ORIGIONAL RESEARCH   **Open Access**

Effects of phonics instruction on improving the decoding and word reading skills of first-grade English as foreign language students in Ethiopia

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Abstract

Decoding and word-reading skills are foundational for children in English as foreign language environments with limited exposure to the language. Despite the very low reading achievement of students in this area, instructions in Ethiopia primarily rely on whole-word reading rather than grapheme-phoneme correspondence skills to recognize the meaning behind written words. Several studies have investigated the word-reading skills of EFL students using implicit instructional methods; however, studies on the effect of explicit phonics on decoding and word-reading are limited. Thus, the current study aimed to examine whether explicit phonics instruction improves the decoding and word-reading skills of EFL students in Sekota Primary School, Ethiopia. Two grade 1 EFL classes were randomly selected as experimental (N = 28) and control (N = 32) groups. Intervention based on explicit decoding and word reading was conducted for the experimental group for 20–25 minutes each school day over twelve weeks. Test results were measured based on participant pretest and posttest scores, and they were analyzed using a t-test. Results revealed that explicit phonics significantly improved the word-reading skills of the experimental group compared to the control group. Accordingly, this study suggests the necessity of emphasizing phonics to improve the word reading skills of EFL.

Key words: decoding, word reading, explicit phonics, English as a foreign language

Introduction

Reading proficiency is a foundation for the academic, economic, social, and emotional success of individuals throughout their lives. Longitudinal studies have underscored the significance of early reading acquisition by providing evidence on how the gap between good and poor reading performance begins and continues in the early grades (Halle et al., 2009; Sénéchal & LeFevre, 2002; Tourangeau et al., 2015). Early reading skills strongly predict later reading success, particularly during the critical transition from "learning to read" to "reading to learn" in third grade. However, low reading achievement at this basic level leads not only to the above consequences of reading but also to other individual differences and developmental problems (Share & Stanovich, 1995). Such cases may be exacerbated in English as Foreign Language (EFL) environments, where children are taught English alongside their mother tongue (Kim & Piper, 2018).

Poor reading outcomes of EFL are often linked to the limited exposure of students to spoken and written language, both within and outside the school environment (Agegnehu et al., 2023; Huo & Wang, 2017; Jiang, 2000; Kim & Piper, 2018). However, when dealing with children in such classroom settings, phonological awareness and word reading are underlying cognitive skills that should be considered important components of a given instructional approach because children's phonological acquaintance at this stage is a foundation for learning to read and the most potent predictor of initial reading development (Clayton et al., 2020; Kennedy et al., 2012; Tulloch, 2023). In an alphabetic language, prints represent sounds at the phonemic level, and reading in English largely depends on the phonological knowledge of children segmenting and blending sounds at various levels. This shows that reading or converting written symbols into corresponding sounds requires formal and systematic instruction to recognize written words in English.

Reading is generally meant to make meaning out of print. This process requires the activation of several cognitive processes depending on the various linguistic units represented and the regularity of sound-to-symbol correspondence in a given language (Yamashita, 2013; Ziegler et al., 2010). Since the alphabetic symbols primarily represent sounds at the phonemic level, one must be able to analyze printed input and learn how the units of print translate into the units of sound to recognize words in English. This can be done by utilizing two underlying cognitive skills simultaneously; these are phonological awareness and phonological decoding. First, readers must possess phonemic awareness, i.e., the ability

to focus on and manipulate phonemes in speech, particularly segmentation and blending, and then they need to know the major grapheme-phoneme correspondence rules of the writing system to decode and access their meaning (Ehri, 2014).

Children initially use sounds symbolized by the letters and blend letter sequences to figure out the meaning of written words. This process is not as easy as it looks initially since children are not aware that each sound unit is represented by a letter and understand the relationship (Huo & Wang, 2017). However, during phonological decoding, children learn how to form connections between phonemes and corresponding graphemes and recognize how these are associated with letter patterns and spoken units, such as phonemes and syllables which are stored in memory with their meaning (Coltheart, 2005).

Word-level analysis in the decoding process is the most basic component for successful reading because operations at this level free up cognitive resources and provide quality information needed for higher-level skills such as word recognition and comprehension (Grabe, 2014; Share & Stanovich, 1995; Tulloch, 2023; Yamashita, 2013). This underlies the development of early reading skills, which illustrate the processes involved in the identification of words, either by 'sight recognition' or making use of rules relating a unit of grapheme to a unit of phoneme (Coltheart, 2005).

Sight word recognition operates within familiar words since it accesses meaning to recognize a word (Coltheart, 2005; Ehri, 2014). In contrast, this is not possible in reading unfamiliar words, since it requires translating a unit of sound into a unit of print using letter-sound decoding skills (Ng, 2006; Whitehurst & Lonigan, 1998). Although the simple view of reading suggests instructional implications for accessing meaning through phonological decoding, reading is viewed as a set of mappings between phonological forms and conceptual meaning rather than a specific aspect of processing that subsequently lead to comprehension (Gough & Tunmer, 1986; Grabe, 2014; Share & Stanovich, 1995). On the other hand, the second route to word recognition—the non-lexical procedure—involves rules relating segments of orthography to segments of phonology rather than knowledge about words, spelling, and pronunciation (Coltheart, 2005). Thus, training in phonological decoding is critical not simply to figure out words but also to progress successfully in reading with the alphabetic system where converting a unit of print into a unit of sound is critcal (Stanovich et al., 1986).

Phonological instruction involves segmenting and blending sounds at phonemic levels and grapheme-phoneme correspondences skills of children to decode words in English (Huo & Wang, 2017). As indicated above, phonological instruction frees the cognitive load available for reading comprehension and effectively enhances literacy skills for first and second-language learners (Grabe, 2014; Woore, 2022; Yamashita, 2013). It involves two distinct instructional approaches, such as phonemic awareness, which largely depends on the phonological knowledge of children to recognize and manipulate speech sounds like segmenting, rhyming, and identifying phonemes; on the other hand, phonics emphasizes the relationship between sounds and their spelling in written text and developing the ability to convert written symbols into spoken sounds to access the meaning of words in a text.

Various working models and research findings demonstrate the instructional effectiveness of phonics. The importance of accurate and explicit phonological representations in word reading has been advocated by the lexical quality hypothesis (LQH) (Perfetti & Hart, 2002). Furthermore, the instructional implication of phonics is evident within the Dual Route Cascaded (DRC) model, which applies the grapheme-phoneme rule system to pronounce words without lexical access (Coltheart, 2005). This process is slower and does not yield a native-like realization of each phoneme for EFL, but it accesses symbols of each sound and shows how to decode letter patterns (Walter, 2008). None the less, poor representations between the constituents present confusion between a pair of similarly spelled words and frequent members of a pair in written language (Perfetti & Hart, 2002).

Previous studies revealed challenges in EFL reading due to a lack of explicit instruction in decoding. Beginner learners pronounced the familiar French word 'France' more accurately than unfamiliar words with the same spelling pattern 'lance' (Woore, 2022). Similarly, in Ethiopia, children could recognize a known word fast, which was not the outcome of the letter-sound decoding skills, as evident in mispronouncing, reversing syllables, and omitting words. There was also little gain observed in the recognition of real words, while there was none in decoding nonsense words (Agegnehu et al., 2023). In both cases, this suggests that participants had not mastered the necessary skills of converting spelling into sounds but instead processed them as whole orthographic or phoneme units, which is revealed by the most accurate indicator of a reading handicap (Coltheart, 2005; Stanovich et al., 1986).

In most L1 classrooms, reading is practiced using prior knowledge as an underlying source of syntactic and semantic information to recognize words in English (Ehri, 2014; Stanovich et al., 1986). Although this process is difficult in EFL, reading instructions of the existing curriculum in Ethiopia requires prior knowledge of learners to match each letter and word with pictures and colors, along with several repetition drills inline with the whole-word approach (Agegnehu et al., 2023; Ashenafi et al., 2022). According to studies conducted on children's poor decoding and word recognition abilities, instruction based on the whole-word approach makes children rely on context as their main reading strategy, and this results in lower-level comprehension and word recognition errors (Perfetti & Hart, 2002; Stanovich et al., 1986; Woore, 2022). Although explicit phonics is effective in various contexts of EFL (Huo & Wang, 2017; Ng, 2006; Woore, 2022), available studies in Ethiopia (Agegnehu et al., 2023; Atsero et al., 2024; Gashaw, 2017; Melesse & Enyew, 2020) are more focused on teaching global aspects of sound that require learners' underlying oral language proficiency rather than explicit decoding instruction (Huo & Wang, 2017; Jiang, 2000; Woore, 2022).

In Ethiopia, English is taught for academic purposes, and it is believed that critical reading skills of children lead to success in academic achievement and overall English language competence (Gerencheal & Mishra, 2019; Melesse & Enyew, 2020). This has been the main focus of Ministry of Education (MoE) and USAID projects over many years in the country. However, despite the efforts made toward curriculum revision and development, teacher training, and capacity building, previous studies in this area showed that children's reading achievement in all mother tongues and English was extremely low (USAID, 2012).

In the current educational system of Ethiopia, improving the English language competency of children focuses primarily on learning to read with the transition of common cognitive skills, such as phonemic awareness, from MT to English (Ashenafi, 2022). As a result, phonemic awareness is one of the main reading sub-tasks set by EGRA (Ashenafi, 2022; USAID, 2012) in both mother tongue and English. However, a positive outcome within this area of reading in EFL is claimed to have lacked adequate evidence that supports its instructional effectiveness, while the process, even within L1 real-word recognition and reading comprehension, is still unclear (Ehri, 2014; Grabe, 2014). Althoiugh, phonemic awareness involves blending and sounding out operations; however, accessing meaning directly from phonological memory is not visible. This shows that phonemic awareness instruction is based on the

whole-word approach that operates within familiar words but not in reading unfamiliar words, which involves translating the units of print into the unit of sound to recognize written words (O'Connor & Vadasy, 2011).

Furthermore, results of extensive research reviews (Chen et al., 2022; Grabe, 2014; Huo & Wang, 2017; Woore, 2022) revealed that the difficulty of translating the phonological underlying outcomes to actual reading is a constraint of phonological-based instruction in EFL; instead, learners may benefit from correct spelling and pronunciation. According to research conducted in Ethiopia, Amharic and native English speakers do not exhibit similarities in phonemic tasks like stress, intonation, or rhythmic pattern (Gashaw, 2017). Thus, children who receive reading instruction focused on these aspects of sound before they reach the oral language ceiling in L2 will struggle greatly due to a lack of explicit instruction to apply the skills they acquired in L1 (Woore, 2022).

Similarly, descriptive linguistics findings in Appleyard (1987) revealed that certain English sounds such as /p/, /o/, and /e/ do not exist in the phonemic inventories of Ximtagna language spoken by the target groups in the current study. This has particularly been observed from the students' word reading and spelling trials that the phonemes /p/, /e/, and /o/ often assimilate with corresponding consonants and semi-vowels such as /b/, /y/, and /w/, respectively. In this connection, it is argued that the accuracy of EFL word reading may be constrained by the nature of L2 phonological representations not only while they are not well distinguished in the phonological inventory of L2 but also in the context where correct symbol-to-sound mappings are in place (Walter, 2008; Woore, 2022). This suggests that without explicit instruction in letter-sound decoding, EFL learners in this context may not be able to connect the phonological forms to the words in the L2 mental lexicon, and this creates confusion in the latter-sound mapping (Perfetti & Hart, 2002; Walter, 2008). This further makes the transition of cognitive skills difficult for these language speakers in Ethiopia to realize their English language competency through learning to read.

As mentioned above, previous studies in Ethiopia have addressed EFL reading difficulties in areas of phonological awareness (Agegnehu et al., 2023; Atsero et al., 2024; Gashaw, 2017; Melesse & Enyew, 2020). However, while the outcome of phonological instruction in EFL reading is in doubt, none of the studies could extend beyond phonemes and syllables for reading words. Although word reading involves segmenting and blending sounds, accessing meaning within phoneme units is not possible due to insufficient oral language proficiency of learners in English.

Accordingly, it can be argued that even though EFL learners can not recognize words by sounding them out, they should at least be able to pronounce letter sequences correctly in order to facilitate ongoing word recognition (Stanovich et al., 1986). Therefore, to fill the research gap and achieve the objective of the current study, the following two research questions were formulated. First, what are the effects of explicit phonics instruction on improving the letter-sound decoding skills of EFL children? Second, what are the effects of explicit phonics instruction on improving the word-reading skills of EFL children?

Methods

This study employed a quasi-experimental research design to investigate the effectiveness of explicit phonics instruction on the decoding and word reading skills of EFL students. Due to methodological and practical constraints of assigning individual student to different groups, two grade-1 EFL classes were randomly selected as experimental and control groups. When the investigation was carried out, an English teacher instructed each group for 40 minutes of each school day. Thus, over a period of 12 weeks, the experimental group received instructional intervention on decoding and word reading using explicit phonics, while the control group was taught based on the conventional method and received no intervention. Pre- and post- tests were administered to assess changes in the decoding and word reading skills of each group.

Sampling

This study was conducted at L.G.H.K. Primary School in Sekota, Ethiopia. The school was purposively selected due to the high prevalence of low reading achievement, where instruction is primarily conducted in the local language, *Ximtagna*. Most of the students in the target school come from rural areas where they are deprived of appropriate schooling and are reportedly poor readers. The researcher focused on grade-1 EFL classes and assigned them randomly as experimental and control groups. The instruction for both groups was offered by the same classroom teacher. First grade was selected because identifying the alphabet and word-reading skills begin at this grade level in Ethiopia (Ashenafi et al., 2022).

Materials and procedure

In the current study, it was difficult to compare two teaching strategies and measure the effect of the new approach while entirely relying on the contents and approach of the existing one (Ashenafi et al., 2022). As a result, specific areas of decoding and word reading skills were carefully synthesized and modified in the textbook, and lessons were compiled into a manual in line with the teacher's annual lesson plan to implement the experiment. The manual contained a detailed lesson plan, time frame, content, objectives, activity descriptions, teaching methods, aids, and assessments. The researcher prepared each daily lesson plan and provided it to the classroom teacher for implementation.

Due to the absence of reading standards for children in Ethiopia, the current MLC (Agegnehu et al., 2023; Ashenafi et al., 2022) and the frequency of written English (Woore, 2011) were primarily considered when preparing the material for intervention. Furthermore, the researcher has tried to make modifications based on the inputs obtained from research supervisors and classroom practitioners. The lesson for the alphabet included all capitals and small letters at random to prevent use of context instead of explicit decoding strategies. Similarly, word reading lessons consisted of one-syllable words with decodable consonant clusters and vowels (/a/, /e/, /i/, /o/) at different positions.. The working model for the current study is rule-based and couldn't account for other multi-letter or irregular graphemes and ambiguous pronunciations, e.g., the vowel /u/ having different realizations in /put/ and /but/.

Each intervention lasted approximately 20-25 minutes out of the entire 40-munute daily English language period. The remaining 15-20 minute segments were devoted to covering other aspects of EFL as per the curriculum. The intervention was implemented over 12- weeks of each school day during the first semester of the academic year (October, November, and December). To ensure the validity and trustworthiness of the intervention, several control measures were implemented:

- Teacher Training: The instructor who taught each group had received training on explicit phonics and the research procedures and importance of adhering to the assigned instructional approaches.
- Classroom Observations: Regular classroom observations were conducted to monitor instructional fidelity and ensure that both groups received instruction as intended.
- Material Control: The provision of supplementary materials was restricted to the experimental group while minimizing potential confounding variables.

The procedure for implementing the experiment followed the dual route model of the non-lexical procedure because, unlike the lexical route, the non-lexical procedure applies the grapheme-phoneme rule system for decoding and word reading (Coltheart, 2005). Upon conditions required by the new MLC for grade1 English in Ethiopia, the first four initial cycles were employed within the nonlexical procedure in the current study, within the non-lexical procedure, the first four initial cycles were employed in the current study to allow whole-word pronunciation through letter-sound correspondence skills (Ashenafi, 2022; Coltheart, 2005).Therefore, word pronunciation and word recognition were different outcomes of reading in the current study. Furthermore, the main instructional procedure for implementing the experiment was partially modified from the work of Woore (2011) and summarized in a series of stages below.

The teacher models the whole process following these stages: (stage-1) decoding individual grapheme; (stage-2) introducing syllables based on the target graphemes; (stage-3) blending and segmenting the target graphemes within syllables by emphasizing the pronunciation; and (stage-4) blending individual grapheme within a sequence to generate the word's overall pronunciation.

Data gathering and analysis

The current study utilized both quantitative and qualitative data sources using a mixed-method approach. Quantitative data was collected through pre-and post-tests to assess changes in the decoding and word-reading skills of the experimental and control groups. These tests were developed in line with the actual instructional material and the specific learning outcomes of the Grade-1 English curriculum. Insights for the qualitative data were collected through daily classroom observation. To ensure content and item validity, the test items were reviewed by subject matter experts and piloted with a small group of students before final administration.

Decoding and word reading tests followed similar procedures in terms of administration, time frame, scoring, and other formats. Each decoding and word reading test was mixed up based on format (upper and lower case) and content (various alphabets and words) and put in different (4) items. So, during decoding and word reading tests, a participant would receive an item of a question at random. Aspects of skills considered during the decoding and word reading tests include:

- Grapheme-phoneme correspondence: Identifying the sound and name of an individual grapheme represented.
- Word reading: generating an overall pronunciation of a sequence of letters within a word and non-word context.

Test administration was held in an open classroom setting where an individual participant is randomly shown a computer-typed 'letter' or 'word' and asked to sound it out; hence, 'reading' in the current study refers to sounding out a particular representation of a grapheme or combination of graphemes (Huo & Wang, 2017). Because the view taken in this study was how fast decoding and reading processes are accomplished by each participant for later word recognition and comprehension, it was approximately one minute time-frame test for decoding and word reading. Every correctly sounded-out test was worth one point; in contrast, 'zero' was scored for every incorrectly sounded-out test within the given time interval or beyond.

Validity and reliability of test instruments were measured using 'Cronbach alpha' to check the internal consistency and reliability of the scores obtained from each test result, and this showed that it was greater than 0.7, which is an acceptable value for the internal consistency and reliability of the tests.

Data analysis was conducted using SPSS version 26. Descriptive statistics, including mean and standard deviation, were used to summarize the performance of each group on the pre-test- and post-tests. To determine the statistical significance of the intervention, an independent sample t-test was conducted to compare the pre-test and post-test scores between the experimental and control groups in decoding and word reading skills. In addition, classroom observation was conducted at regular intervals to gather qualitative data, and this was analyzed by grouping specific issues into themes to understand the overall instructional processes of the new intervention.

Results

Quantitative data analysis

This study aimed to examine whether there is a statistically significant difference between the pre- and post-test mean scores of the experimental and control groups regarding their letter-sound decoding (alphabet) and word-reading skills. The pre- and post-test comparison results of decoding and word reading between and within the groups are presented below.

Table1

Results of the Independent Sample T-Test for English Alphabet and Word

		Experiment			Control				
					(Pre-test)				
Tests	n	Mean	SD	n	Mean	SD	t.	df.	Sig. 2Tailed
Alphabet	30	29.0000	25.09980	32	28.4375	24.37733	0.090	60	0.929
Word	26	7.6923	18.82715	28	8.5714	19.18994	0.70	52	0.780

The above table shows the mean decoding and word reading scores for both the experimental and control groups in the pre-test stage. While the mean scores on the pre-test slightly favored the experimental group, the results of the independent samples t-test revealed no statistically significant differences between the two groups for either decoding (t = 0.090, p = 0.929) or word reading (t = 0.70, p = 0.780). These findings indicate that the decoding and word-reading skills of both groups were comparable before the study.

Following 12-week of intervention periods, during which the experimental group received explicit phonics instruction while the control group had the conventional instruction, an independent samples t-test was conducted again to compare the post-test scores of the two groups. Table - 2 below demonstrates this result.

Table 2

Results of the Independent Sample T-Test for English Alphabet and Word

		Experiment			Control				
					(Post-test)				
Tests	n	Mean	SD	n	Mean	SD	t.	df.	Sig. 2Taild
Alphabet	23	45.2174	34.36033	28	39.285	42.59836	0.65	49	0.513
Word	19	44.2105	42.59836	29	8.2759	19.83305	3.95	46	0.000

The results of the independent samples t-test revealed that although the experimental group exhibited slightly higher mean scores in decoding than the control group in the post-test, this difference was not statistically significant (t = 0.659, p > 0.05). In contrast, a significant difference was observed in word-reading skills between the two groups, with the experimental group demonstrating significantly higher post-test scores compared to the control group (t = 3.951, p < 0.000). This finding suggests that explicit phonics instruction has a greater impact on improving word-reading than decoding skills.

As noted above, in addition to measuring results between groups, the study also aimed to compare the decoding and word-reading skills of children within each group based on their pre-test and post-test results.

Table 3 shows the pre-test and post-test results of each group in decoding and word reading skills.

Table 3

Results of the Paired Sample T-Test for Experimental Group

Tests	Pre-test			Post-test					
	n	Mean	SD	N	Mean	SD	t.	df.	P-value
Alphabet	30	29.0000	25.099	23	45.217	34.360	-1.98	51	0.017
Word	26	10.000	20.591	19	44.2105	42.598	-3.23	24	0.000

The results in Table -3 above indicate a significant improvement in both decoding and word-reading skills within the experimental group. Paired samples t-test revealed a significant difference between pre-test and post-test scores in both decoding (t (51) = -1.98, p < 0.017) and word reading (t (24) = -3.23, p < 0.000), suggesting that the explicit phonics instruction effectively enhanced these skills in the experimental group.

Table 4

Results of the Paired Sample T-Test for Control Group

Tests	Pre-test			Post-test					
	n	Mean	SD	n	Mean	SD	t.	df.	P-value
Alphabet	32	28.438	24.377	28	39.286	29.929	-1.54	58	0.262
Word	28	8.571	19.189	29	8.276	19.833	0.57	55	0.603

An analysis of the pre- and post-test scores for the control group revealed a slight improvement in the mean decoding scores. However, paired samples t-tests showed no statistically significant differences in decoding or word-reading skills within the control group (p > 0.05) within all measures. These findings suggest that the standard instruction received by the control group did not result in significant improvements in either decoding or word-reading skills.

Qualitative data analysis

Classroom observations were conducted throughout the study to gather qualitative data and findings from the observation revealed that the experimental group, which received explicit phonics instruction, demonstrated improved decoding and word reading performance compared to the control group. However, during the initial stages of intervention, no observable difference was realized in reading performance among groups that may be attributed to their prior use of whole word instruction. Despite some challenges presented to the experimental group during this stage, their word reading skills gradually

improved as they became more familiar with the new method. Moreover, this group demonstrated increased engagement and active participation in the learning process.

Every decoding and word-reading session in the experimental group began with the teacher distributing copies of decoding or word-reading activities to each group. The teacher then demonstrated the target sounds or words on the flip chart using the explicit phonics instruction and allowed students to practice in groups. Finally, it was shown that an individual student from each group demonstrated the process on the blackboard using explicit phonics method before classroom students. This process allowed the teacher to give feedback and corrections during whole-class discussions.

Furthermore, classroom observation revealed that students in the experimental group were more focused on using letter-sound strategies to recognize the alphabet and blend letter sequences than on letter name decoding. However, with this method, students were observed while thinking and rehearsing crtically to identify the sound of a given letter instead of its name and attempting to blend letter sequences. At this critical stage, the researcher recognized that although some students could sound out a letter or even letter sequences, their reading demonstrated that overall word pronunciation was significantly challenging as it would require enough time to rehearse or support from the teacher. Nonetheless, this group was able to show better progress than the control group in terms of engagement and sounding out simple words very easily and correctly without using contextual clues.

Discussion

The present study was designed to examine the effects of explicit phonics instruction on improving the decoding and word reading skills of primary school students in an EFL setting. The study generally showed that, although decoding and word-reading skills are interrelated, instructional intervention influenced a different outcome of reading performance among groups. Accordingly, the experimental group, which received explicit instruction, showed significant improvement in word reading compared to the control group in decoding skills. This indicates that explicit phonics instruction improves word reading better than the decoding skills of EFL.

Letter-sound decoding results in the current study showed improvement both within and between groups. Particularly, the mean score of within-group decoding performance was greater for the

experimental group than the control group; however, this difference was not statistically significant. Although the experimental group showed a numerical advantage over the control counterpart with their decoding score, the difference was statistically insignificant.

Comparable performance in decoding between each group in the current study supports recent findings in Ethiopia. It is claimed that the current whole-word approach compromises children's decoding skills by using context as an easy way to recognize each letter of the alphabet (Agegnehu et al., 2023; Atsero et al., 2024). Thus, the insignificant impact of the intervention in decoding skills shows that children at this stage are more likely to learn the alphabet easily using phonetic cues along with context or meaning; however, studies indicate that connections are very weak or unreliable (Lane, 2020).

Instructions based on context or phonetic cues may lead children to assume that every word that begins or ends with a particular letter or symbol is always the same, hindering their ability to accurately decode unfamiliar words. Such a phenomenon of phonological activation before word recognition in the L1 context has been explained by scholars as either the result of prior knowledge influence or a critical sign of a less proficient reader (Stanovichet al, 1986). Though children in EFL use contextual strategies of detecting patterns to recognize an individual letter, it is not always possible to figure out a specific alphabet based on semantic cues or guessing games without focusing on explicit letter-sound decoding skills (Woore, 2022).

As shown above, despite the statistical difference in the decoding outcomes of the two groups, there was a statistically significant difference found in the word reading skills of the experimental group compared to the control group. Results suggest that the letter-sound decoding strategy utilized by the experimental group may go beyond simple letter-sound relationships and involve a blending process to create new words.

Although theory and research in L1 argue that teaching letter names predicts knowledge of letter sounds and a large effect on phonological awareness, most English letters start with a consonant-vowel (CV) sound pattern (/v/, /b/, /d/) compared to the number of letters that begin with a vowel-consonant (VC) (l, m, n) (Evans et al., 2006; Kim et al., 2010). This suggests that with the use of letter-sound strategy, children are more likely to know the sounds of not only most English letters but also draw their attention to the sounds of spoken language given the adequate knowledge of letter-sound linkage (Evans et al., 2006). Beyond alphabetic knowledge, letter-sound teaching is more directly related to conventional

literacy skills like spelling and decoding than letter-name knowledge, because letter names do not always map directly to phonemes in words, creating confusion in decoding (Proberts, 2019).

Although the letter-sound strategy was effective in simplifying the reading process, classroom observation revealed difficulties in converting letter sequences into word pronunciation. In earlier studies, this was linked to the interference of prior knowledge in letter names (Proberts, 2019). However, no similar result was found in the current study despite much effort it needs to identify letter-sounds instead of their names and read letter sequences. This reading difficulty in EFL explains one of the fundamental instructional assumptions of most reading theories on the role of oral language proficiency that accesses meaning within phoneme units (Coltheart, 2005; Ehri, 2014; Gough & Tunmer, 1986; Perfetti & Hart, 2002). In contrast, this is not possible in EFL due to the limited oral language proficiency of learners in English (Chen et al., 2022; Grabe, 2014; Huo & Wang, 2017; Woore, 2022). This supports previous research claims of using explicit instruction in word reading skills of EFL.

Conclusion

The present research findings on decoding and word-reading instruction have implications for future investigations into the challenges and opportunities associated with alphabetic reading in EFL environments. Understanding the typical instructional approach and the context in which it is implemented is critical for language practitioners and curriculum experts to consider and improve the necessary skills for a particular group of learners. The study found that explicit phonics instruction was effective in EFL students decoding and word-reading skills. It indicated that letter-sound decoding improves word-reading skills more than letter-name decoding strategies. Further impacts of phonics should focus on word recognition and reading comprehension skills of EFL while addressing limitations of the current study, such as large sample sizes, longer intervention periods, and standardized measurements.

Declarations

Conflict of interst

The authors declare that there is no conflict of interest.

Funding

Consent of agreement

This study was conducted by obtaining permission from the head principal and classroom teacher and opt-in consent from available parents and the pupils themselves. The researcher explained them about the study in child-friendly language, and participants were informed that they could opt-out at any time without penalty. Data, exclusively for the purpose of this study, was stored in a password-protected laptop, and each participant was assigned an ID number.

Acknowledgements

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