Examining the effect of phonological awareness instruction on EFL learners' pronunciation and motivation

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ABSTRACT

ELT teachers in Indonesia mostly apply an integrative language teaching approach to cover the linguistic elements of language skills. However, the pronunciation in speaking exposure is required to be accurate through the intervention of phonological awareness. Thus, this study examines the effect of phonological awareness on students' English pronunciation and how it provokes students' motivation in speaking English. This study used a pretest-posttest control group design. The experimental group which consisted of 36 participants was given a phonological awareness intervention and the control group which consisted of 36 participants was given without any intervention. The instruments of the study were a text reading-aloud task and a questionnaire. Data were then analyzed using Pearson correlation and independent sample t-test. The findings revealed that phonological awareness instruction positively impacted participants' pronunciation performance with better phonemes articulation, more appropriate stress determination, and more adequate intonation that directly provoked their speaking motivation. Therefore, EFL teachers should determine the phonological awareness approach for the potential English competence and performance integrated into the learning syllabus more intensively.

Introduction

The main goal of the English learning program in Indonesia is to gain the ability to express and respond to the meaning of both spoken and written utterances. Concerning face-to-face communication, being able to speak English as a foreign language (EFL) fluently is the primary objective of learning English language teaching (ELT) (Suzani, 2022). It is, therefore, clear that students' English-speaking skills are not determined only by expressing ideas in correct sentence structure, unlimited vocabulary, or awareness of the social and cultural context but also by the articulation of speech sounds. Incorrect sentence structure and diction

selection may still convey meaning but incorrect speech sound articulation conveys nothing. Although those components of speech are required to deliver meaning, accurate English pronunciation is the primary indicator of successful spoken English mastery (Yaniafari & Olivia, 2022).

Moreover, when the students make grammatical errors and use lexical ambiguities, the teachers can predict and understand the ideas the students attempt to say because the context of utterances provides clues (Elkouz & Munoz Luna, 2022); however, English speech sound errors uttered by students make the teachers misunderstand the message (Misti'ah, 2022). Therefore, it is assumed that English pronunciation, which is one of the aspects of phonological awareness, will result in more accurate speech outcomes than emphasizing solely complicated language structures.

Along with this initial assumption, EFL students confirm that English pronunciation is a very complex sound system (Fachrunnisa & Nuraeni, 2022) because the pronunciation of words does not correspond to their orthography (Bassetti et al., 2022). In addition, the writing does not correspond to the writer's speech. In contrast to Indonesian, English speech has a continuous sound configuration (Masykar et al., 2022). According to preliminary observations, EFL students exhibit three distinct errors in articulating English sounds (Ambalegin, 2022). First, students tend to pronounce words based on their writing, such as small /smɔːl/, which is pronounced as [smal]. Second, students frequently use their first language's consonant and vowel sound system to pronounce English words. For example, English diphthongs are phonetically articulated as monophthongs. Finally, students do not correctly pronounce English sound segments resulting in meaning confusion, such as "five" and "pipe". This phenomenon challenges language and education researchers to solve the obstacles by reviewing linguistic-based teaching programs.

Based on this fact, there are two important issues in English speech sound acquisition by EFL learners in Indonesia, namely phonetic articulation and phonological process. Phonetic articulation is how sound is in such a way produced in the configuration of the speech apparatus. Some English consonant sounds are not commonly pronounced by Indonesian learners, such as /f/, /v/, /tʃ/, /ʃ/, and /dʒ/. Nevertheless, inaccurate phonetic articulation can lead to lexical ambiguity (Gow, 2002). Meanwhile, the phonological process can be described as an articulation phenomenon. Although the phonological process of language is universal, the mental process of the underlying segment into a deriving form through substitution in the form of assimilation, deletion, insertion, addition, and metathesis (Li, 2022). Phonological awareness of English is not the main instruction at the elementary and secondary levels but the students get the English speech sounds through explicit learning. In fact, students do not articulate the speech sounds in general without knowing any articulation differences and phonological changes.

Based on this observation, there must be a paradigm shift concerning English sound acquisition. The issue of English speech outcomes by learners has become a crucial issue in Indonesian education. So far, current studies focus more only on pronunciation errors and methods of teaching English speaking. Thus, it is necessary to investigate the real conditions of speaking teaching methods on students' English pronunciation, strengthen phonological awareness, and practice speech articulation. The phenomenon that has resulted from the absence of phonological awareness can be an indicator of the lack of accuracy in students' English pronunciation. Brown et al. (2021) argue that various aspects of phonological

awareness include rhyme recognition, syllable counting, initial-phoneme matching, initial-phoneme deletion, phoneme blending, and phoneme counting. Thus, this study believes that awareness of English phonology can be an indicator of the appropriate pronunciation. To prove this, it is necessary to conduct an initial investigation of whether or not there are differences in English pronunciation with or without phonological awareness.

There have been limited studies concerned with Indonesian learners' English speech articulation (Ramdani & Rahmat, 2018), speaking teaching strategies (Milal, 2021), and speech accuracy (Flege & Hillenbrand, 1984) but none of the scopes focused on the phonological awareness that might provoke the students' English-speaking motivation. In fact, teaching strategy can only improve the flow of meaningful speech but not accurate speech sounds (Gao et al., 2022). Therefore, this research intends to see whether phonological awareness impacts the students' English speech sound articulation more effectively than without any approach. This study also aims to find out whether accurate speech articulation can provoke the student's speaking motivation. Based on this assumption, this research proposes two problem formulations.

1. Is phonological awareness instruction significantly correlated with students' English pronunciation and speaking motivation?
2. How does phonological awareness instruction impact on EFL learners' speech sound accuracy?

Scientific experimental evidence regarding the students' English phonological awareness in ELT investigated in this study can provide a new perspective to promote English speaking ability. From the findings, teachers can adopt the phonological awareness approach to improve students' English correct articulation so the student's motivation in speaking English becomes stronger. Thus, the roles of the phonological awareness approach contribute a better view than solely word pronouncing-based practice.

English pronunciation, stressed syllables, and intonation

Pronunciation is the ability to produce sounds to communicate meaning (Pennington & Rogerson-Revell, 2019). Both students and teachers believe that fluency is more important than accuracy. This viewpoint holds that learners should focus on sentence structure and vocabulary rather than how native speakers pronounce a word. The ultimate goal of learning English, however, is to achieve native-like proficiency (Saito, 2021). Nowadays, good pronunciation necessitates both fluency and accuracy (Felker, 2021). According to Nangimah (2020), pronunciation is essential during a conversation to avoid misunderstanding. So, when the simplest words are misspoken, the interlocutors become confused. This study agrees with McArthur et al. (2018), who state that pronunciation is the act of correctly sounding out words, syllables, digraphs, and letters, and it is gradable

In line with speech outcomes in ELT, Tarık (2020) defines pronunciation as the act of speaking aloud a word or sound by the rules of the language. Furthermore, it frequently refers to pronouncing these correctly. Articulation, however, means speaking or pronouncing words in such a way that they are clearly understood. Meanwhile, the general definition of articulation is dividing into distinct parts. According to Bocková (2022), the concept of articulation is perhaps one of the most generative concepts in contemporary cultural

studies. It is critical for understanding how cultural theorists conceptualize the world. It means that articulation refers to speaking clearly and concisely.

In linguistics, articulation is referred to as phonetic realization (Li & Kuang, 2022). In general, phonetics is the study of how speech sounds are produced. Phonetics reveals where speakers place an accent or stress on a word. Every word has one or more syllables, with one syllable being more empathic than the others. This syllable is denoted in phonetics by an apostrophe ('). In phonetics, rhythm refers to the speed and cadence with which you say a sentence (Temperley, 2022). Some beginning students may say each word in a sentence at the same speed, making them sound like robots. Developing different speeds and knowing when to slow down and speed up can add interest to your spoken English (Brysbaert, 2019). Meanwhile, intonation is regarded as the language's "music". Questions can be asked with a rising intonation, which raises the pitch.

Phonological awareness

According to Hu (2019), phonological awareness (PA) is fundamental for figuring out how to peruse alphabetic dialects like English. They contend that exploration has recognized a general grouping of phonological awareness improvement that is all-inclusive across dialects, and those specific qualities of communication in composed dialects impact the pace of ordinary turn of events and levels of phonological knowledge. In addition, Khasawneh & Alkhawaldeh (2020) express that phonological awareness is the capacity to perceive and control the verbally expressed pieces of sentences and words. Besides, Wade-Woolley et al (2022) state that phonological awareness is the capacity to distinguish words that rhyme, perceive similar sounding word usage, portion a sentence into words, recognize the syllables in a word, and mix and fragment beginning rhymes. Thus, this study underlines that the issue of phonological mindfulness is the acknowledgment that words have constituent sounds and constituents of a word (e.g., book) might be recognized in three ways: by syllables of /bu:k/, by onsets /b/ and rimes /u:k/ or by phonemes /b/, /u:/, /k/.

In line with language learning, phonological awareness (PA) includes a continuum of abilities that foster after some time and that is significant for perusing and spelling achievement since they are integral to figuring out how to interpret and spell printed words (Powell & Atkinson, 2021). Phonological awareness, according to Wang et al (2021), is particularly significant at the earliest phases of perusing improvement in pre-school, kindergarten, and 1st grade for ordinary perusers. Regarding reading literacy, phonological awareness alludes to worldwide familiarity with sounds in verbally expressed words, as well as the capacity to control those sounds (Milankov et al., 2021). In this way, phonological awareness alludes to oral language and phonics alludes to print. Thus, both of these abilities are vital and will generally connect in understanding the turn of events, however, they are particular abilities; youngsters can have shortcomings in one of them yet not the other.

For reading Khasawneh (2021), phonological awareness is the establishment for perusing. It is essential for reading because written words correspond to spoken words. Readers must have awareness of the speech sounds that letters and letter combinations represent to move from a printed word to a spoken word (reading), or a spoken word to a written word (spelling). It allows individuals to perceive and work with the hints of communication in the language. According to Genelza (2022), phonological awareness

incorporates: picking out words that rhyme, counting the number of syllables in a word, and noticing sound redundancy. From this perspective, according to Yopp and Yopp (2000), phonological awareness is basic expertise for all understudies' proficiency improvement and an indicator of later perusing and spelling achievement. In speaking skills, phonological awareness alludes to oral language and is the comprehension of the various ways that language can be separated into more modest parts (Layes et al., 2021). In short, phonological awareness comprises five subskills starting with the word, syllable, beginning/rime awareness and moving to the more complicated subskills of fundamental and high-level phonemic awareness.

Phonemic awareness, as per Chen et al. (2022) is the information on letter sounds and the capacity to apply that information in deciphering new printed words. Familiarity with the sounds communicated in the language is expected to learn letter-sound correspondences; mix sounds to disentangle a word; and "map" words into long-haul sight jargon (Eccles et al., 2021). However, the issues with phonological awareness have been distinguished as a significant reason for understanding troubles The statement "understudies with great phonological awareness are strategically positioned to turn out to be great perusers, while students with poor phonological awareness quite often battle in perusing" (Faizefu, 2022).

Anthony and Francis (2005) investigate the likelihood that suprasegmental phonology might commit to making sense of both the starting points of segmental phonological awareness starting perusers, yet additionally polysyllabic word perusing in additionally accomplished perusers. Krajewski and Schneider (2009) advocate that there are connections between phonological awareness and other more crucial abilities, then this recommends that phonological deficiencies are a trademark, and maybe causal, of understanding challenges. In this situation, this study believes that the beginnings of the phonological shortfall in abilities formatively go before the improvement of segmental phonological awareness. On the off chance, this study assumes that the starting points of the phonological deficiency formatively go before the improvement of segmental phonological awareness treatment, therefore, this can grow opportunities for early students. This study will apply the analysis of phonological components. Three basic components that are extracted in a principal analysis include a phoneme factor, a syllable factor, and a rhyme factor.

To look at these three components, this study analyzes two distinct circumstances between phonological awareness intervention and without mediation. The previous studies regarding phonology education were conducted by Celik (2008). The scholar uncovers the portrayal of phonology by lessening the 8 phonemes from a concentration on all out of 23 phonemes from Received Pronunciation (RP). He contends convincingly that it is fairly odd to stress the need to train students to adjust to RP. Moreover, Hamka (2016) advocates that English is separated into three circles, (1) Inner circle-primary language, (2) external circle-second client, and (3) growing circle-unfamiliar client. Meanwhile, Nurhayati (2019) demonstrates that the accomplished study involving Edmodo impacts the familiarity with learning phonology courses so the students find it more straightforward to feel the benefits (time compelling and proficiency, not neglectful about PCs, improving on learning material, intelligence, open, expressive, decreasing bamboozling task, perceiving class the board, and making understanding easier.

Based on this hypothetical and observational view of phonological awareness, one would expect the results of discourse to be derived from the method of mental phonology (basic

form) becoming phonetic realization (deriving form) of the English language, which is learned and obtained through implicit and explicit learning. With explicit learning, EFL students begin to recognize letter-sound pronunciation, figure out the phonological rules of the English language, and practice discourse. The students who are taking English discourse learning courses may feel the impact of phonological awareness when perusing and talking exercises. This means that they will perform these tasks better than those who do not have this phonological awareness.

Method

Research design

This present study applied experimental research since it attempted to investigate whether or not students' pronunciation abilities could be impacted by phonological awareness instruction. This quantitative study also examined how phonological awareness affected participants' English pronunciation. Creswell et al. (2015) state that experimental research is research used to see the relationship and affect where the treatment is applied as the independent variable and the results of the intervention are the dependent variable. Independent and dependent variables in this study are described as follows.

1. Independent variables are variables/factors that are made free and varied. The independent variable used in this study was phonological awareness intervention.
2. The dependent variable is the variable/factor that arises due to the independent variable The dependent variable used in this study was students' English pronunciation abilities.

Considering that clear identification, this study used a pretest-posttest control group design. The first group as the experimental group was given phonological awareness intervention and the second group was the control group without any intervention. In the end, both groups received a performance test (pretest-posttest). Furthermore, a pretest-posttest control group research design is figured out below.

1. $A: \rightarrow O_1 \rightarrow X \rightarrow O_2$
2. $B: \rightarrow O_1 \quad \rightarrow \quad O_2$

A is subjects that are classified as an experimental group; B is subjects that are classified as a control group; O_1 is the pretest and O_2 is post-tests, and X is phonological awareness instruction.

Population

Population, according to Sugiyono (2016), is a generalization area consisting of subjects who have certain qualities and characteristics that are determined by researchers to be investigated and then draw conclusions. The population in this study were all students of semesters 1 and 3, the English study program of a private university in Denpasar, Bali. The reason for choosing this class as a subject of the study was because the students are required to study linguistics and education. Thus, their English pronunciation and motivation in speaking are required to be investigated.

Sample

The research sample, according to Sugiyono (2016), is part of the number and characteristics possessed by the population. In this study, the samples were the students from two different classes of the English study program of a private university in Denpasar, Bali that were randomly selected. Systematic random sampling means there is a gap, or interval, between each selected unit in the sample. Of the two selected classes, one class was involved as the experimental group and the other class was taken as the control group. The experimental group consisted of 36 students and the control group had 36 students too. The experimental group received phonological awareness instruction for a few courses, while the control group received no treatment. Furthermore, the motivation for speaking English in the academic context was also investigated

Instrument

Because the two related variables used in this study contained two aspects, namely the affective aspect and the cognitive aspect, the instrument used in this study were tests and non-test or a questionnaire.

Test

The test in this study was used to measure the students' English pronunciation abilities. The type of test was a performance test. The students in two groups were required to read English text with correct phoneme articulation, appropriate stress, and proper intonation. The speech analyzer PRAAT was used to record and analyze students' reading performance. This performance test was considered valid and reliable as an instrument because it was taken directly from the book of a national education resource. Thus, the test was not retested or tried out. Reading pronunciation was assessed by three criteria: accurate phonemes stressed syllables and rhythm. As a consideration, every word referred to in the scoring rubric is weighted by 2, 1, and 0. A score of 2 is given if the pronunciation, stress, and rhythm were correct. Score 1 was given to the student's performance if the pronunciation and emphasis were correct, but the rhythm was incorrect. A score of 0 was given if all aspects of sound pronunciation were incorrect.

Non-test

The non-test used to assess students' learning motivation was the questionnaire that was adapted from previous research (Anton, 2019) and tailored to the context of the research theme. This questionnaire was in the form of a checklist. The questionnaire responses were measured by using a 0-5 Likert scale rate including Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD). There are three aspects of indicators which were developed into several indicators and 20 questions. Furthermore, the score of the respondent groups was calculated by using criteria interpretation of the score which was then modified. Meanwhile, the motivation questionnaire responses were classified as having very high, high, medium, low, or very poor motivation. The score interpretation criteria are presented in Table 1.

Table 1. Motivational interpretation criteria

Score percentage	Interpretation criteria
0% ≤ SC ≤ 20%	Very poor
20% ≤ SC ≤ 40%	Poor
40% ≤ SC ≤ 60%	Sufficient
60% ≤ SC ≤ 80%	High
80% ≤ SC ≤ 100%	Very high

Data analysis

To describe the correlation between participants' pronunciation ability before and after the instruction of phonological awareness, the performance test result and motivation questionnaire were analyzed using Pearson correlation. Furthermore, regarding the difference in participants' pronunciation skills of the two groups, an independent sample t-test was used to find out how phonological awareness impacted the participants' English pronunciation. The data were transferred to SPSS 25, statistics software. This study used parametric because the data were normally and homogeneously distributed after applying the Kolmogorov-Smirnov[a] and Shapiro-Wilk normality tests, where sig .200> p.0.05 and homogeneous test where sig .706 >p.0.05.

There are two decisions in the correlation statistical test; the comparison of the significance and the comparison of the t-count value with the t-table. Significance value is presented in ($P < 0.05$). If the significance value is higher than 0.05 (P < 0.05), English phonological awareness significantly is correlated with positive motivation or affects the participants' pronunciation. On the other hand, if the significance value is lower than 0.05 ($P>0.05$), then the intervention does not affect the participant's pronunciation; (2) the comparison of the t-count value with the t-table. If the r-count value is higher than the r-table (*rob > rcv)*, then the intervention affects participants' English pronunciation and vice versa, if the value of *rob < rcv,* then it does not affect their pronunciation.

Findings and discussion

This study classifies instruments into three types, namely instrument A, Instrument B, and Instrument C. Instrument A is an English text reading test given to two groups to measure how accurate the articulation of speech sounds is. Instrument B is a post-test given to both groups to determine the level of articulation of English sounds with or without intervention. Instrument C is a questionnaire to measure the level of motivation in speaking English. Based on this classification, the findings are chronologically divided into (1) the level of articulation of English sounds, (2) differences with and without phonological awareness, and (iii) the effect of phonological awareness on motivation to speak English.

Participants' initial English speech sound articulation

Data from instrument A describes how well students articulated each phoneme in a sequence of sound units in sentences with English stress and intonation. There are three elements of speech that are measured, namely phoneme articulation, stressed syllables, and rhythm or

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intonation. In this case, the errors are quantified to see how well they utter the English speech sound. Those speech components are displayed in simple and complex words, phrases, or sentences. The findings of English speech sound pronunciation can be displayed in Table 2.

Table 2. The distribution of participants' English pronunciation

Group	Pre-test			Post-test		
	Phonemic articulation	Stress syllable	Intonation	Phonemic articulation	Stress syllable	Intonation
Experimental						
Total	2108	2341	2240	2720	2811	3000
Mean	58.6	65.0	62.2	75.6	78.1	83.3
Category	Poor	Sufficient	Sufficient	Good	Good	Excellent
Control						
Total	2137	2321	2080	2235	2407	2310
Mean	59.4	64.5	57.8	62.1	66.9	64.2
Category	Poor	Sufficient	Poor	Sufficient	Sufficient	Sufficient

The data in Table 2 describes the ability of students from the experimental group and the control group in pronouncing simple and complex words, phrases, and sentences. In the pretest, the accuracy of pronunciation of phonemes, word stress, and intonation produced by the experimental group obtained an average score of 62.20 which was categorized as "sufficient". Meanwhile, the control group experienced serious problems with pronunciation, stress, and intonation with a mean score of 60.50 which was also categorized as "sufficient". After the phonological awareness instruction was given to the experimental group, the main score of pronunciation in the reading-aloud task was raised to 79.00 and it was categorized as "good" pronunciation. Meanwhile, the mean score of the control group, without any treatment, was 64.00 and it was categorized as "sufficient" achievement.

The mean score of participants' phonemes articulation of the experimental group was 58.6 and it was categorized as "poor". The participants in the experimental group tended to articulate voiceless and voiced fricative phonemes (/f/, /v/ into voiceless plosive phonemes /p/. Furthermore, voiceless and voiced alvio-palatal affricate /ʃ/ dan /ʤ/ become voiceless dan voiced alveolar fricative /s/ dan /ʒ/. Meanwhile, for vowel errors, participants in both groups tended to lower the vocal quality, from diphthong to monophthong in all distributions. For example. okay /əʊkeɪ/ is pronounced [oke]. This phoneme articulation error tends to be the result of the influence of the Indonesian or Balinese articulation system by both groups.

Regarding syllable stress, the data in Table 3 shows that the accuracy of word stress obtained by both groups was categorized as a "sufficient" level of stress determination. The average correct answer for the experimental group is 65.00. While the average gained in the use of syllable stress in the control group is 64.50. Both groups could not determine the exact syllable stress; whether the stress is primary or secondary stress, especially in complex words and compound words. Both groups tend to use stress on the second syllable, for example, brother /'brɒðə/ becomes [bro'ðə] or university /juni'vəsəti/ becomes ['junivəsiti]. This word stress error can lead to unclear or different meanings conveyed. This is of course due to a lack of knowledge of English phonological rules.

Considering intonation, the ability of the two groups to provide appropriate tone, tonic syllable, or intonation patterns in the form of raising and falling is still categorized as low. The experimental group's score in the intonation sentences was only 62.20, while the control group had an average score of 57.80 for the English intonation pattern. The problem faced by both groups in the intonation of words, phrases, and sentences is the determination of tonic syllables. They tend to give a tonic syllable pattern to each word. Raising intonation is at the beginning of the word and there is no tonic syllable at the end of the word so that the meaning of the reading or utterance confuses the utterance or reading. This is also due to a lack of knowledge about the intonation of sentence patterns. Therefore, the mean difference between the experiment and the control group is presented in Figure 1.
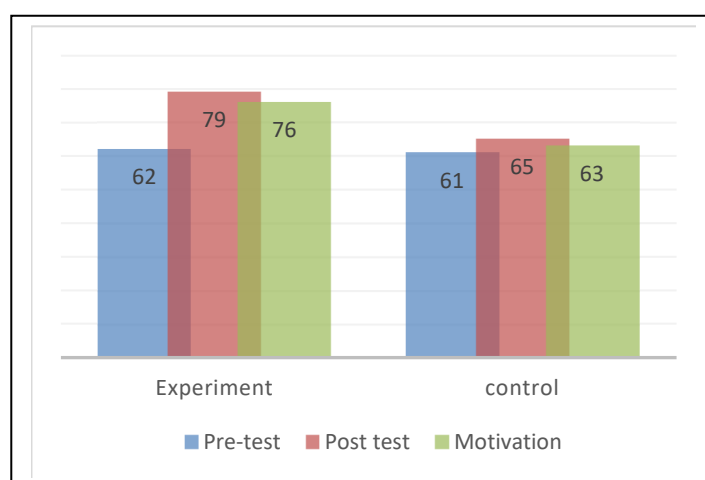

Figure 1. Mean difference between experiment and control group

Therefore, to see the difference in students' pronunciation skills, an investigation was carried out by implementing phonological awareness which includes phonetic articulation, phonological processes, stressed syllables, and intonation patterns. The implementation of the teaching took place in eight meetings. While the control group was not given any action. This experimental study was thus to find out whether there is a significant difference between the experimental and control group's pronunciation skills after the application of phonological awareness or without it, was applied. The teaching was about the quality of pronunciation, stress, and intonation of words, phrases, and sentences. For this reason, the findings of differences in phonological awareness can be presented in the following sub-findings.

Differences with and without phonological awareness

To find out the correlation between the two mean scores in the pretest and posttest achieved by two different groups, the mean of both groups in phonemes articulation, word stress, and sentence intonation were compared. The comparison of the mean scores is also to see how significant phonological awareness correlates with students' pronunciation abilities. The two compared mean scores of pre-test and post-test were analyzed using SPSS25 Pearson correlation. The difference between the pre-test and post-test before and after being given a phonological awareness approach is presented in Table 3.

Table 3. The difference in pre-test and post-test of the experimental group

	Correlations	Pre-test	Post-test
Pre-test	Pearson Correlation	1	.751**
	Sig. (2-tailed)		.000
	N	36	36
Post-Test	Pearson Correlation	.751**	1
	Sig. (2-tailed)	.000	
	N	36	36

**Correlation is significant at the 0.01 level (2-tailed).

This study indicates a significant difference between the participants' initial and final abilities in performing phoneme articulation, word stress, and sentence intonation. The phonological awareness in this study impacted participants' English speech sound significantly since the result of the linear regression correlation test in Table 3 showed that Sig 0.000 < Alpha (0.05). Taking the analysis into account, this study reveals that Ho: p = 0 (there is no correlation of phonological awareness on pronunciation) is now rejected. H1: p # 0 (there is a significant correlation of phonological awareness on participants' phonemes articulation, stress syllables, and intonation) is accepted. Furthermore, the level of significance can be seen from the significance of r, where *rob* (2.648) > *rcv* (751). From the statistical analysis, this finding indicated participants' phonological awareness had a strong and positive impact on their English pronunciation. It can be interpreted that the higher the rate of the participants' phonemes articulation, stress syllable, and intonation, the better their English pronunciation they gain. The findings advocate that phonological awareness provides a crucial contribution to students' conception of English speech sound articulation and the phonological rules.

Considering the difference between participants' knowledge with or without phonological awareness, the findings showed that the experimental group gained a much higher mean score in English pronunciation than the control group. The participants of this group performed the text reading with better phonemes articulation, more accurate stressed syllables and greater intonation than those who did not have phonological awareness. To see the evidence, the statistical difference between the experiment group and the control group is presented in Table 4.

Table 4. The difference between with and without Phonological awareness instruction

		Coefficients				
		Unstandardized Coefficients	Standardized Coefficients			Sig. (2-tailed)
	Model	F	Sig	t	df	
Post test	Equal variances assumed	7.512	.008	9.181	70	.000
	Equal variances not assumed	.896	.041	.9.181	59.904	.000

Based on statistical independent sample t-tests in Table 4, this study shows that there is a significant difference between the experimental group's ability to pronounce English after the phonological awareness intervention and the control group's participants' ability without

any intervention. This can be seen as a significant value, Sig 0.000 < Alpha (0.05), and this level of influence is categorized as strong and has a positive pattern. If the value of t count is positive: There is a significant difference if t count > t table. It can be seen from the significance of the r-value, where *rob* (9.181) > *rcv* (2.64790). This means that phonological awareness significantly provokes the participant's English pronunciation more accurately and vice versa, if the participants do not have phonological knowledge, they encounter difficulties in English articulation, word stress, and intonation.

Phonological awareness and English-speaking motivation

To find out whether or not there is an impact of participants' phonological awareness on motivation in speaking English, this study presented two comparison mechanisms, namely determining the difference between students' English pronunciation ability after or without phonological awareness intervention and their English-speaking motivation. However, to find out the level of participants' motivation is presented in Table 5.

Table 5. Level of participants' motivation

Motivation	Experiment group F/%	Control group F/%
Excellent	25/69 %	2/5%
High	8/22 %	10/28%
Sufficient	3/9%	20/56%
Poor	-	4/11%

The participants' speaking motivation with or without the phonological awareness approach in Table 5 revealed that the mean score of the speaking motivation revealed by the experiment group is 76% categorized as high because they learned phoneme articulation, syllable exchange, and sentence intonation accurately. On the other hand, participants in the control group had low motivation in speaking English because they could not articulate sounds, syllable stress, and sentence intonation. The correlation between phonological awareness and English motivation can be presented in Table 6.

Table 6. The effect of Phonological awareness on English speaking motivation

	Correlations	Phonological awareness	Motivation
Phonological awareness	Pearson Correlation	1	.498**
	Sig. (2-tailed)		.002
	N	36	36
Motivation	Pearson Correlation	.498**	1
	Sig. (2-tailed)	.002	
	N	36	36

**Correlation is significant at the 0.01 level (2-tailed).

The data in Table 6 above shows a significant difference between the motivation to speak English in the experimental group and the control group. From the table above, it can be seen that the significance value of the p-value is 0.000 (<0.05), so reject the null hypothesis

(Ho). In conclusion, there is a relationship between English pronunciation and motivation in speaking English. The magnitude of the correlation is 0.498. The level of correlation has a strong and positive pattern. That is, the participants in this study showed positive and strong motivation due to phoneme articulation, syllable stress, and appropriate intonation due to the knowledge of English phonology. On the other hand, without phonological knowledge, participants do not know how to pronounce the correct English phonemes of each utterance, where to put emphasis on words, and how to exchange the intonation. Therefore, participants have low motivation in speaking English.

The data analysis revealed two main findings that are closely and consistently related to the research objective and research questions outlined in the introduction of the study. This study found the fact that, in the initial condition, all participants of both groups had a lot of difficulties pronouncing the words, phrases, and sentences in a short text. This study supports the similar finding of Leafstedt et al. (2004) that the more complex the words and the sentences they found in the text, the longer time they took because they repeated the same words or phrases. Thus, the meaning of the text is not clear. To cover this issue, this study conducted a phonological approach intervention only for the experiment group. The participants have instructed on the concepts of English speech sound meanwhile the control group was not given any treatment. The result of the post-test showed that participants of the experiment group had much better performance in articulating English phonemes, determining stress in syllables, and intonation. Meanwhile, the counterpart, the control group, had low English pronunciation ability. Statistic evidence revealed that there was a significant correlation between English phonological awareness and English pronunciation. The level of the correlation was strong and positive. It means that those participants who had great phonological awareness performed better in phonemes articulation, stress syllables, and intonation, which directly impacted their English pronunciation.

The second finding concerned how the participant's English pronunciation provoked their speaking motivation. As stated in the first finding that participants' better phonological awareness impacted their more accurate English pronunciation, therefore the second finding revealed that the phonological awareness significantly impacted the participant's pronunciation and it directly provoked their motivation in speaking English. This occurs because of the fact that clear and accurate phonemes articulation, appropriate stress syllables, and adequate intonation bring clear meaning and intention of utterance they convey (Bruck & Genesee, 1995). Therefore, the two ways conversation may possibly take place in communication if the speech sound contains accurate pronunciation, stress, and intonation. To achieve this, Quiroga et al. (2002), in line with this finding, state that the learning motivation needs to pay more attention because it plays important role in English language learning as a foreign language.

The preview on the phonological approach towards spoken language skills in EFL provides either theoretical or empirical evidence regarding the significant impact of phoneme articulation, stress, and intonation on clear information in spoken English. These findings may change the perspective that speaking ability can be solely improved by an integrated teaching model. In fact, the linguistic pedagogy, in this case, the phonological approach, gives a significant impact on participants' English speech. This issue occurs because linguistic competence, in this case, the mental process of speech sound, should be acknowledged for better language-spoken performance (Rafkahanun, 2021). Nevertheless,

accurate English speech cannot be partially gained in the integrative teaching model because concepts stand longer than memorizing how to pronounce sentences.

Furthermore, from the affective and emotional aspect of language learning, this approach and the result provoke the participants' learning motivation in expressing ideas, information, and feeling in spoken English. Supporting the statement of Hismanoglu (2012), this study advocates that motivation is the emotional inner drive that can be encouraged if the participants are well-acknowledged. Thus, the meaning cannot be shared unless the speech sound is well articulated. The mispronunciation may result in ambiguity or even miscommunication and of course, will impact the decreasing motivation in spoken language learning.

These findings are consistent with previous studies regarding phonological awareness instruction in English foreign language learning. This study supports theoretically the finding revealed by Bassetti et al. (2020) who advocate that direct or explicit instruction of the English phonological system has to be offered in fairly non-transparent languages, so the learners may be aware that they are pronouncing words appropriately. Indeed, the finding of the present study provides evidence for a direct link between the effects of phonological awareness intervention on speech production and on learning motivation. Furthermore, related to the bilingual system in EFL learning in Indonesia, this study supports the idea of Derwing (2017) that phonological awareness entails implicit knowledge about the target language's phonological system and its structural properties at the segmental, suprasegmental and phonotactic levels. However, Venkatagiri and Levis (2007) emphasizes that EFL teachers should be able to allocate the potential competency of English speech sound exposed in the learning syllabus.

In the context of English language teaching in Indonesia, some findings related to this study tend to expose consonant articulation errors. Anggayana and Sari (2018) who focused on the pronunciation of tourism students found that the fricative consonants were mainly articulated based on their Balinese and Indonesian perceptions. As it was found in this present study, /f/ and /v/was articulated with /p/. However, they only focus on the errors of consonant articulation without investigating the impact of these errors on English pronunciation which did not only involve the articulation but also the stress and the intonation of a broader spoken context. Therefore, Arafiq et al. (2021) revealed that phonological instruction enables students to apply learning strategies to strengthen their articulation skills.

This study supports the idea that at the end of this instruction, participants had better self-confidence in producing spoken English, especially reading skills. Meanwhile, Adnyani (2021) found that the order of difficulties Indonesian learners had in producing fricative sounds (from the most to the least problematic) was: /v/, /ʃ/, /ð/, /θ/, /z/, /ʒ/, /f/, and /s/. The challenging English spelling system plays the most important influence on the students' errors. However, this study only revealed one side of so many facets of pronunciation that English phonological awareness covers. Indeed, different from the above previous findings, the findings are likely that phonological awareness impacts the participants' English pronunciation either in conversation or reading activities. In other words, this study opens the view that the EFL teachers or researchers should not only identify the students' speech errors but like these findings, more researchers are expected to use the phonological awareness approach in fixing the errors of whole elements of speech sound to encourage their accurate pronunciation and greater motivation in speaking English.

Even though the findings of this study may not cover all issues in one single study, phonological awareness is strongly believed that EFL learning as it has been revealed through recent multidisciplinary and cross-language research, entails better-spoken performance as a consensus on the successful language learning achievements. This research has identified a general sequence of phonological awareness where certain characteristics of spoken languages are very much influenced by the knowledge of speech sound as a normal development in foreign language learning.

Conclusion

Phonological awareness in ELT may acknowledge the participants' perceptions towards the systems of speech sound of the target language (L2). Along with the objective of this study, the findings revealed that participants' English phonemes articulation, stress syllables, and intonation were impacted significantly after a series of phonological awareness instructions were carried out. The strong and positive pattern of the correlation between phonological awareness and English pronunciation is evidence of how phonological awareness impacts the students' speech accuracy. Furthermore, the instruction also brings positive motivation to the participants in speaking the language because the conversation or the speech they make sounds clear and understandable. Therefore, the phonological awareness instruction in this study indicates the development of speech sound awareness in EFL as a cognitive effect on spoken language outcomes and academic emotion.

The study may not cover generalization in a single discussion due to the limited time and bigger population involved. However, this study provides wider implications on the students' phonemes articulation, proper word stress, and well-patterned intonation. It also implicates positive emotion in English conversation exposures. Instead of some uncovered scope and focus, this study explores theoretical and empirical findings to strengthen the previous finding in English speech sound, especially in university students' contexts. Therefore, further future researchers in Indonesia are suggested to examine the larger scope of phonological awareness included in the curriculum of linguistic pedagogy. From the evidence, this study advocates that English phonological awareness instruction may not only provide a positive effect on accurate pronunciation but also provokes the students' motivation in speaking English.

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