



Innovative Learning Media In Physical Education On The Level Of Enjoyment Of Elementary School Students In 3T Areas

Muhammad Hafidz Nurudin Tyas^{1*}, Mochamad Ridwan²

1 Universitas Negeri Surabaya, Surabaya, Indonesia.

2 Universitas Negeri Surabaya, Surabaya, Indonesia.

Abstract

This study aims to analyze the impact of using innovative physical education learning media on the level of enjoyment of elementary school students in 3T areas. The background of this study stems from limited learning conditions, both in terms of facilities, infrastructure, and access to technology, so that innovative, simple, and contextual learning strategies are needed. The method used in this study was quantitative with a One Group Pretest-Posttest design. This study involved all twelve students, and data were collected through a 15 item enjoyment level questionnaire. The data were analyzed using the Shapiro-Wilk normality test and paired sample t-test. The results showed a significant increase in the enjoyment scores of students after the application of innovative media, with an increase in the average score from 28 to 47. The results of the paired sample t-test showed a significance value of 0.000 (<0.05), indicating that innovative media for physical education, health, and sports learning had a significant effect on increasing student enjoyment levels. These findings confirm that the use of innovative media in accordance with the characteristics of 3T areas is effective in creating a more interesting and enjoyable learning process for students.

Keywords

Keywords 1; 3T regions 2; elementary school learning 3; enjoyment level 4; innovation media 5; physical education

© 2026 Semarang State University

✉ Corresponding author :
Address: Jl. Golf 6/19 RT 03 RW 04 Kel. Gunungsari Kec. Dukuh Pakis, Surabaya, 60224
E-mail: muhammadhafidz.23282@mhs.unesa.ac.id / 081231472776

p-ISSN 2460-724X
e-ISSN 2252-6773

INTRODUCTION

Learning activities in 3T areas are generally still untouched by technology (Siahaan, 2018). The learning process is also still limited in the use of technology, such as learning media. Learning media is used in teaching activities to convey information (Rohima, 2023). The use of educational media not only facilitates the learning process but also has the potential to increase student engagement and enjoyment (Putri, 2024). The utilization of innovative media is an important element in the learning process, where the rapid advancements in technological innovation can be leveraged to create learning media specifically designed to meet the requirements in 3T areas (Rahmi et al., 2019). The need for innovative learning media in 3T areas cannot be equated with urban schools; instead, it must be designed to make learning efficient and enjoyable (Veronika et al., 2024). The development of innovative media aimed at learning objectives must adhere to various criteria to ensure that benefits are maximized and materials are communicated effectively (Shalikhah, 2017). Some factors to consider when choosing learning media include: 1) The purpose of using the media, 2) The target audience who will use the learning media, 3) The characteristics of the media, 4) The time required, 5) The necessary costs, and 6) The availability of learning media (Husein Batubara & Noor Ariani, 2019).

Research on the application of innovative physical education learning media on the enjoyment levels of elementary school students in 3T areas is important because 3T areas (front, outermost, and lagging) still face limitations in facilities, infrastructure, and access to creative learning methods (Kardius Richi, 2017). This condition often makes physical education learning boring and students less interested, which impacts their low interest and participation (Khaidir et al., 2021). By implementing innovative learning media, it is hoped that students will not only have a pleasant learning experience but will also be more motivated to be actively engaged (Imawati & Maulana, 2021). A fun learning experience makes it easier for students to remember and accept all the

material presented (Rihlasyita & Rahmawati, 2022).

Previous research has proven that innovative media for physical education learning, whether traditional games, interactive media, or digital applications, can increase the enjoyment of elementary school students. However, most of these studies have focused on schools in urban areas or regions with relatively adequate educational facilities (Cahyani & Nur, 2017). Research specifically highlighting the application of innovative physical education learning media in 3T areas, with all the limitations of facilities, infrastructure, and technology access, is still very limited. However, conditions in 3T areas require innovative strategies that are not only enjoyable for students but also easy for teachers with limited resources to implement (Saleh & Ramdhani, 2020). Professional teachers are highly needed in this situation because they must be able to use learning media effectively and adapt to the existing conditions (Nurgiansyah, 2022). Professional teachers must be able to carry out their duties and responsibilities completely, for the main goal of educating the nation's future generations.

The focus on implementing innovative PJOK learning media is the novelty of this research, which not only focuses on improving students' motor skills but also specifically measures the level of enjoyment among elementary school students in 3T areas. Unlike previous studies that were generally conducted in schools with adequate facilities, this research attempts to use simple and easily implementable innovative media in environments with limited facilities and infrastructure, in line with the needs of schools in 3T areas.

The purpose of this research is to ensure the success of innovative physical education learning media in relation to the level of enjoyment of elementary school students in 3T areas, thereby gaining insights into the extent to which this innovative media can foster an engaging and enjoyable learning environment, while also increasing student participation in physical education learning. In addition, this research aims to provide solutions in addressing limitations in facilities and infrastructure, while also contributing to improving the quality of physical education in 3T areas.

METHODS

A quantitative research method using a quasi-experimental design has been chosen as the methodological approach in this study to answer the research questions posed. The specific method applied in this study is a pre-experimental design approach. This research uses the One Group Pretest-Posttest Design framework. This framework only includes one group, specifically the experimental group, where participants do not undergo relocation or randomization. This research focuses on one of the public elementary schools in Sidoarjo Regency that is said to be lagging behind (Nadela et al., 2022; Suprihatin, 2021). Next, the population in this study consists of all the students at the school, totaling twelve children. The instrument in this study used a questionnaire adapted from previous research, specifically the pleasure level questionnaire by (Gani et al., 2023). The validity test using the Product Moment Pearson Correlation showed that

all question items had a calculated r value exceeding the r table of 0.244 and a sig. (2-tailed) value of $0.000 < 0.05$ at a significance level of 5%, thus all question items were declared valid. The reliability test using Cronbach's alpha yielded a value of 0.740, concluding that all question items are considered reliable or consistent out of a total of 15 questions. This research was conducted over four separate meetings, with the initial meeting serving as a pretest, followed by the administration of treatment, the second meeting also involving treatment administration, the third meeting also involving treatment administration, and the final meeting encompassing treatment and the posttest. Data analysis was conducted using IBM SPSS version 22. The analysis method used in data evaluation was regression analysis. Researchers believe that the questionnaires given to participants can be filled out in line with the current realities they face in their educational institutions, and that the research conducted can indeed represent a broader context.

RESULTS and DISCUSSION

The results of this study show data on the application of innovative physical education learning media on the level of enjoyment of elementary school students in 3T areas. This data was obtained thru a questionnaire consisting of fifteen questions focused on students' level of enjoyment of innovative learning media.

Table 1. Descriptive Analysis

	<i>PreTest</i>	<i>PostTest</i>
Mean	28	47
Median	28	47.5
Minimum	25	41
Maksimum	32	51
Std. Deviasi	2.089	2.985

Table 1. presents the data obtained during the pretest and posttest. During the pretest, the mean score was 28, the median score was 28, the minimum score was 25, the maximum score was 32, and the standard deviation was 2.089. The posttest scores obtained after the treatment using innovative learning media showed an increase in the average score to 47, with a median score of 47.5, a minimum score of 41, a maximum score of 51, and a standard deviation of 2.978. Based on these data, there was

an improvement in the posttest average score, indicating an effect of the application of innovative learning media.

Table 2. Normality Test Result

	<i>Sig.</i>	Description
PreTest	0.389	Normal
PostTest	0.689	Normal

Table 2. The Shapiro-Wilk normality test is one of the statistical methods used to determine whether the data obtained is normally distributed or not. This is indicated by a p-value greater than 0.05, which means the data is normally distributed. Conversely, a p-value less than or equal to 0.05 indicates that the data is not normally distributed. The data in the table presents the results of the pretest normality test, which is 0.389, and the posttest, which is 0.689. This indicates that the data is normally distributed. Therefore, the next step is to use the paired sample t-test to determine the effect within the same variable after treatment.

Table 3. Result of the paired sample t-test

PRETEST POSTTEST	
Mean	-19.000
Std. Deviasi	3.303
Sig. (2-tailed)	0.000

Table 3. The results of the paired sample t-test show a significant difference between pretest and posttest scores. The mean difference value is -19,000, with a standard deviation of 3,303. The calculation results show that the significance value Sig.(2-tailed) is 0.000, which is below the significance level of 0.05. Based on these results, it indicates that the treatment provided in the study significantly improved the outcome, thus the research hypothesis can be accepted.

After conducting research, it was found that conditions in 3T areas are not only limited to school facilities, but access to school is also an obstacle to learning (Lumbanraja et al., 2020; Wachidah & Wardana, 2018). Unpredictable weather in 3T areas is also a factor affecting learning, such as tidal fluctuations in coastal areas making access to schools difficult. Looking at other conditions, students in 3T areas have different knowledge and thinking levels compared to those in urban areas (Yanto et al., 2020). They need different treatment so they can receive the material well and enjoy learning (Reresi & Lamatoka, 2023). Based on the analysis results, the application of innovative physical education learning media can increase the enjoyment level of elementary school students in 3T areas (Ilmiah et al., 2025). The magnitude of this increase in enjoyment after being taught using innovative media is also supported by research conducted by (Antoro et al., 2023; Suprianto, 2017), which states that the use of innovative media is one form of teacher creativity in the learning process that impacts student enjoyment.

This increase further strengthens the assumption that students in 3T areas need a learning approach that is not only informative but also stimulates a love of learning. Media innovations, whether visual or educational games, can create a different learning atmosphere, making students more actively involved in the learning process (Cahyaningtias & Ridwan, 2021; Lesmawan et al., 2021). The application of innovative media also promotes collaborative learning, where students will work together more, discuss, and help each other complete the given activities (Nuraydah et al., 2023). These positive

interaction patterns create a warmer classroom environment, fostering a sense of confidence and ease among students in physical education lessons. Innovative learning media not only enhance learning enjoyment but also impact students' social interaction development (Ghavifekr, 2020; Nasir, 2023).

The results of this study are also in line with (Budiastuti, 2022) that the application of innovative media improves students' skills, while on the other hand, it also enhances teachers' ability to design and use innovative learning media in an effort to increase students' enjoyment of learning. This finding illustrates that the limited resources in 3T areas are not a major obstacle as long as educators are able to adapt with innovative strategies and media. Utilizing innovative media that is easy to implement with the surrounding environmental conditions so that the learning process can run more effectively (Aulia et al., 2024). The increase in pretest and posttest scores underscores the important role of innovative physical education learning media in creating a fun learning environment. The implementation of media innovation is highly relevant and must continue to be developed, especially in 3T areas.

CONCLUSION

Based on the findings obtained from the research conducted, it is concluded that the utilization of innovative PJOK learning media significantly impacts the increase in the enjoyment level of elementary school students living in 3T areas. Pretest and posttest data show an increase in average scores. These findings indicate that using innovation media created according to the conditions, limitations, and characteristics of 3T environments can increase students' enthusiasm, engagement, and comfort in participating in physical education lessons.

Beside increasing learning enjoyment, innovative media also play a role in enriching students' learning experiences, helping teachers present material more creatively, and creating a more active learning atmosphere. This research confirms that the limitations of facilities in 3T areas will not be an obstacle if teachers are able to utilize simple, inexpensive, and innovative media that are relevant to the local context. The implementation of innovative physical education learning media needs to be continuously developed to strengthen the quality of learning in 3T areas and improve the quality of students' learning experiences.

Based on the findings of this research, it is recommended that physical education teachers in disadvantaged areas continue to progress and implement innovative learning media that are simple, cost-effective, and adapted to environmental conditions to increase student engagement and satisfaction in the educational process. In addition, it is hoped that future research can increase the sample size, use stronger research designs such as experiments with control groups, and explore more varied innovation media as well as their impact on other aspects such as students' learning motivation, motor skills, and physical participation.

REFERENCES

- Antoro, B., Amelia, M. M., Hakim, L., & Rozi, F. (2023). *Inovasi Media Pembelajaran Matematika Menggunakan Puzzle untuk Meningkatkan Minat Belajar Siswa SDN 064024 Medan Pendahuluan*. 4(1), 399–404.
- Aulia, Z., Siregar, Z., & Novianti, Y. (2024). Pemanfaatan Barang Habis Pakai sebagai Media Pembelajaran untuk Menunjang Kreativitas Siswa Kelas 10 SMK Swasta Pelita Bulu Cina. *MUKADIMAH: Jurnal Pendidikan, Sejarah, Dan Ilmu-Ilmu Sosial*, 8(1), 113–120. <https://doi.org/10.30743/mkd.v8i1.8693>
- Budiastuti, S. A. (2022). Peningkatan Keterampilan Membuat Karya Inovasi Media Pembelajaran melalui Metode Modifikasi Permainan Anak. *Ideguru: Jurnal Karya Ilmiah Guru*, 8(2), 146–155. <https://doi.org/10.51169/ideguru.v8i2.455>
- Cahyani, L. A., & Nur, C. A. (2017). *the Effectiveness of Activity Daily Living Learning Based on*. 13 No.1, 1–11. <https://journal.uny.ac.id/index.php/jpk/article/view/27499>
- Cahyaningtias, V. P., & Ridwan, M. (2021). Efektivitas Penerapan Media Pembelajaran Interaktif terhadap Motivasi Siswa di SMKN 2 Buduran Sidoarjo. *Riyadhoh: Jurnal Pendidikan Olahraga*, 4(2), hlm 87.
- Gani, I., Yudanto, Hendra Setyawan, & Willy Ihsan Rizkyanto. (2023). Tingkat enjoyment peserta didik sekolah dasar terhadap physical activity break dalam pembelajaran. *Trihayu: Jurnal Pendidikan Ke-SD-An*, 9(2), 165–178. <https://doi.org/10.30738/trihayu.v9i2.14500>
- Ghavifekr, S. (2020). Malaysian Online Journal of Educational Sciences Collaborative Learning: a Key To Enhance Students ' Social Interaction. *Malaysian Online Journal of Educational Sciences*, 8(October), 9–21.
- Husein Batubara, H., & Noor Ariani, D. (2019). Model Pengembangan Media Pembelajaran Adaptif Di Sekolah Dasar. *Muallimuna: Jurnal Madrasah Ibtidaiyah*, 5(1), 33–46. <http://ojs.uniska-bjm.ac.id/index.php/jurnalmuallimuna>
- Ilmiah, J., Jinu, N., Mei, N., Yusuf, R., & Wicaksana, E. (2025). *Pembelajaran Yang Inovatif Di Kelas VI SDN Jagalan 1 Kota Kediri*. 2(3), 281–288. <https://ejurnal.kampusakademik.co.id/index.php/jinu/article/view/4459/3939>
- Imawati, V., & Maulana, A. (2021). Minat Belajar Siswa dalam Mengikuti Proses Pembelajaran PJOK. *Patria Educational Journal (PEJ)*, 1(1), 87–93. <https://doi.org/10.28926/pej.v1i1.439>
- Kardius Richi, Y. (2017). Pendidikan di Beranda Terdepan Negara Perbatasan Entikong. *Seminar Nasional Fakultas Ekonomi UNY*, 192–201. <http://eprints.uny.ac.id/41250/>
- Khaidir, A., Valianto, B., & Nugraha, T. (2021). Pengembangan Media Pembelajaran Interaktif Materi Atletik Pada Mata Pelajaran Pendidikan Jasmani Olahraga Kesehatan. *Jurnal Pedagogik Olahraga*, 7(2), 6. <https://doi.org/10.24114/jpor.v7i2.31230>
- Lesmawan, H., Handayani, W., El Cintami Lanos, M., Ayu Risma Putri, S., Gunawan Manullang, J., & Herman Tarmizi, M. (2021). *Pengembangan Gerak Dasar Manipulatif Berbasis Media Inovatif untuk Pembelajaran Penjas SD*. 6(2), 167–186. <https://www.ojs.cahayamandalika.com/index.php/jomla/article/view/4270/3338>
- Lumbanraja et al. (2020). Equity in Education Journal (EEJ). *Pengelolaan Usaha Kesehatan Sekolah (UKS)*, 6(1), 46–53. <https://ejournal.upr.ac.id/index.php/eej/article/view/2447/2221>

- Nadela, E., Firdaus, J., & Prasetyo, D. (2022). Analisis Kemampuan Non Akademis Dan Kebersihan Sekolah Dasar Negeri Gebang 2 Sidoarjo. *Prapanca : Jurnal Abdimas*, 2(1), 10–15. <https://doi.org/10.37826/prapanca.v2i1.288>
- Nasir, A. (2023). Menciptakan Lingkungan Belajar yang Menyenangkan untuk Meningkatkan Sikap Siswa dalam Belajar. *JBSI: Jurnal Bahasa Dan Sastra Indonesia*, 3(01), 136–145. <https://doi.org/10.47709/jbsi.v3i01.2789>
- Nuraydah, D. S., Hariani, L. S., & Widjiastuti, V. Y. (2023). Peningkatan Keterampilan Kolaborasi dan Hasil Belajar Peserta Didik Melalui Model Pembelajaran Problem Based Learning dengan Media Video Pada Materi Alat Pembayaran Non Tunai. *Jurnal Pembelajaran, Bimbingan, Dan Pengelolaan Pendidikan*, 3(6), 514–525. <https://doi.org/10.17977/um065v3i62023p514-525>
- Nurgiansyah, T. H. (2022). Meningkatkan Minat Belajar Siswa dengan Media Pembelajaran Konvensional dalam Pembelajaran Pendidikan Kewarganegaraan. *Jurnal Pendidikan Dan Konseling*, 4. <https://media.neliti.com/media/publications/446857-none-35739e7c.pdf>
- Putri, A. E. (2024). Penggunaan Media Pembelajaran Berbasis Digital dalam Pembelajaran Sejarah untuk Meningkatkan Minat Belajar Peserta Didik. *JIM: Jurnal Ilmiah Mahasiswa Pendidikan Sejarah*, 9(2), 533–540. <https://doi.org/10.24815/jimps.v9i2.30523>
- Rahmi, M. S. M., Budiman, M. A., & Widyaningrum, A. (2019). Pengembangan Media Pembelajaran Interaktif Macromedia Flash 8 pada Pembelajaran Tematik Tema Pengalamanku. *International Journal of Elementary Education*, 3(2), 178. <https://doi.org/10.23887/ijee.v3i2.18524>
- Reresi, M., & Lamatoka, J. (2023). Strategi Pengembangan Kompetensi Guru Di Daerah Tertinggal. *Selidik (Jurnal Seputar Penelitian Pendidikan Keagamaan)*, 4(1), 33–41. <https://doi.org/10.61717/sl.v4i1.68>
- Rihlasyita, W., & Rahmawati, R. D. (2022). Penerapan Metode PAIKEM GEMBROT dalam Pembelajaran Bahasa Arab di Era Pandemi. *EDUSCOPE: Jurnal Pendidikan, Pembelajaran, Dan Teknologi*, 8(1), 40–55. <https://doi.org/10.32764/eduscope.v8i1.2494>
- Rohima, N. (2023). Penggunaan Media Pembelajaran Untuk Meningkatkan Keterampilan Belajar Pada Siswa. *Publikasi Pembelajaran*, 1(1), 1–12.
- Saleh, M. S., & Ramdhani, S. (2020). Survei Sarana Dan Prasarana Pendidikan Jasmani Dan Tingkat Kesegaran Jasmani Siswa Kelas VIII SMP PGRI Barembeng Kabupaten Gowa. *Journal Coaching Education Sports*, 1(1), 49–62. <https://doi.org/10.31599/jces.v1i1.86>
- Shalikhah, N. D. (2017). Media Pembelajaran Interaktif Lectora Inspire sebagai Inovasi Pembelajaran. *Warta LPM*, 20(1), 9–16. <https://doi.org/10.23917/warta.v19i3.2842>
- Siahaan, S. (2018). Perintisan Model Pembelajaran Terintegrasi Tik Di Daerah Terdepan, Terluar, Tertinggal, Dan Perbatasan. *Jurnal Teknodik*, 171–185. <https://doi.org/10.32550/teknodik.v0i0.459>
- Suprianto, T. (2017). Meningkatkan Keterampilan Back Roll Dalam Senam Lantai Pada Siswa Kelas Xii Ipa-1 Sma Negeri 4 Balikpapan Melalui Modifikasi Alat Bantu Pembelajaran. *Ilmu Pendidikan*, 2, 37.
- Suprihatin, S. (2021). Menjemput Karya Generasi Muda Dari Pucuk Sidoarjo. *Prapanca : Jurnal Abdimas*, 1(2), 70–79. <https://doi.org/10.37826/prapanca.v1i2.205>
- Veronika, P., Abadi, M. J., & Palada, A. (2024). Kajian Kebutuhan Media Interaktif Berbasis Multimedia Guru Sekolah Dasar Daerah Terpencil Kabupaten Sorong Selatan Provinsi Papua Barat Daya. *Journal of Education Research*, 5(4), 5700–5710. <https://doi.org/10.37985/jer.v5i4.1807>
- Wachidah, K., & Wardana, M. D. K. (2018). Desain Pembelajaran Sekolah Dasar Berbasis Kearifan Lokal di Kawasan

Pertambahan Kabupaten Sidoarjo. *Jurnal Pendidikan Dasar*, 9(1), 156–165.
<https://journal.unj.ac.id/unj/index.php/jpd/article/view/7118>

Yanto, A., Imron, A., & Noor Benty, D. D. (2020).
Manajemen Pembelajaran Sekolah Dasar di
Daerah Tertinggal. *JAMP: Jurnal Adminitrasi
Dan Manajemen Pendidikan*, 3, 72–83.
<https://doi.org/10.31004/basicedu.v8i3.7390>