

The Effect Of Traditional Game On The Speed Of Reaction And Motivation For The Physical Fitness: The Case Of One Private Vocational School

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Abstract: This study aimed to determine the differences in the influence of traditional games, reaction speed, and exercise motivation on physical fitness. The method used in this study was experimental. The results indicated that the game of stone touch had an effect better than the game of battle and mass. Fighting games have a lower effect than massallo games. There are interactions between traditional games, reaction speed, and exercise motivation towards physical fitness. The traditional rock, face and mass touch games have a good effect on physical fitness in the high reaction speed group and the low reaction speed group. The traditional rock touch, face and mass game have a good effect on physical fitness in the reaction speed group with a high exercise motivation while the reaction speed group has a low motivation to exercise. Traditional rock touch, face and mass games have an adverse effect on physical fitness in the reaction speed group with a high exercise motivation and low reaction speed groups with a low exercise motivation

Index Terms: The National Police Commission, The Role and Effectiveness, Police Performance

1. INTRODUCTION

Schools as educational institutions that organize physical education programs have a fundamental function for the future of their students. According to Samsudin (2008) Physical education programs must be associated with improving students' health and physical fitness. Physical education programs are seen as a place to learn fair play and a spirit of good sportsmanship, also want to learn leisure time utilization activities, also want to play in a team. According to Rosdiani (2012), physical education held in schools basically has a purpose to improve the physical fitness of students' skills in sports, improve health levels. The burden of learning in school is so heavy that the child's need for movement cannot be fulfilled due to time and opportunity limitations. Traditional games are now almost no longer played by school students. Traditional games are expected to be used as learning media in schools, by doing so it means preserving the cultural values that are lost at this time in addition they indirectly train their physical growth and development and shape themselves to be healthy so that good physical fitness is achieved. Children love a variety of sports, children's desires to absorb knowledge and skills are part of the growth and development of children who are natural (Giriwijoyo & Sidik, 2012).

Traditional games touch rock, face and mass, in its implementation activates all members of the body, because it happens to chase each other with each other, there is an activity turning in a fast running situation to avoid touching the opponent. This game if carried out seriously will burden the physical and can form strength, endurance of the heart and breathing, running speed, agility, flexibility, speed of reaction and socializing with other friends, therefore researchers assume that the game is what will form fitness when played the culprit's body. Based on these assumptions, the researchers wanted to do research on the physical fitness of senior high school students in Jambi who performed traditional touches of rock, face and mass games. They were grouped on high and low reaction speeds and high and low exercise motivation. This study used traditional games as a form of

treatment, what is meant by traditional games is a game that contains elements of culture that cannot be underestimated, because traditional games have a major influence on the child's psychological development, character, and social life in the future.

2 LITERATURE REVIEW

Physical fitness is closely related to human activities in doing work, with good physical fitness influencing physical conditions, psychological aspects in the form of increased motivation to work, morale, confidence, fatigue and so on. Psychologically, physical conduction has a very large influence in the cultural environment, especially in socializing (Tangkudung & Puspitorini, 2012). Physical matter is the ability of a person's body to perform daily work tasks without causing significant fatigue. Components of physical fitness are closely related to the components of physical conditions that must be possessed by each person; this component is an integral whole that cannot be separated, both its improvement, and its maintenance. Components of physical fitness revealed by Kirkendall (1997) and friends include: muscle strength, muscle endurance, and endurance of the heart and breathing, muscle explosive power, agility, flexibility and balance. A person's physical fitness can only be known by doing a physical fitness test. The physical fitness test used in this study is TKJl for sons of the age group 13-15 years consisting of: (a) running 50 meters; (b) hanging lift body, 60 seconds; (c) lying down sitting, 60 seconds; (d) upright jumps; (e) run 1000 meters.

2.1. Traditional Game Touch Stone

Stone touch game is a traditional game played by children between 13-15 years old, both men and women, this game is used to fill leisure time and as a recreational activity. The touch stone game is also called pris-prisan game (Husna, 2009) this game aims to develop dexterity, leadership, cooperation, strategy, insight, and honesty. The equipment needed in this game is a medium sized stone fruit around 10 x 10 Centimeter, which is placed in a spaced distance of about 10-15 meters (adjusted to the playing area), the number of players in a squad is between 4 - 7 people (the more the better), It is said to be a rock touch game because, the stone

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placed in a certain place is always guarded by team members so that the opponent's feet are not touched, because if touched.

2.3. Traditional Block Game

Fighting games or Galasin / Gobak Sodor is one of the traditional games that are suitable to be played by children aged 13-15 years both male and female. This game is carried out to fill free time. The values contained in it are elements of dexterity, leadership, cooperation, strategy, insight, and honesty. The point of the game is to block the opponent from being able to escape through the line to the line starting from the back to the front and back again to get points. This game in its implementation if we observe requires running speed, reaction speed, agility, flexibility and strategy. This game is played by two teams, namely the guard team and playing team. The number of players in each team is at least four people, in this case we only form teams with the same number of players. The shape of the field can also be adjusted to the number of players in one team. What if the players in a team of four people have four plots, each 4 x 3 meter plot, if the number of players is one team of five people, then the pertinent line is added one so that it becomes six plots of the same size so on.

2.2. Traditional Massalo Game

Massalo is a name in the Bugis area in general, in the Makassar area called Assalo, but there are also those that call it Foreign (Aminah & Rukmini, 1984). At first it was played at night when the full moon after the harvest was over, the game was intended to create a happy atmosphere for the harvest obtained. Based on its development the game was carried out at any time i.e. the afternoon or morning as spare time filler. This game is suitable for teenagers; this game contains elements of education and sports, namely training skills, agility and physical endurance and discipline, training children to compete in a healthy manner. In the implementation of traditional games, reaction speed is needed, which is meant by reaction speed (reaction speed) is the time needed to provide a kinesthetic response after receiving a stimulus or stimulus (Wahjoedi, 2001). Meanwhile, according to Bustamam (2003) that the reaction speed is the related to the speed of time used between the start of stimulation or stimulation with the start of the reaction. From the description above, it can be stated that the speed of reaction is the individual's ability to carry out movements from the start of the stimulus to the end of the response in the shortest possible time. In addition to the speed of reaction motivation is also very much needed in traditional games. According to Jamaris (2010), motivation as a force that encourages and directs human behavior to achieve the goals to be achieved. When associated with sports, the motivation to exercise is the overall driving force in the individual that causes exercise activities, guarantees continuity of training and gives direction to training activities to achieve the desired achievement (Husdarta, 2010).

3 METHODS

This research was an experimental study, using a factorial 3x2x2 design. The variables of this study consist of variable bound, physical fitness, independent variables, traditional games, namely touching stone, face, and massalo games. Attribute variables namely reaction speed grouped on high

and low, exercise motivation grouped above high and low. Physical fitness data collection was carried out by physical fitness test using TKJl for the age group 13-15 years. For the reaction speed the reaction speed test was carried out, using the standard whole body reaction tester test for exercise motivation to do the exercise motivation test using a questionnaire. Data analysis used a two-way ANOVA with a significance level of $\alpha = 0.05$. Normality test is used liliefors test, homogeneity test is used barlet test, if there is an interaction followed by further testing using t-dunnet

4 RESULTS

The results of the t-dunnet advanced test analysis showed that 1). tcount 3.703> Ftable 1.671 means that the group of rock touch games has an effect better than the game against physical fitness. 2) The results of the t-dunnet advanced test analysis obtained tcount 2,893> Ftable 1,671 means that the game of rock touch has a better effect than the massallo game on physical fitness. 3) Results of analysis of further t-dunnet test obtained tcount 0.810 <Ftable 1.671, meaning that playing games have a lower effect than mass play on physical fitness. 4) Results of analysis of variance of interaction between traditional games, reaction speed and exercise motivation on physical fitness obtained interaction count (FABC) 5,741> Ftable 3,11, or H0 rejected H1 accepted, meaning that there is interaction of traditional games, reaction speed and exercise motivation towards fitness physical. 5) The results of the t-dunnet test group analysis (A1B1 - A2B1) value of tcount 2.618> t table 1.671. It means that the touch stone game is better than the battle game, the group (A1B1 - A3B1) value tcount 1.964> t table 1.671. This means that rock touch games are better than massallo games, groups (A2B1 - A3B1) value tcount 0.654 <ttable 1.671. It means that game play is lower than massallo's game, it can be concluded that there is a good influence on physical fitness from the application of the three traditional forms of play in the high reaction speed group. 6) The results of the t-dunnet test group analysis (A1B2 - A2B2) value of tcount 2.618> t table 1.671. Means rock touch games are better than face games, groups (A1B2 - A3B2) value tcount 2.127> t table 1.671. It means that rock touch games are better than massallo games, groups (A2B2 - A3B2) tcount 0.490 <t table 1.671It means that game playing is lower than mass game, it can be concluded that there is a good influence on physical fitness from the application of the three traditional forms of play in the low reaction speed group. 7) The results of the t-dunnet test group analysis (A1B1C1 - A2B1C1) value tcount 3,240> t table 1,721. This means that rock touch games are better than face games, groups (A1B1C1 - A3B1C1) t count 2,546> ttable 1,721. That means rock touch games are better than massallo games, groups (A2B1C1 - A3B1C1) tcount 0.694 <ttable 1,721. It means that game play is lower than mass game, it can be concluded that there is a good influence on physical fitness from the application of the three traditional forms of play in the high motivational high reaction group. 8) The results of the t-dunnet test group analysis (A1B1C2 - A2B1C2) tcount 0.462 <ttable 1.721. This means that the game touches the rock and faces, does not contribute well to physical fitness, the group (A1B1C2 - A3B1C2) has a tcount of 0.231 <ttable 1.721. It means that rock and mass touch games do not make a good contribution to physical fitness, the group (A2B1C2 - A3B1C2) has a tcount of 0.231 <ttable 1.721. It means that the game of face and mass does not contribute well to physical fitness, it can be concluded that

there is no good effect on physical fitness from the application of the three traditional forms of play in the group with high reaction speed and low exercise motivation. 9) The results of the analysis of the t-dunnet group test (A1B2C1 - A2B2C1) are $t_{count} 3,240 > t_{table} 1,721$. This means that rock touch games are better than face games, groups (A1B2C1 - A3B2C1) value $t_{count} 2,777 > t_{table} 1,721$. This means that rock touch games are better than massallo games, groups (A2B2C1 - A3B2C2) value of $t_{count} 0.462 < t_{table} 1,721$. It means that game play is lower than massallo's game, it can be concluded that there is a good influence on physical fitness from the application of the three traditional forms of play in the group with low reaction speed and high exercise motivation. 10) The results of the t-dunnet group test analysis (A1B2C2 - A2B2C2) value of $t_{count} 0.462 < t_{table} 1,721$. This means that rock touch games and face games do not have a good effect on physical fitness, the group (A1B2C2 - A3B2C2) has a t_{count} of 0.231 $< t_{table} 1,721$. It means that the rock and mass touch game does not have a good effect on physical fitness, the group (A2B2C2 - A3B2C2) has a t_{count} of -0.231 $< t_{table} 1,721$. It means that the game of face and mass does not have a good effect on physical fitness, it can be concluded that there is no good effect on physical fitness from the application of the three traditional forms of play in the low-reaction group with low motivation.

5 DISCUSSION

The Influence of Traditional Games Touch Stone is better than an infinite game against physical fitness because the implementation of traditional stone touches games gives the opportunity to run longer and farther than the game of fighting. This causes the game to touch stones to have a better effect than playing against the culprit's physical fitness. 2) The Influence of Traditional Games Touch Stone is Better Than Masso Games Against Physical Fitness because the implementation of traditional touch stone games when chased by an opponent cannot stop unless it returns to the stone, while playing massally after inside the field they have to wait until all group members enter trying to get out, the above certainly will result in differences in the physical load of the culprit, with this causing traditional touch stone games to have an effect better than mass play on the perpetrator's physical fitness. 3) Traditional Game Influence of No better Fighting than Massalo Games on Physical Fitness because the execution of traditional games provides a chance to stop between field plots so that the opportunity to run as fast as possible and longer is very small, while the mass game before the player enters the field opportunity to run fast around the field, when there are some of them entering the plot. The above causes differences in the physical load of the culprit, with these causing traditional games to play no effect better than mass games, on the physical fitness of the culprit. There is an Interaction between Traditional Games, Speed of Reaction and Motivation to Exercise on Physical Fitness because in the implementation of traditional games of rock touch, face and mass required running speed, endurance of the heart and lungs, muscle endurance, agility and high energy. The speed of the reaction is also very much needed in the implementation of the game above because the reaction speed that has caused the game to look better, Motivation also has a very important role in the game. Because it becomes a driver for chasing or avoiding the opponent's touch with this game becoming more alive, this will affect the physical loading of the culprit, thereby causing an interaction

between the traditional game, reaction speed and exercise motivation towards the culprit's physical fitness. 5) Differences in physical fitness between traditional games touch Batu, Hadang and Massalo in High Reaction Speed Groups because traditional touch rock games have a wider area, thus the culprit can freely practice physical abilities and reaction speed, the area of the game is narrower so that even though the culprit has a high reaction speed it will be difficult to apply in the game because the chances of running are very narrow. Massalo games have a wider area than playing games so the opportunity to practice the reaction speed of the culprit is very large, the above conditions cause differences in physical loading, resulting in differences in the physical fitness of the culprit. 6) The difference in physical fitness between traditional touch stone, face and mass games in the low reaction speed group occurs because the traditional practice of touching stones happens to chase each other while making a bend, if the culprit has a low reaction it will certainly be easy to catch, as well as playing games in the execution of the play team must move from one plot to another, if the perpetrator has a low reaction speed will certainly be easily caught. Similar to the mass game in the implementation the play team must try to get into the field by running around the field, if the playing team has a low reaction it will certainly be easy to get caught. The above situation will affect the physical burden of the culprit, thereby causing a difference in the perpetrator's physical fitness. 7) Differences in physical fitness between traditional touch, face and mass games in the group of high reaction speed and high motivation to exercise this occurs because traditional games touch rock, face and mass in its implementation requires running speed, strength of fiber endurance, agility if the culprit has high reaction speed of course the culprit will do well, plus if the culprit has a high motivation to exercise it will be more enthusiastic, serious in doing the game this will affect the physical imposition of the culprit, which causes differences in physical fitness of the perpetrators of the game. 8) Differences in physical fitness between traditional touch stone, face and mass games in the high reaction speed group and low exercise motivation occur because traditional games touch rock, face and mass in the implementation generally do running, needed agility, speed endurance etc., if the culprit has a high reaction speed will do these activities well, seriously but what if the culprit has a low motivation to exercise then they will be lazy to chase thus will affect the perpetrator's physical loading with this certainly will cause differences in the perpetrators of physical fitness. 9) Differences in physical fitness between traditional rock, face and mass touch games in the low reaction speed group and high exercise motivation, because the low reaction speed of a person will certainly be hard to follow in the form of a game that requires agility and speed as in touch rock games face and massalo. Even if you take part in the game, it certainly seems less enthusiastic, but if the players have high exercise motivation, they will certainly take the game seriously, excited. This of course will affect the physical imposition of the culprit causing a difference in the physical fitness of the culprit. 10) Differences in physical fitness between traditional rock, face and mass touch games in the low reaction speed group and low exercise motivation, because traditional games touch rock, face and mass in the implementation require agility, endurance, strength, speed to run when the culprit has reaction speed low, the culprit certainly has difficulty following the game as a result the game looks less good, plus if the

culprit has low exercise motivation, then the game falters, this will affect the culprit's physical loading, this will affect the difference in the perpetrator's physical fitness.

6 CONCLUSION

The conclusions of this study are: (1) Traditional game of touch stone has an effect better than a game against physical fitness. (2) Traditional game of touch stone has an effect better than mass game on physical fitness. (3) Traditional games have a lower effect than mass games on physical fitness. (4) Interaction between traditional games, reaction speed and exercise motivation towards physical fitness, (5) Traditional game of rock touch, face and mass affect both on physical fitness in the high reaction speed group. (6) The traditional game of rock touch, face and mass affect both fitness in the low reaction speed group. (7) Traditional rock touch, face and mass games have a good effect on physical fitness in the group with high reaction speed and high exercise motivation. (8) Traditional game of rock touch, face and mass has less effect on physical fitness group of high reaction speed and low exercise motivation. (9) Traditional game of rock touch, face and mass effect has a good effect on physical fitness in the group with low reaction speed and motivation to exercise high. (10) Traditional rock touch, face and mass games have an adverse effect on physical fitness in the group with low reaction speed and low exercise motivation.

REFERENCES

- [1] Aminah, H., & Rukmini, A.K. (1984). Permainan rakyat suku bugis makassar di Sulawesi Selatan. Ujung Pandan: Depdikbud Ditjen Kebudayaan.
- [2] Bustamam, A. (2003). Pembinaan kesegaran jasmani untuk lanjut usia, perkembangan olahraga terkini kajian para pakar. Jakarta: PT. Raja Grafindo Persada.
- [3] Giriwijoyo, S, H. Y. S., & Sidik, D. Z. (2012). Ilmu kesehatan olahraga. Bandung: P.T. Remaja Rosdakarya Offset.
- [4] Husdarta. H.J.S. (2010). Psikologi olahraga, Bandung: Alfabeta.
- [5] Jamaris, M. (2010). Orientasi baru dalam psikologi pendidikan. Jakarta: Yayasan Penamas Murni.
- [6] Rosdiani, D. (2012). Model pembelajaran langsung dalam pendidikan jasmani dan kesehatan. Bandung: ALPABETA.
- [7] Samsudin. (2008). Pembelajaran pendidikan jasmani olahraga dan kesehatan SMA/MA. Jakarta: PT. Fajar interpratama.
- [8] Tangkudung, J., & Wahyuningtiyas, P. (2012). Kepelatihan olahraga edisi II. Jakarta: Cerdas Jaya.
- [9] Wahjoedi. (2001). Landasan evaluasi pendidikan jasmani. Jakarta: PT. Raja Grafindo persada.