Incidental and Intentional Learning of Vocabulary among Young ESL Learners

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ABSTRACT

Developing a rich vocabulary repertoire in English is an essential achievement for young learners acquiring English as a second language (ESL) as having a strong word knowledge base supports the development of the four language skills in the second language. Most studies on vocabulary learning, however, have been conducted with adult learners at the college levels. The primary purpose of this study is to investigate the effectiveness of different instructional techniques (incidental learning and intentional learning) on vocabulary acquisition among young ESL learners. The participants were 99 students between 10-11 years old in a Malaysian Tamil primary school. Stratified sampling was applied, and the subjects were divided into 3 groups; a control group and two experimental groups: extensive reading (ER) and extensive reading plus vocabulary enhancement (ER+). The ER group received treatment involving extensive reading of storybooks while, the ER+ group received treatments involving extensive reading of storybooks and vocabulary enhancement activities. The treatments were conducted as after-class activities. The control group did not attend the after-class activity but continued with regular class activities. The vocabulary levels test (VLT) was administered to all groups before and after the treatment to measure the significant difference between the three groups. The results show a significant gain for both the experimental groups with the ER+ group having higher means in both the post-test and delayed post-test scores. However, there was no gain recorded for the control group. The study provides evidence that extensive reading can enhance vocabulary learning but the blending with vocabulary enhancement activities was more effective.

Keywords: Incidental learning; intentional learning; extensive reading; vocabulary learning; graded readers

INTRODUCTION

With many different languages in use worldwide, knowing a second language (L2) that has socioeconomic value can give a person an edge in a multilingual world. Nevertheless, learning a L2 may not be a simple task, particularly for young learners in Malaysia who may be required to acquire multiple languages at the same time. All primary school students in Malaysia are required to learn both Malay and English in the primary school, and if they are attending Tamil or Chinese primary schools, they will be learning either Tamil or Chinese as well. Coady and Huckin (1997) has argued that developing vocabulary skills among ESL learners is fundamental to language learning and language use. Laufer and Hulstijn (2001) also noted that generally, L2 scholars and teachers know acquiring a L2 includes the learning of a sufficiently wide range of vocabulary. In a more recent study, Bei (2011) concluded that in
language learning, vocabulary acquisition is the primary aspect and a basic factor needed for becoming proficient in a language. As words are also fundamental for communication, one cannot communicate efficiently with poor word knowledge. Hence, adequate vocabulary knowledge is crucial for successful language learning and language use.

Vocabulary skills consists of more than just knowing a wide range of words; learners should also have access to that knowledge at any point of time as well as use it well while performing a spoken or written task (Read, 2000). A wide range of psycholinguistics studies draw the conclusion that word building can assist fluent speaking and effective writing (e.g. Read, 2004; Marashi & Azarmi, 2012; Ahmad, 2012). Ahmad (2012) further claims that, word learning enhances the learners' combined language skills such as reading, writing, listening and speaking. Moreover, as argued by Wilkins (1972), “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (p.110-111). Hence, over the past few decades, vocabulary learning has captured the attention of scholars within the academic discourse community around the globe and is increasingly viewed as crucial to language learning.

The estimated number of words in English has been reported to range from half a million to over 2 million (Crystal, 2002). Researchers have argued that English language native speakers at the university level are estimated to know about 70,000 words or around 20,000 word families (Nation, 2001) and they tend to acquire an additional 1,000 word families in a year (Nation & Waring, 1997). However, Laufer and Yano (2001) reported that college educated non-native speakers of English, know only less than 17,500 words which comes up to only one quarter of the words available to native speakers. To succeed in their academic endeavors in English, Min (2013) argued that ESL learners would need to build up their word power. According to Nation and Waring (1997) “vocabulary knowledge enables language use; language use enables the increase of vocabulary knowledge; knowledge of the world enables the increase of vocabulary knowledge and language use and so on” (p. 6). Simply put, one must know what words mean before they could understand what they are reading, and it may be important to get started as early as possible for ESL learners to get to the vocabulary size needed for college education demands (Rahman, Yap & Darmi, 2018).

LITERATURE REVIEW

One significant debate in L2 vocabulary acquisition revolves around the approaches and strategies for effective vocabulary learning that can lead to easier vocabulary retrieval. Two primary approaches on vocabulary acquisition have been advanced: intentional and incidental vocabulary learning. Incidental vocabulary learning occurs when one does not have the direct intention to learn something but end up learning it while, intentional learning involves highly structured and planned learning. Both approaches have been claimed to contribute to the increase of L2 vocabulary knowledge (Hulstijn, 2001).

Prior studies have constantly referred to intentional vocabulary learning as designed, or intended (Yali, 2010) classroom based, highly structured learning (Marsick & Watkins, 1990). According to Yali (2010), intentional learning always places emphasis on the word itself, “and combines with all kinds of conscious vocabulary learning strategies and means of memorising words” (p.74) while, Schmitt (2008) argues that intentional vocabulary learning almost always leads to quicker and better accomplishments along with a greater chance for retention.

However, Ahmad (2012) pointed out that intentional vocabulary learning that focuses on activities such as word substitution, multiple choice quizzes, synonyms, antonyms, scrambled words and crossword puzzles may not be effective, as the learners may choose to
simply memorize the unknown words. The study further argued that learners are most possibly going to cram the meaning of the unknown vocabulary without necessarily associating the meaning of the word with other words or other forms of the same word; simply put there is less cognitive engagement. As such, most likely only limited words are learned through this approach unless it gets converted into an active learning process.

On the other hand, Yali (2010) refers to incidental vocabulary learning as methods of learning words through reading, doing exercises or supplementary activities that are not directly linked to word learning. Past studies (e.g. Schmidt, 1994; Kweon & Kim, 2008; Yali, 2010) defined incidental learning as the type of learning that is an outcome of acquiring or doing something else. Nation (2001) stated that incidental vocabulary learning allows learners to encounter new words subconsciously, commonly during reading as the learning occurs without any specific objective to focus on word learning. Ponniah (2011) further explains that every time learners encounter a new word, they learn at least partial meanings of the word, and frequent exposure of those words may result in a significant amount of vocabulary development. Readers tend to learn words when they focus on the full meaning of the textual content, and not necessarily while specifically paying attention to the new vocabulary. As it is a subconscious process, learners usually do not realise that they have acquired the vocabulary during reading.

A wide range of literature (e.g. Hulstijn & Laufer, 2001; Kweon & Kim, 2008; Ahmad, 2012) suggests that incidental vocabulary learning endorses deeper mental processing and better recall. Hulstijn and Laufer (2001) argue that the wordlist that the readers come across in incidental vocabulary learning would be retained in the long-term memory and could be used more confidently in different situations. Ponniah (2011) also found out that first year undergraduate students engaged in incidental learning outperformed students who learned vocabulary consciously. However, thus far the literature surveyed on this focused mostly on college ESL learners.

Studies related to children and reading or vocabulary learning is also extensively covered in the literature (e.g. Booth, 2009; Asraf & Ahmad, 2003; Watson, 2000). Many researchers (e.g. Asraf & Ahmad, 2003; Krashen, 1993) have reported strong effects of extensive reading (ER) on vocabulary development among young children. Scholars also found that ER plays an essential role in developing young learner’s word knowledge and spelling (Pigada & Schmitt, 2006), as well as to enhance their reading speed, attitudes (Al-Homoud & Schmitt, 2009) and to increase language development with a strong influence on reading comprehension and grammar (Krashen, 2003). For children aged 9-12 years old, reading a book series is the initial stage towards independent reading and perhaps it is the most important continuous reading that children do. A reading series also help promote confidence for the student to read in the English language. As a matter of fact, the more any individual reads, the simpler and more comforting reading becomes. Consequently, young readers engaging in extensive reading have been found to learn the target language incidentally and have optimistic views towards books (Asraf & Ahmad, 2003).

**EXTENSIVE READING AND INCIDENTAL LEARNING**

Extensive reading usually involves reading an enormous amount of independent resources with the aim of achieving overall understanding of the material. Scholars (e.g. Harmer, 2003 & Nation, 2001) view ER as a delightful reading situation where teachers usually give readers the choice to select reading materials at a level that they can understand especially the graded reader series. Graded readers are a series of storybooks that is specifically designed, written or adapted for L2 and foreign language learners. The books are written with various difficulty levels. Beginner level books involve a simple story plot with only beginner level
vocabulary and earlier stages of grammar to make the reading manageable and easier (Waring, 2011). Meanwhile, advanced level books incorporate more complex grammatical structures and a few thousand different words (Waring, 2011). Readers with a lower proficiency level may begin with the lowest level of the readers programme, and as the readers reach a level of comfort, they can progress to the next level (Nation & Wang, 1999). Nation (2001) recommends that the “learners should be reading at the level just beyond their present vocabulary knowledge” (p.245).

Many L2 researchers in the past have concluded that incidental vocabulary learning is efficiently achievable if the learner is actively involved in ER (Coady, 2001; Kweon & Kim, 2008; Nation, 2001; Ramos, 2015; Ahmad, 2012; Read, 2004; Harmer, 2003). According to Huckin and Coady (1999), learners obtain their first 1000 vocabularies intentionally, word learning subsequently occurs mainly through ER, and usually by inferring the meaning of the new words. As such, reading is an individual activity and learners at dissimilar proficiency levels are able to learn at their own pace without being forced into any fixed whole class programmes and the independence to select the reading materials based on their interests promotes motivation for learning (Nation, 2001).

However, there are many variables that influence the success of ER. Schmitt (2008; 2010) discussed an issue that is linked to word learning through reading, which is the number of exposures that is required to ensure better word learning. Learners, who were exposed to new words frequently, show greater gains in vocabulary knowledge compared to those who have fewer encounters with the new word (Webb, 2007). Meanwhile, sole exposure has very limited result on uptake of vocabulary knowledge (Schmitt, 2010; Webb, 2007). When compared to 2-4 exposures, six encounters seemed to result in better uptake (Rott, 1999). Pigada and Schmitt (2006) discovered that there was no specific exposure rate that can ensure the growth in vocabulary learning; however, they reported that with approximately 10 or more encounters, there was obvious gains in the acquisition rate. The findings of a few other studies (e.g. Webb, 2007; Schmitt, 2010) also suggest that learning new words requires approximately 8 to 10 exposures. However, Schmitt (2010) argued that vocabulary learning is also determined by the quality of the student’s engagement with the words and not solely determined by exposure rates.

COMBINATION OF INCIDENTAL AND INTENTIONAL LEARNING

Regardless of the evidence and suggestions made over the last few decades that words are learned incidentally, studies claim that incidental vocabulary learning alone is insufficient and should be followed by intentional learning activities (Coady, 1997; Nation, 2001). Schmitt (2008) pointed out that incidental vocabulary learning through reading seems to have a low pick-up rate. Besides that, Chen (2006) reported that incidental vocabulary learning tends to be incremental and slow. In a pioneering work Horst, Cobb and Meara (1998) discovered that in incidental vocabulary learning, only around one out of every 12 word was accurately recognised. Therefore, these researchers have argued that incidental vocabulary learning through reading alone might not be adequate for successful vocabulary learning. Lately, scholars such as Nation (2001), Coady (1997), Pigada and Schmitt (2006), Schmitt (2008; 2010) seem to agree that incidental learning is insufficient and it would be more beneficial to have explicit learning strategies (intentional learning) for L2 vocabulary learning and the blending of both approaches may be more successful for vocabulary enhancement. The implementation of the two learning approaches would assist to maximize word learning, with the notion that “the strengths of each approach will make up for the weaknesses of the other” (Sok, 2017, p. 90).

Furthermore, the findings of a few studies (e.g. Smith, 2006; Schmitt, 2008)
confirmed that vocabulary acquisition in isolation, for instance dictionary search or conscious learning besides reading, tends to offer only a limited value. However, scholars have argued that by reading extensively, learners could learn the entire vocabulary that they need from context. Hulstijn (1997) noted the worth and the necessity of ER for word learning but also have highlighted the worth of teaching explicit strategies for vocabulary learning.

Given the established evidence of explicit approaches in boosting word learning it is common to assume that the method would be a main section in any language classrooms. However, that is not the case when teaching and learning settings are examined closely. Generally, teachers may not be using a lot of new words in their class in a natural setting (Schmitt, 2008). In fact, a study by Meara, Lightbown, and Halter (1997) showed that teachers from both audiolingual and communicative approaches used only about 2.75 new words per 500 words of speech. Although, engagement-rich explicit teaching is efficient in fostering learning, Schmitt (2008) argued, “there are inevitable limitations in the number of times that teachers and materials writers can engineer such contact” (p.346). This is where incidental learning can consolidate and boost the learners’ lexical knowledge by reading extensively. Yet, explicit activities ought not be neglected as such reviewed studies clearly show that any vocabulary learning programme essentially needs to include an explicit component (Schmitt, 2008).

Nevertheless, a large number of studies related to incidental and intentional vocabulary acquisition (e.g. Coyle & Valcarcel, 2002; Ball, 2014) have been carried out with adult learners at university or college level (e.g. Paiman, Thai & Yuit, 2015), high school students (e.g. Kazerouni & Rassaei, 2016) or with children below the age of five (e.g. McLeod & McDade, 2011). Despite the importance of word knowledge among young children, not much research has been reported on the effectiveness of different vocabulary learning approaches among primary school students, specifically in the Malaysian context.

YOUNG ESL LEARNERS IN THE MALAYSIAN CONTEXT

The English language is among the official languages in Malaysia and is taught as a L2 in all primary and secondary schools. Nevertheless, Malaysian students are reported to be still weak in English after having learned the language for eleven consecutive years at the primary and secondary school levels (Darus & Subramaniam, 2009). The key educational concern in Malaysia is the pupils’ limited communicative skills in English. According to Lee, Krishnamoorthy and Rong (2019), Malaysian students mostly struggle to understand and to communicate in English with their teachers and peers who have a higher level of English proficiency. Students from the Malaysian vernacular primary schools (with Tamil and Chinese medium of instruction) often possess limited ability to communicate in English. In fact, the English language proficiency of Tamil school students’ has always been compared to the National school students. According to the statistics provided by the Malaysian Examination Board (cited in Arumugam, 2008), the performance of Tamil school students’ in the Primary School Achievement Test or Ujian Pencapaian Sekolah Rendah (UPSR) for English language is at least 10% lower than that attained by students enrolled in the National schools and 12.6% lower compared to students in the Chinese schools even though the Chinese young ESL learners also have to manage learning three languages like the Tamil schools students. This discrepancy in the performance of Tamil school students was one of the reasons motivating the current study.

Indian parents also want their children to be proficient in English. However, since majority of the children are used to using their mother tongue and the local Malay dialects, they may have difficulty to speak fluently if they do not have sufficient access to the necessary English vocabulary to convey their thoughts (Hiew, 2012). In 2017, the Malaysian
Education Ministry also revised the English Language Curriculum for Primary Schools (KSSR) to promote the development of literacy among primary school learners and to align the curriculum with the levels in the Common European Framework of Reference for language (Senin & Tafsir, 2017). The main shift of the curriculum that focuses on English literacy and communication skills was timely, especially when the majority of the vernacular school children may not live in rich English environments at home and in schools (Azman, 2016).

On top of that, only a few studies have been conducted on the literacy level of Malaysian primary school students. For instance, Ayaoo, Al-Hudawi, Musah and Sibes (2014) conducted a study on the role of storytelling in improving the comprehension skills for the Malay language among primary Tamil school students. Another study conducted by Razak, and Yunus (2016) focused on using English action songs for vocabulary learning among primary school students. Meanwhile, Ma’rof, Redzuan, Anderson and Ma’rof (2012) investigated the impact of shared book-reading on the vocabulary development and oral skills among young Indigenous Malaysian children learning Malay as a L2. Samuddin and Krish (2018) examined the phonological, orthographical and morphological awareness and knowledge in English of 46 young Malay ESL learners from a national primary school. However, we were not able to find any studies on the use of different learning approaches for the development of English vocabulary among children in the Tamil primary schools.

The aim of the present study is, therefore, to address this gap in the literature by investigating the effects of different vocabulary instruction (incidental and intentional learning) that can enhance the vocabulary development among Malaysian Tamil school students. The current study was part of a larger research on different vocabulary learning approaches and word learning strategies among young ESL learners which examined also qualitatively the effectiveness of the treatment in both the experimental groups. This paper, however, reports only the findings on the quantitative data of the study by addressing the following research questions: 1) To what extent do different vocabulary learning contexts influence vocabulary gains? 2) To what extent are the gains in vocabulary retained over time in the various learning contexts?

**METHODOLOGY**

The present study adopted an experimental research design using a pretest and post-test control group research design. The objective was to determine if there were any statistically significant difference between the post-test mean scores of the participants in the experimental groups (ER and ER+) and the control group.

**PARTICIPANTS AND SAMPLING METHOD**

Ninety-nine students (10-11 years old) from one of the biggest Tamil schools in a northern state in Malaysia participated in the study. The students were selected from Year 5 students because the learners from Year 1-4 (7-10 years old) might not have had sufficient exposure to English while Year 6 students were occupied with preparation for the UPSR examination, and permission to involve them in the study may not be granted. A pre-test was administered to determine the participant’s baseline of vocabulary knowledge. Stratified sampling was applied, and the subjects were divided equally (N=33 for each group) into 3 groups; a control group and two experimental groups: extensive reading (ER) and extensive reading plus vocabulary enhancement activities (ER+). Both the experimental groups received 11 weeks of treatment, which involved reading of storybooks as after-school activities while continuing...
with their regular English classes. The control group did not participate in the after-school activities, but they continued to attend the regular English classes. As shown in Table 1, around 89% of the participants’ mother tongue is Tamil while a smaller percentage speaks English (7%) and other language(s) as their first language (L1). The children speak Tamil fluently and can communicate fairly well in both English and Malay. Some participants also speak Telugu and Hindi (languages of India) as their mother tongue. Table 1 also shows that the participants’ L2 are both English (83%) and Malay (92.9%).

<table>
<thead>
<tr>
<th>Language</th>
<th>Tamil</th>
<th>English</th>
<th>Malay</th>
<th>Others</th>
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</thead>
<tbody>
<tr>
<td>L1 ER+</td>
<td>90.9%</td>
<td>3%</td>
<td>-</td>
<td>6%</td>
</tr>
<tr>
<td>ER</td>
<td>90.9%</td>
<td>6%</td>
<td>-</td>
<td>3%</td>
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<tr>
<td>Control</td>
<td>84.8%</td>
<td>12%</td>
<td>-</td>
<td>3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>89%</td>
<td>7%</td>
<td>0%</td>
<td>4%</td>
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</table>

| L2 ER+       | 9%    | 84.8%   | 97%   | -      |
| ER           | 9%    | 81.8%   | 87.8% | 3%     |
| Control      | 15.1% | 84.8%   | 94%   | 3%     |
| TOTAL        | 11%   | 83%     | 92.9% | 2%     |

RESEARCH INSTRUMENTS

A background questionnaire was given to the participants to gather the demographic information of the participants which includes age, gender, mother tongue and other language(s) that they speak and their experience in reading graded reader series. The questionnaire was set up in both English and Tamil language to help the students understand the questions better.

The main instrument of measurement applied to collect the quantitative data of this study is the Vocabulary Levels Test (VLT), originally designed by Nation (1990) and later developed by Schmitt, Schmitt and Clapham (2001). The test’s validity and reliability have been checked in many previous studies (Read, 2000; Schmitt et al., 2001). The VLT was administered for the pretest and post-tests to measure the participants’ receptive vocabulary size throughout the treatment period. The purpose of using the same test in the pre-test, post-test and delayed test is to have a comparable analysis. The 11-week distance between the pre-test and post-test was considered adequate for the participants not to remember the specific words in the test. Several studies in the past (e.g. Al-Hammad, 2009; Webb & Chang, 2015) have also used the same approach of using the same test (VLT) for the pre and post-tests.

The VLT is considered as one of the most globally recognised and generally used vocabulary test that is easily and freely available to researchers (Al-Hammad, 2009). The VLT was devised as a measurement of vocabulary size and it is well known as an appropriate measure of vocabulary size. Read (2000) suggests that, in the absence of a standard vocabulary assessment tool, the VLT is almost the next best alternative as it was shown to be a good diagnostic measure of vocabulary size. The VLT uses multiple choice definition-based vocabulary items and the test takers are required to match the words with the most appropriate definitions. The VLT measures written receptive vocabulary knowledge (for instance mostly the word knowledge essential for reading) of learners at 4 frequency levels of English word families: 2,000, 3,000, 5,000 and 10,000. In addition to the four frequency-based levels, the VLT includes test items from the Academic Word List (AWL). However, 10,000- and 5,000-word levels were excluded in the present study since the teachers of the school believe that the target participants do not have a broad knowledge of vocabulary that would reach those levels.

The revised VLT consists of two versions of the test (Schmitt et al., 2001) and each
version contains 300 words and is divided into four frequency-based levels plus the academic levels. Each word level contains 60 words, and are grouped into 10 clusters. In each cluster, six words are presented on the left and the matching meaning of three of these in another column on the right as shown in the example provided in Figure 1. The test takers were asked to choose three words that matched the definitions. Hence, the VLT requires the test takers to identify the word form, instead of the meaning, and the options are words rather than definitions (Schmitt, 2010).

![Table]

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<table>
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<td>6</td>
<td>wall</td>
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</tr>
<tr>
<td>3</td>
<td>animal with four legs</td>
</tr>
<tr>
<td>4</td>
<td>something used for writing</td>
</tr>
<tr>
<td>6</td>
<td>part of a house</td>
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</table>
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**FIGURE 1. Sample VLT questions and answers**

However, in the past, most studies using the VLT were conducted with college or university-level students (e.g. Al-Hammad, 2009; Ishii & Schmitt, 2009; Golkar & Yamini, 2007). Fewer studies have surveyed and used the VLT among young children. For example, Dunn (2012) carried out a study to investigate if the VLT is a valid vocabulary test for fourth and fifth grade students (10-11 years old) in Washington State. They reported the VLT to be suitable and reliable for children of this age group. Catalán and De Zarobe (2009) have also administered the 2,000-frequency band of the VLT to the six-grade primary school students (11 years old) in Spain, while Catalán and Gallego (2005) have also used the VLT (the 2,000-word level) among the 4th year primary school students (10 years old), to investigate their receptive word knowledge of English. The result of their study indicated that the students know around 178 words from the 2,000-frequency band of the VLT. It is considered a reasonable vocabulary size since the students were only in the fourth year of primary education. Therefore, the present study adapted the 2000 and 3000 frequency band and academic words list to test the children’s vocabulary size. A pilot study conducted using the VLT also found the test suitable for the learner’s age and language level in the Malaysian Tamil school context.

**RESEARCH PROCEDURE**

All participants provided written consent and parental consent were also obtained for their participation in this study. A background questionnaire was given to all participants. Then the pretest was conducted prior to the treatment sessions to determine their baseline vocabulary knowledge level. The participants were then selected and placed randomly into the respective groups.

One week after the pre-test, the participants for the experimental groups (ER and ER+) were introduced to the extensive reading programme. First, they were introduced systematically to the concept of extensive reading, and its purposes, processes and benefits. The only dissimilarity between the two experimental groups is that the treatment in the ER+ group was accompanied with vocabulary enhancement activities whereas the ER group was not. The treatment was carried out over a period of 11 weeks with only one session per week and each session lasted for 90 minutes. The treatment for both the experimental groups were conducted by an experienced English teacher who planned the class activities together with the researcher. The researcher only met the participants in the control group during the testing
period for the pretest, post-test and the delayed post-test.

**ER GROUP**

Participants of this group were introduced to the extensive reading activities but the activities and tasks during the intervention were designed with no direct or conscious attention given to word learning. Instead, the post reading activities were designed and carried out to ensure that the students have read the books and they were asked to speak and share their opinion and thoughts about the graded readers and activities. The teacher ensured that the class discussion/presentations and group work to be within the story line and all participants were given the chance to speak, ask and answer questions accordingly. The children were advised not to overuse the dictionary but instead to enjoy reading the selected books. The students were given reading reports to fill in their opinion, thoughts and feedback for each storybook that they read. The children completed a brief report, for each book they read.

**ER+ GROUP**

Children in the ER+ group also participated in extensive reading activities. According to Waring (2011) one of the criteria for extensive reading is allowing the children to choose books based on their preference. As such, the children in the present study chose books on their own based on their interest and the researcher and the teacher did not interfere in book selection. However, to ensure that the children do not choose books that are too difficult, they were asked to read a few sentences from the book before checking out and taking the book home. Therefore, the books that the children read varied throughout the treatment period. Hence, it was almost impossible for the teacher to suggest the words for the activities from one particular book. Instead, the children were asked to identify the unknown words from the books that they had read for the week. The activities were designed with explicit goal for vocabulary learning, which included tasks focusing on new words from the storybooks. The lesson then revolved around vocabulary and the lessons were prepared with the conscious aim for vocabulary acquisition incorporating explicit learning techniques (e.g. memorizing new words and their meaning, constructing sentences to use the new words, writing antonym and synonyms and looking up meaning in the dictionary). To meet the goals of the ER+ programme, highly interactive vocabulary activities were used, and they included word maps, word tables, writing tasks, group discussion, individual/group presentations, story re-telling, sentence constructing, reading comprehension and word learning games.

The children were also required to write a brief report in English on their reaction, comments and thoughts of the storybooks and the activities. However, some student completed some parts of the report in Tamil and this was allowed by the researcher as to encourage the students to participate in the task. The only difference between the ER and ER+ reading reports is that the reports completed in the latter group required the children to write about the word choices and if the words from the books were easy or difficult for them. Moreover, they were also given the vocabulary record sheet, which required them to record any new words that they encountered while reading. The sheet also required the children to expand their knowledge of vocabulary by getting them to write the other forms of the learned words or to include a memory idea (e.g. construct a sentence or write the direct translation of the word).

A post-test was administrated after the 11 weeks of treatment to measure the effects of the treatment on the students’ vocabulary knowledge. Following that, a delayed post-test was also conducted after 40 days of the immediate post-test, which coincided with the end of the year school holidays for the children. According to White (1998) “although it is difficult to specify the amount of time that should elapse between the immediate and delayed post-
tests, a minimum of a month would seem to be both reasonable and practical, given the constraints of school-based research” (p. 92). Hence, the gap of 40 days, which exceeds a month, seems to be a reasonable break between the post-test and the delayed post-test.

RESULTS

The pre- and post-test were manually scored. The raw scores of the pre- and post-tests were analysed using the Statistical Package for the Social Sciences (SPSS). In order to determine the homogeneity of vocabulary level of the control and experimental groups, the one-way Anova was conducted to compare the pre-test scores of children in all groups before the treatment. Table 2 shows that there were no significant differences between the pre-test scores of the three groups [F (2, 96) = 0.39, p = 0.68]. Therefore, the result indicates that the control and experimental groups (ER and ER+) had similar vocabulary size prior to the treatment. During the treatment period, both the experimental groups (ER and ER+) underwent the Extensive Reading programme while the control group did not do so. As a result of the treatment, there was a significant difference in the vocabulary scores of the control and experimental groups as shown in the Table 2 [F (2, 96) = 13.36, p < .01].

The descriptive statistics result shows that the immediate post-test scores for both the experimental groups recorded an increase over the treatment period. The ER group’s mean score recorded a gain of 13.07% while the ER+ group recorded a gain of 16.10% as shown in Figure 2. In order to investigate if the post-test means score difference between the two experimental groups is statistically significant a post-hoc test was performed. As Table 3 shows, the post-hoc test indicates that the mean scores of the ER and ER+ group is not significantly different [p= 0.117, p > .05]. Therefore, it can be concluded that, despite the difference in the treatments, both the experimental groups showed no significance difference in their vocabulary post-test mean scores.

The delayed post-test was conducted 40 days after the immediate post-test for all groups. As shown in Table 2, there is a significant difference in the delayed post-test mean scores of the control and experimental groups [F (2, 96) = 20.66, p< .01]. Meanwhile, the descriptive statistics results indicate that the students’ in the control group performed poorer in the delayed test than the experimental groups [control group: M=41.78, SD= 25.51; ER group: M= 65.51, SD= 26.99; ER+ group: M= 83.48, SD= 26.74]. In order to determine where the significant difference lay, a post-hoc test was carried out. As shown in Table 3, the test revealed that there is a significant difference between the experimental ER group and ER+ group compared to the control group. The effect size was calculated in order to indicate the difference between the groups is statistically significant and did not occur by chance. Based on Cohen’s (1988) guidelines, the effect size can be considered as very large, η² = 0.30.

**TABLE 2. One-way ANOVA results and descriptive statistics for all groups**

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
<th>F</th>
<th>Sig</th>
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<tr>
<td>Pretest</td>
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<tr>
<td>Control</td>
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<td>25.43</td>
<td>33</td>
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<td>.681</td>
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<td>ER</td>
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<tr>
<td>ER+</td>
<td>48.64</td>
<td>25.37</td>
<td>33</td>
<td></td>
<td></td>
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<tr>
<td>Post-test</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>45.58</td>
<td>25.54</td>
<td>33</td>
<td>13.36</td>
<td>.00**</td>
</tr>
<tr>
<td>ER</td>
<td>67.67</td>
<td>25.38</td>
<td>33</td>
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</tr>
<tr>
<td>ER+</td>
<td>77.73</td>
<td>26.61</td>
<td>33</td>
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</tr>
<tr>
<td>Delayed post-test</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>41.79</td>
<td>25.52</td>
<td>33</td>
<td>20.67</td>
<td>.00**</td>
</tr>
<tr>
<td>ER</td>
<td>65.51</td>
<td>27.00</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER+</td>
<td>83.48</td>
<td>26.75</td>
<td>33</td>
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</tbody>
</table>

** p<.01
TABLE 3. Multiple Comparisons of ANOVA

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) Group</th>
<th>(J) Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
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</thead>
<tbody>
<tr>
<td>Post-test</td>
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<td>6.36</td>
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<td>-19.52</td>
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<td></td>
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<td>Control</td>
<td>22.09**</td>
<td>6.36</td>
<td>.001</td>
<td>9.46</td>
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<td></td>
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<td>.000</td>
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<td></td>
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<tr>
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<td>6.51</td>
<td>.000</td>
<td>-36.64</td>
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<tr>
<td></td>
<td></td>
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<td>.000</td>
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<tr>
<td></td>
<td>ER</td>
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<td>23.73**</td>
<td>6.51</td>
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<td></td>
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<td>.007</td>
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<td>Control</td>
<td>41.70**</td>
<td>6.51</td>
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<td>28.78</td>
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<tr>
<td></td>
<td></td>
<td>ER</td>
<td>17.97</td>
<td>6.51</td>
<td>.007</td>
<td>5.05</td>
<td>30.88</td>
</tr>
</tbody>
</table>

** p<.01  
* p<.05

The ER group’s delayed post-test mean scores were slightly lower compared to the mean of the immediate post-test mean scores with a mean difference of 11.90%. On the other hand, the ER+ group had performed better in the delayed post-test with a gain of 19.35%. There was also a significant difference between the mean scores of ER and ER+ group [p= 0.007, p < .05]. Therefore, it can be concluded that, although no significance difference was found in their vocabulary post-test mean scores between these two experimental groups, the ER+ group managed to significantly outperform the other two groups in the delayed post-test. The study provides evidence that extensive reading can enhance vocabulary learning but the blending with vocabulary enhancement activities was more effective on the long run.
DISCUSSION AND CONCLUSION

The VLT was carried out in this study to find out if there was any vocabulary growth among the participants after reading graded reader series during a treatment period of eleven weeks with only intervention of 90 minutes per week. Three main issues emerged from the current study. First, the children were found to be motivated to read as a result of participating in the extensive reading programme. Over the years, pleasurable reading has been identified as one of the most efficient strategies to increase the motivation for reading at different proficiency levels (Takase, 2007; Al-Hammad, 2009; Matthew, 2005; Ro, 2013). The children in both the experimental groups (ER and ER+) showed significant growth in their vocabulary knowledge after being encouraged to pick their own books to read for pleasure. Such gains were not observed among the participants in the control group who did not participate in the reading programme but they continued with their English class as usual as did the participants in the other two experimental groups. The vocabulary knowledge gained among the experimental group students could be due to the nature of the extensive reading programme, which makes reading materials accessible to children after school hours and allowing the children to choose their own material to read according to their reading level, reading pace and interest, thus increasing their motivation to read a huge amount of storybooks that eventually facilitated vocabulary development.

Motivation for reading and readers engagement is enhanced when the students are given a choice to pick storybooks on their own (Nation, 2001; Takase, 2007). Readers at a lower proficiency level may begin with books at the lowest level in the series, and once they have reached a level of comfort, they may progress to the next level. With this, the children would not lose interest in reading since a large number of unknown words can be a hurdle for reading which may hamper their confidence in independent reading. Eventually, the readers may gain confidence and with improved fluency and vocabulary knowledge, they could continue to read extensively on their own. The participants read 5 graded readers on average over the 11 weeks of treatment (Meganathan & Yap, 2018). It seemed to be a reasonable average number of graded readers read, as Nation and Wang (1999) suggest at least a minimum of one graded reader every two weeks.

Studies in the past have provided evidence that pleasure reading has increased motivation for reading in the L2 (e.g. Ro, 2013; Mason & Krashen, 1997). Apart from that, Al-Hammad (2009) found out that the readers showed positive attitudes towards extensive reading and showed a strong motivation to continue to read extensively. Furthermore, Takase (2007) highlighted that the freedom to choose the reading materials and where to read them tend to motivate the participants, consequently influencing their reading performance positively.

The qualitative analysis of the study also showed that extensive reading has the potential to promote increased motivation for reading among the participants (Meganathan & Yap, 2018). Overall, the study provides evidence that both the learning conditions (incidental learning, combination of incidental and intentional learning) for vocabulary learning were very effective. The results also show that the combined approach of extensive reading and intentional focus on learning new words resulted in better retention and possible extended learning gains as the vocabulary scores of the children in the ER+ group continued to improve 40 days after the treatment had ended. This could have resulted from improved motivation as well as learning of specific vocabulary learning strategies to sustain vocabulary learning among the children in the ER+ group but not in the ER group. The results suggest that intentional learning and giving specific focused training on vocabulary learning skills could have equipped the children to be more independent readers and word learners.

Previous studies such as Ahmad (2012), Alipour Madarsara, Youhanaee, Barati and Nasirahmadi (2015), and Ponniah (2011) provide further support for the efficacy of the
incidental vocabulary learning, while studies conducted by Read (2004), Nation (2001) and Paiman, Thai and Yuit (2015) argues for the efficiency of intentional learning of vocabulary. It is evident that ER promotes vocabulary learning (Nation, 2001; Schmitt, 2008; Horst, 2005; Pigada & Schmitt, 2006), but as incidental vocabulary learning is a gradual process, it requires repeated encounters in context (Webb & Chang, 2015), which is a time-consuming process and may require positive motivation to sustain. Moreover, there is only a slight chance of inferring the meaning precisely, unless the context is rich and helpful for such guessing to be accurately managed (Kelly, 1990). In any case, as Schmitt (2008) argued, the pick-up rate would be rather low. Thus it would be rather difficult to improve the students’ vocabulary knowledge from limited exposure to novel words in the L2.

The treatment for the ER+ group of readers, incorporated post-reading activities with explicit learning tasks that required them to use the unknown words. The activities used in the study included getting students to translate into the L1, using memorization techniques, looking up a dictionary, writing synonyms and antonyms of new words, using it in a sentence and using those words to retell the story read (Meganathan & Yap, 2018). These activities seem to have allowed the children to encounter the unknown words even after they are done reading. The explicit activities aid to maximize the amount of exposures of the words which may have led to greater opportunity for retention. In other words, the mixed approach comprises the most exposure to the words in contextualised and decontextualized formats, and higher changes for engagement with words (Sok, 2017). According to Hulstijn, Hollander and Greidanus (1996) explicit oriented tasks (e.g. referring to a dictionary) during the reading phase can support successful learning compared to reading alone. Meanwhile, Hill and Lauffer (2003) discovered that explicit activities focusing on target words after reading aid better word learning than comprehension questions. Newton (2001) also argues that readers tend to learn vocabulary from each other, mainly when they are working in a group, as it comprises explicit negotiation of the meaning of the words. By introducing children to specific vocabulary learning skills as done in the ER+ group, the children might have been taught skills which helped sustain their motivation to be efficient independent readers.

In conclusion, the current study offer evidence for the effectiveness of the combined approach of intentional and incidental learning for L2 vocabulary development, found to be effective for adult learners to be also extendable to young ESL learners. The findings of the study indicate that extensive reading provides support for vocabulary growth among young L2 readers with the support of explicitly enhanced post-reading activities. Despite the short period of the reading programme, a total of 990 minutes of engaging in reading storybooks and participating in word learning activities, a significant impact was found on the vocabulary growth of the Tamil school students involved.

In this study, we selected a Tamil school for the study as Tamil children have been reported to have lower performance in school (Arumugam, 2008) and they also represent the group that are more marginalized in terms of access to economic resources which may have impacted their performance in schools. However, future studies can examine the effect of such intervention programmes for advantaged and disadvantaged children from the perspective of social economic affordances in other communities in Malaysia to examine the efficacy of such short-term reading programmes as positive initiatives that can be organised by the Ministry of Education or local communities to help children gain access to reading resources. Future studies can also examine the use of such interventions on the general academic performance of children as increased motivation and ability to read may be extended to increased motivation to learn in general.
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REFERENCES


