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# PHONOLOGICAL AWARENESS IN STUDENTS WITH READING DIFFICULTIES AT ELEMENTARY SCHOOL

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**Abstract:** Phonological awareness is an essential skill for children to learn to read. Most children with reading difficulties have problems with it. This article was written to describe phonological awareness skills in children with reading difficulties with a descriptive method. There were 31 students with reading difficulties were tested informally. Data analysis was carried out using descriptive techniques and tabulation will define the result of their test. The results showed that there were 25 (81%) students have problems with phonological awareness. It is indicated almost all students with reading difficulties cannot read with phonological awareness un-mastery. This theme opens up opportunities for further research on phonological awareness of language in primary schools given its importance in teaching reading in schools.

**Keywords**: Phonological awareness; reading difficulties; reading in elementary school

### INTRODUCTION

Reading is divided into two activities. Decoding activity is the first activity a person should do and, in the future, is understanding the meaning (Frankel, et al., 2016). These activities are not natural, reading skills are established by design, but the prerequisite is natural (Lyon, 1998; Akubuilo, et al., 2015). Cracking the code is the first activity that should be done when a person reads the word. To crack the code, persons should learn about the relationship between sound and symbols. These skills will happen if phonological awareness is developed first. It means that phonological awareness is an essential skill that should grow before children learn to read.

Phonological awareness is one of the skills that are a prerequisite for developing early reading skills in students (Elsaad, Ali, & El-Hamid, 2015; Paige, et al., 2018). Phonological awareness is a person able to identify phoneme sounds in the words he makes. Like human development, phonological awareness development is a learning process that should go through stimulation (Ayriza, 1997). Lestari (2018) found that the modality of phonological awareness has grown since children were three years old. Still, it does not mean that without intervention, it can guarantee that phonological awareness would be naturally developed.

The phonological awareness components are divided into three parts: the phoneme factor, the syllable factor, and the rhyme factor (Høien, Lundberg, Stanovich, & Bjaalid, 1995). The phoneme factor is a person's awareness of identifying phoneme sounds contained in a word. This awareness can be seen in determining the initial and final phonemes; phoneme manipulation of words. Syllable factors include counting syllables; identifying the beginning and ending syllables. The rhyme factor includes identifying the rhyme at the beginning and end of the comment of phonemes and syllables. These components are variants of the possible obstacles that occur in students who experience difficulties in phonological awareness.

Phonological awareness is part of language development, especially in linguistic development. Linguistic awareness of the sound uttered in saying a word is the highest awareness. Carroll et al. (2003) found that the skill of dividing expressions into phoneme segmentation was the latest development after articulation skills, awareness of syllables, and awareness of rhyme. Thus, the highest development of spoken language was the skill of breaking words into letter segmentations. Furthermore, the skill of dividing the phoneme segmentation of a word will be connected with the printed forms of the phoneme. Especially in the Indonesian language, where word formation is based on syllables, breaking words into phonemes would be challenging.

The student with reading difficulties is who can crack the print symbol into spoken language. The limitations of solving written symbols in English and Indonesian are different. In English, most words are pronounced in one breath, so that the reader must break the written symbols into phonemes. Thus, the student is said to be able to read if he has solved printed symbols in word form. However, it is different in the Indonesian language, which consists of syllables, so that the skill to decode printed symbols must start

from solving printed symbols in syllable form. With the combination of these syllables, the student can read the word later on. In Indonesia, students with early reading difficulties are characterized by problems in reading syllables and words.

It will be confusing between what is heard and the symbol represented that ideally, an ambiguous one-to-one correspondence should exist between phoneme and grapheme. Students are listening to a sound but represented in one and some letters. This concept will be difficult for the rest of the student who learns reading for the first time. It should be a time for a student to understand the principle of connection between sound and letter in Bahasa Indonesia. The student should learn how the word is shaped in the sound of the first. It is necessary to understand that the segmentation of sound will be represented by letters. All of that explanation is phonological awareness area. It will be logical that phonological awareness is connected to reading.

The student who used the Indonesian language as a first language will be checked to read syllables and words to recognize whether they can read or not. It will be a scope of problems in reading difficulties because the main idea in reading is "crack the code". A nonsense word is contributed to know that whether the student mastery reading skills (Fien, et al., 2010; Stover, 2019). Reading difficulties shown are difficulty in spelling, deleting letters, inserting letters, reversing letters, and mispronouncing letters (Masroza, 2013). Thus, the skill of dividing the sound of a word into the smallest sound can be started from syllables, rhyme and syllable onset, syllable manipulation, and syllable removal. The variety of syllables in Indonesian that form the original Bahasa Indonesia word is divided into three patterns, with one letter/V pattern, a two-letter pattern/CV, and a three-letter pattern/CVC (Alwi, et al., 2014). It could be more difficult to find phoneme sound consonants because consonants can be sounded clearly in the Indonesian language.

In other research results, it was found that students showed difficulty reading at the beginning through difficulty in recognizing letters and arranging letters into syllables and syllables into words (Lili et al., 2013). It was also found that students showed difficulty reading at the beginning through difficulty in recognizing letters and arranging letters into syllables and syllables into words (Zijlstra et al., 2020). Other than that, the findings presented by Masroza (2013) and Lili, et.al (2013) show that the process of solving written symbols in students with reading difficulties occurs in the problem of arranging letters to read. This series of letters can be in the form of a syllable or a word. Thus, the

area of early reading in the Indonesian language context lies not only in word reading skills but also in the string of words in syllables. To make sure that students have a problem in reading, they should read syllables at first. This article will be shown how phonological awareness description in students with reading difficulties.

#### **METHOD**

This research is not the purpose for generalization. This research aims to describe the phonological awareness skills of students with reading problems in seven schools. The respondent of this research was a student with early reading difficulties based on the reports of their classroom teachers. The results obtained several thirty-one students have reading difficulties said. Theirs came from grade two until grade four from seven elementary schools in East Jakarta, Indonesia. All data were collected in 2018.

To find the data, the student with reading difficulties had tested phonological awareness. The instrument of phonological awareness is informally tested. This instrument was developed by the special education department, Education Faculty, the State University of Jakarta as shown in figure 1 and 2. Data analysis is used descriptive analysis data and tabulation. There are seven indicators focused on finding data about phonological awareness in Indonesian. There are (1) counting syllables, (2) rhyme of syllables, (3) onset of syllables, (4) rhyme of phonemes, (5) onset of phonemes, (6) blending of syllables, and (7) manipulation. Each area will be some questions. Students should answer the question, and the correct answer will count and be multiplied by percent for data processing.



Figure 1. Phonological Awareness Instrument for Fonem

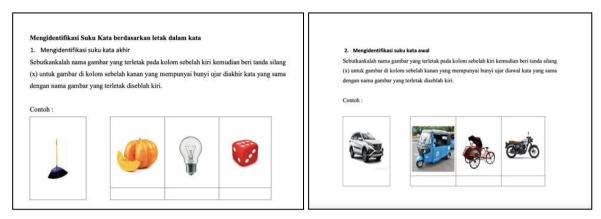


Figure 2. Phonological Awareness Instrument for Syllables

#### RESULT AND DISCUSSION

The test result showed the phonological awareness skills of the student with reading difficulties described in Table 1. The phonological awareness score limit is ninety. It was decided with consideration that all the students pass the phonological awareness age. The phonological age should be developed from four until six years old. According to it, we can find that 77% of students have difficulties in counting syllables, 87% of students have difficulties in finding the rhyme of the syllable, 87% student difficulties in onset syllable, 67% student difficulties in rhyme phoneme, 67% student difficulties in onset phoneme, 51% of students have difficulties in blending syllables, and 90% have difficulties in manipulation.

It was found that a lot of students have more difficulties recognizing syllables than those who have difficulties recognizing phonemes. This phenomenon is wired. In languages with syllable-based word-forming elements, the sound sensitivity in children is in the syllable area rather than between syllables and phonemes (Gonzalez & Gonzalez, 1993). This should also happen in Indonesian as a language where syllables form words (Laubach, 2013). This is because phonological awareness depends on the language used (Anthony & Francis, 2005). Furthermore, the development of phoneme awareness develops after syllable develops (Carroll, et al., 2003).

However, it was found that the students were more sensitive to phoneme sounds than syllable sounds (Akubuilo et al. 2015). Although it is said naturally, however, language develops in humans because of the learning process that occurs naturally from the interaction between humans and humans (Kennison, 2013). If language develops based on the results of interaction, this also occurs in phonological awareness. The learning process that develops phonological awareness becomes something that is planned (Pratiwi et al., 2018; Sumarti, 2017).

Table 1. Phonological Awareness Describe of Student with Reading Difficulties

	Grade	Phonological Awareness Skills						
Name		Counting	Rhyme Onset		Rhyme Onset of	Blending	Manipula-	
Timile	Grade	Syllables	of	of	of	Phoneme	Of	tion
			Syllables	Syllables	Phoneme		Syllables	
A	V	0	0	80	100	100	100	80
В	III	100	100	100	100	100	100	100
C	III	100	100	100	100	100	100	90
D	III	80	60	80	80	80	80	80
E	III	100	100	80	60	60	80	50
F	II	100	100	80	100	100	80	40
G	II	20	20	80	100	100	80	50
Н	II	100	60	0	40	40	100	80
I	II	60	40	60	40	40	80	50
J	III	60	80	20	20	20	100	60
K	III	0	60	0	60	60	100	70
L	II	60	80	80	60	60	100	50
M	II	60	60	60	40	40	100	100
N	II	0	0	80	80	80	100	80
O	II	100	100	80	80	80	80	80
P	II	80	80	80	80	80	80	40
Q	II	60	60	60	40	40	60	70
R	II	40	60	40	60	60	80	30
S	IV	60	40	80	80	80	100	70
T	IV	0	0	0	40	40	40	40
U	III	80	40	40	60	60	100	40
V	II	60	60	20	80	80	80	60
W	II	20	20	40	100	100	100	20
X	II	40	40	20	40	40	60	30
Y	II	100	80	40	100	100	100	70
Z	II	60	60	40	80	80	60	70
AA	II	20	60	40	100	100	100	80
AB	III	80	60	60	60	60	100	70
AC	IV	40	40	100	100	100	60	70
AD	III	60	40	40	100	100	80	80
AE	III	20	0	100	60	60	80	60

The Indonesian language is different from English. Word in the Indonesian language is shaped from syllables. Laubach (2013) found that "Romanised letters have such different pronunciation", a traditional script in Devanagari, which is used in Sanskrit, has a principle that every consonant was syllabics and every vocal was phonemic. It means that the sound of consonants will never know by a person if there were no vocal beside. It means that will be a difference between phonological awareness in English and Bahasa Indonesia perspective. Segmentation of the word to be phoneme will be challenging. Other than that, in Romans, letters will separate represent phonemes, while in the Indonesian language, the syllable is unit to the shape of the word. In one syllable, it

could be represented by one or some letters. Students can read if they can identify of syllable and connect it to letters that define it.

The Early Childhood Education Curriculum (PAUD) provides the opportunity for children to learn letters first and explicitly. The development of phonological awareness skills is not directed as an essential part to be developed before children enter the age of primary education (Kementerian Pendidikan dan Kebudayaan, 2014). The Elementary School Curriculum then provides direction that the initial reading skill that is recognized for the first time is phonemes (Kementerian Pendidikan dan Kebudayaan, 2016). Thus, it can be seen that the learning experience regarding language sounds and their relationship with written symbols is introduced through a phonemic approach.

The score in Table 1 comes from the percentage of the student answer who accepted the score describing the student's skills in phonological awareness. The phonological awareness skills score in students with reading difficulties is shown in Table 2.

Table.2 Distribution of Phonological Awareness

Score	f
0 - 25	1
0-25 $26-50$	2
51 – 75	22
76 - 100	6
N	31

It shows that three students have phonological awareness below fifty. It means that these students have severe difficulties in phonological awareness. There are twenty-two students who have serious problems in phonological awareness. Six students had mild problems with phonological awareness. All the explanations of the data show that identifying syllables is more complex than phonemes. Interestingly, the identification of phonemes should be the last of phonological awareness development. Almost of students have difficulties identifying syllables and counting syllables. It has been previously explained that the building blocks of words in Indonesian are syllables. This applies to the plains of Asia (Laubach, 2013). Of course, this condition is contrary to the learning experience that students with reading difficulties have gone through. They are allowed to learn through a phonemic approach. The question is why only students who are participants have difficulty reading with phonological awareness conditions included in needing development support.

Fröhlich, Petermann, and Metz (2013) argued that the factors affecting phonological awareness skills were intelligence and age. Phonological awareness is a skill in analyzing spoken language sounds. This skill is abstract and allows the intelligence factor to become a challenge in developing phonological awareness. However, Eissa (2013) found that the phonological awareness skills of children with developmental disabilities increased. Next, Dessemontet et al. (2017) found that the phonological awareness of children with developmental disabilities increased with age. These findings show that phonological awareness skills have not become a convincing thing to be influenced by intellectuals.

Age is one of the factors identified by Fröhlich, Petermann, and Metz (2013), which affects phonological awareness. This condition can be seen in finding the development of great vocabulary in children (Kenninson, 2013). Age development will be related to the growth of the child's physiological condition. The better the child's physiological condition grows, the more perfect the opportunity is to make the articulation of the words spoken. The growth of the child's physiology is not sufficient in developing phonological awareness skills. Language develops based on interaction with the social environment. Age development also contributes to physical development. At the age of 3-5 years, it can be seen that the physical activity of children is very high. This activity then becomes the driving force for social interaction with the closest social environment to the child.

Phonological awareness is a challenging skill to develop in children with speech sound disorders (Shakeri, Soleymani, & Kanali, 2016). Impairment conditions are the conditions that most allow obstacles to the development of children's phonological skills. However, if we look at the data on the development of children with disabilities, there should be less. There are also variants of disability conditions. Thus, a minimal condition of speech sound disorder occurs in large numbers of children.

Possible linguistic experiences in later children will contribute to the development of phonological awareness. This linguistic experience is influenced by the opportunity for children to acquire it. This acquisition follows what is suggested by Ayriza (1997), Sumarti (2017), and Pratiwi et al. (2018). In effect, this occurs when the child enters non-formal education. However, if it is observed again, the ability development curriculum for children in PAUD and the learning curriculum in elementary school does not explicitly show that phonological awareness skills are developed. The development that occurs is precisely in decoding skills with a phonological approach. Thus, the developing phonological awareness is much influenced by the phonological approach experience. The learning experience will discuss as a new predictor for phonological awareness problems in the future.

## CONCLUSION AND SUGGESTION

Phonological awareness is an important skill mastered by children before they learn to read. In reality, there is still an early reading difficulties phenomenon. Many students still recognize difficulties in syllables compared to difficulties in recognizing phonemes. However, it was found

that students were more sensitive to the sound of phonemes than syllables. This is an exciting finding that phonemic identification is more sensitive than syllable identification. It is out of belief today that syllable identification should be prudent for students. At the same time, there is a need for treatment or intervention that can overcome this problem in phonological awareness before students learn to read. For this reason, future research will open to investigate phonological awareness in teaching the Indonesian language.

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