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Zone defense exercises to develop agility and balance and their impact on the offensive skills of wheelchair basketball players

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Abstract---The aims of the research Preparing the Zone defense exercises to develop fitness and balance and their impact on the offensive skills of basketball players on wheelchairs, and to learn about the impact of the Zone defense exercises to develop agility and balance and their impact on the offensive skills of basketball players on the wheelchairs, and the experimental curriculum adopted the design of the experimental and control groups, on a sample of players Maysan Governorate Committee on the (12) moving chairs, who are continuing their training for the season (2021-2022), were chosen intentionally from their asset in the comprehensive method by (100%), and then divided into the two groups with an equal number, and after specifying the appropriate tests for the privacy of this The sample, the region's defense exercises were tried for a period from 18/4/2022 to 15/6/2022, and then treatment by (SPSS), The Extracts and applications were that the Zone defense exercises are important and effective to develop agility, balance and offensive skills for basketball players on wheelchairs, and that agility and balance is a major requirement for the success of the attacking skill performance in basketball because they contain movements that require attention and rapid action, and it is necessary to adopt the Zone defense exercises in developing fitness. Balance and offensive skills of basketball wheelchair players .

Keywords---Zone defense exercises, Basketball attack skills, wheelchair players.

Introduction

Research problem:

The basketball game on animated chairs is one of the sports that has started to develop little by little and the results achieved in it depend on creativity in sports training and what the coaches and specialists offer from different and varied training, and for this when the training is specialized according to the performance of the game works to raise the right level in the performance of the players That is why to find specialized training means that provide time and effort in the player's physical and skillful progress, and the best way is to choose planning exercises because their performance is the result of integrating physical with the skill within one exercise, and thus may We can achieve the main aimed of the exercise, which is the player's development in an integrated manner with the minimum effort being with special needs. The defense of the region is also one of the types of defense in basketball, which is an advanced style of a man's defense plan for a man, and the Zone defense plan requires cooperation between the team members and each player has taken the limited area for him in defensive formation at the same time as soon as he lost the ball during the attack, as any one fails Some of them from his specified area leads to defensive disintegration because there is an area of the stadium free from the defense process, while the purpose of the defense method is the area: it is to prevent the attacking team from hitting the goal, because all the players from the defending team players take over the defensive area and protect it from The players of the attacked team trying to guard and follow it all the players from receiving the ball or aiming at the goal or participating in the implementation of an organized offensive plan, (12: 1), hence the importance of research in developing the basketball game on wheelchairs and delivering informative information to the coaches about the importance of planning exercises Especially the region's defense training during the special numbers period and its achievement of effort and time in developing players, including balance, fitness and other offensive skills among basketball players on wheelchairs, and fitness and balance are important physical requirements for basketball players (on wheelchairs) during successive attacks Defense performance is the starters and others, and this affects The level of performance in the event of a reduction in their level, and through the experience of the two modest researchers, being specialized in the field of basketball game on animated chairs, noticed the low level of offensive skill performance, which sees the lack of physical requirements, especially agility and balance, so the two researchers decided to experiment with the training performance training of the Zone defense, considering the planning exercise is the result On integrating several skills and physical movements similar to performance and the requirements of achieving the end of the attack by achieving the required points by upgrading offensive skills, balance of balance and grace required.

The research Aims:

1. Preparing a legs defense exercises for a leg to develop fitness and balance and their impact on the offensive skills of basketball players on moving chairs.

2. Learn about the impact of a legs defense exercises for a leg to develop fitness and balance and their impact on the offensive skills of basketball players on wheelchairs.
3. Learn about the differences between the results of the tribal and remote tests of the control and experimental groups to develop fitness and balance and their impact on the offensive skills of basketball players on wheelchairs.
4. Learn the differences in the results of the dimensional tests between the two controlled and experimental groups to develop fitness and balance and their impact on the offensive skills of basketball players on wheelchairs.

The research hypotheses:

1. The presence of differences between the results of the tribal and remote tests of the two controlled and experimental groups to develop fitness and balance and their impact on the offensive skills of basketball players on wheelchairs.
2. The presence of the differences in the results of the dimensional tests between the two controlled and experimental groups to develop fitness and balance and their impact on the offensive skills of basketball players on wheelchairs.

Study methodology:

The two researchers used the experimental curriculum, by designing the control and experimental groups with a tight control of the tribal and post tests, in order to solidify the solution to the research problem and achieve its goals.

Study Society and its sample:

The sample was chosen in the intentional way represented by the players of the Maysan Governorate Committee on animated chairs, which numbered (12) players who are continuing in their training for the season (2021-2022). The number of each group has become (6) players, and the homogeneity has been found to the research sample in the exotic variables of age, length, weight as well as the educational age, and the equivalent between the two groups in all the variables that are followed, all of the two groups of the two groups, and as shown in Table (1):

Table 1: Results of the study groups at the pretest verbal Study

The tests	control			Experimental			t	Ass
	mean	±SD	difference	mean	±SD	difference		
Age/ year	19.23	1.65	8.58	19.33	0.84	4.345	0.12	N.S
Weight /kg	80.6	2.65	3.287	80.8	2.41	2.982	0.124	N.S
Height/ cm	187.6	2.4	1.279	187.4	2.8	1.494	0.121	N.S

Fitness/second	5.23	0.236	4.512	5.423	0.356	6.564	1.01	N.S
Balance/degree	2.23	0.123	5.278	2.45	0.36	14.693	0.705	N.S
Riyadh handling /times	18.5	0.6	3.24	18.4	0.8	4.34	0.22	N.S
The handling of one hand/ times	16.5	0.3	1.8	16.4	0.67	4.08	0.3	N.S
Offensive follow-up on the painting/ times	17.6	0.4	2.27	17.5	0.3	1.7	0.45	N.S
Peaceful scoring after the performance of the chief/ times	8.6	0.2	2.32	8.5	0.3	3.52	0.26	N.S

n = (12), Significance Level= 0.05; t-test value is significant at P-value \leq 0.05

df. (N-2)

Measurement Tools and Test:

The codified test, which has honestly, stable, and objective, is relied upon and taken from previous sources (5: 54-55).

1. Test of the slows between the barriers and the correction of the stadium.

The purpose of the test: measuring the speed of the chickpea and the performance.

Tools: Challenge (5,) whistle, timing watch 2, basketball, basketball stadium, Measurement bar, registration form.

Performance description: The laboratory stands on the midfield line in the basketball field and towards the goal and 5 people are distributed on it, the first person is away from the middle line (1) m and the distance between the faces (5,1) m when the instrument is starting. The fifth is heading towards the target to aim towards the goal.

Measurement: Calculating the performance time, as the time of the time is stopped at the moment of the ball out of the player's hand to aim to the oppression of the place of the ball, and the time of implementing the correction skill is calculated from the moment of the start and the hour stops at the time of the end of the goal .

Number of attempts: Three attempts are calculated for the best attempt and when the laboratory player does not take control of the ball, it is a failed attempt. As for the goal calculates the time of successful the goal for basketball .

2. Balance test: sitting on the chair and raising the arms aside (7: 131). The purpose of the test: control, side control, balance, kinetic control. Performance:

The laboratory is required to sit on the wheelchair and raise the arms aside and at the time of the capacity of (30 s) and the evaluation is from (1-4).

3. The handling test is one hand. (4: 221)
4. Sadr handling test (4: 237-239)
5. The offensive follow-up test on the painting. (4: 237-239)
6. A peaceful scoring test after the performance of the training (4: 224)

The two researchers applied an exploratory experience on 5/4/2022 to the original research sample by applying some exercises for the purpose of legalizing them and knowing the appropriate extent of the research sample and finding the components of the training pregnancy. Suggested exercises for the defense of the region were prepared in the main section of the training unit of the coach of the experimental group only, taking into account the training period, which is the period of the special numbers and the severity of the exercises that ranged between (85 % - 100 %). And groups (2) in order to rely on increasing the speed of the skill for the purpose of raising the level of agility and balance. Especially when the severity (90% -100%) was (130-140 ° C/D), which is the appropriate period to perform the skill again with a high concentration and without fatigue or decline in the level, and the implementation of exercises continued for two months and by (2) training units per week, The experimenting of the independent variable for the period continued from 4/18/2022 to 15/6/2022, then it was applied for dimensional tests on 20/6/2022, and after the collection of the results was addressed by the (SPSS) system to find: the arithmetic, the standard deviation, and the tested of the interconnected samples , Test for non -interconnected samples, and the percentage.

Results and discussion:

Table 2: Results of the study groups of the pretest and posttest .

The tests	control					Experimental				
	mean pretest	mean Posttest	SD. Err	t	Ass	mean pretest	mean Posttest	SD. Err	t	Ass
Fitness/second	2.23	4.11	0.235	4.765	S	5.423	3.845	0.456	3.46	S
Balance/degree	2.23	3.11	0.224	3.482	S	2.45	3.998	0.471	3.286	S
Riyadh handling /times	18.5	20.1	0.2	8	S	18.4	22.3	0.2	19.5	S
The handling of one hand, /times	16.5	17.7	0.1	0.12	S	16.4	18.3	0.3	6.33	S

Offensive follow-up on the painting, times	17.6	18.9	0.1	13	S	17.5	20.3	0.3	9.3	S
Peaceful scoring after the performance of the chief, times	8.6	9.2	0.1	6	S	8.5	10.8	0.3	7.6	S

n = (6), Significance Level= 0.05; t-test value is significant at P-value \leq 0.05

df. (N-1)

The reason for the development of the control group is due to its continuation of training and their regularity in it, and this certainly helps to develop physical and skillful characteristics at the same time because it is one of the privacy and principles of training science. In addition, Muhammad Hassan Allawi (1986) (6:17) and Nader Abdel Salam Al -Awamari (1983) (9: 301) states that sports training improves physical qualities and skillful performance level.

Also, the training planning used by the coach was successful and achieved the goal of sports training, and this is confirmed by Hanafi Mohamed Al -Mukhtar (1998) (2: 96) in his saying (that proper planning and choosing appropriate exercises enable the coach to develop physical qualities and at the same time working to master the player For basic skills).

As for the experimental group, its development is due to the method of exercises used, which is scientifically chosen by the research sample, which has worked to achieve the goal of the subject training, because agility and balance is an important requirement in the success of the level of performance, especially the attacking skill performance.

Also, the planning side exercises aims to raise the physical side, as well as complete its deficiencies from the physical characteristics (agility and balance) individually according to the requirements of its position on the stadium and its plans.

The two researchers also see that the reason for the development of the experimental group is to take into account all conditions of the region's defense exercises and its technical and legal principles, and this was confirmed by Muhannad Abdul Sattar (11: 89) (that there is a scientific fact that must be stood there, which is that the exercises used in the training curricula lead to the development of performance. It was built on scientific foundations in organizing the training process, using the appropriate pregnancy, observing individual differences, under good training conditions, and under the supervision of specialized trainers, where the codified and organized training programs according to the scientific foundations work to develop the physical and skill level of the players).

As for the reason for the development of basic offensive skills is due to the development of agility and balance, as athletes cannot master the basic skills that characterize each event in the event of their lack of the necessary physical qualities of sports activity, so we find the close link between the skill level and special requirements in each activity (1: 9).

Table 3: Results of the study groups at the posttest verbal Study

The tests	control		Experimental		t	Ass
	mean	±SD	mean	±SD		
Fitness/second	4.11	0.224	3.845	0.124	2.324	S
Balance/degree	3.11	0.324	3.998	0.121	5.766	S
Riyadh handling /times	20.1	0.4	22.3	0.3	10	S
The handling of one hand/ times	17.7	0.1	18.3	0.1	10	S
Offensive follow -up on the painting/ times	18.9	0.2	20.3	0.3	8.75	S
Peaceful scoring after the performance of the chief/ times	9.2	0.2	10.8	0.4	8	S

n = (12), Significance Level= 0.05; t-test value is significant at P-value ≤ 0.05

df. (N-2)

From noting table (3) it was found that the experimental group is better than the control group in the development of fitness and balance as well as in developing basic basketball skills on wheelchairs, through the presence of moral differences in the dimensional tests between the two groups and in favor of the experimental group in the search variables.

The reason for this is due to the training method (the defense of the region) used, in addition to containing the various exercises, which directly affected the necessary muscles that the game needs, and thus the development of that quality affected the basic skills and achieved a good achievement in it.

It is known that each sporting event depends on certain muscular groups that differ from one game to another according to the specialized sport and the fact that the basketball game is on the wheelchairs from the games that distinguish its players with deliberate muscles on grace and balance in a great way, so it is necessary to pay attention to these groups through the regulatory repetition of exercises and the gradual increase in repetitions Muhammad Hassan Allawi and Muhammad Nasr al -Din Radwan states that the player's distinction with a good

balance contributes to his ability to improve and upgrade his performance of many movements or conditions in most sports activities' (9: 150).

Conclusions and Applications:

1. The Zone defense exercises are important and effective to develop agility, balance and offensive skills for basketball players on wheelchairs.
2. Agility and balance is a major demand for the success of the attacking skill performance basketball on the wheelchairs because they contain movements that require jumping and rapid action.
3. It is necessary to adopt the Zone defense exercises in developing fitness, balance and offensive skills for basketball players on advanced wheelchairs.
4. The necessity of emphasizing agility and balance during the training units, as it is a major demand for the success of the attacking skill performance of basketball on wheelchairs because they contain movements that require balance, scoring and rapid action.
5. Using the use of exercises and training similar to the atmosphere of the match and competition to develop the physical qualities necessary for the game in addition to developing the skills associated with each type of training used and the goal for which it is set, whether offensive or defensive.

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