# Traditional games to reinforce the character of students in terms of educational qualifications: a meta-analysis

By Hendra Mashuri

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#### Abstract

Physical education plays an important role in shaping human character through pleasurable physical activity. One of the fun and noble physical activities is the traditional game. Traditional games are rich in noble values that are able as learners' character boosters. This study analyzed the role of traditional games on strengthening the character of learners reviewed from the level of education. The research method used is a meta-analysis by checking ten national journal articles formulated with the Glass formula. The results showed that traditional games have a very strong influence on strengthening the character of middle school education learners. At the elementary school level, traditional games have a high effect on strengthening the character of learners. But at the high school level, the influence of traditional games on strengthening the character of learners can be ignored or the effect is very small.

**Keywords:** traditional games, character strengthening, physical education and sports, meta-analysis.

#### INTRODUCTION

Physical education, sports, and health (PJOK) as an education that utilizes physical activity and a healthy lifestyle to produce a complete change in the quality of individuals have a very vital role in the formation of humans (healthy) completely (Mashuri & Pratama, 2019). Healthy human beings are a perfect human condition, both physical, spiritual, and social, not only free from disease or weakness (World Health Organization (WHO), 2020). PJOK, through physical activity and habituation of healthy living, is believed to be of real benefit in the formation of the student's body and the physical fitness of learners (Mashuri et al., 2019). PJOK also has a major impact on the psyche of learners who encourage learners to behave well and correctly. The encouragement is seen in sports activities that contain moral values, namely respect, responsibility, caring, honesty, fairness, and citizenship (Maksum, 2009).

PJOK becomes a medium to encourage learners in motor development, physical abilities, knowledge, reasoning, value-raising (attitude-mental-emotional-spiritual-social), and the formation of a healthy lifestyle that boils down to balanced growth and development (Royana, 2017). One of the efforts to benefit from PJOK is to align traditional games in PJOK learning because traditional games are able to stimulate various

aspects of child development, namely motor, cognitive, emotional, language, social, spiritual, ecological, and moral values (Misbach, 2006).

Basically, from various theories of development, it can be concluded that childhood is a time that is identical to play (Nur, 2019). Traditional games offer benefits for a child's growth and development. Through PJOK, traditional games are able to get a strategic role to carry out the PJOK function mandated in the 2004 curriculum, namely developing organic, neuromuscular, perceptual, cognitive, social, and emotional aspects (Royana, 2017). Based on the theory of child development and the role of traditional games in PJOK, it can be ascertained that traditional games will provide an experience for learners to grow and develop in accordance with their time.

(Aisyab 2017) explained in the results of her study that "Traditional games can build children's character. Reviving the traditional games as today's children's games can be an alternative to create a generation of noble character". A generation that has sublime characters can be built through traditional games. Traditional games train learners to do things that are important for their lives in the future, such as practising numeracy, able to think, train not to be recalcitrant (not whiny), courageous, being honest, sportsmanship and so on (Widodo & Lumintuarso, 2017). The noble cultural values contained in traditional games will strengthen the character of learners in PJOK.

Strengthening the character of learners has been mandated by the Ministry of Education and Culture through Strengthening Character Education with its main values being religion, nationalism, independence, gotong royong, and integrity (Kemendikbud, 2017). The values in character education are integrated in traditional games. This is in line with the study of (Mashuri & Pratama, 2019) which makes strategies to strengthen the character of learners through traditional games in physical education and sports subjects. Thus, traditional games in PJOK can strengthen the character of learners.

In accordance with the mandate of the Government of the Republic of Indonesia, strengthening the character of learners must be integrated in every subject, including PJOK. PJOK as a subject that involves physical activity and often uses games as a form of teaching, then PJOK is believed to be able to strengthen the character of learners. PJOK, through traditional games, aligns physical activity by absorbing and applying to familiarize noble values in traditional games.

The Government's efforts to carry out the mandate by dividing education into three levels of education. Indonesia's education level is divided into elementary school (SD), junior high school (SMP), high school (SMA), and college (PT). But PJOK is only taught at elementary, junior high and high school levels. Therefore, traditional games contained in PJOK are believed to strengthen the character of elementary, junior high and high school students.

Based on the description, this study aims to analyze the effectiveness of traditional games against strengthening the character of learners from the level of education. This meta-analysis research is expected to provide the best solution for teachers to apply traditional games that will be used for PJOK learning that is tailored to the level of education and strengthening the educational values of students' character.

#### **METHOD**

This study is a meta-analysis. A meta-analysis is a robust study design that combines published and unpublished studies to collect the effects of interventions (e.g., drugs, devices, surgeries, treatment strategies) on clinical and intermediate outcomes. Therefore, a reliable method for a systematic review is required for all meta-analyses (Hernandez A., V.Marti K. M., Roman Y. M., 2020). Meta-analysis is a study conducted by researchers by summarizing research data and reviewing and analyzing research data from previous studies' results (Anugraheni, 2018).

The research data collection is done by searching for researched articles contained in online journals using Google Scholar

(https://scholar.google.co.id/). The stages of screening (screening) research articles are described as follows.

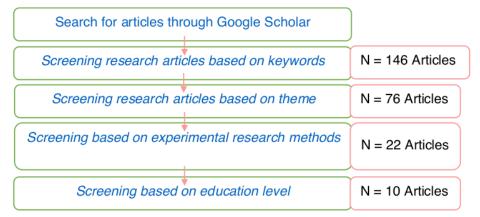


Figure 1. Research article screening chart

The ten articles in accordance with the criteria for inclusion are tested for feasibility by reviewing population, samples, data analysis results, and research results. After that the research continued by analyzing quantitatively using the Glass Formula (1976) with the following effect size criteria.

Table 1. Effect size Glass category

Effect size Values Category

Effect size Values	Category	
Effect size ≤ 0,15	Negligible effects	
$0,15 < \text{effect size} \le 0,4$	Negligible effects	
$0.4 < \text{effect size} \le 0.75$	medium effect	
0,75 < effect size ≤ 1,1	high effect	
1,1 < effect size ≤ 1,45	Very high effect	
1,45 < effect size	Very high influence	

#### **RESULT**

The collection of research articles was done by looking for articles themed on the influence of traditional games on strengthening the character of elementary, junior high, high school students. The keywords used in searches on Google Scholar are "Traditional Games", "Character Strengthening", "Physical Education". Search results get 146 articles that

match keywords. Then from 146 articles filtered according to the criteria of research inclusion, namely research results according to the theme of meta-analysis research, research using experimental methods, and elementary, junior high, and high school education levels produced ten research articles. Here is the distribution of articles after screening.

**Table 2.** Distribution of Traditional Game Articles to The Character of Learners

				The		
No.	Research	N		of The Research Subject	Variable	
		Experiment	Control	Cubject	Free	Bound
1	Ardiansyah, M.A., Djawa, B. (2019)	36	37	SMA	Gobak Sodor	Collaborate
2	Ni'am, L.S.K., Ferianto, B. (2017)	32	32	SMA	Gobak Sodor, Bentengan, Petak Umpet	Collaborate
3	Alifia, E., Hartati, S.C.Y. (2017)	33	0	SMP	Bentengan, Gobak Sodor	Collaborate
4	Abidin, S. (2015)	60	0	SMP	Bentengan, Boy-boyan, Galasin, Jala Ikan	Respect, Leadership, Compliance
5	Nur, H.A., Makmun, A., Fitri, M. (2019)	20	10	SMA	Gobak Sodor, Enklek, Boy- boyan	Social Behavior
6	Imama, A.W.K. (2016)	12	13	SD	Boy-boyan	Collaborate
7	Jaerudin, M.A., Suherman, A., Komarudin (2018)	25	0	SD	Kasti	Collaborate
8	Novian, H.	10	0	SD	Boy-boyan	Moral
9	Abdullah, M.I. (2017)	20	0	SMP	Permainan Tradisional	Social Behavior
10	Syah, M.E. (2020)	6	9	SD	Genukan, Gamparan, Benthik, Jeg-jegan	Social Adjustmen

Then coding is done to the research article. Coding is the most important requirement in meta-analysis research, so instruments in meta-analysis research are performed with coding category. Coding is intended to provide the information necessary to calculate the magnitude of the influence of traditional games on the reinforcement of learners' characters.

Based on the study of 10 articles, the results of the study obtained the effect size of traditional games on strengthening the character of learners in physical education subjects reviewed from the level of education are as follows.

**Table 3.** Results of Calculation of Effect size of each Level of Education

Level of Education	Δ	Criterion
SMA (Senior high school)	0,149	Effects negligible
SMP (Junior high school)	3,729	The effect is very high
SD (Elementary school)	1,060	High effect

The results in table 2 can be described simply the comparison of the effect size of each level of education is as follows.

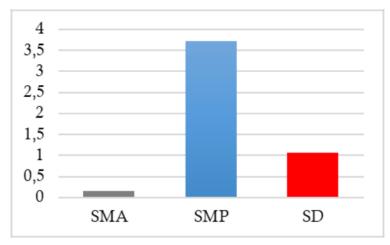


Diagram 1. Comparison of Effect size of Traditional Games at The Level of Education

The results of a meta-analysis of the influence of traditional games on strengthening the character of learners based on education level showed that traditional games have a great influence on the strengthening of the character of elementary school learners (elementary school). For students of junior high school education, traditional games have a very large influence on strengthening the character of learners. But at the level of high school education, the impact of traditional games is very small and its influence can be ignored. This meta-analysis shows that the use of

traditional games is more effective if applied to physical education learning at the level of middle and elementary education.

#### 4 DISCUSSION

The results of the traditional game meta-analysis of the strengthening of the character of learners in PJOK subjects as a whole have a positive influence. In line with the statement (Mashuri & Pratama, 2019), which uses traditional games as a surefire strategy to strengthen students' character. Traditional game integration strategy in PJOK subjects by introducing traditional games, introducing the values to be obtained, giving freedom to learners to practice with agreed rules, evaluating the noble values obtained by learners, reflecting on the values in the life of learners, freeing learners to develop the game with a values development approach, and giving awards for students who are able to apply values.

Traditional games as a tool to strengthen students' character have a vital position, namely as a tool to restore the nature of learners as creatures who like to play. Through traditional games, unwitting learners will absorb the values contained in the game and strengthen the character that has been owned by learners (Huda, 2018). The approach to teaching local culture is very useful in optimizing the implementation of strengthening character education. Therefore, the standard of character values set in schools must follow local cultural values and rules that have been integrated with student life behaviour (Effendi et al., 2020). This applies to learners in childhood and early adolescence who essentially like games as a routine activity in their lives. Therefore, traditional games at elementary, junior high, and high school education levels are able to strengthen the character of learners.

The influence of traditional games on strengthening the character of learners has a variation in the effect size at the level of education. At the elementary education level, the effect size of traditional games on strengthening characters has a high influence. This means that traditional games are effective to strengthen the character of elementary school

learners. At the level of junior high school education, traditional games have a very high effect size, meaning that traditional games are very effective as a booster of the character of junior high school students. In high school education, the effect size can be ignored, meaning that the effectiveness of the influence of traditional games on high school education level on strengthening the character of learners is very small.

Each character carries the concept of character education. However, in different contexts of time and cultural settings, the central idea can be united in one common theme, namely how to instil attitude, identity and morality as the core character of the latent community and citizenship of identity in the global arena and face the ever-changing flow of time (Hulawa, 2019). Based on the level of education, the application of traditional games most effectively applied to the level of junior high school education. Middle school students are early teens who are faced with selfchanges such as puberty and self-image, so there is a self-drive to learn new things, including traditional games, and open to lessons including character strengthening. Junior high school students will behave like adults in the transition from child to teenager (puberty). Still, he is not ready (Utomo & Ifada, 2019), this encourages learners to do what people usually do. The consequence is to get the consequences of what has been done, such as doing traditional games impact strengthening the character of junior high school learners.

The meta-analysis results showed the influence of traditional games that can be ignored at the level of high school education. Students in the high school education program are focused on things that are intellectual and abstract (male) and emotional and concrete (women) (Utomo & Ifada, 2019). So that learners prefer activities that can and efficiently affect their future, such as learning subjects used as national exams or doing activities that make them involve their feelings. Therefore, traditional games are considered less influential on their future and do not show identity as incredible humans or do not keep up with the times. Learners prefer physical activities that can make them popular or famous, such as

basketball or futsal, rather than traditional games. When learners do traditional games, they are less passionate. High school students do not absorb the impact of the values contained in traditional games.

The results of a meta-analysis of the role of traditional games on strengthening character at the elementary education level showed a high impact. Psychosocially, elementary school learners begin to be confident and often low-self-esteemed. Learners start to try to prove that they are "mature", feeling "I can do something on my own". This elementary school environment is rich in factors that stimulate children to be active, investigate, and test the objects they find. Children develop this experience through various physical activities. This condition is particularly relevant to the brain's neurodevelopment, allowing children to effectively utilize things in the environment (Leasa et al., 2017). Therefore, elementary school students feel happy and challenged to show themselves so that during the learning process with small games, they are very excited and passionate. Thus the values contained in traditional games will be easily absorbed. But because elementary school learners are children who like to play, they do not realize that traditional games educate them. This causes the values of traditional games to be less absorbed by elementary school learners.

Strengthening character education becomes a must because education makes learners smart and intelligent, education also builds noble ethics, manners and culture. Strengthening character education is a means to strengthen student character, while the efforts made by teachers to carry out strengthening character education carry out programs accustoming students to maintain cleanliness, beauty, and order, getting used to managing classroom conditions before starting learning, providing examples of good deeds, applying religious values, responsibility and discipline to students (Andayani et al., 2020). Building cultured people must be by using cultural activities in everyday life that are integrated and accustomed in primary education to higher education. In elementary education (elementary school), character education through traditional

games should be more than 60%. The higher the level of education, the more leads to academic education (Harun, 2013). This means that character education through traditional games in PJOK should start basic education (SD) with a portion of 60% and 40% of academic education. The portion given at the junior high level is 50% for character education and 50% for academic education. The portion of high school education for character education through traditional games in PJOK subjects can be up to 40% and 60% for academic education.

#### CONCLUSION

This meta-analysis research seeks to find the influence of traditional games on strengthening learners' character based on education levels. The results of this meta-analysis research can be concluded that traditional games strongly influence elementary education students. At the level of junior high school education, traditional games are very influential in strengthening learners' character. But the influence of traditional games on strengthening character at the level of high school education is less influential or the effect can be ignored.

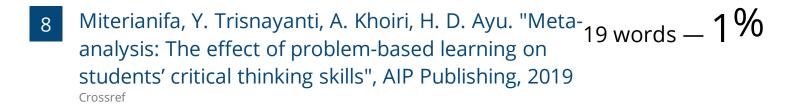
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