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IMPLEMENTASI GERAK DASAR SENAM DI SEKOLAH DASAR

IMPLEMENTATION OF FUNDAMENTAL MOVEMENT LEARNING GYMNASTICS IN ELEMENTARY SCHOOLS

Herman Chaniago[1], Wahyuningtyas Puspitorini[2], Yafi Velyan Mahyudi*[3]

Pendidikan Jasmani, Olahraga, dan Kesehatan, Fakultas Ilmu Keolahragaan, Universitas Negeri

***Corresponding Author: Yafi Velyan Mahyudi, yafialetta11@gmail.com**

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Abstrak

Tujuan penelitian ini untuk mempelajari bagaimana siswa belajar gerak dasar *gymnastic* di sekolah dasar dan dampak pada pertumbuhan fisik dan kognitif. Hasil penelitian ini akan memberikan pedoman pembelajaran senam di sekolah dasar dan meningkatkan kesadaran akan pentingnya metode pembelajaran yang menyenangkan dan interaktif. Metode penelitian yang digunakan dalam penelitian tindakan ini adalah model Kemmis dan Mc Taggart. Subyek penelitian adalah siswa dari kelas dua SD yang berusia antara 8-9 tahun dan berjumlah 27 anak, terdiri dari 17 perempuan dan 12 laki-laki. Pengambilan sampel dengan *purposive sampling* yaitu menetapkan usia pada level 1 *gymnastic*. Instrumen penelitian berupa lembar observasi yang terkait dengan respon siswa selama pembelajaran dan tes keterampilan gerak dasar senam. Pada indicator keseimbangan memperoleh nilai rata-rata paling tinggi yaitu 84, gerakan memutar 79, gerakan berguling 72 dan kelenturan 75. Dari hasil penilaian tersebut rata-rata sudah memenuhi kriteria ketuntasan minimum siswa dalam pembelajran pendidikan jasmani. Sedangkan perbedaan penilaian dari siklus I dan siklus II diperoleh hasil 2,868 lebih besar dari t0 2,755 dan α (0,05). Penelitian ini mengkonfirmasi bahwa implementasi gerak dasar *gymnastic* pada siswa sekolah dasar efektif dalam meningkatkan keseimbangan, koordinasi, dan fleksibilitas. Ini memiliki dampak positif pada perkembangan fisik siswa dan sebaiknya diintegrasikan dalam kurikulum olahraga sekolah dasar. Penelitian juga mengkonfirmasi peran penting kesehatan fisik atau untuk mempersiapkan fisik bagi anak-anak.

Kata kunci: gymnastic, gerak dasar, pendidikan jasmani

Abstract

This research aims to study how students learn basic floor exercise movements in elementary school and the impact on physical and cognitive growth. The results of this research will provide guidelines for learning gymnastics in elementary schools and increase awareness of the importance of fun and interactive learning methods. The research method used in this action research is the Kemmis and McTaggart model. The research subjects were students from the second grade of elementary school aged between 8-9 years and totaling 27 children, consisting of 17 girls and 12 boys. The research instrument was an observation sheet related to students' responses during learning and basic gymnastics movement skills. The balance indicator obtained the highest average score, namely 84, twisting movement 79, rolling movement 72, and flexibility 75. From the results of the assessment, the average met the minimum criteria for student completeness in physical education learning. Meanwhile, the difference in assessments from cycle I and cycle II obtained a result of 2.868 which was greater than t0 2.755 and α (0.05). This research confirms that the implementation of basic gymnastics movements in elementary school students is effective in improving balance, coordination, and flexibility. It has a positive impact on student's physical development and should be integrated into the primary school sports curriculum. Research also confirms the important role of physical health in preparing children physically.

Keywords: *gymnastic, gross motor skills, physical education learning*

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Herman Chaniago[1], Wahyuningtyas Puspitorini[2], Yafi Velyan Mahyudi*[3]

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INTRODUCTION

Sports and physical education are important components of the primary school curriculum. Sports, gymnastics, and physical education have become key in Human and Social Sciences, influencing the integration of these subjects into undergraduate programs and fostering a strong interface with education (Polevoy, 2022). Gymnastics models for elementary school can improving basic movements (Jusuf et al., 2019). Gymnastics is a type of sport that involves basic movements such as squatting, jumping, and rolling on a mat with technical skills and flexibility. Gymnastic exercises on basic motor skills (walking, running, jumping, gallop jumping, standing long jump) (Demirel, 2018). One factor that often becomes an obstacle in this learning material is the complex movement elements. Learning gymnastics has great benefits for students' physical, cognitive, and social development. Gymnastics participation offers health benefits for children's development, including socio-emotional growth, physical growth, and cognitive improvements (Lucas et al., 2019). The right delivery method will make it easier for students to master good and correct techniques, thereby creating a sense of self-confidence and encouraging students to learn and practice.

Gymnastic exercise activities use more movement of all parts of the body, both for the exercise activity itself and for other branches of activity. The associative stage is characterized as much less verbal information, smaller gains in performance, conscious performance, adjustment making (Huber, 2017). Make sure your students understand the motor learning stages and which stage students are at during the relearning process. Combining different exercises like lunges, push-ups, and squats can result in a significant increase in muscle strength and power (Deineko et al., 2021). That is why this gymnastic activity is said to be a basic activity. There is a positive influence on students' physical development from learning basic floor exercise movements. By doing movements such as squatting, jumping, hanging, and handstands, students can improve body muscle strength, balance, and motor coordination. Gymnastics to develop some motor abilities (agility, flexibility, balance, compatibility) and learn some free skills in of students (Salman, 2020). Learning gymnastics exercises can also improve students' core strength and flexibility. According to research conducted by (Kaneko et al., 2019) students who participated in the floor exercise program had a higher body mass index (BMI) and higher fitness levels compared to students who did not participate in the program. Young athletes' motor skills can be improved through basic gymnastics by mastering the principles of movement, and teaching moral, volitional and physical attributes.

Gymnastics is a type of sport that increases the physical, motoric, and cognitive growth of elementary school students. Floor exercise has been proven to be an effective learning material for improving basic motor skills in young children. A training program accompanied with musical rhythm significantly improved the skill level and performance of students in gymnastics (Mismar & Ikhweileh, 2020). Elementary school is an ideal place to start a floor exercise learning program because there is a lot of potential development that students can achieve. By implementing floor exercises in a systematic and organized manner, it is hoped that students' health and fitness will improve.

Learning the basic movements of gymnastic exercise can also improve students' cognitive abilities apart from providing physical benefits. Gymnastic preparations can effectively complement improving performance, coordination, and health prevention (Krištofič, 2018). Gymnastic exercise can improve brain development through the complex movements and coordination required by the body. A gymnastics program involving gym-ball exercises can

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effectively maintain good health female populations (Hidi, 2014). As shown by research conducted by (Lucas et al., 2019) gymnastic exercise has the potential to improve students' abilities in problem-solving, memory, and abstract thinking. Collaborative gymnastic learning strategies improve students' and teachers' gymnastic competences, group relations, decision-making capacity, and overall satisfaction (Ávalos Ramos et al., 2019). In addition, gymnastic exercises also encourage students to experiment with new movements or combine existing movements. This can improve students' ability to think creatively.

However, there is a need for further research specifically focused on gymnastics instruction in elementary schools. The existing studies have examined gymnastics in general student populations, but have not looked specifically at implementation and outcomes in elementary grades. Additional research should investigate developmentally appropriate gymnastics curriculum, teaching methods, and assessment for elementary students. Longitudinal studies tracking the effects of early gymnastics instruction on both physical abilities and academic performance would be beneficial. More data is needed on how gymnastics can be integrated into elementary physical education programs to maximize benefits. Research partnerships with schools implementing gymnastics programs could provide valuable insights.

The aim of this study how students learn fundamental gymnastic exercise movements in elementary school and the impact on physical and cognitive growth. This research can understand the factors that influence the success of learning programs by examining effective implementation processes. The results of this research will provide guidelines for creating sports curricula in elementary schools and increase awareness of the importance of fun and interactive learning methods. Research also explains the importance of floor exercise activities for children's education. The importance of this research is to develop a sports learning approach that focuses on the physical and cognitive growth of students in elementary schools.

METHOD

The research method used in this action research is the Kemmis and Mc Taggart model (Kemmis et al., 2002). The model proposed by Kemmis & Taggart is cyclical. Each device consists of four components, namely: planning, action, observation, and reflection. The two components of action and observation are two activities that must be carried out simultaneously. The research subjects were students from the second grade of elementary school aged between 8-9 years and totaling 27 children, consisting of 17 girls and 12 boys. All participants involved in the lesson do not yet have the skills and knowledge of basic floor exercise movements. The research was carried out between March and June 2023.

The action plan explains what, why, when, where, by whom, and how the action is carried out. In the design stage, the focus of events or problems that need special attention to be observed is determined, namely improving basic gymnastic exercise movements. The second stage is carrying out the contents of the research design, implementing actions regarding what the researcher does to improve, and correct problems in existing learning, and is guided by the research design (Planning). Observation actually goes hand in hand with the implementation of action. In this stage, all things that are necessary and occur during the implementation of the action are recorded or recorded. Researchers and observers observe the results or impacts of actions given to students during research. Reflection includes analysis, synthesis, and assessment of the results of observations of actions taken. If a problem is found, a review process is carried out through the next cycle until the problem can be resolved.

The first research instrument is an observation sheet related to student responses during learning from the beginning of the activity to the end. In the floor exercise series at level 1, students must be able to do forward rolls and backward rolls. So, in this research, one of the students must be able to practice forward and backward rolling movements. The following are

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student responses listed in student activities; 1) Teachers in providing material and practicing basic gymnastics movements, 2) Students in expressing the information received, 3) Students in practicing basic gymnastics movement material taught, 4) Students in expressing opinions regarding difficulties experienced during learning, 5) Students sharing place and equipment with other friends, 6) Student participation in practicing movement tasks individually and in groups, 7) Student participation in discussing and understanding basic gymnastics movement material, 8) Students in accepting group members.

The purpose of measuring the back roll movement in floor gymnastics, among others, is to evaluate the student's ability to perform basic gymnastic movement skills correctly and smoothly. The back roll is one of the basic movements in floor gymnastics (Van Rossum, 2014). The indicators for assessing the front roll consist of: execution technique, beauty of movement, balance, body flexibility, and final position of the roll. Meanwhile, the indicators for a back roll are as follows: execution technique, push strength, body coordination, body flexibility, and final position of the roll. The rating scale for front rolls and back rolls uses a Likert scale with the categories Very Good with a score of 4, Good with a score of 3, Adequate with a score of 2, and Poor with a score of 1. The maximum score that students will get is 40 points (20 for the front roll and 20 for the back roll). Although floor exercise generally aims to evaluate gymnastic movement skills in the abstract, not all floor exercise categories are specifically designed to test basic gymnastic movement skills. Some floor exercise categories are more focused on the artistic component (Karacsony & Cuk, 2015).

Descriptive statistical analysis of the total score for each indicator. This includes the mean, and standard deviation. This statistical analysis will provide an overall picture of the score distribution and score variations. Analysis of averages on forward roll and backward roll allows researchers to compare and contrast performance on both skills. Researchers will use a paired t-test to determine if there is a statistically significant difference in scores between forward rolls and backward rolls. Researchers will calculate the mean and standard deviation for each indicator (technique, execution, balance, flexibility, final position) separately for both types of rolls. This will provide insight into which aspects students are performing well or the difficulties they are facing.

RESULTS

The results of research on the implementation of basic gymnastics movements for elementary school students present findings from individual observations and tests of basic gymnastics movements. During 3 (seven) meetings, the research recorded various things in the application of basic gymnastics movements to elementary school students. Below is presented research data from the findings of the cycle I researchers during observations and tests.

a. The Cycle I

The following is concluded from the results of observations during learning in Table 1. Based on the results of observations with the physical education teacher, suggestions and input were obtained as follows: 1) in the process of learning basic gymnastics movements, it is necessary to pay attention to the facilities and infrastructure needed by students according to the movements carried out, 2) the flow of movements must be easy first, 3) adjust the repetition of each movement to the duration of sports learning at school, 4) group the basic movement types of twisting, rolling, balance and flexibility. 5) arrange each daily learning program or adapt it to student needs. Meanwhile, the results of the basic gymnastics technique test will be presented in Figure 1.

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Table 1. Cycle I Observation Results

Criteria	Evaluation
The teacher provides materials and practices basic gymnastics movements	Very good
Students convey the information they receive	Poor
Students practice the basic gymnastics movement material taught	Poor
Students express their opinions about the difficulties experienced during learning	Good
Students share space and equipment with other friends	Good
Student participation in practicing movement tasks individually and in groups	Good
Student participation in discussing and understanding basic gymnastics movement material	Good
Students accept group members	Good

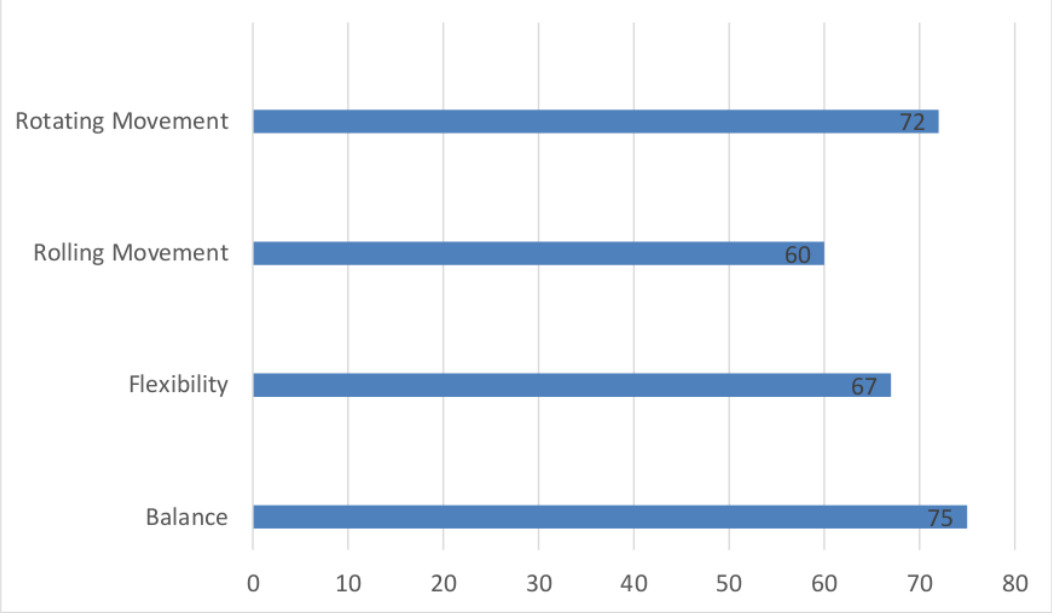

Figure 1. Cycle 1 Assessment Results

Based on the picture **(Figure 1),** it is known that the average student assessment for each indicator is different. The balance indicator obtained the highest average value 75, rotating movements 72, rolling movements 60, and flexibility 67. So, it is necessary to apply basic gymnastics movements in the second cycle to ensure that the treatment applied can provide a significant effect/improvement. The advantages of basic gymnastics movement activities that have been conveyed are based on observations with the physical education teacher, so the researcher made a reflection for the next meeting. Based on several suggestions and input from observations, the following is a reflection of cycle I:

1. The importance of physical preparation and warm-up

One of the things that researchers noticed was the importance of physical preparation before starting more complex gymnastics movements. Some students experience difficulties when they don't warm up well enough. Therefore, the teacher will include a more thorough warm-up in the next lesson plan. This will help reduce the risk of injury and ensure students

ISSN 2654-4474 (Print), ISSN 2654-9069 (Online)

are ready to perform basic gymnastics movements well.

2. Appropriate level of difficulty

Researchers also realize that each student has a different level of ability. Some students struggle with more complex movements, while others master them quickly. Therefore, researchers and teachers working together will pay attention to adjusting the level of difficulty in the next lesson plan. This will allow each student to develop at their own pace.

3. Providing constructive feedback

During this lesson, researchers provided feedback to students about their movement techniques. Researchers realize the importance of providing constructive and positive feedback to increase student motivation. Researchers will continue this approach in future lesson plans to ensure that each student feels supported and motivated to improve their skills.

4. Variety and Creativity

Gymnastics is a field that allows for a wide variety of movements and levels of creativity. Researchers will strive to inspire students to create their own movements and experience the joy of their creative expression in gymnastics.

5. Safety Awareness

During learning, student safety is always the top priority. Researchers will continue to place emphasis on safety and proper behavior in future lesson plans. This includes the correct use of gym equipment and maintaining a safe environment during lessons.

b. The Cycle II

The research findings in cycle II will be presented in the form of observation tables and diagrams of the development of students' mastery in practicing basic gymnastics techniques. The effectiveness of implementing basic gymnastics movements in the elementary school curriculum and identifying its impact on student's physical development. Based on observations made by the physical education teacher during cycle II with 3 meetings, the following results were obtained **(Figure 2)**

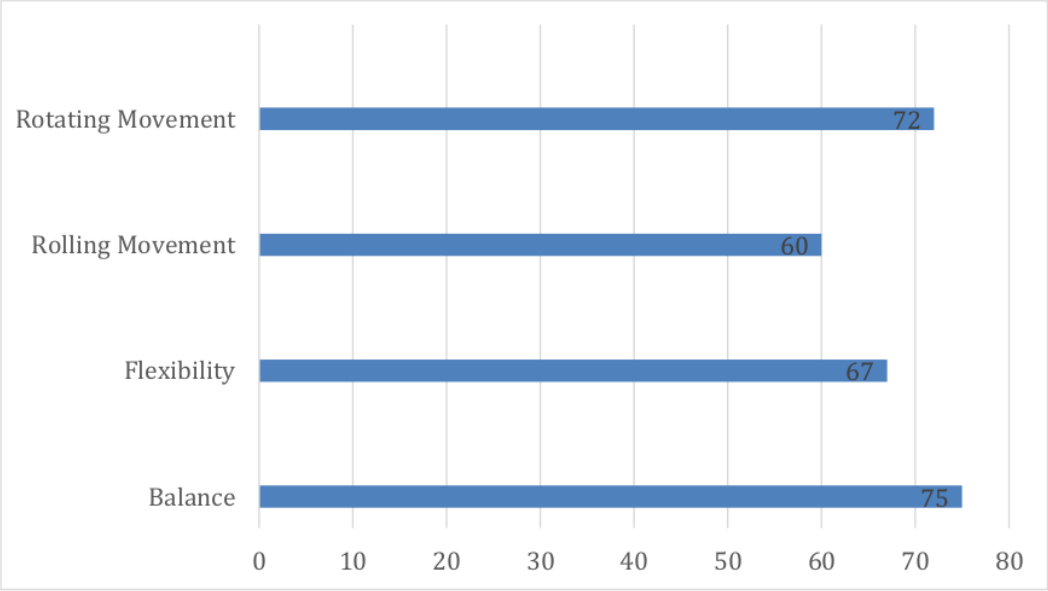

Figure 2. Results of Cycle II Assessment

ISSN 2654-4474 (Print), ISSN 2654-9069 (Online)

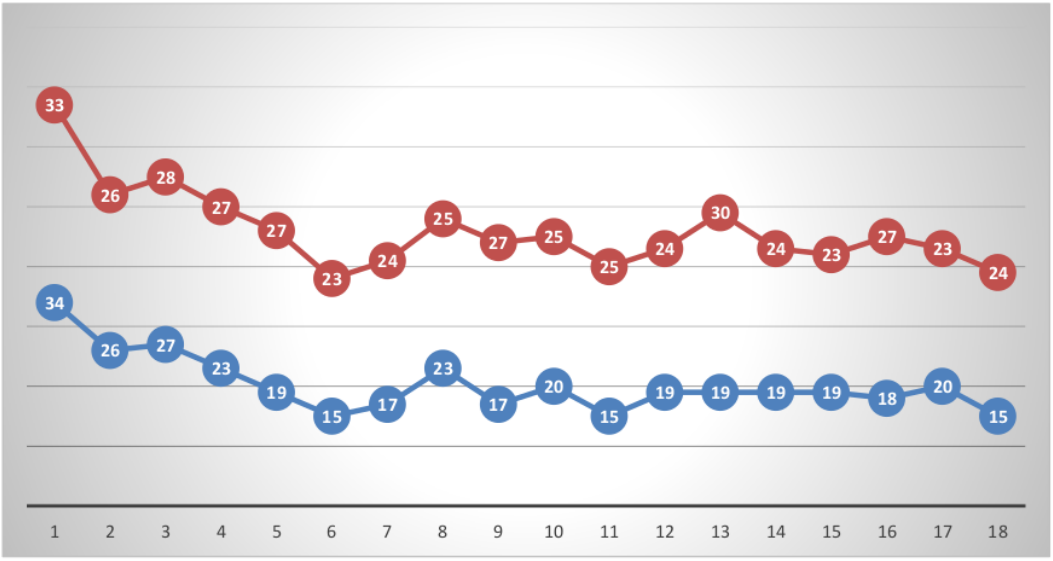

Figure 3. Assessment Cycles I and II

Based on Figure 2 above, it is known that the average student assessment for each indicator is different. The balance indicator obtained the highest average score, namely 84, turning movement 79, rolling movement 72, and flexibility 75. From the results of this assessment, on average, students have met the minimum criteria for completeness in physical education learning. Meanwhile, the difference in assessments from cycle I and cycle II obtained a result of 2.868 which was greater than t0 2.755 and α (0.05). In Figure 3, the results of the front roll and back roll assessments from cycle I and cycle II are shown.

DISCUSSION

Overall, the results showed that there was an increase in students' competence in learning physical education from cycle I to cycle II, both on average and for each assessment indicator. This improvement was statistically significant. The applied learning method is effective in improving students' competence, especially basic gymnastic movements.

The results of this research indicate that the implementation of basic gymnastics movements in the elementary school. Gymnastics effectively improves physical fitness in elementary school students, contributing more than 50% to their overall fitness (Pasaribu & Mashuri, 2019). Basic gymnastics should be a core component of the physical education curriculum for grades 1-9 (Deyneko, 2015). Sports curriculum is effective in improving students' balance, coordination and flexibility (Ningrum et al., 2022). Special exercises can improve general motor balance and performance in gymnastics, leading to better learning of free skills and balance (Bushra Kadhum, 2020). This is in accordance with the literature which states that basic gymnastics movements can contribute positively to students' physical development. Students who receive basic movement lessons in gymnastics show balance that can support daily physical activities.

There is a positive correlation between the more bioethics (flexibility, compatibility, explosive arm force, and balance), the better performance (Kurniawan & Hanief, 2022). Students also have improved motor coordination to help in various activities, including in-class learning. The developmental gymnastics program significantly improves explosive strength in girls 9-11 years compared to those who only attend physical education classes (Paunović et al., 2019). Increased flexibility through learning basic gymnastics movements can prevent injury

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and increase physical comfort. Gymnastics training program significantly improved university students' balance, strength, and flexibility, potentially benefiting all applied lessons (Özer & Soslu, 2019). Gymnastics classes in secondary school can improve body movement accuracy and interpersonal communication among students (Šimůnková et al., 2010). The implementation of basic gymnastics movements should be considered an integral part of the elementary school sports curriculum. This can help students in their physical development and motor skills. In addition, PE teachers need to receive additional training to teach basic gymnastics movements effectively.

Researchers are aware that there are still some students who get lower grades because they are less able to practice each movement indicator. The implementation of the gymnastics section in full under modern conditions is difficult to achieve, this is proved by the fact that the section is implemented in full only in 22% of educational institutions (Kuzmina & Anisimova, 2023). So, it is necessary to implement further basic gymnastics movements by physical education teachers in order to provide significant improvements. The results of the observations showed several shortcomings in the implementation of the research. Awareness of the importance of balance: basic gymnastics movements teach students to really have good balance. Researchers must understand how to control body movement and balance so as not to fall. Gymnasts who are worse off with performance always have a higher incidence of problems with the musculoskeletal system (Hassmannová et al., 2019). This reminds researchers how important body awareness is in everyday life, such as maintaining good posture.

Perseverance in following learning. Gymnastics material teaches students those extraordinary achievements cannot be achieved without continuous practice or learning. Gymnastics classes significantly improved motor skills (Čičirkaitė, 2022). The results of the research show that applying basic gymnastics movements can improve students' basic movement abilities. This is also in accordance with research that says that gymnastics exercises had a significant effect on the development of balance and gross motor skills of locomotors and sub- scales of its as galloping, hopping, leaping (Fallah et al., 2015). Researchers believe that learning with persistence is the key to mastering difficult movements in gymnastics. This teaches students not to give up easily when facing difficulties in learning new things.

Physical education classes significantly improve light and moderate-to-vigorous physical activity levels in elementary school students when teaching gymnastics elements (Petrušič et al., 2022). Artistic gymnastics exercises in the central part of physical education significantly improve adolescents' physical fitness compared to regular physical education (Miletić et al., 2019). The importance of physical health through exercise activities, realizing that a strong and flexible body is a valuable asset in everyday life, and exercise is one way to achieve that goal. Using a gymnastic stick in physical education significantly improves coordination abilities in children aged 8-9 years (Polevoy, 2022). Apart from physical health, there are other benefits of exercise such as reducing stress. Gymnastic exercise significantly reduces stress, and fatigue, and improves sleep quality (Yang & Chen, 2018). Gymnastics often involves movements that require courage to practice. This teaches students to be calm in taking measured risks and increases self-confidence. Sometimes, overcoming the fear of falling is the first step to greater accomplishments.

A smaller sample size was used in this study than a large general population. Participating in a school gymnastics program may provide more generalizable insights, so future research should expand to a broader group of students. No one knows how gymnastics helps students become braver in practicing acrobatic movements. Further studies could examine specific elements of gymnastics that encourage bold behavior and have real-life consequences.

CONCLUSION

This research confirms that the implementation of basic gymnastics movements in

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elementary school students is effective in improving balance, coordination, and flexibility. It has a positive impact on student's physical development and should be integrated into the primary school sports curriculum. Research also confirms the important role of physical health in preparing children physically but also that a non-negligible proportion of variability in the academic performance of all participants. The results of this study support the importance of children being physically active to improve their academic performance and physical fitness. Future research needs to observe how the teacher's role and teaching methods can influence the effectiveness of implementing basic gymnastics movements. So that teacher competence with additional skills in gymnastics can be known to have a better impact on the development of students' basic movements.

REFERENCES

Mismar, B. A, & Ikhweileh, S.M. (2020). The Impact of Training Program Associated with Musical Rhythm to Teach Female Student's Gymnastics Selected Skills. *International Journal of Applied Science and Technology*, *10*(4), 59-69. https://doi.org/10.30845/ijast.v10n4p5

Ávalos Ramos, M. A., Martínez Ruiz, M. A., & Merma-Molina, G. (2019). Implementation and evaluation of a collaborative gymnastic strategy. *Revista Internacional de Medicina y Ciencias de La Actividad Fisica y Del Deporte*, *19*(76), 579–598. https://doi.org/10.15366/rimcafd2019.76.001

Čičirkaitė, F. (2022). Do 5-6-Year-Old Girls Who Attend Gymnastics Achieve Better Motor Skills' Assessment Results Compared to those Who Do Not Attend Gymnastics. *Reabilitacijos Mokslai: Slauga, Kineziterapija, Ergoterapija*, *2*(27), 68–74. https://doi.org/10.33607/rmske.v2i27.1263

Deineko, A., Lutsenko, L., & Petrov, D. (2021). Basic gymnastics as an effective means of enriching the motor experience of young athletes. *Scientific Journal of National Pedagogical Dragomanov University. Series 15. Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports)*, *4(134)*, 39–42. https://doi.org/10.31392/npu-nc.series15.2021.4(134).10

Demirel, N. (2018). The Impact of Therapeutic Recreational Gymnastic Exercise on Basic Motor Skills of Hearing-Impaired Children Aged Between 6 and 9 Years. *Journal of Education and Training Studies*, *6*(3), 147. https://doi.org/10.11114/jets.v6i3.3048

Deyneko, A. (2015). Basic gymnastics as a basic component invariant component of the curriculum subject «Physical culture». *Слобожанський Науково-Спортивний Вісник*, *47*(3), 30–34. https://doi.org/10.15391/snsv.2015-3.005

Bushra Kadhum, D. A. (2020). The effect of special exercises on improving general motor impairment to perform forward anterior heart rate skill on the mat of ground movements for ages (10-13). *Modern Sport*, *19*(3), 01-18. https://doi.org/10.54702/msj.2020.19.3.0018

Fallah, E., Nourbakhsh, P., & Bagherly, J. (2015). The Effect of Eight Weeks of Gymnastics Exercises on the Development of Gross Motor Skills of Five to Six Years Old Girls. *European Online Journal of Natural and Social Sciences Special Issue on New Dimensions in Economics*, *4*(1), 845–852. https://doi.org/10.33222/juara.v7i3.2440

Hassmannová, K., Pavlů, D., & Nováková, T. (2019). Most common injuries of the

ISSN 2654-4474 (Print), ISSN 2654-9069 (Online)

musculoskeletal system among children of elementary school age who engage in gymnastic sports (aerobics, artistic or rhythmic gymnastics) at an elite level. *Auc Kinanthropologica*, *55*(1), 10–20. https://doi.org/10.14712/23366052.2019.2

Hidi, J. (2014). Gymnastics Program Involving Gym-ball Exercises Meant to Prevent Heart Diseases. *Procedia - Social and Behavioral Sciences*, *84 (4)*, 193–196. https://doi.org/10.1016/j.sbspro.2014.02.200

Huber, J. J. (2017). Applying Educational Psychology In Coaching Athletes. Sports Coaching Review, 9(1), 119–121. https://doi.org/10.1080/21640629.2019.1694807

Jusuf, J.B.K., Raharja, A.T., & Mahardika, N. A. (2019). The Development of Ritmic Gymnastic Model To Improve Basic Movement and Interest in Rytmic Gymnastic. Acitya Journal of Teaching & Education, 1(1), 1–37. https://journals.umkt.ac.id/index.php/acitya/article/view/205

Kaneko, Y., Hasegawa, C., & Mariko, Y. (2019). Research on the creation of an original school gymnastic to the university song and its benefits. *Journal of Gymnastics for All*, *7 (2)*, 31–38. https://doi.org/10.4107/gym.7.31

Karacsony, I., & Cuk, I. (2015). *Floor Exercises: Methods, Ideas, Curiosities, History*. Human Kinetics Publishers.

Kemmis, S., Mctaggart, R., & Zuber-Skerritt, O. (2002). The concept of action research. In *The Learning Organization, 9* (3). 621-641. https://doi.org/10.1108/09696470210428840

Krištofič, J. (2018). Utilization of gymnastics in the dry preparation of hockey players. *Studia Sportiva*, *12*(1), 31–37. https://doi.org/10.5817/sts2018-1-4

Kurniawan, A. W., & Hanief, Y. N. (2022). Development of basic movement learning models of the concept of play and games modification elementary school level. *Journal Sport Area*, *7*(2), 246–261. https://doi.org/10.25299/sportarea.2022.vol7(2).8589

Kuzmina, S. V., & Anisimova, N. A. (2023). The state of implementation of the "Gymnastics" section of the physical education program for the of students of 1–11th grades. *Physical Education and University Sport*, *2*(1), 63–69. https://doi.org/10.18500/2782-4594-2023-2-1-63-69

Lucas, W. C., Titus, S., & Young, M. E. M. (2019). Experiences of young South African gymnasts, parents and coaches about the health benefits of sport participation. *African Journal for Physical Activity and Health Sciences (AJPHES)*, *25*(2), 216–231. https://doi.org/10.4314/AJPHERD.V25I2

Salman. M. (2020). The effect suggested exercises to develop some motor abilities and learning some free skills in the rhythmic gymnastic of female students. *University of Thi-Qar Journal of Medicine*. *15* (1). 69-81. https://doi.org/10.32792/utq/utg/vol15/n.1/1

Miletić, M., Ilić, H. S., Jeremić, M., Parlić, M., Ilić, I., & Vidaković, H. M. (2019). The Effects of the Arthistic Gymnastics Program on Physical Fitness of Adolescents. *Facta Universitatis, Series: Physical Education and Sport*, 743-750. https://doi.org/10.22190/fupes190413034m

ISSN 2654-4474 (Print), ISSN 2654-9069 (Online)

Ningrum, D. T. M., Chaniago, H., Pasaribu, A. M. N., & Mahyudi, Y. V. (2022). Types of Physical Activity and Sports for teens in Maintaining Physical Fitness in Leisure. *Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan)*, *5*(2), 661-672. https://doi.org/10.31851/hon.v5i2.8710

Özer, Ö., & Soslu, R. (2019). Comparison of the Static Balance, Strength and Flexibility Characteristics of the University Students Who Taken Artistic Gymnastic Lesson. *Turkish Journal of Sport and Exercise*, 21 (2), 229–233. https://doi.org/10.15314/tsed.573516

Pasaribu, A. M. N., & Mashuri, H. (2019). The role of rhythmic gymnastics for physical fitness for elementary school students. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, *5*(1), 89-98. https://doi.org/10.29407/js_unpgri.v5i1.12551

Paunović, M., Đurović, M., Veličković, S., Živković, M., & Stojanović, N. (2019).The Explosive Strength of Girls of the Younger School Age. *Facta Universitatis, Series: Physical Education and Sport*, 16(3). 677-685. https://doi.org/10.22190/fupes171022046p

Petrušič, T., Bogataj, Š., & Štemberger, V. (2022). Teaching Gymnastics Elements in Elementary School With Placebo Effect Digital Games: Cluster Randomised Controlled Trial. *Kinesiologia Slovenica*, *28*(3), 5–15. https://doi.org/10.52165/kinsi.28.3.5-15

Polevoy, G. G. (2022). Development of Kinesthetic Differentiation of Movement Parameters of Children Aged 8-9 Years Using a Gymnastic Stick. *Entomology and Applied Science Letters*, *9*(4), 65–70. https://doi.org/10.51847/zti27ovmot

Šimůnková, I., Novotná, V., & Vorálková, J. (2010). The structure of physical literacy for sport branch rhythmic gymnastics. *Studia Kinanthropologica*, *11*(2), 110–117. https://doi.org/10.32725/sk.2010.029

Van Rossum, J. H. A. (2014). Life span motor development. In *Human Movement Science* (Vol. 6, Issue 1). https://doi.org/10.1016/0167-9457(87)90023-6

Yang, C. L., & Chen, C. H. (2018). Effectiveness of aerobic gymnastic exercise on stress, fatigue, and sleep quality during postpartum: A pilot randomized controlled trial. *International Journal of Nursing Studies*, *77*, 1–7. https://doi.org/10.1016/j.ijnurstu.2017.09.009

ISSN 2654-4474 (Print), ISSN 2654-9069 (Online)

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