Identification of Art Activity Futsal Run at Professional Futsal League in Indonesia

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Abstract: The purpose of this study was to identify how far the running, jogging and road activities in each game. Calculates the average of all activities done by all athletes UPI Antam Bandung who competed against Cosmir UNJ Jakarta in one game. And aims to know the distance from each activity so that can be used as a basis by the coach in preparing the exercise program. The method in this research is quantitative with descriptive approach by analyzing the activities of futsal athletes run in the match video UPI Antam Bandung against Cosmir UNJ Jakarta at Bung Tomo Stadium Surabaya. The results showed that the total distance of activity run 11112.77 meters in one game. This resulted in an average total of athletes performing 1234.75 meter running activities in one game.

1 INTRODUCTION

The futsal sports bureau is often dominated by men, but futsal has also been favored by women. This is proven by the highest caste rolling futsal league in Indonesia called Liga Futsal Professional Indonesia which consists of female futsal athletes Establishment of the league is no other than improving the quality of Indonesian women futsal athletes in facing of tournaments among countries. But the achievements currently obtained by Indonesian national futsal team is still not pleasing, this is driven by several factors such as lack of match schedule, futsal female research, and others. In today's modern world many modern applications or tools support the advancement of world sport in all sports. To find out how far a football player running in a 2x45 minute time range, soccer sports experts usually use statistics to find out their running events. The high intensity of running is not favored by opponents in the application of play strategy and irregular reflection of the ball inhibits teamwork because the ball is difficult to control and easily taken by the opponent. (Rosario et. al, 2015)

Running activity is a component in playing futsal that can play an important role in achieving an achievement. (Makaje, Ruangthai, Arkarapanthu and Yoopat, 2012). Running activities are often underestimated by some coaches because some coaches assume that teamwork will make a team win in a match. The coach always gives feedback in a match to the athlete (Sarmento, 2015). But if the coach is able to know the running activity of every athlete in a game then, the coach will take the decision by rotating the players to change the game strategy (Watsford, 2014). In addition trainers can create standardized training programs for each athlete in order to improve performance in the next game. Given the data about running activities in this study, it is expected to trainers, players and readers, so that they can understand how important running activities are in futsal game. It is also hoped that this research can be useful for futsal sport in Indonesia especially for UPI Antam Bandung to achieve more in the future.

Futsal Liga Professional Indonesia followed by 16 male teams and 8 female teams, 8 female teams that follow LFPI (Professional Futsal League of Indonesia), among others: UNJ Cosmir Jakarta, UPI Antam Bandung, Netic Cibinong and 5 other teams. UPI Antam Bandung is a famous futsal club in Indonesia which is domiciled in Bandung West Java. UPI Antam Bandung was established in 2006 after being declared as a Student Activity Unit (UKM) with members of UPI Bandung, so the cohesiveness in the team is highly trained due to professional coaching and coupled with some members of the team who have become members of the national team of Indonesia Fitri Rosdiana, Tia Darti, Deliana Fatmawati and Novita Murni.

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2 METHODS

2.1 Type of Research

The type of research applied in this study is a quantitative research. Quantitative research has a deductive research process in which to answer the formulation of the problem used the concept or theory so it can formulate hypotheses and then the data collected can be analyzed quantitatively by using statistics. This research is a non-experimental research through descriptive quantitative approach. Some theories say that quantitative research is a study that uses numbers as a measurement scale (Severini, 2015: 8). This type of descriptive research uses descriptive problem formulation as well, which means that the question is directed towards the existence of independent variables, either only on one or more variables (stand-alone variables). Quantitative research uses descriptive statistical data analysis. This research is done through a detailed observation in order to get maximum results. Conducting observations are done in a way, every single athlete examined by one researcher, if in one game there are 11 athletes who play then there are 11 different researchers. This study uses a duration of 2 x 20 minutes, with a note when the time stops (ball out, timeout, foul) then not done research, and I am already running then research done again.

2.2 Research Instrument

The research instrument is a tool used to measure natural or social phenomena being observed. The instrument of this research is Smartphone used to record the events during the futsal match of UPI Antam Bandung.

2.3 Data Collection Technique

Data collection techniques used in this research is the technique of observation and documentation. The observation technique is one of the researcher's interaction efforts with the subject in the field by making the note become the focus of observation of the researcher (Wilkinson & Birmingham, 2003: 115). In this study, researchers conducted a recording of the match between futsal daughter of UPI Antam team against UNJ Cosmir Jakarta at Bung Tomo Sports Arena Surabaya East Java.

3 RESULTS

Based on the data of research that includes the activity of the road, jogging activity and running activity at the futsal athlete of UPI Antam Bandung in Indonesian professional league in 2016. In futsal sport game, running activity is an important component that must be considered either by the coach or by the player own. Running activities can play an important role in the team's winning outcome, this is because in sports games futsal is a sport that has a high tempo game, thus putting pressure on technical skills and abilities in highpressure situations. Related to the objectives of the research that has been presented in the chapter one, the results of research on road activity, jogging activity and running activities can be measured through video identification, that is:

3.1 Running Activity

Futsal movement is an activity that is always used and reliable both in the process of attacking and defending, both in dribbling or movement without the ball. Running with maximum effort is the effort that is done maximally with the position of the foot floating in the air. (John Lythe, 2008: 20).

Table 1: Results of observation of running, jogging and Futsal athletes at UPI Antam Bandung.

Stage	Walking (m)	Jogging (m)	Running (m)	Total (m)
Stage 1	1404,38	2109,84	1790,54	5304,76
Stage 2 2	1294,62	2500,97	2012,42	5808,01
Total (m)	2699	4610,81	3802,96	11112,77



Figure 1: Percentage of running activity, jogging and futsal team of UPI Antam Bandung round 1.



Figure 2: Percentage of running activity, jogging and timing of futsal team of UPI Antam Bandung daughter in round 2.

Based on the results of the research in table 1 and images 1 and 2 explained that the total keseluruan activities athletes futsal athletes UPI Antam Bandung is 3802.96 m with an average of 422.55 m. Then the total running activity in the first half as far as 1790.54 m with an average of 198.95 m, while in the second half performing activities run as far as 2012.42 m with an average of 223.60 m, for a detailed calculation can be seen in the appendix 7. Running activities of futsal athletes UPI Antam Bandung has a percentage in the first half of 26% while in the second half of running activity increased by 38% with total overall percentage of 32%. The data obtained show that, the percentage of 42% overall total run. This shows that the difference in activity difference is very significant ie 32% UPI Antam Bandung. While 42.1% of professional futsal athletes in Spain (Castagna, Carlo, Dottavio, Stefano, Granda, Juan & Alvarez, Balbero, 2008).

Running activities performed by futsal athletes daughter of UPI Antam Bandung when competing against Cosmir UNJ Jakarta, from all athletes in doing the longest running distance 2800 cm or 28m. Then for the activity that often run from all athletes UPI Antam Bandung that is as far as 1884 cm or 18,84 m. From the data above description can be concluded that the data can be used as a reference to the coach of UPI Antam Bandung, that in training to increase the distance of athletes run for more than 28m. So if in the process of exercising in running activity exceeds than 28 m, it is expected that the quality of running athletes in a game can run for more than m. In futsal sport game, there are three names of players positions often mentioned in futsal game: Pivot, Ancor and Flank. Of the three positions in this study, for the position of Pivot perform the

most fleeing activity with a distance of 21 m in a single run. For the position of Ancor jogging activities as far as 26.6 m in one jog, and in the position of Flank as far as 28 m. From the data it can be concluded that the activity run with the farthest distance in a single run that is in the position Flank.

3.2 Jogging Activity

Associated with sport futsal jogging activities is a necessity that is always done by futsal athletes, be it futsal son or futsal daughter. Even jogging activity is not only done in futsal sports only, but there are also on other sports namely: Football, Hockey, Floorball, and others. Jogging is a form of running exercise, but at a slower and more relaxed pace. Jogging is a slowly moving forward movement to move places (John Lythe, 2008: 20).

Based on the results of research conducted can be explained that the total jogging activities athletes futsal daughter UPI Antam Bandung is 4610.81 m, with an average 512.31 m. Then the total jogging activity in the first round as far as 2109.84 m with an average of 234.43 m, while in the second half jogging activities as far as 2500.97 m with an average of 277.89 m. The jogging activities of futsal athletes UPI Antam Bandung has a percentage in the first half of 41% while in the second half jogging activity experienced a determination that is 41% with total overall percentage of 41%. The data obtained when associated with previous research results conducted by Castagna. Carlo, Dottavio. Stefano, Granda. Juan and Alvarez. Balbero. (2008) shows that the total percentage of total jogging is 39.9%. This shows that the difference in activity difference jogging is relatively the same ie 41% UPI Antam Bandung and 39.9% professional futsal athletes in Spain.

2.3 Walking Activity

Road activity is a movement performed by humans in their daily life. But in the sports activities of the road is also needed, as in the sport futsal. Futsal sports cannot be separated from the road activities such as the example when the athlete to decrease the tempo, then the road activity that plays a role in these activities. The road is the movement of the two feet that touch the ground at the same time and do like swinging a bicycle (John Lythe, 2008: 20).

Result of research of running activity that has been done can be found that total of all activity of futsal atlet of UPI Antam Bandung is 2699 m with average 299,89 m. Then total road activity in the first half as far as 1404.38 m with an average of 156.04 m, while in the second phase of road activities as far as 1294.62 m with an average of 143.85 m, for detailed calculation can be seen in the attachment 7. The activities of futsal athletes UPI Antam Bandung has a percentage in the first half of 33% while in the second half of road activity has decreased 21% with total overall percentage of 27%. The data obtained when associated with the results of previous studies showed that the percentage of roads 9.0% (Castagna, Dottavio, Granda and Alvarez, 2008). This shows that the difference in the difference of road activity is very significant 27% UPI Antam Bandung, while 9.0% professional futsal athletes in Spain. Therefore comparison with far difference enough that is on the activity run and on the activity of the road, while the jogging activity has percentage which is relatively the same. If analyzed the differences can occur due to the factors, among others, the professional futsal athlete Spayol, the sample used is futsal athlete son while on samples UPI Antam Bandung samples used are female futsal athletes. So there are differences in the activities performed by each player that influences the research results. However, for the total running activity (road, jogging and running) have similarities, that is, both experienced an increase in the intensity of running activity from the first half to the second round.

2009 Jul; 12 (4):490-4. doi: 10.1016/j.jsams.2008.02.001. Epub 2008 Jun 12.

- Hugo, Sarmento. 2015. Quantifying theoffensive sequences that result in goals in elite futsal matches. DOI: 10.1080/02640414.2015.1066024.
- John Lythe. 2008. The physical demands of elite men's field hockey and the effects of differing substitution methods on the physical and technical outputs of strikers during match play.
- Makaje, Niromlee., Arkaranpanthu, Apasara., Ruangthai, Ratree., dan Yoopat, Pongjan., 2012. Physiological demands and activity profiles during futsal match play according to competitive level. J SPORTS MED PHYS FITNESS 2012; 52: 366-74.
- Rosario, S., Antonio, T., Carlo, M., Laura, C., Antonio, A. 2015. Match analysis heart-rate and CMJ of beach soccer players during amateur competition. *International Journal of Performance Analysis in Sport*, 15(1), 241-253.
- Severini, A, Thomas. 2015. Analytic Methods In Sport. USA. CRC Press.
- Watsford. Mark, Dogramaci. Sera & Murphy. Aron. 2014. Journal Changes in futsal activity profiles in a multiday tournament. J SPORTS MED PHYS FITNESS 2015; 55: 722-9.
- Wilkinson. David & Birmingham. Peter. 2003. Using Reseach Instruments. London. RoutledgeFalmer.

4 CONCLUSION

Based on the research that has been done through observation using video object by analyzing the activities of futsal athletes at UPI Antam Bandung league in 2016 Indonesian professional league, it can be collected that from three component of physical activity such as running activity, jogging activity and activity of road. Jogging activities are more dominant than those of running and walking activities. Based on the total overall physical activity, jogging and running activities increased in the second half, but on road activity actually decreased in the second half. While the total number of activities performed athletes UPI Antam Bandung when against Cosmir UNJ Jakarta reached 11112.77.

REFERENCES

Castagna. Carlo, Dottavio. Stefano, Granda. Juan & Alvarez. Balbero. 2008. Match Demands of Professional Futsal: A Case Study. J Sci Med Sport.