ORIGINAL



Does the traditional game of Cublak Cublak Suweng teach educational values? An exploratory study

¿El juego tradicional de Cublak Cublak Suweng enseña valores educativos? Un estudio exploratorio

Hardianto Hardianto¹^(b), Wachidah Hayuana¹^(b), Noviansyah Kusmahardhika¹^(b), Poppy Rahmatika Primandiri²^(b) Agus Muji Santoso²^(b), Susriyati Mahanal¹⁰, Siti Zubaidah¹⁰ 🖂

¹Universitas Negeri Malang, Department of Biology. Malang, Indonesia. ²Universitas Nusantara PGRI Kediri, Biology Education Program. Kediri, Indonesia.

Cite as: Hardianto H, Hayuana W, Kusmahardhika N, Rahmatika Primandiri P, Muji Santoso A, Mahanal S, et al. Does the traditional game of Cublak Cublak Suweng teach educational values? An exploratory study. Salud, Ciencia y Tecnología. 2025; 5:1689. https://doi. org/10.56294/saludcyt20251689

Submitted: 27-09-2024 Revis

Revised: 14-01-2025

Accepted: 09-06-2025

Published: 10-06-2025

Editor: Prof. Dr. William Castillo González 回

Corresponding author: Siti Zubaidah 🖂

ABSTRACT

Introduction: Cublak Cublak Suweng (CCS) is one of the traditional games played by children in several regions of Indonesia, combining songs and dances. This game has a deep philosophy, but the educational values that emerged in the game have not been widely revealed.

Objective: this study aims to explore the educational values that emerged in CCS.

Method: we conducted participant observation to obtain data in schools in the East Java province where students still played CCS. The collected data were combined with literature on the philosophy of CCS. Then, the data were used in expert discussions to reveal the educational values that emerged in CCS.

Results: the findings showed that CCS lyrics have a philosophy of how to seek or find the path of truth. CCS has three domains of educational values: collaboration and cooperation, critical and strategic thinking, and moral education.

Conclusions: the study suggests that developing CCS games for learning is necessary to preserve traditional games, and they can be designed to empower learners' skills.

Keywords: Collaboration; Critical Thinking; Traditional Game.

RESUMEN

Introducción: *Cublak Cublak Suweng (CCS)* es uno de los juegos tradicionales que juegan los niños en varias regiones de Indonesia, que combina canciones y bailes. Este juego tiene una filosofía profunda, pero los valores educativos que surgieron en el juego no se han revelado ampliamente.

Objetivo: este estudio tiene como objetivo explorar los valores educativos que emergieron en el CCS.

Método: se llevó a cabo una observación participante para obtener datos en escuelas de la provincia de Java Oriental donde los estudiantes aún jugaban CCS. Los datos recopilados se combinaron con la literatura sobre la filosofía de la CAC. Luego, los datos se utilizaron en discusiones de expertos para revelar los valores educativos que surgieron en CCS.

Resultados: los hallazgos mostraron que las letras de CCS tienen una filosofía de cómo buscar o encontrar el camino de la verdad. CCS tiene tres dominios de valores educativos: colaboración y cooperación, pensamiento crítico y estratégico, y educación moral.

Conclusiones: el estudio sugiere que el desarrollo de juegos de CCS para el aprendizaje es necesario para preservar los juegos tradicionales, y pueden diseñarse para potenciar las habilidades de los alumnos.

© 2025; Los autores. Este es un artículo en acceso abierto, distribuido bajo los términos de una licencia Creative Commons (https:// creativecommons.org/licenses/by/4.0) que permite el uso, distribución y reproducción en cualquier medio siempre que la obra original sea correctamente citada

Palabras clave: Colaboración; Pensamiento Crítico; Juego Tradicional.

INTRODUCTION

Traditional games are passed down from generation to generation and are usually played live in a particular community environment.⁽¹⁾ These games often do not require modern equipment or advanced technology but rely on physical skills, creativity, and social interaction between players.⁽²⁾ There are many traditional games on one of the islands in Indonesia, namely on Java, including jamuran, congklak, bentengan, and others. In addition to being a means of entertainment, traditional games also have deep cultural values, such as cooperation and respect for mutually agreed-upon customary rules.^(3,4) Traditional games remain essential in maintaining cultural identity and building community togetherness.⁽⁵⁾

Traditional games hold great potential in education, as they are rich in noble values, skills, and knowledge relevant to learning.⁽¹⁾ Traditional games are also ideal for developing students' social-emotional skills.⁽⁶⁾ Through interaction with peers, students learn about cooperation, healthy competition, sportsmanship, and empathy.⁽⁷⁾ Teachers can design fun and meaningful learning activities using traditional games as learning media.⁽⁸⁾

Understanding the philosophical value of traditional games in learning is of paramount importance because traditional games are not only a means of entertainment but also hold various deep values that can be taught to the younger generation.^(9,10) Each traditional game has a philosophy that reflects local wisdom, such as togetherness, cooperation, honesty, resilience, and good manners. Traditional games can be used as a tool to teach moral and ethical concepts in a fun and interactive way in today's modern era.⁽¹¹⁾ Students are also invited to appreciate local culture and history in traditional games, thus strengthening their sense of identity and pride in cultural heritage.⁽¹²⁾ Learning seems holistically designed, integrating cognitive, emotional, and social aspects, which play a role in teaching philosophical values through traditional games.

Cublak Cublak Suweng (CCS) is one of the traditional games from Javanese and has been widely recognized in Indonesia, especially among educators, cultural observers, and people who care about the preservation of local traditions.⁽¹³⁾ CCS games are often played by children in open fields. CCS has its roots in ancient Javanese culture and is believed to have existed since the royal era in Java, especially the Majapahit kingdom era. The game was inspired by the life of Javanese people who, at that time, highly valued symbols of wealth and wisdom, such as suweng (floral jewelry made of precious metals worn in girl's ears), which became a symbol of property and social status.⁽¹⁴⁾ Several children play the game, with one playing the role of seeker, while the others sit in a circle, hiding a small object, such as suweng (earrings), between their hands. While singing Cublak Cublak Suweng song, the players try to hide the object from the seeker.

The philosophy in the song Cublak Cublak Suweng is an effective learning medium that introduces wisdom to the younger generation.⁽¹⁵⁾ This entertaining activity sharpens sensitivity, intuition, and group cohesiveness. ⁽¹⁴⁾ Current studies on CCS generally focus on the cultural aspects and preservation of traditional games as part of Indonesia's cultural heritage.⁽¹⁴⁾ Many studies examine these games in the context of culture, history, and character, especially to keep traditional games from becoming extinct amid the dominance of modern games.⁽¹⁶⁾

However, until recently, few studies have specifically explored the meaning of lyrics and the educational values of CCS in learning. The exploration related to the philosophy of this traditional game can be integrated into learning to make a broader contribution to character education and the preservation of local culture. This study aims to explore the values of CCS that can be internalized in learning. This study seeks to identify domains of educational values that can be applied to contextualized learning in the classroom. In addition, the present study is expected to contribute to the development of learning strategies that are more holistic, rooted in local wisdom and learner culture, and relevant to the needs of education in the modern era.

METHOD

This study employed an exploratory design within a qualitative descriptive approach to reveal the educational values that emerged in CCS. We conducted four research stages: observation of CCS games implemented by the community, data collection from key references, focus group discussions, and conclusion (figure 1). The first stage was the participatory observation of traditional CCS games conducted in Kediri District, Blitar District, and Sidoarjo District in East Java Province, Indonesia, from July to November 2024. Each district selected one elementary school where students still played CCS. The data collected in this first phase were the frequency of students playing CCS, the tools or materials used in playing CCS, and game procedures.

The second stage of this study was to trace information about CCS as a traditional game from key references. There are two ancient and classical key references used, namely a book entitled Javaansche Meisjesspelen en Kinderliedjes written by Overbeck on Javanese children's games and the book Cultural Values Preservation through folk games of Yogyakarta Special Region. The information gathered from these key books included

authentic lyrics of songs sung by children in CCS as well as techniques or procedures for playing them. This data was needed to confirm the data obtained in the first stage.

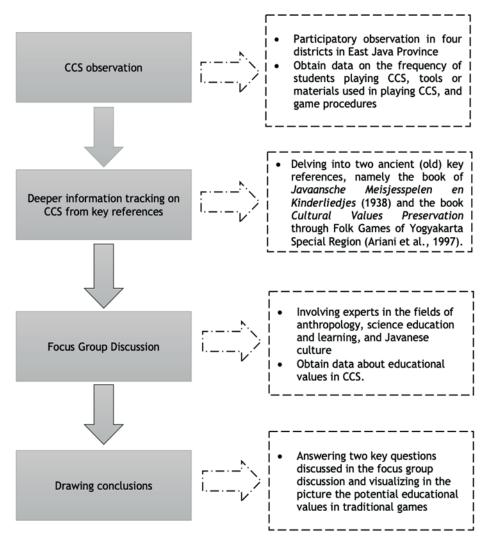


Figure 1. Data collection stages of the Cublak Cublak Suweng game

The third stage of this study was a focus group discussion, which involved several experts in anthropology, science education and learning, and Javanese culture. The discussion aimed to obtain data on the educational values that emerged in CCS. The discussion began with the researchers presenting research data from stages one and two. The experts discussed the data with a focus on two questions: (1) what the meaning and philosophy of the lyrics of CCS is, and (2) what the educational values are emerging in CCS. The fourth stage was to formulate conclusions. The conclusion is the answer to the two key questions discussed in the focus group discussion and visualized in the picture of potential educational values in traditional games.

RESULTS

Procedures of playing Cublak Cublak Suweng

The observations revealed that all students in low and high grades (figures 1, 2, and 3) and grades (grades 4, 5, and 6) could play the traditional CCS game. Students play CCS during recess for approximately 30 minutes in two to three games. During one week, primary school students play CCS four to six times. This fact shows that students play CCS games at school during recess almost daily. The unique thing found in this study is that students can use any objects around them as props to play CCS. Small objects easily grasped with their hands are props for playing CCS. For example, pebbles, marbles, and paper are formed into small balls, and leaves are torn or cut (figure 2). Students use these objects as substitutes for suweng, which has been the main property in playing CCS.



Figure 2. The original property called suweng (A) and objects that are often used as substitutes for suweng by children in East Java in playing CCS include marbles (B), plastic balls (C), seeds (D), torn leaves (E), pebbles (F), paper made into balls (G), and unused buttons (H)

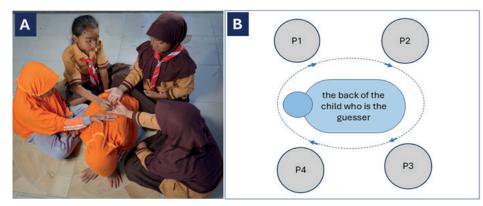


Figure 3. Documentation of a CCS game by children at a school in East Java (A) and a sketch of the CCS game formation (B). The child who becomes the Guesser sits bent over so his back can be used as a table by his friends (P1 to P4) sitting in a circle with open palms on the Guesser's back. *Suweng* is rotated on the palm of the hand like the direction of an arrow while singing the lyrics of the CCS song

The procedures for playing Cublak Cublak Suweng are:

• Number of Players: minimum three people; the more, the merrier.

• Tools required: no special tools are needed, but small objects such as pebbles or coins can be used to represent *suweng* (earrings).

Play step

- Determination of roles, namely as players and guessers.
- Choose one child as the guesser, usually the child who lost the whistle.

• Players who are not guessers sit cross-legged in a circle. The guesser bends down in the circle's center with their eyes closed or looking down at the floor (figure 2).

• The other players place their hands on the Guesser's back, forming a path to pass the object (suweng) (figure 3).

• While singing the lyrics of Cublak Cublak Suweng, the players pass the suweng from one hand to another in a hidden manner.

• When the lyrics arrived at "Sopo Ngguyu Ndhelikake"; the player began to hold both hands with both index fingers open and continued singing with the next lyrics "Sir-sir pong dhele kopong".

The guesser will get up from a bowed position and then start guessing who is carrying the suweng. The Guesser only gets a chance to guess once. If the guesser's guess is correct, then the one holding the suweng must become the next guesser. If the guesser's guess is wrong, then the guesser must become the second guesser. The stages are repeated as agreed.

Song and Values of Cublak Cublak Suweng Education

The song of CCS is not just a game for children but contains moral messages reflecting the Javanese worldview. Each stanza contains wisdom and an understanding of the balance of life, which has been taught to children for generations. Therefore, a sense of the cultural and social context surrounding this song is an important foundation for interpreting its philosophy. The meaning of each lyric is presented as follows. CCS has song lyrics when children play, with song lyrics as follows:

- Cublak cublak suweng,
- Suwengé teng gelenter,
- Mambu ketundhung gudèl,
- Pak empo lera-lere,
- Sopo ngguyu ndhelikaké,
- Sir-sir pong dhele kopong,
- Sir-sir pong dhele kopong.

CCS is a simple game yet full of deep philosophical teachings. Through CCS, children are taught to have fun and understand the importance of wisdom, cooperation, and humility in life. The philosophical values of CCS are highly relevant to be applied in school learning, especially in the context of character education. Some of the values that can be internalized in learning are as follows (figure 4).

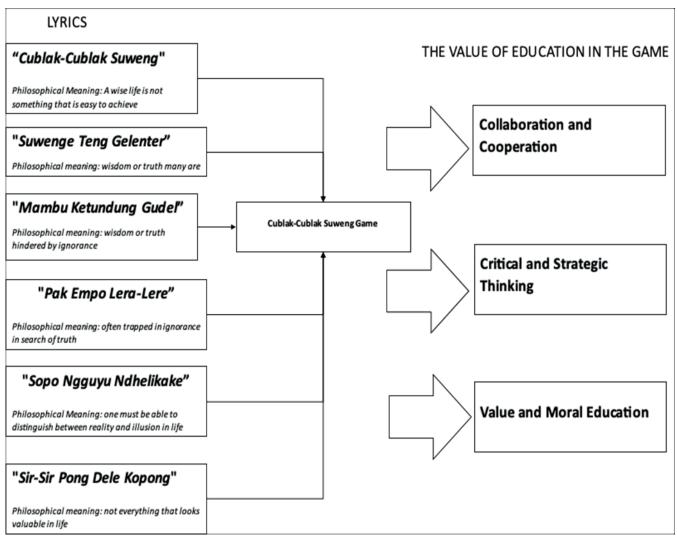


Figure 4. The meaning of lyrics and educational values in CCS

DISCUSSION

The Meaning of Song Lyrics Cublak Cublak Suweng

The meaning of "Cublak Cublak Suweng"

In the old Javanese language, the word cublak means a place, while the word suweng has a synonym in the Javanese language, suweng, which means empty or quiet or meaningful treasure. The word suweng can also mean earrings (floral jewelry made of precious metals worn in the ear and generally used by women). Suweng is a symbol of treasure, wealth, or wisdom. This philosophical value symbolizes that in life, true treasure is not material things that have a high price, but true treasure is wisdom. Treasure requires effort, hard work, and perseverance to achieve, while wisdom requires life experience, deep learning, and self-reflection.⁽¹⁴⁾ Not everyone with abundant wealth will automatically act wisely because wisdom results from an inner journey that involves understanding life values, empathy, and the ability to assess situations clearly. Achieving wisdom is even more difficult than accumulating wealth, as it cannot be bought or inherited but must be acquired through learning and experience.⁽¹⁷⁾ This first lyric means that both treasure and wisdom require sustained effort and strong determination to achieve.

The meaning of "Suwenge Teng Gelenter"

Suwenge teng gelenter means "earrings lying on the ground." This lyric illustrates that although wisdom is all around us, many people do not realize or appreciate it. The philosophical value is that wisdom and truth are often scattered around us, but not everyone can see or appreciate the wisdom. Many are caught up in routine or busy pursuing worldly interests, thus ignoring the signs of wisdom that are present in various forms.⁽¹⁸⁾ To grasp wisdom and truth, one needs to open one's heart and mind, and be humble enough to learn. Wisdom does not always come in a formalized form. Sometimes, it is hidden in simplicity, light conversation, or frequent experiences. Only people who are sensitive and willing to reflect can see the value of wisdom and take it as a guide to life.⁽¹⁹⁾

The meaning of "Mambu Ketundung Gudel"

Mambu ketundung gudel means "driven away by the buffalo calf" which means that the buffalo calf symbolizes ignorance or indifference that interferes with the search for wisdom. The philosophical value is that true wisdom or treasure can be blocked by ignorance or insignificant distractions, thus making one lose focus on what is truly valuable in life. Many people get caught up in momentary pleasures that do not actually bring meaning to life.⁽²⁰⁾ Some distractions can be ego, excessive desires, or excessive obsessions that ultimately cloud their view of the higher values of wisdom.⁽²¹⁾ Ignorance arising from ignorance or the inability to see the greater things in life keeps one away from the real treasures of inner peace, true happiness, and deep knowledge. Therefore, it takes awareness and inner calmness to avoid these distractions and achieve true wisdom.⁽²²⁾

The meaning of "Pak Empo Lera-Lere"

The word "Pak Empo" means an old man with no teeth, while "lera lere" means the body is lying on its stomach. The word "Pak Empo" symbolizes a person who has no knowledge and who cannot get the path of truth will fall in his life. The philosophical value is that every human being should have knowledge. Because with knowledge, humans can fulfill their roles (duties and obligations) as humans properly and correctly. Without knowledge, humans will fail to fulfill their duties and responsibilities, so they will not enjoy life well. Searching for wisdom is a long process and requires perseverance.⁽²³⁾ Many people think that wisdom can be obtained quickly or through an easy path, whereas the process is much more complex and challenging. Wisdom involves intellectual knowledge and depth of understanding, introspection, and profound life experiences.⁽²⁴⁾ One may face failures, mistakes, and confusion, but this is how one learns and grows. The search for wisdom is a long process, requiring perseverance, and humility to keep searching and learning without stopping.⁽²⁵⁾

The meaning of "Sopo Ngguyu Ndhelikake"

Sopo ngguyu ndhelikake means that whoever is laughing is hiding suweng. Players who laugh usually hide something, which is a clue for wisdom seekers. In this context, the philosophical value is that laughter symbolizes deception or illusion. One must be able to distinguish between reality and illusions or distractions in life. It is often difficult for a person to see the truth, which is temporary or misleading. Illusions can come in many forms, ranging from unsubstantiated opinions that have no positive impact. Therefore, it is important for individuals to exercise critical and reflective skills and have high self-awareness to evaluate experiences and information received.⁽²⁶⁾ One can find deep and valuable truths in life by developing a deep understanding of the difference between reality and illusion.

The meaning of "Sir-Sir Pong Dele Kopong"

Sir-sir pong dele kopong means "empty soybeans." Empty soy beans symbolize something that seems

valuable but actually has no content. The philosophical value is that not everything seen is valuable in life. Judgments of things are often influenced by outward appearances, which can be misleading. Many aspects of life, such as material ambitions, social status, or physical appearance, are often considered necessary.⁽²⁷⁾ This phrase reminds us not to get caught up in outward appearances and to be more careful in evaluating anything worthwhile.⁽²⁸⁾ It is essential to dig deeper and seek the essence of things, so as not to be deceived by deceptive external appearances.

The Value of Education in The Game of Cublak Cublak Suweng

Collaboration and cooperation

This game teaches the importance of cooperation and good social interaction. This is reflected in the children's cohesiveness in singing the lyrics with the same rhythm, obedience and discipline in obeying the rules of the game until CCS is declared over, and cooperation in strategizing so that the Guesser does not easily guess who is bringing the suweng. Teachers can integrate this value of cooperation through group activities, encouraging students to work together to achieve a common goal. Collaboration and cooperation in learning are two key elements that can enhance the learning experience and enrich students' knowledge.^(29,30) Through collaboration, students are encouraged to work together, share ideas, and learn from each other, creating an environment that supports open discussion and innovation.⁽³¹⁾ Collaboration also helps build important social skills, such as communication, empathy, and the ability to resolve conflicts, all of which are needed in everyday life and the world of work. Collaboration allows students to see a problem from multiple perspectives, thus deepening students' understanding.⁽³²⁾ Learning processes involving collaboration and cooperation create a sense of community and equip students with relevant skills to contribute to society.

Critical and strategic thinking skills

Students playing CCS are required to think critically and strategically. As guessers, children will learn how to guess the position of *Suweng*, while the other players will learn how to trick the Guesser. The development of critical and strategic thinking skills is essential in facing the challenges of the modern world. Critical thinking involves the ability to objectively analyze, evaluate, and filter information so that students can distinguish between facts and opinions and make informed decisions based on facts.⁽³³⁾ Strategic thinking helps one plan ahead and anticipate various possibilities for solving problems. This skill is beneficial in academia and everyday life as it allows individuals to make smarter, creative, and effective decisions.^(34,35) Students will be better prepared to face complexity in various aspects of life and be able to take thoughtful and purposeful actions.

Value and moral education

Value and moral education in learning are important in shaping students' character and personality. In addition to teaching academic knowledge, a good education should instill ethical values, such as honesty, responsibility, empathy, and integrity.⁽³⁶⁾ These values help students develop intellectually and become individuals with greater moral awareness in their social lives.⁽³⁷⁾ Through values education, students are taught to understand the difference between right and wrong and to respect diversity and the rights of others. Value and moral education are the foundation for forming a generation with character, caring for others, and ready to contribute positively to society.⁽³⁸⁾ CCS is a traditional Javanese cultural heritage with a deep meaning in each song lyric and contains relevant educational values.

Limitations

This exploratory study into CCS as a traditional game encompasses two limitations. Firstly, the current literature related to the philosophy of traditional games in Indonesia is sparse. The two key books used in the study are traditional game master books. The adaptation of Javanese children's traditional games, such as CCS, has not been recorded and reported scientifically. Traditional games are passed down from generation to generation without standardized written records. As a result, there are variations in lyrics, melodies, and philosophical interpretations in different regions of Java, making it difficult for researchers to set standards for lyrics, songs, movements, and even properties used as references. Secondly, there is no formal documentation of the creation of traditional games in Indonesia. The lack of formal documentation of the historical and sociocultural contexts in which these songs were created hinders a deeper understanding of their original meanings, so interpretations are often based on modern assumptions or analyses that may not fully reflect their original values.

CONCLUSIONS

This study shows that CCS is not only an important cultural heritage but also has a deep meaning of how a human being must behave in finding the path of truth to carry out his duties and obligations as a good human being. Based on the characteristics of the lyrics of the CCS song, the educational values that emerged in CCS are grouped into three categories: collaboration and cooperation, critical and strategic thinking, and value

and moral education. This game can be developed and applied in classroom learning. It is highly relevant to be applied in learning, especially in character education that emphasizes students' social, emotional, and moral development. The meaning and educational values that emerged in CCS can be an inspiration in designing learning that is more contextual, fun, and meaningful for students.

Further studies need to be conducted to integrate the educational values of CCS into the formal learning curriculum in schools. Teachers can use this game as an interactive learning model to teach learning concepts through a fun approach that aligns with the current policy of the Ministry of Primary and Secondary Education of the Republic of Indonesia. Collaboration between educators and cultural experts in developing learning modules that combine traditional values with modern learning methods. The government and schools are expected to support preserving traditional games such as *Cublak Cublak suweng* by integrating them into extracurricular activities or local culture introduction programs.

REFERENCES

1. Gao Z, Zhang P, Podlog LW. Examining elementary school children's level of enjoyment of traditional tag games vs. interactive dance games. Psychol Health Med. 2014 Sep 3;19(5):605-13.

2. Fernández-Amat C, Zarza-Alzugaray FJ, del Barrio Aranda L. Design and validation of a scale for the assessment of educational competencies in traditional musical games. Humanit Soc Sci Commun. 2024 Jun 29;11(1):860.

3. Correa-Bautista JE, Reyes Rodríguez ID, Ortega-Mora GI, Gil-Moreno DP, Florian-Lara JL. Design and validation of a questionnaire of knowledge, attitudes, and practices (KAP) related to traditional children's games in Colombian schoolchildren. Retos. 2024 Aug 29;60:341-51.

4. Lidström I, Svanberg I, Ståhlberg S. Traditional sports and games among the Sámi people in Northern Fennoscandia (Sápmi): an ethnobiological perspective. J Ethnobiol Ethnomed [Internet]. 2022;18(1). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85126655026&doi=10.1186%2fs13002-022-00517-9&partnerID=40&md5=4e6d928284af8ec39542f69ccaf8c9d8

5. Morejón-Calixto SE, Mayanza-Paucar O, Barcia-Maridueña AM, Vásquez-Alvarado E. Traditional games as a pedagogical strategy for the strengthening of cultural values in the community. Retos. 2024 Aug 3;57:859-65.

6. Lavega P, Alonso JI, Etxebeste J, Lagardera F, March J. Relationship Between Traditional Games and the Intensity of Emotions Experienced by Participants. Res Q Exerc Sport. 2014 Oct 2;85(4):457-67.

7. Budiman IA, Yudha BAR, Anshori YZ. Increasing self-esteem through traditional sundanese games and sport from Indonesia in physical education. International Journal of Human Movement and Sports Sciences [Internet]. 2021;9(4):25-30. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85112089911&doi=10 .13189%2fsaj.2021.091305&partnerID=40&md5=b7cdcf84593ef1c5c8dc63a8c8220b13

8. Winarso W. A Traditional Game-Based Parenting Model as a Cultural-Inheritance Medium in Early Childhood Education. International Journal of Learning, Teaching and Educational Research [Internet]. 2022;21(3):143-65. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129445287&doi=10.26803%2fijlter.2 1.3.9&partnerID=40&md5=d921b3081448323a903662497e838f05

9. Ribas JP, Hernández-Moreno J, Díaz-Díaz R, Borges-Hernández PJ, Ruiz-Omeñaca J V, Jaqueira AR. How to understand sports and traditional games and how to apply it to physical education. On the "Goal of Game." Front Sports Act Living [Internet]. 2023;5. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85150282683&doi=10.3389%2ffspor.2023.1123340&partnerID=40&md5=68449bdc8e9496c334dc21c4b9a19a df

10. Yılmaz E, Yel S, Griffiths MD. Comparison of Value Perception of Children in Playing Videogames and Traditional Games: Turkish and British Samples. Egitim ve Bilim [Internet]. 2022;47(210):41-66. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131605366&doi=10.15390%2fEB.2022.10574&partne rID=40&md5=f6ebeab70b14dd0273e0cf832d86be5b

11. Aditya F. Traditional Game Module Development: An Alternative To Stimulate Early Childhood Language Development. Nazhruna: Jurnal Pendidikan Islam [Internet]. 2023;6(1):139-58. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85175523269&doi=10.31538%2fnzh.

v6i1.2977&partnerID=40&md5=e00a24dfe273a588a3d629493adccf81

12. Kamid K, Rohati R, Hobri H, Triani E, Rohana S, Pratama WA. Process Skill and Student's Interest for Mathematics Learning: Playing a Traditional Games. International Journal of Instruction [Internet]. 2022;15(3):967-88. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134671537&doi =10.29333%2fiji.2022.15352a&partnerID=40&md5=03bb274273380d2b8879fb8a3e4fcf0d

13. Tyasworo R, Farah ;, Putri R, Mukhamad ;, Samiaji H. Increasing the Character of Responsibility and Discipline in the Manba'ul Huda Play Group Through the Cublak-Cublak Suweng Game. 2023;3(1). Available from: https://creativecommons.org/licenses/by/4.0/

14. Kurniawati NI, Qomariyah L, Mahmoud MFAA. The Use Traditional Game Cublak-Cublak Suweng to Improve Arabic Vocabulary Achievements. Jurnal Al-Maqayis. 2022 Nov 24;9(2):161.

15. Anggraini R, Wahyuni A. Development of Religious and Moral Values Through Cublak-Cublak Suweng Traditional Games To Build Children's Character. JOYCED: Journal of Early Childhood Education. 2021 Dec 26;1(2):115-26.

16. Fernández-Oliveras A, Espigares-Gámez MJ, Oliveras ML. Implementation of a playful microproject based on traditional games for working on mathematical and scientific content. Educ Sci (Basel) [Internet]. 2021;11(10). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85117495578&doi=10.33 90%2feducsci11100624&partnerID=40&md5=d3322b0c2ea0651fc914f95249d820fe

17. Gandhewar AM, Hande A. Wisdom behind understanding cleft lip and palate. Multidisciplinary Reviews. 2024 Aug 6;7(11):2024268.

18. Kroik L, Stoor K, Anette EL, Tishelman C. Using narrative analysis to explore traditional Sámi knowledge through storytelling about End-of-Life. Health Place. 2020;65(August).

19. Xue E, Li J. Contextualizing the philosophy of science education: Insight from China. Educational Philosophy and Theory [Internet]. 2022 Aug 16;1-10. Available from: https://www.tandfonline.com/doi/full/ 10.1080/00131857.2022.2111256

20. Balukh V, Kraliuk P, Shkribliak M. Christian Centrism In The Context Of The Postmodern Paradigm of Philosophy Education And Value Strategies For Education Of Student Youth. Youth Voice Journal [Internet]. 2022;4(SpecialIIssue):7-16. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131244701&partnerID=40&md5=d1439e3c41afb15b5f1526acf461ceec

21. Sinha S, Roy AG. Philosophy, education and visceral politics of the now. Educational Philosophy and Theory [Internet]. 2023;55(6):719-30. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124966096&doi=10.1080%2f00131857.2022.2034618&partnerID=40&md5=8e15372bdbf36fda8c49ebbe21320d 6d

22. Arcilla R V. Response to commentators on Wim Wenders's Road Movie Philosophy: Education Without Learning. Journal of Philosophy of Education [Internet]. 2021;55(4-5):776-81. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85120684943&doi=10.1111%2f1467-9752.12602&partnerID=40&md5 =a88b93710bead8bcbf94d99837ec407e

23. Abadal LM. Ensuring Genuine Assessment in Philosophy Education: Strategies for Scaffolding Writing Assessment in an LLM Era. Teach Philos [Internet]. 2024;47(2):255-77. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85195517027&doi=10.5840%2fteachphil2024422195&partnerID=40&md5=b3 ec26058179149496687c8aa6244466

24. Van Calcar M. A Plea for Wild Philosophy: How Thinking about Online Philosophy Teaching Shows that Doing Philosophy Well Is Like Being an Elephant in the Jungle. Teach Philos [Internet]. 2023;46(3):341-66. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85171531040&doi=10.5840%2fteachph il2023719182&partnerID=40&md5=58fc58147296732d20e80d59df2a80c9

25. Rombout F, Schuitema J, Volman M. Effects of a philosophy classroom dialogue intervention

on students' value-loaded critical thinking. Think Skills Creat [Internet]. 2024;53. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85201759553&doi=10.1016%2fj. tsc.2024.101617&partnerID=40&md5=601a904d94ca246dc4f8ea950ea3c051

26. Rombout F, Schuitema JA, Volman MLL. Teaching strategies for value-loaded critical thinking in philosophy classroom dialogues. Think Skills Creat [Internet]. 2022;43. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85120179487&doi=10.1016%2fj. tsc.2021.100991&partnerID=40&md5=eb158485c747ce088a0e0b876ee84dfa

27. Hurst M, Dittmar H, Bond R, Kasser T. The Relationship Between Materialistic Values and Environmental Attitudes and Behaviors: A Meta-Analysis. J Environ Psychol [Internet]. 2013;36:257-69. Available from: http://dx.doi.org/10.1016/j.jenvp.2013.09.003

28. Wahl R. Ways of seeing: Materiality and grace in Wim Wenders's Road Movie Philosophy by René Arcilla: Introduction to the suite of papers. Journal of Philosophy of Education [Internet]. 2021;55(4-5):710-3. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85115360334&doi=10.1111%2f1467-9752.12587&partnerID=40&md5=d0fe8e79b2dd3aa73144351f458fc629

29. Lucas C, Schindel TJ, Saini B, Paslawski T. Game Changer: Pharmacy Students' Perceptions of an Educational "Party Hat" Game to Enhance Communication and Collaboration Skills. Curr Pharm Teach Learn [Internet]. 2020;12(4):442-9. Available from: https://doi.org/10.1016/j.cptl.2019.12.033

30. Hoadley U. How do structured pedagogy programmes affect reading instruction in African early grade classrooms? Int J Educ Dev. 2024 May 1;107.

31. Purnamasari L, Herlina K, Distrik IW, Andra D. Students' Digital Literacy and Collaboration Abilities: An Analysis in Senior High School Students. Indonesian Journal of Science and Mathematics Education. 2021;4(1):48-57.

32. Dewi CA, Erna M, Martini, Haris I, Kundera IN. Effect of Contextual Collaborative Learning Based Ethnoscience to Increase Student's Scientific Literacy Ability. Journal of Turkish Science Education. 2021;18(3):525-41.

33. García-Carmona A. Scientific Thinking and Critical Thinking in Science Education. Sci Educ (Dordr) [Internet]. 2023 Sep 5; Available from: https://link.springer.com/10.1007/s11191-023-00460-5

34. Leen CC, Hong H, Kwan FNH, Ying TW. Creative and Critical Thinking in Singapore Schools. Vol. 2, An Institure of Nanyang Technological University. 2014. 49 p.

35. Finissha GD. Investigating Critical Thinking In Solving Reading Problem. 2021;5(2):109-20.

36. Škėrienė S, Jucevičienė P. Problem Solving Through Values: A Challenge for Thinking and Capability Development. Think Skills Creat [Internet]. 2020;37(May):100694. Available from: https://doi.org/10.1016/j. tsc.2020.100694

37. Massarutto A. Moral duty, warm glow or self-interest? A choice experiment study on motivations for domestic garbage sorting in Italy. J Clean Prod [Internet]. 2019;208:916-23. Available from: https://api.elsevier. com/content/article/eid/1-s2.0-S0959652618331561

38. Akmal A. Local culture and morality attachment to TPACK framework of pre-service english teachers within the challenge of the 21st century skills. International Journal of Education. 2017;9(2):113.

FINANCING

We appreciate the Directorate of Research, Technology, and Community Service, Ministry of Education, Culture, Research, and Technology for funding this research through the KATALIS Research Grant in 2024 (contract number: 029/E5/PG.02.00/PL.BATCH.2/2024).

CONFLICT OF INTEREST

None.

AUTHORSHIP CONTRIBUTION

Conceptualization: Hardianto Hardianto, Noviansyah Kusmahardhika. Data curation: Hardianto Hardianto, Wachidah Hayuana. Formal analysis: Hardianto Hardianto, Wachidah Hayuana, Noviansyah Kusmahardhika. Research: Hardianto Hardianto, Poppy Rahmatika Primandiri, Agus Muji Santoso. Methodology: Poppy Rahmatika Primandiri, Agus Muji Santoso. Project management: Susriyati Mahanal, Siti Zubaidah. Resources: Susriyati Mahanal, Siti Zubaidah. Software: Hardianto Hardianto, Wachidah Hayuana, Noviansyah Kusmahardhika. Supervision: Susriyati Mahanal, Siti Zubaidah. Validation: Poppy Rahmatika Primandiri, Agus Muji Santoso, Susriyati Mahanal, Siti Zubaidah.

Display: Hardianto Hardianto, Wachidah Hayuana, Noviansyah Kusmahardhika.

Drafting - original draft: Hardianto Hardianto, Wachidah Hayuana, Noviansyah Kusmahardhika.

Writing - proofreading and editing: Hardianto Hardianto, Poppy Rahmatika Primandiri, Agus Muji Santoso, Susriyati Mahanal, Siti Zubaidah.