



The Effect Of A Tactical Approach In Invasion Games On Physical Fitness And Playing Skills

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Abstract: This study was motivated by the lack of understanding of playing in invasion games and the lack of application of learning models and low levels of physical fitness. This study aims to determine the effect of the tactical approach in invasion games on physical fitness and playing skills. The research method used is quantitative research with experimental research type. The design used in this research is one group pretest posttest. This research was conducted for 4 weeks at Bandung City Elementary School, the participants involved were class 5A students with a total of 30 students. By using GPAI and TKJI instruments. Sample selection was carried out using purposive sampling technique. The research group was given invasion game treatment. Data analysis used in this study used data normality test, Paired T-test. The results of this study state that there is an effect of the tactical approach in invasion games on physical fitness with a significance value of $0.000 < 0.05$ as well as a tactical approach to playing skills with a significance value of $0.000 < 0.05$. Furthermore, that there is a difference in the average value of the initial test and the final test on the tactical approach to physical fitness and the tactical approach to playing skills. That way, it is necessary to consider using the approach for educators both physical education teachers and sports coaches.

Keywords: Tactical Approach, Physical Fitness, Playing Skills, Invasion Game

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INTRODUCTION

Education is a human activity and effort to improve personality by fostering personal potential, namely spiritual and physical and skills (Rahman et al., 2022). In addition to the existence of personal potential concerning spiritual and physical, the aim is to develop self-potential, namely to have spiritual strength, religion, self-control, personality, intelligence, noble character, and skills needed by himself, society, nation and state (Pristiwanti et al., 2022). Therefore, physical and spiritual aspects can be formed changes through learning to move, move through learning (Faridah, 2016). Motion is one of the daily activities, one of which can be done in physical education learning (Ruzaman, 2018). Physical education aims to improve the affective cognitive and psychomotor domains (Bernhardin, 2021, p. 94). Through well-directed physical education, children will develop skills that are useful for filling leisure time and are active in activities to develop a healthy physical and mental life (Lestari, 2021).

One of them is skill development through soccer games. Besides that, soccer games are one of the learning materials from physical education which prioritizes

physical activity as well as fun and much-loved elements (Irfan et al., 2022 p. 168). In connection with that, physical education that prioritizes physical activity can be used as a tool to increase the degree of physical fitness (Darmawan, 2017).

One of the problems faced in the world of education in Indonesia is the weak implementation of the learning process (Wiyasa, 2013). In addition, the tendency to use a traditional approach, as well as physical fitness in grade V students is relatively low, such as during the ceremony many students complained of illness. In addition, during the physical education learning process students tend to get tired quickly. Elementary school age students in West Java are still found 42.27% of physical fitness levels in the low category Sulistiono (2014). Low fitness levels are triggered by a lack of physical activity (Hasan et al., 2020). Learning through sports games is one of the efforts of physical education teachers to provide a motion learning process as a tool in developing physical fitness (Apriani et al., 2021).

In an effort to improve playing skills and physical fitness, researchers took a learning approach, namely, the tactical approach. The purpose of the tactical approach in game learning is to increase students' awareness of the concept of play through the application of appropriate techniques according to the problem or situation in the game (Subroto, 2001, p. 4). In essence, the tactical approach is related to efforts to apply technical skills in game situations (Tarigan, 2001).

Based on the background discussion and the problems faced by researchers. Therefore, researchers are interested in following up on existing problems, by conducting research with the title "The Effect of Tactical Approach in Invasion Games on Physical Fitness and Playing Skills"

METHOD

Quantitative research is used in this study because, quantitative research is conducted to determine whether there is a correlation or influence of the independent variable on the dependent variable (Mulyadi, 2011). Based on the purpose of this research, it is included in the type of experimental research. The experimental research method is a research method used by researchers to look for the effect of certain treatments on other variables (Arifin, 2020, p. 3). So in this study researchers used one group pretest-posttest. One group pretest-posttest design is a group measured and observed not only after treatment, but also measured before treatment (Fraenkel et al., 2011, p. 269). This aims to see the effect of the tactical approach in invasion games on physical fitness and playing skills. In this study, 12 treatments were carried out with 1 pre-test and 1 post-test with a total of 14 meetings. This study used TKJI (Indonesian physical fitness test) and GPAI (Games performance assessment instrument) instruments.

The population and samples used in this study were grade 5 elementary schools in Bandung City. The sample used in the study was class 5A with 18 male students and 12 female students. The sampling technique used was purposive sampling technique with certain consideration criteria. This research uses experimental research methods where treatment is used. In this research procedure, pretest and posttest were conducted. First, the determination of the population research subject was carried out by selecting class 5. Second, the determination of the sample was carried out using purposive sampling technique so that the determination of the sample by taking class 5A. Third, a pretest was conducted using TKJI and GPAI instruments. Fourth, the tactical approach in the invasion game is given treatment. Fifth, a post-test is carried out using

TKJI and GPAI instruments. Sixth, data processing and data analysis are carried out. Seventh, determine conclusions after data processing and data analysis.

By doing the assumption test, namely using the normality test using the shapiro-wilk technique, because the sample data is below 50 with the provisions If Sig. (2-tailed) > 0.05, then the data is normally distributed, otherwise if the Sig value. (2-tailed) <0.05 then the data is not normally distributed. Data is processed and analyzed using SPSS Version 25 software. This hypothesis test uses a paired sample t-test where the determination criteria are if Sig. (2-Tailed) <0.05 then there is a significant difference in influence. Conversely, if the results of data processing Sig. (2-tailed) > 0.05 then there is no significant difference between before and after treatment.

RESULT AND DISCUSSION

Result

Based on the data that has been processed, the researcher presents the data in tabular form as follows:

Table 1. Description data Physical fitness and playing skills

	N	Minimu m	Maximu m	Mean	Std. Deviation
Pretest_TKJI	30	12	18	15.17	1.763
Posttest_TKJI	30	16	22	18.93	1.574
Pretest_GPAI	30	1	6	3.10	1.269
Posttest_GPAI	30	3	8	5.60	1.221
Valid N (listwise)	30				

The data above contains a description of the data from physical fitness and playing skills with the help of SPSS Version 25 software. The data is continued with the normality test, as follows:

Table 2. Normality test of physical fitness data and playing skills

	Shapiro-Wilk		
	Statistic	df	Sig.
Pretest_TKJI	.948	30	.151
Posttest_TKJI	.946	30	.132
Pretest_GPAI	.941	30	.094
Posttest_GPAI	.940	30	.093

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The data above shows that the Sig. value of the data processing results is normally distributed because the value is more than 0.05.

Table 3. Hypothesis testing of physical fitness data and playing skills

	t	df	Sig.(2-tailed)
Pretest_TKJI- Posttest_TKJI	-16.871	29	.000
Pretest_GPAI- Posttest_GPAI	-23.924	29	.000

Based on the results of the data above, it shows that the significant value of 0.000 <0.05 on physical fitness and on playing skills is 0.000 <0.05. It can be concluded that there is an effect of the tactical approach in invasion games on physical fitness and playing skills.

Discussion

Research shows that using a tactical approach through invasion games significantly improves physical fitness and playing skills among students. This method not only promotes physical activity but also fosters motor competence, which is crucial for long-term engagement in sports and physical activity. Impact on Physical Fitness A study showed that students who participated in invasion games showed significant improvements in various physical fitness tests, including standing broad jump and medicine ball throwing, with effect sizes showing meaningful gains (Valantine et al., 2017).

Other research highlighted that traditional sports also improved physical fitness, but the tactical approach of invasion games produced superior results in improving specific fitness components (Perdana et al., 2024). Effect on Playing Skills Tactical game models, when combined with teaching techniques, have been shown to increase learning motivation and physical activity, leading to better playing skills among students (Nur et al., 2024).

Specifically modified invasion games improve actual and perceived motor competence, showing a direct influence on students' playing skills (Neira-Navarrete et al., 2024). While tactical approaches through invasion games are effective, it is important to consider that traditional sports also contribute positively to physical fitness, demonstrating the potential to integrate both methods for optimal results in physical education.

CONCLUSION

Based on data processing and hypothesis testing has been presented. It can be concluded that: Through a tactical approach using invasion games there is an effect of increasing physical fitness in students. There is an influence of the tactical approach to playing skills through invasion games.

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CONFLICT OF INTEREST

Clearly explain whether there are any conflicts of interest related to the reported research.

REFERENCES

- Apriani, L., Sari, M., & Alpen, J. (2021). Studi Eksperimen Pada Unit Kegiatan Mahasiswa Petanque Universitas Islam Riau Meningkatkan Kesegaran Jasmani Melalui Permainan Hadang dan Bentengan. *Jurnal MensSana*, 6(1), 50–55. <https://doi.org/10.24036/menssana.06012021.19>
- Arifin, Z. (2020). Higher Education Research Methodology. *Higher Education Research Methodology*, 1(1), 1–5. <https://doi.org/10.4324/9781315149783>
- Bernhardin, D. (2021). Hasil kebugaran jasmani siswa Studi Eksperimen Tentang Materi Kebugaran Jasmani Pada Siswa SMA. *Jurnal Master Penjas & Olahraga*, 2(April 2020), 93–98.
- Darmawan, I. (2017). Upaya Meningkatkan Kebugaran Jasmani Siswa Melalui Penjas. *Jip*, 7(2), 143–154. <http://ejournal.unikama.ac.id/index.php/jrnspirasi>
- Faridah, E. (2016). Mengajar Pendidikan Jasmani Melalui Permainan “Ide Kreatif Mengoptimalkan Aspek Pedagogis.” *Jurnal Ilmu Keolahragaan*, 15(2), 38–53.
- Fraenkel, Wallen, N. E., & Hyun, H. H. (2011). *How to Design and evaluate research in education* (8th ed.).
- Hasan, M., Juniarsyah, A. D., Hidayat, I., & Safei, I. (2020). Pemetaan Tingkat Aktivitas Fisik Siswa Sekolah Dasar Kota Bandung. *JUARA : Jurnal Olahraga*, 5(2), 128–134. <https://doi.org/10.33222/juara.v5i2.846>
- Irfan, I., Anwar, K., Purwoto, S. P., & Hidayatullah, F. (2022). Pengaruh Pembelajaran Metode Drill Pass Terhadap Hasil Belajar Passing Sepakbola Pada Siswa Kelas Xi Ma Nurul Karomah. *Jurnal Ilmu Keolahragaan*, 21(2), 167–173. <https://jurnal.unimed.ac.id/2012/index.php/JIK/article/view/39638>
- Lestari, D. F. (2021). Pengembangan Model Pembelajaran Aktivitas Jasmani Melalui Permainan Tradisional Bagi Siswa Sekolah Dasar. *Jurnal Pendidikan Jasmani, Olahraga Dan Kesehatan Undiksha*, 8(1), 7. <https://doi.org/10.23887/jjp.v8i1.33742>
- Mulyadi, M. (2011). Penelitian Kuantitatif Dan Kualitatif Serta Pemikiran Dasar Menggabungkannya [Quantitative and Qualitative Research and Basic Rationale to Combine Them]. *Jurnal Studi Komunikasi Dan Media*, 15(1), 127–138.
- Neira-Navarrete, D., Páez-Herrera, J., Reyes-Amigo, T., Yáñez-Sepúlveda, R., Cortés-Roco, G., Oñate-Navarrete, C., Olivares-Arancibia, J., & Hurtado-Almonacid, J. (2024). Effects of Modified Invasion Games on Motor Competence and Self-Assessed Physical Condition in Elementary School Students in the Physical Education Classroom. *Children*, 11(3), 337. <https://doi.org/10.3390/children11030337>
- Nur, L., Muslihin, H. Y., Stephani, M. R., Wibowo, R., Mustaqim, R., Sianturi, R., Annamayra, A., Malik, A. A., & Nilan, F. (2024). Effectiveness of Tactical Games Model Based on Teaching by Invitation for Enhance Learning Motivation and Physical Activity in Primary School Students. *JUMORA: Jurnal Moderasi Olahraga*, 4(1), 74–83. <https://doi.org/10.53863/mor.v4i1.1143>
- Perdana, D. A., Sudijandoko, A., Fikri, M. D., & Dewi, R. C. (2024). Pengaruh olahraga tradisional terhadap peningkatan kebugaran siswa. *Jurnal Porkes*, 7(1), 34–44. <https://doi.org/10.29408/porkes.v7i1.24219>
- Pristiwanti, D., Badariah, B., Hidayat, S., & Dewi, R. S. (2022). Pengertian Pendidikan. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 1707–1715.
- Rahman, A., Munandar, S. A., Fitriani, A., Karlina, Y., & Yumriani. (2022). Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, 2(1), 1–8.

- Ruzaman, A. K. (2018). Pembelajaran Gerak dasar dalam pembelajaran Pendidikan jasmani, olahraga, dan kesehatan di sekolah dasar melalui Permainan. *Prosiding Seminar Dan Diskusi Nasional Pendidikan Dasar 2018*, 254–258.
- Subroto, T. (2001). pembelajaran keterampilan dan konsep olahraga di sekolah dasar : sebuah pendekatan permainan taktis (1st ed.). depdiknas.
- Sulistiono, A. A. (2014). Kebugaran Jasmani Siswa Pendidikan Dasar dan Menengah di Jawa Barat. *Jurnal Pendidikan Dan Kebudayaan*, 20(2), 223–233. <https://doi.org/10.24832/jpnk.v20i2.140>
- Tarigan, B. (2001). Pendekatan keterampilan taktis dalam pembelajaran sepakbola : konsep & metode (1st ed.). depdiknas.
- Valantine, I., Madić, D., & Sporiš, G. (2017). Effects of invasion games on physical fitness in primary school children. *Exercise and Quality of Life*, 9(1), 15–22. <https://doi.org/10.31382/eqol.170602>
- Wiyasa, I. K. N. (2013). Model Pembelajaran Permainan Sepak Bola Bagi Siswa Sekolah Dasar. *Jurnal Pendidikan Jasmani Indonesia*, 9(1), 1–10