



The Comparison of some physiological and physical variables between Iraqi and Russian youth players in basketball

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Abstract:

The basketball game consider one of the most popular games over the world and play by different ages began from early age (five years) in the schools , youth centers and clubs , it consider as effective instrument for the physical education and sport culture even it become as a life style in some countries in the world. In addition to this information the basketball enter to the Olympic sport programs and schools and practice in most sport clubs. The problem of research is weakness in the skills performance of Iraqi youth players, this weakness in most of time as result the bad selection of players because they do not depend on good standard of body and physical specifications to help select the future players to achieve the desired results. Therefore, the aim of study is knowledge of the differences between Iraqi and Russian youth players in some of physiological and physical variables. The hypotheses is: There are significant differences between Iraqi and Russian youth players in some of physiological and physical variables.

Key wards: physiological and physical variables, basketball

1- The introduction :

The basketball game consider one of the most popular games over the world and play by different ages began from early age (five years) in the

schools , youth centers and clubs , it consider as effective instrument for the physical education and sport culture even it become as a life style in some countries in the world. In addition to this information the basketball enter to the Olympic sport programs and schools and practice in most sport clubs

The practice of basketball want special requirement like body and physical specifications, which the players have it to reach to the high skills performance for the achievements

The problem of research is weakness in the skills performance of Iraqi youth players, this weakness in most of time as result the bad selection of players because they do not depend on good standard of body and physical specifications to help select the future players to achieve the desired results.

Therefore, the researchers wanted to study the problem through the knowledge of differences between Iraqi and Russian players in some of physiological and physical variables because the Russian players have a good level in their skill performance.

The aim of study is knowledge of the differences between Iraqi and Russian youth players in some of physiological and physical variables. The hypotheses is: There are significant differences between Iraqi and Russian youth players in some of physiological and physical variables.

2-Methodology

2 -1 Sample

The sample of research consisted of (20) players represented the youth team of al-hillah club and the Russian youth players depend on the standard levels in the programs of Russian Olympic schools and clubs.

2-2 Measurement of the variables:

The researchers used some tests, which selected from the references, used by other researchers, and applied in the Iraqi environment

2-2-1 The physiological tests: the researchers measure the variables (length – weight - Vital capacity – strength grip - systolic blood pressure – heart rate – heart rate after the load – recovery after the load) for the Iraqis youth players after that the researchers made the comparison it with Russian youth players standards(3-192).

2-2-1 The physical tests: the researchers measure the physical variables (Jump forward from stability to measure speed strength for legs – vertical jump to

measure explosive strength for legs - throw the medical ball from sitting to measure explosive strength for hands – running six meter from the stand up to measure reaction time – running for six minutes and calculates the distance for measure the speed endurance) (2-100).

2-3 exploratory experiments:

2-3-1 The first exploratory experiment for the physiological variables:

The researchers did exploratory experiment in 28/4/2014 used (10) players to make sure from the devises if work well or not

2-3-2 The second exploratory experiment for the physical variables:

The researchers did exploratory experiment in 29/4/2014 used (10) players to get solutions for all problems when the tests execution.

2-4 physiological and physical tests execution:

The researchers executed the physiological tests in 3/5/2014 on Iraqis youth players group but the physical test executed in 4/5/2015.

2-5 statistical means:

Data of study was analyzed through a program SPSS and using mean, stander deviation, independent- samples t test.

3- Presentation and discussion of results:

For the knowledge of Evaluation of physiological and physical Iraqi players' level, the researcher analyzed data by using the mean and stander division to describe these variables; the tables (1) (2) show that, the tables (3) show the Russian players standards.

Table (1) show the Descriptive Statistics for the physical variables

variables	N	Mean	Std. Deviation
1- Jumping from stability	15	231.6000	18.56956
2-Vertical jump	15	32.6000	3.64104
3-Throw medical ball	15	7.3413	0.15170
4-Reaction time	15	1.7940	0.15170
5-Running endurance	15	1109.0000	61.30253

Table (2) show the Descriptive Statistics for the Physiological variables

variables	N	Mean	Std. Deviation
1-Breathing capacity	15	3096.6667	230.26899
2-Grip strength	15	40.1400	3.75800
3-Systolic Pressure	15	119.6667	5.16398
4-Heart rate	15	74.4000	3.22490
5-Heart rate after the load	15	154.8000	9.93694
6-Recovery	15	2.0953	.15679

Table (3) show the physical and physiological Russian standards(1-15)

Physical standards	value	physiological standards	value
1-Jumping stability	240	1-Breathing capacity	3900
2-Vertical jump	44	2-Grip strength	50.5
3-Throw a heavy ball	13	3-Systolic Pressure	120
4-Reaction time	1.65	4-Heart rate	69
5-Running endurance	1400	5-Heart rate after the load	150
		6-Recovery	1.3

For reach to the aims and solve the problem research, the researchers analyzed the data by using (t) test for independent group, the tables (4) and (5) shows the significant differences between Iraqis and Russians players in physiological and physical variables

Table (4) show the statistical differences of physiological variables

variables	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
1-Breathing capacity	-13.512	14	0.00	803.33333	-930.8521	-675.8146
2-Grip strength	-10.677	14	0.00	-10.36000	-12.4411	-8.2789
3-Systolic Pressure	-0.250	14	0.80	-0.33333	-3.1930	2.5264
4-Heart rate	6.485	14	0.00	5.40000	3.6141	7.1859
5-Heart rate after the load	1.871	14	0.08	4.80000	-0.7029	10.3029
6-Recovery	19.646	14	0.00	0.79533	0.7085	0.8822

Table (5) show the statistical differences of physical variables

variables	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
1-Jumping stability	-1.752	14	0.102	-8.40000	-18.6835	1.8835
2-Vertical jump	- 12.126	14	0.00	- 11.40000	-13.4163	-9.3837
3-Throw a heavy ball	- 38.336	14	0.00	-5.65867	-5.9752	-5.3421
4-Reaction time	3.677	14	0.002	0.14400	0.00600	0.2280
5-Running endurance	- 18.385	14	0.00	- 291.0000	-324.9482	- 257.0518

By analyzing, the table (4) we can note the significant differences between Iraqis and Russian group in four physiological variables (Breathing capacity - Grip strength - Heart rate - Heart rate after the load) and in favor of the Russian group because of that significant values are less than (0.05), but two variables (Systolic Pressure - Heart rate after the load) was insignificant differences because that significant values are more than (0.05).

From these results, we note the Russian profile over come on Iraqis profile; the researchers attribute these results to improve the ability of body devices (Cardio respiratory – nerves system - Skeletal system) at Russian players as results the right training programs and selection of players as well as the lot of time training with helping tools lead to adaptation in body devices. In another hand, the Iraqis players failed in these comparisons because of the weak programs and wrong selection in most variables like body and physical specifications.

By analyzing, the table (5) we can note the significant differences between Iraqis and Russian group in all physical variables (Vertical jump- Throw a heavy ball - Reaction time - Running endurance) and in favor of the Russian group except the variable (Jumping stability) because of that, significant values are less than (0.05)

From these results, we note the Russian profile over come on Iraqis profile in physical variables; the researchers attribute these results to the true planning of training programs which builder by the fitness and basketball experts whom considered improve the physical abilities (strength, speed, endurance and so on) are most important for the players to reach to the high levels in performance. The researchers consider the physical ability is most important factor for the player to able to perform different skills in different situations perfectly.

4- The conclusion and recommendation:

According to the results of the study and discussion, the researchers reach to conclusion that the Russian players (profile) overcome on Iraqis players in physical and physiological variables.

The researchers recommend the following; we should build special standards of different variables (physical, physiological, psychological and so on) for basketball players for all ages in Iraq and depend on them in elective the players. In addition to build, the true training programs by basketball experts and training science.

References:

1. Haider jumaa . **Dynamic in the physical conditions and the level of preparedness of high school students of Iraq in the process of basketball training session, physical culture, sport science journal.** kuban university of physical education, sport and tourist, Krasnodar. No.2-2015.
2. Portnov, v.m and others . **basketball ; application of the program of sports training for children – youth sports school, specialized children – youth school at Olympic reserve,** v.m portnov, v.g. bashikirov, v.g. lunichkin and eet . m;soviet sport, 2006.
3. Landa, B.H. **methodology of integrated assessment of physical development and training manual/ B.H-M;** soviet sport, 2004- p192
4. Schmidt and Weisberg. **Motor Learning and performance,** Human Kents 2000.
5. Samir yousif mutib and others. The Effect of Teaching Curriculum According to the Error Measures to Develop Accuracy Performance of Some Types of Shooting for Junior Players in Handball. . **International Journal of Advanced Sport Sciences Research-ASSR Vol 1, No 2 (2013)**
6. Ahmed yousif and others. The Effect of Stretching Exercises in Development of Physical Flexibility for Beginner Physical Strength Players. **International Journal of Advanced Sport Sciences Research-ASSR.** Vol 1, No 2, 2013.
7. Samir yousif mutib and others. The Effect of Teaching Curriculum According to the Error Measures to Develop Accuracy Performance of some Types of Shooting for Junior Players in Handball. **International Journal of Advanced Sport Sciences Research-ASSR .**Vol 1, No 2, 2013.
8. Samir yousif mutib and others. The Effect of Proposed Teaching Curriculum in the Development Speed and Accuracy Performance of some Types of Shooting for Juniors Players of Handball. **International Journal of Advanced Sport Sciences Research-ASSR Vol.2 Issue.4, December 2014.**

9. Samir yousif mutib and others. The effect of sensory preferences in learning some of the motor skills of artistic gymnast at the college of Physical Education students. **International Journal of Advanced Sport Sciences Research-ASSR** Vol.3 issue.2, June 2015