

## The Impact of Traditional Acehese Games on Physical Fitness, Motivation, and Social Skills among Male Students Participating in Extracurricular Football Activities at MTs Negeri 5 Bireuen

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### ABSTRACT

#### ARTICLE HISTORY

##### Received:

10 December 2025

##### Revised

06 January 2026

##### Accepted:

11 January 2026

##### Online available:

12 January 2026

#### Keywords:

traditional aceh  
games; physical  
fitness; motivation;  
social skills; soccer

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#### Introduction:

Traditional games are part of local cultural heritage that have the potential to support physical, motivational, and social development in students. In physical education contexts, integrating traditional games may provide an enjoyable learning experience while enhancing students' physical fitness and social character.

#### Methods:

This study employed a quasi-experimental method using a randomized control group pretest–posttest design. A total of 26 male students participating in soccer extracurricular activities were selected through total sampling and divided into experimental and control groups. Research instruments included the Indonesian Physical Fitness Test (TKJI), a learning motivation questionnaire, and a social skills questionnaire (SSRS).

#### Results:

The findings indicate that the implementation of traditional Acehese games led to improvements in students' physical fitness, learning motivation, and social skills. Students who participated in traditional game-based activities demonstrated better physical condition, higher motivation to engage in learning activities, and more positive social interactions compared to those who did not receive the treatment.

#### Conclusion and Suggestion:

This study concludes that traditional Acehese games are effective as an alternative learning strategy to enhance physical fitness, motivation, and social skills among students in extracurricular sports activities. It is recommended that physical education teachers and schools incorporate traditional games into extracurricular and instructional programs to promote holistic student development. Future research is encouraged to involve larger samples and different educational levels to strengthen the generalizability of the findings.

### INTRODUCTION

Physical education is an integral part of the education system that aims to develop students' physical fitness, motor skills, and social attitudes (Akhiruyanto & Yudhistira, 2024).

Through targeted physical activities, students not only gain health benefits but also instill values such as discipline, responsibility, cooperation, and sportsmanship. However, the implementation of physical education in schools is often conventional and monotonous, thereby reducing students' interest and motivation to actively participate in sports activities. This condition has an impact on the low level of physical fitness and enthusiasm of students in participating in extracurricular activities, such as soccer. Physical fitness is an important factor in supporting student learning performance and sports activities. Students with good physical fitness tend to have high endurance, greater enthusiasm for learning, and the ability to adapt to various physical demands (Mahfud et al., 2020; Maulana et al., 2022; Mulyani et al., 2022). Based on observations at MTS Negeri 5 Bireuen, it was found that most male soccer extracurricular participants showed low physical fitness and motivation to exercise. Many students quickly became tired, lacked focus in working together, and showed limited social skills. This problem indicates the need for innovation in training methods so that the process of physical and social development of students is more effective and enjoyable.

One alternative learning method that can be used is traditional Acehese games, such as *Tarek Situek Massal* and *Meuen Galah*. Both games involve complex movements and emphasize teamwork and coordination, thereby potentially improving students' physical fitness and social skills. In addition, the local cultural values contained in traditional games can foster a sense of togetherness, empathy, and healthy competitiveness. Haff, physical exercise conducted regularly over several weeks can produce significant physiological adaptations, indicating that traditional games can be an effective means of exercise when applied continuously (Alvar et al., 2017). In addition to their impact on physical fitness, traditional games also have the potential to increase students' motivation to learn and practice (Anugrah & Dermawan, 2022; Kurniawan et al., 2023). Fun and competitive games can stimulate students' intrinsic motivation to be physically active and engage in the learning process. Through these activities, students not only exercise but also learn to interact socially, respect rules, and control their emotions in a healthy competitive environment. Thus, the application of traditional Acehese games is a relevant learning strategy for developing students' physical abilities and social character in an integrated manner. Given this background, this study aims to determine the effect of traditional Acehese games on the physical fitness, motivation, and social skills of male soccer extracurricular participants at MTs Negeri 5 Bireuen. The results of this study are expected to contribute scientifically to the development of a locally-based training model that not only improves physical abilities but also strengthens the social values and character of students. Furthermore, the findings of this study are expected to serve as a reference for educators and sports coaches in designing effective, engaging, and contextual learning activities in educational settings.

## METHOD

This study used a quasi-experimental method with a Randomized Control Group Pretest-Posttest Design. This design was used to measure the effect of traditional Acehese games on the physical fitness, motivation, and social skills of soccer extracurricular participants at MTs

Negeri 5 Bireuen. The study involved two groups, namely the experimental group, which was given *Tarek Situek Massal* and *Meuen Galah* game training, and the control group, which underwent conventional training. The treatment was carried out over 16 sessions, in accordance with the guidelines (Bompa O. Tudor, 2019), that physiological adaptation can be achieved after 4–6 weeks of regular training. The place and time of the study were at MTs Negeri 5 Bireuen, Jalan Medan–Banda Aceh, Kecamatan Kota Juang, Kabupaten Bireuen, Provinsi Aceh. The study was conducted over three months, from July to September 2025. The population and sample consisted of all 26 male students participating in the extracurricular soccer program at MTs Negeri 5 Bireuen. The sampling technique used was total sampling, so that the entire population was used as the research sample. Instruments and data collection techniques included the Indonesian Physical Fitness Test (TKJI) to measure strength, speed, endurance, agility, and flexibility; the Social Skills Questionnaire (SSRS) to assess aspects of cooperation, empathy, assertiveness, and self-control; and the Learning Motivation Questionnaire based on Maslow's theory with 32 valid and reliable statements ( $\alpha = 0.953$ ). Data were collected through pretest and posttest before and after the treatment during 16 meetings. The validity and reliability of the TKJI ( $r = 0.70\text{--}0.89$ ), SSRS ( $\alpha = 0.797$ ), and Learning Motivation ( $\alpha = 0.953$ ) were assessed. Data analysis techniques included normality (Shapiro–Wilk) and homogeneity (Levene Test) tests. Furthermore, a paired sample t-test was used to see the difference in the pretest and posttest, and an independent t-test was used for comparisons between groups. If the data were not normal, the Wilcoxon and Mann–Whitney tests were used. The results were considered significant if  $p < 0.05$ .

## RESULT AND DISCUSSION

### Description of Research Results Data

This study was conducted at MTs Negeri 5 Bireuen, located at Jalan Medan–Banda Aceh, Geulanggang Teungoh, Kota Juang District, Bireuen Regency, Aceh Province. The research activities lasted for three months, from July to September 2025, with a total of 16 meetings. The research involved two groups, namely the An experimental group that was given traditional Acehnese games (*Tarek Situek Massal* and *Meuen Galah*) and a control group that did not receive any treatment. The research data were obtained from the results of pre-tests and post-tests on three variables, namely physical fitness, learning motivation, and social skills. The pre-test data were collected on July 14, 2025, while the post-test was conducted on September 17, 2025. This data was used as a basis for observing the differences in results before and after the treatment.

### Normality Test

The normality test was conducted using the Shapiro–Wilk Test with a significance level of 5% ( $\alpha = 0.05$ ). The test results showed that all data had a *p-value* greater than 0.05. Thus, it can be concluded that all data were normally distributed.

Table 1. Results of the Normality Test of Research Data

| Variable                    | Sig. Value | Description |
|-----------------------------|------------|-------------|
| TKJI Pretest                | 0.05       | Normal      |
| TKJI Posttest               | 0.349      | Normal      |
| Pre-test Motivation         | 0.238      | Normal      |
| Posttest Motivation         | 0.124      | Normal      |
| Social Skills Pretest (SP)  | 0.322      | Normal      |
| Posttest Social Skills (SP) | 0.255      | Normal      |
| Social Skills Pretest (SS)  | 0.512      | Normal      |
| Posttest Social Skills (SS) | 0.207      | Normal      |

Source: data processed with SPSS.

Based on the table above, all significance values are greater than 0.05, so all data meet the assumption of normality.

### Homogeneity Test

The homogeneity test was conducted using Levene's Test to ensure that the variance between data groups was the same. The test results showed a significance value greater than 0.05, which means that the data is homogeneous.

Table 2. Results of the Data Homogeneity Test

| Variable            | Levene Statistic | df1 | df2 | Sig   | Description |
|---------------------|------------------|-----|-----|-------|-------------|
| TKJI                | 1.084            | 1   | 50  | 0.303 | Homogeneous |
| Learning Motivation | 0.014            | 1   | 50  | 0.907 | Homogeneity |
| Social Skills       | 1.857            | 1   | 100 | 0.142 | Homogeneous |

Thus, the data for all variables meet the requirements for hypothesis testing using parametric analysis.

### Hypothesis Test Results

Hypothesis testing was conducted using a Paired Sample t-Test with a significance level of 5% ( $\alpha = 0.05$ ). The test results are presented in the following table.

Table 3. Paired Sample t-Test Results for Pretest and Posttest

| Variable                | Mean Difference | Std. Deviation | Std. Error Mean | df | Sig. (2-tailed) | Description |
|-------------------------|-----------------|----------------|-----------------|----|-----------------|-------------|
| TKJI (Physical Fitness) | -3.769          | 2.160          | 0.424           | 25 | 0.000           | Significant |
| Learning Motivation     | -4.577          | 1.629          | 0.319           | 25 | 0.000           | Significant |
| Social Skills           | -3.230          | 10,485         | 1,454           | 51 | 0.031           | Significant |

The t-test results show that all significance values are less than 0.05 ( $p < 0.05$ ), which means that there is a significant difference between the pretest and posttest results. Thus, the alternative hypothesis ( $H_a$ ) is accepted, that traditional Acehese games affect improving students' physical fitness, motivation, and social skills. The results of the study show that the application of traditional Acehese games has a significant effect on improving the physical fitness, motivation, and social skills of male soccer extracurricular participants at MTs Negeri 5 Bireuen. This can be seen from the significant difference between the pretest and posttest scores on all variables measured after the treatment in the form of traditional games, *Tarek*

*Situek Massal*, and *Meuen Galah*, for 16 meetings. In terms of physical fitness, statistical test results show a significant improvement after participants took part in activities based on traditional Acehnese games. The activities involved in these games require full body movement such as running, jumping, holding, and pulling, thereby stimulating the cardiovascular and respiratory systems as well as muscle strength. This improvement shows that traditional games are not only recreational but also effective in developing students' physical components. This is in line with the opinion Pradipta et al (Pradipta et al., 2023; SUGENG & ISWAHYUDI, 2020), which states that physical activities based on basic movements can significantly improve physical fitness in adolescents. Thus, traditional Acehnese games can be used as a fun and effective alternative exercise to build the physical fitness of students.

In terms of motivation, research shows a significant increase in students' enthusiasm and interest in participating in extracurricular activities. Traditional games create a more varied and enjoyable learning atmosphere compared to conventional exercises, which tend to be monotonous. The competitive atmosphere, teamwork, and local cultural elements in the games make students more involved and enthusiastic. This increase in motivation reflects the positive influence of traditional games on students' psychological aspects, particularly their intrinsic motivation to move and participate actively. These results are in line with research which states that variation in learning methods in physical education can foster learning motivation and active involvement of students (Anugrah & Dermawan, 2022; Farid et al., 2023; Sumarliyan et al., 2023). Meanwhile, in terms of social skills, the results of the study also showed significant improvement. Students who participated in traditional Acehnese games demonstrated better cooperation, communication, and sportsmanship skills than before. In each game, students were required to work in teams, develop strategies together, and respect both opponents and teammates. This situation provided a natural environment for students to learn empathy, responsibility, and social discipline. These findings support Yudhanto et al, Sulistyono et al assertion that game-based learning can improve students' social interaction, cooperation, and adaptability in a group environment (Sulistyono et al., 2021; Yudanto et al., 2022).

Overall, the implementation of traditional Acehnese games has had a comprehensive positive impact on soccer extracurricular participants at MTs Negeri 5 Bireuen. Not only does it improve physical abilities and motivation, but it also strengthens students' social values and character. Acehnese traditional games play a crucial role in creating a contextual learning environment rooted in local culture, enabling students to not only gain physical fitness benefits but also understand the values of camaraderie, sportsmanship, and teamwork. These findings indicate that a traditional game-based learning approach can be a relevant and effective alternative in physical education and extracurricular sports activities. In addition to supporting students' physical and social development, the application of traditional games also contributes to the preservation of Aceh's local wisdom as an integral part of national character education.

## CONCLUSION

Based on the results of the study, it can be concluded that traditional Acehnese games have a significant effect on improving the physical fitness, motivation, and social skills of male

soccer extracurricular participants at MTs Negeri 5 Bireuen. Through the activities of Tarek Situek Massal and Meuen Galah, students experienced improvements in physical ability, increased enthusiasm for training, and enhanced capacity to cooperate and interact socially. These findings indicate that traditional games are not only effective in improving physical performance but also play an important role in fostering positive attitudes and social behavior among students. Furthermore, the integration of traditional Acehese games into extracurricular sports activities provides an effective, enjoyable, and culturally rooted alternative learning method that supports holistic student development. By incorporating elements of local culture, teamwork, and active movement, traditional games can enhance students' engagement while simultaneously strengthening character values such as cooperation, discipline, and mutual respect. Therefore, the use of traditional games is highly recommended as a complementary approach in physical education and extracurricular programs to promote both physical fitness and social character development among students.

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