners each year and the male learners’ performance was more inconsistent than that of female learners. The inconsistency led to disproportional reporting of male learners as poor readers.

Gender differences in RC do exist because, in most cases, female learners outperform male learners, and this could be due to a lack of motivation or enjoyment in reading for male learners (Şuteu et al., 2021). In a quantitative study by Cekiso (2016) conducted in the Eastern Cape, Grade 3 isiXhosa HL learners’ RC was tested, and the results indicated that gender differences in RC scores from the different genders were statistically insignificant, although girls performed better than boys. Female learners generally outperform male learners in RC because they are intrinsically motivated to read. They read for enjoyment, which is highly correlated with RC (Miyamoto, 2024). Ngongare et al. (2020) conducted a study in Indonesia, and they found that gender affects RC, and the results were statistically significant.

In contrast, some research in Iran and Greece has shown that differences in reading comprehension between male and female learners are statistically insignificant, i.e., the differences are too trivial to be taken into consideration (Salehi et al., 2014; Vlachos et al., 2015). Gender differences in reading also depend on age, which means gender differences in reading performance increase over time with the learners’ age, insinuating that results for children in primary and high school are different (Miyamoto, 2024). In Romania female learners in Grade 4 have been shown to read more for pleasure than male learners (Şuteu et al., 2021). Males are more interested and will have better comprehension of more masculine texts, and females are more likely to comprehend feminine topics (McGeown et al., 2016; Ngongare et al., 2020). If a child is not intrinsically motivated to read as much as the other gender,

they could face challenges in making a persistent effort to read and may need support in doing so (Miyamoto, 2024). A study conducted in a UK primary school included 10-year-old female and male learners, and the results showed that the relationship between intrinsic motivation and RC was higher for boys than it was for girls (Miyamoto, 2024).

Children in primary schools are more likely to read more traditional texts (comics, fiction, poems) than technology-based materials like those in secondary schools (McGeown et al., 2016). As children grow, their reading is more influenced by their interests and abilities as they have power over what they would like to read (McGeown et al., 2016). Perceived competence also plays a role in RC, with female learners considered to have a high perceived competence thus, outperforming male learners in RC (Şuteu et al., 2021; Wilsenach & Makaure, 2018). Learners with high perceived competence in reading tend to perform better in reading tests than those who encounter challenges in reading and have a low reading perceived competence (Şuteu et al., 2021). When learners view texts as difficult to read, their RC is affected (Miyamoto, 2024).

In South Africa, gender differences are influenced by various factors (de Waal et al., 2018). According to Zuze and Reddy (2014), girls outperform boys in reading in South African primary schools, which implies that either girls can use the available resources provided at school better to improve their reading or the delivery of the content and the availability of the resources are more appropriate for girls to grasp and learn how to read than it is for boys.

There are inequalities in the South African education system, and it seems that gender differences in RC and LC would be of major concern; however, they are not (Zuze & Reddy, 2014). Understanding the reason for gender differences in the achievement of learners may aid in designing instructional interventions to improve quality and inequality concerns (Cekiso, 2016). South Africa has gone through vast changes in policies; therefore, it is important to determine if literacy inconsistencies between boys and girls could be the aftermath of these changes.

Exploring the underperformance of boys in RC and LC is of most interest in determining whether the education system is fulfilling its role in ensuring the achievement of all its learners. Zuze and Beku (2019) state that many public schools

in South Africa are co-educational, meaning that they may preserve the conviction of societal gender roles. Consequently, international research has shown that girls perform better in all subjects. Thus, female learners are better in RC and LC activities than male learners. South Africa is known to struggle with socioeconomic issues, with gender inequality being one of the main issues (Selebi et al., 2023).

2.10. Conclusion

This chapter aimed to highlight factors that interlink with and affect the RC and LC of South African learners who have had to switch to English as a SL. The chapter highlighted the importance of being proficient in a language in order to read with understanding. It also indicated how most ISAL speakers are in schools where the LoLT is English or Afrikaans and not their HL, which may be the biggest contributor to the reading crisis in South Africa. English is dominant in South African schools, and it is said to be paramount in academic success and gives better educational and occupational opportunities, unlike the indigenous languages; hence, all learners in South Africa, especially from Grade 4, are expected to be proficient and learn in it. If learners cannot master their HL, then they cannot use the same skills they utilised to acquire their HL to learn an SL. Children's academic success is heavily dependent on how well they can read, write and understand written texts. In order for children to be able to read, write, speak, and listen accurately, they ought to be trained so they can be skilled and proficient in their HL and English. The current study then narrowed down to the focus on the RC and the LC of ESL learners. In the narrowed sections, the RC and the LC of Grade 4 Sesotho HL learners were explored.

However, a gap in the literature was discovered as there was very little research regarding Grade 4 Sesotho HL learners RC and LC. The literature review identified a gap in the research on Grade 4 Sesotho HL learners. The section was then followed by differences in RC and LC between male and female learners, and the results were based on both local and international findings. The differences in RC and LC between boys and girls will show discrepancies because different studies show different results. Female learners are usually expected to outperform male learners in lower grades; however, when they reach secondary level, the results might be different. Overall, the chapter underscores the importance of language as it plays a substantial role in the development and enhancement of RC and LC of ESL learners.

Chapter 3: Methodology and Research Design

3.1. Introduction

In this chapter, the research methodology is unpacked to explain the guidelines followed in conducting the study. Discussing the research paradigm is important as it forms the basis of the study and is discussed in Section 3.2. This is followed by Section 3.3, which discusses the approach to theory which informs the reader of the reason the study uses a deductive approach. Section 3.4 discusses the methodological approach of the study to enhance understanding of the basis on which the study was founded and conducted. Understanding the research design of the study is important as it guides the researcher on how to analyse data, and this is discussed in Section 3.5. Section 3.6 discusses the time horizon, followed by Section 3.7, which delves into the sampling method and sample size of the study and the importance thereof. Data collection tools are extensively discussed in Section 3.8 to inform the reader of how the raw data was collected following the guidelines of the methodological approach that was selected and suitable for the study. Section 3.9 delves into data analysis and explains how the researcher aims to analyse data based on the results found in the analysis. Section 3.10 discusses quality assurance and its importance in ensuring that the study refrains from biases extensively. The ethical consideration guidelines that the researcher followed prior to and during the study are fully considered in Section 3.11. Section 3.12 concludes and sums up the important points of the study.

3.2. Research Paradigm

The current study employed the post-positivism paradigm, which was developed to address the shortcomings of the positivism paradigm (Roux, 2015). Auguste Comte is viewed as the pioneer of positivism in the 19th century (Maksimovic & Evtimov, 2023). The positivism paradigm accepts all verified experiences, opts for objectivity, and does not make room for subjectivity (Alharahsheh & Pius, 2020). The purpose of the positivism paradigm is to ensure that the researcher remains unbiased by removing interactions between the researcher and participants to ensure objectivity and to investigate and test theories (Creswell & Creswell, 2018). Positivism links with general experiences, taking into consideration the truth and facts without the influence of biased information (Alharahsheh & Pius, 2020). According to Panhwar et

al. (2017), the rise of post-positivism was not only due to the limitations of positivism but also due to the recent constructive research in education.

Post-positivism balances both positivist and interpretivist paradigms and allows the researcher to carry out research using different research methods based on the nature of the research questions (Panhwar et al., 2017). As a result, it limits human bias as it allows the researcher to use distinct research methods that allow the study to be investigated from different angles. Although human bias or subjective opinions cannot be completely dismissed, the researcher needs to remain impartial when conducting research (Maksimovic & Evtimov, 2023).

Post-positivism was selected to carry out the research due to its nature, which enables the researcher to interact with participants while maintaining objectivity. It incorporates both quantitative methods, such as surveys and qualitative methods, such as interviews (Maksimovic & Evtimov, 2023). Furthermore, the post-positivism paradigm allows the research to include participants in the study, unlike the positivism paradigm, and the problems solved by post-positivism encourage the need to inspect causes (Roux, 2015). The post-positivism paradigm offers flexibility, which is pivotal in aiding the researcher in acquiring extensive information and utilising different angles to collect data. It can explain past events and concepts and provide data that is valuable and reliable (Panhwar et al., 2017). Grade 4 Sesotho HL learners' reading and listening comprehension skills were tested using Annual National Assessment tests (ANA). The assessments were used as a tool to obtain adequate information based on the research questions and the theoretical framework. In the data collection process, there was an interaction with the participants before and after the tests to explain to them what was expected and to remain objective throughout the tests.

3.3. Approach to Theory Development

The current study incorporated the deductive approach because it is used to test existing theories (e.g., reading and listening comprehension and gender differences in RC and LC), allows for the drawing of certain conclusions, and substantiates the theory by data collection (Melnikovas, 2018). The deductive approach is intertwined with scientific research and is considered a top-down approach, as conclusions must be drawn after the theory has been tested and confirmed (Alturki, 2021). In the

current study, Sesotho HL learners' RC and LC were tested to draw conclusions on whether there was a relationship and if there were differences in RC and LC between boys and girls. The researcher moved to a more specific focus, which entailed Sesotho HL learners' skills to be tested in English rather than a general focus whereby learners across South Africa's 12 official languages were tested.

3.4. Methodological Approach

The current study adopted a quantitative research approach, which aimed to acquire precise and reliable data that allow the utilisation of specific statistical techniques to address questions like *who*, *how much*, *what* and *how* (Apuke, 2017; Queirós et al., 2017). Quantitative studies create numbers (data) that need to be interpreted before drawing conclusions. It is used in both natural and social science and has to do with quantity, meaning that the phenomenon under investigation can be described in a way that can be counted. Quantitative research has an important role in the justification of research (J. Park, 2016), and it is deductive since it is about collecting data, finding patterns or relationships, making predictions, focusing on objectivity, and, after that, making conclusions (Watson, 2015). The justification process entails the following methods: assessing results through a validation process, using research data for generalisation, establishing explanations and predictions and taking part in necessary control activities (J. Park, 2016). Quantitative methodology supports various methods that deal with the exploration of social occurrences utilising analytical data and believes that data can be measured (Asamoah, 2014).

Post-positivism is an appropriate research paradigm for this quantitative study as it acknowledges the existence of an objective reality while recognising that knowledge is fallible and subject to refinement through empirical investigation (Creswell & Creswell, 2018). This paradigm supports the use of structured methodologies, such as statistical analyses and hypothesis testing, to systematically examine relationships between variables while allowing for the possibility of measurement error and bias (Maksimovic & Evtimov, 2023; Phillips & Burbules, 2000). By adopting a post-positivist stance, the study ensures methodological rigour and objectivity.

The current study includes one primary and two secondary research questions to reach the objectives of the study, and learners' RC and LC had to be tested as guided by the quantitative approach. The research asked questions like *what* to draw

conclusions in the relationship between the RC and LC of learners to obtain reliable and precise data. The data acquired can be interpreted in numbers and words to make conclusions.

3.5. Research Design

The current study used a correlational design, which was appropriate for investigating a possible relationship between variables without manipulating them (Creswell, 2014). This design addressed the current study's SRQ1. In addition, the study also utilised a comparative research design to address the current study's SRQ2. Comparative research design can be defined as a research methodology that investigates factors of social sciences in different contexts and focuses on measuring differences and similarities (Miri, 2019).

By using both research designs, it was possible to address both the research aims of the current study, which provides valuable insights from multiple perspectives on the importance of RC and LC when taking cognisance of the role gender plays. Johnson and Christensen (2019) are in support of utilising a combination of comparative and correlational research designs, in order to have a clearer understanding of the research problem. Nilsson et al. (2017) utilised a comparative correlational research design that included the patients from two hospitals in Sweden. A comparative correlational design is commonly used as it is capable of providing a comprehensive understanding of results.

A correlational design aids in determining if there is a relationship between variables and a comparative design reveals differences and similarities between variables. The current study focuses on the relationship between RC and LC of Grade 4 Sesotho HL learners and the role gender plays, therefore, a correlational design was responsible in addressing the SRQ1. As such, the correlational design is unpacked below.

The current study uses a correlational research design, which seeks to investigate the relationship between two or more variables without manipulating them (Asamoah, 2014). The purpose of a correlational research design is to measure how differences in one variable relate to differences in one or more other variables (Curtis et al., 2016). The correlational design does not state the cause because the relationship between two variables, RC and LC, could be described by another

variable (Curtis et al., 2015; Queirós et al., 2017). A relationship between variables in correlation research is shown when a variable increases and another variable increases or decreases (Curtis et al., 2015).

Typically, a correlational study encompasses a quantitative research method in which two or more quantitative variables are investigated to determine if there is a relationship between them (Asamoah, 2014). The current study fits into correlational research design because it investigated the relationship between two or more variables, which in this case are RC and LC skills. Grade 4 Sesotho HL learners were tested, and the scores on the tests were used to obtain data in the correlational study (Asamoah, 2014). Prior to the commencement of the research, suitable variables, reliable tools, and identification of the sample were selected to achieve the aim and objectives of the research. The two variables are unpacked and discussed distinctively to gain an understanding of how they could be related and what they both entail. Two variables may coincide, but it is only through research that a relationship can be shown, and it is important for quantitative researchers to establish how and why things differ and how a relationship is formed between two or more variables (Curtis et al., 2015). All correlational studies require descriptions of how and why variables might be related to other variables; hence it is important for the researcher to outline the association precisely (Curtis et al., 2015).

The strengths of a correlational study are that there is no manipulation of variables, the relationship between variables can easily be calculated, and different domains can be researched (Queirós et al., 2017). A correlational design does not limit the researcher to which variables to investigate (Asamoah, 2014).

Correlational studies do not go as far as investigating the cause and explaining the reasons behind an association between variables (Asamoah, 2014). Cross-sectional studies give a brief explanation of a situation that makes it challenging to find causal inferences between exposure and outcomes (Lau, 2017).

To address the SRQ2, the current study employed the comparative research design, which is a design that can be quantitative in which the analysis is based on variables, and the aim of variable-oriented research is to establish descriptive inferences, which are patterns found in a sample (Miri, 2019). A comparative research design is described as a study that examines an occurrence to search for

differences and similarities between units (Iranifard & Latifnejad Roudsari, 2022). The aim of a comparative design is to gauge similarities and differences between variables which in this case are gender differences between RC and LC of Grade 4 Sesotho HL learners (Bryman, 2016).

The main advantage includes the contribution to the quality of the research (Goerres et al., 2019). Furthermore, the comparative research data gives rich knowledge about a context (Kosmützky, 2018). Disadvantages of a comparative design include the researcher being biased in the selection of the sample, thus producing data that is biased (Goerres et al., 2019). The comparative research design is complicated because it collects, examines and compares data in different contexts (Kosmützky, 2018).

The comparative correlational research designs are quantitative descriptive methods that aim to analyse characteristics and existence of different occurrences because they both aim to recognise relationships between variables (Umstead & Mayton, 2018). Although the correlational and comparative design may be similar, they are also different because the comparative design seeks to explore how variables are different from one another while the correlational design only focuses on the relationship between variables (Johnson & Christensen, 2019; Umstead & Mayton, 2018).

3.6. Time Horizon

A cross-sectional study requires information to be gathered at a single point, and as such, causation cannot be established (X. Wang & Cheng, 2020). This research is cross-sectional because data is collected from a group of individuals only once. In contrast, one gets longitudinal data that follows the same set of individuals over time (i.e., data is collected from the same group of individuals twice or more) (Caruana et al., 2015).

The current study did not seek to determine the cause-and-effect of the variables to explain the results. The study only sought to investigate the relationship between RC and LC of Grade 4 Sesotho HL learners and the differences in RC and LC between boys and girls. The researcher only appeared once in the two schools to test the participants and had no intention of following the same participants to keep a record of changes in their performance or to test their RC and LC skills over time.

The limitations of the study are that the current study is cross-sectional; therefore, it does not determine causation, does not give a conclusive reason for the relationship between variables and may lack internal/external validity (Queirós et al., 2017). Therefore, it does not provide a conclusive view as to why there may be a relationship between two variables. Cross-sectional study results do not remain the same as they might be different had another time been chosen to conduct the study (Lau, 2017).

3.7. Sample, Sampling Method and Sample Size

It is important to determine the intention or aim of the study before choosing the sampling method (Curtis et al., 2015). The current study employed a non-random purposive sampling method, which was used to select participants for the study's specific purposes (C. Venter, 2019). The purpose of purposive sampling is to obtain a plethora of information to address the study's research questions by selecting specific participants according to the inclusion criteria and based on the subjective decision of the researcher (Thobejane, 2018). The purposive sampling technique was employed as it allows the researcher to select participants that are relevant and beneficial to the study at an efficient cost (Gill, 2020). The non-random probability selection process does not offer a guarantee of selecting random people to be part of the study as opposed to random probability sampling. The specific inclusion criteria for the current study are Grade 4 Sesotho HL learners who have English introduced as SL in Grade 4. These learners had to have been taught in Sesotho HL in the FP, and then experience a LoLT change to English in Grade 4.

In the process of designing research, the minimum required sample size to obtain a high statistical power is calculated. When utilising the G*Power version 3.1.9.4 software (Faul et al., 2007), there are sample sizes that are needed for correlations with a small sample size of 29, a medium size of 84 and a large size of 782. Effect size refers to the intensity of a relationship between two or more variables (Téllez et al., 2015). Disregarding a small effect size, a n_{min} of 29 and 84 is needed for medium and large effect sizes, respectively, so the aim was to gain at least 84 responses. Obtaining the needed minimum sample size is required to point out small effect sizes, because there may be statistical significance ($p < 0.05$) for a small effect size with a statistically significant result; however, the significance might not be feasible (Baicus & Caraiola, 2009; Peeters, 2016). Having a large effect size does not mean

practical significance (Peeters, 2016). Sample size and statistical significance are interconnected, and research with large samples can reveal small differences (Peeters, 2016).

The current study sample included 84 learners in two schools in the Gauteng province. The learners that were included in the study were Grade 4 Sesotho HL learners with English as an SL. The Grade 4 Sesotho HL learners were specifically chosen to meet the inclusion criteria. Two schools in the Gauteng Province were considered as it has schools that offer Sesotho HL in the FP and English as SL language in Grade 4. The researcher had to follow specific inclusion criteria, which is Grade 4 Sesotho HL learners who have English introduced as SL in Grade 4 in the Gauteng province, to ensure that the objectives were met. In both schools, learners from different classes whose parents consented to them being part of the study were put together in one class to be tested.

3.8. Data Collection Tools

The current study utilised the ANA assessments to test the learners' RC and LC skills. The ANA assessments are a state-mandated standardised tool to measure learners' competence and ensure quality education and instruction by responding to the encountered educational deficiencies through assessment and detecting learner problems (Maphalala & Dhlamini, 2017). The ANA assessments were selected because they are set according to the CAPS policy standards to assess if learners are grasping the information they acquire in the classroom. The assessments have been set to include the activities that learners are taught in class and then tested on them. The reliability and validity of the tests were established by the DBE; hence, the researcher utilised them (Maphalala & Dhlamini, 2017). For the current study, the ANA instruments include one RC and two short LC tests. Both RC and LC tests were obtained from the DBE website.

3.8.1. Assessment Tools

The RC test included a passage that did not have a title, and learners had to read it to be able to choose the most accurate title for the passage. The passage was fictional because the characters were not real, and the events in the story were invented. The characters in the passage were animals who could speak and help each other in times of need. The literary device used in the passage is

personification because animals were given human characteristics, such as the ability to speak and reason. The RC test was about the “Lion and the mouse”. The lion’s mercy toward the mouse worked in his favour because, one day, he got caught in a trap, which was a net. The lion could not do anything but cry for help, and the mouse came to his rescue by chewing the net. The mouse was able to help because when she got caught in the lion’s paws, she begged him not to eat her, and he had mercy on her and decided to let her go. In that way, she was returning the favour. The RC test is found in Appendix A, and the corresponding memorandum is in Appendix B.

The assessment framework included multiple-choice questions, true/false questions, underlining the correct word, and tenses. The RC test included 14 questions in total, which were divided into eight multiple-choice questions, one true or false question, three close-ended questions and two questions in which the learners were required to underline the correct words (see Appendix A).

The LC test included a short passage that did not have a title, as learners had to generate one from listening to what the passage was about, and a short poem called “Lunchtime”. By asking learners to provide a title after listening to the passage, the researcher can assess their listening comprehension skills by evaluating their ability to grasp the passage’s main idea and determine whether they have understood the central theme, key details, and overall meaning of the passage. Providing a title for the passage also encourages critical thinking and summarising skills (higher-order skills). In addition, it helps develop active listening skills, which is crucial for their overall development and academic success. The passage was a fictional story because the events that took place were not real. One of the characters had magic powers and fulfilled the king’s wish, which was that everything he touched turned to gold. The king had a good heart but loved gold. One day, he helped an old man who had magic powers, and because of the king’s kindness, the old man said he could have one wish. The king’s wish was that everything he touched turned to gold. He eventually got tired of his wish as everything he would touch would turn to gold. He told the old man to revert his wish, and it was done. Learners were provided with questions and given 30 minutes to answer questions on the passage. The listening exercise overall was 45 minutes. The first LC test is found in Appendix C, and the corresponding memorandum is in Appendix E.

The second LC test included a short poem that had four lines and was about Siya and Siphho, who could not wait to have lunch. The literary device used in the poem was rhyme because in each sentence, every last word rhymed with the last word in the following sentence. The poem was fictional because the events that took place were not real, and so were the characters. Siya and Siphho were outside, sitting on the wall, waiting for their mother to call them to have lunch.

The assessment framework for both LC tests included multiple-choice questions, true/false questions, and filling in the missing words. The passage about a king who loved gold included ten questions in total (see Appendix C). There were two multiple-choice questions, two yes or no questions, two true or false questions, and four fill in the missing word questions. The short poem included seven questions in total. There was one multiple-choice question, two fill-in-the-missing-word questions and four true or false questions.

3.8.2. Procedures for Data Collection

For RC, learners were instructed by the test administrator (researcher) to read the passage independently and answer all questions in the spaces provided. They were allocated 45 minutes to complete the task. Before the test began, the administrator read the instructions aloud to ensure learners understood the task; however, no questions related to the test content were permitted. The administrator provided examples on the whiteboard to familiarise learners with different question formats. Responses were required to be in English only. The RC test is included in Appendix A, with the corresponding memorandum in Appendix B.

For LC, The test administrator read the instructions aloud to ensure learners understood the expectations. Examples of different question formats were demonstrated on the whiteboard, with learner responses required to be in English. The passage was read aloud three times, after which learners received the corresponding questions, and they were given 30 minutes to answer questions based on the passage. The LC passage is included in Appendix C, with the corresponding memorandum in Appendix E. Similarly, a short poem was read aloud three times, followed by the distribution of related questions. Learners were instructed to listen attentively, as they would not be permitted to ask for repetitions or clarifications. They were given 15 minutes to answer questions on the poem. The

second LC test is included in Appendix D, with the corresponding memorandum in Appendix E. The time allocated for LC was 45 minutes. Testing at both schools took place on the fourth day of the week in the morning to ensure consistency in administration of learners before they could start writing to know what to expect and what was expected of them. They were provided with examples on the whiteboard on how to answer questions in English only. The passage was read aloud three times, and questions were distributed to them and they were given 30 minutes to answer questions on the passage. The listening exercise overall was 45 minutes.

The short poem was also read three times aloud, and after that, the questions were provided to them. Learners were instructed to listen attentively when both the short story and poem were read as they would not be allowed to ask questions or to ask that the stories be read again. They were given 15 minutes to answer questions on the poem. The second LC test is found in Appendix D, and the corresponding memorandum is in Appendix E. Overall, the time allocated for LC was 45 minutes. Both schools were tested in the morning on the fourth day of the week.

The purpose of the LC test was to test their understanding and memory, as it is easier to recall something which you understand. Overall, the tests were set up to investigate the relationship between the two comprehension skills and to determine if gender differences existed. For both tests, learners were given adequate time to answer the questions. The test administrator marked and scored the tests using the guidance on the ANA memoranda. The current study fits in the quantitative approach because it made use of assessments in the data collection process.

3.9. Data Analysis

The current study utilised Statistical Package for the Social Sciences (SPSS) because it is commonly used in social sciences to analyse quantitative data. All data was captured in MS Excel. The data included the learner responses from the RC and LC tests (test scores: ratio continuous variables), the school they attended (binary variable) and their gender (binary variable). After the data was captured, it was imported into SPSS for analysis.

After the data was imported into SPSS, descriptive and inferential statistics were conducted. Correlations are easily calculated in SPSS using a correlation coefficient, of which the values acquired determine the level of association between variables.

Quantitative data can be described as percentages, with a central tendency such as mode and spread such as range (Curtis et al., 2015).

Prior to the presentation of the results, normality tests should be run to determine if data is normally distributed or not, and in this case, the data was not normally distributed for RC and LC scores (Kishore & Jaswal, 2022). The Shapiro-Wilk test is a test used to test for normality, and if the p-value is <0.05 , it indicates that there is no normal distribution (González-Estrada et al., 2022). Testing for normality is important because it also guides the researcher to utilise appropriate statistical tests. If data is normally distributed, then parametric tests can be used. However, if it is not normally distributed, then non-parametric tests ought to be used to test for normality (Hernandez, 2021; Kishore & Jaswal, 2022).

The non-parametric Mann-Whitney (MW) test was used to test for differences in RC and LC scores between boys and girls. There were 38 boys and 46 girls that participated in this study. To conduct the MW test, the data was first imported into SPSS. The analysis was performed by navigating to the “Analyze” tab, selecting “Nonparametric Tests”, followed by “Independent Samples”. Next, the appropriate variables were under the “Fields” tab, and gender was selected under “Groups” and the analysis was executed. The MW test is a test used to compare for statistically significant differences between two independent groups (i.e., female and male) when sample sizes are small (Kishore & Jaswal, 2022). The non-parametric Spearman correlation was used to test for a correlation between RC and LC.

In correlational research, data can be outlined using frequencies, which refer to data summarised in numbers and percentages of respondents in each category, and descriptive statistics, such as mean and median, are used to explain the sample characteristics (Curtis et al., 2015). Descriptive statistics provides summarised data in the form of mean, median and mode, which are referred to as central tendency (Ali & Bhaskar, 2016). In descriptive statistics, there are distinct variables such as intervals, ratios, measures of frequency, position and variation (Kaur et al., 2018). To generate descriptive statistics, the data was first imported into SPSS. Before the descriptives were run, the option of “Split file” by “Gender” was selected. This ensures that the descriptive statistics per gender is produced. Following this, the descriptive analysis was conducted by selecting the “Analyze” tab, followed by

“Explore”. The relevant variables - RC and LC scores - were then selected for analysis. The “Explore” option was used as opposed to the “Descriptives” option, as the latter only produces the minimum, maximum, mean and standard deviation. The “Explore” option gives more descriptive statistics such as the median and the IQR. Nominal and ordinal are categorical variables, while interval and ratio are continuous variables, also referred to as quantitative or numerical (Ali & Bhaskar, 2016). Interval variables have a digital value but no zero point, but ratio variables have a zero point, as well as all features of interval variables (e.g., height) (Ali & Bhaskar, 2016). Measures of dispersion/variation explain the extent to which data is similar and distinct (Ali & Bhaskar, 2016). Central tendency is the value that explains the whole data set (Kaur et al., 2018). It is important to calculate descriptive statistics before making inferential statistical comparisons because it provides a base for comparing variables with inferential statistical tests (Kaur et al., 2018).

The key concept in inferential statistics is to determine if something is statistically significant or not. Analysis is usually performed using inferential statistics because it allows the investigation of the association between variables and differences between mean values (Watson, 2015). The analysis was carried out utilising inferential statistics, which allows researchers to test the differences between means and the relationships between variables (Amrhein et al., 2019). In the current study, a 5% level of significance was used, and if the p-value was less than 0.05, the results were statistically significant. Statistical significance is explained by a probability, which estimates how likely something is to occur. If the probability is below 0.05 (less than a 1 in 20 chance), that implies that the observation is statistically significant, which means the relationship between variables is real (Watson, 2015).

A frequent statistical test used in this correlational study is Pearson’s r , which is usually employed to measure relationships between variables (Curtis et al., 2015). The strength of relationships was indicated by correlation coefficients, which ranged from 1.00 to -1.00, and correlations indicated by coefficients closer to 1.00 and -1.00 specified a stronger relationship (Asamoah, 2014). Positive correlations expressed that as the values interlinked with one variable increased, so did values interlinked with the other variable, whereas negative correlations expressed that as the values interlinked with one variable went up, the values interlinked with the other variable

went down (Apuke, 2017). The case where a correlation coefficient was 0.00 indicated that there was no relationship between the variables explored (Asamoah, 2014; Curtis et al., 2015). To determine the strength of correlations, generally effect sizes are used for this purpose and, accordingly, $rs \leq 0.1$ (small), $0.1 < rs < 0.3$ (small to moderate), $0.3 < rs < 0.5$ (moderate to large) and $rs \geq 0.5$ (large) (Télez et al., 2015). Given the various interpretations of correlations see (Akoglu, 2018), focusing on effect sizes provides a more meaningful and consistent way to evaluate relationships between variables. The study employed the non-parametric Spearman correlation (rs) to determine the relationship between RC and LC and the nonparametric MW test to determine differences in RC and LC of boys and girls.

3.10. Quality Assurance

Quality assurance had to be considered prior to conducting the study. Reliability and validity are explained in Sections 3.10.1 and 3.10.2. Reliability and validity can be explained by the way assessments are established and delivered to learners (Maphalala & Dhlamini, 2017).

3.10.1. Reliability

Reliability refers to the degree to which an instrument yields the same measurements each time it is utilised (Watson, 2015). It is the ability of researchers to produce the same results when an instrument is frequently used on the same object, and there is no validity without reliability (Mabiletja, 2015). The reliability of ANA assessments has been established as instruments were pre-tested to ensure that they give the same results when tested on two occasions (DBE, 2015; Watson, 2015). Participants were given clarity and examples of how to answer questions prior to the commencement of the tests to ensure reliability.

3.10.2. Validity

Validity refers to the ability of an instrument to measure what is intended to be measured or what the researcher is interested in (Watson, 2015). In the current study, the researcher aimed to measure LC and RC using ANA assessments. In addition, the current study relies on content validity to establish whether the instruments cover all the content to measure learners' reading and listening comprehension skills. Content validity in ANA assessments was achieved through the utilisation of panel experts, including moderators, test developers, and editors

across different South African languages. It was managed by following uniform assessment procedures so that observations, equipment and materials were the same for all test takers (Maphalala & Dhlamini, 2017). The content is valid when an instrument assesses what it has been designed to assess or test, and it includes clarity of instructions, content, grammar, and the appropriateness of the response format (Koller et al., 2017). Most of the assessment response format was in multiple-choice format, true/false and filling in the blank spaces for both RC and LC. The ANA assessments' fairness and validity have been confirmed, and the DBE has used the tests to test learners since 2008 in accordance with the guidelines that align with CAPS (DBE, 2013).

3.11. Ethical Considerations

When conducting research, ethical concerns are discussed to ensure that participants are protected and not taken advantage of during the research (Sibanda, 2018). Ethical considerations are essential when conducting research in formal institutions such as schools (Mabiletja, 2015). As a researcher, it is important to ensure that participants who are part of the study are comfortable and guided throughout the research and that their rights are protected. Ethical consideration is a guideline that researchers ought to follow to ensure that the research is carried out in a way that is appropriate and does not violate the rights of the participants and institutions involved (Mabiletja, 2015).

Prior to the research being conducted in the schools, permission was obtained from the University of Pretoria's ethics committee (protocol number: EDU088/23) and the Gauteng DBE. Permission was sought to go to two schools in Gauteng, both of which are located in Katlehong. The current study included school-going children; therefore, permission letters were accompanied by consent forms for principals (see Appendix G), and parents/caregivers (see Appendix H) and assent letters for learners (see Appendix I). The consent forms highlighted the importance and the purpose of the research and guaranteed that there would be no consequences should the school and respondents decide not to be part of the study. The principals, parents and learners had to sign the consent and assent forms as an acknowledgement to be part of the study. The consent forms were explicit as to what to expect and what was expected from participants should they be permitted to be part of the study. Furthermore, the consent forms were put in place to protect

participants from having their rights violated. The participants' rights and confidentiality were protected throughout the course of the research, and it was explained to them that they could withdraw from the study should they wish to do so, and they would not face any consequences in return. The current study considers the Protection of Personal Information (PoPI) Act to maintain the confidentiality and anonymity of the participants.

Data will be stored for ten years by the University of Pretoria in a locked room and electronically on a password-protected computer. Upon completion of the degree, the data will be uploaded on the UP-Research Data Repository, Figshare, as per the Research Data Management (RDM) Policy that was approved by the University Senate in 2017 (Policy Number: S4417/17). Before the data is uploaded onto Figshare, all identifying and sensitive personal information will be removed. At the end of the study, the digital data should be uploaded to the University's institutional RDM System, which will then be made available in the University's RDM Repository.

3.12. Conclusion

This chapter highlighted the paradigm employed in the study, which was the basis for the researcher's decision on which research methods to employ. The researcher employed the post-positivism paradigm, which allowed the researcher to be flexible in the data collection process. The current study applied the deductive approach because it is quantitative, and conclusions ought to be drawn after a theory has been tested.

The research design provided a basis for the steps that had to be taken before the commencement of the research. The correlation design was incorporated to investigate the relationship between RC and LC. The current study aimed to determine the relationship between RC and LC in English and whether there were differences in RC and LC between boys and girls. The study was not interested in determining the cause of any findings because the nature of the current study was cross-sectional.

The sample size was calculated using the G*Power statistical calculator, and the inclusion criteria were Sesotho HL learners who started learning English in Grade 4. Grade 4 learners' RC and LC were tested to obtain data. The researcher had to visit two schools and test Grade 4 Sesotho HL learners. Learners were tested with Grade

4 ANA tests. The researcher used reputable, reliable and valid instruments to test participants. It was essential to pick effective material to test learners to enhance the accuracy and adequacy of the results. SPSS, which is mostly used in social sciences to analyse quantitative data, was used to analyse the data the researcher had gathered from the two schools. The reliability and validity of the tests had been standardised and ensured by the DBE. The chapter was a discussion of the fundamental steps that had to be put in place to ensure that the research adhered to the procedures which had to be followed. Steps such as ethical clearance clearly shows that the researcher sought permission before conducting the study. The researcher understood that participants' rights had to be protected by following the ethical guidelines.

Chapter 4: Results and Discussion

4.1. Introduction

This section focuses on the results of the current study, which were achieved through the careful consideration of the research methods and design that the researcher had to follow to ensure that the research questions could be addressed. Reviewing the research design and methodology of the study is important as it formed the basis of how the research would be conducted and guided the researcher on steps to follow in the data collection process. The previous chapter focused on the foundation which informed the current study and provided guidance on how the study was to be conducted to ensure that the research aim and objectives were met. The current study employed a quantitative research approach to address the research questions by incorporating the ANA assessments to test the Grade 4 Sesotho HL learners' RC and LC in English. The integration of the post-positivism paradigm allowed the researcher to interact with the participants while remaining objective throughout the data collection process. The current study investigated the relationship between the reading and listening comprehension of Grade 4 Sesotho HL learners who have English as an SL and gender differences in RC and LC.

Prior to the analysis of data, a statistical test was run to determine the distribution of the data. A summary of the tests that were carried out to test the normality of the data and their results are reflected below. Understanding if data is normally distributed or not is important in the next step of deciding which parametric or non-parametric tests to use moving forward.

4.2. Statistical Tests

Before the results of the research questions could be presented, normality tests had to be conducted on the RC and LC scores to establish whether the underlying data distribution was normally distributed. This step is important, because if the data is normally distributed, parametric tests can be used to address the research questions (Ali & Bhaskar, 2016; Kaur et al., 2018). On the other hand, if the data is not normally distributed, non-parametric tests (Kishore & Jaswal, 2022) must be used to address the research questions. The Shapiro-Wilk test was used to test for normality. If the p-value is greater than 0.05 (González-Estrada et al., 2022), the

underlying process distribution of RC and LC is normally distributed. The results of the normality tests are shown in Table 4.1.

Table 4.1
Normality Tests

Comprehension test	Shapiro-Wilk test statistic	Degrees of freedom	<i>p</i>-value
RC	0.970	84	0.049
LC	0.961	83	0.013

From Table 4.1, the *p*-values for both RC and LC are less than 0.05, indicating that both the RC and LC scores are not normally distributed and, accordingly, non-parametric tests were used (Kishore & Jaswal, 2022). The non-parametric Spearman correlation was used to test for relationships, and the non-parametric Mann-Whitney (MW) test was used to test for differences between the RC and LC results of male and female learners. In addition, since the data is non-normal, the median (*Mdn*) and the interquartile range (*IQR*) are reported along with the mean (*M*) and standard deviation (*SD*).

4.3. Results for Secondary Research Question 1

SRQ1 asks: “What is the correlation between RC and LC for Grade 4 Sesotho HL learners in English?” When combining the data of both schools, the correlation coefficient equals 0.755 (*p*-value < 0.001), indicating a strong positive correlation (Curtis et al., 2015), which implies that if a child does well in one test, they will do well in the other. And vice versa, if a child does poorly in one test, they will perform poorly in the other. Statistical inference allows one to draw conclusions about a population based on sample data; however, since this study focused specifically on Grade 4 Sesotho HL learners with English as a SL, the results cannot be generalised to speakers of the other 11 official South African languages. Nevertheless, the strong positive correlation suggests that proficiency in listening comprehension is closely linked to reading comprehension, reinforcing the importance of integrated literacy instruction in multilingual contexts. Next, the MW test was used to test for substantial differences (Kishore & Jaswal, 2022) between the schools because, if there are, then the correlations per school are of interest (see Table 4.2).

Table 4.2
MW Test Results

School A	School B
RC	RC
<i>M</i> = 56.00	<i>M</i> = 65.47
<i>Mdn</i> = 53.33	<i>Mdn</i> = 66.67
<i>SD</i> = 20.67	<i>SD</i> = 20.85
<i>IQR</i> = 33.33	<i>IQR</i> = 33.33
LC	LC
<i>M</i> = 33.45	<i>M</i> = 41.74
<i>Mdn</i> = 32.00	<i>Mdn</i> = 44.00
<i>SD</i> = 17.60	<i>SD</i> = 17.72
<i>IQR</i> = 24.00	<i>IQR</i> = 32.00

Note: M = mean, Mdn = median, SD = standard deviation and IQR = interquartile range

For RC, the MW test showed that the RC% differed statistically significantly between schools (MW = 638.500, $p = 0.031$). For school A, under RC, the *M* is higher than the *Mdn*, which means that the distribution is positively skewed. For school B under RC the *M* is slightly less than the *Mdn*; therefore, the distribution is negatively skewed. The *SD* and the *IQR* for both Schools A and B under RC are the same. For both schools, the *M* is different, with School B having an *M* that is higher than School A. The *Mdn* for both schools are also different, with School B having a *Mdn* that is higher than School A. Thus, School B performed significantly higher in RC than School A.

For LC, the MW test showed that the LC% differed statistically significantly between the schools with MW = 623.500, $p = 0.032$. For School A under LC, the *M* is slightly higher than the *Mdn*, which means that the distribution is positively skewed. For School B under LC, the *M* is lower than the *Mdn*, which means that the distribution is negatively skewed. The *SD* for both School A and B are the same; however, the *IQR* for School A is lower than the *IQR* for School B. Moreover, *M* and *Mdn* in School B are higher than the *M* and *Mdn* in School A.

Thus, once again, School B significantly outperformed School A. Since the differences between the schools were statistically significant for both RC and LC when addressing SRQ2 about the gender effect, the differences in the scores between boys and girls were considered per individual school.

In addition, an interesting result was that the higher Quintile school, which was School B, did statistically significantly worse than the lower Quintile school, which was School A. The result was interesting because higher Quintile schools are expected to perform better than lower Quintile schools because of access to resources that are needed for the daily functioning of the school. Note however, that, although statistical inference allows one to draw conclusions about a population based on sample data; since this study focused on two specific schools, the findings cannot be generalised to all South African schools across different Quintiles.

4.4. Results for Secondary Research Question 2

SRQ2 asks: “What are the RC and LC performance patterns of Grade 4 Sesotho HL boys and girls in English?” The MW test⁶ showed that there were no statistically significant differences between male and female learners in RC and LC for both schools. For referral, Table 4.3 shows that for RC, the MW test for School A equals 230.500 and the p -value equals 0.778.

⁶ MW test steps included in Section 3.9 Data Analysis

Table 4.3
Gender Differences per School

School	Comprehension test	Descriptive statistic	Boy	Girl	MW	Z	p
School A	RC	<i>M</i>	55.06	57.41	230.500	-0.291	0.778
		<i>Mdn</i>	53.33	53.33			
		<i>SD</i>	21.05	20.60			
		<i>IQR</i>	26.67	33.33			
	LC	<i>M</i>	33.93	32.71	211.500	-0.435	0.671
		<i>Mdn</i>	32.00	28.00			
		<i>SD</i>	15.63	20.84			
		<i>IQR</i>	24.00	38.00			
School B	RC	<i>M</i>	63.64	66.19	150.000	-0.126	0.908
		<i>Mdn</i>	80.00	66.67			
		<i>SD</i>	26.89	18.50			
		<i>IQR</i>	40.00	25.00			
	LC	<i>M</i>	41.45	41.86	140.000	-0.439	0.671
		<i>Mdn</i>	52.00	44.00			
		<i>SD</i>	24.28	14.95			
		<i>IQR</i>	40.00	26.00			

For RC in School A, male learners' *M* is lower than the female learners' *M*. The *Mdn* remains the same. For RC, the MW test for School B equals 150.000, and the p-value equals 0.908. For RC in School B, male learners' *M* is also less than the female learners' *M*. However, the male learners' *Mdn* is higher than the female learners' *Mdn*.

For LC, the MW test for School A equals 211.500, and the p-value is 0.671. In School A, for LC, the *M* for male learners is slightly higher than the *M* for female learners.

The *Mdn* for male learners is also higher than the female learners' *Mdn*. For School B, the MW test for LC equals 140.000, and the *p*-value is 0.671. For LC in School B, the *M* for both male and female learners is the same, and the *Mdn* for both male and female learners is different, with the male learners' *Mdn* being higher than for the female learners. Although the MW test for both RC and LC in School A is higher than the one for School B, the *p*-values are >0.05 ; thus, the results are statistically insignificant. Overall, the results showed that there are no gender differences, meaning female learners did not outperform male learners and vice versa. Table 4.3 depicts the differences in RC and LC between male and female learners in both schools, but the results are statistically insignificant. The *p*-values are greater than 0.05 for male and female learners for RC and LC in both schools; thus, the results are statistically insignificant.

From Table 4.3, although the descriptive statistics for the genders differ, the results exhibit statistically insignificant gender differences for the RC test. For School A, the mean and median for RC for male learners equalled 55.06 and 53.33, respectively, whereas for female learners, these numbers were 57.41 and 53.33. Thus, although the medians are the same, the mean for female learners is higher; however, since the *p*-value equals 0.778, the mean difference is not statistically significantly higher. For School B, the mean and median for RC for male learners equalled 63.64 and 80.00, respectively, whereas for female learners, these numbers were 66.19 and 66.67. The mean for girls is higher than the one for boys, and the median is lower for girls and higher for boys. Since the *p*-value is 0.908, the mean difference is statistically insignificantly higher.

The results from Table 4.3 showed that there was no significant gender difference in the LC tests. For school A, the mean and median for LC for male learners equalled 39.93 and 32.00, respectively, whereas for female learners, these numbers were 32.71 and 28.00. The mean and median for boys are both above the values for the girls. The *p*-value equals 0.671; the mean difference is not statistically significantly higher. For School B, the mean and median for LC for male learners equalled 41.45 and 52.00, respectively, whereas for female learners, these numbers were 41.86 and 44.00. The mean for male and female learners is the same, although the mean for female learners is slightly higher by a few decimals, and the median of male learners is higher than that of female learners. The *p*-value for School A equals 0.671, and

although the mean is the same with a slight difference, it is not statistically significantly higher.

Collectively, the MW test results showed that there are no statistically significant gender differences because the p -value was > 0.05 . This was an interesting finding as many studies have shown that gender differences do exist (see Ngongare et al., 2020; Q. Wang, 2015; Wilsenach & Makaure, 2018), although a few would oppose the results found in gender differences (see Cekiso, 2016; Miyamoto, 2024; Vlachos et al., 2015). It should be noted that although statistical inference allows one to draw conclusions about a population based on sample data; since this study focused on a specific group of Grade 4 Sesotho HL learners, the result of no statistically significant gender differences cannot be generalised to all learners in South Africa.

Table 4.4 shows the percentages of both RC and LC scores per question. The assessment of the learners' RC tests showed that many learners performed better in multiple-choice questions than in close-ended, true or false and underline-the-correct-word questions. The most challenging multiple-choice questions were Question 5.2, with 17% correct responses; Question 8, with 35% correct responses; Question 12, with 39% correct responses; and Question 14, with 38% correct responses (see Appendix F). The questions required learners to provide a reason for their answer, what they have learnt in the story, underlining the correct word and changing the tense of a sentence. Many learners (82%) obtained higher marks for the multiple-choice questions, but most learners got the closed-ended questions wrong.

The most challenging questions for learners in the LC tests were Question 1.5, which had 17% correct answers, and Question 2.5, which had only 10% accurate answers. In these questions, learners were required to fill in the missing words (see Appendix F). Most learners had incorrect answers in questions that required them to explain their answers or fill in the missing words in the missing word questions.

Table 4.4

RC and LC Percentage Scores

RC Test Questions	% Correct	LC Test 1 Questions	% Correct	LC Test 2 Questions	% Correct
Question 1	94%	Question 1.1	73%	Question 3.1	26%
Question 2	96%	Question 1.2	72%	Question 3.2	7%
Question 3	40%	Question 1.3	70%	Question 3.3	54%
Question 4	79%	Question 1.4	51%	Question 3.4	57%
Question 5.1	72%	Question 1.5	17%	Question 3.5	69%
Question 5.2	17%	Question 2.1	42%	Question 4.1	53%
Question 6	54%	Question 2.2	52%	Question 4.2	60%
Question 7	51%	Question 2.3	67%		
Question 8	35%	Question 2.4	60%		
Question 9	77%	Question 2.5	10%		
Question 10	66%				
Question 11	65%				
Question 12	39%				
Question 13	72%				
Question 14	38%				

The following LC test was a short poem with four lines (see Appendix D). Most learners struggled with the true or false questions and to provide reasons for their answers. Of all the questions, the most challenging ones were Question 3.1, with 26% accurate answers and Question 3.2, with 7% accurate answers. The questions included a multiple-choice question and a fill-in-the-missing word question. Overall, the true or false questions and closed-ended questions were challenging for learners in both RC and LC tests, as most learners provided incorrect answers. Overall, the most challenging questions in the tests for learners were Question 2.5 from the RC test and Question 3.2 from the second LC test.

Moreover, the schools yielded different results, with School B outperforming School A. Forty-six (46) female learners were tested for RC and 38 male learners were tested for both RC and LC activities. Table 4.5 shows girls' and boys' percentages in RC and LC tests in two schools.

Table 4.5

Scores Between Boys and Girls

ID	School	RC	LC	Gender
1	School A	86.67	56.00	Girl
2	School A	93.33	24.00	Boy
3	School A	53.33	36.00	Girl
4	School A	66.67	28.00	Girl
5	School A	46.67	20.00	Boy
6	School A	33.33	20.00	Boy
7	School A	53.33	16.00	Girl
8	School A	93.33	40.00	Boy
9	School A	40.00	0.00	Girl
10	School A	33.33	12.00	Girl
11	School A	100.00	64.00	Girl
12	School A	46.67	20.00	Girl
13	School A	86.67	60.00	Boy
14	School A	80.00	72.00	Boy
15	School A	40.00	28.00	Girl
16	School A	26.67	8.00	Girl
17	School A	53.33	-	Girl
18	School A	66.67	12.00	Boy
19	School A	13.33	16.00	Boy
20	School A	33.33	16.00	Girl
21	School A	53.33	44.00	Boy
22	School A	40.00	20.00	Boy
23	School A	33.33	20.00	Boy

ID	School	RC	LC	Gender
24	School A	40.00	20.00	Boy
25	School A	73.33	52.00	Boy
26	School A	73.33	36.00	Boy
27	School A	66.67	32.00	Boy
28	School A	60.00	36.00	Boy
29	School A	33.33	24.00	Boy
30	School A	20.00	12.00	Boy
31	School A	60.00	20.00	Girl
32	School A	40.00	40.00	Girl
33	School A	46.67	44.00	Boy
34	School A	66.67	36.00	Boy
35	School A	66.67	40.00	Boy
36	School A	53.33	40.00	Boy
37	School A	33.33	24.00	Boy
38	School A	60.00	28.00	Boy
39	School A	73.33	64.00	Girl
40	School A	73.33	32.00	Girl
41	School A	53.33	56.00	Boy
42	School A	40.00	32.00	Boy
43	School A	73.33	52.00	Girl
44	School A	60.00	56.00	Boy
45	School A	80.00	64.00	Girl
46	School B	86.67	40.00	Girl
47	School B	20.00	12.00	Boy

ID	School	RC	LC	Gender
48	School B	60.00	40.00	Girl
49	School B	73.33	56.00	Girl
50	School B	86.67	52.00	Girl
51	School B	66.67	52.00	Girl
52	School B	100.00	52.00	Girl
53	School B	73.33	44.00	Girl
54	School B	73.33	48.00	Girl
55	School B	93.33	52.00	Boy
56	School B	66.67	24.00	Girl
57	School B	93.33	68.00	Boy
58	School B	66.67	56.00	Girl
59	School B	40.00	24.00	Girl
60	School B	86.67	68.00	Girl
61	School B	66.67	36.00	Girl
62	School B	66.67	56.00	Girl
63	School B	80.00	52.00	Girl
64	School B	33.33	20.00	Girl
65	School B	53.33	44.00	Girl
66	School B	80.00	64.00	Boy
67	School B	26.67	12.00	Girl
68	School B	80.00	64.00	Boy
69	School B	66.67	32.00	Girl
70	School B	46.67	28.00	Boy
71	School B	86.67	60.00	Boy

ID	School	RC	LC	Gender
72	School B	46.67	24.00	Boy
73	School B	80.00	32.00	Girl
74	School B	46.67	24.00	Girl
75	School B	26.67	0.00	Boy
76	School B	73.33	60.00	Girl
77	School B	86.67	56.00	Girl
78	School B	53.33	52.00	Girl
79	School B	46.67	24.00	Boy
80	School B	26.67	20.00	Girl
81	School B	66.67	28.00	Girl
82	School B	66.67	60.00	Girl
83	School B	80.00	60.00	Boy
84	School B	80.00	32.00	Girl

- **Interpretation of Results**

Typically, the relationship between RC and LC is strong, and this phenomenon has been researched by many researchers who have found the relationship to be highly connected (see He et al., 2022; Hogan et al., 2014; Lervåg et al., 2018). The current study showed a positive relationship between Grade 4 Sesotho learners' RC and LC. ANA assessments were used as a tool to determine whether there was a relationship between the RC and LC of Grade 4 Sesotho HL learners with English SL and the significance of gender differences in RC and LC. Various studies have found that there are gender differences in the RC and LC of learners (Şuteu et al., 2021; Q. Wang, 2015; Wilsenach & Makaure, 2018), with female learners typically outperforming male learners in RC and LC activities (Nouwens et al., 2017; Wilsenach & Makaure, 2018). Reviewed research studies argue the existence of gender differences in RC and LC (Namaziandost et al., 2018), which support the results of this conducted research.

- **Discussion of Implications**

The relationship between reading and listening comprehension among Grade 4 Sesotho HL learners has not been extensively studied, highlighting a significant gap in the literature. While no prior research specifically examines this relationship within this learner population, the findings of this study contribute to the broader understanding of RC and LC by drawing on existing studies conducted in other linguistic contexts. The study's results align with the research questions, revealing a positive correlation between RC and LC among Grade 4 Sesotho HL learners. Additionally, the findings indicate no significant gender differences in RC and LC, reinforcing the inconsistencies in previous research regarding gender disparities in comprehension skills (see Mari et al., 2021; Namaziandost et al., 2018; Reynolds et al., 2015). On the other hand, some studies (Limbrick et al., 2011; Nouwens et al., 2017; Wilsenach & Makaure, 2018) suggest that gender influences RC and LC performance of learners, others (see Reilly et al., 2019; Salehi et al., 2014; Vlachos et al., 2015) argue that boys and girls perform similarly; showing no notable differences in English as a second language.

- **Connection of the Study to Existing Research**

This study highlights the issue of reading and listening comprehension in South Africa and globally, drawing on PIRLS results as evidence of the significant decline in South African Grade 4 learners' reading skills (Böhmer & Wills, 2023; DBE, 2023a; Howie et al., 2017). Since Sesotho-speaking English as a second language (ESL) learners participated in PIRLS, understanding the relationship between RC and LC among Grade 4 Sesotho learners is important (DBE, 2023a). This is particularly relevant as many learners transition to English as LoLT in Grade 4, often struggling to cope academically (Sibanda, 2018; Thobejane, 2018; Venter, 2019).

A comprehensive investigation into Sesotho HL learners can help educators, parents, and policymakers better understand the linguistic differences between Sesotho and English and inform strategies for supporting learners. This may include targeted intervention programs and improved classroom instructional delivery to strengthen the foundational RC and LC skills needed for academic success. The

findings of this study reinforce the SVR model, which asserts that without sufficient language proficiency, RC and LC skills will fail (Demie, 2018; Sebole et al., 2019). Given that language proficiency underpins reading development, this study emphasises the necessity of addressing language barriers to enhance literacy outcomes among Sesotho HL learners.

- **Strengths and Limitations of the Study**

The study focuses on the language RC and LC skills of Sesotho learners. It is one of the under-researched South African languages, and attention was brought to it and its HL speakers. The study hopes to encourage more scholars to include Sesotho in language investigations to improve the RC and LC skills of Sesotho HL learners in English as a Second Language. This study was able to identify a gap in literature because reading and listening comprehension of Grade 4 Sesotho HL learners had never been explored before. Although the study is limited in a sense that it is a quantitative study meaning in-detail explanations of human experiences are not identified, it is a cross-sectional study and a pilot study was not conducted which limits the ability to identify issues ahead of the study. Even though a pilot study was not conducted, instruments used to test learners were piloted and proven to be valid and reliable by the Basic Department of Education (DBE, 2015). With ANA assessments, learners' RC and LC skills were tested and gender differences in RC and LC were shown to be statistically insignificant. The assessments that were used to test learners were appropriate for their grade and cognitive levels. The study's research questions were answered with the ANA assessments used to test learners and the researcher was able to remain unbiased to ensure the credibility of the results. The other learning disabilities of learners that may contribute to poor RC and LC were not tested.

Chapter 5: Conclusion and Recommendations

5.1. Introduction

The current study explored the relationship between reading comprehension and listening comprehension of Sesotho Grade 4 HL learners, taking into consideration the role that gender plays. Reading comprehension and listening comprehension skills are of utmost importance in a child's development and academic success. The current study explored a wide range of literature across different themes, such as the policy on bilingualism in South Africa, orthographic differences between English and Sesotho, and, perhaps most importantly, the reading and listening comprehension skills of young children. Section 5.2 provides a comprehensive overview of the previous chapters. Next, a summary of the research results is provided (Section 5.3). Section 5.4 reflects on the theoretical framework that guided the study. Section 5.5 discusses the main conclusions of this research. Reflections on the methodology for the current study are discussed in Section 5.6. The limitations of the current research are provided in Section 5.7. See Sections 5.8 and 5.9 for recommendations on policy and practice, and future research. Lastly, Section 5.10 provides final thoughts on the current research.

5.2. Overview of the Previous Chapters

Chapter 1 of this study was an introduction to the focus of the study, which explored the relationship between RC and LC of Grade 4 Sesotho HL learners and the role gender plays in their RC and LC. The aim was to determine if there was a relationship between the RC and LC of Grade 4 Sesotho HL learners and if there were gender differences in the RC and LC of these learners. This chapter provided an overview of the intricacies of RC and LC, geared explicitly towards Sesotho HL learners who speak English as an SL. This chapter also highlighted the gender roles when considering reading and listening comprehension of ESL learners. The chapter presented the research questions related to RC and LC, as well as the role that gender plays in RC and LC. The research approach was briefly discussed, specifically the role of correlation research with a post-positivist philosophy. The reason for conducting a cross-sectional study was also justified. Moreover, the chapter presented the specific research methods, such as sampling techniques, data collection tools, and data analysis techniques.

Chapter 2 entailed the literature review of the current study, which tackled the historical context of language in South Africa to help the reader understand how LoLT came about in South African schools. The evolution of LoLT was discussed from the educational policies of the past to the recent ones to understand how the LiEP promotes bilingualism in South African schools and the curriculum that learners currently follow in schools. The curriculum encourages all learners to be taught in English, which is why it was important for the current study to begin by providing a broad discussion of the historical context in relation to ISAL learners and narrowing down the study's focus to ensure that a comprehensive view has been presented to enhance understanding.

The focus of the study was to address the primary and secondary research questions by providing a comprehensive understanding of factors that interlink with the RC and LC of learners. The chapter closed off by including the research found in the exploration of the relationship between the RC and LC of Grade 4 Sesotho HL learners. However, no conclusions were reached. Thereafter, gender differences in the RC and LC were explored by inquiring about both international and local literature and the findings from different studies were presented accordingly. Furthermore, the theoretical framework of the study was also included in this chapter. The researcher followed the framework because the study's focus was on investigating the relationship between the RC and LC of Grade 4 Sesotho HL learners.

Chapter 3 involved the research methodology, which was shaped based on the quantitative approach employed by the study to collect data in order to unpack the relationship between the two skills investigated. The quantitative approach allowed the researcher to collect data utilising assessments to investigate the relationship between the RC and LC of Grade 4 Sesotho HL learners. The post-positive philosophy was discussed as the lens through which the study was completed. The chapter explained the selection of the ANA tests for this study. The chapter provided a view on the reliability and validity of the assessments that were used to test the Sesotho HL learners. The researcher intentionally selected the sample to meet the aim and objectives of the study. Moreover, an overview of data analysis and the statistical tests used to obtain the results was presented in detail. The chapter highlighted the guidelines the researcher followed in conducting the study to ensure

the protection of participants when collecting data and that the research was carried out ethically. The chapter also explained how permission was sought prior to data collection in different schools and institutions. Lastly, an explanation of where and for how long the data would be stored was also highlighted in this section.

Chapter 4 entailed the examination of the results, the statistical tests used and the reasons for using the specific tests. This chapter showed that normality was tested first, and the results showed that the data was not normally distributed, which meant that non-parametric tests had to be used. Therefore, the non-parametric Spearman correlation was used to test for the relationship between RC and LC and the non-parametric MW test was used to test the differences in the scores between Sesotho HL learners RC and LC. The chapter showed that there were no statistically significant gender differences in RC and LC of Grade 4 Sesotho HL learners, but there was a strong correlation between the RC and LC levels of learners.

5.3. Summary of the Research Results

Most ISAL learners learn all subjects in their HL in the Foundation Phase and then learn in an SL, which in most cases is English, in the Intermediate Phase. The ISAL learners tend to struggle to read and listen with comprehension in ESL, which in turn affects their self-esteem because of the poor results they produce (Chen et al., 2018). Investigating the relationship between RC and LC is not common in Sesotho, although ISAL learners constitute the vast majority of learners who cannot read with comprehension in South Africa. Learners who learn in English in the Foundation Phase tend to perform better in reading and listening activities than their peers who only start learning in English in Grade 4. The switch from learning in one's HL to learning in a new one can be overwhelming for ISAL learners and should be prioritised and investigated to mitigate the problems.

Overall, many factors could contribute to the low reading literacy skills of Grade 4 Sesotho HL learners in South Africa and the exploration of these factors is necessary. Exploring the relationship between the two comprehension skills, specifically of Grade 4 Sesotho HL learners, is of utmost importance amid the revealed gap in the literature. A vast amount of research needs to be dedicated to studying the relationship between the RC and LC of Grade 4 ISAL learners and the causes thereof.

The primary research question looked into the RC and LC skills of Grade 4 Sesotho learners who have English as a second language by asking the following: “What is the relationship between reading comprehension and listening comprehension skills of Grade 4 Sesotho HL learners with English as LoLT, and what role does gender play?”

In order to address the primary research question, the following secondary questions were posed:

- SRQ1: What is the correlation between RC and LC for Grade 4 Sesotho HL learners in English?
- SRQ2: What are the RC and LC performance patterns of Grade 4 Sesotho HL boys and girls in English?

5.3.1. Addressing SRQ1

SRQ1 was stated as “What is the correlation between RC and LC for Grade 4 Sesotho HL learners in English?”. SRQ1 investigated the correlation between the RC and LC of Grade 4 Sesotho HL learners, and the results of the current study showed that there is a strong positive correlation between the reading and listening comprehension skills of Grade 4 Sesotho HL learners. According to the search on Scopus and Web of Science, no literature has covered the relationship between the RC and LC of Grade 4 Sesotho HL learners before. Exploring the relationship between the RC and LC of Grade 4 Sesotho HL learners was important to enhance understanding, possibly contemplate solutions to fill in the gap in the literature and combat the reading crisis in ISAL learners, especially Sesotho learners in this context. Many studies have explored the relationship between the RC and LC of ESL learners internationally and locally in official South African languages other than Sesotho. Therefore, exploring the relationship between the RC and LC of Grade 4 Sesotho learners was important to elaborate further on the reading crisis that may exist for these ISAL learners.

5.3.2. Addressing SRQ2

SRQ2 asked, “What are the RC and LC performance patterns of Grade 4 Sesotho HL boys and girls in English?” SRQ2 investigated the role gender plays in the RC and LC of Grade 4 Sesotho HL learners, and the results revealed that no discernible gender differences were found in the current study. The results were statistically

insignificant, depicting that there were no significant differences between male and female South African Sesotho Grade 4 learners in terms of their RC and LC. In contrast, some other studies have found different results and have reached different conclusions regarding the role of gender in RC and LC. Although the existence of gender differences in RC and LC has been covered in many studies, some studies have shown that there were no significant differences in RC and LC between male and female learners (see Mari et al., 2021; Reilly et al., 2019). Additionally, some studies tend to favour female learners over male learners in terms of comprehension achievement due to the perception that female learners are more prone to perform better in reading and listening than male learners. Therefore, research by different authors revealed different results based on their studies and both statistically significant and insignificant results have been presented in the current study.

5.3.3. Addressing the Primary Research Question

The primary research question was, “What is the relationship between reading comprehension and listening comprehension skills of Grade 4 Sesotho HL learners in English, and how are these skills distributed across boys and girls?” The primary research question investigated the relationship between the RC and LC of Grade 4 Sesotho HL learners with English as LoLT and the role that gender plays. Exploring the relationship between the RC and LC and discussing the differences in the RC and LC of male and female learners was important in the study to address both the primary and secondary research questions and to meet the aim and objectives of the study. A lot of underlying factors had to be discussed and linked to provide coherent background information to obtain in-depth information on the main focus of the study. As such, a few factors were explored and discussed in relation to the RC and LC and the gender differences, and the results were presented accordingly.

The two skills (RC and LC) are the most common ones to be researched in previous and current literature; however, it was found that there was a gap as they have not been researched in the Sesotho language. The research results showed that most learners who performed well in their RC tests were able to perform well in their LC tests. The result was not surprising because of the statistically significant strong positive correlation between RC and LC. The correlation is further supported by the SVR model, which posits that RC is a result of decoding and linguistic comprehension, which is generally perceived as LC.

With regard to the role gender plays in RC and LC, the study showed that the results were statistically insignificant. This result simply means that there are no gender differences when it comes to the RC and LC of Grade 4 Sesotho HL learners; therefore, no gender requires more attention and resources than the other to excel academically. Both genders ought to be taught and provided for equally academically in relation to learning materials, school resources and equipment. This result was interesting as many studies have proclaimed gender differences as statistically significant.

5.4. Theoretical Framework Reflections

The current study selected the SVR theory since it considers the relationship between RC and LC comprehension of Grade 4 Sesotho HL learners. The SVR is known to be applicable to learners from preschool to Grade 5 and, as such, was deemed appropriate for this study. The current study focuses on the RC and LC skills of learners, and it shows that linguistic comprehension can also be referred to as LC. The SVR focuses on RC and posits that linguistic comprehension, also referred to as LC and decoding, is the strongest predictor of RC. The study touched on the importance of RC and the strong relationship it has with decoding and LC. As the SVR states, RC will not occur should learners lack either decoding or linguistic comprehension; the results of the current study confirmed that learners who performed well in their RC tests also performed well in their LC tests.

The other important note about the SVR model is its advocacy for language proficiency. The current study investigated Grade 4 Sesotho HL learners who have ESL, and the SVR model highlights the importance of language proficiency as learners will not succeed in both RC and LC without being proficient in it. Learning a language is a prerequisite for learning how to read and listen with understanding. English SL learners tend to perform poorly in RC and LC for multiple reasons, one of them being that they are not proficient in the SL. This lack of proficiency means they first need to develop the appropriate skills in both their HL and the SL to be able to read and listen with understanding. The current study recognises the importance of learners being proficient in both their HL and SL so they may be able to use the same skills in learning a second or even a third language.

This study employed the SVR model as the theoretical framework to investigate the relationship between reading and listening comprehension skills in Sesotho-speaking learners. The SVR model was selected because it is empirically testable and clear and directly links decoding and linguistic comprehension as the foundational components of reading comprehension (Gough & Tunmer, 1986). The aim of this study was to explore the correlation between RC and LC within the parameters of the model. The SVR was ultimately deemed appropriate and sufficient for the scope and objectives of the current research.

Although other models, such as Scarborough's Reading Rope (2001) and the Active View of Reading (Duke & Cartwright, 2021), offer broader perspectives on reading development by incorporating constructs such as fluency, executive function, and motivation, these were not the focus of the present study. Scarborough's Reading Rope plays an important role in assisting teachers to acknowledge and envision the elements necessary to build fluency and to know where their subjects add to learners' overall literacy (Bishop & Preece, 2024). Similarly, the Active View of Reading introduces a wide range of interacting components believed to influence reading comprehension and may inform intervention strategies, although the model has not yet been fully validated (Burns et al., 2023).

To maintain conceptual and methodological consistency, these two broader models of reading comprehension were not incorporated into the framework of this study. Since constructs such as fluency, prior knowledge and executive functioning were not measured, including models that focus on these constructs would have introduced theoretical dimensions that were not aligned with the study's design or focus.

5.5. Methodological Reflections

The methodology of any research forms its basis and guidance on how the researcher should go about gathering and collecting data. Quantitative research was suitable for the current study because this research needed to address the research questions that aimed to explore the relationship between two variables (RC and LC) and the differences that exist in RC and LC between male and female learners. A post-positivism paradigm was employed to maintain flexibility while remaining objective. As such, the positivist paradigm was suitable in aiding the researcher in

achieving this goal in the data collection process. The cross-sectional route was suitable for the study simply because the researcher's focus did not include following the participants to test them again after a while; instead, the intention was to test them only once and determine the relationship between the variables. Moreover, it was appropriate for the current study to employ a deductive approach because conclusions had to be reached based on the results that have been tested and then presented.

The ANA assessments were used, meaning learners had to be tested during the data collection process while the researcher could interact with them without influencing the results. Presenting objectivity in the study is important because of the accuracy, reliability and validity it brings. The assessments were reliable and valid as they were obtained from the DBE and ensured that the researcher tested the learners with instruments that were grade and cognitively appropriate.

5.6. Main Conclusions

- **Positive correlation between RC and LC of Grade 4 Sesotho HL learners**

The results of the current study showed that there is a strong positive correlation ($r_s = 0.755, p < 0.001$) between the RC and LC of Grade 4 Sesotho HL learners who completed the assessments in English – note that English is the LoLT with a correlation coefficient of 0.755. This conclusion is supported by the literature where the RC and LC have been found to have an association. Reading and listening comprehension are complex and entail a myriad of factors, such as vocabulary, reading fluency, phonological awareness, decoding, and listening, to consider prior to mastering them. These factors are associated with enhanced RC and LC, and some may be prerequisites to both RC and LC. It is important to teach learners how to read with understanding from a younger age, thus developing their decoding and linguistic skills, which aids in enhancing the learners' RC and LC. Factors surrounding RC and LC and their impacts on them have been highlighted as they contribute to the development of RC and LC skills. Exploring the factors that affect RC and LC are important to be discussed to provide a clear understanding of how important it is to eliminate them and how the factors affecting these two skills are almost the same.

- **Less affluent school outperforms more affluent school in terms of reading and listening comprehension**

The finding that a less affluent Quintile 3 primary school outperformed a more affluent Quintile 4 school in an RC (MW = 638.500, $p = 0.031$) and LC (MW = 623.500, $p = 0.032$) test is significant as it challenges prevailing assumptions about the association between socioeconomic status (SES) and academic performance. Traditionally, more affluent schools are expected to perform better due to better resources, more experienced teachers, and greater access to educational materials. However, this result suggests that factors beyond wealth, such as effective teaching strategies, community involvement, and student motivation, can play a crucial role in academic success. It emphasises the need for a more nuanced understanding of what drives educational outcomes in South Africa, potentially shifting the focus from merely improving resources to enhancing teaching quality and engagement in all schools, regardless of their SES.

Even though this study did not focus on SES, this finding contributes to the growing body of research that questions the deterministic view of SES as the primary driver of academic achievement. It encourages further investigation into the specific practices, cultural factors, and environmental influences that enable schools with fewer resources to excel. This study could inspire researchers and policymakers to explore and replicate the successful strategies employed by the Quintile 3 school, which could, in turn, inform broader educational reforms aimed at closing the achievement gap across different socioeconomic levels.

- **No gendered differences were observed for Grade 4 Sesotho HL learners**

The finding that there are no gendered differences in RC and LC among Grade 4 Sesotho HL learners is important for South African schools, as it challenges common stereotypes about gender and language proficiency. In many contexts, girls are often expected to outperform boys in language-related tasks due to social and developmental factors (de Waal et al., 2018; Retelsdorf et al., 2015; Wilsenach & Makaure, 2018). However, this finding suggests that boys and girls in Sesotho-speaking communities may have equal opportunities and capabilities in language comprehension, reflecting a more balanced educational environment. This finding challenges educators to reconsider the gender biases that might influence teaching

practices and expectations, encouraging a more equitable approach that supports both boys and girls equally in their language development. From a research perspective, this finding adds valuable insight to the body of literature on gender and educational outcomes, particularly in the context of indigenous languages in South Africa. It underscores the importance of examining language proficiency within specific cultural and linguistic contexts rather than relying on generalised assumptions about gender differences. This result could prompt further studies into how different factors such as teaching methods, cultural norms, and home environments, affect language learning for both boys and girls. Moreover, this result encourages a more inclusive and holistic understanding of gender dynamics in education, advocating for educational policies and practices that are based on evidence.

5.7. Limitations of the Study

The most “common limitation” of a quantitative study is that it restricts the ability to provide hidden human perceptions towards a phenomenon and lacks the deep and in-detail explanations that qualitative research can provide (Taherdoost, 2022).

The absence of a pilot study in this research on reading and listening comprehension skills by gender presents a notable limitation, as it restricts the ability to identify and address potential issues before the main study. A pilot study serves as a crucial preliminary step to refine research instruments, ensuring that test items are clear, reliable, and appropriately aligned with the study’s objectives (Cope, 2015; Creswell & Creswell, 2018).

Since the focus was on Grade 4 Sesotho HL learners with English as SL, the results cannot be generalised to the other 11 official South African languages. Learners’ RC and LC were tested; however, the study did not indulge in examining learning disabilities, such as auditory skills/dyslexia, as a possible cause of learners’ inability to perform well in the tests. The study was cross-sectional, which limits the study because no cause and effect can be established (Queirós et al., 2017; X. Wang & Cheng, 2020). Thus, variables were not investigated in terms of how they could be affected by another or how they could have possibly caused an occurrence or change in the other variable.

5.8. Recommendations

This section makes recommendations based on the results found in conducting research. Recommendations for policy and practice are considered first, followed by recommendations for future research.

5.8.1. Recommendations for Policy and Practice

South Africa is a multilingual country, and creating multilingual awareness is important to include everyone and to honour the basic right to language of choice regardless of the location of the school. As we could not find a study similar to this one by conducting a search on Web of Science and Scopus (see Appendix G), the recommendation is that more capital resources need to be put towards conducting research in education in all 12 official South African languages. Focusing more on ISAL learners may aid in improving their comprehension skills as they tend to perform more poorly than learners who had been learning in English in the FP (Chen et al., 2018). There are no studies in the current literature about the relationship between the RC and LC of Grade 4 Sesotho HL learners, meaning that there has not been a focus on how to improve their RC and LC skills crisis specifically. The current implementation of language and literacy programmes should be constantly improved for ESL learners in all 12 South African official languages as early as the FP for the preparation of change in LoLT in Grade 4. In addition, more resources should be made available for ISAL school children.

5.8.2. Recommendations for Future Research

The current study discovered a gap in the literature that needs to be addressed. More research on the relationship between the RC and LC of Grade 4 Sesotho HL learners in English needs to be explored. The transition from the HL as LoLT to English without considering the proficiency of learners in English needs to be researched extensively to deliver solutions to assist ESL learners who encounter such challenges in South African schools. Furthermore, the differences in the RC and LC of Sesotho HL learners with ESL need to be thoroughly explored by conducting longitudinal studies so that causal relationships can be established.

The finding that a less affluent Quintile 3 primary school outperformed a more affluent Quintile 4 school in a reading and listening comprehension test is significant as it challenges prevailing assumptions about the association between SES and

academic performance. This result may suggest that factors beyond wealth, such as effective teaching strategies, community involvement, and student motivation, can play a crucial role in academic success. It emphasises the need for more research in this area to gain a more nuanced understanding of what drives educational outcomes in South Africa, potentially shifting the focus from merely improving resources to enhancing teaching quality and engagement in all schools, regardless of their SES. The finding that there are no gender differences in reading and listening comprehension among Grade 4 Sesotho HL learners is significant for South African schools, as it challenges stereotypes about gender and language proficiency. It highlights the need for future studies to examine language proficiency within specific cultural and linguistic contexts rather than relying on generalised assumptions about gender differences. The study's limitation in exploring learners' auditory skills should be investigated in future research.

Future research could expand on this study by comprising the additional models Scarborough's Reading Rope (2001) and Active View of Reading (Duke & Cartwright, 2021) to unpack additional cognitive and linguistic skills that play a part in RC.

Scarborough's Reading Rope (2001) gives a concise breakdown of the subskills in both word recognition and language comprehension and comprises vocabulary, verbal reasoning, prior knowledge and phonological awareness. Future studies could explore how these skills relate to RC and LC, particularly in learners that struggle to read and bilingual learners.

The Active View of Reading (Duke & Cartwright, 2021) expands on SVR by incorporating self-regulation, motivation, executive function, morphological awareness which in turn control higher-order comprehension purposes. Future research could investigate how these cognitive factors step in RC and LC outcomes, particularly in learners with attention difficulties or lower working memory capacity.

While this study shows that SVR provides a strong basis for understanding the relationship between RC and LC, including these additional reading models in future research could produce affluent results of the complexities of reading development in different learners.

5.9. Final Thoughts

The current study was pursued with the intention of exploring the relationship between the RC and LC of Grade 4 Sesotho HL learners in English and the role that gender plays in their RC and LC. The relationship between RC and LC has been shown to be integral to a child's academic success and has been stressed in numerous studies. Unpacking the relationship between RC and LC in ISAL is important in understanding challenges ESL learners could encounter in their years of schooling. The ability to read, write and listen in English is important because learners who are proficient in English are most likely to excel academically, be admitted in tertiary institutions, work or study abroad. Therefore, ESL learners must be equipped with the necessary skills from an early age to develop language skills, interact with people, and thrive academically. Although English and Sesotho have different orthographies, which may also be one of the factors that may hamper ESL learners' ability to read with understanding in English, they must possess sufficient vocabulary and other skills in both their HL and ESL to prevail in it. Once a learner masters their HL, learning an SL will be easier, which will, in turn, improve their reading and listening skills.

Gender differences in RC and LC are commonly researched across languages, and some studies have shown statistically significant results, while other studies argued that the results are statistically insignificant. The results from the current study indicating insignificant statistical differences between gender achievement show that the assumptions that some educators and researchers have about female learners outperforming male learners are inconsistent and that both genders need the same amount of attention, resources and material to perform academically. This result erases the assumption that girls are better readers and listeners than boys and the biases around this issue. Educators in the classroom must be adequately trained to deliver the content to learners in the best possible way that is satisfactory to the learners' learning needs while ensuring equality for both genders.

Education and language in South Africa have evolved over the past years as past occurrences have had an impact on education and learners' RC and LC skills. Providing background information on how people learnt prior to colonisation and as well as post-apartheid helps the reader understand present occurrences in the education system and where they could possibly stem from, making it clear how

knowledge in South African schools is being imparted to learners due to policies such as the LIEP and CAPS. It was necessary to review the past in terms of how education was provided then and how English and LoLT gained hegemony in South Africa. All these discussions play a necessary role in understanding how education and language in South Africa have evolved over the past years.

The SES also plays an important role in how well learners perform in class; however, the current study shows that the two schools in which data was collected belonged to different quintiles. The school in the upper quintile performed more poorly than the school in the lower quintile, which also questions the assumption of SES contributing to learners' low academic performance. Although the study did not investigate SES specifically, the results from the two schools were interesting as the researcher expected the school in the upper quintile to perform better than the school in the lower quintile simply because of the access they have to better equipment and resources to aid learners' RC and LC. The revelation of these interesting results mainly shows the amount of support and research that is needed to salvage South African learners' reading crisis.

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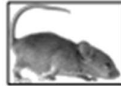
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Appendices

Appendix A: Reading Comprehension Test Lion and the Mouse

SECTION A : COMPREHENSION

Read the passage below and answer questions 1–14.



One day, two tiny grey mice were watching a huge, strong lion sleeping in the sun. "Run over his nose," said one. "See if he wakes up!"

So the silly little mouse ran over the lion's nose, and what happened? Of course, the lion woke up and caught the mouse in his big paw.

The huge lion was upset and was going to eat the small mouse. "Oh, please don't eat me, lion," begged the frightened mouse. "One day I will help you!"

The lion laughed. "You? You are too small to help anyone, little mouse! You can't help me!" He was not really hungry and so the lion let the mouse go.

Soon after that, the lion was running in the veld. Suddenly, he ran into a trap that the hunters had made to catch a buck. It was a large net and the lion was caught fast. He couldn't move, but he could roar.

"Help! Help! Help!" he roared. "Save me from this trap."

A buck walked by. "I won't help you," said the buck. "Last week you ate my brother."

A rabbit hopped by. "I won't help you," said the rabbit. "Last week you ate my mother."

Then, the little grey mouse ran by. "You didn't eat me last week," she said. "I will help you."

So the little grey mouse chewed at the net. She chewed and chewed and chewed. Late in the afternoon the hole in the net was big enough for the lion to climb out.

"Thank you, little friend. Now I know that even little animals can help big animals like me," said the lion.

1. Circle the letter of the correct answer.

Which is the best title for this story?

- A The Little Grey Buck
- B The Lion and the Wolf
- C The Mouse and the Rabbit
- D The Lion and the Mouse

(1)

2. Circle the letter of the correct answer.

Who is the main character in the story?

- A hunter
- B rabbit
- C lion
- D buck

(1)

3. Circle the letter of the correct answer.

Where does the story take place?

- A veld
- B zoo
- C forest
- D kennel

(1)

4. Circle the letter of the correct answer

How did the lion escape from the trap?

- A The lion set himself free by chewing the ropes.
- B The lion set himself free by pulling and breaking the ropes.
- C The lion untied the ropes and freed himself from the trap.
- D The mouse chewed the ropes and set the lion free. (1)

5. Tick (✓) if the statement is True or False.

5.1 The lion needed help from the mouse.

True	False
------	-------

(1)

5.2 Give a good reason for your answer.

(1)

6. Answer the following question:

What did the little grey mouse do to wake the lion up?

(1)

7. Answer the following question in a full sentence:

What happened to the mouse when the lion woke up?

_____ (1)

8. Circle the letter of the correct answer.

What lesson did you learn from the story?

A Little animals cannot help big animals.

B Take care of all animals.

C Size is not always important.

D Small friends do not make good friends.

(1)

9. Circle the letter of the correct answer.

Which animal is not in the story?

A buck

B lion

C mouse

D elephant

(1)

10. Circle the letter of the correct answer.

How do you think the lion felt when he was trapped?

A lucky

B angry

C happy

D glad

(1)

11. Underline the correct answer within brackets.

There were (many, much) lions in the jungle. (1)

12. Underline the correct form of the verb within brackets.

The little mouse (run, runs) over the lion's nose. (1)

13. Circle the letter of the correct answer.

Find a word from the passage that has the same meaning as "little".

A strong

B huge

C large

D tiny (1)

14. Rewrite the following sentence in the past tense.

The lion runs into a trap.

Yesterday _____
_____ (1)

Appendix B: Memorandum Reading Comprehension Test Lion and the Mouse



basic education
 Department:
 Basic Education
 REPUBLIC OF SOUTH AFRICA

ANNUAL NATIONAL ASSESSMENT 2013 GRADE 4 ENGLISH FIRST ADDITIONAL LANGUAGE TEST MEMORANDUM

TOTAL : 50

This memorandum consists of 3 pages.

QUESTION	EXPECTED ANSWERS	MARKS	TOTAL
SECTION A COMPREHENSION			
1.	D✓	1	1
2.	C✓	1	1
3.	A✓	1	1
4.	D✓	1	1
5.1	FALSE✓	1	1
5.2	The mouse chewed through the net to set the lion free ✓	1	1
6.	The little mouse ran over the lion's nose. ✓	1	1
7.	The lion caught the mouse in his big paw. ✓	1	1
8.	C✓	1	1
9.	D✓	1	1
10.	B✓	1	1
11.	many✓	1	1
12.	runs✓	1	1
13.	D✓	1	1
14.	Yesterday the lion ran into a trap. ✓	1	1
TOTAL			15

Appendix C: Listening Comprehension Test 1 The King Who Loved Gold

Read the passage below and answer the following questions:

Long ago there lived a king called King Midas. He was a good and kind king but he loved gold.

One day when he was walking he saw an old man who had fallen down. King Midas helped the man. The old man had magical powers. 'For being so kind you can have one wish,' said the old man.

King Midas said, 'I wish that everything I touch turns to gold.'

King Midas and the old man walked back to the palace. As they walked, he kicked a stone. It turned to gold! King Midas shouted for joy. His wish had come true! He touched a tree. It turned to gold! He touched the river. It turned to gold! The gold shone like the sun.

King Midas was very happy but he was tired. He asked for some food. He tried to eat, but the food turned to gold! Then his little daughter came running to greet him. She touched him. She also turned to gold!

King Midas began to cry. 'Please change my wish. My wish was not a good one. I was too greedy!'

The old man felt sorry for King Midas. He changed the king's wish. Everything was changed back to how they were. King Midas was happier than ever before.

1.1 Circle the letter of the correct answer.

Which is the best title for this story?

- A The King Who Loved Gold
- B The Golden King And The Wish
- C The King's Three Wishes
- D The Sad King Makes A Wish

(1)

1.2 Fill in the missing word.

Everything King Midas touched turned to _____.

(1)

1.3 State whether the following sentence is True or False.

King Midas ate all his food.

Tick the correct answer.

TRUE	FALSE
------	-------

Give a reason for your answer.

(2)

1.4 Do you think that King Midas was happy with all his gold?

Tick the correct answer.

YES	NO
-----	----

Give a reason for your answer.

_____ (2)

1.5 Fill in the blank space.

King Midas asked the old man to _____ his wish. (1)

2.1 Circle the letter of the correct answer that best describes the character of the old man.

A Selfish

B Caring

C Hardworking

D Cruel

(1)

2.2 Complete the sentence.

The old man felt _____ for King Midas. (1)

2.3 State whether the following sentence is True or False.

Tick the correct answer.

The old man was sad to see King Midas unhappy.

TRUE	FALSE
------	-------

Give a reason for your answer.

_____ (2)

2.4 Do you think the old man was pleased to see King Midas crying?

Tick the correct answer.

YES	NO
-----	----

Give a good reason for your answer.

_____ (2)

2.5 Fill in the blank space.

The old man changed the King's wish because the King was sorry he had been

_____ (1)

Appendix D: Listening Comprehension Test 2 Lunchtime

Read the poem below and answer the following questions:

LUNCHTIME

Sipho and Siya sat on the wall,
Sipho and Siya heard Mother call.
Time to wash hands for lunch was done,
Goodness, my goodness, just see the boys run!

3.1 Circle the word that rhymes with *done*.

- A hands
- B wash
- C run
- D herd

(1)

3.2 Add a word to complete the following sentence:

_____ rhymes with *call*.

(1)

3.3 State whether the following sentence is True or False.

Tick the correct answer.

Do you think that Sipho and Siya are hungry?

TRUE	FALSE
------	-------

Give a reason for your answer.

_____ (2)

3.4 State whether the following sentence is True or False.

Tick the correct answer.

Sipho and Siya are waiting to be called for lunch.

TRUE	FALSE
------	-------

Give a reason for your answer.

_____ (2)

3.5 Fill in the blank space with a correct word from the poem.

Siya and Sipho have to wash their _____ before they ate. (1)

4.1 State whether the following sentence is True or False.

Tick the correct answer.

Sipho and Siya are waiting in the house.

TRUE	FALSE
------	-------

Give a reason for your answer. (2)

4.2 State whether the following sentence is True or False.

Tick the correct answer.

Sipho and Siya are brothers.

TRUE	FALSE
------	-------

Give a reason for your answer. (2)

Appendix E: Memorandum Listening Comprehension Test 1 and 2 The King Who Loved Gold and Lunchtime



**GRADE 4 ENGLISH
FIRST ADDITIONAL LANGUAGE
ANNUAL NATIONAL ASSESSMENT: 2012
MEMORANDUM SET 3 EXEMPLAR**

QUESTION	EXPECTED ANSWERS	MARKS
1.1	A	1
1.2	gold	1
1.3	False. The food turned to gold.	2
1.4	No. He could not eat gold /his daughter turned to gold.	2
1.5	change	1
2.1	B	1
2.2	sorry	1
2.3	True. He changed the King's wish.	2
2.4	No. He changed the King's wish.	2
2.5	greedy	1
3.1	C	1
3.2	wall	1
3.3	True. They ran inside when Mother called.	2
3.4	True. They were listening for Mother's call.	2
3.5	hands	1
4.1	False. They were sitting on the wall outside.	2
4.2	True. It says mother called them.	2

Appendix F: Principal Assent Form



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

7 August 2023

Dear Principal

I am a master's student studying at the Faculty of Education at the University of Pretoria and would like to collect data at your school for a research project titled **Exploring the relationship between reading and listening comprehension skills of Sesotho learners in English.**

I am conducting research with the aim to understand the relationship between reading and listening comprehension skills of Grade 4 Sesotho home language learners in English as a second language. The three objectives supporting the study's aim are as follows: The first objective is to present empirical evidence on the relationship between South African Sesotho home language speakers' reading and listening comprehension skills with English as a second language. The second objective is to encourage teachers and parents to incorporate listening comprehension as much as reading comprehension in learning activities. The third objective is to encourage parents, policymakers, teachers and other stakeholders to focus on developing the learners' vocabulary in the Foundation Phase. The benefits linked to conducting research in the school are: discovering the learners' ability and performance in the research and that means the school would have its own learners tested, and their results analysed. Based on their results, teachers, principals and parents may be encouraged to come up with new ideas on how to be more supportive and effective for the learners' improvement in language skills in future. It is crucial for a school to show interest in discovering issues that could be contributing to the reading crisis in South Africa. I would appreciate the opportunity to conduct our research in your school.

This consent letter serves as a request to grant me permission to include Grade 4 Sesotho home language learners in the research that will be conducted in your school. I wish to conduct the research after school hours to avoid interfering with the

school's programme. However, any time between 7am and 3pm on weekdays is acceptable if it is suitable for the principal and the school. For this study, I need 42 Grade 4 learners to participate in this study - the total of which can be put together from different classes. The support of the class teachers to assist with selecting learners and administering the tests would be much appreciated. Learners will write a reading comprehension test and complete a listening comprehension test. The duration of the tests is 115 minutes.

Participation is entirely voluntary, and the anonymity of the participants will be ensured and all identifying information will be treated confidentially. Since your participation in the study is voluntary, please note that no participants will receive any monetary awards or awards in kind. I would like to request your permission to use your data, confidentially and anonymously for further research purposes as the data sets are the intellectual property of the University of Pretoria and, where relevant, project funders. Further research may include secondary data analysis, the use of the data for teaching purposes, data sharing, and open access data use. The confidentiality and privacy applicable to this study will be binding on future research studies.

The Ethics Committee at the Faculty of Education at the University of Pretoria has approved this study. For any further queries, you are more than welcome to contact me or my supervisors.

Your support in this matter will be appreciated.

Tshepiso Thibedi (researcher)

(078) 980 7684

u17080241@tuks.co.za

<hr/> <p>Dr Karen Roux (supervisor) (012) 420 5689 karen.roux@up.ac.za</p>	<hr/> <p>Prof Marien Graham (co-supervisor) (012) 420 6637 marien.graham@up.ac.za</p>
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Should you agree to participate in the study under the above stated terms, please fill in the details below.

I the principal of.....primary school give permission to the researcher mentioned above to conduct research in my school. I understand that my Grade 4 learners' participation in the research is entirely voluntary. I also permit the researcher to issue out consent forms to Grade 4 Sesotho home language learners' parents/caregivers for acknowledgement. I consent that the parents of Grade 4 learners have three days to permit their children to participate in the research by signing the consent forms and returning them to school.

Date:..... Signature:.....

Appendix G: Parents/Caregivers Assent Form



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

7 August 2023

Dear Parents/Caregiver

I am a master's student studying at the Faculty of Education at the University of Pretoria and would like to collect data at your school for a research project titled **Exploring the relationship between reading and listening comprehension skills of Sesotho learners in English.**

I am conducting research with the aim of understanding the relationship between reading and listening comprehension skills of Grade 4 Sesotho home language learners in English as a second language. The three objectives supporting the study's aim are as follows: The first objective is to present empirical evidence on the relationship between South African Sesotho home language speakers' reading and listening comprehension skills with English as a second language. The second objective is to encourage teachers and parents to incorporate listening comprehension as much as reading comprehension in learning activities. The third objective is to encourage parents, policymakers, teachers and other stakeholders to focus on developing the learners' vocabulary in the Foundation Phase. The benefits linked to conducting research in the school are: discovering the learners' ability and performance in the research and that means the school would have its own learners tested, and their results analysed. Based on their results, teachers, principals and parents may be encouraged to come up with new ideas on how to be more supportive and effective for the learners' improvement in their language skills in future. It is important for a school to show interest in discovering issues that could be contributing to the reading crisis in South Africa. I would appreciate the opportunity to conduct our research at your school.

This consent letter serves as a request to grant me permission to include Grade 4 Sesotho home language learners in the research that will be conducted in your

child's school. I wish to conduct the research after school hours to avoid interfering with the school's programme. However, any time between 7am and 3pm on weekdays is acceptable if it is suitable for the principal and the school. For this study, I need 42 Grade 4 learners to participate - the total of which can be put together from different classes. Learners will write a reading comprehension test and complete a listening comprehension test. The duration of the tests is 115 minutes.

Participation is entirely voluntary and the anonymity of you and your child, the school and other participants, such as the teachers and principals, will be ensured, and all identifying information will be treated confidentially. Since your child's participation in the study is voluntary, please note that no participants will receive any monetary awards or awards in kind. I would like to request your permission to use your child's data, confidentially and anonymously for further research purposes, as the data sets are the intellectual property of the University of Pretoria and, where relevant, project funders. Further research may include secondary data analysis, the use of the data for teaching purposes, data sharing, and open access data use. The confidentiality and privacy applicable to this study will be binding on future research studies.

The Ethics Committee at the Faculty of Education at the University of Pretoria has approved this study. For any further queries, you are more than welcome to contact me or my supervisors.

Your support in this matter will be appreciated.

Tshepiso Thibedi (researcher)

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<hr/> <p>Dr Karen Roux (supervisor) (012) 420 5689 karen.roux@up.ac.za</p>	<hr/> <p>Prof Marien Graham (co-supervisor) (012) 420 6637 marien.graham@up.ac.za</p>
---	---

Should you agree to participate in the study under the above-stated terms, please fill in the details below.

I (name and surname)

.....

..... the
parent(s) of give permission for
my/our child to be part of the research which has been explained above. I/We
understand that there will be no rewards attached to my/our child's participation in
the research. I/We also understand that participation in the research is entirely
voluntary. I/We also consent that we, as parents of Grade 4 learners, have three
days to permit my/our children to participate in the research by signing the consent
form and returning them to school.

Date:

Signature:

Appendix H: Learner Assent Form



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

10 August 2023

Learner assent for participating in a research study

A research project of the University of Pretoria

Project Title: Exploring the relationship between reading and listening comprehension skills of Sesotho learners in English

To be read to children under the age of 18 years

Why am I here?

This research project will give us a chance to see how we, together with your school and teachers, can help you improve academically and address learning challenges you may encounter here at school. We want to support you so you may be equipped with skills that you can use while studying and after leaving school. We are asking you to be part of the research project because your parents/caregivers have agreed that you can be part of this research project. Let me tell you a little bit more about the research project.

What will happen to me?

If you want to be part of this research project, you will spend some time with me and your class teacher completing a reading comprehension and listening comprehension test. These tests will take place when I come to your school. The questions in the tests are developed to help us understand your comprehension skills and your school marks will not be affected by the marks you get on the tests. I will not use your name in any report.

Will the project hurt?

No, the project will not hurt. The comprehension tests will not take long. If you do not understand a question, you can move on to the next one. If you do not want to

participate, you do not need to. All of your answers will be kept private. Your teachers and parents will not know what you wrote in the tests.

Will the study help me?

We hope the study will help you learn more about yourself and encourage you to read which will help improve your reading comprehension skills. We also hope the study will improve your listening comprehension skills by encouraging you to engage in listening comprehension activities both at home and at school. We also hope it will help you feel good about yourself, but we do not know if this will happen.

What if I have any questions?

You can ask questions about this research project, but questions related to the tests will not be accepted. If you have questions later that you do not think of now you can contact me on 078 980 7684 or you can ask me when I come to your school again.

Do my parents/caregivers know about this project?

Yes, your parents/caregivers have been informed about this research project, and they said you could be part of it if you want to. You can talk with them before you decide whether you want to be part of the research project or not.

Do I have to be in the project?

You do not have to be in this research project. If you change your mind later, you have to inform us, and no one will be upset if you change your mind. You can say yes or no, it is up to you.

Writing your name on the next page or signing it means that you agree to be in the project and that you know what will happen to you in the research project. If you decide to quit the project, all you have to do is to tell the person in charge.

Tshepiso Thibedi (researcher)

(078) 980 7684

u17080241@tuks.co.za

<hr/> <p>Dr Karen Roux (supervisor) (012) 420 5689 karen.roux@up.ac.za</p>	<hr/> <p>Prof Marien Graham (co-supervisor) (012) 420 6637 marien.graham@up.ac.za</p>
---	---

By writing your name below or by signing, you agree to participate in the project.

Signature of learner:

Date: