IMPLEMENTATION OF TRADITIONAL GAMES IN EARLY CHILDHOOD EDUCATION LEARNING IN INDONESIA

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ABSTRACT

Indonesia is an archipelago consisting of 17,504 people spread in 34 provinces. One of them is West Nusa Tenggara Province. Besides that, Indonesia to a country rich in traditional games because Indonesia has more than 300 ethnic groups and has 1,340 ethnic groups. If it is assumed that one ethnic group has only two traditional games, then in Indonesia there will be around 2,680 types of traditional games. Traditional games can stimulate aspects of child development such as physical-motoric, cognitive, language, social-emotional, creativity and character. The purpose of the research in this article is to find out the implementation and utilization of traditional games in the learning process at ECED. The research method uses descriptive qualitative with interview and observation techniques. The research subjects of the interview were 100 kindergarten teachers in West Nusa Tenggara Province. Observer were carried out during traditional game trials in 10 kindergartens representing ten regions in West Nusa Tenggara. Research time July - October 2018. The results of the study show that the use of traditional games in ECED learning can stimulate aspects of child development as a whole and the game can help teachers stimulate all aspects of early childhood development. The suggestion that can be conveyed is that the traditional game should be included in the educational curriculum for early childhood education teachers and is used as an alternative learning strategy in kindergartens, especially in Indonesia

Keywords: traditional games, earlychildhood education, games in learning

Introduction

Every country has a traditional game. Even in one country can have more than ten traditional games. Why? Traditional games are folksy game, which is hereditary from one generation to the next generation. Traditional games are also a picture of local discernment from one region or a certain place. That matter analogous with James Danandjaja's statement, that traditional game is a folk game which is in the form of children's games, which verbally circulated among the certain community member, traditional form with or without self – made tool, and bequeathed in generation to the next generation. Traditional games have so many variations. Usually the younger children imitate the older children. While the older children have imitated from the previous children's generation. So, traditional games that exist now are a legacy from previous

generations and maybe I have passed down several generations that preceded it (Danandjaja 1987). Priscilla Haring state, the game is a cultural heritage that is followed by next generation without questioning its origin and passed down to the next generation in the same way (Haring 2014).

if examined more deeply, a traditional game usually describes the life that occurs in the surrounding community. For example, cat and mouse game. This game illustrates cat as an animal maintained by humans, which is one of its functions is to hunt mice that become pests at the cat owner's house. Therefore, in this game, a child who acts as a cat must hunt a child who acts as a mouse. Accordingly the picture shows that traditional game is a symbol of symbolic of hereditary knowledge and has various functions or messages behind it. Even so, on the fundamental of children's game still a child's game is an activity that carried out for the purpose of having fun and that is their way to fill their free times. Therefore, whatever the shape and form of the traditional game, the activities will be fun and to delight or excite children who play the game

Indonesia is an archipelago consisting of 17,504 pieces spread in 34 provinces. Indonesia also one of the countries that located in the Southeast Asian region. Indonesia's geographical position is very strategic, because Indonesia flanked by 2 continents (Asia and Australia) and 2 oceans (Hindia Ocean and Pacific Ocean). Total area of Indonesia is almost 2 million kilometers stretching from 6 ° N to 11 ° S and 95 ° -141 ° East Longitude (BPS 2018).

This strategic location also affects various fields of people's life, one of them is a socio-cultural field. The effect is apparent with so many foreign cultures that are fused and growing in Indonesia. This can be seen from various types such as how to dress, musical instruments, films, dances, games and others. With these conditions, Indonesia became a country rich in culture and local wisdom, one of them is a traditional game. According to data from the Indonesian Central Statistics Agency Indonesia has more than 300 ethnic groups and 1,340 ethnic groups. If it is assumed that one ethnic group only has two traditional games, so in Indonesia there will be around 2,680 types of traditional games (BPS 2018). Many traditional games in Indonesia need to be preserved, one of them is through learning in schools including Early Childhood Education (ECE). Moreover, traditional games also can be used to help teachers stimulate child's development. One game can develop several aspects of a child's development(Kolb 2010), (L. Kageorge, et.al. 2018), (N Lindberg, et.al. 2017)). Traditional games can also be modified in such a way, both simply and through the use of sophisticated technology in order to further improve the benefits of that game (Miller 2018). Games also can help children to improve school readiness which includes cognitive,

language, socio-emotional aspects and children's independence (H. Kartal & F. Guner 2018). Smyrnakis, Qu, and Veres in his research in Turkey states that the game can be modified with an emphasis on certain elements to stimulate certain aspects. For example, in "how to play and framework" to stimulate logarithmic skills (M. Smyrnakis, H. Y. Qu & S. Veres. 2014), or by modifying the playing environment to stimulate swimming abilities of infants and young children ((J. Monsalve and J. Maya 2012), (Ersan 2017)). The game includes traditional games that are well planned and designed will be able to stimulate and help improve aspects of development, skills and abilities in early childhood, among them are cognitive, language, social-emotional, creativity, independence, moral, and children's physical-motor skills (Ersan 2017). Ersan also stated that the empowerment of traditional games can be made by teachers and parents everywhere as long as its implementation prioritizes pleasure, does not force it and is in accordance with the level of development of children who use it (Ersan 2017). Ali Errah, *et. al* states that the traditional game can be changed by anyone who uses it according to the needs and conditions that accompany it because the game belongs to everyone (A. Erah, et.al. 2018)

Based on that observation, this article will describe the results of research aimed at studying and analyzing the implementation of traditional games in the ECE curriculum in Indonesia, especially the use of traditional games in stimulating child development. Given the large number of traditional games, this article will only discuss four traditional games, *Engklek*, marbles, cat and mouse and *congklak*.

Method

This study applies a descriptive qualitative paradigm with survey methods. Using interview and observation techniques. Interviews were conducted with 100 kindergarten teachers randomly selected. This interview intends to get information about a) traditional types of games from the West Nusa Tenggara region known by the teacher; b) what kind of games that appropriate for early childhood; c) how to play each traditional game; d) how to apply to stimulate aspects of early childhood development.

The observation technique was carried out on 10 kindergarten teachers randomly selected from 100 people interviewed. Observations are made when the teacher applies the selected traditional game to their students in their class. Observations were made to obtain data about a) how to implement traditional games in learning in kindergarten; b) what aspects of development are

stimulated through each of the traditional games; c) teacher and students' comments related to the application of traditional games in learning in kindergarten or early childhood education. The results obtained were then analyzed descriptively. The study was conducted in July - October 2018.

Result and Disscusion

The results of interviews with 100 kindergarten teachers in West Nusa Tenggara (NTB), showed that many kindergarten teachers do not know the names of traditional games in West Nusa Tenggara. But when one teacher tells how to play from a game, another teacher said that she knows the game. This shows that the teacher does not know the name of the game, but actually they know the game. After further reviewed, apparently as many as 62 kindergarten teachers who were the subject of this study came from outside NTB. As many as 38 people came from NTB, and even then came from different regions, Sumbawa (five people), Bima (seven people), Sasak (16 people) and Lombok (10 people). It is reasonable if the research subjects do not know the name of the game, because West Nusa Tenggara has at least 11 languages that the people use, i.e. Bajo, Balinese, Malay, Sasak, Mbajo, Sumbawa (Samawa), Mandarin Ampenan, Madura, Makasar, Javanese, **Bugis** (Indonesian language and maps: http://118.98.223.79/petabahasa/pulau.php?idp=6). Here is the data from the results of data collection.

Table 4.2 Types of games still known by kindergarten teachers in West Nusa Tenggara

No	Traditional games	N	Cara memainkan
1.	Mpa'agopa, Sonda, Engklek	33	Prepare the picture, children take turns playing by throwing a
			katuk and jump on one leg / two feet. Various box pattern.
2.	Marbles	21	Run with marbles with a spoon.
			 Put marble in a hole, then look for the marble's target to
			touch. If the player hit a marble's target with marble, and
			then all the marbles belongs to that player.
3.	Ngao Lobo Karawo,	16	This game is done by imitating the behavior of cats and mice
	Ngaokarawi		that are always hunting each other
4.	Congklak, Mpa'akajuji	14	This game is done by piercing the ground and using small
			stones (gravel) which are mapped from one hole to the next.
			The total number of holes is 16 with 98 stones or shells.
5.	Rope/ruber/ Mpa afenti	10	 Two people hold a string or a strung rubber band while the
			other child jumps.
			• Rope or rubber is rotated by 2 people, others will jump in to
			the rotated rope. The kid who fail to jump over the held

No	Traditional games	N	Cara memainkan
			rope or the rotated rope will get a turn to become a guard or
			rope holder.
6.	Tapak galah, Lile,	8	The game is made by two groups. One group as a guard and the
			other as an attacker. The game is played in a large outdoor area.
			The play area is drawn on the ground or floor with chalk or
			charcoal. The picture is rectangular and each line is guarded by
7.	Kasti Ball	6	One person. This game is like softball but uses a termis ball or ball made of
7.	Kasu dan	O	This game is like softball but uses a tennis ball or ball made of paper that is rolled up and tied with rubber to form like a ball.
8.	Seek and hide	6	The child who is the guard counts one to ten. The other child is
0.	Seek and mac	U	hiding. Then the child guarding must look for his friends who
			are hiding. If the child who is hiding is found, he will be the
			guardian
9.	Mpa'acepehidi	5	Participants consisted of two groups, each group has a pillar or
	1 1	-	stone as a place of era or shelter (fortress). If the stone or pillar
			is captured by an opponent, then this kid is declared to be
			defeated and will be a prisoner of the opponent. Prisoner's
			group members will try to save the kid. At the end, if the stone
			or the fortress are successfully seized by the opponent, the
			opposing team is declared victorious. (Like playing the
			guardian of castle)
10.	Dragon Snake game	4	Children line up and go around to entering the tunnel guarded
			by two children holding hands facing each other. The last child
			who captured in the tunnel is then given the choice of to be a
			guard for group A or guard for group B.
11.	Cici La Riri, Puri-puri Kalo	4	This game is done by five-six children while singing. One child
			bent down and his back was used as a place to put the hands of
			the other children. The other children sit around a burnt child.
			When singing there is a small stone that is rotated in the hands
			of children. when the song stops, the stone is placed in one of the child's hands. Then the child who bends to bend and
			guesses the position of the stone while saying the child's name.
			If the guess is absent, then the child who is guessed, turns to a
			burnt child. If wrong, then he will bow again. Usually this
			game is done by girls.
12.	Game of war	4	Weapons are made from a banana midrib. There are criminals
			and heroes / cops.
13.	Rubber band throwing game	4	Plant a small stick or a spike in the ground. Children throw
	2.2		rubber bands one by one from a certain distance in turn. The
			child who succeeds inserting the rubber band into the stick or
			the spike is declared victorious, or be paid by the rubber band
			according to the agreement or initial agreement.
14.	Run in sack	3	The children race from the start line to the finish line using
			sacks from their legs to their waist. They run or jump on their
			tracks to the finish line. The child who arrives first will win.
15.	Snakes and Ladders	3	This game uses media in the form of paper, pawns and dice.
			The paper has boxes, picture with numbers from one to 100 and
			are equipped with pictures of stairs and snakes too. The game
			starts by throwing the dice. The number that appears on the
			dice indicates that the child must move the numbers according
			to the number in the box in order from number 1. If the player
			meets the stairs then the pawn can go up according to the stairs.
			If the player meets a snake (head), the pawn has to go down to

No	Traditional games	N	Cara memainkan
	_		the snake's tail. The player who reaches the box with the
			number 100 first will wins.
16.	Contest filling water into	2	This game is done individually. Children run from the starting
	bottles		line while carrying empty bottles toward the water container.
			There they filled the bottle to the brim and then returned to the
			starting line. The child who comes first with a bottle full of
			water is the winner.
17.	Playing telephone	2	This game is done using a used plastic cup which is connected
			with a rope at the bottom, then the children use it as a telephone
			and carry on a conversation. The sound will reach the listener if
			the rope position is tense.
18.	Mpa'agelo	2	This game is done using two pieces of woods and cut with a
			length of 50 cm and 10-15 cm with a diameter of about 1-2cm.
			Longer wood is used to hit small pieces of wood so they can
			slam. The farther the distance are, the better. If the wood that
			slams earlier can be captured by the opponent, the game has to
			change position of players.
19.	Playing piggyback	1	This game uses a banana midrib that is shaped to resemble a
			horse. The children put the artificial horse between the crotch
			like riding a horse.
20.	Mpa'akawongga	1	The "gasing" used in this game is a coconut or a small palm
			about the size of a hand that falls from a tree. Part of the
			coconut is stabbed with a stick and given a rope or rubber so it
			can be rotated. The longest it round, the more satisfied the
			player is.

The next research result is the name of the game which, according to the teacher, is still often played by people in the NTB Region and the reasons they chose the game are as follows.

Table 4.3 Games that are still often played by people in NTB and their reasons

No	Traditional Games	N	Reason
1.	Mpa'agopa, Sonda, Engklek	27	Easy to play
			 Practice counting
			 Does not require a large place
			• Parents are easy to supervise
			 Children are on location during the play (not going anywhere)
2.	Cat and Mouse	15	 Easy to play, happy
			Glad to play outdoor.
3.	Congklak, Mpa'akajuji	11	 Children are happy, this activity challenges children because it starts from finding stones as the medium, making a playground in the ground up to playing activities Children are not sweating and having fun while sitting still Can develop numeracy, fine motor skills and practice perseverance and patience as well as sportsmanship and honesty.

No	Traditional Games	N	Reason
4.	Marbles	11	This competitive game challenges children have fine motor skills and good strategy.
5.	Rope/ruber/ Mpa afenti	6	It is fun because children move swiftly and there are targets to be achieved. for example, how high a rope they can exceed.
6.	Rubber band throwing game	4	There is satisfaction and pride when successfully entering the rubber tossed into the target. Beside that the child who wins will bring a lot of rubber bands as his own.
7.	Seek and hide	4	Attract and challenge children to find strategies for hiding places that are hard to find or not easy to suspect guards
8.	Kasti ball	3	Channeling energy and needing strength, training cohesiveness, strength and physical endurance.
9.	Tapa Gala/Gobak Sodor	3	Group games that practice cohesiveness, strategy and ability in deceiving opponents and training, physical strength (running ability).
10.	Game of war	2	Interesting, especially for boys because it shows a heroic impression and strategy and it is describe real life (many children aspire to be police or army)
11.	Snakes and Ladders	2	Children are happy, do not need a broad playground, challenge children to win the game.
12.	Playing telephone	1	Interesting when making and curious about the success of the tools made. If successful, children will feel satisfied and practice it happily.

Implementation of traditional games in learning in kindergarten/ECE

In this article the implementation of the game will explain only the top five best known and quite often applied by the ECE teacher in her class.

The Mpa'agopa (Sasak Language) or Sonda / Engklek (Indonesian) game

The game is a game that is played by almost all children in Indonesia. This game has different names in each region, although the way they play has something in common. The shape of the play area can also be different, but still uses geometric shapes (picture 1). This game does not require complicated tools or requires a special time to make it. The tools used are only broken tiles (roofs) or pieces of wood and land or flat floor for drawing the game.

Players: This game can be done individually by at least two people who fight each other or a team (a team member of at least two people).

Hopw to play:

- a. The players decide (can be with rock paper scissors or Indonesian call it *hompimpa*) to determine the sequence of the game.
- b. The first player stands in the starting area then throws (small piece of broken roof). Throws must point to the boxes in order starting from the box from the very front (marked in the star picture on it).
- c. Player jumps to each box. If there is a one box, the player must jump on one foot (*engklek*) and land on two legs if they are in a lined box. When starting, the box which containing the small piece of broken roof must be skipped (must not be stepped on) and upon return, the player must take the small piece of broken roof with hands while still standing on one foot. Up to the initial position in the finish area. The player is declared a failure if stepping on the line or unable to jump with one leg.
- d. The winner is the player who can complete the round when the roaming passes through the mountains or at the top end of the playing area.

Stimulated Child Development Aspects

- a. Gross motoric or kinesthetic: Children are trained to jump, stand on one leg, balance, leg strength and hand strength.
- b. Fine motoric: throwing small piece of broken roof, grasping the small piece of broken roof, accuracy of eyes, holding a tool to draw the playing area.
- c. Cognitive: recognize geometric shapes, problem solving strategies, concentration
- d. Language: communication with friends, listening, reading images and writing.
- e. Social emotional: patience waiting for their turn, sportivity, perseverance, loyal, confident.
- f. Morality: Honesty, respect for friends, be proud of yourself, pray before and after playing.
- g. Creativity: find the best strategy to win, choose the best broken roof.

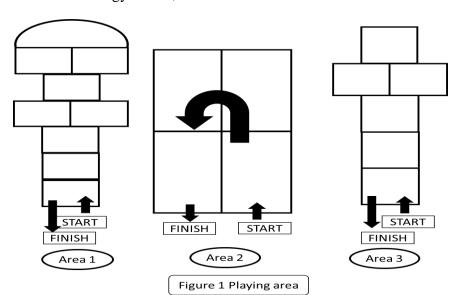


Figure. 1 Mpa'agopa, Sonda/Engklek

Marbles Game

Marble is a small pebble the size of gravel usually made of glass or marble. Marbles have a variety of types. Marbles have a variety of beautiful and unique color patterns. The shape of the marbles and how to play can be seen in Figure 2.



Figure. 2 Marbles game

How to play:

There are so many ways to play this game. The point is by flicking the marble with a finger and directed to a target in the form of a hole made in the ground with a depth of 3-5 cm and a diameter of 3-5 cm square or other marbles belonging to the opponent. Players who can hit the target will get the marbles at stake. Children who win are usually marked by the child who gets the most marbles to take home.

Stimulated child development aspects

- a. Gross motoric or kinesthetic: Children are trained to squat and stand alternately, strength of legs and thighs, balance and endurance.
- b. Fine motoric: train the fingers, coordinate between fingers, hold marbles, accuracy of the eyes, hold grains of marbles when counting them.
- c. Cognitive: recognize geometric shapes (circles), solve problems, concentrate when flicking marbles, and count and numerate, estimate distance and speed.
- d. Language: communication with friends, listening, getting to know new vocabulary.

- e. Social-emotional: patience waiting for their turn, sportivity, perseverance, proud of own performance, confident.
- f. Morality: honesty, praying, and appreciate friends.
- g. Creativity: find various strategies in play, adjust the game to the available area.

Mpa'akajuji Game (Sasak Language)

In Indonesian language, this game called Congklak with holes and grains (can be made from fruit seeds or small shells). This game's image is presented in Figure 3. In the 1970s the game was played on perforated soil. The holes in one row are peculiar, five or seven holes facing each other and 2 large holes on both sides. Every small hole in the player's side and a large hole on the right side is considered to belong to the player. The game uses seeds or small stones or conch shells.

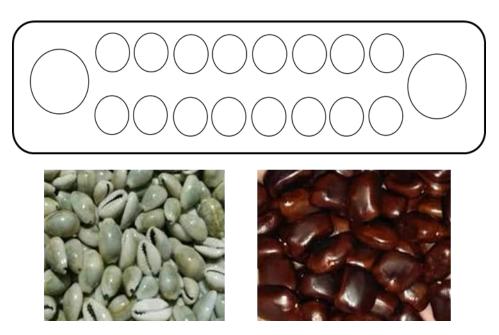


Figure. 3 Mpa'akajuji, Congklak

How to play:

Before the game started, each small hole is filled with seven seeds. Two players sit facing each other. One of the players who won during the draw with rock paper scissors can choose the position of the hole that that player will start with. If that player has chosen, the opponent will receive another hole as their own. Then they sat facing each other. The player who wins at the draw can start the path first by taking the seeds contained in one of the holes and then dropping the seeds

one by one on another hole through which the player passes. This player will fill the big hole as his own with one of the seeds. The player will take all the seeds in the hole where the last seeds he dropped and continue his way through the next holes while continuing to drop each seed. Players will stop running seeds if the last seed they have fallen on an empty hole and the opposing party will start walking the same way. The game is considered finished when no more seeds can be taken (all seeds are in the big hole of both players). The player who has the most seeds in the big hole he has is the winner.

Stimulated child development aspects

- a. Fine motoric: train the fingers when the child is grasping many seeds, then dropping them one by one into the hole. coordination between fingers, grasping congklak seeds, eye accuracy.
- b. Cognitive: recognize geometrical shapes (circles), solve problems, concentrate when dropping seeds one by one into a pit, and count and count, learn simple mathematical operations (plus and minus).
- c. Language: communication with friends, listening, getting to know new vocabulary related to the Congklak game.
- d. Social-emotional: patience waiting for their turn, sportivity, perseverance, trust in others.
- e. Morality: honesty, respect friends, pray.
- f. Creativity: find various strategies in playing, choose and look for seeds or gravel for game seeds.

Ngao Lobo Karawo (Cat and Mouse) Games

This game is a group game. This game is based on the philosophy that cats and mice can never be friends and cats always hunt mice in various ways. There are players who act as a cat and a mouse. While other children act as fences that will help keep mouse from the cat so the mouse not getting caught.

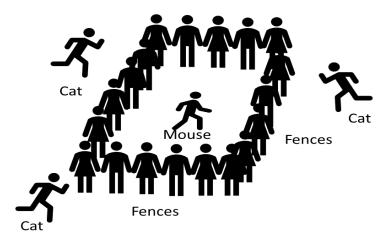


Figure. 4 Cat and Mouse Game

How to play:

Before the game starts, the teacher first determines the child who plays as a cat and who play as a mouse. The amount is free, according to the situation and conditions when the game is done children who act as a fences join hands in a circle. The fences will move from standing or squatting to prevent the cat from chasing the mouse, but letting the mouse escape the fences. Mouse that is caught will join the fence and join hands. And the mouse who, caught by the cat will become a cat. A cat that has not caught a mouse will remain a cat until the cat has caught a mouse. The game will continue as agreed and the cast of the mouse and the cat can be replaced by different children so that each child can get a turn. This game's picture is presented in Figure 4.

Stimulated child development aspects.

- a. Gross motoric and kinesthetic: ability to run, bend, crawl, walk, avoid, balance, endurance or stamina.
- b. Fine motoric: train the fingers, especially the ability to hold other people's hands, eye orientation, facial expressions.
- c. Cognitive: recognize the faces of others, solving problems, especially when you are a mouse or cat, concentrate on being a fence that has to bow or stand according to the situation, compile and implement strategies to avoid or catch, speed and accuracy in moving.
- d. Language: communication with friends, listening, getting to know new vocabulary, using various types of sentences (exciting sentences, commands, invitations and so on).
- e. Social-emotional: sportively, perseverance, proud of own performance, confident, and never give up.
- f. Morality: honesty, respect for friends, loyal friends, pray, play roles.
- **g.** Creativity: find a variety of strategies in play, creativity in choosing a strategy to avoid or capture opponents.

Conclusion

Traditional game in West Nusa Tenggara, actually the same or almost the same as the game found in other regions in Indonesia, only different from the name or tools and the materials. The way to play those games are almost the same. These traditional games can stimulate almost all aspects of child development, but it is still not optimal because many ECE teachers in NTB does not even know and have never applied the game despite knowing its benefits for stimulation of early childhood development.

References

- A. Erah, et.al. 2018. "The effects of Play-Based learning on Early Childhood Education and Development." *Journal Evolution Med. Dent. Science.Vol. 7 Issue 43* 6808-6811.
- BPS. 2018. Wilayah Indonesia. Laporan Tahunan, Jakarta: Badan Pusan Statistik, Indonesia (bps.go.id).
- Danandjaja, James. 1987. Foklor Indonesia. Jakarta: Pustaka Grafikpers.
- Ersan, Şule. 2017. "Arranging Play and Learning Environtment in Early Years Classroom." In *Educational Research and Practise*, by Irina Koleva and Gokan Duman, 54-64. Sofia: St. Kliment Ohridski University Press.
- H. Kartal & F. Guner. 2018. "A Review of Articles that Include the Schools' Readiness Dimension." *European Journal of Educational Research Volume 7, Issue 3* 431 443.
- Haring, Priscilla. 2014. *Play together, learn together. Game Based Learning in social context.* USA: https://www.researchgate.net/publication/301231002.
- J. Monsalve and J. Maya. 2012. "A Product Design Method Proposal for Babbies' Play and Learning." *International Design Conference Design 2012*. Dubrovnik Croatia: Industrial Design . 1351-1362.
- Kolb, Alice Y. Kolb and David A. 2010. "Learning to play, playing to learn: A case study of a ludic learning space." *Journal of Organizational Change Management Vol. 23 No. 1* 26-50.
- L. Kageorge, et.al. 2018. *Play, Dance, Learn*. Report Project, Philippines: "Public Space Public Life" Tool: Determining the Effectiveness of Quezon Memorial Circle as an Urban Public Space.
- M. Smyrnakis, H. Y. Qu & S. Veres. 2014. "A Verification Framework for Fictitious Play Based Learning Algorithms." USES Conf. Proc. 01. doi: 10.15445/01012014.25 15-16.

- Miller, Tess. 2018. "Developing numeracy skills using interactive technology in a play-based learning environment." *International Journal of STEM Education 5: 39 https://doi.org/10.1186/s40594-018-0135-2* 1-11.
- N Lindberg, et.al. 2017. "Detecting Play and Learning Styles for Adaptive Educational Games." *Journal of information and Computer Engineering* 1-9.

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