



Creative Innovation: Modernizing the Traditional Game Teng-teng

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Abstract

Amid the rapid advancement of technology, today's younger generation increasingly spends their time on smartphones and video games as sources of entertainment and recreation. Unfortunately, many modern games lack the physical interaction and direct communication that are the hallmarks of traditional games. One traditional game that remains known to this day is Teng-teng. This game is not only enjoyable but also beneficial for the mental and physical development of its players. Therefore, an innovative adaptation called Teng-teng-Think has been developed to make this game more unique and creative. With its appealing design and vibrant colours, Teng-teng-Think is expected to attract the interest of today's youth. Based on preliminary research conducted in Malaysia, 25% of respondents agreed that this innovation is appealing. Additionally, 35% of respondents felt that this game requires strategy and creativity due to its unique gameplay. Furthermore, 40% of respondents stated that when played in groups, this game can foster teamwork and communication skills, as each team member must communicate and collaborate to win. This innovation aims not only to modernize a traditional game in Malaysia but also to introduce it to Indonesia, so that this cultural heritage can be appreciated by a wider audience.

Keywords: Traditional Game, Innovation, Teamwork, Cultural Heritage, Strategy and Creativity.

1. Introduction

In the rapidly evolving digital era, technology has become an inseparable part of everyday life, particularly for the younger generation. This technological advancement not only influences how they communicate and learn but also impacts their choices of entertainment and recreational activities. Smartphones and video games have become the primary entertainment options for children and teenagers, replacing many traditional games that were once very popular (Prensky, 2001).

Unfortunately, the popularity of modern games often sacrifices essential elements such as physical interaction and direct communication, which are the hallmarks of traditional games. Traditional games excel in social and physical interaction, not only providing enjoyment but also benefiting the mental and physical development of their players (Huizinga & Judens, 1955). One traditional game that is still known today is Teng-teng, a game that combines physical skills and strategy.

Teng-teng is one such traditional game that has endured despite changing times. The game is not only enjoyable but also offers numerous benefits, including cognitive and physical development. Research shows that traditional games like Teng-teng can help develop gross motor skills, strategy, and teamwork (Smith, 2009). Nevertheless, to remain relevant in the modern era, this game needs to be modernized to make it more appealing to today's youth.

To address this challenge, an innovation called Teng-teng-Think has been developed. This innovation incorporates creative elements such as appealing design and vibrant colors to make the game more attractive to young people. Preliminary research conducted in Malaysia showed that 60% of respondents agreed that Teng-teng-Think is an interesting innovation, and 73.3% of them believed that the game requires strategy and creativity due to its unique gameplay.

Teng-teng-Think aims not only to modernize a traditional game in Malaysia but also to introduce it to Indonesia. Thus, this innovation is expected to help preserve the rich cultural heritage and reintroduce traditional values to the younger generation in Indonesia, who may not yet be familiar with this game (Suharto, 2019). Through this effort, traditional games can be adapted to meet the demands of the times without losing their essence.

2. Literature Review

2.1. History of Teng-teng Game

Teng-teng, also known as “Hopscotch” which is a traditional game that has long existed within Malay culture. It is a game involving physical activity where players jump from one square to another using either one foot or both feet. This game is typically played outdoors on a surface marked or painted with various squares. The history of Teng-teng reflects how this traditional game has been used to promote physical activity and social interaction among the younger generation (Yasin et al., 2021).

Studies suggest that this game is believed to have originated from various ancient cultures, including Roman and Greek traditions, where early forms of the game were played (Widjono & Geraldine, 2022). In the Malaysian context, Teng-teng has become part of the cultural heritage passed down from one generation to the next. Although popular in the past, this game is increasingly less played by younger generations who are now more interested in digital games and modern technology (Buckingham & Willet, 2013).

Today, traditional games like Teng-teng face challenges in remaining relevant due to technological advancements and lifestyle changes. Studies show that younger generations are now more engaged in virtual game activities, which can lead to a decline in their involvement in traditional physical games like Teng-teng (Aypay, 2016; Jantan, 2013). Consequently, there are initiatives to innovate this game to make it more appealing and relevant to current preferences.

The innovation project known as Teng-teng-Think aims to transform this traditional game by introducing a new, more vibrant, and interactive design. This innovation involves using colorful hexagonal shapes to attract the interest of younger generations and promote creative and critical thinking skills. In this way, Teng-teng can be revitalized and continue to play a role in the physical and social development of children today.

3. Methodology

3.1. Innovation of Teng-teng-Think Game.

The innovation process for the Teng-teng-Think game requires a structured approach to ensure high-quality and effective results. The first step in this methodology involves planning and idea generation, which includes brainstorming sessions among team members. During this phase, the decision was made to modify the traditional Teng-teng game, with an in-depth study conducted on the rules and format of the traditional game (Yasin et al., 2021).

The next phase involves gathering and analyzing information about the existing Teng-teng game. Data was collected on how the traditional game is played and its original design. Based on this analysis, aspects needing innovation were identified, including the gameplay method and the design of the squares (Widjono & Geraldine, 2022).

In the subsequent phase, careful selection of materials for the Teng-teng-Think mat was conducted. The choice was made to use a 7x7-foot tarpaulin banner that meets requirements for durability, water resistance, and cost-effectiveness. This material was selected to ensure the game could be played in various settings without the need for manual square drawing (Salim et al., 2018).

The design of the Teng-teng-Think mat is a critical component in the development phase. This design involves changing from the traditional square shape to a unique and colorful hexagon shape. The use of hexagons aims to enhance the versatility of the game, providing players with six possible paths to choose from and encouraging strategic planning. The use of bright colors is intended to attract attention and motivate players (Rustina et al, 2018).

Finally, a pilot test phase is conducted to assess the usability and effectiveness of the innovative game. This testing involved secondary school students from MRSB Besut. Data collected from this test is analyzed to evaluate how well the innovation meets its objectives in enhancing the gaming experience and learning outcomes (Aypay, 2016; Jantan, 2013).

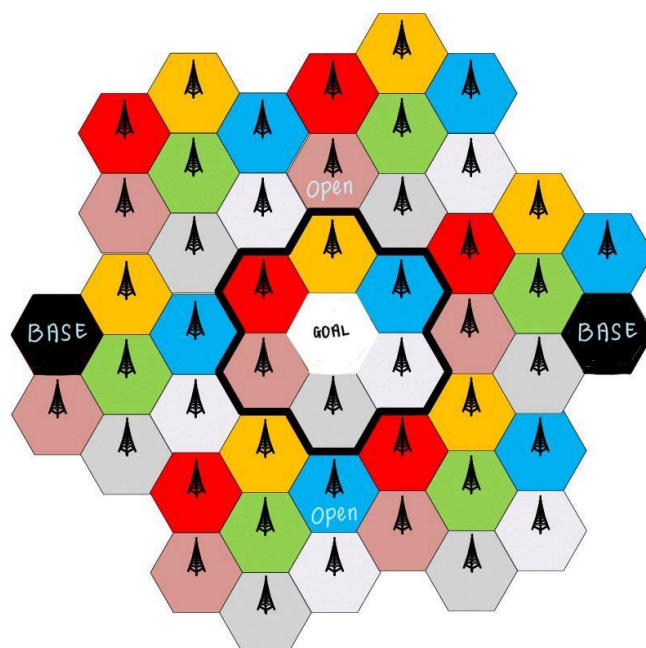


Figure 1 Design of the Teng-teng-Think Game Mat

3.2. Guide: How to Play and Rules of the Teng-teng-Think Game.

Teng-teng-Think can be played by two to four players at the same time. The game set includes the Teng-teng-Think mat, a color die, a step die, colored markers for each player, and chalk to mark the houses that have been claimed by players. Below are the instructions on how to play and the rules for the Teng-teng-Think game.

A) How to play the Teng-teng-Think game

- Determining Turns:** Before starting the game, each player must roll the Step Die to determine the order of play. The player with the highest number goes first, followed by the others in descending order. Then, participants can also choose to start at which base because there are 2 base options.
- Gameplay Steps:** Starting from the Base square as shown in Figure 1, each player must roll two types of dice: the Step Die and the Color Die. The Step Die indicates the number of steps or moves to be made, while the Color Die shows the color of the hexagon square that must be landed on last.
- Player Movement:** Players must hop on one foot from one hexagon square to the next according to the number rolled on the Step Die and the color rolled on the Color Die. For example, if Player A rolls a three on the Step Die and red on the Color Die, Player A must hop three hexagons from the starting hexagon, with the final hexagon being red. Then, the turn passes to the next player, who must follow steps 2 and 3 until they reach the Goal square.
- Claiming a House:** When a player successfully reaches the Goal square, they must throw the Colored House Marker from behind to claim a House. The hexagon square that is claimed will be marked with chalk. Other players are not allowed to step on squares already claimed by someone else.
- Returning to Base:** Players who have claimed a House or those who have not yet succeeded must return from the Goal square to the Base square, following their turn, and repeat Steps 2 and 3.
- Determining the Winner:** The game ends when a player successfully claims three Houses of the same color. That player is declared the winner.

B) Rules for the Teng-teng-Think game

- Open Hexagon Squares:** The Open hexagon square (see Figure 1) can be red, blue, green, pink, white, grey or yellow. Therefore, if a player cannot find a hexagon square of the desired color, they can use the Open square as their final square.
- House Claiming Opportunity:** Players are given only one chance to claim a House per turn. If they fail, they cannot try to claim a House again during that turn.
- House Square Rule:** Players cannot step on House squares already claimed by other players, except for their own claimed squares. If a player steps on a House square that is not theirs, they will lose their turn.
- House Claiming:** During the turn to claim a House, if the Colored House Marker lands on a line or on a House square already claimed by another player, the player will lose their opportunity to claim a House.

4. Results and Discussion

Feedback forms were distributed to respondents, who were high school students, to gather their opinions on the Teng-teng-Think game. A total of thirty students were involved in this preliminary study, providing valuable insights into the awareness and preservation of traditional games within the younger generation. Figure 2 shows that 60% of the respondents were female students, while the remainder were male students.

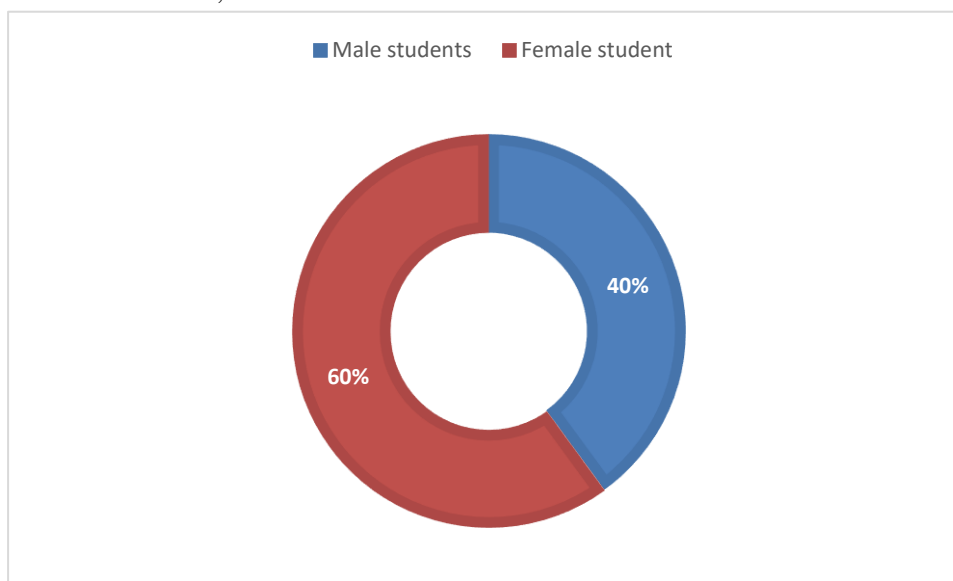


Figure 2 Respondent's Gender

The students were also asked about traditional games they knew. Figure 3 shows the responses from the participants. Most of them were familiar with the game Congkak (43%). According to them, Congkak games are still available in school resource centers. Additionally, Gasing was also recognized by the respondents (25%). Both of these games are still played in schools. Only 9% of the respondents were aware of the game Teng-teng.

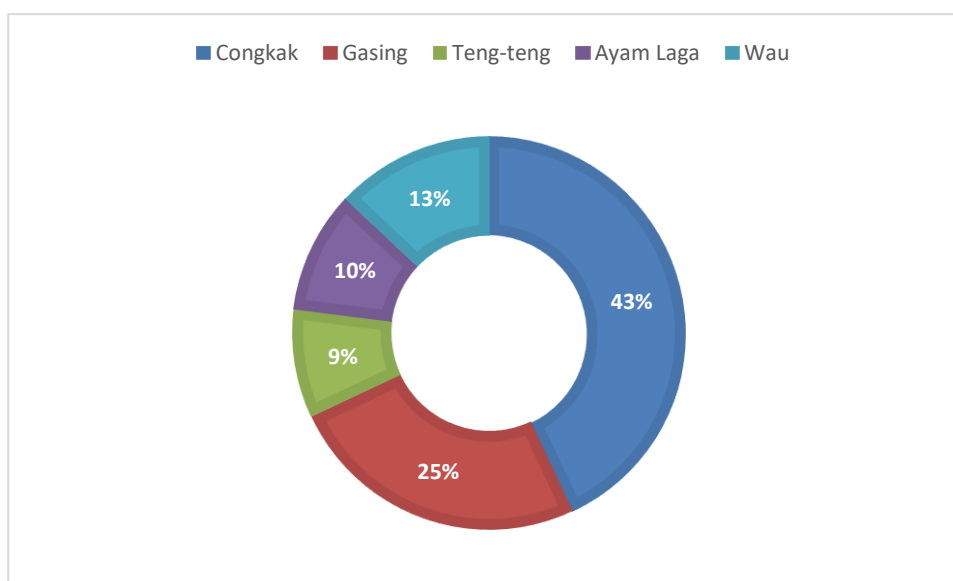


Figure 3 Traditional games are popular among respondents

The students then played the Teng-teng-Think game, and their opinions about the game were recorded. Their feedback was categorized into three criteria: (1) game appeal (attractive), (2) use of strategy and creativity (creative), and (3) encouragement of teamwork (teamwork). According to the results shown in Figure 4, 25% of the respondents agreed that this innovative game is appealing. They mentioned that the colorful hexagon design attracted them to play the game. Meanwhile, 35% of the respondents felt that the game required strategy and creativity to win, due to its unique gameplay. The majority of respondents (40%) agreed that communication among team members is necessary to win the game, which promotes team spirit.

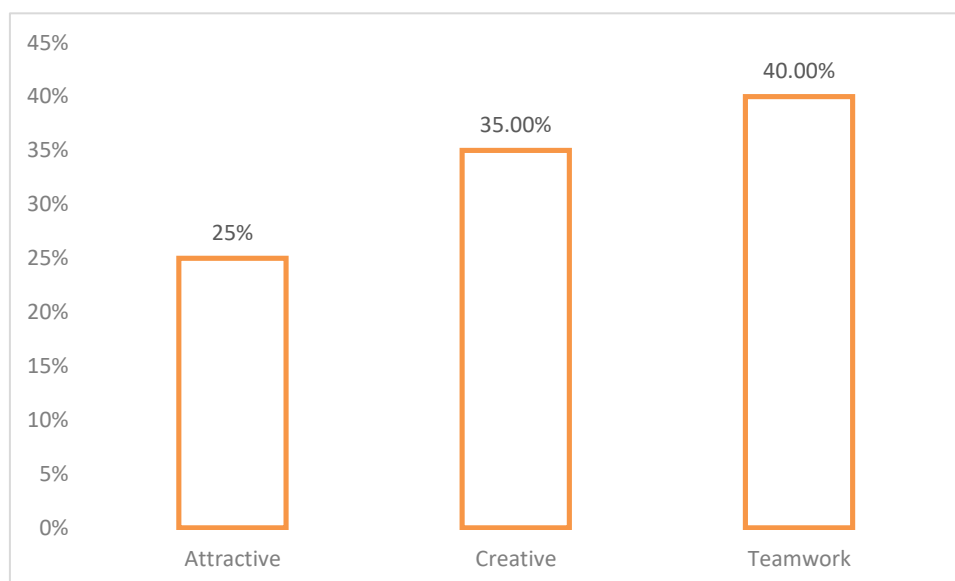


Figure 4 Feedback from participants who played Teng-teng-Think based on three criteria

5. Conclusion

Innovation in traditional games does not mean altering the original gameplay or changing the culture. Instead, it aims to modernize the game's design to appeal to the current digital generation while preserving traditional values. Teng-teng-Think is a prime example of efforts to blend creativity and tradition into a single game. With its unique design and vibrant colors, Teng-teng-Think seeks to capture the interest of today's youth, who are increasingly exposed to modern technology.

Preliminary research indicates that Teng-teng-Think effectively engages young people, with 25% of respondents finding the innovation appealing and 35% believing that the game requires strategy and creativity. Furthermore, 40% of respondents feel that the game promotes teamwork and communication skills, especially in group play settings.

This innovation aims not only to modernize a traditional game in Malaysia but also to introduce it to Indonesia. In introducing Teng-teng to Indonesia, there is an opportunity to expand the cultural exchange between neighboring countries and enrich the traditional game landscape in Indonesia. This initiative is driven by the observation that while games like Congkak (43%) and Gasing (25%) are still widely recognized and played in Malaysian schools, Teng-teng remains less known, with only 9% of respondents familiar with it. By introducing Teng-teng-Think to Indonesia, we aim to broaden the appreciation of regional cultural heritage, ensuring that these traditional games continue to thrive and are passed on to future generations.

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