Phonological Awareness Profiles of Early Readers: Evidence of Weak Phonemic Skills in First-Grade Students

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Abstract: This study aims to map the phonological awareness profile of first-grade students as a basis for planning early reading instruction at SDN 1 Sidorahayu. A quantitative descriptive design was employed involving 28 students in the 2025/2026 academic year selected through total sampling. Data were collected using a phonological awareness test based on Gillon's model, covering rhyme, alliteration, syllables, onset–rime, phoneme isolation, phoneme blending, phoneme segmenting, and phoneme manipulation. The 25-item instrument used a 0–3 scoring scale, and data were analyzed using descriptive statistics, including means, standard deviations, frequencies, percentages, and component-level scores. Results showed a moderate phonological awareness level (M = 1.72, SD = 0.83). Fourteen students (50.0%) were categorized as high, six (21.4%) as moderate, and eight (28.6%) as low. Syllable awareness was the strongest component (M = 3.00), whereas phoneme blending and manipulation were the weakest (M = 1.25). These findings support early screening and differentiated phonemic instruction to strengthen early reading readiness.

Abstrak: Penelitian ini bertujuan memetakan profil kesadaran fonologis murid kelas I sebagai dasar perencanaan pembelajaran membaca permulaan di SDN 1 Sidorahayu. Penelitian menggunakan pendekatan kuantitatif dengan desain deskriptif yang melibatkan 28 murid kelas I tahun ajaran 2025/2026 melalui sampling jenuh. Data dikumpulkan menggunakan tes kesadaran fonologis lisan berbasis model Gillon, yang mencakup rima, aliterasi, suku kata, onset–rime, isolasi fonem, blending fonem, segmenting fonem, dan manipulasi fonem. Instrumen terdiri atas 25 tugas dengan skala skor 0–3. Data dianalisis menggunakan statistik deskriptif berupa rerata, standar deviasi, frekuensi, persentase, dan skor setiap komponen. Hasil menunjukkan kesadaran fonologis secara keseluruhan berada pada kategori sedang (M = 1,72; SD = 0,83). Sebanyak 14 murid (50,0%) berkategori tinggi, 6 (21,4%) sedang, dan 8 (28,6%) rendah. Kesadaran suku kata menjadi komponen terkuat (M = 3,00), sedangkan blending dan manipulasi fonem merupakan komponen terlemah (M = 1,25). Temuan ini mendukung pentingnya screening dini dan pembelajaran fonemik berdiferensiasi untuk memperkuat kesiapan membaca.

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A. Introduction

Early reading is a fundamental component of elementary education because reading ability provides an essential foundation for learning across academic subjects. Difficulties that emerge during the early stages of reading development may affect students' ability to decode words, develop reading fluency, spell accurately, and subsequently comprehend written texts (Dicataldo et al., 2022; Hill & Jacobs, 2020; Rand & Morrow, 2021). The foundation established during the early years of schooling is therefore important for students' subsequent educational development. Early reading should not be understood merely as the ability to recognize letters or pronounce familiar words. Rather, it involves the gradual development of the ability to connect spoken language with written symbols, beginning with sensitivity to speech sounds, followed by sound–letter associations and the decoding of unfamiliar words (Compton-Lilly et al., 2023; Ehri, 2022; Verwimp et al., 2023). Recent empirical evidence further indicates that preliteracy skills, particularly phonological awareness and letter-related knowledge, contribute to subsequent word reading, decoding, and reading fluency (Mues et al., 2023). Consequently, understanding the foundational skills that support early reading is essential for identifying students who may require additional instructional support.

Among the foundational skills associated with early reading development, phonological awareness occupies an important position. Phonological awareness refers to the ability to consciously identify, distinguish, and manipulate sound units in spoken language, ranging from larger units such as rhyme and syllables to smaller units such as onset–rime and individual phonemes (Gillon, 2018). This ability is metalinguistic because children are required to attend to the sound structure of language rather than merely its meaning (Melogno et al., 2022; Sousa et al., 2022; Wydell, 2023). Phonological awareness is particularly relevant to reading acquisition because children need to establish connections between speech sounds and written symbols as they learn to decode words. In relatively transparent orthographies, phonological awareness also plays an important role because the systematic relationship between sounds and written symbols facilitates the development of reading skills (Milankov et al., 2021). Thus, foundational literacy instruction needs to consider not only whether students can recognize letters, but also whether they have developed the phonological skills required to analyze and process the sound structure of spoken words.

Phonological awareness develops across different levels of linguistic complexity. According to Gillon (2018), children generally encounter larger sound units before developing more sophisticated awareness of individual phonemes. Tasks involving rhyme and syllables may therefore be more accessible to beginning learners, whereas phoneme-level tasks require more precise and conscious analysis of speech sounds. This developmental progression has important implications for early reading instruction because phonological awareness should be developed systematically rather than treated as a single, undifferentiated ability. Research has shown that beginning readers may demonstrate relatively stronger performance on larger sound units while experiencing greater difficulty

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with smaller phonemic units (Gonzalez-Frey & Ehri, 2021; Susanto & Nanda, 2023; Sutfin, 2025). Intervention research also indicates that struggling beginning readers benefit from instruction combining phoneme awareness, letter–sound knowledge, decoding, and blending skills (Webber et al., 2024). Weaknesses in phonemic processing may subsequently interfere with students' ability to decode unfamiliar words, potentially resulting in slow or inaccurate reading and reliance on guessing based on visual or contextual information (De Rom & Van Reybroeck, 2024; Zipoli, 2023).

The issue is particularly important in the early grades because phonemic skills do not necessarily develop automatically through ordinary exposure to spoken language. Children may communicate effectively in everyday situations while still experiencing difficulties when they are required to identify, blend, segment, delete, add, or substitute individual phonemes (Popescu & Noiray, 2022; Quam & Creel, 2021). In classroom settings, some students may already recognize letters and read familiar syllables but struggle to identify initial sounds or combine individual phonemes into unfamiliar words. Such differences indicate that early reading readiness may vary substantially among students even within the same classroom (Jahreie, 2022). Evidence from the Indonesian context similarly suggests that phonological awareness is relevant to literacy development among first-grade students, while further investigation within Indonesian elementary school settings remains necessary (Fitri & Setyaningsih, 2025). Therefore, identifying the specific phonological components that students have mastered and those that remain underdeveloped is important for informing appropriate early reading instruction.

A component-based assessment can provide more useful instructional information than a single overall phonological awareness score. A total score may indicate whether a student has generally high or low phonological awareness, but it does not adequately reveal whether the difficulty occurs in rhyme, alliteration, syllable awareness, onset–rime, phoneme isolation, blending, segmenting, or manipulation. Recent assessment research emphasizes the importance of examining specific phonological subskills to obtain a more detailed picture of children's early literacy readiness (Kiss et al., 2024; Kiss & Csapó, 2025; Sapi'ee & Tan, 2020). Component-level information is particularly valuable for differentiated instruction because students with different profiles may require different levels and types of support. Students with substantial weaknesses may require intensive intervention, those with developing skills may require reinforcement, and those who have already mastered foundational skills may benefit from enrichment. Such an approach is consistent with the developmental progression described by Gillon (2018), in which instruction can move from larger sound units such as rhyme and syllables toward onset–rime and increasingly complex phonemic skills such as blending, segmenting, and manipulation (Gillon, 2018; Lane et al., 2025). Integrating these skills with letter–sound knowledge can further support the development of decoding abilities (Filderman & Toste, 2022; Truckenmiller & Brehmer, 2021).

The importance of such an approach is reinforced by empirical evidence showing that explicit instruction in foundational reading skills, including phonemic awareness and

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phonics, can improve early literacy outcomes among kindergarten and first-grade students (Lane et al., 2025). Preliteracy skills, including phonological awareness and letter-related knowledge, have also been associated with subsequent word reading, decoding, and reading fluency (Mues et al., 2023). These findings suggest that early reading instruction should extend beyond letter recognition and syllable reading to systematically develop students' abilities to hear, identify, combine, separate, and manipulate speech sounds. Consequently, phonological awareness assessment can function not only as a measurement activity but also as an instructional basis for determining which skills should be prioritized and which students require additional support.

Despite the growing body of research on phonological awareness and early reading, an important gap remains in the detailed profiling of phonological awareness among lower-grade elementary students. Previous studies have predominantly examined the relationship between phonological awareness and broader outcomes such as reading achievement, decoding ability, reading fluency, and spelling performance (Altamimi, 2024; Papadopoulos et al., 2020). Although these studies establish the importance of phonological awareness, they provide limited information about how individual phonological components develop within a particular group of early-grade students. Research has also indicated that students may perform relatively well on larger sound units such as syllables while experiencing difficulties with phonemic tasks such as blending and manipulation (Susanto & Nanda, 2023). However, limited evidence is available regarding detailed component-level profiles encompassing rhyme, alliteration, syllables, onset–rime, phoneme isolation, phoneme blending, phoneme segmenting, and phoneme manipulation, particularly in Indonesian lower-grade elementary classrooms. This gap is consequential because teachers require specific information about students' phonological strengths and weaknesses to design differentiated and targeted early reading instruction rather than relying solely on an overall phonological awareness score.

The novelty of this study lies in its component-based profiling of first-grade students' phonological awareness using Gillon's framework as an analytical basis for understanding early reading readiness. Rather than treating phonological awareness as a single general construct, this study examines performance across specific phonological components to identify patterns of relative strength and weakness within the same classroom. This approach provides a more precise instructional perspective by connecting assessment results with differentiated instructional priorities. In particular, the study seeks to determine whether strengths in larger sound units, such as syllable awareness, coexist with weaknesses in more advanced phonemic skills, such as blending and manipulation. The resulting profile is intended not only to describe students' current phonological abilities but also to provide an empirical basis for planning targeted and tiered early reading instruction. In this way, the study extends the practical value of phonological awareness assessment from general classification toward component-specific instructional planning.

Based on the identified research gap and the proposed component-based approach, this study addresses four research questions: (1) What is the level of phonological awareness

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among first-grade elementary students? (2) How are students distributed across low, moderate, and high phonological awareness categories? (3) Which phonological awareness components represent the strongest and weakest areas of students' performance? (4) How can the component-based phonological awareness profile be used as a basis for planning targeted early reading instruction? These questions are intended to provide a systematic description of students' phonological awareness, reveal differences in performance across students and phonological components, and translate the resulting profile into instructional priorities for supporting early reading development.

B. Method

This study employed a quantitative approach with a descriptive research design. The design was selected because the study aimed to describe students' phonological awareness profile without applying treatment or manipulating any variables (Creswell, 2009). The study was conducted at SDN 1 Sidorahayu during the 2025/2026 academic year and involved 28 first-grade students. Total sampling was used because all Grade 1 students who met the research criteria were included as participants. The inclusion criteria were students who were officially enrolled in Grade 1, were present during data collection, and completed the entire assessment procedure.

Data were collected using an individual oral phonological awareness test developed with reference to Gillon (2018) framework. The assessment covered eight components: rhyme, alliteration, syllable awareness, onset–rime, phoneme isolation, phoneme blending, phoneme segmenting, and phoneme manipulation. The instrument consisted of 25 oral tasks, with each item scored on a 0–3 scale, resulting in a total possible score of 0–75. A score of 0 indicated an incorrect or absent response, 1 indicated a partially correct or approximate response, 2 indicated a correct response after repetition of the instruction or a hesitant response, and 3 indicated a correct spontaneous response without assistance.

The content validity of the instrument was examined through expert judgment using Aiken's V (Aiken, 1980). Two experts evaluated the relevance of each item using a four-point rating scale. A minimum coefficient of 0.80 was used as the validity criterion. The results showed that all 25 items had Aiken's V coefficients ranging from 0.833 to 1.000, with an overall mean of 0.920, indicating acceptable content validity. Because the assessment involved oral responses scored using a rubric, two raters independently assessed the students' responses using the same scoring guidelines. Differences in scoring were discussed and resolved with reference to the established rubric to minimize scoring subjectivity.

The data were analyzed using descriptive statistics, including mean scores, standard deviations, frequencies, percentages, and component-level mean scores (Field, 2024). Each student's mean score was calculated by dividing the total score obtained by the number of assessment items. Students were classified into three categories based on their mean scores: low (<1.00), moderate (1.00–2.00), and high (>2.00). These criteria were derived from the 0–3 scoring rubric, in which lower scores represented weaker performance and higher scores

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represented stronger and more independent performance. The categorization was consistent with criterion-based rubric interpretation (Brookhart, 2018; Nitko & Brookhart, 2014). The analysis involved four stages: calculating individual total and mean scores, calculating mean scores for each phonological awareness component, classifying students according to the predetermined categories, and interpreting the resulting profiles to identify students' strengths and weaknesses.

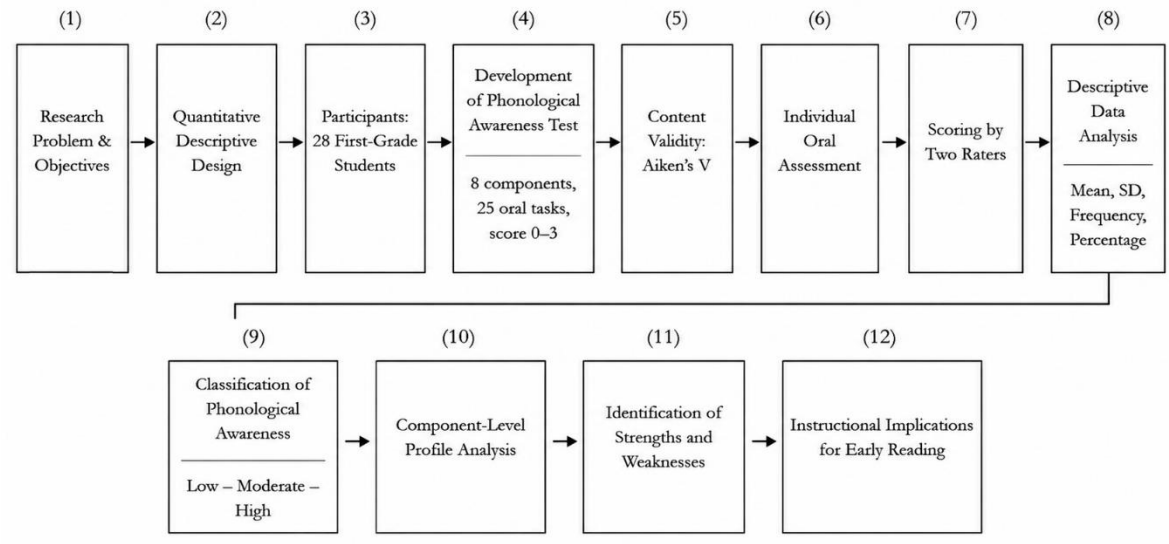

Figure 1. Research Flow of the Study

C. Result

Overall Phonological Awareness Level

The descriptive analysis involved 28 first-grade students. As presented in Table 1, the overall mean score of phonological awareness was 1.72 (SD = 0.83) on a 0–3 scale. The individual mean scores ranged from 0.52 to 2.84, while the mean total score was 42.96 out of a maximum possible score of 75. Based on the predetermined classification criteria, the overall mean score was within the moderate category. The range between the minimum and maximum scores indicates variation in students' phonological awareness performance.

Table 1. Descriptive Statistics of Students' Phonological Awareness

Statistic	Score
Number of students	28
Overall mean score	1.72
Standard deviation	0.83
Minimum mean score	0.52
Maximum mean score	2.84
Mean total score	42.96
Total score range	0–75

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Item-Level Performance

The performance of students across the 25 phonological awareness tasks is presented in Table 2. The scores varied across tasks and components. The three syllable-awareness tasks, namely *rumah*, *belajar*, and *seragam*, each obtained the maximum mean score of 3.00. In contrast, several tasks involving phoneme blending and manipulation obtained lower mean scores, each at 1.00. The complete item-level results are presented in Table 2.

Table 2. Students' Performance on Individual Phonological Awareness Tasks

No.	Component	Task	Mean Score
1	Rhyme	*kucing–pancing–bola*	2.00
2	Rhyme	*jadi–padi*	2.00
3	Alliteration	*meja–mata–topi*	1.00
4	Alliteration	Words beginning with /k/	2.00
5	Syllable awareness	*rumah*	3.00
6	Syllable awareness	*belajar*	3.00
7	Syllable awareness	*seragam*	3.00
8	Onset–rime	*baru*	1.00
9	Onset–rime	*s + api*	2.00
10	Onset–rime	*m + akan*	2.00
11	Phoneme isolation	*gajah*	2.00
12	Phoneme isolation	*pintu*	1.00
13	Phoneme isolation	*kuda*	2.00
14	Phoneme isolation	*sekolah*	2.00
15	Phoneme blending	*b-a-j-u*	2.00
16	Phoneme blending	*m-a-l-a-m*	1.00
17	Phoneme blending	*s-u-p*	1.00
18	Phoneme blending	*a-m-b-i-l*	1.00
19	Phoneme segmenting	*baju*	2.00
20	Phoneme segmenting	*kelas*	2.00
21	Phoneme segmenting	*merah*	2.00
22	Phoneme manipulation	*apel* without /a/	2.00
23	Phoneme manipulation	*makan* without /n/	1.00
24	Phoneme manipulation	*s + apa*	1.00
25	Phoneme manipulation	*batu*, replace /b/ with /s/	1.00

Note: *A score of 1 indicates a partially correct or approximate response; 2 indicates a correct response after repetition of the instruction or a hesitant response; and 3 indicates a correct spontaneous response without assistance. The task items are Indonesian words used as oral test stimuli; they are therefore kept in the original language and set in italics in the Task column.*

Component-Level Phonological Awareness Profile

The item-level scores were further aggregated to obtain the mean score for each phonological awareness component. As shown in Table 3, syllable awareness obtained the highest mean score (M = 3.00). Rhyme and phoneme segmenting each obtained a mean score of 2.00, followed by phoneme isolation (M = 1.75), onset–rime (M = 1.67), and alliteration (M = 1.50). Phoneme blending and phoneme manipulation obtained the lowest mean scores, both at 1.25.

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Table 3. Mean Scores of Phonological Awareness Components

No.	Component	Number of Items	Mean Score	Category
1	Rhyme	2	2.00	Moderate
2	Alliteration	2	1.50	Moderate
3	Syllable awareness	3	3.00	High
4	Onset–rime	3	1.67	Moderate
5	Phoneme isolation	4	1.75	Moderate
6	Phoneme blending	4	1.25	Moderate
7	Phoneme segmenting	3	2.00	Moderate
8	Phoneme manipulation	4	1.25	Moderate

The component-level results show a clear difference in mean performance across the eight assessed components. Syllable awareness represented the highest-performing component, whereas phoneme blending and phoneme manipulation represented the lowest-performing components.

Distribution of Students by Phonological Awareness Category

The distribution of students across the three phonological awareness categories is presented in Table 4. Of the 28 students, 14 students (50.0%) were classified as having high phonological awareness, 6 students (21.4%) were classified as moderate, and 8 students (28.6%) were classified as low. Thus, the high category represented the largest proportion of participants, while the moderate category represented the smallest proportion.

Table 4. Distribution of Students by Phonological Awareness Category

Category	Frequency	Percentage
Low	8	28.6%
Moderate	6	21.4%
High	14	50.0%
Total	**28**	**100%**

Table 4 presents the distribution of students according to their overall phonological awareness level. Of the 28 students assessed, 14 students (50.0%) were classified in the high category. Meanwhile, 8 students (28.6%) were classified in the low category, and 6 students (21.4%) were classified in the moderate category. Thus, the high category represented the largest proportion of students, followed by the low and moderate categories. The distribution of students across the three categories is presented visually in Figure 2.

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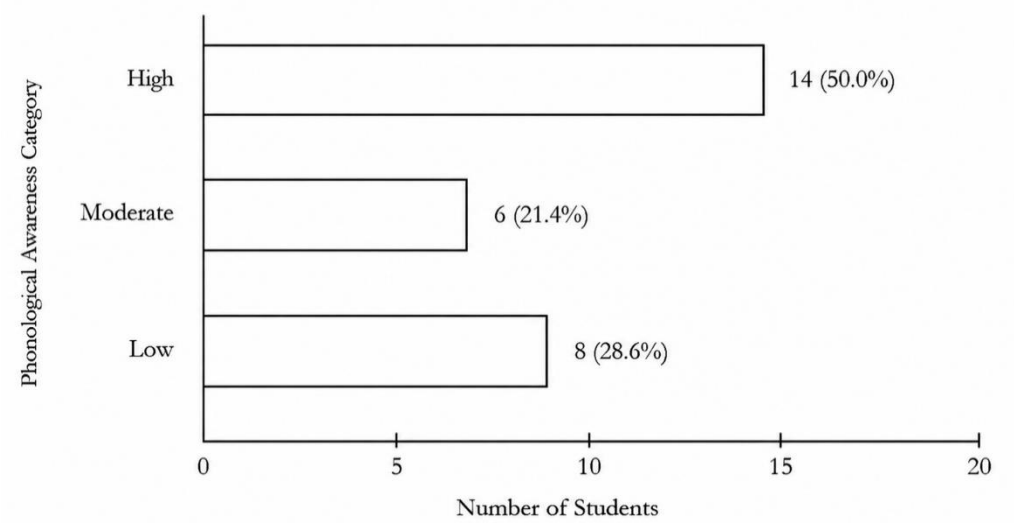

Figure 2. Distribution of Students' Phonological Awareness by Category

Individual Variation in Phonological Awareness

Individual students' mean scores ranged from 0.52 to 2.84. Fourteen students obtained mean scores above 2.00 and were classified in the high category. Six students obtained scores between 1.00 and 2.00 and were classified in the moderate category, while eight students obtained scores below 1.00 and were classified in the low category. The highest individual mean score was obtained by R13 (2.84), followed by R14 (2.76), R22 (2.68), and R20 (2.64). The lowest scores were obtained by R17 and R25, both with a mean score of 0.52.

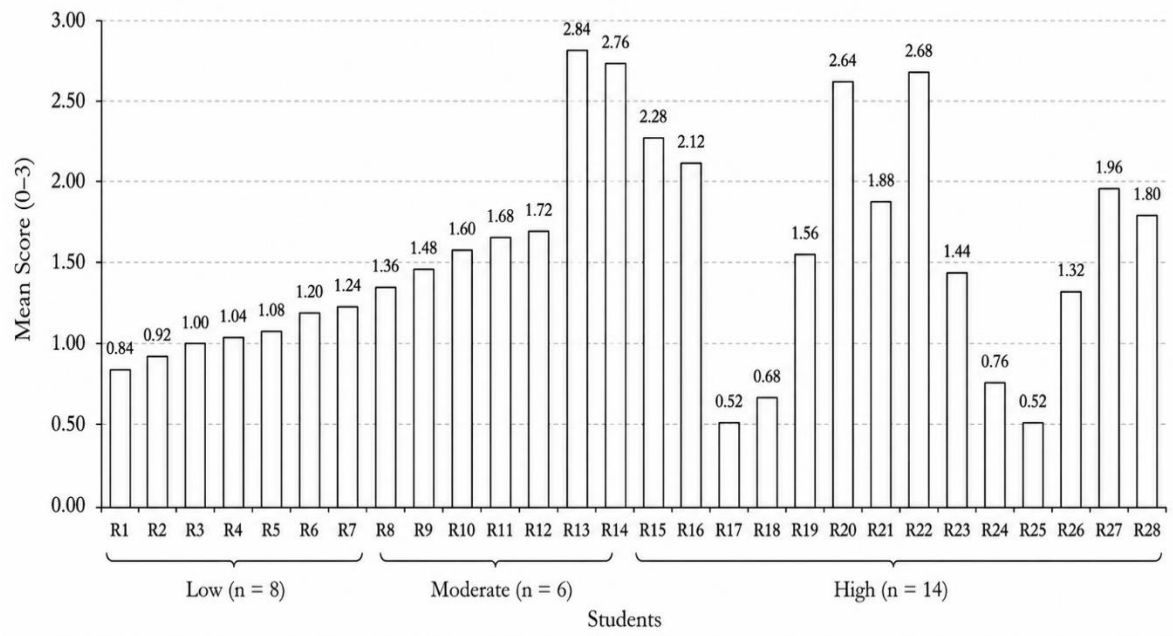

Figure 3. Individual Phonological Awareness Scores of First-Grade Students

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Overall, the results demonstrate variation in phonological awareness both among students and across the assessed components. The overall mean was 1.72, with syllable awareness showing the highest component-level performance and phoneme blending and manipulation showing the lowest. The distribution of students also demonstrated three distinct ability categories, with 14 students in the high category, 6 in the moderate category, and 8 in the low category. These findings provide the empirical basis for the interpretation and instructional implications discussed in the following section.

D. Discussion

The findings indicate that first-grade students' phonological awareness was generally at a moderate level, with an overall mean score of 1.72 (SD = 0.83). However, the individual scores ranged from 0.52 to 2.84, indicating that students did not develop phonological awareness uniformly. Some students had relatively strong phonological awareness, while others continued to experience difficulties, particularly when tasks required more specific phonemic processing. This variation can be understood through the developmental nature of phonological awareness. Gillon (2018) explains that children generally develop awareness progressively, beginning with larger sound units and gradually moving toward smaller and more complex phonemic units. Thus, the moderate overall performance may indicate that many students were still transitioning from general awareness of sound structures toward more analytical phonemic awareness. This interpretation is consistent with Incognito & Pinto (2023) and Timperley et al (2022), who emphasize individual differences in early literacy development, as well as Zijlstra et al (2021) and Graham et al (2020), who reported that weaknesses in phoneme-level skills are associated with later reading difficulties. The present study extends these findings by demonstrating that an overall moderate score can conceal substantial differences among students. Therefore, in response to the first research question, the phonological awareness of the first-grade students was generally moderate, but its development was heterogeneous across learners.

The distribution of students across the three ability categories further confirms this heterogeneity. Fourteen students (50.0%) were classified in the high category, six students (21.4%) in the moderate category, and eight students (28.6%) in the low category. Although the high category represented the largest group, the presence of nearly one-third of students in the low category indicates that a considerable proportion of learners had not yet developed adequate phonological awareness. This variation may reflect differences in students' prior literacy experiences and their exposure to phonological activities before and during early schooling. The pattern is consistent with the Response to Intervention framework, which emphasizes early identification and differentiated levels of support according to students' needs. It also supports Gillon (2018) and Suryana et al (2021), who emphasize adjusting early literacy support to students' developmental needs, and Sucena et al (2021), who highlight the value of identifying and supporting students at risk before reading difficulties become persistent. The contribution of the present study is that the

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categorical distribution is considered together with component-level performance, providing a more detailed basis for understanding why students differ in their overall phonological awareness. Thus, in response to the second research question, the students were distributed heterogeneously across the low, moderate, and high categories, demonstrating the need to recognize differences in students' levels of phonological development.

A more specific pattern emerged at the component level. Syllable awareness was the strongest component, with a mean score of 3.00, whereas phoneme blending and phoneme manipulation were the weakest, both with mean scores of 1.25. Rhyme and phoneme segmenting showed comparatively stronger performance, each obtaining a mean score of 2.00. The stronger performance in syllable awareness may be related to the greater perceptual salience of larger sound units and students' familiarity with syllable-based reading activities. Gillon (2018) describes phonological awareness as developing from larger units toward smaller phonemic units, while Vazeux et al (2020) highlight the relevance of syllable-based practices in early reading contexts. In Indonesian classrooms, children are commonly exposed to syllable patterns and the combination of syllables when learning to read, which may provide greater familiarity with syllable-level processing than with individual phonemes. This finding is also consistent with Susanto & Nanda (2023), who reported stronger performance on larger sound units alongside weaknesses in phonemic tasks. The present study extends these findings by showing that syllable awareness can be particularly strong even when other phonological components remain less developed within the same group of first-grade students. Therefore, in response to the third research question, syllable awareness was the strongest phonological component identified in this study.

In contrast, the low scores for phoneme blending and phoneme manipulation suggest greater difficulty with more complex phonemic processing. Phoneme blending requires students to retain separate sounds and combine them into a meaningful word, while manipulation requires students to delete, add, or substitute sounds while maintaining the structure of the word. These processes require more deliberate metalinguistic analysis than recognizing or processing larger sound units. The weakness may also be related to limited opportunities for explicit oral phonemic practice if early reading experiences emphasize letter naming, syllable reading, and repetition of familiar words. Such instructional experiences may support familiarity with larger sound units without sufficiently developing flexible manipulation of individual phonemes. The finding does not necessarily indicate inadequate oral language ability; rather, it points to a need for more explicit opportunities to analyze and operate on individual sounds. This interpretation is supported by Webber et al (2024), who emphasize the connection between phoneme awareness and decoding among beginning readers, and Verhoeven & Perfetti (2022), who highlight the importance of phonemic skills when children establish sound–letter mappings. It is also consistent with Lane et al (2025), who found benefits from explicit instruction in foundational reading skills, and Mues et al (2023), who reported that phonological

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awareness and letter-related knowledge contribute to later word reading, decoding, and reading fluency. The present study therefore extends previous research by identifying a specific phonological pattern in an Indonesian first-grade classroom: strong syllable awareness may coexist with relatively weak advanced phonemic skills. In response to the third research question, phoneme blending and phoneme manipulation were the weakest components.

Taken together, these findings demonstrate the value of examining phonological awareness as a set of related but distinguishable components rather than relying only on an overall score. Previous research has frequently examined phonological awareness in relation to broader outcomes such as reading achievement, decoding, fluency, or spelling (Altamimi, 2024; Papadopoulos et al., 2020). However, fewer studies have provided detailed profiles showing which specific components function as strengths and which may require additional support, particularly in lower-grade Indonesian elementary classrooms. The present study addresses this gap by applying a component-based profile based on Gillon's framework to distinguish students' performance across rhyme, alliteration, syllable awareness, onset–rime, phoneme isolation, blending, segmenting, and manipulation. The contribution is therefore not simply the identification of a moderate level of phonological awareness, but the demonstration of an uneven developmental profile in which syllable awareness is relatively established while advanced phonemic skills remain comparatively weak. This distinction provides a more informative description of early reading readiness because it identifies the specific areas that require further development.

The component-based profile also provides a basis for targeted early reading instruction. Because students differed both in their overall ability categories and in their component-level performance, the findings suggest that instructional support should be matched to students' actual profiles rather than based solely on their grade level. Students in the low category require more intensive and repeated support, students in the moderate category require reinforcement to develop consistency and automaticity, and students in the high category can receive enrichment activities to strengthen decoding readiness. At the component level, students' strength in syllable awareness can serve as an instructional entry point before instruction progresses toward onset–rime, phoneme isolation, blending, segmenting, and manipulation. This progression is consistent with Gillon (2018) developmental framework and with evidence supporting explicit and systematic phonemic instruction (Lane et al., 2025). Integrating phonemic instruction with letter–sound knowledge is further supported by Filderman & Toste (2022) and Truckenmiller & Brehmer (2021). Thus, in response to the fourth research question, the component-based phonological awareness profile can be used as a practical basis for planning targeted early reading instruction by identifying both which students require different levels of support and which phonological components should receive instructional priority. Importantly, because this study used a descriptive cross-sectional design, these findings identify patterns of phonological awareness rather than establish causal relationships between weak phonemic skills and decoding difficulties.

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E. Implication

The findings imply that early reading instruction should be data-informed, differentiated, and component-based, beginning with phonological awareness screening to identify students' specific needs. Instruction should use students' strength in syllable awareness as an entry point and progressively develop more complex phonemic skills, particularly blending, segmenting, and manipulation, while integrating sound–letter knowledge to support decoding. A tiered intervention approach is recommended, with intensive and repeated support for low-performing students, reinforcement for moderate-performing students, and enrichment for high-performing students. At the program level, teachers should be supported through early literacy training, sound-based instructional materials, and periodic progress monitoring to ensure that students' phonological development progresses appropriately (Qangule & Letuma, 2025).

F. Limitation and Suggestion for Further Research

This study is limited by its quantitative descriptive and cross-sectional design, which provides a single-time-point profile and therefore cannot establish causal relationships or examine changes in phonological awareness over time. The sample was also limited to 28 first-grade students from one class at one elementary school, restricting the generalizability of the findings to other contexts. In addition, although the oral assessment was scored by two raters, rubric-based scoring may still involve subjectivity, particularly for hesitant or partially correct responses. Future studies should therefore involve larger samples across multiple schools and regions and report inter-rater reliability coefficients more explicitly, along with additional psychometric analyses of the assessment instrument.

Future research should employ longitudinal, experimental, or quasi-experimental designs to examine the development of phonological awareness and test the effectiveness of component-based phonemic interventions. Studies could also investigate whether the pattern of strong syllable awareness and weaker phonemic skills is consistent across different Indonesian school contexts and examine its relationship with later decoding, reading fluency, and spelling. Including additional variables such as letter–sound knowledge, rapid automatized naming, home literacy exposure, and instructional quality would further provide a more comprehensive understanding of early reading development.

G. Conclusion

This study concludes that the phonological awareness of first-grade students was generally at a moderate level, with substantial variation across students and phonological components. Syllable awareness emerged as the strongest component, whereas phoneme blending and phoneme manipulation were the weakest, indicating that students were more proficient in processing larger sound units than in performing complex phonemic operations. The distribution of students across low, moderate, and high categories further demonstrates the heterogeneous nature of phonological development within the classroom.

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These findings highlight the importance of component-based phonological awareness assessment as a basis for targeted early reading instruction. In particular, instruction should build on students' existing syllable awareness while progressively strengthening phonemic skills through explicit and systematic activities, with differentiated support according to students' ability levels. Thus, the study contributes empirical evidence that mapping phonological awareness at the component level can provide a more precise foundation for planning differentiated and tiered early reading instruction, although further research with larger samples and longitudinal or intervention-based designs is needed.

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