



# Does it matter if some learners read slowly? Exploring relationships between reading comprehension and oral reading fluency

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**Background:** Although Zimbabwe has performed quite well on Grade 6 SACMEQ literacy assessments compared to other African countries, reading levels are generally low and there is little research on reading literacy in Zimbabwean primary schools.

**Aim:** Grade 3 and 4 learners' reading comprehension (RC), accuracy and speed in oral reading fluency (ORF) were assessed to examine more closely the relationship between these aspects of reading development.

**Setting:** Data were obtained from Grade 3 and 4 learners from four different primary schools within Gweru urban district in Zimbabwe.

**Methods:** A RC test was administered to 374 learners across the two grades, and ORF data were obtained from a subsample of 72 learners. Data were analysed using descriptive and inferential statistics.

**Results:** The learners' RC performance was generally poor (41%–45%) across the grades and the four schools, showing much variation within and across grades. Oral reading fluency results were equally varied in terms of accuracy and speed. There was no significant difference in mean learner performance in RC and ORF between Grades 3 and 4, indicating little growth in reading from one grade to the next. However, the results showed robust correlations between ORF accuracy, ORF speed and RC.

**Conclusion:** Given the robust relationship between ORF accuracy, ORF speed and RC, there is need for reading literacy instruction to attend to all these aspects of reading development and to assess them early and systematically so as to provide appropriate interventions for early remediation and to ensure growth in reading from one grade to the next.

**Contribution:** This article contributes to the small but growing body of research on oral reading fluency and its relationship to reading comprehension in African primary schools.

**Keywords:** reading literacy; oral reading fluency; reading accuracy; reading speed; reading comprehension, English second language; language of learning and teaching.

## Introduction

Reading is one of the key competencies required for successful learning. Geske and Ozola (2008) describe reading as the backbone of all learning processes, including the ability to learn all the subjects that one is exposed to in the school system. Delgadova (2015) describes reading as the currency used in schools where reading affords the learner not only independent access to information but also the ability to acquire new knowledge from it and to actively participate in all the learning processes associated with formal learning: 'It is the core competency for processing the information gained, innovating it and consequently creating new knowledge' (Delgadova 2015:49). As reading is critical in all learning processes, it is important for learners from an early age to attain good reading skills in the languages of instruction applicable to their schooling contexts.

For learners to read a text with understanding in their home language (HL) or the official language of schooling, first they need to master foundational reading skills (Wills et al. 2022). Foundational reading skills are usually developed within the early years of schooling (typically the first 3 years). These basic reading skills include knowledge of the alphabetic code and the ability to decode words accurately and quickly, which enables comprehension (Rasinski & Nageltinger 2012).

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Foundational reading skills are best developed in the home language, but in multilingual contexts such as Zimbabwe, foundational reading skills are often developed in an official language of schooling. In the African context, this can be Arabic, Kiswahili or a colonial language such as English, French or Portuguese. In Zimbabwe, the official language of schooling is English while the HL could be Shona, Ndebele or any of the 16 native languages spoken in the country. Whatever the language in which reading is taught, learners need to develop strong reading skills because reading is the means whereby much new knowledge is acquired in the learning context.

Research has consistently shown fluency to be critical for reading comprehension (RC), especially when texts become longer and more difficult (Pikulski & Chard 2005; Wang et al. 2018). By the end of Grade 3, learners should have developed fluent reading skills that are essential to all future learning (Espinoza 2010). From Grade 4 onwards, learners are expected to read and understand non-fiction or expository texts in subjects such as science, mathematics and social studies. Learners who struggle to read and understand what they read will continue to fall behind even up to university level, unless effective intervention strategies that specifically address their reading challenges are implemented.

The Grade 3 and 4 years constitute a critical period in reading literacy development in any schooling language. By Grade 3, learners should have mastered basic reading skills (usually with narrative texts) and start transitioning from 'learning to read' to 'reading to learn' from longer and more complex texts, especially information texts found in content subject textbooks, a challenging transition for most learners. Gibbons (2009) argues that those who start falling behind at this stage will continue to fall behind and unless successful interventions are instituted, such learners will end up performing poorly in their studies. In many African countries, including Zimbabwe, Grade 3–4 is the period when many learners also transition from using the indigenous languages to using a postcolonial language such as English or French, a challenging process for most learners, especially if early reading skills are not well established in the indigenous languages (Sibanda 2017). Although fluency has been shown to be important for comprehension when reading in English as a home language (Grabe 2018; Hasbrouck & Tindal 2006; Klaudia & Guthrie 2008; Scarborough 2001). and as an additional language (EAL; Al-Otaiba et al. 2009; Broward County 2012; Pretorius & Spaul 2016; Wills et al. 2022), it is important to examine this relationship across a variety of EAL schooling contexts, especially from developing country contexts.

Given the essential role that RC plays in the learning process and the supportive role that early reading skills play in enabling RC, this article reports on a study that focussed on the English reading abilities of Grade 3 and 4 learners from Zimbabwean schools whose home language is Shona.<sup>1</sup> The

1. The data reported here comes from a larger doctoral study (Mutema 2022) on Grade 3 and 4 reading literacy, including lesson observations of how reading was taught and the analysis of textual features of Grade 3 and 4 texts.

aim of this article is to compare Grade 3 and 4 learners on English RC and fluency and on the basis of these comparative data to examine the relationship between these two aspects of reading literacy within and across the grades to better understand the reading challenges these learners face during this important transition in early primary school.

The article is structured as follows: In the next section, the literature review outlines the componential framework of reading and its development, followed by a brief overview of research on reading literacy in Zimbabwe to contextualise the study. Thereafter, the methodology is explained, followed by the results, discussion and conclusion of the study.

## Reading comprehension and its components

Reading comprehension is the essence of reading. It is a process of 'simultaneously extracting and constructing meaning through interaction and involvement with written language' (RAND Reading Study Group 2002:11; Kintsch 1998). To extract and construct meaning in written language, it requires accurate decoding of print and the ability to hold the decoded information in memory long enough to be able to connect and integrate text information with background knowledge in order to make sense of the text. All this requires active engagement by the reader (Snow 2010). Reading comprehension is thus a process that involves the interaction of a number of elements, from the basic processes of decoding (i.e. using knowledge of the alphabetic code to read words) to complex cognitive processes (e.g. inferencing, perceiving temporal sequences and whole-part relations, integrating information, etc.), which leads to meaning construction. Research over the decades has consistently shown that if the basic processes of decoding are not in place, the more complex cognitive processes of meaning-making are compromised (Adams 1990; Castles, Rastle & Nation 2018; Snow et al. 1998; Wang et al. 2019).

The view of reading as a complex, hierarchical cognitive process involving the interaction of a number of linguistic, code-based, cognitive, affective and social facets (Castles et al. 2018; Guthrie, Coddington & Wigfield 2009; Scarborough 2001; Klaudia & Guthrie 2008; Snow 2010) underpins this study. Tankersley (2003) likens the multifaceted nature of reading to a tapestry of tightly woven strong foundational threads, and if one of the threads is missing, there are holes in the tapestry and the weave cannot hold tight and cannot function for lifelong use. In the following sections, we briefly examine some of these foundational threads that make up the reading tapestry.

### Decoding

In alphabetic writing systems, spoken language is represented at the sublexical level by letter symbols that represent phonemes in the language. Learning the code thus means learning how the letters match to sounds. Decoding refers to the ability to understand that a printed word represents the

spoken word and that this printed word is made up of a sequence of phonemes represented by alphabetic symbols (Espinoza 2010). Through decoding, a reader uses letter-sound correspondences 'to unlock the pronunciation of a word' (Powell & Hornsby 1993:21). It comprises several sub-skills such as phonological and phonemic awareness (the ability to perceive sound patterns and individual sounds within words, respectively), letter-sound knowledge, the ability to blend letter-sounds to form words and word reading. Beck and Juel (2002) state that decoding is also referred to as word recognition or word identification, word attack skills and sight word recognition. Sight words are typically associated with English reading and its opaque orthography and refer both to words that are not readily decodable (*the, once, through, there*) as well as decodable words that have become familiar and easily recognisable through practice. With regular reading opportunities and practice, readers develop word recognition skills that enable them to easily and effortlessly read words and this aids fluency and comprehension.

### Oral language proficiency

This is another key component of reading development, as reading is expressed through language. Oral language proficiency is a broad construct that encompasses various aspects such as phonology, morphology, vocabulary, syntax and discourse (Kim et al. 2016). By the time children enrol for preschool, they already have oral language skills, although in varying degrees (Hart & Risley 2003). The variations are because of a number of factors, including exposure to rich oral language contexts, socioeconomic status (SES) or individual developmental factors. Oral language proficiency impacts both word reading and language comprehension (Shanahan & Lonigan 2020).

### The simple view of reading

According to the simple view of reading (SVR), RC is a product of decoding (D) and language proficiency (L), which can be represented as follows:  $RC = D \times L$  (Gough & Tunmer 1986; Hoover & Tunmer 2018). Both *decoding* and *(oral) language proficiency* are equally necessary for RC to take place. Without adequate decoding, RC cannot take place; equally, without adequate language proficiency RC cannot take place. While being able to decode does not automatically mean ability to comprehend, not having adequate decoding skills will compromise RC (Roberts 2010). Readers use their decoding skills for successful word recognition, and integration of information gained at this level together with relevant background knowledge, inferencing and strategic processing leads to deeper understanding of a text. The SVR emphasises the importance of decoding in early reading. Without decoding skills, children have difficulty getting out the literacy 'starting blocks', so to speak; once fluent decoding skills are in place, then the dynamics between the reading components change and language proficiency (L) becomes a strong predictor of RC.

The SVR has been criticised by Whole Language proponents who downplay the role of decoding in reading (Goodman 2005) and instead promote a 'multiple cues' model where readers are encouraged to focus on various sources for comprehension such as meaning, vocabulary, sentence structure and visual cues (Clay & Cazden 1990). Phonics is taught incidentally in context, if at all, and phonological (i.e. decoding) cues are used as a last resort when other higher-level strategies fail. However, evidence-based reading instruction finds little support for Whole Language claims (Buckingham, Wheldall & Beaman-Wheldall 2013; Moats 2007; Senior 2013). As Kim (2017) points out, the 'simple' in the SVR does not mean simplistic. When the complex process of reading is pared down to its essence, then D and L remain the core components.

The SVR has withstood the test of time and been confirmed in many studies, across many languages and orthographies (Hjetland et al. 2019; Joshi et al. 2012; Kendeou, Savage & van den Broek 2009; Kirby & Savage 2008; Nation 2019; Roch & Levarato 2009). There are numerous English studies, which show that RC correlates with both decoding and listening comprehension (Hogan, Adolf & Alonzo 2014). Researchers have found that the SVR model is also relevant for explaining the development of L2 reading skills in alphabetic orthographies (Sparks & Parton 2016). The SVR is useful as it informs instruction; learners who have problems with RC may have decoding problems, or they may have oral language problems, or they may have challenges in both decoding and language. Teachers can implement its framework to identify learners' challenges and to craft intervention strategies suitable for individual learners (Kendeou et al. 2009).

More recent models acknowledge the contribution of the SVR in explaining the complex process of reading but extend it by examining the interrelationships of many more cognitive-linguistic and textual variables; for example, the Direct and Indirect Effect Model (DIER) of Kim (2017) and the Complete View of Reading (Francis, Kulesz & Benoit 2018) derived from differences and similarities between typical and struggling readers. In these expanded models, skilled decoding still plays a central role in enabling RC.

### Reading fluency

While studies on decoding focus mainly on subskills such as phonological and phonemic awareness, mastery of the alphabetic code and word reading, reading fluency is another key competency in the reading process. According to Kuhn and Levy (2015:11), 'fluency combines accuracy, automaticity and oral reading, which taken together, facilitate the reader's construction of meaning'. It builds on both decoding and oral language skills and serves as the bridge between decoding and comprehension (Rasinski & Padak 2013). Unless learners traverse the bridge of fluency, they are left on an island of words vainly attempting to decode or understand (Rasinski & Nageldinger 2012). Comprehension is limited by inefficient,

slow, laborious reading<sup>2</sup> (Hasbrouck 2017). To be able to comprehend a text, learners should read with sufficient accuracy and speed that is appropriate to their grade level and the orthographic norms of the language in which they read. This is measured by taking note of the number of words read correctly from a text in 1 min. English fluency norms are different from fluency norms in African languages, and even in African languages, there are different fluency norms depending on whether a conjunctive (e.g. isiZulu) or disjunctive orthography (e.g. Setswana) is used (Ardington et al. 2020; Wills et al. 2022).

Research from the brain sciences shows that processing information accurately and fast confers cognitive advantages (Eagelman 2015). In reading, this takes the form of accurately recognising alphabetic shapes and their combinations and chunking them into larger word forms. Initially, this happens slowly, is error-prone and consumes attention and working memory. Accuracy develops first and once words start being recognised correctly, the brain speeds up and processes connected text more quickly, without conscious attention. This is referred to as automatic processing. Automaticity in reading is a critical skill that frees up attention and memory, thereby enabling comprehension (Dehaene 2009; Seidenberg 2017). It is also needed to get through volumes of extended text quickly and efficiently. This is why learners who can read fluently are so much better at learning from text.

Regular reading practice (i.e. reading extended text every day) is needed to develop fluency. Thus, it is imperative that during the foundation phase, learners have direct instruction on how the code works (i.e. phonics instruction) and opportunities to practice reading through repeated exposure to print.

Fluency can be measured to determine readers' overall reading level in order to be able to provide appropriate intervention strategies where necessary. It is measured by observing a reader reading an unpractised text, timing it (usually for 1 min) and taking note of the errors the reader makes during the process of reading. Errors here refer to any word that is omitted, mispronounced or substituted for another. The total number of errors is then subtracted from the total number of words read to yield the total number of words correct per minute (wcpm; Hasbrouck & Tindall 2006). This procedure measures accuracy (number of words read correctly in relation to the total number of words read and number of errors made) and the speed (wcpm) at which a reader reads connected text within a minute. Although prosody (reading with appropriate intonation so that oral reading sounds such as natural speech) is part of fluency, it is more subjective to measure and other indicators are used to assess it.

A number of studies in both English HL and English as second (ESL) or additional language (EAL)<sup>3</sup> contexts show

2. Although reading too fast also negatively affects comprehension, this seldom happens in the early stages of reading. Most struggling readers read slowly and effortfully.

3. The term English as second language (ESL) is commonly used in the international literature, while English as additional language is (EAL) commonly used in the multilingual South African context. Both refer to non-home language users of English, irrespective of whether it is a second, third or fourth language. The terms are used interchangeably here.

a strong relationship between reading fluency and RC (Armbruster, Lehr & Osborn 2001; Cook 2003; Buck & Torgesen 2003; Fuchs et al. 2001; Grabe 2018; Jimmerson, Hong, Stage & Gerber 2013). In the African context, Pretorius and Spaull's (2016) study with Grade 5 ESL learners in South Africa attested to a strong relationship between oral reading fluency (ORF) and RC. Likewise, Piper, Schroeder and Trudell (2016) study in Kenya showed a relationship between ORF and RC in both English and Kiswahili. The recent large-scale longitudinal study by Wills et al. (2022) involving over 20 000 ESL learners in South Africa also confirmed the relationship between ORF and RC, where learners who read inaccurately and slowly were trapped in a non-comprehension zone.

Over the past 2 decades, there have been numerous large-scale longitudinal studies that provide normative data on how accuracy and speed increase across the grades. It is from such large data sets that benchmarks can be derived to provide guidelines for teachers to ensure that learners are on track with their reading development. Accuracy in reading needs to develop early, and cross-linguistic studies show that it happens more easily and quickly in languages with transparent orthographies. For example, in Seymour et al.'s (2003) comparative study of Grade 1 reading accuracy in 14 European countries, most children achieved 90% – 98% accuracy by the end of Grade 1 in transparent orthographies (e.g. Norwegian, Dutch, Italian, Turkish, German). In contrast, English readers showed the slowest development, with many readers only achieving 95% – 98% accuracy 2 or 3 years later. The US data collected from DIBELS (Dynamic Indicators of Basic Early Literacy Skills, University of Oregon 2022) from the 2021–2022 school cycle<sup>4</sup> indicate that reading with 90% or less accuracy in Grades 3 and 4 puts learners 'at risk', while reading with 91% – 95% accuracy puts Grade 3 and 4 learners at 'some risk'. It is only when Grade 3 and 4 learners can read with 96% or more accuracy that they are at minimal risk of RC.

In the United States, reading below 40 words per minute in English HL by the end of Grade 1 flags children who are considered at risk of reading failure (Riedel 2007). The large ORF data set of mainly HL English learners from Grades 1–8 across different socioeconomic (SE) settings reported by Hasbrouck and Tindal (2006, 2017) and DIBELS (University of Oregon 2022) provide a reliable reflection of normative development at different percentile rankings. Broward County (2012) proposed benchmarks for ESL learners in the American context suggesting that by the end of Grade 3, learners should be reading 89 WCPM at the 50<sup>th</sup> percentile level and 103 WCPM at the end of Grade 4. Closer to home, Wills et al. (2022) proposed more conservative minimum benchmarks of 50 wcpm for Grade 3 and 70 wcpm for Grade 4 ESL learners in South Africa. Learners who read below those levels in each grade struggled with RC. Conservative benchmarks were chosen because the foundational reading skills of the learners in the large South African data set of about 20 000 ESL learners were generally

4. These data were collected during the COVID-19 pandemic. The data set comprises over 2 million learners, so it is well represented.

**TABLE 1:** English oral fluency rates across Grades 3 and 4.

English HL and ESL Benchmarks	Grade 3 wcpm	Grade 4 wcpm
<b>English HL H&amp;T (2017)</b>		
<i>Percentile</i>		
25	91	105
<b>50</b>	<b>112</b>	<b>133</b>
75	139	160
90	166	184
<b>English HL DIBELS (2021–2022)</b>		
<i>Percentile</i>		
25	92	99
<b>50</b>	<b>118</b>	<b>127</b>
75	147	147
90	171	169
<b>ESL - USA Broward County (2012)</b>		
50 <sup>th</sup> percentile	89	103
ESL – South Africa Wills et al. (2022)–minimum benchmark	50	70

Note: The bold is to highlight average fluency rates per grade, i.e. fluency of children in the 50th percentile.

DIBELS, Dynamic Indicators of Basic Early Literacy Skills; ESL, English as second language; HL, home language; H&T (2017), Hasbrouck & Tindal 2017; wcpm, words read correctly per minute.

low. In Table 1, we show end-of-grade ORF scores for Grades 3 and 4 from these data sets.

Contrary to Goodman's (1967) assertion that reading is a psycholinguistic 'guessing game', the scientific research literature consistently indicates that skilled reading is a precise and fast skill; as learners develop their reading skills, both precision and speed in decoding increase across the grades and are strongly associated with text comprehension, in both home language and ESL reading (Al-Otaiba et al. 2009; Fuchs et al. 2001; Seidenberg 2017). However, as will be argued as follows, very little research on foundational reading skills in general and fluency skills in particular has been undertaken in the Zimbabwean context.

### The Grade 3–4 transition

Grades 3 and 4 mark a critical period in the development of reading literacy where learners transition from the 'learning to read' to the 'reading to learn' stage (Gibbons 2009; Sibanda 2017). There are a number of skills that Grade 3 learners are expected to have mastered in order to meet more advanced academic challenges in the new stage. One such skill is the ability to read fluently (accurately and at a grade appropriate speed) in Grade 3, so that comprehension can happen. Failure to do so results in challenges with text comprehension, which in turn leads to challenges in academic performance in primary and secondary school (Mudzielwana 2014). This stage is thus critical in the learner's academic journey and an average Grade 3 learner should be able to decode texts with relative ease and understand their content.

In Zimbabwe, the average age for Grade 3 is 7–8 years and for Grade 4 it is 9–10 years (Mutema 2022). For those in Grade 4, this is a challenging stage, especially for those who failed to master the basic skills of reading. Reading to learn is a more complex cognitive process which makes use of reading as a tool to unlock textual meaning (Sibanda 2017) and independently acquire new knowledge from texts. The instructional focus at this stage is no longer on decoding but

on fluency and comprehension at a deeper, critically evaluative cognitive level. Now learning revolves around reading for comprehension from textbooks and those who are not proficient will fall behind. The texts are no longer simple narrative texts that relate to an everyday frame of reference, but become more discipline-oriented, dealing with topics about which readers often initially know little. Struggling readers find this stage more challenging and their interest may diminish while at the same time their progress slows down (Kitson 2011). This stage can be problematic even for HL learners because of the unfamiliar nature and complexity of academic language employed in the texts (Sibanda 2014).

## An overview of research on reading literacy in Zimbabwe

There is little research on reading literacy in the Zimbabwean schooling context. The lack of research is compounded by a number of factors, one of which is lack of funding (Dube 2015; Mukoko & Mdhlongwa 2014), especially for large-scale projects owing to a long period of economic woes.

Two studies have looked at RC in high school. Pfukwa's (1994) study that examined the RC performance of Grade 8 learners from a secondary school in Harare showed that learners had RC challenges. Similar findings emerged from Moyana's (2000) study with Grade 9 learners from Harare, showing poor performance in RC. However, because they are focussed on RC, these studies do not show which aspects of reading literacy development may have contributed to these comprehension challenges.

One large-scale project carried out in Zimbabwe was by the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) to which Zimbabwe was affiliated. Southern and Eastern African Consortium for Monitoring Educational Quality carries out research on Grade 6 literacy and numeracy in member states at 5–6-year intervals. Zimbabwe only participated in two rounds of SACMEQ owing to financial constraints (SACMEQ 1, 1995–1998 and SACMEQ 111, 2007–2011). The 2011 RC results showed that the Zimbabwean Grade 6 learners who participated were average performers with a national mean of 508 while the SACMEQ mean was 500. The highest performers (Tanzania, Seychelles and Mauritius) had means above 600.

The only study that includes data on early reading skills is by Brown (2014) who presents data from one district in Mashonaland West province, on a programme called Literacy Boost (LB), involving six intervention and four control schools. The programme was meant to improve early grade reading skills in English and Shona (the participants' mother tongue), focussing on concepts about print, letter identification, word reading and fluency of Grade 3 learners ( $n = 91$  in intervention and 52 in control schools). The results showed that the treatment group showed significant improvements in concepts about print, letter identification, individual word reading and fluency,

compared to the control group. Despite significant increases in fluency in both Shona and English in the intervention groups, reading accuracy remained low and fluency was generally poor in this study, with Grade 3 learners reading at 22 and 24 wcpm in Shona and English, respectively. These learners were reading extremely slowly in relation to the English fluency norms presented in Table 1. Although Brown's (2014) study was a small-scale snapshot of the situation in Zimbabwe, snapshots can hold up a mirror to the larger schooling system (Mutema 2022).

A recent small-scale study on reading literacy in high school is one by Gumede and Boakye (2020), which looked into the RC ability of Grade 9 learners in Bulawayo to see at what level they were reading. The findings showed poor RC generally, and the researchers concluded that the Grade 9 learners' performance was below that of Grade 4 learners, although it is not clear what criteria were used to determine reading levels. While the study provided information on contextual factors such as SES and teacher motivation as contributory factors to the low RC performance, it did not include assessment of the decoding or fluency aspects of reading, which play a key role in RC performance.

From the preceding discussion, it is clear that reading is not receiving much research attention in Zimbabwe. The few reading studies that do exist have focussed mainly on RC in high school. The only study that has examined the development of early components of reading is that of Brown (2014). Studies on the foundational aspects of reading and the role they play in RC performance in the elementary stages of learning are not available in Zimbabwe.

Does it matter if some learners read slowly? From anecdotal observations of reading across numerous classrooms, both authors have noticed slow and halting reading, in both African home language and English classrooms. When asked about this, teachers often reply: 'These children are still learning', 'We are patient with young learners', 'We don't put pressure on them' or 'We help them with pronunciation even if they say it slowly'. While slow and halting reading is certainly associated with early reading development, comments such as these suggest that teachers may not be aware of different stages of reading, the role of fluency in reading or that slow reading signals decoding problems.

Given the dearth of fluency research in Zimbabwe, this study focusses on fluency and RC of Grade 3 and 4 EAL learners for whom English is the language of instruction from the start of primary school. This article contributes towards addressing the gap on EAL reading skills in the early primary school context in Zimbabwe and providing a better understanding of the relationship between fluency and (written) RC in Grade 3 and 4 EAL learners in a developing country context. The research questions in this article address the following two issues:

1. How does performance on RC and ORF accuracy and speed differ within and across the Grade 3 and 4 EAL learners in this study?
2. What is the relationship between ORF accuracy, ORF speed and RC in this cohort of EAL learners?

## Research methods and design

### Research context and participants

Four primary schools in Gweru district of the Midlands province of Zimbabwe were sampled for purposes of this study, representing the various SE sectors found within the broader Gweru urban area. The Midlands province is one of the 10 provinces in Zimbabwe and it is located in the heart of the country; as a result, both Shona and Ndebele-speaking people are found in this province although the majority are Shona speakers. Some of the schools in Gweru are located in the more affluent suburbs or city centre and most pupils in these schools come from middle SE backgrounds and the schools are relatively well-resourced. One school was randomly sampled from this group of schools. Schools situated in the more densely populated and industrial suburbs are mixed, with pupils coming from both middle and low SE backgrounds. Many of these schools have old and dilapidated buildings and are poorly resourced and two schools were purposively sampled for purposes of this study. The fourth school was again purposively sampled from council-owned schools that are situated in high-density suburbs although they are better resourced compared to government schools. The four schools represented the SE groupings in the city of Gweru. An intact class from each of the two grades was assigned to the study in each of the four schools and this was done by the school administrators for each school but they did not disclose their criteria. This resulted in 178 Grade 3 and 186 Grade 4 pupils being tested, totalling 374 pupils in all, taken from a range of schools representing the different SE strata in Gweru.

### Assessment tools and procedures

The learners were assessed for RC and ORF. The researcher administered the two tests after receiving training from her PhD supervisor on how to carry out the assessments.

#### Reading comprehension

A pre-PIRLS<sup>5</sup> text from the 2011 Progress in International Reading Literacy Study (PIRLS), released in the public domain, was used for both grades. The comprehension test was a narrative text entitled *Brave Charlotte*, comprising 464 words, and a total of 18 questions, including literal and higher order questions. The questions included a mix of multiple-choice questions with four options and constructed responses where learners wrote their answers in the space

5. The pre-PIRLS texts (later renamed PIRLS Literacy in 2016) were introduced in 2011 in response to the increasingly diverse profile of middle- and low-income countries participating in PIRLS. These were shorter, easier texts, with relevant questions posed on the opposite page of each section of text rather than at the end of the text. They are deemed suitable for Grade 3 and 4 learners.

provided. Sixteen of the 18 questions were assigned a score of 1, while two of the higher order questions were out of 2 marks, yielding a total of 20 marks.

The RC test was administered in a group setting by the first author, to all the learners who were present the day their class was scheduled to write the test. The test was written in their English language classrooms during a 1-h long comprehension lesson period for each class across the four schools.

### Oral reading fluency

Because ORF tests are administered one-on-one and therefore more time-consuming to conduct, not all the learners in the sample were assessed for ORF. The results of the RC tests were used to identify a smaller subset of learners for ORF assessment. A subsample of nine learners was drawn from each class based on their performance in the RC test: three weakest (<45%), three average (50% – 66%) and three strongest learners (72% – 100%) were drawn from each class and assessed one-on-one for their oral fluency. The three groups are here named weak, developing and strong comprehenders. In all, 72 learners participated in the ORF test, 36 from Grade 3 and 36 from Grade 4.

The ORF assessment tool comprised two different passages from the 2011 pre-PIRLS and PIRLS passages for the two grades. The Grade 3 pupils read *The Lonely Giraffe*, a 2011 pre-PIRLS text that comprised 181 words while the Grade 4 learners read *Enemy pie*, a 2011 PIRLS text with 266 words. Analysis of the words in terms of their frequency levels and lexical density shows that the two ORF texts were similar in terms of their lexical profiles, as shown in Table 2.

The levels refer to the frequency levels of words that occur in English,<sup>6</sup> in sets of 1000 word levels, ranging from *high-frequency* words (Levels 1–3 with the 1000–3000 most common words used in every day conversational contexts and words that occur commonly across a variety of written texts), *mid-frequency* words (Levels 4–9 words that fall within the 4000–9000 most frequent words) and *low-frequency* words (Levels 10–25 words that occur in the 10000–25000 and beyond bands of frequency; Schmitt & Schmitt 2014). Given that Grade 3 and 4 EAL learners should be familiar with the 3000 most familiar words in English, these texts are appropriate for their grade levels and should not pose major lexical difficulties. While the Grade 4 text reaches 99.4% coverage at the Level 2 already, the words *leopard* and *giraffe* in the Grade 3 may be less common to speakers of British or American English but these words will be familiar to children living in Zimbabwe.

Upon visiting a school, the identified learners were taken one-by-one to a secluded place in the school (usually an

<sup>6</sup>The corpus reference used in the analysis is the combined British National Corpus of 100 million words and the Corpus of Contemporary American English of 450 million words. This provides a very strong evidential basis of the frequency levels of words used in English.

**TABLE 2:** Comparison of the lexical profiles of the Oral reading fluency texts.

Levels	Grade 3: <i>The Lonely Giraffe</i> % word coverage per frequency level	Grade 4: <i>Enemy pie</i> % word coverage per frequency level
Level 1	90.8%	88.4%
Level 2	94.8%	99.4%
Level 3	95.4%	-
Level 4	96.6% (jungle × 2)	100.0% (scrap [of paper])
Level 6	97.2% (huddled)	-
Level 8	97.8% (leopard)	-
Level 10	100% (giraffe × 4)	-
Lexical density (content words/text length)	0.51	0.49

empty office or the storeroom) where they read without being disturbed and without disturbing other learners (Mutema 2022). Oral reading fluency is measured by having an assessor ask a learner to read a grade appropriate text aloud under timed conditions, normally 1 min. The learner's score is calculated by recording the total number of words read per minute and then subtracting the number of errors to get the number of words read correctly per minute (wcpm). It is a reliable test that also correlates strongly with RC (Stanovich 1986; Piper et al. 2016). After each learner had read the text, she or he was thanked and left, and the number of errors were subtracted from the total number of words read, yielding an ORF score of wcpm per learner.

Afterwards all the RC and ORF results were captured and analysed on SPSS version 25, using descriptive and inferential statistics. Two scores reflecting accuracy and speed were computed for ORF. Accuracy in word reading was computed by subtracting the number of errors in word reading from the number of words read in the passage per learner and converting it to a percentage. Speed in ORF was computed in terms of number of words read correctly within a minute (wcpm).

### Ethical considerations

The research was carried out following due ethical procedures and conventions. Ethical clearance was granted by the University of South Africa Department of Linguistics and Modern Languages Research Ethics Review Committee (RERC) (No. AL\_FM011\_2015).

### Results

Test reliability was good, with a Cronbach's alpha of 0.86 recorded for the RC test as a whole for both grades. The data were also tested for normality using the Shapiro-Wilk test. For Grade 3 data,  $W(df) = 0.97(188)$ ,  $p > 0.000$ , and for Grade 4 data,  $W(df) = 0.95(187)$ ,  $p > 0.000$ . In both cases the results indicated that the data were not normally distributed. As a result, non-parametric tests were used for further analysis of the data.

The first research question addresses reading differences between the grades.

*How does performance on RC and ORF accuracy and speed differ within and across the Grade 3 and 4 EAL learners in this study?*

Table 3 shows descriptive statistics of the RC tests for both grades, using the full sample. The raw scores for RC have been converted to percentages in the table for reading ease.

The Grade 3 learners generally did not perform well, with a mean score of 41.1% and a large SD, showing that there was a lot of variability. Even the stronger readers in the cohort – those at the 75<sup>th</sup> percentile – only achieved a comprehension mean of 60%.

Although there was a slight increase in RC mean to 45.8% among the Grade 4 learners, performance was still low and the SD also showed a lot of variability. The Grade 4 learners' performance at the 25<sup>th</sup>, 50<sup>th</sup> and 75<sup>th</sup> percentiles was marginally better than Grade 3 performance (a 5% increase at each interquartile). From both grades there were learners who got zero for RC (4 and 2 learners, respectively). A non-parametric Mann–Whitney test was used to test for significant differences between the grades. The results showed no significant differences in RC between the Grade 3 and 4 learners ( $U = 19498.5$  [ $df = 2$ ],  $p = 0.053$ ).

Table 4 provides descriptive statistics for reading performance of the subsample of 72 learners who did the ORF tests across

**TABLE 3:** Descriptive statistics for Grade 3 and 4 reading comprehension.

Grades	Mean RC		SE	% learners scoring zero	Min – max %
	%	SD			
<b>Grade 3 (N = 188)</b>	41.1	23.62	1.7	2.1	0 – 90
<i>Percentiles</i>					
25 <sup>th</sup>	20	-	-	-	-
50 <sup>th</sup>	40	-	-	-	-
75 <sup>th</sup>	60	-	-	-	-
<b>Grade 4 (N = 186)</b>	45.8	23.18	1.7	1.1	0 – 100
<i>Percentiles</i>					
25 <sup>th</sup>	25	-	-	-	-
50 <sup>th</sup>	45	-	-	-	-
75 <sup>th</sup>	65	-	-	-	-

RC, reading comprehension; SD, standard deviation; SE, socioeconomic; min, minimum; max, maximum.

**TABLE 4:** Descriptive statistics for reading comprehension, oral reading fluency accuracy and speed for Grade 3 and 4 subsample.

Grades	No.	Mean RC		Mean total words read	Mean total errors	Mean ORF accuracy (%)	Mean ORF speed (wcpm)	Min–max wcpm
		%	SD					
<b>Grade 3 total mean</b>	188	41.1	23.62	-	-	-	-	-
<i>Subsample</i>	36	-	-	77.8	6.6	87.4	71.2	5–153
Weak comprehenders	12	18.8	-	53.3	9.6	79.5	48	5–85
Developing comprehenders	12	58.8	-	76.6	5.7	93.5	80	46–94
Strong comprehenders	12	80.0	-	100.8	4.6	95.6	101	60–153
<b>Grade 4 total mean</b>	187	45.8	23.18	-	-	-	-	-
<i>Subsample</i>	36	-	-	79.1	6.0	87.7	72.9	0–172
Weak comprehenders	12	19.6	-	47.7	7.5	78.9	49	0–71
Developing comprehenders	12	52.2	-	82.7	6.8	92.7	72	58–92
Strong comprehenders	12	81.3	-	107	3.9	96.4	108	47–172

ORF, oral reading fluency; RC, reading comprehension; wcpm, words read correctly per minute; SD, standard deviation; min, minimum; max, maximum.

the two grades. The RC mean (and standard deviation in brackets) for the whole grade sample is also given in relation to the reading performance of the three comprehension groups, viz. weak, developing and strong comprehenders.

While overall there was great variability in fluency within and across grades in the subsample, these results show two trends. Firstly, overall there was not much growth in ORF accuracy or speed from Grade 3 to 4. It was surprising that the Grade 4 learners did not show greater overall growth in fluency; they did not read noticeably more accurately or faster than their Grade 3 peers. Similar to RC, a non-parametric Mann–Whitney test for this subsample showed no significant differences in ORF accuracy between the two grades ( $U = 696$  [ $df = 2$ ],  $p = 0.589$ ) or in ORF speed ( $U = .653$  [ $df = 2$ ],  $p = 0.955$ ). In fact, it is only when one disaggregates the data (as shown in Table 4) that the different growth pathways emerge within and across Grades 3 and 4.

Secondly, although there was not much overall reading growth from Grade 3 to 4, when the results are disaggregated in the three groups, a similar developmental trend emerges within each grade, in that in each grade there was a reduction in errors and an increase in ORF accuracy and speed in the developing and strong comprehenders, respectively, compared to the weak comprehenders. In other words, in each grade, poor comprehension was associated with error-prone, slow reading; increases in comprehension were associated with fewer errors and increases in accuracy and reading speed.

The second research question examines associations between these reading variables more closely:

*What is the relationship between ORF accuracy, ORF speed and RC?*

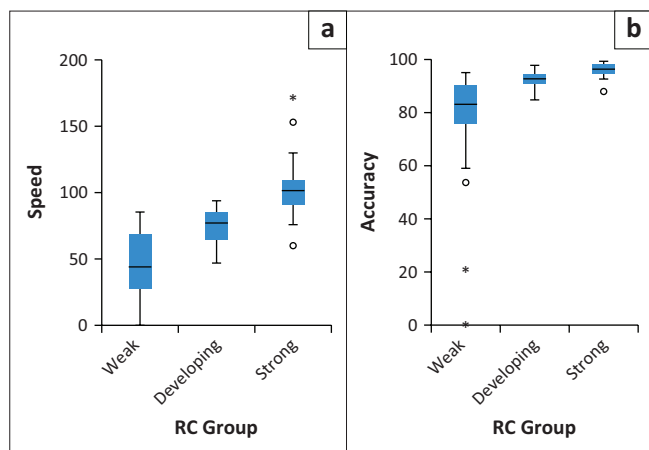
**TABLE 5:** Correlation matrix showing relationships between oral reading fluency accuracy, speed and reading comprehension.

Items	ORF speed	RC
ORF accuracy	0.82†	0.76†
ORF speed	-	0.83†

ORF, oral reading fluency; RC, reading comprehension.

†, Correlation significant at the 0.01 level (two-tailed).





RC, reading comprehension.

**FIGURE 1:** (a) speed and (b) accuracy across comprehension groups.

While the descriptive statistics clearly show that accuracy and speed in ORF increases across the three RC groups albeit not across the grades, a non-parametric Spearman's rho was used to test for significant relationships between accuracy, speed and RC across the whole cohort. The results showed robust correlations between all the reading variables, as shown in Table 5.

A reduction in errors (i.e. increased accuracy) is strongly linked to increased speed, and increased speed is strongly related to increased comprehension. The box-and-whisker plots in Figure 1 clearly show this relationship across the comprehension groups.

Non-parametric Kruskal–Wallis tests showed significant differences in accuracy and speed between the three different groups, with a post hoc Bonferroni test indicating significant differences in accuracy and speed between the weak and developing comprehenders, as well as between the developing and strong comprehenders, as shown in Table 6.

Across the subsample, strong comprehenders read more accurately and faster than their developing peers, and developing comprehenders read more accurately and faster than the weak comprehenders. There was one outlier in the strong comprehenders group (in Grade 3) with low accuracy (84%) and slow reading speed (60 wcpm). Unfortunately, there was not an opportunity to retest him to check for reliability in performance, but his RC was lower (75%) than the stronger group RC mean of 80%. In any case, a single outlier does not negate a trend.

From performance data in Table 3, uneven development can be observed within these three groups from Grade 3 to 4, with the weak comprehenders showing stagnant growth from Grade 3 to 4. Their reading accuracy remained low at 79/78%, restricting their reading speed to 48/49 wcpm, which caused them being trapped in a very low RC zone of 18/19%. The developing comprehenders showed the well-known slump from Grade 3 to 4. Although the developing comprehenders in both grades had much higher accuracy,

**TABLE 6:** Significant differences in accuracy and speed across the three reading comprehension groups.

Factor	Test statistic	Sig.	Adj. sig.†
<b>Kruskal–Wallis Accuracy</b>	38.70	< 0.001	-
Weak versus developing	-	-	0.003
Developing versus strong	-	-	0.011
<b>Kruskal–Wallis Speed</b>	42.84	< 0.001	-
Weak versus developing	-	-	0.003
Developing versus strong	-	-	0.004

RC, reading comprehension; Sig., significance; Adj., adjusted.

†, Adjusted significance by Bonferroni correction for multiple tests.

speed and RC levels than the weak comprehenders, performance regressed from Grade 3 to 4 in reading speed (from 80 wcpm to 72 wcpm) and in RC (from 58% to 52%). In both grades, achieving 95%+ accuracy characterised the strong comprehenders, who achieved a mean score of 80% for RC; here for the first time, Grade 4s showed growth, having a faster mean ORF speed of 108 wcpm compared to the 101 wcpm of their Grade 3 peers.

## Discussion

Although reading literacy occupies a central place in schooling and learning, many learners in both HL and ESL or EAL contexts struggle with RC and other aspects of reading such as fluency. While reading research over the decades has consistently found a relationship between fluency and reading ability (Castles et al. 2018; Seymour et al. 2003; Siedenburg 2017), research in the Zimbabwean context tends to be silent on this issue. This article looks into RC and fluency among Grade 3 and 4 ESL learners in Zimbabwe to ascertain the status of written RC and its relationship with accuracy and speed in ORF among Grade 3 and 4 learners from Zimbabwean primary schools. Grades 3 and 4 were chosen because these grades represent a critical transition stage in children's primary education. Gibbons (2009) asserts that learners who fall behind at this stage continue falling behind as they proceed to higher grades.

From the results presented in the preceding section, two main trends were found. Firstly, contrary to developmental expectations, on the whole there were no significant differences in performance overall in fluency accuracy, fluency speed or written RC between the Grade 3 and 4 learners. Although there was a slight increase in written RC from Grade 3 to 4 (from a mean of 41.1% – 45.8%), it was not statistically significant. Similarly, there was no concomitant significant increase from Grade 3 to 4 in fluency accuracy (from a mean of 87.4 to 87.7) or speed (from a mean of 71.2 wcpm to 72.9 wcpm). Despite being in the more challenging 'reading to learn' phase of primary school, Grade 4 learners did not exhibit stronger reading skills than their younger Grade 3 counterparts.

Secondly, despite the anomaly in Grade 3–4 reading development in the aggregated data, strong significant relationships were found between ORF accuracy, speed and

RC across the data set. These relationships help to explain reading performance within and across grades, where poor comprehension was strongly associated with slow and error-prone reading within as well as across the two grades. These developmental trends emerged clearly when the data were disaggregated into three groups of readers within each grade and which showed similar reading profiles across the grades. We examine these issues more closely in the following discussion.

### Reading comprehension and oral reading fluency in different English as additional language contexts

The written RC and ORF results were generally low for both grades. The results are similar to what was found in Piper and Zuilkowski's (2015) study with Grade 2 Kenyan ESL learners as well as Draper and Spaul's (2015) study with South African Grade 5 learners whose ESL ORF was low. However, comparison to the South African benchmarks recently established by Wills et al. (2022) shows that the Zimbabwean Grade 3 learners were on average reading about 20 wcpm faster than the South African Grade 3 EAL benchmark of 50 wcpm. However, even with an average of 71 wcpm, the Grade 3 learners performed poorly in the comprehension test, which suggests that even at 71 wcpm, a Grade 3 EAL learner can struggle with RC. The same applies to the Grade 4 learners who averaged almost the same rate (72.9 wcpm) as stipulated by Wills et al.'s (2022) Grade 4 benchmark of 70 wcpm. Of importance to notice from Wills et al.'s (2022) study is that they explicitly state that the 50 and 70 wcpm benchmarks are conservative and do not guarantee RC but are a stepping stone to achieving the 90 wcpm benchmark by Grade 5. This is confirmed by this study's low written RC, despite learners reading on average around 71–72 wcpm.

When using Broward County (2012) benchmarks,<sup>7</sup> the Grade 3 learners in this study fall within the Limited English Speaker (A2) category where learners at the 50<sup>th</sup> percentile within the A2 category average 74 wcpm. The Grade 4 mean could also be equated to that of Grade 4 A2 Limited English speaker learners in the United States at the 50<sup>th</sup> percentile. Learners in this category demonstrate limited understanding and can communicate orally in English with one- or two-word responses. As learners in this category have limited language understanding, this alone can compromise their comprehension skills over and above their decoding skills. This suggests that the Zimbabwean Grade 3 and 4 learners in this study have reading challenges and read slower than American ESL learners already in remedial programmes.

As fluent readers derive their fluency from a strong foundational decoding base, the findings in this study support the decoding claims of the SVR. The SVR states that both language proficiency and decoding are necessary conditions for successful RC, in either HL or EAL. The only successful

Grade 3 and 4 comprehenders in this cohort were those with higher ORF accuracy and speed. As language proficiency was not measured in this study, no claims can be made about the status of these learners' EAL proficiency. Because the Grade 3 and 4 comprehenders were all highly fluent readers and had means of 80% for RC, this suggests indirectly that there is an association between fluent EAL reading and EAL proficiency. This is also indicated in the Broward County norms (2012). However, more research is needed to explore the EAL relationship between language proficiency and fluency. The EAL learners, especially in the early years, typically have lower language proficiency than their HL counterparts, which can affect their RC. If they attend schools where decoding skills are not explicitly developed, then RC challenges are compounded. However, as the North American ESL reading research shows, learners with limited language skills can still achieve fairly strong decoding skills in the L2 (Lipka & Siegel 2007). Although such a situation does not guarantee good RC performance, more efficient decoding provides ESL learners with cognitive resources (better working memory, more attention freed up for meaning-making) that can enable RC. A lack of fluency in ESL learners during their early years of schooling is a result of lack of familiarity with letter-sound relationships and lack of practice in decoding words in and out of context. Such learners will have challenges in comprehending texts because more cognitive effort is expended on lower-level skills at the expense of higher order comprehension skills (Pikulski & Chard 2005; Sparks & Patton 2016). Based on the low ORF results, some of the learners in this study could be struggling with letter-sound relationships and inaccurate decoding of familiar words, which in turn affect RC. Decoding and language proficiency work in tandem: if one is compromised, RC will be negatively affected and if learners lack both language and decoding skills, effective RC becomes virtually impossible (Broward County 2012; Hudson, Lane & Pullen 2005). As fluency is an outcome of learned code-based skills and practice opportunities (Pretorius & Spaul 2016), the low ORF accuracy and speed scores suggest instructional deficiencies regarding early reading in the schools in question.

Al-Otaiba et al.'s (2009) study with Latino ESL learners in the United States from high-poverty schools can also be used to help understand the ORF performance of the learners in this study. The Latino ESL learners' ORF scores ranged from 53 wcpm for Grade 2 to 75 wcpm for Grade 3 learners. The Grade 3 learners in this study read about 4 wcpm below their typical Grade 3 Latino peers, which suggests that these Zimbabwe Grade 3 learners were not performing too poorly, especially considering that the Latino learners followed explicit and systematic reading programmes, and the US schools are also better resourced, which is not the case in developing countries such as Zimbabwe. The status of phonics in early reading instruction in Zimbabwean schools is an area that awaits further research.

On the other hand, the Grade 4 learners in this study showed a downward trend as they read about 2 wcpm below the Grade 3 Latino learners, which is developmentally not desirable, especially in this transition stage of schooling.

<sup>7</sup>The report specifies five classifications: A1 – Non-English speaker, A2 – Limited English speaker, B1 – Intermediate English speaker, B2 – Intermediate English speaker and C1 – Advanced English speaker.

By Grade 4, learners should be reading better than Grade 3s and should have attained greater reading fluency, which is essential for the transition to the intermediate level. The greatest growth in ORF typically occurs between Grades 1 and 4, which means a downward trend in Grade 4 does not bode well. It is worrying to have struggling readers in Grade 4 because if left to their own devices, they will continue with their poor reading skills to higher grades, which will in turn affect their academic performance. Unless such learners get teachers who are knowledgeable about reading literacy instruction and are able to attend to the learners' specific needs, learners will continue with their reading challenges.

Even though the preceding comparison shows that the learners in this study were slow readers, compared to learners from other African contexts (South Africa and Kenya), they were better than South African Grade 5 EAL learners who read less than 40 wcpm (Draper & Spaul 2015), while the Grade 3 learners in this study at 71 wcpm surpassed the minimum EAL Grade 3 benchmark of 50 wcpm proposed by Wills et al. (2022). This might be a positive for Zimbabwean teachers and learners, given the ongoing sorry state of the economy and its negative impact on the education sector.

### Accuracy, speed and reading comprehension

The strong correlation between ORF speed (as measured by wcpm) and RC in this study ( $r_s = 0.82$ ) confirms findings from other ESL reading research: 0.64 in Piper and Zuilkowski's 2015 study with Grade 2 Kenyan learners; 0.83 in Draper and Spaul's 2015 study with Grade 5 South African learners; 0.73 in a Grade 5 Namibian study (Liswaniso & Pretorius 2022) and 0.82 in Pey, Min and Wah's 2014 study with Korean ESL learners. These robust correlations in ESL reading mirror the many studies showing strong correlations between ORF and RC in English HL (Armbruster et al. 2001; Fuchs et al. 2001; Spear-Swerling 2006).

This study also includes data on accuracy in decoding. What is of interest is the low accuracy of the weak comprehenders in each grade (79% and 78%), which was accompanied by slow reading (48 and 49 wcpm) in each grade. These were learners whose RC in each grade was extremely low (18% and 19%) and who barely understood anything when reading. There was negligible reading growth from Grade 3 to 4 in this group of readers, where low decoding accuracy and speed seemed to trap them in a non-comprehension zone. Even though the developing comprehenders in both grades reached 93% accuracy levels, the Grade 4 slump evidenced in this group of readers was reflected in a slump in reading speed, accompanied by a concomitant slump in RC, while a mean accuracy of 93% in Grade 3 yielded mean reading speed of 80 wcpm and RC of 58%, this development nose-dived in Grade 4 when reading speed dropped to 72 wcpm and RC dropped to 52%. It was only when readers in both grades reached accuracy levels of around 95% that they seemed to hit a sweet spot, achieving 80% or more for RC. It was also only in this group that the expected developmental difference in reading speed emerged, at 101 wcpm and 108 wcpm, respectively.

To return to the question posed in the title of this article: *Does it matter if learners read slowly?*, the data in this study indicate unequivocally that slower reading among EAL Grade 3 and 4 readers is associated with poorer RC. Slow reading is also associated with inaccurate reading. Readers across the grades who read with 95% accuracy not only displayed very good understanding of what they read but they also showed an increase in reading speed in the transition from foundational to intermediate primary schooling. It is likely that only this group of learners could cope adequately with the 'reading to learn' demands from middle primary school onwards that more advanced literacy skills support.

### Limitations of the study

As discussed earlier, the SVR posits that RC is a product of decoding and linguistic comprehension (Gough & Tunmer 1986). This means that RC challenges in learners could be a result of poor decoding skills or poor linguistic comprehension or both because neither of the two is sufficient on its own. In this study, only decoding, as indexed by accuracy and speed in reading fluency, was assessed and not linguistic comprehension. Although evidence from this study certainly shows a strong link between written RC performance and poor fluency skills, it would be interesting to examine how linguistic comprehension and decoding play out in the comprehension of ESL readers. The relationship between oral language proficiency, fluency and RC is an area that merits further research in developing country contexts.

In addition, this was a small- to medium-sized study, and only a subsample of the 374 Grade 3 and 4 learners were assessed one-on-one for fluency. More research is needed to track developmental trends in language proficiency, decoding and comprehension among EAL readers. It is also important to assess the alphabetic knowledge of learners, particularly the weaker readers whose accuracy and fluency levels are low, to determine how language proficiency and decoding instruction affect subsequent EAL reading development. The assessment of foundational reading skills should be included in future reading assessments of early primary school learners to identify reading problems early and to inform EAL reading instruction in the early grades.

### Implication and recommendations

The poor RC and ORF performance point to inadequate reading instruction. Reading comprehension is a cognitive skill that requires a strong code-based foundation and research consistently shows that learners benefit when reading is explicitly and systematically taught (Adams 1990; Castles et al. 2018). Poor reading performance in schools could be a result of lack of content knowledge about reading and outdated or ineffective instructional knowledge on the part of the teachers. Shortage of resources also adversely affects learners' reading ability because of a lack of exposure and regular reading practice.

To return again to the title of this article, it does indeed matter if some learners read slowly for their grade. Although speed is measured in ORF, measurement and instruction are not the same thing. Making learners read faster is not what develops fluency. Instead, building mastery of alphabetic knowledge and the ability to blend letter sounds to form words, and providing children with plenty of daily practice in reading texts appropriate to their grade level help to develop automaticity. Automaticity frees up attention and memory in both HL and EAL readers, making higher-level cognitive-linguistic resources available for meaning-making. Of concern to observe is that unless these basic reading skills are properly taught and developed during the early years of schooling, failing learners will continue falling behind (Kim, Lee & Zuilkowski 2019; Snow & Mathews 2016). This suggests that if these Grade 3 and 4 learners receive no effective instruction or intervention, meaningful learning in all areas is sure to be compromised as RC cuts across all subject areas. Thus, reading fluency cannot be overemphasised if schools aim to improve RC among learners. However, teachers must be knowledgeable about reading and the different components that make up skilled reading, how they interact and develop over time, how they are best taught and how they can be assessed to identify and remediate reading problems from an early age.

It is recommended that teachers be given in-service training courses on reading literacy instruction that is informed by converging evidence across scientific studies of reading. Teachers' training colleges should emphasise good reading literacy instruction practices so as to equip preservice teachers. The establishment of strong foundational reading skills should be emphasised in the early years of schooling. There should be ORF assessment programmes at school level in the critical stages of reading development during Grades 1–3 to help identify learners with reading difficulties as early as possible in order to be able to provide appropriate rescue measures. The ministry should also mobilise resources for reading literacy instruction in schools.

## Conclusion

As Snow (2010) asserts, poor comprehension can be a product of a breakdown in any of a wide variety of reader skills, which include fluency, vocabulary, background knowledge and text memory among others. In this study, the low ORF results confirm that EAL learners with poor decoding skills find RC challenging. The study showed that the Grade 3 and 4 learners have challenges with accuracy and fluency in reading, which in turn affects RC, and such a state of affairs negatively affects all learning processes. This is especially so as learners transition to higher levels of learning, which depend mainly on one's reading proficiency and ability to comprehend texts. The study also showed a strong relationship between RC and ORF confirming what L1 and ESL scholars elsewhere have established. As such it is important that reading literacy be systemically taught and learners get exposure to reading resources as early as possible to help develop good reading literacy skills.

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The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

## Authors' contributions

This article is based on data from a PhD thesis submitted by F.M. and which was supervised by E.J.P. F.M. collected and analysed the data, wrote the first draft of the article and contributed to revising the article. The article was conceptualised by E.J.P., who also contributed to reviewing and editing the article.

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## Data availability

The data that support the findings of this study are not openly available because of confidentiality and are available from the corresponding author, F.M., upon reasonable request.

## Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. The article does not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

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