

JURNAL_HENNI_LISNIARTI_REVISI_ROUND+2

by MIT Id

Submission date: 02-Oct-2026 02:23PM (UTC+0700)

Submission ID: 3048209719

File name: JURNAL_HENNI_LISNIARTI_REVISI_ROUND_2.docx (227.86K)

Word count: 4948

Character count: 31368



Analysis of the Implementation of Rhythmic Gymnastics in Stimulating Gross Motor Skills of Early Childhood: A Qualitative Study at TK Lembayung Indah, Bengkulu City

7

Received : Month x, 20xx

Revised : Month x, 20xx

Accepted: Month x, 20xx

Publish : Month x, 20xx

Henni Lisniarti¹, Lydia Margaretha², Rika Partika Sari³^{1,2,3} Study Program of Early Childhood Teacher Education, Faculty of Teacher Training and Education, Universitas Dehasen Bengkulu, IndonesiaAuthor. Email: lisniartihenni5@gmail.com

Abstract:

ABSTRACT

Background of study: Gross motor development in early childhood does not occur automatically; it requires systematic and consistently planned stimulation. Rhythmic gymnastics, a series of movements accompanied by music, has become one of the activities widely used in early childhood education institutions to stimulate coordination, balance, agility, and muscle strength. However, in-depth studies on how such activities are actually implemented holistically within a single institution remain limited.

Aims and scope of paper: This study aimed to describe and analyze the implementation of rhythmic gymnastics activities in stimulating gross motor skills of early childhood at TK Lembayung Indah, Bengkulu City.

Methods: A descriptive qualitative approach was employed, involving four informants (one school principal and three Group B teachers) selected purposively, while the research object was the gross motor development of 15 Group B children. Data were collected through semi-structured interviews and documentation during July 2026, then analyzed using the interactive model of Miles and Huberman.

Result: Rhythmic gymnastics was implemented in a structured manner, beginning with collaborative planning, conducted routinely every Saturday in three phases: warm-up, core movement, and cool-down. Based on teacher and school principal reports, the activity appeared to provide stimulation across all four investigated gross motor aspects, though agility showed relatively lower reported progress compared to coordination, balance, and muscle strength. Music preferred by children, consistent scheduling, and active involvement of all teachers and the school principal served as supporting factors, while limited space, technical constraints, and a small number of less-active children were identified as inhibiting factors.

Conclusion: Based on teacher and school principal reports, rhythmic gymnastics conducted routinely and in a structured manner was perceived to meaningfully stimulate early childhood gross motor development, although this reflects informants' perceptions rather than direct measurement. Strengthening written evaluation documentation and adding movement variations are recommended to optimize agility stimulation.

Keywords: Early Childhood; Gross Motor Skills; Physical-Motor Development; Qualitative Research; Rhythmic Gymnastics

1. INTRODUCTION

Early childhood education (ECE) is a holistic developmental effort aimed at children from birth to the age of six, providing educational stimulation to support their physical and psychological growth and prepare them for the next level of education (Durrotunnisa et al., 2024; Saputri & Katoningsih, 2023). This principle is aligned with Indonesian Ministerial Regulation No. 137 of 2014, which affirms that ECE plays a vital role in facilitating comprehensive child development in accordance with their respective developmental stages.

Publisher Note:

CV Media Inti Teknologi stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Copyright

©2026 by the author(s).

Licensee CV Media Inti Teknologi, Bengkulu, Indonesia. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike (CCBY-SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

Among the aspects of development that deserve particular attention in ECE settings is physical-motor development, specifically the child's ability to use body



muscles for various movement activities. Gross motor skills, which engage large muscle groups for walking, running, jumping, and maintaining body balance, have a broad impact on children's self-confidence, independence, and capacity to interact with their environment (Atqiya, 2024; Haywood & Getchell, 2021). Gross motor development does not emerge spontaneously; rather, it requires appropriate and planned stimulation. Children who receive insufficient stimulation tend to experience difficulties in movement coordination and body balance (Dobell et al., 2020).

Within the Fundamental Movement Skills (FMS) framework proposed by Haywood and Getchell (2021), gross motor development encompasses three interrelated categories: locomotor movements (e.g., running, jumping), stability movements (e.g., balancing, bending), and manipulative movements (e.g., coordinating hands and feet following a rhythm). These categories provide a theoretical lens for examining how structured physical activities such as rhythmic gymnastics may simultaneously address coordination, balance, agility, and muscle strength in an integrated manner.

Rhythmic gymnastics offers a promising answer to this developmental need. By integrating bodily movement with musical accompaniment, it becomes a more structured, engaging, and enjoyable activity for children, simultaneously training coordination, balance, agility, and the ability to follow instructions (Sinaga & Aguss, 2021; Ahdal et al., 2026). Research has consistently demonstrated that routinely and structurally implemented rhythmic gymnastics can stimulate gross motor development in early childhood (Harahap et al., 2025; Darmawati et al., 2025; Nurlaela et al., 2025). Furthermore, music used in such activities has been shown to enhance children's motivation and participation during the sessions (Zhao et al., 2024).

At TK Lembayung Indah, Bengkulu City, rhythmic gymnastics has been conducted routinely as part of the weekly learning schedule, and children have demonstrated high enthusiasm in participating. However, no systematic and in-depth study has been conducted regarding the planning, implementation, and evaluation of the activity, nor its specific contribution to stimulating gross motor skills. Previous studies generally reported overall improvements across all gross motor aspects without sufficiently examining why certain aspects achieved different outcomes, or the specific enabling and inhibiting factors within a single institutional context. Moreover, most prior studies employed quantitative or action research designs and focused on measurable outcomes, leaving a gap in understanding the implementation process as perceived and narrated by the practitioners themselves. To date, no known study has specifically examined how rhythmic gymnastics is planned, implemented, and evaluated within a single early childhood institution in Bengkulu City, nor how teachers themselves perceive its supporting and inhibiting factors; addressing this

practitioner-centered, single-site perspective constitutes the novelty of the present study.

Based on this gap, the present study aims to provide comprehensive and in-depth description of the implementation of rhythmic gymnastics as a medium for stimulating gross motor skills in early childhood. The specific objectives are: (1) to describe and analyze the planning, implementation, and evaluation of rhythmic gymnastics activities; (2) to identify which gross motor aspects—coordination, balance, agility, and muscle strength—were stimulated and to what degree as reported by teachers; and (3) to identify supporting and inhibiting factors, all within the context of Group B children at TK Lembayung Indah, Bengkulu City.

2. MATERIAL AND METHOD

This study employed a descriptive qualitative approach, aiming to describe and understand the naturally occurring phenomena in the field without researcher manipulation (Sugiyono, 2019). The research was conducted over one month in July 2026 at TK Lembayung Indah, located at Jalan Zainul Arifin No. 26, Dusun Besar, Singgaran Pati District, Bengkulu City.

Research informants consisted of one school principal and three Group B teachers, selected purposively based on two criteria: (1) direct involvement in planning and implementing rhythmic gymnastics activities at the research site. This criterion ensured that informants possessed sufficient experiential knowledge to provide meaningful accounts of the activity. The research object was the gross motor development of all Group B children aged 5-6 years; their development was described through interview data from teachers and the school principal as well as supporting documentation, not through instruments directly administered to the children.

Data were collected through two primary techniques: semi-structured interviews and documentation. The semi-structured interview guide was developed based on the research objectives and covered the planning, implementation, and evaluation of rhythmic gymnastics activities; stimulated gross motor aspects; children's responses; and obstacles encountered along with strategies to address them, while allowing informants the freedom to elaborate further. The guide was developed through a systematic drafting process based on the study's theoretical framework and research objectives, and reviewed in consultation with the thesis supervisors prior to data collection to ensure content alignment and clarity of questions. Data collection continued until the four informants had been interviewed and no substantially new information relevant to the research questions emerged from subsequent interviews, indicating that data saturation had been reached. Specifically, by the third and fourth interviews, informants' responses across all five thematic areas of the guide planning, implementation,

gross motor stimulation, children's responses, and obstacles along with strategies—consistently converged without yielding substantially new categories or themes, confirming that the four informants constituted a sufficient data source for this study. Each of the four informants was interviewed twice during the research period, with each session lasting approximately 15 minutes, to allow efficient elaboration and clarification of information. Interviews were audio-recorded with informants' consent, then transcribed verbatim for analysis. Data coding followed a two-cycle procedure: first-cycle descriptive coding to label recurring topics, followed by second-cycle pattern coding to identify thematic categories across informants. Documentation in the form of photographs of gymnastics activities and Daily Learning Implementation Plans (RPPH) was used to confirm that the activities were formally recorded within the learning plan. Direct observation of children was not employed, as the study focused on obtaining the teachers' and school principal's firsthand accounts of the implementation process; child-level developmental data were therefore derived from informant reports rather than researcher observation, which constitutes a design boundary acknowledged in the limitations.

Data analysis followed the interactive model of Miles and Huberman, encompassing data reduction, data display, and conclusion drawing/verification (in Sugiyono, 2019). Data validity was maintained through four trustworthiness criteria from Lincoln and Guba as described by Sugiyono (2019): credibility, through member checks in which informants reviewed and confirmed the accuracy of their transcribed responses, prolonged engagement during the one-month data collection period, and peer debriefing with thesis supervisors; transferability, through thick description of the research setting, informant profiles, and activity procedures to allow readers to judge applicability to other contexts; dependability, through an audit trail documenting each stage of data collection, reduction, and analysis; and confirmability, through anchoring all interpretations directly in interview transcripts and RPPH documents rather than the researcher's assumptions.

2.1 Figures and Tables

Tables and figures are positioned centrally. Table titles appear above the table in centered alignment, while figure titles appear below the figure in centered alignment. All tables and figures are referenced in the text.

3. RESULT AND DISCUSSION

3.1 Results

Rhythmic gymnastics at TK Lembayung Indah was conducted routinely once per week, every Saturday from 08.00 to 09.00 WIB, and led jointly by three classroom teachers and the school principal. The simultaneous involvement of all four personnel not only facilitated supervision of all children but also

signaled the institution's collective commitment to the importance of gross motor stimulation.

Planning. Prior to each weekly session, teachers prepared musical equipment (speakers and audio source) and arranged children in rows according to their classes. The school principal explained that planning was conducted collaboratively each week, encompassing song selection, choosing age-appropriate simple movements, and preparing a safe and comfortable venue, all formally incorporated into the official learning schedule. The collaborative nature of this planning involving all three teachers and the school principal distinguished the activity from informally improvised physical exercises. This was confirmed by the RPPH documents, which listed rhythmic gymnastics as a recurring weekly activity together with its accompanying song and general sequence of movements, indicating that the activity was formally part of the structured learning plan rather than an incidental or spontaneous one. However, the RPPH documents did not state a separate, explicit learning objective linking the activity to gross motor development, nor did they specify indicators for assessing children's participation or progress during the activity a gap in documentation that the present study's findings help to highlight.

"Before the activity is carried out, the teachers and I first prepare a plan together. We decide on the song to be used, choose simple movements appropriate to the children's age, and prepare a safe and comfortable venue. The gymnastics activity is also included in the learning schedule so that its implementation is more directed." (School principal, interview, July 2026)

Implementation. The activity used the song "Anak Indonesia Hebat" as musical accompaniment, implemented in three main phases: warm-up (approximately 10 minutes), core movement (approximately 40 minutes), and cool-down (approximately 10 minutes). Core movements included marching in place, swinging arms forward and sideways, alternately raising knees, small jumps, bending and stretching the body, turning, and moving hands and feet following the musical rhythm; these movements were repeated across two to three rounds progressing from simple to more active movements to avoid excessive early fatigue. When the available space was limited, teachers reportedly managed this by arranging children in tighter rows and directing movements inward, reducing lateral displacement. On occasions when technical issues (e.g., power outages) occurred, teachers continued leading movements with vocal rhythm cues in place of music. Teachers led movements in front of the children while providing counting and encouraging words, a strategy that, according to informants, proved effective in maintaining children's attention and motivation throughout the session. Most Group B children were reported by teachers to demonstrate high enthusiasm and to follow the rhythm and movements with reasonable proficiency.

"The teachers always demonstrate the movements enthusiastically, use songs the children enjoy, and praise children who are willing to try. We also invite all the children without forcing them, so that they feel happy participating in the gymnastics activity." (School principal, interview, July 2026)

Evaluation. After each session, all three teachers and the school principal conducted a brief reflective evaluation through group discussion, typically reviewing whether movements were appropriate to the children's ability level and whether the session achieved its intended learning objectives, according to informants, a movement was judged too difficult when several children were still unable to complete it even after repeated demonstration, and judged of low interest when children appeared visibly disengaged or reluctant to participate. If any movement was deemed too difficult or of low interest to children, it was simplified or varied in the following session a responsive adjustment that informants described as routine practice. However, this evaluation remained verbal and had not been systematically documented in written individual developmental records for each child. As Mulyasa (2022) emphasized, systematic and documented evaluation is an inseparable component of ECE learning management, making this gap an important area for future strengthening.

"Yes, after each session the teachers conduct an evaluation together. If a movement is too difficult or the children seem less enthusiastic, it will be simplified or replaced with a more interesting variation in the next session so that the learning objective is still achieved." (School principal, interview, July 2026)

Stimulation of Gross Motor Aspects. The stimulation of each gross motor aspect through the activity is described below.

Coordination. Coordination was stimulated through simultaneous hand and foot movements and alternate knee-raising. Teachers reported observing that, over time, children's hand-foot coordination appeared increasingly directed and fluid, with fewer instances of mismatched movements between upper and lower limbs.

"The children now find it easier to follow the movements. At first, some of them were still confused, and their hands and feet could not move together. But after regularly joining the 'Anak Indonesia Hebat' gymnastics, they became accustomed to it and their movements are now more coordinated." (Teacher A, interview, July 2026)

Balance. Balance was stimulated through turning and body bending-stretching movements requiring children to maintain body posture. Balance was judged successful when a child could complete these movements without falling or losing footing, without necessarily requiring a perfectly still final position; based on this criterion, most children were reported to

maintain body posture reasonably well during these movements, though a small number occasionally needed verbal reminders or brief demonstrations to reestablish their posture.

"In my opinion, it is already quite good. When moving to the music, the children can already maintain their body position. There are still a few children who need more practice, but overall there has been an improvement." (Teacher C, interview, July 2026)

Agility. Agility showed the most notable variation across children, as reported by teachers, evidenced particularly in children's ability to transition quickly from one movement to the next in synchrony with the musical tempo. According to informants, one to two children consistently needed to observe peers or teachers for a brief moment before following each movement transition a pattern that teachers attributed to two primary factors: relative unfamiliarity with the song structure in early sessions, and natural individual differences in processing speed for sequential movement cues, rather than to the complexity of the movements themselves or difficulty following teachers' instructions, which were not reported as issues. This suggests that agility, specifically the rapid response to shifting rhythmic cues at the song's tempo, may require more targeted repetition or simplified transition sequences for some children.

"The children quickly pick up the movements once they are familiar with the song. Because we use the 'Anak Indonesia Hebat' gymnastics, they become more enthusiastic and find it easier to follow each change of movement." (Teacher B, interview, July 2026)

Muscle Strength. Muscle strength was stimulated through repeated small jumps and arm swings sustained throughout the approximately one-hour session. As no standardized strength measurement was used, the finding below reflects teachers' observations of children's ability to sustain the movements rather than an objectively assessed increase in muscle strength: teachers reported that nearly all children completed the full movement sequence, though a small number appeared fatigued toward the final phase.

"As for movements like jumping, swinging the arms, or bending the knees, they are already able to do them. Although some children get tired quickly, they still try to keep up until the activity is finished." (Teacher A, interview, July 2026)

Table 1 summarizes the overall implementation findings, while Table 2 presents findings by each gross motor aspect.

Table 1. Summary of Research Results

Component	Finding	Data source
Time of implementation	Every Saturday, 08.00–09.00 WIB ($\pm$ 1 hour)	Interview (principal, teachers);

		RPPH		change)	reminders or brief re-demonstrations.
Activity leader	Three classroom teachers and school principal simultaneously	Interview (principal)	Agility	Transitions between movements following the musical tempo (speed and accuracy of movement change)	Teachers reported that one to two children consistently needed to observe peers or teachers before transitioning between movements.
Musical accompaniment	"Anak Indonesia Hebat"	Interview; RPPH			
Activity phases	Warm-up – core movement – cool-down	Interview; RPPH			
Children's response	Reported as enthusiastic; majority observed by teachers to follow rhythm and movements with reasonable proficiency	Interview (principal, teachers)	Muscle Strength	Repeated small jumps and arm swings sustained across the session (ability to sustain movement, not a measured strength indicator)	Teachers reported that nearly all children completed the full sequence, though a small number showed visible fatigue toward the end.
Evaluation	Reflective and verbal; not yet documented in individual written records	Interview (principal, teachers)			
Supporting factors	Music preferred by children, involvement of all teachers and school principal, consistent schedule, progressive movements	Interview (principal, teachers)	3.2 Discussion		
Inhibiting factors	Limited space, technical constraints (e.g., power outages), small number of less-active children	Interview (principal, teachers)	The routine and scheduled implementation of rhythmic gymnastics, rather than ad hoc delivery, aligns with the principle that gross motor stimulation is more beneficial when provided consistently within daily learning activities (Nurlaela et al., 2025), a pattern reported internationally, where structured musical movement activities delivered regularly over several weeks were found to support preschoolers' rhythmic and motor development (Laure & Habe, 2023). The involvement of all classroom teachers alongside the school principal in every session also provided a stronger layer of supervision and direct guidance compared to activities managed by a single teacher.		
Most challenging aspect	Agility (rapid transitions between movements, per teacher reports)	Interview (Teacher B); researchers' analysis	From a planning perspective, the selection of music and movements adapted to the children's		

Table 2. Gross Motor Stimulation Findings by Aspect (referring to Haywood & Getchell, 2021)

Gross Motor Aspect	Related Movement / Indicator	Reported Finding (source: teacher/principal interviews)
Coordination	Simultaneous hand-foot movement and alternate knee-raising (integration of upper- and lower-limb movement)	Teachers reported that the majority of children were increasingly able to coordinate hand and foot movements with the musical rhythm, with fewer mismatched movements over time.
Balance	Turning, bending, and stretching (maintaining body stability during postural	Teachers reported that most children were able to maintain body stability during these movements, though a small number occasionally needed verbal

3.2 Discussion

The routine and scheduled implementation of rhythmic gymnastics, rather than ad hoc delivery, aligns with the principle that gross motor stimulation is most beneficial when provided consistently within daily learning activities (Nurlaela et al., 2025), a pattern also reported internationally, where structured music-movement activities delivered regularly over several weeks were found to support preschoolers' rhythmic and motor development (Laure & Habe, 2023). The involvement of all classroom teachers alongside the school principal in every session also provides a stronger layer of supervision and direct guidance compared to activities managed by a single teacher.

From a planning perspective, the selection of music and movements adapted to the children's age, confirmed through both interviews and RPPH documents, demonstrates that the activity is not a spontaneous exercise but part of an intentional instructional design. The warm-up-core movement-cool-down phases applied in implementation align with general principles of rhythmic gymnastics, emphasizing gradual increases in movement intensity so that children remain enthusiastic without excessive fatigue (Harahap et al., 2025; Darmawati et al., 2025).

When framed within Haywood and Getchell's (2021) Fundamental Movement Skills (FMS) framework, the movement sequences in this activity encompassed all three categories of fundamental movement simultaneously: marching in place and small jumps fall under locomotor movements; turning, bending, and stretching constitute stability movements; while hand movements coordinated with feet following the rhythm represent manipulative movements. The simultaneous occurrence of these three categories in a single rhythmic gymnastics sequence is consistent with the view that structured rhythmic movement may stimulate

various fundamental movement categories in an integrated manner (Dobell et al., 2020).

Of the four gross motor aspects investigated, coordination, balance, and muscle strength showed relatively good achievement, while agility, particularly the ability to quickly transition between movements following the musical tempo, remained a challenge for a small number of children. This finding is consistent with (Mulyani, 2021), who noted that variations in motor ability among children are natural given individual differences in movement capacity and maturity, and is further supported by Haywood and Getchell (2021), who established that individual variation in FMS achievement is influenced by biological maturity and the intensity of stimulation received.

The supporting factors of music preferred by children and active involvement of all teaching staff align with (Harahap et al., 2025), who affirmed that the success of rhythmic gymnastics is strongly dependent on the teacher's ability to facilitate activities in a directed manner, including selecting appropriate music and creating an enjoyable atmosphere. Conversely, the space limitations found in this study are consistent with (Mahendra, 2018), who noted that limitations in space and facilities represent one of the primary weaknesses that can affect the effectiveness of rhythmic gymnastics implementation.

Regarding evaluation, teachers at TK Lembang Indah conducted reflective evaluation through discussion after each session, with outcomes directly applied to subsequent planning, a practice consistent with (Mulyasa's, 2022) view that planning, implementation, and evaluation are cyclical and mutually influencing processes. However, evaluation remained verbal and was not documented in written records at the individual child level, leaving room to monitor each child's gross motor development more systematically and accurately over time.

Compared with prior research, these findings generally align with Harahap et al. (2025), Darmawati et al. (2025), and Rosidah and Maryani (2025), all of which found that routinely and structurally implemented rhythmic gymnastics stimulates children's coordination, balance, and muscle strength. The distinction is that the present study found agility to be a more prominent challenge for some children at TK Lembang Indah, a difference understandable given variations in institutional context, child characteristics, and activity intensity. Consistent with Simamora et al. (2024), who emphasized the importance of movement variation in rhythmic gymnastics, this finding suggests that adding variations in movement transitions could potentially help optimize agility stimulation more evenly across children.

3.2.1 Implications

The findings carry both practical and conceptual implications. Practically, the combination of collaborative weekly planning, a fixed three-phase

sequence, the involvement of all teaching staff, and music preferred by children appears to be a workable arrangement that other early childhood institutions with similar resources could adapt. The strategies teachers used to cope with limited space and power outages, namely arranging children in tighter rows and substituting vocal rhythm cues for music, also show that the activity can continue under modest conditions. Because the RPPH did not state an explicit gross motor objective or participation indicators, the findings imply that planning documents and evaluation need to be linked more closely if the activity is to be monitored as a gross motor stimulation program, in line with Mulyasa's (2022) view of evaluation as an integral part of ECE learning management. Conceptually, the fact that a single sequence covered locomotor, stability, and manipulative movements suggests that the FMS framework (Haywood & Getchell, 2021) is a useful lens for analyzing structured rhythmic activities in ECE.

3.2.2 Research contribution

This study contributes a practitioner-centered, single-site account of how rhythmic gymnastics is planned, implemented, and evaluated in an early childhood institution in Bengkulu City, a context that, to the authors' knowledge, has not been examined in this way. Whereas earlier studies mostly reported overall improvements across gross motor aspects, this study draws attention to differences between aspects: agility was reported as the most variable, and the teachers' own explanations are presented, namely unfamiliarity with the song structure in early sessions and individual differences in processing speed for sequential movement cues. It also documents a gap between practice and documentation, in which reflective evaluation was routine but remained verbal, and it relates the movements used to both the four gross motor aspects (Table 2) and the FMS categories, providing a descriptive basis on which later studies using observational or quantitative measures can build.

3.2.3 Limitations

It is important to note that, as a qualitative study relying on teacher and school principal reports rather than direct observational measurement of child performance, the present findings reflect perceived and narrated accounts of the implementation process rather than empirically quantified developmental outcomes. This design boundary limits generalizability and means that claims about the extent or magnitude of gross motor stimulation remain interpretive. In addition, no standardized measure was used for any gross motor aspect, so statements about muscle strength reflect teachers' observations of children's ability to sustain movement rather than measured strength, and direct observation of the sessions was not conducted. The data also came from four informants, who were themselves the implementers of the activity, covering 15 children in one institution over one month, so informants' accounts may have favored a positive picture of their own practice, and the transferability of

the findings to other settings should be judged through the thick description provided.

3.2.4 Suggestions

Based on these findings, several suggestions are offered. For the school and teachers, the RPPH could state an explicit gross motor learning objective and simple participation indicators for rhythmic gymnastics, and the current verbal reflection could be complemented by brief written records of each child's progress, such as a checklist or anecdotal notes, so that development can be monitored over time. To support agility, teachers could add movement variations and simplified transition sequences, and allow repeated familiarization with a song before more demanding transitions are introduced, since unfamiliarity with the song structure was one reason given for children's hesitation in early sessions. Where space is limited, tighter formations and non-musical rhythm cues can continue to serve as a backup. For future researchers, observational instruments, standardized gross motor assessments, or mixed methods across several institutions would strengthen the evidentiary base for these findings, and including parents' perspectives could add a further view of children's responses.

4. CONCLUSION

This study concludes that rhythmic gymnastics at TK Lembayung Indah, Bengkulu City was implemented in a structured manner, initiated through collaborative planning between teachers and the school principal, conducted routinely each week through three clear phases, and followed by reflective evaluation, though not yet documented in written form. Based on teacher and school principal reports, the activity appeared to provide meaningful stimulation across all four investigated gross motor aspects—coordination, balance, muscle strength, and agility—with teachers perceiving children's movements as becoming progressively more directed and active over time, though agility achievement was reported as remaining relatively lower compared to the other three aspects. This process was supported by music preferred by children, a consistent schedule, and active involvement of all teaching staff, while limited space, technical constraints, and a small number of less-active children presented ongoing challenges. As a qualitative study relying on teacher-reported perceptions rather than direct child assessments, the findings describe the implementation process and its perceived stimulation value rather than quantified developmental outcomes. Nonetheless, the findings are consistent with the view that structured, routine rhythmic gymnastics may support early childhood gross motor stimulation, while indicating the need to strengthen written evaluation documentation and add movement variations as steps for future improvement.

5. ACKNOWLEDGEMENT

20

The authors express gratitude to the school principal and teachers of TK Lembayung Indah, Bengkulu City for their cooperation during the data collection process, as well as to the Early Childhood Teacher Education Study Program, Faculty of Teacher Training and Education, Universitas Dehasen Bengkulu, for the academic support provided throughout the research. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

6. AUTHOR CONTRIBUTION STATEMENT

HL: conceptualization, data collection, data analysis, and manuscript writing. LM: data collection and manuscript review. RPS: literature review, reference management, and manuscript editing.

1

AUTHOR INFORMATION

Corresponding Authors

Henni Lisniarti, Universitas Dehasen Bengkulu, Indonesia
 Orcid id: <https://orcid.org/0009-0003-0813-3115>
 Email: lisniartihenni5@gmail.com
 Author phone (Whatsapps): 085711823070

Authors

Lydia Margaretha, Universitas Dehasen Bengkulu, Indonesia
 Orcid id: <https://orcid.org/0009-0002-3284-3881>
 Email: argarethalydia@gmail.com

Rika Partika Sari, Universitas Dehasen Bengkulu, Indonesia
 Orcid id: <https://orcid.org/0009-0007-0647-8194>
 Email: rkpar85@gmail.com

REFERENCE

- Ahdal, A., Herlina, H., Heman, H., Wahira, W., & Surya. (2026). Rhythmic gymnastics activities on gross motor development in early childhood. *International Journal of Multidisciplinary Approach Research and Science*, 4(01), 239–257. <https://doi.org/10.59653/ijmars.v4i01.2156>
- Atqiya, N. (2024). *Perkembangan fisik-motorik anak usia dini*. Pustaka Pelajar.
- Darmawati, Sudarti, & Maulina, I. (2025). Senam irama pada kemampuan motorik kasar anak usia dini. *Jurnal Administrasi Pendidikan Indonesia*, 16(1), 72–79. https://ejournal2.undiksha.ac.id/index.php/jurnal_ap/article/view/5905

- Dobell, A., Pringle, A., Faghy, M. A., & Roscoe, C. M. P. (2020). Fundamental movement skills and accelerometer-measured physical activity levels during early childhood: A systematic review. *Children*, 7(11), 224. <https://doi.org/10.3390/children7110224>
- Durrotunnisa. (2024). Pendidikan anak usia dini: Konsep dan implementasi. Rajawali Pers.
- Harahap, N. K., Aulia, R., Harahap, A. M., & Muchtar, N. A. F. (2025). Peran senam irama dalam perkembangan sensor motorik anak usia dini di RA Bunda. *Jumper: Jurnal Mahasiswa Pendidikan Olahraga*, 6(2), 278–284. <https://doi.org/10.55081/jumper.v6i2.4363>
- Haywood, K. M., & Getchell, N. (2021). Life span motor development (7th ed.). Human Kinetics.
- Laure, M., & Habe, K. (2023). Stimulating the development of rhythmic abilities in preschool children in Montessori kindergartens with music-movement activities: A quasi-experimental study. *Early Childhood Education Journal*, 1–12. <https://doi.org/10.1007/s10643-023-01479-1>
- Mahendra, A. (2018). Senam artistik dan ritmik untuk pembelajaran. Alfabeta.
- Mulyani, N. (2021). Pengembangan motorik kasar anak usia dini melalui senam irama. Prenadamedia.
- Mulyasa, E. (2022). Manajemen PAUD. PT Remaja Rosdakarya.
- Nurlaela, W., Ismayanti, S., Sansofa, C. A., Nuraeni, K. M., & Cahyawati, I. D. (2025). Implementing rhythmic gymnastics as a learning strategy for gross motor development in early childhood: A qualitative study. *GENIUS: Indonesian Journal of Early Childhood Education*, 6(2), 197–208. <https://genius.uinkhas.ac.id/index.php/gns/article/view/228>
- Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 137 Tahun 2014 tentang Standar Nasional Pendidikan Anak Usia Dini. <https://jdih.kemdikbud.go.id>
- Rosidah, I., & Maryani, H. (2025). Upaya meningkatkan kemampuan motorik kasar anak usia dini melalui kegiatan senam irama pada kelompok A RA. Aisyiah 2 Desa Sukamaju Kecamatan Kadudampit Kabupaten Sukabumi. *Validitas: Jurnal Pendidikan dan Pembelajaran*, 1(1), 282–289. <https://journal.maysapublishing.com/index.php/Validitas/article/view/61>
- Saputri, & Katoningsih. (2023). Dasar-dasar pendidikan anak usia dini. Prenadamedia.
- Simamora, A. N., Sigalingging, G. P., Naipospos, Y. A., Situmorang, F., & Siregar, F. S. (2024). Pengaruh senam irama terhadap perkembangan motorik anak. *Harmoni Pendidikan: Jurnal Ilmu Pendidikan*, 1(3), 153–161. <https://doi.org/10.62383/hardik.v1i3.443>
- Sinaga, & Aguss. (2021). Aktivitas fisik dan perkembangan motorik anak usia dini. Alfabeta.
- Sugiyono. (2019). Metode penelitian kuantitatif, kualitatif, dan R&D. Alfabeta.
- Zhao, H., Deng, Y., Song, G., Zhu, H., Sun, L., Li, H., Yan, Y., & Liu, C. (2024). Effects of 8 weeks of rhythmic physical activity on gross motor movements in 4-5-year-olds: A randomized controlled trial. *Journal of Exercise Science & Fitness*, 22(4), 456–462. <https://doi.org/10.1016/j.jesf.2024.10.001>

2

Please provide alternative names for potential reviewers for your manuscript

	Reviewer 1	Reviewer 2	Reviewer 3
*Title (Prof, Dr, or?)			
*Name (First, Middle, Last)			
*Faculty - University			
*SCOPUS ID			
*Email			
*ORCID ID			

ORIGINALITY REPORT

9%

SIMILARITY INDEX

8%

INTERNET SOURCES

5%

PUBLICATIONS

4%

STUDENT PAPERS

PRIMARY SOURCES

1	ejournal.gomit.id Internet Source	3%
2	icotel.org Internet Source	1%
3	Submitted to Universitas Islam Negeri Ar-Raniry Student Paper	<1%
4	Submitted to Institut Agama Islam Al-Zaytun Indonesia Student Paper	<1%
5	ejournal.uit-lirboyo.ac.id Internet Source	<1%
6	proceeding.unimar.ac.id Internet Source	<1%
7	Submitted to INTI Universal Holdings SDM BHD Student Paper	<1%
8	Inda Amelia, Dewi Hasanah, Maisuna Mustapha Yahya. "Strategies of Moral Faith Teachers in Integrating SDGs-Based Character Education in Islamic Boarding Schools", Profetika: Jurnal Studi Islam, 2026 Publication	<1%
9	Victor Luckyboy Dzramado, Priscilla Asantewaa Boadi. "Fertility counseling experiences and perceived gaps in provider support among people living with HIV: a qualitative study from an antiretroviral therapy clinic in Ghana", Frontiers in Reproductive Health, 2026 Publication	<1%
10	Nabillah Tsany, Dwi Istiyani, Mursid Mursid. "Implementasi Media Wayang Islami dalam Mengembangkan Nilai Agama dan Moral pada Anak", Aulad: Journal on Early Childhood, 2025 Publication	<1%
11	risetpress.com Internet Source	<1%
12	Submitted to CSU, San Jose State University Student Paper	<1%

13	bmcpublikealth.biomedcentral.com Internet Source	<1 %
14	ejournal.iainpalopo.ac.id Internet Source	<1 %
15	genius.uinkhas.ac.id Internet Source	<1 %
16	repository.ubharajaya.ac.id Internet Source	<1 %
17	Imam Safi'i, Soraya Soraya, Sobri Sobri. "Teachers' Experiences in Building Motivating and Anxiety-Reducing Language Learning", Springer Science and Business Media LLC, 2026 Publication	<1 %
18	b3b7dd1a-d8cb-4579-8cfc-f21897e0f1ee.filesusr.com Internet Source	<1 %
19	www.wosconkongreleri.com Internet Source	<1 %
20	I Made, Made Santo. "Development of Adaptive Mobile Learning (AML) on Information System Courses", International Journal of Advanced Computer Science and Applications, 2015 Publication	<1 %
21	ejournal.uin-suka.ac.id Internet Source	<1 %
22	journal.unj.ac.id Internet Source	<1 %
23	Shriner, Shriner. "Essentials of Lifespan Development: A Topical Approach", UAGC, 2025 Publication	<1 %

Exclude quotes

Off

Exclude matches

Off

Exclude bibliography

On