The Effect of Game Modification Training Methods Toward Football Performance Skills

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Abstract: This research aimed to see the effect of game modification training methods toward football performance skills. Game modification training methods can be given to the athletes in order to comprehend and describe every material training. By using the approach of game modification method, it can introduce different levels of tasks/exercises to be performed. This is because the modification method gave the game a different task on its level. In addition, used of game methods could push to determine the athlete’s level for his performance in running training process. This article provided the effect of football performance skills, the mean difference = 8.136 which means football game modification skills between after and before given game modification method. Statistical t-value = 11.415, With df = 43 and number sig. or p-value = 0.000 < 0.05 or H0 rejected. Thus, it was concluded that there were significant differences on football performance skills between before and after given game modification method.

I. INTRODUCTION

Every football team wants to give the best performance. The athletes must have the basic skills (technique) to get the good performance. Based technical skills plays a good ball to be born through the mastery of basic techniques mature, this was a form of the effect of the process of proper exercise, intensive and systematic. So, that when all components were already running well then the expected accomplishments will be achieved. Sport of football, a player must a physical readiness for the game of football including hard sports category in its implementation, (Erianti & Yuni Astuti, 2019).

Model development of today’s youth, which was designed to identify and nurture the perspective of the football players, have been criticized for their inefficiency in its entirety in physical exercise (Barreiros, Côté, & Fonseca, 2014). In some theoretical and empirical papers, early involvement activities that are not known and the type of game have been proposed to facilitate the development of psychological skills, including motivation of athletes in training (Hendry, Williams, & Hodges, 2018).

Engineering or technical skills in sports is a major component in the development of athletes in many sports, including football. Various tests have been developed to evaluate the control of the ball with the body (trapping), the head (heading) and leg (dribbling), passing (short and long), among others, the accuracy of shooting, throwing and kicking for distance, agility and kick (Caicedoet al., 1993; Van Rossum & Wijbenga, 1993; Soares et al., 1994; Ro Schet al., 2000; & Kirkendallet al., 1987).

Fitts and Posner (1967), suggest that the speed and precision of motor skills may affect the quality of the overall performance. In individuals with less experience in technical skills aspect of performance was done by increasing the phenomenon known as' speed-accuracy trade-off '. Eberle, (1972) says that every age level of students emphasize the explanation, demonstration, and practice basic skills and techniques of the football. The acquisition of movement skills are very important in the context of sports and ergonomics. Typically, become skills takes years of practice goal-directed (Éricsson et al. 1993, Éricsson and Charness 1994).

Game modification is a multidimensional concept with many overlap definitions, which all have the same idea of a fun activity and is done for its own sake (Burghardt, 2011). Point concept in this research was the concept of game modifying in physical activity, which can be defined as follows: game modification of physical activity, in particular, may involve symbolic activities or game to the rule; activities may be social or solitary, but the behavioral traits that distinguish enjoyable context is accompanied by physical activity such as metabolic activity well above the level of metabolism at rest.

This integrative concept is useful when discussing health function and development of all physical activity that tend to thrive in a pleasant outdoor setting. The difference between the modification game with high intensity in enabling imaginative content, either verbally or physically (Bishop & Curtis, 2001). Skills acquired during modification athletes can play in transfer for other activities, so that the benefits to physical, social, and cognitive (Staiano & Calvert, 2011).

So in this study we provided a form of exercise that uses a modification method of game, in the design of training activities such as passing, shooting, dribbling, and control. Based on these activities we hypothesized that a game modification method will provide a positive impact on athletes football skill.
II. METHODS

This study design was experimental (Pre Exsprimen) one group pretest and posttest. The study was conducted football athletes aged 16-17 years, about 44 people in SSB Taram FC, Lima Puluh Kota district. Instruments in this study were; using football skills test (passing, shooting, dribbling, and control). The procedures in this study were:

1) Interventional procedures

One group consists of 44 athletes. The procedure took place in the SSB Taram FC, Lima Puluh Kota district Field. It was done 2 hours in a week for 8 weeks.

2) Reliability observers

All athletes were evaluated individually by two assessors (football coach). The assessors were not involved in any way in the testing of experimental conditions. Each athlete was identified by number only. Each observer noted the time and rated the athletes skills on the score sheet standards that reflect elements of each technique measured. The assessors were trained by using StockWatch as an example to ensure the reliability of assessors and the scoring sheets in trial for each athlete. Reliability in observation result inspected after the first day and the next day for 44 athletes.

Statistical analysis of the data was made by using SPSS version 24. Significance was determined at the 0.05 level. Before the data analyzed test data variance, the Kolmogorov-Smirnov test (KS test) the test for normality of the variables and the covariance matrix was used equivalence test. There were non-significant values (p <0.05), indicating that the data did not differ significantly from multivariate normality of variables, so that parametric tests can be applied.

III. RESULT

The primary effect in this study was the difference of playing on football skills before being given a modification method of the game and after being given method playing. Based on the method given before the results can be reported as follow:

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov (a)</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>statistics</td>
<td>df</td>
</tr>
<tr>
<td>Before</td>
<td>.127</td>
</tr>
<tr>
<td>After</td>
<td>.090</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.

From the above output, obtained by: statistics value before being given a game modification method for Kolmogorov-Smirnov about 0.127 and sig or p-value = 0.948 > 0.05, meant that H0 was accepted or not significant. Thus, the data is normally distributed football game skills. Statistics value after being given a modification method for the Kolmogorov-Smirnov in the playing about 0.090 and sig or p-value = 0.200 > 0.05. H0 is accepted or not significant. Thus, the data was normally distributed on football game skills. For more details can be seen in the Quantile and Quantil (QQ) normal diagram plots.

![Normal Q-Q Plot of Sebelum](image1)

![Normal Q-Q Plot of Setelah](image2)

Picture 1. Normal diagrams and Quantile quantile (QQ) plots Before and After
In addition, to the normal QQ plot, normality test can also be learned from Detrended Normal QQ plot. The indicator was expressed in normal distribution of data if the distribution of the data in the form of dots did not form a specific pattern and gathered around a horizontal line through the zero point.

Table 2. Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. deviation</th>
<th>Std. error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>pair 1</td>
<td>Before</td>
<td>41.86</td>
<td>44</td>
<td>5901</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>50.00</td>
<td>44</td>
<td>5969</td>
</tr>
</tbody>
</table>

In the table looks Paired Sample Statistics Average game Modification football Skills being given the student's chest game modification method of 41.86 and standard deviation 5.901 and after being given a game modification method of 50.00 and standard deviation 5.969. This means there was a difference in descriptive average game modification Football Skills chest before and after given a game modification method.

Table 3. Paired Samples Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pair 1</td>
<td>44</td>
<td>.683</td>
<td>.000</td>
</tr>
</tbody>
</table>

On the table Paired Samples Correlations above, coelcien obtained Football Skills chest correlation score between before and after administration game modification method at 0.683 with numbers sig. or p-value = 0.000 <0.683 or significant.

Table 4. Paired Samples Test

<table>
<thead>
<tr>
<th></th>
<th>paired Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>pair 1</td>
<td>Before–After</td>
</tr>
</tbody>
</table>

On the table Paired Samples Test above, it was obtained by the mean difference = 8.136 which means the difference score Modification Skills Football game between after and before the game by the modification method. Positive significantly value after being given a modification method of the game with a score Football Skills game higher than before the modification method given game. Next on the table is also obtained std.error mean that the standard error figures show an difference average . Furthermore, the most important outcome of this was the price statistics tabel t =11.415. With db = 43 and number sig. or p-value = 0.000 <0.05 or H0 rejected. Thus, it was concluded that there were differences significant football game skills between before and after giving game modification method.

IV. DISCUSSION

In this research, related to the football skills, it was offered the modification game method in preparing the scheme would play skills training program football. Game modification method used in football game or skills can give good results categorized. This was the fact from the difference of the average results of students who owned an athlete before and after was given the game modification method.

(Burdette and Whitaker, 2005), Explains that This is caused all modifications game with others requires the completion of some form of social issues, such as deciding what to play, who can modify the game, when to start, when to stop, and the rules of the game. To overcome this dilemma and conflicts that arise in the game encourages athletes to promise and cooperate. This process can foster a variety of social and emotional abilities such as empathy, flexibility, self-awareness and self-regulation. Capabilities like that, sometimes referred to collectively as "emotional intelligence," is very important for successful social interaction in adult life.

Game modification method seems to have a strong influence of the reactor athlete skills development, which, by using a modification method of game athlete can perform physical activity to a higher level. To maximize physical activity in athletes, field modifications to the game should be designed with a modification equipment broad and diverse game(Farley, Meriwether, Baker, Rice, & Webber, 2008), Access to appropriate facilities for physical activity and active play physically has been identified as a major determinant of participation for the physical development of athletes(Ellaway, Kirk, Macintyre, and Mutrie, 2007),

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To solve these problems by applying interesting methods exercise for athletes that use a game modification method, can provide a solution to the problems in the process of skills athletes in the football. Game modification method was given can have an impact on quality improvement skills possessed on athlete football game.

V. CONCLUSION

Game modification method addressing a significant influence on the football skills. This can be seen when the mean difference before and after the given method of game modifications. Furthermore the value of statistic \( t = 11.415 \), With \( df = 43 \) and number sig. or \( p \)-value \( = 0.000 \) < 0.05 or \( H_0 \) is rejected, an outcome that. Thus, it was concluded that the game modification method give positive impacts on the football athletes game skills. This means that with a good training program of the skills of playing on football athlete can increase. So, we suggest that humans may have developed a special sensitivity towards certain types of social information, as long as the method of incorrect or direct modification of the game can facilitate social cognition athletes. Cognitive benefits of physical play was described as giving a break from the demands of intellectual tasks, thus indirectly using the game modifications method, the football skills will increase (Bjorklund & Brown, 1998).

REFERENCES