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Implementation and Student Response to Phonics Songs for Beginning Readers: A Case Study at SD Bangkala III Makassar

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Abstract: This study aims to analyze the implementation and student response to the Phonics Reading Songs media as a preliminary trial at SD Bangkala III Makassar. This qualitative case study focuses on 15 progressive songs that emphasize phonemic awareness, ranging from letter recognition to syllable blending. Data were collected through participatory observation and in-depth interviews with classroom teachers and students. The results showed that the Phonic Song media proved to be practical and easy for teachers to implement. Affectively, first-grade students at SD Bangkala III Makassar, including those who had difficulty reading, showed positive responses, increased enthusiasm, and active involvement in learning. Cognitively, Phonics Songs function effectively as an auditory mnemonic that strengthens phonological memory and facilitates the blending of phonemes into syllables. These findings are supported by preliminary evidence of efficacy in a preschool context, indicating the suitability of this medium for early reading intervention. This case study concludes that the integration of rhythm and phonics is an effective approach to overcoming early reading difficulties. Further quantitative research is needed to measure the broader impact.

Keywords: Auditory Mnemonic, SD Bangkala III Makassar, Beginning Reader, Phonics Songs, Student Response

A. Introduction

Early reading skills are the main foundation for early childhood literacy development, where phonemic awareness plays a role as an early indicator of reading success (Blachman, 2013; Gillon, 2018). Mastering the relationship between sounds and letters is a key competency that first-grade elementary school students must master in order to develop word decoding and reading fluency. However, in the Indonesian context, reading instruction still faces various obstacles, including a lack of media that emphasizes a contextual phonics approach, a lack of rhythmic variation to strengthen phonological memory, and suboptimal integration of songs, letter recognition, and syllables in learning (Fauzan et al., 2023; Laksono & Retnaningdyah, 2018).

First-grade elementary school students who experience early reading difficulties are generally influenced by a combination of cognitive-linguistic factors and environmental context (Watson et al., 2003). Cognitively, deficits in morphological awareness, phonological awareness, letter knowledge, and rapid naming ability (RAN) have been shown to be strong predictors of decoding and reading fluency difficulties in early elementary school (Louleli et al., 2021). Limitations in the home literacy environment, unequal access to education due to socioeconomic status, and less explicit instructional quality exacerbate these risks (Buckingham et al., 2014). This condition results in reduced exposure of children to reading and writing activities and weak reinforcement of the relationship between sounds and letter symbols, which is crucial in the early stages of learning to read (Hamilton et al., 2016).

In response to these obstacles, the use of phonics songs that combine elements of rhythm, melody, and multisensory repetition offers a potential intervention pathway to improve phonological processing and letter-sound mastery. Modern empirical evidence shows that explicit phonics instruction, including variants integrated with musical or technological elements, can accelerate decoding and word recognition acquisition (Murnan & Bequette, 2025). The integration of music also aids in the internalization of prosodic patterns and structured repetition that facilitate sound automation learning (Cedeño Macías & Cantos Vélez, 2025). Research on the implementation of technology or music in literacy education shows that combining media such as songs, visuals, or movement strengthens children's engagement and enables the repeated practice necessary to transform letter recognition into automatic decoding. However, its effectiveness also depends on explicit and consistent instructional design (Bautista et al., 2024; Standley, 2008). Delayed reading in first grade can also be attributed to a lack of preschool literacy stimulation, as well as neurocognitive factors that affect the integration of sounds and symbols. A phonics-based learning approach that involves songs can activate the auditory pathway to strengthen phonemic awareness while stimulating the visual and kinesthetic systems, thereby supporting the formation of stronger phonological and orthographic representations (Huertas-Abril & Haikal, 2023).

At SD Bangkala III Makassar, data from 2025 shows that 10 out of 75 first-grade students, or about 13% of students, still have difficulty reading. This condition emphasizes the importance of multisensory, rhythmic, and enjoyable learning interventions, such as the use of phonics songs, to help children improve phonemic awareness and reduce the risk of reading difficulties in the early stages of primary education. One medium that has been proven effective in improving phoneme awareness is song-based auditory media because it utilizes rhythm and repetition to create auditory mnemonic cues, which facilitate phonics mastery (Treiman & Kessler, 2022). The Phonics Songs that are the subject of this study were developed in a structured manner from Level 1 to Level 7, covering letter recognition, syllables, consonant-vowel combinations, and numeracy literacy. This product is designed

according to the principles of repetition, musicality, and syllable integration (Moats, 2009). Therefore, this study aims to analyze in depth how Phonics Songs are implemented and how first-grade students respond to this media at SD Bangkala III Makassar, which serves as an initial trial for the product.

B. Methods

This study uses a case study that focuses on the implementation and student response to the Phonic Song media in a specific and limited environment. The case study design was chosen because the objective was not to test statistical effectiveness, but rather to gain a deep and contextually rich understanding of the implementation process and user reactions in a real classroom (Cresswell, 2017). Methodologically, this case study serves as a preliminary test of a larger research and development (R&D) product. The case selected involved 10 students who were not yet fluent readers out of a total of 75 first-grade students at SD Bangkala III Makassar. The main subjects of the study were first-grade teachers and first-grade students at SD Bangkala III Makassar. Teachers acted as key informants in interviews regarding the ease of implementation, while students were the subjects of observation and interviews to measure their affective and cognitive responses to the songs. The songs were implemented in the context of early reading lessons during a specific period, in which the teacher used 15 progressive phonics songs from Level 1A to Level 7D as the main auditory media. The songs covered Animal-like Letters, AIUEO Syllable Variations, and Numeracy Literacy, which were designed to strengthen phoneme awareness and early decoding.

Data collection using a triangulation approach to achieve strong internal validity: 1) Participatory Observation: Researchers conducted direct observations during the implementation of Phonic Songs to record the implementation, level of student participation in singing, body movements, focus of attention, and phoneme pronunciation. Data was recorded using an Implementation Observation Sheet; 2) Semi-Structured Interviews: In-depth interviews were conducted with classroom teachers to explore their perspectives on the challenges, ease of use, and perceived effectiveness of the media. Interviews were also conducted with students who initially had difficulty reading to determine their affective responses, such as interest and enjoyment, and cognitive responses, such as understanding; and 3) Content Documentation: An analysis was conducted on the lyrics of 15 Phonics Songs from Level 1A to Level 7D to describe the content implemented. This analysis emphasized how the elements of rhythm, repetition, unique acronyms, and the phonics structures of Consonant-Vowel, Consonant-Vowel-Consonant, and Vowel-Consonant (C-V, C-V-C, V-C) were embedded in the media. Initial data in the form of students' reading difficulty levels before and after were documented as descriptive evidence. This song media accommodates a total of 564 items of basic reading skills for beginners.

Qualitative data obtained from observations and interviews were analyzed using

Miles et al. (2014) thematic analysis model, through the following stages: Data Reduction, which involves sorting data relevant to implementation and student responses; Data Presentation, which involves compiling quotations and descriptions in a matrix; and Drawing Conclusions through interpreting findings and relating them to phonics and auditory learning theory. The success of the case study was measured by the strength of the description and consistency of the responses obtained through triangulation of data sources.

C. Results and Discussion

The intervention consisted of fifteen progressively structured phonics songs designed to strengthen early decoding skills in beginning readers. The songs were organized across seven levels, starting from alphabet recognition and basic phonemes, progressing to open and closed syllable patterns, and concluding with functional literacy content. Each level targeted specific phonics components through rhythmic repetition, auditory mnemonics, and structured syllable variations. To provide a concise overview of this structure, Table 1 summarizes the levels, number of songs, instructional focus, and examples of phonological skills embedded in the content.

Table 1. Description of Implemented Phonic Song Media

Level	Number of Songs	Main Focus	Example Skills/Content
1	4	Alphabet Recognition, Basic Phonemes, and Auditory Mnemonics	Building basic phonemic awareness; Overcoming visual-auditory confusion; Using acronyms such as "*dbqp dengan baca qu pintar, Ll Ii JL Lupa-lupa Ingat-ingat Jangan Lupa, nu wm ae niat usaha waktu, mari ayo eee*" for similar letters.
2	3	Transition to Open Consonant-Vowel (C-V)	Bridging single phonemes with the formation of basic C-V syllables; Teaching upper/lower case letters; Introducing consonant-vowel combinations (e.g., Ba/Da/Fa/Ga/Ha)
3	1	Strengthening and Automation of Open Syllables (C-V)	Consolidation and rhythmic repetition of C-V syllable variations (e.g., Ba, Bi, Bu, Be, Bo, up to Za, Zi, Zu, Ze, Zo) to achieve reading automation.
4	1	Mastery of Closed Syllables (C-V-C)	Increasing decoding complexity; Combining three phonemes (e.g., Bab, Bib, Bub, Beb, Bob) to reduce the cognitive load on phoneme fusion.
5	1	Mastery of Closed Syllables (V-C)	Complete the mastery of closed syllables with the V-C pattern (e.g., Ab, Ib, Ub, Eb, Ob) to practice decoding words that begin with a vowel.
6	2	Complex Phonemes and Syllable Variation	Preparation for decoding long words/loanwords; Introduction to diphthongs (Au, Ai) and consonant clusters (Tra, Kla, Spla) to improve phonological flexibility.
7	4	Functional and Contextual Literacy	Bridging decoding with contextual understanding; Using phonics to teach Days, Months, Punctuation, and Numeracy Literacy

Findings from participatory observation and in-depth interviews at SD Bangkala III

Makassar were grouped into several main themes focusing on implementation, affective response, and initial cognitive impact.

Practicality and Ease of Implementation by Teachers

Teachers reported that the phonics songs were highly practical and easy to integrate into daily instruction. The songs fit naturally into short 10 to 15 minute sessions, allowing teachers to incorporate them without disrupting the main learning schedule. Implementation was also straightforward, as teachers simply needed to play the songs repeatedly while guiding students through listening and responding. Despite the simplicity of delivery, the media contained a high density of phonological content, consisting of 564 phonological items that aligned with active Indonesian syllables. This strengthened curricular relevance and ensured meaningful exposure. Overall, the implementation ran smoothly without technical difficulties. Teachers agreed that the phonics songs were efficient and user-friendly.

Increased Student Engagement and Motivation (Affective Response)

Students showed strong affective engagement throughout the intervention. Even those who struggled with early reading participated actively in singing and imitating phonemes, indicating that the songs created a low-pressure and enjoyable learning environment. The rhythmic and musical nature of the media enhanced students' willingness to attempt difficult decoding tasks, particularly in Levels 4 (C–V–C) and 5 (V–C), where they typically experienced the most difficulty. The intervention also catered well to diverse learning styles, especially auditory and kinesthetic learners, who benefitted from the multisensory cues embedded in the songs. This heightened engagement contributed significantly to the success of the reading activities.

Cognitive Benefits in Phoneme Mastery and Syllable Blending

The phonics songs functioned effectively as auditory mnemonic tools that provided strong cognitive support for beginning readers. At Level 1, the acronyms and lyrics such as "dengan baca qu pintar, Lupa-lupa Ingat-ingat Jangan Lupa, niat usaha waktu, mari ayo eee" helped students recall letter sounds that are frequently confused, including d, b, q, p, Ll, Ii, Jl, and n, u, w, m. These auditory cues proved more reliable than visual memory alone. At Levels 2 and 3, rhythmic repetition of patterns such as Ba, Ca, Da, Fa, Ga, Ha and Ba, Bi, Bu, Be, Bo enabled students to achieve phonemic blending, allowing them to combine sounds without reverting to letter-name spelling. This significantly accelerated early decoding skills. At Levels 4 and 5, the rhythmic structure of the C-V-C and V-C patterns supported students in maintaining three phonemes simultaneously in working memory, reducing common errors such as dropping the final phoneme when blending, as seen when b a b or a b are read simply as "ba." At Level 6, auditory reinforcement also helped students

pronounce diphthongs like Au and Ai and consonant clusters such as Tr and Kl more accurately. Overall, these findings indicate that the phonics songs played a vital role in strengthening phonological processing through auditory memory mechanisms.

Bridging Decoding to Functional Literacy

Beyond phoneme-level decoding, the Level 7 songs successfully connected phonics instruction to functional literacy. Students were able to internalize real-world knowledge such as the names and sequences of Days and Months, basic punctuation use, and simple numeracy concepts through song-based learning. This integration demonstrated how phonics mastery can extend into broader comprehension skills, supporting early literacy across subjects. The combination of decoding practice with contextual knowledge helped strengthen both linguistic and cognitive aspects of reading development.

Challenges and Recommendations for Multisensory Integration

Although implementation was generally smooth, teachers identified several areas for improvement. They suggested adding consistent kinesthetic movement cues and visual aids, particularly for letters that look similar, to reinforce multisensory learning. Teachers also recommended adjusting the tempo and rhythm of some songs to ensure that they better match the developmental needs and attention span of first-grade students. These suggestions highlight the importance of combining visual, auditory, and kinesthetic modalities to optimize early literacy instruction.

Discussion

Phonics Songs as Auditory Mnemonics for Strengthening Phonological Memory

One of the strongest findings in this study is the powerful auditory mnemonic function of the Phonics Songs, particularly in helping students distinguish visually similar letters. Many students initially struggled with letters such as d, b, q, p, Ll, Ii, Jl, n, u, w, and m. After repeated exposure to Level 1 songs, their accuracy improved significantly. This improvement occurred because students relied less on visual memorization, which is often confusing for early readers, and instead gained an additional mnemonic pathway through rhythmic and melodic patterns.

Mnemonic phrases such as “dengan baca qu pintar,” “Lupa-lupa Ingat-ingat Jangan Lupa,” and “niat usaha waktu, mari ayo eee” acted as stable auditory anchors. These predictable patterns helped secure letter–sound associations in long-term memory. Observational data also showed that the auditory cues embedded in the Level 1 songs were particularly effective in helping students retrieve the correct sounds of commonly confused letters. This aligns with Latifah et al. (2024), who found that

phonics-based songs significantly support early literacy development and improve word recognition among young learners by providing an alternative memory pathway for children who struggle with early decoding. This pattern is supported by Knott & Thaut (2018), who found that musical mnemonics significantly increase verbal memory retention in children. Treiman & Kessler (2022) likewise argue that repeated auditory pairing between graphemes and phonemes accelerates alphabetic recognition. Louleli et al. (2021) further explain that auditory cues compensate for working memory limitations and rapid naming difficulties. In the present study, several students who initially had difficulty with visual discrimination showed rapid improvement once auditory scaffolding was introduced.

The Role of Rhythm in Supporting Phonemic Blending and Speech Segmentation

Rhythm played a crucial role in helping students blend phonemes into syllables. In Levels 2 through 5, students learned to combine sounds into C–V, extended C–V, C–V–C, and V–C patterns. Observational data show that the predictable timing and structured repetition in the songs helped students achieve automatic blending without relying on letter naming. Holcombe (2000) found that singing accelerates phonemic blending, particularly when rhythm provides strong timing cues. The pattern observed in this study supports this claim. Students who initially omitted final phonemes, such as turning b-a-b into "ba" began to articulate complete syllables more accurately after practicing with the songs. Neuroscientific findings further support the connection between rhythm and phonological processing. Fiveash et al. (2021) explain that the neural pathways used for rhythmic processing in music overlap with those used in speech segmentation. When students sang syllable patterns rhythmically, they were engaging brain systems that optimize temporal prediction and phonological coding. Bonacina et al. (2021) add that rhythm synchronization predicts phonological awareness and short-term memory, both of which are essential for decoding. The improvements seen in Level 4 and 5 therefore reflect not just behavioral change but underlying cognitive strengthening.

Cognitive Load Reduction and Working Memory Support

Several early-reading difficulties observed before implementation were linked to limitations in working memory. The rhythmic scaffolding embedded in Level 4 and 5 songs helped reduce cognitive load by providing temporal structure for sequencing sounds. Without musical support, young readers often lost the final phoneme or blended the syllable incorrectly because they could not hold all sounds in working memory simultaneously.

The song rhythms stabilized phoneme retention. Students were able to sustain multiple sounds long enough to articulate the complete syllable. Standley (2008) argues that structured musical patterns reduce cognitive load in language tasks by

providing predictable pacing. This is consistent with the present study, where rhythm functioned as an external organizer for phonological information. Moreover, the predictability of the rhythmic pattern allowed students to develop temporal expectations about when each sound would occur. This reduced the processing burden and facilitated more automatic blending. Students who initially avoided complex syllables became more confident and consistent in their pronunciation once rhythmic support was introduced.

Population-level evidence further underscores the importance of reducing cognitive and phonological load. Tomblin & Nippold (2014) report that approximately 13 percent of early elementary school children are classified as poor readers, largely due to deficits in phonological processing. This prevalence highlights the need for interventions that strengthen phonological access through structured auditory support. The positive results in this study therefore indicate that rhythm-based Phonics Songs may serve not only as a general instructional tool but also as a preventive and remedial strategy for children who are at risk of phonological-processing difficulties.

Motivation as a Pedagogical Catalyst for Struggling Readers

Across all levels, Phonics Songs increased student motivation, which played a crucial pedagogical role. Students who initially displayed low confidence in reading were more eager to participate when the learning was presented through music. Singing created a low-pressure, enjoyable classroom environment that encouraged experimentation with sounds. Motivation is not merely an emotional response; it drives cognitive engagement. Nurmuzib et al. (2025) demonstrated that song-based phonetic learning increases motivation and fosters positive attitudes toward reading tasks. The present findings support this conclusion. Students frequently requested to repeat songs, showing internal motivation to practice. This emotional engagement contributed to sustained attention, repetition, and increased willingness to attempt more complex decoding tasks. Motivation was especially important for struggling readers, who often hesitate when confronted with C–V–C or V–C patterns. The songs gave them a safe, rhythmic structure that reduced anxiety and encouraged persistence. In this sense, motivation functioned as a catalyst that amplified the cognitive benefits of the intervention.

Bridging Decoding to Functional Literacy Through Contextual Integration and Developmental Continuity

Level 7 songs played a crucial role in connecting foundational phonics skills to functional literacy. Students learned not only syllables but also contextual knowledge such as Days of the Week, Months, punctuation, and numeracy vocabulary. This indicates that Phonics Songs support comprehension by situating phonics within

meaningful, real-world contexts. This finding aligns with Hamilton et al. (2016) and Murnan & Bequette (2025), who argue that contextualized literacy tasks strengthen comprehension and long-term retention. Students demonstrated not only improved decoding but also improved recall of functional content, especially in their understanding of sentence structure and prosodic cues introduced through the Punctuation Song. This suggests that the intervention is capable of supporting early comprehension, not merely basic phoneme awareness.

Importantly, the results show strong developmental continuity with earlier preschool trials of the same song framework. Preschoolers previously exposed to these songs showed gains in phonemic awareness and reading readiness. The replication of these outcomes among first graders strengthens the internal validity of the intervention. Research by Moats (2009) and Bonacina et al. (2021) indicates that structured auditory repetition is developmentally appropriate for young learners because it reinforces phonological pathways across age levels.

The developmental continuity of the product is further supported by its broad phonological coverage. The 15 songs contain more than 490 syllable patterns, a range that closely matches the 690 active syllables identified in spoken Indonesian by Widianto et al. (2021). This extensive syllabic coverage ensures that the media exposes students to a substantial portion of the Indonesian phonological system, thereby strengthening the internal validity of the product even before classroom implementation. The breadth of syllable representation also explains why the intervention functioned effectively across both preschool and early-grade learners, offering systematic exposure to the core syllable structures of the language.

Remaining Challenges and Need for Multisensory Integration

Although the auditory and rhythmic components were effective, the findings reveal a need to enhance multisensory elements. Teachers recommended adding more consistent visual aids for commonly confused letters and incorporating kinesthetic movements to support students with motor-based learning preferences. These suggestions align with multisensory reading frameworks such as Orton-Gillingham, which emphasize integrating visual, auditory, and kinesthetic modalities. Teachers also suggested adjusting tempo and rhythm to match developmental needs. Standley (2008) highlights that the effectiveness of musical interventions depends on age-appropriate pacing, which supports these recommendations. Overall, these insights indicate that future versions of the media should expand toward a more complete multisensory phonics model. Strengthening kinesthetic and visual elements would enhance accessibility and deepen learning for a wider range of learners.

D. Conclusions

Based on a qualitative case study analysis of the implementation of the Phonics Song for Early Reading at SD Bangkala III Makassar, several key conclusions were drawn:

1. Implementation and Product Quality: The Phonics Song, developed from Level 1A to Level 7D, proved to be practical and easy to implement by teachers in first grade. The progressive structure of the songs and their focus on phoneme awareness, starting from letters, open syllables, to closed syllables, are in line with the principles of phonics-based early reading.
2. Student Affective Response: First-grade students at SD Bangkala III Makassar showed positive affective responses and motivation toward the Phonics Song media. The rhythm, repetition, and contextual lyrics successfully increased engagement, focus, and enthusiasm for learning, including among the group of students who experienced early reading difficulties, which was around 13% of the sample cases.
3. Early Cognitive Impact: Phonics Songs function effectively as auditory mnemonics, helping students master phonemes, distinguish similar letters, and transition from phonemes to syllable blending. This response is supported by consistent findings from preliminary trials on six preschool-aged children.
4. Intervention Implications: This medium shows potential as an intervention tool for students who are behind in early reading skills, providing a fun approach and reducing the cognitive load of reading simple words.

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