



The Influence of Team Sports on the Social Skills and Mental Health of Muhammadiyah 5 Elementary School Students in Pekanbaru

Novia Nazirun*¹, Merlina Sari²,

^{1,2} Physical Education, Faculty of Teacher Training and Education, Universitas Islam Riau.

Article Info

Article History :

Received : November 2025

Revised : December 2025

Accepted : December 2025

Keywords:

Elementary School Children,
Mental Health,
Physical Education
Social Skills,
Team Sports,

Abstract

This study aims to analyze the effect of team sports activities on improving social skills and mental health of elementary school students. The background of this study is based on the view that physical education does not only focus on developing physical abilities, but also plays an important role in character formation, social skills, and psychological well-being of students. The research method used was a quasi-experimental design with a one-group pretest-posttest design. The subjects consisted of 30 students of Muhammadiyah 5 Elementary School, Pekanbaru, selected through a purposive sampling technique. The research instruments included a social skills observation sheet and a mental health questionnaire that had been tested for validity and reliability. Data analysis was conducted using a Paired Sample t-test to compare the results before and after treatment. The results showed a significant increase in social skills (from an average of 65.2 to 82.6) and mental health (from an average of 63.5 to 80.4) with a p-value <0.01. These findings prove that participation in team sports activities can improve students' ability to work together, interpersonal communication, and psychological well-being. Thus, the integration of team sports activities in physical education learning can be an effective strategy in forming students' social and mental character holistically.



*Corresponding email : novianz@edu.uir.ac.id

ISSN 2685-6514 (Online)

ISSN 2477-331X (Print)

INTRODUCTION

In essence, physical education is an integral part of education that prioritizes the body's ability to perform activities. Through these activities, students are required to develop physical, mental, moral, and social abilities to become whole human beings (Ali et al., 2022).

Physical education provides students with opportunities to learn about discipline, teamwork, and emotional regulation, all of which contribute to mental health. When children participate in group sports, they learn to communicate and cooperate with their peers, which can improve their social skills (Anggiana & Indahwati, 2025).

According to the World Health Organization (WHO), mental health is a state of well-being in which individuals are aware of their own abilities, can cope with the normal stresses of life, can work productively, and are able to contribute to their community (Apendi et al., 2023).

In a mental context, sports help children develop self-confidence and courage, because through various physical activities, children learn to overcome challenges, achieve goals, and feel a sense of satisfying achievement (Melfi et al., 2022).

Success in sports, no matter how small, can be a significant motivator for children to keep trying and strive for better in the future. (Raisty et al., 2024).

Furthermore, mental toughness plays a crucial role in developing students' ability to work in teams. Many sports require athletes to collaborate with

teammates. The ability to remain calm and focused under pressure, as well as maintain effective communication, are components of mental toughness that support overall team performance (Andry et al., 2024).

Team sports, such as basketball or soccer, allow children to learn to cooperate, communicate, and understand the importance of sportsmanship. These skills are crucial for their social development, both inside and outside the school environment (Apri et al., n.d.).

Therefore, this study is important to determine whether participation in team sports has a significant impact on children's social skills and mental health. To address this challenge, this study focuses on a quasi-experimental quantitative approach used to examine the effect of interventions in the form of team sports involvement on the dependent variables of social skills and mental health. The instruments used were standardized questionnaires and structured observations. The approach used is a quasi-experimental quantitative approach model, qualitative research is research based on the philosophy of post-positivism or constructivism, namely viewing social phenomena as holistic, meaningful, interactive, and data obtained naturally through purposive sampling, with the researcher's own instrument as the key, data collection techniques with triangulation (combined), data analysis tends to be inductive, and the final results of the study are descriptive statements in

sentences rather than numbers (Fuadia, 2022).

Experimental research methods allow researchers to manipulate variables and examine their consequences. Experimental research methods aim to determine the causal relationship between variables by administering one or more treatments to research subjects (Wayan & Diah, 2023).

Then, to determine the effects of the treatment, tests and measurements are conducted. Experimental research is divided into pre-experimental, quasi-experimental, and true experimental research (Gresia et al., 2024).

A quasi-experimental quantitative approach was used to examine the effect of team sports intervention on the dependent variables of social skills and mental health (Soebiantoro, n.d.). The instruments used were standardized questionnaires and structured observations. Research using a quantitative approach focuses more on several symptoms that have certain characteristics in human life, namely variables. In a quantitative approach, the nature of the relationship between variables is then analyzed using statistical testing tools and objective theory (Hartatiana et al., 2024).

Because the process of compiling a quantitative study and the sample size used are considered representative of the population, the results of this study can be used as a basis for generalizations to the represented population (A.A. Pradana, 2021). This study offers an important contribution in integrating physical

education with character building and students' mental health. While most physical education research focuses on motor aspects, this study will explore psychosocial aspects, which are still rarely done in elementary schools. Children's social and emotional development is also obtained not only from the process of maturation, but also obtained from learning opportunities and responses from their environment. Social competence is determined by emotional competence. Children with good emotional intelligence tend to be socially competent individuals (Rahail et al., 2023).

By integrating a team sports approach into physical education, it is hoped that students will not only gain a theoretical understanding of cooperation and social dynamics in games but will also be able to internalize these social skills through contextual, real-world experiences (Thazqia et al., 2024). Team sports activities allow students to experience firsthand situations that require collective decision-making, empathy, effective communication, and the ability to manage emotions under competitive pressure (Satriawan, 2022).

Thus, learning is not abstract, but rather transforms into an applicable and reflective character-building process. Through these activities, children's social skills and mental health are developed not only through formal instruction but also through authentic and meaningful social practices in a structured play environment. Therefore, team sports can be positioned as a strategic vehicle to accelerate the internalization of social and emotional

values within a more humanistic and holistic basic education curriculum.

METHODS

This study used a quasi-experimental method with a single-group pretest–posttest design. This method was chosen because the goal was to evaluate the impact of team sports activities on improving students' social skills and mental health. This design allowed researchers to compare participants' conditions before and after receiving the intervention, thus assessing the effectiveness of the intervention.

The research subjects were students at Muhammadiyah 5 Elementary School in Pekanbaru. The researchers selected them using a purposive sampling method, selecting them based on their characteristics, which matched the research objectives. These characteristics included age, good physical condition, and active participation in school sports activities. Thirty participants, consisting of male and female students of elementary school age, participated.

The team sports program is provided in the form of regular activities during a designated time. These activities involve cooperative games such as mini-soccer, simple handball, and other group games. These games are designed to foster cooperation, communication, and sportsmanship. The main goal of this program is to improve students' social skills, encourage positive interactions, and foster mutual respect among students.

The instruments used in this study consisted of a social skills observation sheet and a mental health questionnaire. The observation sheet was used to observe changes in social behavior, such as the ability to cooperate, tolerate, and communicate with peers. Furthermore, the mental health questionnaire was used to evaluate students' emotional aspects, including psychological well-being, self-confidence, and emotional management.

The data were analyzed using a paired sample t-test with statistical software. This test aimed to determine whether there was a significant difference between the pretest and posttest results after students participated in a team sports program. The test results showed a significant difference ($p < 0.01$) in both variables studied, indicating that team sports activities had a positive impact on improving students' social skills and mental health.

This research method used a quantitative approach that was measurable and objective throughout. A quasi-experimental design was chosen because it could control for most external variables that might influence the results, although it was not entirely the same as a true experiment (Rawiyana, 2023). The results of this study indicate that participating in team sports activities can be an effective way to improve the social skills and mental health of elementary school students.

Participants

The research participants were 30 students from Muhammadiyah 5

Elementary School Pekanbaru, consisting of 17 male students and 13 female students. They were between 10 and 12 years old. To select participants, a purposive sampling method was used with several requirements, namely, first, students actively participate in team sports activities at least twice a week, second, have a healthy physical and mental condition, and third, obtain approval from parents and the school. (Galih et al., 2024).

Sampling Procedures

The sampling procedure in this study used a purposive sampling method, which is a method of selecting samples based on certain considerations in accordance with the research objectives. The population in this study included all fourth and fifth grade students of Muhammadiyah 5 Elementary School Pekanbaru who actively participate in team sports activities such as soccer, volleyball, and basketball. The sample was selected based on how active the students are in regularly participating in team sports activities and their ability to follow all stages of the study.

Next, the sample was divided into two groups: an experimental group and a control group. The experimental group consisted of students who actively participated in team sports during the study period, while the control group consisted of students who did not participate regularly. Before the activity began, both groups were given a pre-test to determine their social skills and mental state. After the activity was completed, a post-test was administered to assess

changes resulting from participation in team sports. (Ruslan & Budiman, 2021).

The sample size was determined based on the number of students meeting the entry criteria, while maintaining a balance between the experimental and control groups to ensure good internal reliability. Data were collected using a standardized questionnaire and structured observations to ensure objective and scientifically reliable results (Arifin & Supena, 2023).

Materials and Apparatus

This study used a primary data collection instrument consisting of a social skills questionnaire and a mental health questionnaire, each of which had been tested for validity and reliability. In addition, a structured observation sheet was used to record students' social behavior while participating in team sports activities. The tools used included sports equipment such as balls, whistles, stopwatches, and team vests, as well as administrative and data analysis tools such as laptops, assessment sheets, and SPSS software to process the research results. All materials and tools were prepared according to the research requirements to ensure the process ran smoothly and the results remained valid.

Procedures

This research was conducted in several stages: preparation, implementation, and evaluation. Rephrase: In the preparation stage, researchers created a measuring instrument in the form of a questionnaire to measure social skills and mental health,

and prepared the sports facilities used during the trial (Galih et al., 2024).

The implementation phase used a pretest-posttest control group pattern. The experimental group was given scheduled team sports activities, while the control group received no treatment. Before and after the activities, both groups were given tests to measure changes in social skills and mental health. The evaluation phase involved collecting, processing, and analyzing data using SPSS to determine the significant effects of the treatment (Olahraga et al., 2021).

RESULT

Based on the research results, it was found that the average pretest score for social skills of participants was 65.2 and increased to 82.6 in the posttest, with an increase of 26.7%. On the other hand, the average pretest score for mental health of 63.5 also increased to 80.4 in the posttest, with an increase of 26.6%. The results of the paired sample t-test showed a significant effect of team sports activities on improving social skills ($t(29) = 5.87, p < 0.05$).

Tables & Figures

Table 1. Research Results Data

Variabel	Pretest Average	Posttest Average	Improvement (%)
Social Skills	65,2	82,6	26,7

Mental Health	63,5	80,4	26,6
---------------	------	------	------

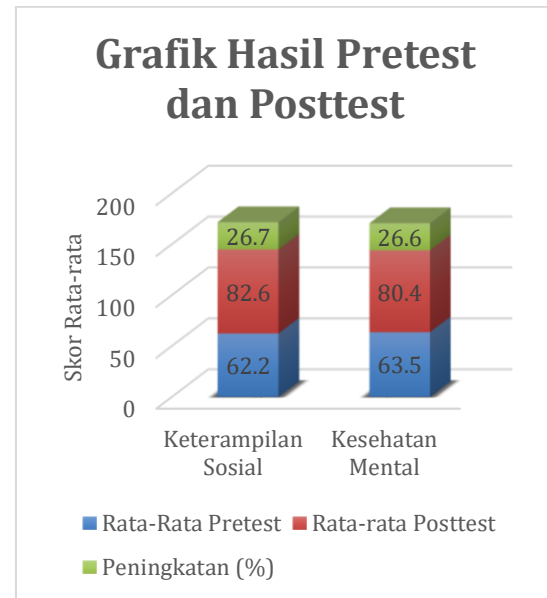


Fig 1. Graphic

The results of the paired sample t-test showed a significant effect of team sports on improving social skills ($t(29)=5.87, p<0.01$) and mental health ($t(29)=5.43, p<0.01$). This finding supports the theory that team sports can be an effective means of developing students' social skills and mental health.

DISCUSSION

This research confirms that physical education not only focuses on physical development but also plays a vital role in shaping students' mental, social, and emotional aspects. Through team sports activities such as mini-soccer, handball, and other collaborative games, students are trained to interact, communicate, and cooperate effectively with their peers. These activities foster discipline, sportsmanship, and empathy, which support their psychological well-being.

The results of the study indicate that student involvement in team sports activities has a positive impact on improving social skills and mental health. Quantitative data shows an increase in the average social skills score from 65.2 to 82.6 (an increase of 26.7%) and mental health from 63.5 to 80.4 (an increase of 26.6%). The paired sample t-test statistical test showed a significant effect of team sports activities on both variables ($p < 0.01$).

Thus, team sports have proven effective as a means of character education and social-emotional development for elementary school students. These activities encourage students to learn to make decisions together, empathize, manage their emotions, and deal with competitive pressure in a healthy manner, ultimately strengthening their mental health and social relationships within the school environment.

CONCLUSION

Based on the research findings, it can be concluded that team sports activities significantly improve the social skills and mental health of elementary school students. Through collaborative sports activities, students not only learn to improve their physical abilities but also develop attitudes of cooperation, sportsmanship, empathy, and the ability to manage emotions and social pressure.

The results of the statistical analysis showed a significant increase in both variables after the implementation of the team sports program, which proves that physical education can be an effective means of character building and

psychological well-being of students. Therefore, the implementation of team sports activities in physical education learning needs to be continuously developed in a structured and sustainable manner to support the formation of individuals who are physically healthy, mentally strong, and have a positive social personality.

REFERENCES

- A.A.Pradana. (2021). *Strategi Pembentukan Karakter Siswa Pada Jenjang Pendidikan Dasar Melalui Mata Pelajaran Pendidikan Jasmani Olahraga Dan Kesehatan*. 3(1), 78–93.
- Ali, M. M., Hariyati, T., Pratiwi, M. Y., & Afifah, S. (2022). *Metodologi Penelitian Kuantitatif Dan Penerapan Nya Dalam Penelitian*. 2(2).
- Andry, S., Anderias, L. f. ., & Dorteon, J. J. A. (2024). *Pendampingan Psikologi Bagi Atlet Binaan Sentra PPLP Dispora NTT*. 6(4), 1099–1115.
- Anggiana, Y., & Indahwati, N. (2025). *Pengaruh Aktivitas Fisik Terhadap Kesehatan Mental Siswa SMP*. 15(1), 17–21.
- Apendi, M., Maharin, H., & Sutarno, S. K. (2023). *Meningkatkan Keterampilan Sosial melalui Permainan Tradisional pada Anak Tunarungu di SLB-B Beringin Bhakti Talun*. 6(2), 212–221.
- Apri, W., Asyidika, I., Kuat, L., & Muhammad, R. (n.d.). *Integritas Nilai-Nilai Pendidikan Karakter Melalui Aktivitas Sepak Bola Di Sd Negeri I Surabaya Kedaton*. 59–70.
- Arifin, F., & Supena, A. (2023). *Praktik Pendidikan Inklusif di Sekolah Dasar*. 9(1), 198–208.

- <https://doi.org/10.31949/educatio.v9i1.4191>
- Fuadia, N. N. (2022). *Perkembangan sosial emosi anak usia dini*. 3, 31–47.
- Galih, F., Donny, S., & Alif, R. F. (2024). *Manajemen Seleksi Minat Dan Bakat Siswa Pada Cabang Olahraga Atletik Tingkat Sekolah Dasar*. 3(1), 58–65.
- Gresia, H. F., Glorio, S. S., Ma'ruf, S., Nurkadri, Ma'ruf, & Sauqi. (2024). *Hubungan Antara Olahraga Dan Kesehatan Mental*. 13, 1–15.
- Hartatiana, Rusdy, S. ., & Khairunnisa. (2024). *Analisis Standar Pemilihan Instrumen Pengumpulan Data Kuantitatif*. 2020, 81–86.
- Melfi, H. M., Sapitri, S., Rolia, S., & Khoirudin, S. S. (2022). *Gersena (Gerakan Kesehatan Anak) Pada Siswa Mdt Di DESA Binanga*. 1(2), 42–48.
- Olahraga, J. P., Muttaqien, I. H., & Hidayat, Y. (2021). *Pengaruh penerapan permainan softgame terhadap perilaku sosial siswa*. 152–161.
<https://doi.org/10.31571/jpo.v10i2.2988>
- Rahail, R. B., Bawawa, M., & Hiskya, H. J. (2023). *Implementasi Model Pembelajaran Olahraga Tradisional Kayu Malele Sebagai Upaya Meningkatkan Sikap Dan Karakter Serta Melestarikan Kearifan Lokal*. 7(1), 1–2.
- Raisty, K., Indah, R., Herviana, Delvita, A., & Fajar, S. (2024). *Dampak Pembelajaran Olahraga Terhadap Kesehatan Mental Dan Fisik Sisiwa Sekolah Dasar*. 0–4.
- Rawiyana. (2023). *Peningkatan Hasil Belajar Siswa Melalui Pendekatan Keluarga Pada Pembelajaran Matematika Terintegritas*. 4(25), 17–24.
- Ruslan, R., & Budiman. (2021). *Pengaruh Kegiatan Ekstrakurikuler Olahraga Terhadap Perkembangan Life Skills Siswa*. 6(November), 306–314.
- Satriawan, R. (2022). *Perbedaan Empati Siswa yang Mengikuti Ekstrakurikuler Olahraga dan yang Tidak Mengikuti Ekstrakurikuler Olahraga*. 12(2), 13–17.
- Soebiantoro, J. (n.d.). *Pengaruh Edukasi Kesehatan Mental Intensif Terhadap Stigma pada Pengguna Layanan Kesehatan Mental*. 52, 1–14.
<https://doi.org/10.20473/jpkm.v2i12017.1-21>
- Thazqia, F. M., Pribadi, R., Rahmah, A. S., Jasmani, P., Dan, K., & Pendidikan, U. (2024). *Pengaruh pendidikan jasmani terhadap life skills*. 24(2), 92–106.
- Wayan, U. W., & Diah, S. H. (2023). *Kelayakan Mahasiswa sebagai Subjek Penyuluh dalam Penelitian Perilaku dengan Metode Eksperimen : Sebuah Reviu Literatur*. 1(1), 46–56.