



# The Sound of Learning: Teachers' Perceptions on the Impact of Music and Rhymes on Kindergarten Pupils' Engagement

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## ABSTRACT

Music and rhymes are widely recognized as effective pedagogical tools for enhancing pupil engagement in early childhood classrooms. This study employed a descriptive-comparative survey design to examine differences in kindergarten teachers' perceptions of the influence of music and rhymes on pupils' classroom engagement when grouped according to age, length of teaching experience, gender, school type, and school size. A total of thirty ( $N = 30$ ) kindergarten teachers participated in the study. The majority of respondents were from public schools (90%,  $n = 27$ ), while 10% ( $n = 3$ ) were from private schools. In terms of teaching experience, 30% ( $n = 9$ ) had 10 years of experience, 23% ( $n = 7$ ) had 15 years, 20% ( $n = 6$ ) had 20 years, 17% ( $n = 5$ ) had 5 years, and 10% ( $n = 3$ ) had 25 years. Regarding school size, 53% ( $n = 16$ ) taught in large schools and 47% ( $n = 14$ ) in small schools. Results indicated that teachers rated the influence of music and rhymes on pupils' classroom engagement as very high ( $M = 4.41$ ,  $SD = 0.45$ ). Inferential analysis revealed a statistically significant difference in perceptions when respondents were grouped according to teaching experience ( $p = 0.05$ ). However, no statistically significant differences were found based on school type ( $p = 0.20$ ) or school size ( $p = 0.886$ ). These findings underscore the pedagogical value of integrating music and rhymes in early childhood education and suggest that teaching experience plays a significant role in shaping teachers' perceptions of their effectiveness in promoting pupil engagement.

**Keywords:** Education; Music and Rhymes; Descriptive-Comparative survey; Agusan del Sur; Philippines

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## Introduction

In both literacy and numeracy, using music and rhymes as instructional tools can significantly enhance preschoolers' knowledge, skills, behaviors, and dispositions. This premise suggests that, when effectively implemented by kindergarten teachers, music and rhymes may contribute to learners' cognitive, affective, and psychomotor development.

In 2016, Hunter conducted a qualitative study to examine the effects of music on reading among preschool children. Involving 13 kindergarten pupils, the study found that students' phonological awareness, alphabet knowledge, and concepts of print improved after a six-week intervention. During this period, children were frequently exposed to nursery rhymes and received instruction on speech-to-text matching, rhyming, initial sounds, syllables, and segmenting through shared reading, small group, and individual sessions. Results indicated an average growth of 15% in alphabet

knowledge, 21% in phonological awareness, and 28% in print concept development (Hunter, 2016).

In the same manner, Otchere-Larbi and Amoah (2020) conducted a quantitative study to determine the impact of rhymes and songs on numeracy instruction. Their study involved 30 female kindergarten teachers from 10 schools in two municipalities in the Eastern Region of Ghana. Findings revealed that approximately 70% of the teachers integrated rhymes and songs into all aspects of numeracy lesson delivery, which produced a positive impact on children's numeracy learning outcomes.

In the Philippines, Sagge and Palomo (2014) investigated the effects of music on the achievement, habits of mind, and dispositions of 12 junior high school students as a basis for developing a music-enhanced mathematics program. Employing a quasi-experimental multiple-group design, the researchers observed that background music positively affected students' mathematics scores, underscoring its potential as an instructional tool.

Collectively, these studies—employing both qualitative and quantitative approaches—demonstrate that music and rhymes can positively influence learners’ development across different contexts. However, research in the local setting, particularly in the province of Agusan del Sur, remains limited. Few, if any, studies have examined music and rhymes as strategies for developing learners’ knowledge, skills, behaviors, and dispositions. This research gap prompted the present study, which aims to investigate kindergarten teachers’ perceptions of the influence of music and rhymes on pupils’ classroom engagement and learning.

**Methods**

**Research Design**

This study employed a descriptive-comparative survey design to examine kindergarten teachers’ perceived influence of music and rhymes on pupils’ engagement in classroom learning activities. The descriptive component provided a systematic portrayal of teachers’ perceptions, while the comparative component enabled the analysis of potential differences across groups defined by age, teaching experience, gender, and type of school (Creswell & Creswell, 2018; Fraenkel et al., 2012). This design allowed for both a comprehensive understanding of the phenomenon and the identification of statistically significant distinctions relevant to pedagogical practice.

The comparative aspect is particularly suited to exploring how teacher characteristics influence perceptions, while the descriptive element ensures that the findings reflect prevailing practices in early childhood classrooms. Collectively, this design supports generalization to a broader population of kindergarten teachers and provides empirical evidence to inform educational policy and teacher development initiatives (Check & Schutt, 2012).

**Research Respondents and Sampling**

The study targeted all kindergarten teachers actively employed in public and private elementary schools in Bunawan, Agusan del Sur, Philippines, ensuring a broad understanding of teacher perceptions across diverse educational settings. A purposive sampling technique was used to select respondents who met specific criteria: possession of a Bachelor of Elementary Education degree (or equivalent), active service as a lead or assistant kindergarten teacher, and employment in a recognized public or private elementary school (Etikan & Bala, 2017; Patton, 2015). This approach ensured that participants were qualified to provide informed insights into the influence of music and rhymes on pupil engagement, enhancing the credibility and validity of the findings (Robinson, 2014).

**Research Instrument**

Data were collected using a researcher-designed questionnaire anchored in Piaget’s Theory of Cognitive Development (Lourenço, 2012) and informed by literature on early childhood education, music pedagogy, and pupil engagement (Welch & Adams, 2020; Zosh et al., 2017). The instrument consisted of two parts: Part I captured demographic and professional information, while Part II measured teachers’ perceptions of the influence of music and rhymes using a five-point Likert scale (1 = Very Low, 5 = Very High) developed by Likert (1932). Verbal interpretations of mean scores were determined using the equal-interval method (Boone & Boone, 2012; Vagias, 2006), ensuring consistent and statistically sound interpretation of the responses.

To establish reliability and validity, a pilot test was conducted with 30 kindergarten teachers who were not part of the main study. Expert validation was then performed by two faculty members specializing in educational statistics and measurement, who assessed clarity, language appropriateness, content relevance, and structural coherence (Haynes et al., 2017; O’Dwyer & Bernauer, 2014). Feedback from this process was incorporated to refine the instrument prior to full administration.

**Likert Scale on the Perceptions on the Impact of Music and Rhymes on Kindergarten Pupils’ Engagement**

Rate	Range of Means	Descriptive Level	Interpretation
5	4.20-5.00	Very High	This means that the items relating to influence of music and rhymes on learners’ engagement in classroom learning activities are always observed.
4	3.40-4.19	High	This means that the items relating to influence of music and rhymes on learners’ engagement in classroom learning activities are oftentimes observed.
3	2.60-3.39	Moderate	This means that the items relating to influence of music and rhymes on learners’ engagement in classroom learning activities are sometimes observed.
2	1.80-2.59	Low	This means that the items relating to influence of music and rhymes on learners’ engagement in classroom learning activities are seldom observed.
1	1.00-1.79	Very Low	This means that the items relating to influence of music and rhymes on learners’ engagement in classroom learning activities are never observed.

**Data Gathering Procedure**

Before data collection, the study secured ethical and administrative approvals, including clearance from the Dean of the College of Teacher Education, following endorsement by the thesis adviser, and formal permission from the heads of the identified public and private elementary schools. These steps ensured compliance with institutional and academic research standards and facilitated collaboration with school authorities (Creswell & Creswell, 2018; Mertens, 2019).

Upon approval, questionnaires were personally distributed to the selected kindergarten teachers. The purpose and objectives of the study were clearly explained, and participation was strictly voluntary, with respondents informed of their right to withdraw at any time. Anonymity and confidentiality were emphasized in accordance with ethical research guidelines (APA, 2020; Orb et al., 2000). Respondents were given adequate time to provide thoughtful and accurate responses. Completed questionnaires were systematically collated, coded, and tabulated to ensure data integrity and reliability before analysis (Field, 2018).

### Statistical Treatment of Data

Data were analyzed using IBM SPSS Statistics (Version 28.0), employing both descriptive and inferential techniques, with a significance level of  $p \leq 0.05$  (Field, 2018; Pallant, 2020). Descriptive statistics, including frequencies, percentages, and weighted means, summarized respondents' demographic and professional profiles and quantified teachers' perceived influence of music and rhymes on pupil engagement (Gravetter & Wallnau, 2017).

Normality of the data was assessed using the Shapiro-Wilk test. Given the ordinal nature of perception data and potential non-normal distribution, nonparametric tests were applied: the Kruskal-Wallis H test for comparisons across three or more groups of teaching experience, and the Mann-Whitney U test for comparisons between two independent groups, such as school type and school size. These tests are robust alternatives to parametric tests for ordinal data and are widely used in educational research (Corder & Foreman, 2014; Salkind & Frey, 2020). Differences with  $p$ -values  $\leq 0.05$  were considered statistically significant, indicating a low probability of results occurring by chance.

### Results and Discussion

Most of the respondents were employed in public elementary schools (90%), while 10% were affiliated with private schools, reflecting the predominance of public institutions in the local educational system (Table 1). Regarding teaching experience, the largest proportion of respondents (30%) had approximately 10 years of service, representing a substantial group of mid-career educators, whereas only 10% reported 25

years or more of experience, indicating a smaller representation of highly seasoned teachers (Table 1).

With respect to school size, 53% of respondents were assigned to large schools, and 47% taught in small schools. For this study, school size was defined based on total pupil enrollment, with large schools having more than 500 pupils and small schools having 500 or fewer pupils. Although school size was not a significant differentiating variable in subsequent analyses, this distribution demonstrates that the sample encompassed a range of institutional contexts and classroom environments. Overall, the respondents' profile reflects a heterogeneous group of kindergarten teachers, providing a relevant context for interpreting perceptions of the influence of music and rhymes on pupil engagement.

Table 1: *Profile of Kindergarten Teacher Respondents by School Type, Teaching Experience, and School Size (n = 30)*

	Frequency	Percentage
<b>Type of School Employed</b>		
Private	3	10%
Public	27	90%
<b>Total</b>	<b>30</b>	<b>100%</b>
<b>Length of Teaching Experience</b>		
A (1-5 years)	5	17%
B (6-10 years)	9	30%
C (11-15 years)	7	23%
D (16-20 years)	6	20%
E (25 years above)	3	10%
<b>Total</b>	<b>30</b>	<b>100%</b>
<b>School Size Classification</b>		
Big	16	53%
Small	14	47%
<b>Total</b>	<b>30</b>	<b>100%</b>

### *Perceived Influence of Music and Rhymes on Preschoolers' Classroom Engagement*

The perceived influence of music and rhymes on pupils' engagement in classroom activities was rated Very High ( $M = 4.41$ ,  $SD = 0.45$ ) (Table 2), indicating that these strategies are consistently used to motivate and encourage active pupil participation. This finding aligns with Piaget's theory of cognitive development, which emphasizes active learning and the central role of sensory experiences in knowledge construction. Children in the preoperational and concrete operational stages learn most effectively through direct engagement and multisensory experiences. Music and rhymes provide such experiences by combining repetition, rhythm, movement, and symbolic representation, enabling children to assimilate new concepts while refining existing cognitive structures. Activities such as counting songs, clapping, and dancing foster deeper information processing, memory retention,

and meaningful cognitive connections while promoting motivation and emotional engagement (Piaget, 1977).

These results are further supported by research highlighting the pedagogical value of music and rhymes. Music enhances attention, engagement, and intrinsic motivation in early learners (Maroye & Uhrmacher, 2019; Binkiewicz, 2016) and functions as a mnemonic tool for memory retention (Register, 2018; Sansone, 2017). In language development, rhymes improve phonological awareness and vocabulary acquisition (Bryant et al., 1989; Goswami & Ziegler, 2006), while in mathematics, songs and rhymes facilitate understanding of counting, sequencing, patterns, and basic operations. Overall, the very high perceived influence of music and rhymes reflects a deliberate and effective instructional strategy that capitalizes on children's natural propensity for active, sensory-driven learning, fostering both cognitive growth and positive emotional connections to classroom experiences.

**Table 2: Teachers' Perceived Influence of Music and Rhymes on Kindergarten Pupils' Classroom Engagement (n = 30)**

Indicator	Mean	Standard Deviation	Descriptive Interpretation	Meaning
Music and Rhymes on Preschoolers' Engagement	4.41	0.45	Very High	Always Observed
Used rhymes and music as strategy to teach English	4.41	0.45	Very High	Always Observed
Used music and rhymes to introduce numbers	4.41	0.45	Very High	Always Observed
Used music and rhymes to encourage the pupils in participating classroom activities	4.41	0.45	Very High	Always Observed
Used rhymes and music to stimulate pupils to pay attention during class	4.41	0.45	Very High	Always Observed
Used music and rhymes to motivate and interact with the pupils	4.41	0.45	Very High	Always Observed
Used music to inspired pupils to do their activities	4.41	0.45	Very High	Always Observed

### Significant Difference in Perceived Influence of Music and Rhymes on Pupils' Classroom Engagement

When disaggregated by teacher profile, the analysis revealed that the length of teaching experience significantly influenced perceptions of the effectiveness of music and rhymes on pupil engagement ( $p = 0.05$ ), whereas school type ( $p = 0.20$ ) and school size ( $p = 0.886$ ) showed no significant differences (Table 3). Experienced teachers, particularly those with more than a decade of service, reported a stronger perceived influence of these strategies. This aligns with Piaget's constructivist framework, which emphasizes that knowledge and pedagogical skill are actively developed over time through experience and reflection. Seasoned teachers have

accumulated extensive classroom experience, enabling them to refine their instructional schemas, anticipate student responses, and implement music and rhymes in ways that foster cognitive processes such as memory retention, language acquisition, and problem-solving (Abraham, 2014; Piaget, 1977). Less experienced teachers, while capable, are still developing these nuanced pedagogical skills, which explains the observed differences in perception.

The absence of significant differences based on school type or size suggests that the pedagogical value of music and rhymes is universal across institutional contexts. Piaget's principles of early childhood cognitive development indicate that young children learn most effectively through active, multisensory, and emotionally engaging experiences, regardless of the school environment. Research supports this universality: music and rhymes enhance attention, motivation, and classroom engagement (Maroye & Uhrmacher, 2019; Binkiewicz, 2016), while also scaffolding learning in language and mathematics (Bryant et al., 1989; Goswami & Ziegler, 2006). Collectively, these findings underscore that teaching experience enhances teachers' ability to implement effective strategies, while the intrinsic pedagogical value of music and rhymes remains consistent across school types and sizes, reflecting their foundational role in early childhood education.

**Table 3: Disaggregated Analysis of Teachers' Perceived Influence of Music and Rhymes on Pupils' Engagement by Profile Variables (n = 30)**

Profile	Indicators	p-value	Remarks
Length of Teaching Experience		0.05	Significant
Type of School Employed		0.20	Not Significant
School Size Classification		0.886	Not Significant

### Conclusion

The study revealed that kindergarten teachers perceive the influence of music and rhymes on pupils' classroom engagement as very high, highlighting these strategies as core pedagogical tools that effectively motivate learners, promote active participation, and support learning in foundational subjects such as English and Mathematics. Notably, teachers' length of teaching experience significantly shaped these perceptions, with more experienced educators demonstrating a deeper appreciation for the pedagogical value and strategic integration of music and rhymes. In contrast, school type and size did not affect perceived effectiveness, indicating the universal applicability of these strategies across

diverse educational contexts. These findings underscore the importance of integrating music- and rhythm-based pedagogy in early childhood classrooms and suggest that teacher training and professional development programs should prioritize these approaches to empower educators to create engaging, cognitively stimulating, and emotionally enriching learning environments for young children.

### **Declaration**

The authors declare that they have no conflicts of interest related to this research. In addition, they used AI tools to enhance not only the grammatical clarity and language quality of the manuscript, but also the analysis of the data.

### **Author Contributions**

Anna Mae S. Dayon: Conceptualization, original draft, data collection, financial administration

Charlie A. Dayon: Formal analysis, review, editing, and resources

Angelica H. Balantac: Methodology and review.

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