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Development of A Cheerful, Healthy Gymnastics Model In Learning Rhythmic Gymnastic Activities For Early Childhood Students In The Bawang Sub-District Of Batang District

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ABSTRACT

The purpose of this study was to develop a model of Senam Sehat Ceria that can be used in learning rhythmic gymnastics activities for early childhood (PAUD) in Bawang District, Batang Regency. This research approach uses a development method (research and development), which involves needs analysis, model design, implementation, and evaluation. The results of the study indicate that the Senam Sehat Ceria model can improve children's motor skills, creativity, and enthusiasm for rhythmic gymnastics activities. This model is designed with simple and fun movements, and is in accordance with the characteristics of early childhood development. This study contributes to innovations in interactive and fun rhythmic gymnastics learning in PAUD. The results of the implementation evaluation show that this model is effective and well-received by PAUD teachers. Innovation in learning rhythmic gymnastics activities for early childhood (PAUD) in Bawang District, Batang Regency, is the Senam Sehat Ceria model. This model is intended to be a fun, interactive learning model that is in accordance with the developmental needs of early childhood. The results of the study showed that the cheerful, healthy gymnastics model can improve children's motor skills, creativity, and their desire to participate in rhythmic gymnastics activities. The movements are designed to be easy, varied, and fun so that teachers and children can easily follow them. According to the implementation evaluation, this model helps children's social and emotional development through activities that encourage interaction and cooperation. So that with this cheerful, healthy gymnastics, it is expected to increase the enthusiasm of early childhood to learn and be active at school. Innovative, relevant, and interesting rhythmic gymnastics learning for early childhood is greatly assisted by this research. It is expected that the Happy Healthy Gymnastics model can be widely applied as part of the early childhood education curriculum, especially in physical education, because the results show that it is well-received by PAUD teachers and has a big impact on children. Thus, with this Happy Healthy Gymnastics, it will help encourage early childhood to be interested in pursuing education from an early age.

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INTRODUCTION

Modern life depends on education. There are three different ways to get education: formal, informal and non-formal. Formal education is provided in schools, non-formal education is provided in the community, and informal education is usually provided in the family (Syaadah et al. 2023). Education is the main task during the growth of children, instilling all the forces of nature in them so that they, as humans and as members of society, can achieve the highest safety and happiness (Mujiburrahman et al. 2021).

There is also the importance of education in early childhood cannot be ignored in the role of parents. Parents must realize the importance of this education to build children's character from an early age (Apriyanti 2019). Basically, introducing character education to children from an early age is very important because this is the most important learning period (Pratama 2022). Therefore, children's physical, cognitive, socio-emotional development and character building are the golden age of their lives. Parenting is very important for early childhood character building. Good and bad stimulus can shape early childhood character, but bad stimulus will shape bad character because early childhood has a spontaneous attitude that cannot yet distinguish behaviour (Latifah 2020). Physical education is a learning process that utilizes movement as a medium to develop the potential of students. Physical education is a planned and conscious process to develop the potential of learners to become healthy and physically fit people and have a sportive character, or athletic spirit (Saitya 2022). Gross motor, a physical skill that is very important for daily life, can have an impact on children's physical, cognitive and social development (Candra et al. 2023). Physical and motor, cognitive, social-emotional, and language development are all aspects of early childhood development. Childhood is the most remarkable and hectic period of growth (Purwanto and Baan 2022). Physical education is an important part of overall education as it aids individual development through natural human movement. Physical education is a series of learning experiences that are planned and designed to meet the developmental, growth, and behavioural needs of each child. Physical education starts at an early age to promote growth (Azis, Nur, and Salama 2023).

Early childhood education (ECE) is an important step in building children's social skills, motor skills, and physical fitness (Zhang 2024). Early childhood education is a development process designed to develop the physical, motoric (gross and fine), and health abilities of children aged 0-8 years. Early childhood is a process of motor development rapidly, so that children are in preschool, a child's gross motor development needs to be done, one of which is by using rhythmic gymnastics. (Marsella, 2020). According to Didik Rilastiyo Budi and Arfin Deri Listiandi (2021), Learning models in physical education are very important to achieve learning objectives at every level. Teachers can use a variety of models, including conventional models, inquiry models, cooperative models, and tactical models.

One of the components of Physical Education, Sports and Health is rhythmic activity. Rhythmic gymnastics can also increase the desire to stay healthy and fit (Gansar Santi Wijayanti et al., 2020). Rhythmic activities, which include various materials (such as aerobic gymnastics), are still rarely taught by PE teachers. To achieve the desired learning objectives, physical education teachers must be able to adapt to the learning

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process (Wijayanti et al., 2021). However, there are advantages and disadvantages to each model, and teachers must understand them to choose the model that best suits the material and goals to be achieved (Setiawan et al., 2020). This may be because some PE teachers do not understand the basic material of aerobic gymnastics or other rhythmic activity material (Herlambang 2017).

Learning rhythmic activities in elementary school is adapted to the characteristics of elementary school children, as reflective movements and based on observation of the environment. The purpose of rhythmic activity is to try to turn rhythmic motion into nature according to the nature and characteristics of children (Febrianta, 2018). Rhythmic activity is part of physical education learning that affects students' rhythmic skills. This research aims to produce a learning model for rhythmic activities based on traditional Javanese dance to improve the rhythmic skills of school students (Mulyaningsih et al. 2022). In addition, rhythmic gymnastics is an art form and sport where coordination is very important (Radaš, Milenković, and Milčić 2022). Teachers should also be more creative when creating learning media to make it more interactive and useful (Adi et al., 2024).

Based on the results of observations that researchers found at PAUD Mawar and Tk Dewi Bawang Regency, the lack of gross motor development in children's walking in place, the lack of children's development in one-legged standing balance, the lack of children's development in swinging their hands, and the lack of children's development in doing rhythmic gymnastics movements.

Therefore, researchers used the development of Senam Sehat Ceria because it incorporates movement elements from the basic movements of rhythmic gymnastics. Researchers created Senam Sehat Ceria by combining several songs and creation movements that follow the abilities of PAUD students. It consists of five movements: warm-up movement, core movement, core movement, core movement, and cooling movement. The selection of songs follows the times. As a new means of enhancing creativity in physical education learning, Senam Sehat Ceria produces an interesting and entertaining gymnastic movement experience. It is aimed specifically at PAUD students learning the basic movement patterns of rhythmic gymnastics.

The development model of Senam Sehat Ceria can be used to increase students' creativity in rhythmic gymnastics movements. In addition, because students have done the physical activity of Cheerful Healthy Gymnastics, it can increase their body immunity. It is hoped that this learning model will help teachers in teaching sports, especially rhythmic gymnastics material (Abdullah, Sujarwo, and Lubis 2020).

METHODS

Research and development (R&D) is a type of research used to make products and test the effectiveness of products. The product of this research is the Healthy Ceria gymnastics development model.

This development model is based on the model used by Borg and Gall. The steps taken in the development research of Ceria Healthy Gymnastics are collecting initial

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information, planning, making initial products, expert validation, product revision, small-scale trials, product revision and large-scale trials. The subjects in this study totalled 28 students, consisting of two schools: 13 students from KB Mawar and 15 students from Dewi Sartika PAUD. The small-scale study was conducted at KB Mawar, which amounted to 13 students. The large-scale study was conducted at Dewi Sartika Kindergarten, with a total of 15 students. In this development, the data analysis technique used is descriptive analysis, with a presentation in the form of percentages obtained from student questionnaires after the trial. Meanwhile, data in the form of suggestions and reasons for selection were analyzed using qualitative analysis techniques obtained from the validation of gymnastics experts and learning experts.

RESULTS AND DISCUSSION

Result

Healthy Ceria Gymnastics is an exercise designed using songs that contain movements so that it can attract children's mobility. This gymnastics is called "Healthy Cheerful" because the gymnastic movements are easily understood by early childhood, so that it can create an atmosphere full of joy during learning rhythmic gymnastics activities.

The music contained in the cheerful, healthy gymnastics is a combination of ice-breaking music and aerobic music consisting of 2 songs, namely Satu Jari Tangan and Gembira Gymnastics. The reason for choosing this music is that the target of cheerful, healthy gymnastics is upper PAUD students, who certainly adjust the characteristics of PAUD students by creating appropriate rhythms and movements. The purpose of Healthy Ceria gymnastics is to improve fitness and health in students and train self-discipline and focus skills, especially in performing the right movements. Training self-discipline and the ability to focus in gymnastics is essential to achieve optimal results. When one performs gymnastic movements, concentration is required to ensure each movement is performed precisely and correctly. This involves attention to technique, breathing, and body rhythm.

The initial product draft of the Healthy Ceria gymnastics model development must go through a validation test stage by experts before being tested on a small scale. This validation stage involved one gymnastics expert, Mr. Dr. Ipang Setiawan, M.Pd, who served as a gymnastics expert lecturer, and two learning experts, Siti Fatimah S.Pd, and Suprapti Ama S.Pd, who served as physical education teachers.

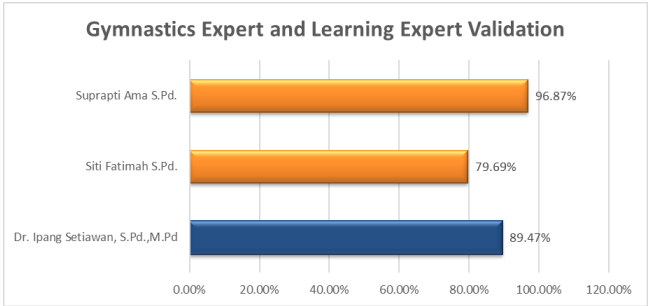

Figure 1.
Expert Validation and Learning Experts

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The results showed that gymnastics experts and learning experts received an average of 89.47% in the "Very Good" category. Thus, it can be concluded that, in learning PE, the development of Ceria Healthy Gymnastics as rhythmic gymnastics learning can be continued to the next stage, namely, small-scale trials. However, before the small-scale trial is carried out, the results of expert validation must be improved. For example, the movements must be adjusted for PAUD students, and the warm-up music section must also be improved. After the Healthy Cheerful Gymnastics development product is tested and changed by experts, the next step is to test the updated Healthy Cheerful gymnastics on students directly. Before the Healthy Cheerful gymnastics is widely introduced, students should be tested on a small scale. The small-scale trial of Gymnastics Sehat Ceria was conducted with 13 PAUD students at KB Mawar in August 2024. This trial was conducted twice a week to identify problems faced by students during the Healthy Cheerful gymnastics activity, such as shortcomings, weaknesses, or the effectiveness of the product when used during learning.

Based on the data from the results of the phase I and II small-scale trials that have been carried out at KB Mawar Bawang, the final data is obtained in the form of student assessments from 3 aspects, namely affective aspects, cognitive aspects, and psychomotor aspects. The three aspects are obtained based on questionnaire sheets that have been filled out by students, observation sheets, and student assessment sheets related to the development of Healthy Ceria gymnastics. From the results of the filling, the results are described as follows:

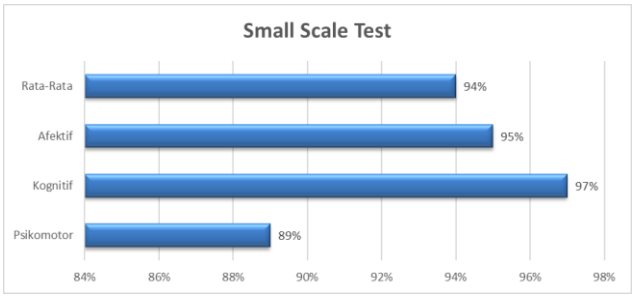

Figure 2.
Small Scale Test

The table image shows that, from the small-scale trial involving cognitive aspects, the percentage of answers of 89 per cent reached the Very Good criteria. Certain students understand and can practice well the development of Ceria Healthy Gymnastics. Due to a good understanding and a fairly detailed explanation of the development of Ceria Healthy Gymnastics, students quickly adapted. With 97% answers, the affective aspect is included in the Very Good category. In this aspect, students can learn attitudes such as cooperation, honesty, responsibility, and sportsmanship. The psychomotor aspect has a percentage of 95% and is included in the Very Good category. Students can perform good movement skills, which allows them to develop Healthy Ceria gymnastics. With an average student response to the Healthy Cheerful gymnastics development game of 94%, the development of Sehar Ceria gymnastics can be used for PAUD students of KB Mawar Bawang.

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The results of the expert evaluation and the phase I small-scale trial conducted on students of KB Mawar Bawang, Bawang Sub-district, Batang Regency showed that the movements had to be changed in the music section too quickly, so that students experienced delays in performing the cheerful, healthy gymnastics movements. Furthermore, a large-scale trial was conducted to evaluate the Healthy Cheerful exercise that had been improved from the previous small-scale trial.

At Dewi Sartika Bawang Kindergarten, the large-scale trial was conducted with 15 students from phase I. The final data included student evaluations of the three components. The final data included student evaluations of the three affective, cognitive, and psychomotor components as follows:

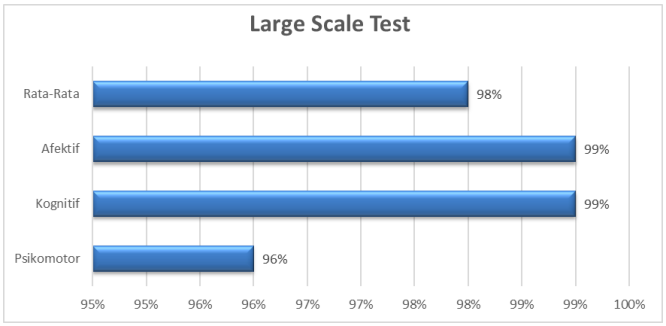

Figure 3.
Large Scale Test

The table above shows some information related to the level of students' abilities in cognitive, affective, and psychomotor aspects in the stage I large-scale test. From the results of this stage, I large-scale trial, the cognitive aspect of students obtained 96% which was included in the Very Good category. In the affective aspect, students get a percentage of 99% which is included in the Very Good category. And in the psychomotor aspect, students get a percentage of 99% which is in the Good category. From these three aspects, the average percentage obtained by students is 98% which is included in the Very Good category.

With the average student response to the Healthy Ceria gymnastics development game of 98%, the development of Healthy Ceria gymnastics can be used for Dewi Sartika Bawang Kindergarten students.

Discussion

Consistent with prior research, our model significantly aided gross motor development, particularly in activities such as running, jumping, pushing, and catching. Empirical data from Jalaleota and ACIK-based models demonstrate that structured, music-accompanied gymnastics positively affects locomotor and manipulative abilities in preschoolers (Handayani et al., 2022; Sulistyowati & Sukamti, 2018). For instance, in Handayani et al.'s R&D study, children exhibited significant improvements in basic motor measures after implementation of the Jalaleota program ($p < 0.05$). This parallels encouragement from Syari et al. (2022), who reported higher levels of gross motor

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coordination following ACIK manipulative exercises among 5–6-year-olds ($p < 0.05$). Our findings reinforce that developmentally structured routines, when delivered joyfully through song and play, substantially boost motor competence—an approach that resonates with global evidence (Zeng et al., 2017; Skopal et al., 2020).

A central feature of our model was the emphasis on joy and engagement through cheerful music, expressive lyrics, and interactive progression. Qualitative observations revealed high enthusiasm, full participation, and positive emotional responses from students. This aligns with the Jalaleota framework, whose warm-up, core, and cool-down sections—crafted to be lively—were rated "good" to "excellent" by students and teachers, with responses ranging from 3.15 to 3.65 on a 4-point scale.

Such positive affect is critical: motivational frameworks like Dalcroze eurhythmics underscore the role of rhythm in enhancing engagement and creative movement in young children, while Sulistyowati & Sukamti (2018) concluded that tempo-aligned music increases motivation and alignment with movements ($p < 0.05$). Our findings support that joyful, musically-enriched models not only boost motor outcomes but also foster positive attitudes toward learning and physical activity, important in preventing sedentary behaviour from an early age (Barros et al., 2021)

Developing a localized gymnastics model required adaptation to local contexts such as Bawang's limited space and resources. The Jalaleota model provides an effective template: its modular structure (warm-up, core, cool-down), adaptation to kindergarten routines, and ease of teacher use were cited as key strengths (Handayani et al., 2022)

Furthermore, our study echoes national classroom action research findings in Indonesia (e.g., Noviria et al., 2023), which highlight that structured, rhythmic-movement programs—particularly those combining movement and song—support integrated motor and cognitive development (Suharsimi Arikunto & Suhardjono, 2021; Galih Dwi Pradipta, 2017). Aligning with these studies, our model draws from play-based pedagogy, reinforcing physical learning with language, rhythm, and sequencing.

Feasibility testing in local contexts was a key component of this research. Teacher feedback was positive: they found the model easy to deliver, culturally relevant, and manageable within kindergarten schedules, urban or rural. These observations echo Jalaleota's expert and user acceptance, which rated it "excellent" in language clarity and visual appeal (Handayani et al., 2022). Implementation followed pilot feedback loops, and adjustments were made to movement complexity and clarity, reflecting best R&D practices (Miles & Huberman, 1994).

Such acceptability is vital for scalability in low-resource, rural settings. Our experience suggests that joyful gymnastics models with flexible structure are practical and sustainable within Indonesian early childhood settings, resonating with recent findings from Surabaya, where creative gymnastics videos were effectively used in morning assemblies (2023).

This study contributes to addressing a methodological gap. There has been scant empirical research targeting joyful, rhythmic gymnastics models in rural early childhood

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contexts within Indonesia (Batang, Bawang). Most literature centres on urban or controlled environments. Our model demonstrates meaningful progress in both psychomotor skills and emotional engagement, offering empirical evidence relevant to rural practice. Comparable frameworks like Jalaleota and ACIK show similar promise, suggesting that joyful gymnastics can serve as a viable physical education strategy across diverse schooling environments.

Moreover, our model provides a replicable framework that maintains fidelity to national curricula while being adaptable to local socio-cultural dynamics. This resonates with principles of asset-based community development, where local context and participation are prioritized.

Despite promising results, the study has limitations. First, the design lacked a control group without joyful elements, limiting causal inference. Future randomized interventions are recommended. Second, the long-term impact on aspects like balance, posture, and cognitive development remains to be explored. Future studies could incorporate neurodevelopmental assessments or longitudinal designs (e.g., academic performance). Lastly, dissemination through teacher training modules and community-based rollouts would facilitate broader adoption and research scaling.

Overall, the Cheerful, Healthy Gymnastics Model developed for early childhood in Bawang demonstrates strong efficacy in enhancing motor skills, emotional engagement, and teacher usability. This aligns with developing frameworks like Jalaleota (Handayani et al., 2022) and ACIK manipulative routines (Sulistyowati & Sukamti, 2018), emphasizing structured music-integrated activities. The positive reception and outcomes signal strong potential for policy integration into rural kindergarten settings. Scaling efforts through teacher workshops and curriculum incorporation will be critical. Future research should incorporate controlled trials, cognitive measures, and localized adaptations.

CONCLUSION

The final result of this development research is the creation of a Healthy Ceria gymnastics development product, which is the result of rhythmic gymnastics activities. Based on the analysis of the results of this study, it can be concluded that the product is the development of a rhythmic activity learning model. According to the average results of the 94% small-scale test with Good criteria and the 98% large-scale test with Very Good criteria, the product development of Cheerful Healthy Gymnastics can be used for early childhood students (PAUD).

However, while there are some advantages to the development of Senam Sehat Ceria, such as attracting students to participate actively, music that adds to students' enthusiasm, and being an option for teachers to teach rhythmic gymnastics, there are also some disadvantages. One of the disadvantages is that some students still have difficulty performing body balance and movements. Therefore, the movements must be corrected and instructions must be given repeatedly. However, the results show that the

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creation of Senam Sehat Ceria is a useful exercise and can be used in early childhood (PAUD) rhythmic gymnastics learning.

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