Humapities and Social Sciences

ISSN 2615-3076 Online) ISSN 2615-1715 (Print)

Understanding of Elementary School Teacher Education Students against the Rules of Basketball

Muhammad Noer Fadlan

Universitas Muslim Nusantara Al-Washliyah Medan, Indonesia muhammadnoerfadlan@umnaw.ac.id

Abstract

This research was conducted to equip each student participant in doing sports, especially in the field of basketball, at this level the research conducted by researchers can be understood together that each student in carrying out basketball sports activities is fairly good, and it can be said that all students who were sampled in this research has a good understanding. The research method carried out by the researcher uses a descriptive approach, where the researcher pours out all the results and a series of research in order to answer the phenomena that occur in the field, so that researchers are easy to categorize the results of the research.

Keywords

Basketball; games; elementary school



I. Introduction

Basketball is a sport for everyone. Although basketball is a youth sport with the highest number of male and female players, basketball is played by both men and women of all ages and body sizes, even those with disabilities, including those in wheelchairs. Although there are many benefits to being tall, there are also many opportunities for short, highly skilled players (Cavedon, et al., 2018). Basketball is a group ball sport consisting of two teams of five people each competing to score points by putting the ball into the opponent's basket. Basketball is very suitable to watch because it is usually played in a closed room and only requires a relatively small court (Chandra, 2018). In addition, basketball is easy to learn because of the large shape of the ball, so it does not make it difficult for players to bounce or throw the ball. In the game of basketball, all players must have good basic playing techniques.

The basic techniques of the game include passing, shooting and dribbling. A person's flexibility greatly supports a person's effectiveness in playing basketball, as an adjustment to himself to carry out all body activities by stretching the widest possible, especially the ligamentous muscles around the joints. (Kostiukevych, et al., 2018). In addition, good coordination is needed between the eyes to look at the target and the hands to throw the ball, so that the ball can enter the ring because the ring is quite high and has a small diameter. In addition to flexibility and coordination between the eyes and hands, the strength of the triceps muscles and arms are also very necessary in the game of basketball so that in entering the ball, players have the strength to throw the ball so that it can enter the ring correctly. (Słowiński, et al.,2019). In other words, flexibility, hand-eye coordination and arm muscle strength are very influential in making shots towards the ring so that shooting movements can be carried out as effectively as possible and produce points.

In the game of basketball in Indonesia, the jump shoot is a shot that is usually done by players in every match, because this shot has many advantages for players who are relatively less tall, besides this shot requires good flexibility in the arms, ankles and hands, and fingers (Goldberry, 2019). One shot that is often done by basketball players is a jump shot. Defines a jump shoot as a jump shot where it is required to lift the ball higher and shoot at the same time as the jump. The implementation of the jump shoot is to jump and then lift the ball simultaneously with the feet, back and shoulders up and at the peak of the jump the ball must be released through the arms, wrists and fingers. (Boddington, 2019). It is important for athletes to learn jump shoots, because if these shots are studied and mastered correctly, they can benefit the player in making jump shoots, because the essence of the jump shoot is that the higher the jump, the better, because the higher the jump, the easier it will be. to avoid block shoots, but in modern basketball, this philosophy also has many opponents, because the acceleration of the jump is more important than the maximum height of the jump (Penner, 2021). Likewise, in addition to requiring a good body and posture for basketball players, the most important thing is when basketball players understand the rules on the field.

From several matches, it can also be seen that in basketball matches often cause body contact to fight for the ball and score points, therefore it takes the role of a referee to lead the match in order to create a fair and competitive match. (Dombrowski, 2020). The referee in basketball consists of 3 referees in the field consisting of refree, umpire 1, and umpire 2 and each referee has their respective duties in the basketball court. In general, national and official basketball matches use 3 referees and for inter-school matches in general only use 2 referees, namely refree and umpire. (Elgammal, 2020). Mekanicourt is needed by basketball referees so that the movement or mobility of refree and umpire becomes regular and can see the occurrence of fouls or errors from the right angle as described above, the importance of physical fitness, this is the main capital for referees in leading the match so that basketball matches become exciting and competitive (Wen, et al., 2018). The authority of a referee includes, among others, the referee will have the authority to make decisions on a deviation of the rules committed by players either inside or outside the boundary line including the match table, bench and area near the back line, the referee blows his whistle when there is a violation of the rules, an period ends or the referee finds something he deems necessary to stop the match (Sailofsky, 2022). Therefore, how important it is for each student to understand the important role of the regulations that have been set by basketball bodies and associations in Indonesia as well as in international regulations, from the background of the problems described above, this study aims to provide an understanding of students in understand the existing basketball rules and see and measure the extent to which student participants can understand the process of existing match rules.

II. Research Method

This research is descriptive research (Escribano 2021). The population in this study were elementary school teacher education students, Faculty of Teacher Training and Education. The total number of students is 358 students, consisting of: Class A 59 students, Class B 60 students, Class C 60 students, Class D 59 students, Class E 59 students, Class F 61 students. This research takes a sample of 25% of the population or a total of 90 students from all elementary school teacher education students with proportional random sampling. This research was conducted from April to June 2022. Data were collected in January and May 2022. The instrument in this study used a questionnaire. The validity test of this instrument is internal validity in the form of questions using the Pearson Product Moment formula. Reliability test with Alpha Cronbach.

III. Result and Discussion

3.1 Research Result

The score in each question item is 1 (if correct) & 0 (if incorrect), & it has been explained that the number of items in each factor in this study is not the same, therefore in order to make it easier to describe the data, the data is converted to a score using a scale of 100 or percentage, which is using the way the total score obtained is divided by the number of questions and then multiplied by 100, as a result, a score range from 0 to 100 is produced. The norms for categorizing scores are presented in the following table.

 Table 1. Normative Calculations Categorization of the level of understanding of students in the Primary School Teacher Education Study Program

 Image: Calculation Study Program

Formula	Score Interval	Category
Mi + 1.5 SDi < X Mi + 3 SDi	76-100	Very good
Mi + X Mi + 1.5 SDi	52-74	Well
Mi – 1.5 SDi < X Mi	27-50	Pretty good
Mi - 3 SDi < X Mi - 1.5 SDi	0-26	Not good

Information:

X = total score of subjects, [sep]

Mi = Ideal mean = 1/2 (ideal maximum = ideal minimum)

SDi = ideal standard deviation/ideal standard deviation

= 1/6 (ideal maximum – ideal minimum)

The research data were analyzed with the help of computer software. Based on the results of the analysis, it can be presented the distribution of the level of understanding of the students of the Elementary School Teacher Education Study Program on the rules of the basketball game based on the following categories.

			Frequency		
No	Score Interval	Category	Ν	Presentation % True	
1	76-100	Very good	29	31.10	
2	52-73	Well	36	39.91	
3	27-49	Pretty good	21	25,40	
	Amou	nt	90	100%	

Table 2. Frequency Distribution of Elementary School Teacher Education Students' Level of Understanding of Basketball Rules

Based on the distribution of the data above, a histogram of the frequency distribution can be formed as follows: Then the frequency distribution according to scores & categorization in each factor can be seen in the following description.

3.2 Equipment and field (Rule 2)

In this study, equipment and field factors were translated into three valid question items. The results of scoring in the three questions are presented in the following table.

Table 3. Scores on the Level of Understanding of Elementary School Teacher Education	n
Study Program Students on Basketball Equipment Regulations	

No	Question Items		swer	Presentati on %
			Wrong	True
1	Basketball Court Size and Length and Width	38	53	42.1
2	Equipment Facilities, Arrow Field	79	12	87.8
3	The playing field must be flat, and have a hard and free surface	56	35	62.2

Based on these results, it can be presented the distribution of the level of understanding of students of the Elementary School Teacher Education Study Program on the rules of the basketball game on equipment and field factors as follows.

Table 4. Frequency Distribution The level of understanding of students in the Elementary

 School Teacher Education Study Program on the rules of the basketball game, equipment

 and field factors

No	Coore Internal	Catagory	Frequency		
10	Score Interval	Category	Ν	Presentation % True	
1	76-100	Very good	31	33.40	
2	52-73	Well	29	31,20	
3	27-49	Pretty good	25	28,70	
4	0-25	Not good	7	7.79	
	Amount			100%	

3.3 Team Factor (Rule 3)

In this study, the team factor was translated into three valid question items. The results of scoring in the three questions are presented in the following table.

Table 5. Scores the level of understanding of students in the Elementary School Teacher

 Education Study Program on the rules of the basketball game

No	Question Items		swer	Presentati on %
			Wrong	True
1	Each Team of 12 Players	57	35	62.3%
2	Players can change from time to time	56	36	61.2%
3	Team Members are eligible to play when authorized to enter and play	59	33	65.5%

These results can be presented in the distribution of the level of understanding of students of the Elementary School Teacher Education Study Program on the rules of the basketball game as follows.

No	Score Interval	Cotogomy	Frequency	
INU	Score milerval	Category -	N Presentation	Presentation % True
1	76-100	Very good	31	33.40
2	52-73	Well	29	31,20
3	27-49	Pretty good	25	28,70
4	0-25	Not good	7	7.79
	Amount			100%

Table 6. Frequency Distribution The level of understanding of students in the Elementary

 School Teacher Education Study Program on the rules of the basketball game

3.4 Game Factor (Rule 4)

The game factor is translated into 5 valid question items. The results of the scores on the five questions are presented in the following table.

Table 7. Scores The level of understanding of students in the Elementary School Teacher	
Education Study Program on the rules of the game of basketball game factors	

No	Question Items		swer	Presentati on %
		Right W		True
1	The competition is held in 4 periods	81	11	88.9
2	Total time 15 minutes	51	41	56.6
3	Break time or half a round of 20 minutes	56	36	61.2
4	Jump Ball is held in the first period	43	49	47.8
5	The team will lose if it does not show up within	67	26	73.3
	the specified time	07	20	73.5

Based on these results, it can be presented the distribution of the level of understanding of students of the Elementary School Teacher Education Study Program towards the rules of the game factor basketball game as follows.

Table 8. Frequency Distribution The level of understanding of students of the Elementary
School Teacher Education Study Program on the rules of the game of basketball game

No	Score Interval	C-4	Frequency		
INO		Category	Ν	Presentation % True	
1	76-100	Very good	40	44.34	
2	52-73	Well	32	35.45	
3	27-49	Pretty good	11	13.23	
4	0-25	Not good	9	10	
Amount			92	100%	

factors

3.5 Violation Factor (Rule 5)

In this study, the violation factor was translated into 5 valid question items. The results of the scores on the five questions are presented in the following table.

Table 9. Scores on the level of understanding of students in the Elementary SchoolTeacher Education Study Program on the rules of the basketball game are a factor of
violation.

No	Question Items	Answer		Presentati on %
110			Wrong	True
1	The player's body outside the field is not a foul	67	25	74.4
2	Players are allowed to dribble a second time after the first dribble ends	33	59	35.5
3	The dribbling movement made by the player is more than 1 step	54	38	61.8
4	Turning the body with one part of the foot into the axis of support	54	38	59.9
5	The players must not enter the opponent's territory for more than 3 seconds	31	60	34.5

Based on these results, it can be presented the distribution of the level of understanding of students of the Elementary School Teacher Education Study Program towards basketball game violations as follows.

Table 10. Frequency Distribution The level of understanding of students in the Elementary

 School Teacher Education Study Program on the rules of the basketball game on the violation factor.

No	Score Interval	Category	Frequency		
			Ν	Presentation % True	
1	76-100	Very good	40	44.34	
2	52-73	Well	32	35.45	
3	27-49	Pretty good	11	13.23	
4	0-25	Not good	9	10	
-	Amount			100%	

3.6 Error Factor (Rule 6)

In this study, the error factor was translated into 3 valid question items. The results of the scores on the three questions are presented in the following table.

Table 11. The Score of Students' Understanding Level of Elementary School TeacherEducation Study Program on the rules of the basketball game is an error factor.

No	Question Items	Answer		Presentati on %
110		Right	Wrong	True
1	Blocking the opponent by the players is a violation	51	41	56.7
2	Pushing the opponent is done by the players by pushing intentionally is a violation	43	49	46.8
3	Two fouls by the players	69	23	76.7

Based on these results, it can be presented the distribution of the level of understanding of students in the Elementary School Teacher Education Study Program for basketball game errors, the error factor is as follows.

No	Score Interval	Category	Frequency		
			Ν	Presentation % True	
1	76-100	Very good	40	44.34	
2	52-73	Well	32	35.45	
3	27-49	Pretty good	11	13.23	
4	0-25	Not good	9	10	
	Amount			100%	

From the results of the research conducted, there are very satisfying results that each question item and understanding of the students of the primary school teacher education study program is stated to be good and very satisfying. So, it can be concluded that the understanding of elementary school teacher education study program students about basketball is stated to be very good. Thus, students really have to understand about the rules of the basketball game. The three students learned independently about the rules of basketball and the student's enjoyment of basketball made the rules of basketball well understood. If you look closely, based on the results of the study, actually the potential of students in terms of refereeing skills needs to be considered because students do have the potential to further develop their refereeing abilities.

3.7 Discussion

a. Definition of Basketball

According to (Nuñez, 2018) basketball game was created by Prof. Dr. James A. Naismith, one of the physical education teachers of the Young Mens Christian Association (YMCA) Springfield, Massachusetts, United States in 1891. The idea that prompted the creation of this new sport was the fact that at that time the membership and attendance of the school was decreasing day by day. the main thing is the boredom of the members in participating in gymnastics exercises whose movements are stiff. In addition, the need felt in winter to keep doing interesting sports is even more pressing. Dr. Luther Gullick, superintendent of the head of the sports section at the school, noticed the unfavorable symptoms and immediately contacted Prof. Dr. James A. (Mikaelsson, 2020). In welcoming this task, Nasimith developed an idea that was in accordance with the needs of a closed room, namely a game that was not too hard, there were no elements of blocking, tackling and interesting and not difficult to learn. (Naismith, 2021). The first step, tested the composition of the game Football, Baseball, Lacrose and Soccer. But none of them matched his demands. Because besides being difficult to learn, the game is also too hard to play in a closed room with lights.

From the results of the experiments carried out, Naismith finally came to the conclusion that the new game must use a ball that is round, does not tackle, and must eliminate the goal as its target (Naismith, 2021). To tame the ball as a substitute for kicking, passing movements are carried out by hand and dribbling as a peak of excitement, the goal is replaced with another target that is narrow and located above the players, so that with such a target object the priority in shooting does not lie in strength as happened on kicking time, but on shooting accuracy (Badiru, 2018). Initially, Naismith would use a wooden box to target the shot, but due to the time the experiment was carried out there was only an empty peach basket, so the basket was eventually used as a target for the shot.

From these basketball words, then a new game that was found by Prof. Dr. James A. Naismith is called Basketball (Williams, 2018).

Getting to Know the Game of Basketball Basketball is played by two opposing teams. Each team playing on the field consists of 5 people, while the substitute players are a maximum of 7 people, so that each team consists of a maximum of 12 players. Basketball games are played on hard courts that are intentionally made for that purpose, both in open courts and in closed rooms (Kerr, 2021). In essence, each team has the opportunity to attack and enter as many balls as possible in their own basket to avoid conceding as much as possible. Broadly speaking, basketball games are carried out by using three technical elements that are the subject of the game, namely: passing and catching the ball (passing and catching), (dribbling), and (shooting). (Chen, 2018). The three elements of the technique have developed into dozens of advanced techniques that allow the game of Basketball to be lively and varied. For example, in the technique of passing and catching the ball, there are several ways, such as: chest pass, overhead pass, bounce pass, and so on.

In this series of techniques, also known as a pivot, when holding the ball, one-foot moves and the other foot stays on the floor as a support. The technique of dribbling is closely related to traveling, namely the movement of the foot that is considered wrong because it exceeds the specified step (Vazquez, 2018). Also, double dribble is a hand movement that is prohibited for dribbling with both hands or dribbling the ball for the second time after the ball is controlled with both hands. Shooting techniques are closely related to trickery, jumps, blocks and so on. There are so many game techniques that must be mastered by a basketball player, so it is difficult to detail them one by one in this paper. However, by mastering the three basic technical elements and some of their sequels, one can already play basketball, even though it is not perfect.

b. Terms of Play When Competing

As described above, the game of Basketball is played by two teams, each consisting of 5 players. The referee who leads consists of 2 people who always change positions. The official playing time is 2 x 20 minutes clean, excluding a 10-minute rest period, time out, twice for each team per half for 1 minute, when substitution of players and or the referee's whistle is sounded because the ball is out of the field or a violation occurs. errors such as foul and traveling (Corman, 2018). If in an official match (what is meant here is not a friendly match) there is a collection of the same points, the time is extended by several rounds (every 5 minutes) until there is a difference in points. Especially for the Mini Basketball game which is intended for children under the age of 13 years, a separate regulation that is slightly different is applied, including: the ball used is smaller and lighter, the installation of the basket is lower, the match time is 4 x 10 minutes with 3 times. rest and others as in the case of substitution (emgulys, 2020).

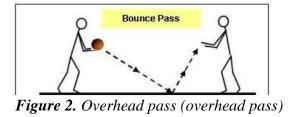
c. Basketball Basics

According to (zhong, 2018) Basic basketball techniques that must be mastered include passing, dribbling and shooting. The game of basketball has undergone many changes to what it is today. The characteristics of modern basketball are: Body Contact, Dynamic, Team Work. How to hold the ball: (1) The ball is at the tip of the upper palm of the hand, (2) the fingers are opened in a relaxed position, (3) the thumb is close to the body behind the ball in an inverted "V" shape. Passing Passing means passing, while catching means catching. Every beginner should learn how to pass and catch the ball with his friends. Passing and catching skills must be equally good, not only partially proficient. In passing there are several techniques, including:



Figure 1. Chest pass (chest-high pass)

This pass starts from holding the ball in front of the chest, then the ball is thrown straight with the palms outwards.



Passes are made with both hands-on tops. The receiver of the ball also catches with his hands up.

IV. Conclusion

Based on the results of the study, it can be concluded that the level of understanding of students of the Elementary School Teacher Education Study Program on the rules of the basketball game is good. Students' understanding of the rules of basketball matches, articles on matches, equipment and fields, teams, games, violations, errors, and general provisions are in the good category. Then the researcher also explained some of the movements that became the basis for the students to understand the movements that were often done when the match started, with the hope that the students understood and were able to practice directly about the existence of these movements.

References

- Boddington, BJ, Cripps, AJ, Scanlan, AT, & Spiteri, T. (2019). The validity and reliability of the basketball jump shooting accuracy test. Journal of sports sciences, 37(14), 1648-1654.
- Badiru, D. (2018). Physics of Soccer Ii: Science and Strategies for a Better Game. iUniverse.
- Cavedon, V., Zancanaro, C., & Milanese, C. (2018). Anthropometry, body composition, and performance in sport-specific field tests in female wheelchair basketball players.Frontiers in Physiology,9, 568.
- Candra, O. (2018, December). Contribution of Leg Muscle Explosive Power and Flexibility on Lay-Up Shoot in Basketball. in2nd Yogyakarta International Seminar on Health, Physical Education, and Sport Science (YISHPESS 2018)(Vol. 278, pp. 479-482).
- Chen, CY, Lai, W., Hsieh, HY, Zheng, WH, Wang, YS, & Chuang, JH (2018, October). Generating defensive plays in basketball games. inProceedings of the 26th ACM international conference on Multimedia(pp. 1580-1588).

- Corman, SR, Adame, BJ, Tsai, JY, Ruston, SW, Beaumont, JS, Kamrath, JK, ... & van Raalte, LJ (2019). Socioecological influences on consensus reporting by NCAA division 1 athletes in high-risk sports.PLoS One,14(5), e0215424.
- Dombrowski, DA (2020). 'Being fair to both sides': an addendum to JS Russell's and Mitchell Berman's philosophies of officiating. Journal of the Philosophy of Sport, 47(3), 451-461.
- Elgammal, M., Hassan, I., Eltanahi, N., & Ibrahim, H. (2020). The effects of repeated sprint training with blood flow restriction on strength, anaerobic and aerobic performance in basketball.Journal of Human Movement and Sports Sciences,8(6), 462-468.
- Escribano-Ott, I., Mielgo-Ayuso, J., & Calleja-González, J. (2021). A Glimpse of the Sports Nutrition Awareness in Spanish Basketball Players.Nutrients,14(1), 27.
- Goldsberry, K. (2019).Sprawlball: A visual tour of the new era of the NBA. Mariner Books.
- Kostiukevych, V., Imas, Y., Borysova, O., Dutchak, M., Shynkaruk, O., Kogut, I., ... & Stasiuk, I. (2018). Modeling of the athletic training process in team sports during an annual macrocycle.Journal of Physical Education and Sport,18, 327-334.
- Kerr, JH (2021). The multifaceted nature of participation motivation in elite Canadian women rugby union players.International Journal of Sport and Exercise Psychology,19(1), 74-89.
- Mikaelsson, K., Rutberg, S., Lindqvist, AK, & Michaelson, P. (2020). Physically inactive adolescents' experiences of engaging in physical activity. European Journal of Physiotherapy, 22(4), 191-196.
- Nuñez, PDP, & Lyras, A. (2018). Basketball, Innovation and Change Agency: Historical Overview and Current Landscape.Sport and Olympic-paralympic Studies Journal,3(1), 155-163.
- Naismith, J. (2021). The James Naismith Reader: Basketball in His Own Words. U of Nebraska Press.
- Penner, LS (2021). Mechanics of the Jump Shot: The "Dip" Increases the Accuracy of Elite Basketball Shooters.Frontiers in Psychology,12, 2303.
- Słowiński, P., Baldemir, H., Wood, G., Alizadehkhaiyat, O., Coyles, G., Vine, S., ... & Wilson, M. (2019). Gaze training supports self-organization of movement coordination in children with developmental coordination disorder.Scientific reports,9(1), 1-11.
- Sailofsky, D. (2022). Athlete-perpetrated violence against women and its effects on career outcomes.
- Vázquez-Guerrero, J., Ayala, F., Garcia, F., & Sampaio, J. (2020). The most demanding scenarios of play in basketball competition from elite Under-18 teams. Frontiers in psychology, 11, 552.
- Wen, N., Dalbo, VJ, Burgos, B., Pyne, DB, & Scanlan, AT (2018). Power testing in basketball: Current practice and future recommendations. The Journal of Strength & Conditioning Research, 32(9), 2677-2691.
- Williams, T. (2018).Do You Speak Football?: A Glossary of Football Words and Phrases from Around the World. Bloomsbury Publishing.
- emgulys, J., Raudonis, V., Maskeliūnas, R., & Damaševičius, R. (2020). Recognition of basketball referee signals from real-time videos. Journal of Ambient Intelligence and Humanized Computing, 11(3), 979-991.
- Zhong, X. (2018). A Study on Basketball Techniques and Tactics Based on Apriori Algorithm.Wireless Personal Communications,102(2), 1203-1212.