



## The Role of Traditional Games and Sports in Forming Social Solidarity among Physical Education Students

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### Abstract

Traditional sports games are distinctive cultural characteristics of various regions in Indonesia and contain valuable social and educational elements. It is crucial to introduce and integrate these games as part of education to cultivate social solidarity among Physical Education students at the Catholic University of Saint Augustine Hippo. This study employed a mixed-methods approach (descriptive and quantitative). Data was collected through observation, interviews, and questionnaires covering five core aspects: social solidarity, cultural values, physical education, digital alternatives, and social character values. The research results indicated that all aspects scored highly, with the highest average score observed in the Physical Education (4.50) aspect, while the lowest score was found in the digital alternatives (4.20) aspect. These findings demonstrate that traditional games hold significant potential for strengthening students' cooperation, empathy, and sense of togetherness. Practically, this study recommends the integration of traditional games into the Physical Education curriculum as a vehicle for instilling character values and preserving local culture. The results further affirm that collaborative activities, such as traditional games, can effectively reinforce a sense of togetherness and social solidarity within higher education settings.

**Keywords:** traditional games, solidarity, culture, education.



## Introduction

According to Restuina (2025), through playing, children not only get pleasure but also develop various important aspects in their lives. Playing helps improve motor, cognitive, linguistic, creativity, emotional, and social development. Through playing activities, individuals learn to interact, obey rules, and develop social skills that are important for social life (In the context of physical education, traditional games have pedagogical value because they encourage physical, emotional, and social engagement simultaneously). Traditional games are more than just recreational physical activities; traditional games are a medium for instilling social values that contribute to the formation of character and moral integrity of the younger generation.

According to Irwan (2020), traditional games, in the form of cooperation, solidarity, and teamwork, foster empathy in the games played in the community. The values of solidarity, implemented through games, become a habitual practice in the surrounding environment and in learning. Traditional sports games play a role in character building in higher education, physical education, health, and recreation. Traditional games foster sportsmanship and social solidarity in school-age children, suggesting that activities such as gobak sodor strengthen social relationships and a sense of community. However, most of this research focuses on primary and secondary education contexts.

The research gap lies in the lack of empirical studies at the higher education level, particularly regarding how Physical Education students internalize social values through traditional game practices. This phenomenon has the potential to weaken the social function of traditional games, which were previously based on face-to-face interactions, replacing them with virtual interactions with different characteristics. As Yogi Imam Hambali (2021) points out, this change reduces opportunities for building a sense of togetherness, cooperation, and empathy within groups, as the real-world interactions found in traditional games are increasingly replaced by virtual interactions. Furthermore, there is little research which relates these empirical results to Durkheim's theoretical framework of social solidarity, which distinguishes between solidarity and social solidarity. Solidarity mechanical solidarity (based on similarity and togetherness) and organic solidarity (based on differentiation and cooperation between roles). This conceptual relationship is important because it provides a sociological basis for understanding how collective physical activity can strengthen social cohesion in modern educational environments.

In today's digital age, students' shift in preference to online games and virtual activities has led to a reduction in face-to-face interactions and a potential decline in the sense of community. Traditional role play has long been recognized in literature. Muhamad Aris (2023) with games that stimulate cognitive development and improve movement skills and become more active, games in the form of competitions will provide more discipline and value in role play to shape character for the younger generation in the current digital era.

Sports game traditional in learning Physical education, health, and recreation involve more attitudes of solidarity, cooperation, and mutual trust. Andriani (2011) states that games can shape character for students in fostering a sense of mutual care in developing an attitude of sportsmanship in games and social interactions. Haku (2022) says that traditional sports games have an important role in instilling an attitude of solidarity among students in higher education. According to Khoiriyah (2024), games stimulate cognitive skills for the players, can hone attitudes of sportsmanship in social activities, and work together in teams.

Game Traditional games serve as a fun and effective learning medium that helps shape character and foster positive social interactions. Therefore, traditional games play a crucial role in shaping a generation that is not only physically healthy but also socially and emotionally mature. Traditional games have an important social function, namely fostering social solidarity among the younger generation.

## Methods

Taking into account the existing background and gaps, this study aims to analyze how sports and sports games game traditional can teach and educate about social gaming and society with study method Mixed methods. This study uses a qualitative approach with sociological study methods. This approach was chosen because it aims to gain a deep understanding of the social meanings, interactions, and solidarity values that emerge through the practice of traditional games among Physical Education students. This study also uses a mixed methods approach, where a qualitative approach is applied to explore the social meanings contained in traditional games, while a quantitative approach is used to support the data through descriptive numerical results obtained from a social solidarity questionnaire.

### Research Design

The use of a mixed methods approach in this research aims to obtain a more comprehensive and

in-depth understanding of the social phenomena being studied.

A qualitative approach was used because this research focuses on understanding the social meanings, interactions, and solidarity values that emerge in traditional game practices. This approach allowed researchers to directly explore the perspectives, experiences, and perceptions of Physical Education students through in-depth observations and interviews. Thus, researchers were able to capture social aspects that cannot be measured numerically.

A quantitative approach was used to complement the qualitative data by providing numerical or percentage support obtained from the social solidarity questionnaire. This quantitative data helped strengthen the qualitative findings and provided an objective and measurable picture of the level of social solidarity among students.

Quantitative data provides an objective and measurable picture of the level of social solidarity among college students. By combining these two approaches, this research is able to produce more valid, comprehensive, and meaningful findings, as explained in this study. Qualitative and quantitative data complement each other.

#### Participants

The subjects of this study were fifth-semester students in the Physical Education, Health, and Recreation Program at Saint Augustine Catholic University, Hippo. A total of 30 students participated, all enrolled in the Traditional Sports Games course

#### Instrument

The instruments used in this study consist of two types—qualitative instruments and quantitative instruments—in accordance with the mixed methods approach applied in this study.

##### Qualitative Instruments

The primary instrument in a qualitative approach is the researcher (human instrument). The researcher acts as the primary data collector through direct observation of traditional game practices and in-depth interviews with Physical Education students. To ensure data validity, researchers developed observation guidelines. And The interview protocol was based on indicators of social values and solidarity derived from Durkheim's sociological theory. This guideline was reviewed through expert assessment (content validation) by two expert lecturers specializing in the sociology of sport and physical education.

##### Quantitative Instruments

In the quantitative approach, the instrument used is the Social Solidarity Questionnaire developed by Researchers to measure the level of social solidarity of students after participating in traditional game activities.

Here is a clear and natural English translation of your work, while maintaining academic format and terminology: to measure the level of social solidarity of students after participating in traditional game activities.

##### Instrument Development

The steps for developing the instrument are as follows:

a) Determine indicators of social solidarity based on Durkheim's sociological theory. b) Develop questionnaire items using a Likert scale with five response options (Strongly Agree – Strongly Disagree). c) Conduct a pilot test of the questionnaire on 30 students outside the research sample.

##### Validity Test

Instrument validation is tested using validation tests content, which is assessed by experts and research the can used profit connect results linear data research for two data for interval or ratio the For results individual with score overall, with mark  $r$  value  $\geq 0.30$  in consider valid. The value as minimum limit.

##### Reliability test

Reliability test done For know how much consistent instrument study the in measure the variables to be examined. Testing done using For evaluate internal consistency is Cronbach's Alpha formula. Test results with results the  $\alpha$  value is 0.87, mark the show reliability high, because in the range value 0.70-0.089. With thus questions on the instrument can said to be valid for measuring research variables. Respondents with the same characteristics can give no answer Lots changeable.

##### Procedure

This study uses a qualitative approach with a sociological study method. This approach was chosen because the purpose of this study is to deeply understand the social meaning, interaction, and solidarity values that emerge through the practice of traditional games among Physical Education students. This study also applies a mixed method approach, where a qualitative approach is used to understand the social meaning reflected in traditional games, while a quantitative approach is used to support the data with descriptive numerical results obtained from a social solidarity questionnaire. to understand the social meaning that emerges in traditional games, while a quantitative approach is used to support the data through descriptive numerical analysis obtained from a social solidarity questionnaire.

##### Data Analysis

Data analysis was carried out using qualitative methods. And method quantitative descriptive. In qualitative analysis, the process follows the model proposed by Miles & Huberman. (Aziza, 2023)

**Table 1**  
*Descriptive Statistics of Measured Aspects*

Aspect	Mean	Standard Deviation	Interpretation
<b>Social Solidarity</b>	4.45	0.32	Very High
<b>Cultural Values</b>	4.35	0.40	High
<b>Physical Education Learning</b>	4.50	0.28	Very High
<b>Digital Alternatives</b>	4.20	0.35	High
<b>Character &amp; Social Values</b>	4.40	0.30	Very High

which includes the following stages: Data Analysis = Data Reduction + Data Presentation + Conclusion Drawing/Verification.

Meanwhile, quantitative analysis uses simple statistical calculations as follows:

To calculate the average score of respondents (Sugiyono, 2020) and determine the reliability coefficient using the Cronbach's Alpha formula.

The results of the analysis are then interpreted according to the category of social solidarity levels based on the percentage range obtained from the calculations.

## Results

A total of 30 students from the Physical Education, Health, and Recreation Study Program participated in this study. The descriptive analysis was conducted using actual quantitative data obtained from the Social Solidarity Questionnaire.

### 1. Descriptive Statistics of Social Solidarity Dimensions

The questionnaire measured five dimensions: Social Solidarity, Cultural Values, Physical Education Learning, Digital Alternatives, and Character & Social Values. The descriptive results are presented in Table 1.

The highest mean score was recorded for Physical Education Learning (4.50), suggesting that students perceived traditional games as highly effective learning tools. The lowest score, Digital Alternatives (4.20), was still categorized as high, indicating that traditional games remain valued even in the digital era. Standard deviations ranging from 0.28 to 0.40 show that responses were consistent and did not vary widely across participants.

### 2. Instrument Validity and Reliability

Instrument validation was performed using content and empirical validity testing.

Content validity was confirmed by two experts in sports sociology and research methodology, who validated all items as relevant and appropriate.

Empirical validity using Pearson Product Moment correlation showed that all items met the minimum requirement ( $r \geq 0.30$ ).

Reliability testing produced a Cronbach's Alpha value of 0.87, indicating high internal consistency.

These results confirm that the instrument used to assess social solidarity is both valid and reliable.

### 3. Visualization of Findings

To support numerical interpretation, two visual representations were prepared:

A bar chart (Figure 1) showing the mean score of each aspect, and

A pie chart (Figure 2) illustrating each dimension's proportional contribution to overall solidarity.

These figures demonstrate that all aspects significantly contribute to the strengthening of social solidarity among students.

### 4. Narrative Summary of Findings

The findings show that traditional games play an important role in fostering social solidarity among university students. Participants reported that traditional games helped them build cooperation, mutual trust, appreciation of differences, and a stronger sense of group belonging. The very high score in the Social Solidarity aspect (4.45) indicates that traditional games effectively promote collective values and interpersonal bonds.

Meanwhile, the high score in Cultural Values (4.35) demonstrates that students recognize traditional games as carriers of cultural norms and heritage. The strong result for Character & Social Values (4.40) reinforces the role of traditional games in instilling discipline, empathy, respect, and teamwork.

Overall, the findings confirm that traditional games remain relevant as culturally rooted pedagogical tools that strengthen social relations and enhance learning experiences.

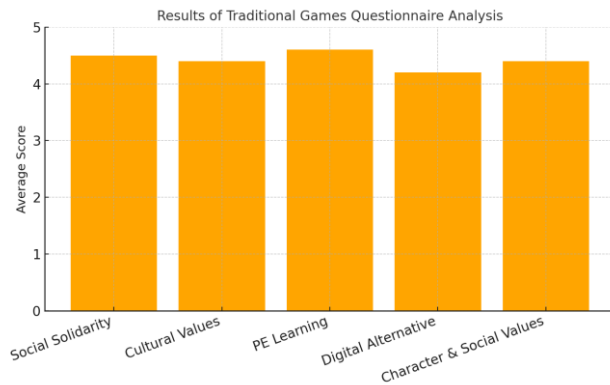
## Discussion

### 1. Alignment with Theory

The results of this study strongly align with Durkheim's theory of mechanical solidarity, which emphasizes that collective activities produce shared values, emotional unity, and social cohesion. Traditional games require synchronous participation, mutual cooperation, and adherence

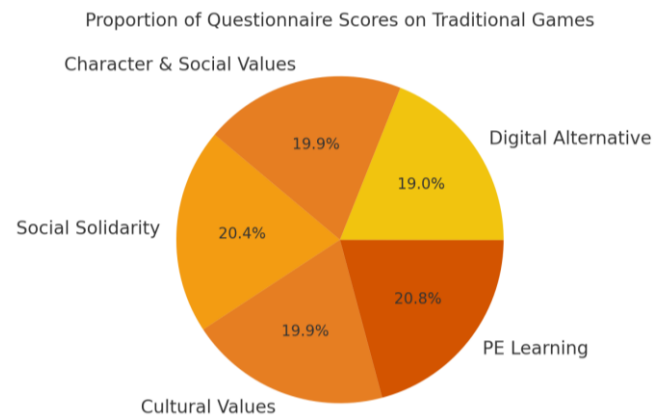
**Figure 1**

The bar chart below shows the average score for each aspect.



**Figure 2**

The pie chart depicts the proportion of contribution of each aspect to the overall score.



to collective norms—elements that Durkheim identified as foundations of social solidarity. The high scores across solidarity-related aspects (4.20–4.50) demonstrate that students naturally form stronger bonds through shared activities and collective goals.

Additionally, from a socio-constructivist perspective (Vygotsky, 1978), traditional games provide social interaction that facilitates learning within the “zone of proximal development.” Through cooperation, mentoring among peers, and communication during the games, students gain not only motor skills but also social and emotional competencies. This supports findings from Rogoff (2003), who argued that learning is inherently social and shaped by culturally embedded activities.

Traditional games also reflect principles from Social Learning Theory (Bandura, 1986), where students learn social behaviors such as cooperation, empathy, and sportsmanship through observation, modeling, and reinforcement during gameplay.

### 2. Comparison with Previous Studies

The findings of this study are consistent with earlier research in Indonesia, such as Haku (2022) and Andriani (2011), which found that traditional games contribute to character development, cooperation, and discipline. Similar to Irwan (2020), this study also confirms that traditional games promote active learning and social interaction in educational settings.

When compared with international literature, the findings of this study are also strongly aligned with global evidence. Pellegrini and Smith (1998) demonstrated that traditional play activities enhance cooperation, conflict resolution, and social competence—outcomes that closely mirror the high levels of social solidarity reported by students in this research. Similarly, Berk and

Meyers (2015) found that culturally rooted games support emotional regulation and strengthen peer relationships, which is consistent with the strong scores obtained in the Character and Social Values aspect. Opie and Opie (2018) further emphasized that traditional games embed social norms and cultural rules, reinforcing the present study’s finding that Cultural Values remain well-preserved despite the rise of digital alternatives. More recent research by Marques et al. (2020) also showed that integrating traditional games into physical education significantly increases motivation, engagement, and group cohesion among university students. Together, these studies highlight that the social and cultural benefits of traditional games observed in this study are in line with international research trends and remain relevant across different educational contexts.

These international studies reinforce that the social functions of traditional games—cooperation, trust-building, conflict resolution, and cultural transmission—are universal, not limited to Indonesian contexts.

### 3. Educational Implications

In line with Marques et al. (2020) and Morgan & Hansen (2017), the findings suggest that traditional games should be integrated into physical education as a way to promote holistic learning that includes social, emotional, cultural, and physical dimensions. The very high score in the Physical Education Learning aspect (4.50) confirms that traditional games function as effective culturally relevant pedagogy.

The results also support Khoiriyah (2024) regarding the shift to digital play. Although digital alternatives received the lowest score (4.20), students still value traditional games as meaningful and socially rich experiences—indicating that traditional games retain strong educational relevance despite digitalization trends.

#### 4. Social and Cultural Implications

Consistent with Durkheim and previous quantitative evidence, the study confirms that traditional games foster social bonds by requiring collaboration, rule-following, and shared emotional experiences. This mirrors Cortés et al. (2019), who found that collective physical activities strengthen group identity and social cohesion in youth communities.

Traditional games also support cultural continuity, aligning with UNESCO (2018), which identifies traditional sports as intangible cultural heritage that fosters identity, belonging, and intergenerational transmission of values. This is reflected in the high score for Cultural Values (4.35).

#### 5. Practical Program Implications

The recommendation to integrate traditional games into the curriculum aligns with Morgan & Hansen (2017) and Bailey (2021), who argue that culturally based pedagogies increase student motivation and foster stronger learning communities. Regular traditional game festivals or competitions may reinforce peer relationships and a positive campus atmosphere.

#### 6. Contribution to Literature

This study contributes to the literature by demonstrating that traditional games, even in higher education, continue to foster solidarity despite the dominance of digital games—a gap noted in prior research by Khoiriyah (2024) and UNESCO (2018). Furthermore, the study operationalizes Durkheim's classical theory within a modern university context, offering new insights into how traditional practices maintain relevance today.

## Conclusions

This study concludes that traditional games play a significant role in fostering social solidarity among Physical Education students. Participation in traditional games promotes cooperation, empathy, communication skills, discipline, and mutual trust. These elements collectively contribute to developing strong social bonds in academic environments.

The results support Durkheim's theory that collective activities reinforce social cohesion, demonstrating that traditional games serve as both recreational and educational tools. They embed cultural values and strengthen character development, making them relevant for modern Physical Education programs.

Practically, the findings highlight the potential of traditional games to be integrated into university curricula as a strategy for enhancing social character and strengthening student relationships.

The consistently high scores across aspects (4.20–4.50) confirm their effectiveness.

Theoretically, this research expands the understanding of mechanical solidarity in contemporary educational settings, especially amid increasing digital individualism. Future research is recommended to involve multiple universities, comparative designs, or longitudinal studies to examine long-term impacts on student behavior.

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## References

- Andriani. (2011). *Traditional games in character formation of early childhood*. Jurnal Sosial Budaya, 9(1), 122.
- Aziza, N. (2023). *Research methodology 1: Descriptive quantitative*. ResearchGate, 166–178.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Berk, L. E., & Meyers, A. B. (2015). *Infants and children: Prenatal through middle childhood* (8th ed.). Pearson.
- Haku, W. A. R. (2022). *The role of the traditional game Gobak Sodor in developing the character of children aged 5–6 years at TK Mantikulore Lasoani, Palu City*. Universitas Tadulako.
- Irwan, M. (2020). *Application of simple and traditional games in physical education learning in elementary schools in Andong Regency* (pp. 1–197).
- Khoiriyah, S. (2024). Game digitalization: The impact and trend shifts from traditional games to the digital world. *Sinar Dunia: Journal of Social Humanities and Educational Research*,

- 3(4), 320–333.  
<https://doi.org/10.58192/sidu.v3i4.2801>
- Marques, R. F. R., Furtado, G. E., & da Silva, R. J. S. (2020). Traditional games in physical education: Effects on motivation, engagement, and group cohesion. *Journal of Physical Education and Sport*, 20(6), 367–375.  
<https://doi.org/10.7752/jpes.2020.06049>
- Muhamad Aris, T. (2023). Development of athletics learning in grade V elementary schools. *Journal of Philosophy, Science, Technology, and Socio-Cultural Studies*, 29(3), 112–120.
- Opie, I., & Opie, P. (2018). *Children's games in street and playground*. Oxford University Press.
- Pellegrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development*, 69(3), 1046–1051.  
<https://doi.org/10.2307/1132366>
- Restuina, C. (2025). *The role of traditional games in PGSD student activities*, 126–132.
- Sugiyono. (2020). *Quantitative, qualitative, and R&D research methodology*. Alfabeta.
- UNESCO. (2018). *Traditional sports and games: Safeguarding intangible cultural heritage*. UNESCO Publishing.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.