The Journal of Asia TEFL

The Effect of Synthetic Phonics on the Development of Reading Skills in L1 and L2

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This research investigated the effect of using synthetic phonics for teaching Indonesian young learners to read in English and Indonesian. Since English orthography is very different from Indonesian orthography, the use of synthetic phonics for teaching Indonesian young EFL learners to read in English potentially affects the development of their skills to read in Indonesian. To verify this assumption, the researchers analyzed the development of the skills for decoding English and Indonesian sounds represented by 'a', 'u', and 'o' within five months in K-2 students from two kindergartens. In one kindergarten, the teacher used synthetic phonics to teach English. In the other, the teacher used the MIKids program. The results of this research indicate that the synthetic phonics method might be less effective when it is used for teaching reading in English in Indonesia. In addition, it can potentially impede the development of skills for reading in Indonesian.

Keywords: kindergarten EFL learners, synthetic phonics, orthography reading skills, decoding skills

Introduction

Reading is an important skill which should be mastered by every language learner, either in L1 or L2. Many studies have shown that L2 learners can enhance their vocabulary knowledge of the target language through reading. Soltani (2011) found that Iranian L2 learners of English who had undergone the extensive reading program learned a significantly higher amount of vocabulary compared to those who had not received the treatment. The same result was also found in a Greek L2 learner of French (Pigada & Schmitt, 2006). In addition, reading plays an important role in improving learners' writing ability. In a study conducted by Ruangnoi, Chatupote, and Aksornjarung (2009), it was found that the writing skills of L2 learners who had been given reading treatment, which had required them to learn the vocabulary, the structures, and also the organization of the given reading materials, developed at a faster rate than those who did not receive the reading treatment.

Since reading is essential for language development, improving language learners' reading skills from

early on is necessary. Phonics has long been proven as an effective method of teaching reading (Beck & Juel, 2002; Ehri, 1987; Hempenstall, 1999). Phonics focuses on teaching the correspondence between sounds and letters. Learners are taught to read by paying attention to individual letters, syllables, and morphemes, instead of the whole words (Hempenstall, 1999). Purewall (2008) asserts that phonics trains the learners' decoding skills so that they can make connections between letters and sounds.

There are different methods of teaching phonics. Based on the content of the phonics instructions, Hempenstall (1999) divides phonic instructions into two types: synthetic (explicit) phonics and analytic (implicit) phonics. Beck and Juel (2002) describe that the difference between synthetic and analytic phonics lies in how explicitly the correspondences between letters and sounds are taught. As pointed out by Lewis and Ellis (2006, p. 4, as cited in Purewall, 2008, p. 28), in the synthetic approach, "…children are systematically taught the phonemes (sounds) associated with particular graphemes (letters)." In contrast, in analytic phonics, children first learn to recognize words before they learn to recognize the letter sounds that compose the words (Johnston, McGeown, and Watson, 2012). It has been argued in many studies that synthetic phonics is more effective than analytic phonics for improving children's ability to read (Hempenstall, 1999; Johnston et al., 2012; Johnston & Watson, 2005; Purewall, 2008). The present study focuses on the impact of employing synthetic phonics for teaching reading in English to kindergarten EFL learners in Indonesia.

In most cases in Indonesia, English is still learned as a foreign language at school. The national curriculum mandates English as a compulsory subject to be learned starting from seventh grade. In daily conversations, including when parents speak to their children, Indonesian people generally use colloquial Indonesian or their local dialects. However, as more and more people realize the importance of English as a global language, it is being taught as a local additional subject in many playgroups and kindergartens. In these kind of schools, according to several English teachers being interviewed, English lessons in the early childhood level generally include teaching students how to read in English. Hence, the teaching of Phonics has been booming since the mid of 2000s in Indonesia.

These days, the synthetic phonics approach has been adopted by many playgroups and kindergartens in Indonesia in the belief that it is effective for the teaching of reading in English to their students. Yet, the adoption of phonics for teaching reading in English in Indonesian schools raises a concern of the impact of phonics instructions on Indonesian young L2 learners' ability to read in Indonesian, which is their L1. There is a conception that although both English and Indonesian use Roman or Latin alphabets, the nature of English orthography is very different from Indonesian orthography. As already stated in many studies, English has an inconsistent orthography (Aro & Wimmer, 2003) or deep orthography (Geva & Siegel, 2000) because the relations between sounds and letters are complex since they do not follow a one-to-one relationship. For instance, in English, the letter 'a' can be pronounced differently, including [æ], [e], [Ə], [a], [Λ] and [ey]. In contrast, Indonesian orthography is transparent or shallow. In Indonesian, the mapping between sounds and letters is simple and reliable as they are related in one-to-one correspondence between the letters and their phonological sounds.

The concern that phonics instruction for teaching English potentially brings negative impacts on the development of Indonesian young L2 learners' ability to read in Indonesian is in accordance with the results of some studies which show that orthographic processing could be transferred cross-linguistically when the two languages share the same alphabet (Commissaire, Duncan, & Casalis, 2011; Deacon, Wade-Woolley, & Kirby, 2009;). Orthographic processing is "the ability to form, store and access orthographic representations" (Stanovich & West, 1989, as cited in Deacon et al., 2009). Readers with good orthographic processing skills are able to identify orthographic regularities faster. This skill contributes to reading achievement because readers use orthographic forms to access the mental lexicon. Although people generally argue that orthographic processing is a language-specific skill, in their research on 76 English-speaking children Deacon et al. (2009) found that the English (L1) orthographic processing skills contributed significantly to reading in French (L2) and vice versa. Correspondingly, Commissaire et al. (2011) found that the English (L2) orthographic processing skills of 90 French-speaking children from level 6 and level 8 correlated significantly with reading speed in French (L1). They also found that French (L1)

orthographic processing skills correlated significantly with reading speed in English (L2) in the older children.

According to Aro and Wimmer (2003), phonics-based approaches are actually effective for teaching reading in languages with transparent orthography. This means that Indonesian young children would benefit from phonics-based instruction if they are taught to read in Indonesian through phonics, as they would be able to read more rapidly. However, in Indonesia, the teachers use phonics-based instructions only for teaching reading in English, not for teaching reading in Indonesian. The researchers assume that this practice is potentially harmful for the development of the L1 reading skills of Indonesian young L2 learners, in particular to those who learn to read both L1 and L2 at the same time, because the instructions potentially cause them to perceive the complexities of the English orthography. As English and Indonesian share the same alphabet, it is highly likely that the orthographic processing in English could be transferred to Indonesian. This condition potentially inhibits the development of Indonesian young L2 learners' ability to read and spell in their L1 as they presume that Indonesian orthography is as complex as English orthography.

Therefore, this study is intended to examine the effect of teaching reading in English through synthetic phonics on the ability of Indonesian kindergarten EFL learners to read in Indonesian and also in English. The researchers would like to investigate whether or not the use of synthetic phonics instruction for teaching reading in English would speed up the ability to read in English and, yet, delay the development of reading in Indonesian. The current study contributes to the use of synthetic phonics for teaching reading in English in Indonesia as this is the first study in Indonesia which examines the results of synthetic phonics by comparing its effect on the reading development of Indonesian kindergarten EFL learners in L1 (Indonesian) and L2 (English).

The scope of this study was the first stage of reading development, i.e. the decoding stage. The researchers focused on the effect of teaching blending, through phonics and non-phonics methods, on kindergarten EFL learners' skills in reading words in English and Indonesian. The results of this study are limited to the subjects of this study who were teachers and students in the two kindergartens under observation. The results of this study are also restricted to the following two factors: the techniques of synthetic phonics and methods of teaching reading in English in Indonesian employed by the teachers in the two kindergartens under observation and the reading tests used in this study.

Literature Review

Reading Skills

The skill of reading involves a set of cognitive skills including decoding symbols into sounds to form words, constructing meanings from texts, and applying schemata to text (Lee, 1969). The present study focuses on the first skill, i.e. decoding. As mentioned by Beck and Juel (2002), in written alphabetic languages, such as English and Indonesian, decoding refers to the process of mapping sounds to letters and/or letter groups (and vice versa). Beck and Juel further state that decoding can be applied either consciously (called *word attack)* or unconsciously (called *word recognition/word identification/sight word recognition*). Readers decode consciously when they come across unfamiliar words or words that they do not instantly recognize. Unconscious decoding occurs when readers encounter familiar words.

In order to master decoding skills, children must learn "how to segment meaningful language into words and phonemes" and "how letters symbolize phonemes in words" (Ehri, 1987, p. 9). According to Beck and Juel (2002), children will be able to learn to decode easily if the following three prerequisites are met: first, they "know that some systematic relationship exists between printed symbols and spoken messages" (p. 3). Second, they know that "words are composed of letters" (p. 4). And third, they are able "to map, or translate, the printed letters into sounds" (p. 4). Accordingly, Beck and Juel (2002, p. 5) argue that beginner readers should be taught by using explicit phonics (i.e., synthetic phonics (Hempenstall, 1999)) because phonics directly teach the systematic relationship between letters and sounds.

Synthetic Phonics

Phonics is a method for teaching reading which focuses on teaching the correspondences between letters and sounds. The main objective of phonics is to train learners' decoding skills. There are several types of phonics-based instructions for teaching reading; the main ones are: embedded phonics, synthetic phonics, analytical phonics, and analogy phonics (A Step at a Time: Synthetic Phonics, n.d.). In line with the objective of this study, the discussion in the rest of this section concentrates on synthetic phonics.

Synthetic (i.e. explicit) phonics is distinctive from other phonic-based approaches in that it is bottom-up, in the sense that it begins by directly teaching the grapheme-sound correspondences (Beck & Juel, 2002; Buie, 2005; Hempenstall, 1999; Purewall, 2008). According to Hempenstall (1999) and Buie (2005), the teacher can start by showing the graphemes first followed by teaching the sounds or the other way round. Afterwards, learners of synthetic phonics are taught the processes of blending and segmenting words to enable them to group letters appropriately and decode a group of letters, respectively.

There have been many studies indicating that synthetic phonics is effective for teaching reading. Hempenstall (1999) argues that synthetic phonics is more effective than analytic phonics and the whole language approach because it not only teaches the letter-sound knowledge but also trains the learners' phonemic awareness skills. Johnston and Watson (2005), in their famous Clackmananshire study, found that the word reading and spelling ability of five-year-old Scottish children who were taught by using synthetic phonics developed faster than that of the children who were taught by using analytic phonics. Furthermore, in the study conducted by Johnston, McGeown, and Watson in 2012, it was found that ten-year-old English children, in particular boys, gained more from synthetic phonics then from the analytic phonics. The study reported that synthetic phonics subjects were better in word reading, spelling, and reading comprehension than the analytic phonics subjects. Johnston et al. suggested that the results of their study were important because they demonstrated that: (1) the effect of the synthetic phonics approach in enhancing learners' word reading skills is long-lasting and escalating, and (2) the synthetic phonics approach is also effective to use in teaching English which has an opaque orthography because it emphasizes on developing the connection between visual information (i.e., graphemes) and phonological information (i.e., sounds) from early on.

The Effect of Orthography on the Reading Skill

The effect of orthographic regularity on reading development is indisputable as reflected in the results of studies conducted by Geva and Siegel (2000) and Aro and Wimmer (2003). In their study, Geva and Siegel (2000) investigated whether reading skills in L1 transferred to L2 or not. They examined the ability of 245 children to read in their L1, i.e. English, and L2, i.e. Hebrew. In accordance to the Orthographic Depth Hypothesis, Geva and Siegel categorized English as a language with 'deep' orthography. In contrast, Hebrew, in particular the voweled Hebrew, is regarded as a 'shallow' (or, transparent) orthography language. The result of their study showed that their subjects generally could read voweled Hebrew accurately earlier than English.

Correspondingly, Aro and Wimmer (2003) found that learning to decode in languages with irregular orthographies, such as English, is much harder and takes longer than in languages with more transparent orthographies. In their study, Aro and Wimmer compared the reading performance of English speaking children to the reading performance of German-, Dutch-, Swedish-, French-, Spanish-, and Finnish speaking children. All children who participated in their study were more or less at the same grade levels, i.e. Grades 1-4. They found that children of languages with more transparent orthographies, such as Finnish, Swedish, and Spanish, could read non-words and number words fluently much earlier than children who spoke languages with inconsistent orthographies, such as English, French, German, and Dutch.

Teaching Reading in Indonesian

Unlike English, Indonesian has a very transparent orthography system. In Indonesian, in most cases each grapheme represents only one phoneme, as listed in Table 1, except in a few cases listed below in Table 1.

TABLE 1

List of Graphemes and Phonemes in Indonesian

Grapheme	Word	Sound	Grapheme	Word	Sound
A / a	*akar* 'root'	[a]	L / l	*lagu* 'song'	[l]
B / b	*buka* 'open'	[b]	M / m	*makan* 'eat'	[m]
	adab 'culture'	[p]	N / n	*nada* 'tone'	[n]
C / c	*cinta* 'love'	[t͡s]	O / o	*obat* 'medicine'	[o] or [ɔ]
D / d	*datang* 'arrive'	[d]	P / p	*paku* 'nail'	[p]
	abad 'century'	[t]	Q / q	*Qur'an* 'Alquran'	[k]
E / e	*lebar* 'wide'	[e] or [ɛ]	R / r	*racun* 'poison'	[r]
	betul 'true'	[ə]	S / s	*suka* 'like'	[s]
F / f	*fakta* 'fact'	[f] or [p]	T / t	*tanda* 'marker'	[t]
G / g	*gajah* 'elephant'	[g]	U / u	*ular* 'snake'	[u] or [ʊ]
H / h	*hadiah* 'gift'	[h]	V / v	*vaksin* 'vaccine'	[f] or [p]
I / i	*ikan* 'fish'	[i] or [ɪ]	W / w	*wajah* 'face'	[w]
J / j	*jauh* 'far'	[d͡z]	Y / y	*yakin* 'certain'	[j]
			Z / z	*zakat* 'alms'	[s] or [d͡z]

1. The letter 'e' can represent either the mid front vowel [e] or [ɛ], as in *lebar* 'wide' or the mid central vowel [ə], as in *betul* 'true'.
2. The letter 'b' is pronounced as [p] when it is in the final position, as in *adab* 'culture'
3. The letter 'd' is pronounced as [t] when it is in the final position, as in *abad* 'century'
4. Speakers of some dialects in Indonesian pronounce the letter 'f' and 'v' as [p].
5. The voiceless alveolar fricative [s] can be represented by either the letter 's' or 'z'.
6. The voiced alveolar affricate [d͡z] can be represented by either the letter 'j' or 'z'.
7. The voiceless labio-dental [f] can be represented by either the letter 'f' or 'v'.
8. The voiceless velar stop [k] can be represented by either the letter 'k' or 'q'.

Interestingly, although Indonesian is a language with transparent orthographies, Indonesian teachers generally use a non-phonic method to teach reading in Indonesian, such as the Alphabet Method (*Metode Abjad*), the Syllabic Method (*Metode Kupas-Rangkai Suku Kata*), the Ganze Method (*Metode Global*), and the Structural Analytic Synthetic Method (*Metode SAS—Struktur Analisa Sintesa*) (Guru Sukses , n.d., in *Tips Mengajar Membaca di Kelas 1 SD)*. On the other hand, although English has inconsistent orthographies, there are more and more English teachers in playgroups and kindergartens who use synthetic phonics for teaching reading in English to Indonesian young learners. Many teachers for young learners are interested in using synthetic phonics because the method has been incorporated into materials and classroom activities which are suitable for children.

The use of synthetic phonics for teaching reading only in English potentially makes Indonesian kindergarten EFL learners aware of the complexity of the relationship between graphemes and sounds in English. Since both English and Indonesian use Latin alphabets, they may transfer the orthographic processing in English to Indonesian. Subsequently, they may mistakenly assume that Indonesian orthography is as complex as English orthography, so that their reading skills in Indonesian develop as late as their reading skills in English. If this is true, this is unfortunate. Their ability to read in Indonesian actually ought to develop faster than in English (L2) since Indonesian orthography is transparent (cf., the study by Geva and Siegel, 2000).

The present study was conducted to investigate the effect of the use of synthetic phonics to teach reading

in English on the development of kindergarten EFL learners' reading skills in English and Indonesian. In this study, the researchers tested the ability of Indonesian kindergarten EFL learners with the following two conditions to decode the letter 'a', 'u', and 'o' in English and Indonesian:

- 1st condition: learners who were taught to read in English through synthetic phonics and to read in Indonesian through the non-synthetic phonics methods.
- 2nd condition: learners who were taught to read in both English and Indonesian through non-synthetic phonics methods.

To examine the effect of synthetic phonics, the results of the tests of the learners in the first and second condition were compared.

Research Methodology

Subjects

The subjects of this study were students of two kindergartens in the Jakarta area. The first kindergarten (henceforth, J) was a private National Plus school; therefore, the medium of teaching in J is English. In J, the teachers taught English by using a combination of phonics and dolch sight words. The Indonesian and English lessons in J were given twice a week, respectively—each meeting lasted around 60 minutes. The second kindergarten (henceforth, T) was a private National school. The medium of teaching in T is Indonesian. The teachers in T used the MI KIDS program to teach English. In T, the Indonesian and English lessons, respectively, were given twice a week—each meeting lasted around 60 minutes. In both schools, the teachers used a combination of *metode abjad* [the spell method] and *Metode Kupas-Rangkai Suku Kata* [the syllabic analytic synthetic method] to teach reading in Indonesian.

The candidates of the student subjects of this research were 43 K2 students of J and 41 K2 students of T. The researchers selected K2 students (TK B) as the subjects because they were in the beginning stage of learning to blend vowels and consonants in English. The results of the tests of several students were excluded from the analysis because of the following reasons: (i) the students were not Indonesian (1 student), (ii) the students failed to comply with the test procedure (4 students), and (iii) the students only participated in one of the two tests (12 students). Accordingly, the total number of subjects was 30 from J and 37 from T.

Research Instruments

To gather the data to answer the research question of this study, the participants were given a pre- and post-test. The pre-test was intended to measure the subjects' decoding skills in Indonesian and English before they learned blending in English. The post-test was to examine the effect of learning blending in English on their decoding skills in the languages under study. Both pre- and post-tests were an individual reading test in which each of the subjects was asked to read several words in Indonesian and English to the researchers. The researchers used puppets to persuade the subjects to say the tested words to reduce their anxiety in performing the test task.

The pre- and post-test focused on the subjects' ability to decode letters 'a', 'u', and 'o' when they appeared in the middle position of C**V**CV nonce-words in Indonesian and C**V**C nonce-words in English. The researchers used nonce-words as the test items to avoid the possibility that the subjects were able to pronounce the tested words accurately because they were already familiar with the words. In Indonesian, the letters 'a', 'u', and 'o' were always pronounced as [a], [u], and [o], respectively, regardless of the environment in which they appeared. In contrast, in English, the letters 'a', 'u', and 'o' had several pronunciations depending on the environment in which they appeared; however, in accordance with the school syllabus, the present study only tested 'a' pronounced as [æ], 'u' as [ʌ], and 'o' as [ɔ]. The

Indonesian nonce-words were in the CVCV construction because Indonesian words are generally polysyllabic (Dardjowidjojo, 2000) and CV is one of the most common syllable shapes in Indonesian (Tadmor, 2009). The researchers prepared the English nonce-words in the CVC construction so that they corresponded to English real words. The CVC construction was selected in accordance to one of the basic phonic rules which states that a vowel in a syllable that ends with a consonant and has only one vowel must be a short vowel (Phonics, Syllable and Accent Rules, n.d.).

In both pre- and post-test for the Indonesian and English nonce-words, the letter 'a' was always followed by the letters 't' and 'm'; the letter 'u' was always followed by the letters 'p' and 'n', and the letter 'o' was always followed by the letters 't' and 'p', as reflected in Table 2. Subsequently, in total, there were 12 English nonce-words and 12 Indonesian nonce-words.

TABLE 2
The Test Items in the Pre- and Post-Test

	Pre-test				Post-test			
	English		Indonesian		English		Indonesian	
'a'	hat 'topi'		hati		mat 'karpet'		mata	
	nat	[æ]	natu	[a]	lat	[æ]	latu	[a]
	pam		pamo		tam		tami	
'u'	cup 'cangkir'		dupa		pup 'anak anjing'		tupai	
	nup	[ʌ]	nupi	[u]	mup	[ʌ]	mupo	[u]
	Mun		muno		lun		luni	
'o'	pot 'jambangan'		kota		tot 'anak kecil'		roti	
	Bot	[ɔ]	boti	[o]	wot	[ɔ]	wotu	[o]
	Gop		gopu		bop		bopa	

As shown in Table 2, in addition to the nonce-words as the real test items, several Indonesian and English real words (English: *hat, cup, pot, mat, pup, tot* and Indonesian: *hati, dupa, kota, mata, tupai, roti*) were also given in the pre- and post-test. These real words were used as a sign to signify whether the given nonce-words must be read in English or Indonesian. The subjects' performances of the real words were excluded from the analysis.

Procedure

The research began by interviewing the teachers in J and T to examine how Indonesian and English were taught in the two kindergartens. A classroom observation was also conducted in T to get a clearer picture of the MI Kids program.

In J, the teachers used a combination of synthetic phonics and Dolch sight words to teach reading in English. The phonics instruction began by teaching the students the phonics sounds of the letters that represent the English vowels and consonants. One way to introduce the sound of a letter is by pronouncing the sound in the initial position of a word repeatedly before pronouncing the word itself. The teachers began to teach blending consonants and vowels together in K2. Blending was taught by telling students to pronounce the first consonant of a simple CVC English word (for instance, *cat*) followed by the combination of vowel and consonant (for instance, [k] + [æt]) before pronouncing the word (i.e. [kæt]). The teachers believed that the phonics instruction was effective for improving the students' reading skills. The Dolch sight words technique was also used for developing the students' vocabulary knowledge. The teachers conducted this technique by telling a story and then repeating the words which frequently occurred in the story. While conducting the Dolch technique, students were not asked to read the words.

The English lesson in T was given by using the MI Kids program, which was a multi-media English language learning program for children. The program, which was intended to develop learners' four language skills, was a combination of the whole language approach and phonics. The duration of each lesson was around 60 minutes. In each lesson, learners would learn English through stories, songs, role-play,

rhymes, and various game-like activities. The lesson typically began by listening to a story which was presented with some animations, followed by discussing the vocabularies. Afterwards, the students were involved in some phonics-based activities, which could be in the form of singing songs. The duration of the phonics-based activity was only around five minutes. The rest of the lesson consisted of other activities which were designed to train different language skills.

In both J and T, the teachers used a combination of the spell method and syllabic analytic synthetic method to teach reading in Indonesian. They began by teaching the vowels followed by the consonants. Afterwards, they trained the students to blend a consonant and vowel together in a CV construction with various consonant and vowel combinations. They also trained the students to decode the syllables in simple meaningful words. In both schools, the teachers began to train students to combine two syllables which enabled them to read disyllable Indonesian words in K2.

The tests were conducted after the researchers interviewed the teachers in both kindergartens. The pre-test was given in mid-October which was the time when the subjects were about to learn to pronounce individual sounds of a word in English. The post test was given in mid-March—around five months after they began to learn to blend in English. All subjects had begun to learn to blend in Indonesian before the pre-test.

Data Analysis

The researchers analyzed the subjects' utterances in the pre- and post-test by examining their accuracy in pronouncing the letters 'a', 'u', and 'o' in the tested words. When pronouncing the English nonce words, the above three letters had to be pronounced as [æ], [ʌ], and [ɔ], respectively. For the Indonesian nonce words, they had to be pronounced as [a], [u], and [o]. Each nonce word which was pronounced accurately by each subject was considered as one accurate pronunciation.

In the analysis, the researchers compared the answers of J subjects to those of T subjects in the following conditions:

1. Accurate pronunciation in the pre-test
2. Accurate pronunciation in the post-test and inaccurate pronunciation in the pre-test
3. Accurate pronunciation in both pre- and post-test
4. Inaccurate pronunciation in both pre- and post-test

The subjects' utterances in English and Indonesian in the above four conditions were analyzed separately and then compared.

Findings

This section presents the findings of this research. The presentation begins by discussing the results of the pre-test, followed by the results of the post-test compared to the pre-test.

The Results of the Pre-test

The effects of using phonics and non-phonics were already visible in the results of the pre-test. As shown in Table 3, there were differences between J and T in terms of performances in the pre-test. For English 'a', the percentage of accurate answers in J was higher than in T. For English 'u', the percentage of accurate answers in J was slightly higher than in T. Interestingly, for English 'o', the percentage of accurate answers in J was much lower than in T. The explanation of why J subjects performed differently in English 'o' than in 'u' and 'a' is given below. For the Indonesian nonce words, the percentages of accurate answers for the three sounds in T were much higher than those in J. In fact, the percentages of accurate answers for Indonesian words in T were almost 100%, which means that the subjects in T could produce the tested

sounds in almost all the Indonesian nonce words accurately. In contrast, in J, the percentages of accurate answers for Indonesian words were around 50% and up to 60%.

TABLE 3
The Amount of Accurate Answers in the Pre-Test

Letters	J (with phonics)		T (with non-phonics)	
	English (60 words/sound)	Indonesian (60 words/sound)	English (74 words/sound)	Indonesian (74 words/sound)
'a'	23 (38.3%)	30 (51.7%)	15 (20.2%)	74 (100%)
'u'	10 (16.7%)	39 (65%)	11 (14.9%)	73 (98.6%)
'o'	37 (61.7%)	37 (61.7%)	73 (98.6%)	73 (98.6%)

The fact that J subjects could produce the English 'a' and 'u' better than T subjects was predictable because J subjects were trained to read in English through phonics; while T subjects were taught English mainly through the non-phonics method. The reason why the performance of J subjects on English 'o' was worse than that of T subjects was as follows: In the pre-test, almost half of J subjects (14 out of 30) spelled the tested words and they pronounced the English 'o' as [ow] (i.e. the sound of the 'o' letter). In contrast, only 6 out of 37 T subjects spelled the tested words and the way they pronounced the English 'o' was indistinguishable between [ɔ] and [o]. Subsequently, almost all English 'o' pronounced by T subjects were considered to be accurate; on the other hand, around 38% of English 'o' pronounced by J subjects were categorized as inaccurate.

In both J and T, the subjects' performances on English 'o' were much better than their performances on English 'a' and 'u'. This is presumably because the phonic sound of English 'o' [ɔ] is similar to the sound of the Indonesian 'o' [o]. On the other hand, the phonic sounds of English 'a' and 'u' are different from the sound of Indonesian 'a' and 'u'; accordingly, the two letters were harder to decode.

There are two other findings of the pre-test which are worth highlighting: Firstly, the subjects in T, who received a limited exposure to phonics, performed extremely well on the Indonesian 'a', 'u', and 'o'. Although subjects in J also performed much better in Indonesian than in English; their performances in Indonesian were still much lower than those of T subjects. Secondly, despite the fact that J used the phonics method for teaching reading in English, the performances of J subjects on the English 'a' and 'u' were only slightly better than T subjects' performances.

The Results of the Post-test in Comparison to the Pre-test

To evaluate the effect of the five-month treatment on the subjects' ability to decode the letters 'a', 'u', and 'o' in English and Indonesian words, the analysis of the post-test in comparison to the pre-test was divided into three parts: (i) accurate answers in the post-test only (presented in Table 4), (ii) accurate answers in both pre- and post-test (presented in Table 5), and (iii) inaccurate answers in both pre- and post-test (presented in Table 6).

The data in Table 4 were from the subjects who pronounced words inaccurately in the pre-test and accurately in the post-test—they represented the development o decoding skills within the five-month treatment. As shown in Table 4, the percentage of the English 'a' was higher in T than in J. This means that, for the English 'a', the progress of the decoding skill of T subjects was faster than that of J subjects. This fact is interesting because this shows that, although T subjects were exposed to a very little amount of phonics compared to J subjects, their decoding skill of the English 'a' progressed faster than that of J subjects. For the other sounds (English 'o' and 'u' and Indonesian 'o', 'u', and 'a'), the percentages in J were much higher than those in T. This fact indicates that there was more development in the decoding skills of J subjects than those of T subjects within the five-month treatment. The fact that J subjects had a higher percentage than T subjects for the English 'u' was unsurprising because they were taught by using phonics. However, interestingly, the percentages of the other tested sounds in T were in a range of 0% to 1.5%, or between 0% and 1.5%, which means that there was almost no progress in T subjects' skills to decode those

sounds.

TABLE 4
The Amount of Accurate Answers in the Post-Test and Inaccurate Answers in the Pre-test

Letters	J (with phonics)		T (with non-phonics)	
	English (60 words/sound)	Indonesian (60 words/sound)	English (74 words/sound)	Indonesian (74 words/sound)
'a'	11 (18.3%)	23 (38.3%)	28 (37.8%)	0
'u'	21 (35%)	14 (23.3%)	9 (12.2%)	1 (1.4%)
'o'	19 (31.7%)	21 (35%)	1 (1.4%)	1 (1.4%)

The data in Table 5 were from the subjects who pronounced the tested words accurately in both pre- and post-test—they represented those who had been able to decode 'a', 'u', and 'o' before the treatment. The data in Table 5 revealed the reason why the decoding skills of T subjects for some of the tested sounds appeared to develop sluggishly during the treatment. It was because they had already performed well in the pre-test. The fact that the percentages of the English 'o' and Indonesian 'a', 'u', and 'o' of T subjects were above 95% shows that they could pronounce the aforementioned sounds almost accurately in both pre- and post-test. On the other hand, in J subjects, the percentages of the aforementioned sounds were only between 45% and 60%. This means that they pronounced the aforementioned sounds accurately in both pre- and post-test only around half of the time. Subsequently, the progress of the decoding skills within the five-month treatment was only observable in J subjects.

TABLE 5
The Amount of Accurate Answers in Both Pre-Test and Post-test

Letters	J (with phonics)		T (with non-phonics)	
	English (60 words/sound)	Indonesian (60 words/sound)	English (74 words/sound)	Indonesian (74 words/sound)
'a'	11 (18.3%)	28 (46.7%)	9 (12.2%)	74 (100%)
'u'	8 (13.3%)	33 (55%)	6 (8.1%)	73 (98.6%)
'o'	34 (56.7%)	35 (58.3%)	71 (95.9%)	73 (98.6%)

So far, the results of the post-test in comparison to the pre-test show that T subjects' decoding skills for the Indonesian sounds and the English 'o' developed earlier than those of J subjects. In addition, the development of the decoding skills for the English 'a' and 'u' of J subjects did not differ much from those of T subjects. J subjects excelled only in the English 'u'. Their decoding skill of the English 'a' was slower than T subjects', as evidenced by the fact that the percentage of T subjects in Table 4 was twice that of J subjects. Furthermore, as shown in Table 5, the percentages of accurate answers in both pre- and post-test for the English 'u' and 'a' of J subjects did not differ much from those of T subjects. This means that the decoding skills of J subjects for the English 'u' and 'a' before the pre-test were only slightly better than those of T subjects.

The data in Table 6 represented the subjects who did not attain the decoding skills for the tested sounds after the five-month treatment. The data were from the subjects who pronounced the tested words inaccurately in both pre- and post-test and also those who failed to pronounce the tested words accurately in the post-test although they actually did well in the pre-test. The latter group of subjects was probably still in the interlanguage stage (see Song, 2012, for an explanation of interlanguage system).

TABLE 6

The Amount of Inaccurate Answers in Both Pre-Test and Post-test

Letters	J (with phonics)		T (with non-phonics)	
	English (60 words/sound)	Indonesian (60 words/sound)	English (74 words/sound)	Indonesian (74 words/sound)
'a'	31 (51.7%)	8 (13.3%)	34 (45.9%)	0
'u'	31 (51.7%)	13 (21.7%)	59 (79.7%)	0
'o'	7 (11.7%)	4 (6.7%)	2 (2.7%)	0

As shown in Table 6, some J subjects were still unable to pronounce the tested sounds in the Indonesian nonce words accurately after the five-month treatment. In contrast, all T subjects were already able to decode the tested sounds in the Indonesian nonce words in the post-test. These facts support the result of the earlier analysis which shows that the decoding skills for Indonesian words of T subjects developed faster than J subjects. With respect to English words, unsurprisingly, there were more T subjects than J subjects who were still unable to produce English 'u' accurately after the treatment. However, interestingly, for the English 'a' and 'o', the percentages of J subjects who still failed in the post-test were actually higher than those of the T subjects. This means that, although J subjects learned to read English by using phonics, their decoding skills for the English words did not improve faster than T subjects, who received only a limited amount of phonics.

To reiterate, the results of this research can be summarized into the following two points. Firstly, the decoding skills of T subjects for the Indonesian 'a', 'u', and 'o' and also for the English 'o' developed faster and earlier than J subjects. Secondly, within the five-month treatment, the development of the decoding skills of J subjects for the English 'a' and 'u' was better than those of J subjects; however, the difference in the progress was not much. To some extent, these results suggest that using synthetic phonics to teach reading in English can potentially impede the development of young L2 learners' reading skills in Indonesian and, in addition, do not significantly speed up the development of the reading skills in English.

Discussion

The results of this research actually need to be interpreted cautiously. The finding that the development of J subjects' decoding skills for the English 'a' and 'u' did not differ significantly from that of T subjects' contradicted the results of research conducted by Johnston and Watson (2005) and Johnston et al. (2012) which showed that synthetic phonics accelerated the development of young childrens' skills in reading and spelling. To account for this difference, the researchers would highlight the fact that the research of Johnston et al. (2005) was conducted in Scotland, in which English, Scots, and Scottish Gaelic were the primary spoken languages. This may be the reason why synthetic phonics was more effective for building the reading and spelling skills of the subjects in their research. In relation to this, the researchers assume that the effectiveness of synthetic phonics for teaching reading in English may be lessened when it is used in Indonesia since children are mainly exposed to Indonesian, which has transparent orthographies. This assumption can explain why the effect of synthetic phonics on the decoding skills of J subjects for the English 'a' and 'u' after the five-month treatment was not striking. In other words, had the duration of the treatment been longer than five months, we might have found that J subjects' decoding skills for the English sounds were much better than T subjects'.

Another benefit of synthetic phonics which could not be investigated in this research was its effect in the long term. Based on the results of their research, Johnston et al. (2012) argued that synthetic phonics had a long-lasting effect in enhancing learners' word reading skills. To verify this argument, the researchers must do a follow-up research on the same subjects in the next five years to examine the reading skills of which group of subjects that develop better in the long run.

The results of this research which showed that J subjects' decoding skills of the Indonesian words were worse than T subjects' in both pre- and post-test support the assumption that using synthetic phonics for

teaching reading in English for kindergarten learners potentially impede the development of their reading skills in Indonesian. This is because J subjects might have transferred their orthographic processing in English to Indonesian (cf., the transferability of English and French orthographic processing to each other in Deacon et al.'s (2009) and Commissaire et al.'s (2011)). In other words, they applied their knowledge of the English orthography to the Indonesian orthography so that they assumed that Indonesian also had a complex orthography.

The researchers acknowledge that there could be other factors which caused J subjects' decoding skills of the Indonesian words to develop slower than T subjects', other than the use of synthetic phonics for teaching reading in English. One of those factors was the amount of the English exposure that J subjects received both in school and also at home, which was potentially higher than the amount of linguistic input in Indonesian. Subsequently, the J subjects' mastery of the knowledge of Indonesian grammar is not as good as that of the T subjects because of the lack of exposure to the Indonesian input in their daily lives. In addition, it was also possible that the two groups of subjects performed differently because the teachers who taught the Indonesian lesson in the two schools had different personality traits. In other words, although the teachers used the same methods to teach reading in Indonesian, they might have carried out the lessons differently. Several researchers have suggested that teachers' personality traits potentially affect students' achievements (Garrett, 2009; Palardy & Rumberger, 2008; Rimm-Kaufman & Sawyer, 2004)

Conclusion

This research aims at investigating the effect of using synthetic phonics for teaching Indonesian kindergarten EFL learners to read in English on their ability to read in English and Indonesian. The results of the research show that the decoding skills for the Indonesian words of the subjects in T had already been better than those in J even before the treatment. Furthermore, after the treatment, the subjects in T were able to pronounce all the tested Indonesian words accurately. In contrast, some subjects in J were still unable to pronounce all the tested Indonesian words accurately in the post-test. The researchers also found that the progress in the skills of reading English words of the subjects in J did not differ much from that of the subjects in T. Based on these results, the researchers concluded that synthetic phonics method might be less effective when it was used for teaching reading in English in Indonesia since Indonesian had transparent orthographies. In addition, the results of this research also support the assumption that using synthetic phonics to teach reading in English to kindergarten EFL learners can impede the development of the skills for reading Indonesian words.

The researchers acknowledge that the results of this research might have been affected by the fact that the teaching medium in the two kindergartens under study was different. In addition, the scope of this research was limited to a relatively small sample of 67 K2 students from the two kindergartens where this research was conducted. Furthermore, this research only examined the development of the decoding skills and the effect of using the phonics and non-phonics methods was restricted to the sounds under study and not generalizable to other sounds. Nonetheless, the researchers expect that the results of this research can give insights to English teachers for young learners, in particular those who teach in playgroups or kindergartens, on the plusses and minuses of teaching English through synthetic phonics. Teachers need to be aware of the fact that the method can potentially hinder the development of the skills for reading Indonesian of young English learners as it may affect the performance of the kindergarten students when taking the entrance test to go to elementary school.

Another factor that Indonesian teachers may want to consider when they plan to employ synthetic phonicsat the kindergarten level is that this method does not only teach learners to read but also, to some extent, to write, since it requires learners to identify the letters that represent the speech sounds of the target language. According to Cameron (2003), in teaching English to young learners, it is important to establish the learners' literacy in the native language before they learn to read and write in English. Kindergarten students generally have not attained literacy in Indonesian; therefore, the use of synthetic phonics for

teaching reading in English in kindergarten potentially hamper the development of the students' reading and writing skills in Indonesian.

Further studies of this topic are needed to investigate further the extent to which the synthetic phonics method affects the development of the skills of reading Indonesian and find out strategies are needed to overcome the problem. Ideally, the research can be conducted in four types of kindergartens differing in the medium of teaching—English and Indonesian—and the English teaching method employed—phonics and non-phonics. It is also important to design follow-up research to examine the effect of synthetic phonics method on the Indonesian learners' reading skills in English and Indonesian in the long term.

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Appendix

Pre-test, Post-test, and Answer Sheets

PRE-TEST ANSWER SHEET

NAME: ……………………………………………………………

CLASS: …………………………………………………………

DATE OF TEST: ………………………………………………….

English words	Tested Letter	Tested Sound	Pronounced words	Pronounced tested sound
HAT	A	[æ]		
GOP	O	[ɔ]		
MUN	U	[a]		
POT	O	[ɔ]		
NUP	U	[a]		
NAT	A	[æ]		
CUP	U	[a]		
PAM	A	[æ]		
BOT	O	[ɔ]		

Indonesian words	Tested Letter	Tested Sound	Pronounced words	Pronounced tested sound
KOTA	O	[O]		
NUPI	U	[U]		
PAMO	A	[a]		
DUPA	U	[U]		
GOPU	O	[O]		
NATU	A	[a]		
HATI	A	[a]		
MUNO	U	[U]		
BOTI	O	[O]		

POST-TEST ANSWER SHEET

NAME: ……………………………………………………………

CLASS: …………………………………………………………

DATE OF TEST: ………………………………………………….

English words	Tested Letter	Tested Sound	Pronounced words	Pronounced tested sound
MAT	A	[æ]		
BOP	O	[ɔ]		
LUN	U	[a]		
TOT	O	[ɔ]		
MUP	U	[a]		
LAT	A	[æ]		
PUP	U	[a]		
TAM	A	[æ]		
WOT	O	[ɔ]		

Indonesian words	Tested Letter	Tested Sound	Pronounced words	Pronounced tested sound
ROTI	O	[O]		
LATU	U	[U]		
MUPO	A	[a]		
TUPAI	U	[U]		
WOTU	O	[O]		
TAMI	A	[a]		
MATA	A	[a]		
LUNI	U	[U]		
BOPA	O	[O]		