

## A follow-up Study of some Technical Performance Amongst the Jordanian National Team Players of the Basket Ball

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**Abstract:** This study aims at evaluating the level of technical performance of the Jordan National Team of the Basket ball players for the years (2010/2011/2012). Moreover it aims at getting acquainted knowledge of the difference in the level of technical performance amongst these players due to the variable of the year. Data were statistically analyzed by extracting the arithmetic means, standard deviations, and analyzed the multi-ANOVA to the finding differences among the three years of the study. Our results revealed that there is a significant decline of the technical performance level amongst the basket ball national team players, and non-development of the technical level starting from the first year (the subject of study) until the following years, in addition to non-existence of differences, with statistical indication of some technical performances amongst the indicated three years. In light of deductions of the study, researchers recommend the necessity of looking for specialized trainers in the basket ball game, and motivate players by increasing salaries and financial rewards. Also we recommend the saving possibilities concerning play grounds and tools, and also showing concern with the local player following the example of the foreign player.

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**Key words:** Basket ball, Technical performance, Jordanian National Team, Jordan.

### 1. Introduction

The game of the basket ball is considered the largest widespread game in the world after the game of the football, and it has its significance in the competitive sphere among the states.

This athletics demands high physical and skillful capacities till the player can have command of it. (Hofmann2005) And with the advent of the Third Millennium, this athletic started to lead a positive trend, toward promotion with the performance and technical level to reach high the accomplishment at the competitive level( C.L Huang .2001). So professionalism entered this game to escort the pioneer competitive states at the Arab and regional level. And through the work of researchers in the athletic field, and the specialized academic work in this game, they found themselves concerned in sharing in the promotion with the level of the game in Jordan, and the attempt to reach with it to the best means that are proficient in rising the performance level, and so achieving accomplishment and the positive results in the game of the basket ball (Brian S,2006).The technical performance amongst players is one of the most important requirements concerning achieving the good results and promotion with it is one of the most important priorities, which exists on the agenda of the technical staff of teams and varieties (Tavarest ,2003)

Barakat (2006) prepared an analytical comparative study of the effectiveness of the

technical performance in the game of the basket ball for the first degree clubs in Jordan. The study aimed at reconnoitering this effectiveness of the defensive and offensive technical performance of the first degree clubs and the differences in these performances between both seasons of 2005/2006. His study aimed at getting acquainted with the effectiveness of the skill of directing club, and each club alone. The researcher used the descriptive analytical method, and the sample of study covered the eight teams participating in the periodical of the first degree clubs for both seasons of 2004/2005. He analyzed 56 matches, percept rates and (t-test) for dimensional comparison was used.

The results of the study indicated the existence of weakness in the skill of directing from three points for all clubs, where the rate of success for the season of 2004 amounted to the rate of 23.28 % - 36.55 % and the season of 2005 between 25.10 % - 37.88 %. The results also showed the absence of differences statistically indicative between both seasons in variables of directing from two points and three points. The free casts, the offensive casting, defensive, the number of the opposite to existence of differences statistically indicative in the number of mistakes committed by the team, where they decreased in the season of the year 2005 in comparison with the season of the year 2004.

Boettcher (1998), prepared an analytical study of the skills and the individual and collective

defensive duties of the European players participating in the European nation's championship of the hand ball 1998. The results of this study disclosed the most important skills and also the means, which should be used in training to develop those skills.

Travers and Gomeson 2003 study attitude (study of offensive performance for beginners' teams with high level of the basket ball). The study aimed at analyzing and comparing the offensive performance for beginner of the basket ball / men leaning on the equality and quantity of tactic and technical variables. The results of the study disclosed that the main method of the match for all teams is the location attack at the rate of 74.6 %, mean while the swift attack is the second method and the rate of 25.4 %, and the swift attack lasted from 13 – 18 seconds, and the method of defense man to man is the basic defensive method for all teams.

Other study accomplished by Shaaban I. Mohammad showed the distinction of speed average (time) of the individual offensive skillful performance in the ball, with the slowness amongst the Egyptian players in comparison with the African and the worldly players.

Shaban Ibrahim 1992 wrote a study on the participating teams in the world eleventh championship in 1990. And the study disclosed the obtainment of the free casts of the highest percent rates, for they amounted between 70 – 80 % and with the average of 75.01 for teams. But directing from two points from the near distances and medium obtained rates between 47 – 60 % and with an average of 53.7 successful directions. And finally, the direction came in three points, with rates of 26 – 46 % and with an average of 37.1 % successful directions. Ahmed Kamel Mahdi 1993 made a comparative study of the participating clubs in the Arab championship for the basket ball. The results of the study disclosed that directing with leaping is the widest read type of direction and the decline of the level of most teams in the triple direction except for the Algerian and Saudi teams, and also the participating teams were distinguished in the championship of directing the free casts.

This study came to follow-up some of the technical performances amongst the national team players of the basket ball, who are participating at their clubs for the years (2010/2011/2012). Moreover it aims at discovering their technical level to assist the concerned people with the game of the basket ball in Jordan to promote with the level of performance and improve the level of the competitive performance of the Jordanian national team. And from this point came the significance of doing this study, in addition to the notice of the researchers about the vibration of

the skillful and technical level amongst these players in the indicated years.

## 2. Material and Methods

The sample of study consists of all players of the National Team for the basket ball in Jordan (20 players). using a statistics for twelve technical and skillful effectiveness amongst these players of the basket ball during their participation in the years 2010/2011/2012. These technical and skillful effectiveness includes: Direction of two points, Direction of three points, The free cast, The free cast, Times of offensive collection, Times of opposite offence, Number of balls he snatched, Number of minutes he played of assisting passes, Number of balls he repulsed, Number of personal mistakes and Number of points he registered. A descriptive method was used in this study.

### Statistical analysis

Means and standard deviations for every variable and analysis of the multi ANOVA were used in this study.

## 3. Results

Table (1) Arithmetic mean and standard deviation for every variable through the period 2010-2012

The variable	year	mean	Deviation
Direction of two points	2010	52.70	8.12
	2011	50.75	6.46
	2012	50.95	8.59
Direction of three points	2010	30.45	9.01
	2011	32.85	7.49
	2012	30.85	7.82
The free cast	2010	63.68	11.37
	2011	65.72	10.12
	2012	66.37	13.91
Times of offensive collection	2010	50.16	45.55
	2011	39.88	25.89
	2012	29.79	22.71
Times of opposite offence	2010	72.63	26.94
	2011	61.71	20.04
	2012	32.63	11.90
Number of balls he snatched	2010	53.58	17.57
	2011	46.76	17.93
	2012	25.05	12.60
Number of assisting passes	2010	66.89	53.91
	2011	63.94	35.38
	2012	38.32	28.11
Number of balls he repulsed	2010	10.67	9.79
	2011	13.58	9.80
	2012	6.08	4.11
Number of personal mistakes	2010	68.21	19.12
	2011	49.71	13.512
	2012	37.75	13.96
Number of points he registered	2010	304.16	123.71
	2011	279.65	86.76
	2012	163.45	72.07
Number of minutes he played	2010	685.00	167.55
	2011	578.88	100.43
	2012	407.15	103.51

Table 1 reveals level of the technical performance for the players of the National Team for the basket ball in the years 2010/2011/2012. Arithmetic means and standard deviations for every variable is shown in this table.

Table 2 showed our results in getting acquainted with the differences in the level of the technical performance amongst players of the National Team for the years 2010/2011/2012. The analysis of multi ANOVA was used.

Table (2) Results of multi ANOVA analysis for the variable of direction from two and three points through years of 2010/2011/2012.

Variable	Source of ANOVA	Total of squares	Degrees of freedom	Mean of squares	f. value	Level of indication
Directing from two points	2010-2011	30.62	1	30.62	0.44	0.515
	2011-2012	15.41	1	15.41	0.33	0.572
	Mistake 2010-2011	1324.88	19	69.73		
	Mistake 2011-2012	883.09	19	46.48		
Directing from three points	2010-2011	1.60	1	1.60	0.02	0.886
	2011-2012	64.53	1	64.53	1.94	0.179
	Mistake 2010-2011	1436.40	19	75.60		
	Mistake 2011-2012	630.80	19	33.20		

F. value is at the level of  $0.05=4.38$

Table (2) shows the analysis of the multi ANOVA of the variable of directing two and three points through the years (2010/2011/2012), and the value of the counted F. indicates the non-existence of differences with statistical indication, the directing from two and three points through the years of 2010/2011/2012, for the counted value was lesser than the table value amounting to 4.38.

Table (3) shows the results of analyzing the multi ANOVA for the variable of the free cast through the years of 2010/2011/2012. And the counted value of F. indicates to the non-existence of differences with statistical indication for directing from two and three points through the years 2010/2011/2012, where the counted value was lesser than the table value amounting to 4.38.

Table (3) Results of analysis of the multi ANOVA for the variable of the free cast during the years of 2010/2011/2012

Variable	Source of ANOVA	Total of squares	Degrees of freedom	Mean of squares	F. value	Level of indication
The free cast	2010-2011	72.05	1	72.5	0.66	0.428
	2011-2012	6.46	1	6.46	0.06	0.817
	Mistake 2010-2011	2087.46	19	109.87		
	Mistake 2011-2012	2222.92	19	117.00		

F. value is at the level of  $0.05=4.3$

Table (4) Pin – points results of analyzing multi ANOVA for the variable of the offensive collecting times and number of defensive collecting times through the years of 2010/2011/2012. And the counted F. value indicates the existence of differences with statistical indication in the number of offensive collecting times and defensive collecting times through the years of 2010/2011/2012. The counted value was higher than the table value amounting to 4.38 except for the number of offensive collecting times through the years 2008/2009 for the counted F. value to 0.00 and it is lesser than the table value amounting to 4.38

Table (4) Results of the multi ANOVA analysis for the variable of the number of offensive collecting times and number of defensive times through the years of 2010/2011/2012.

Variable	Source of ANOVA	Total of squares	Degree of freedom	Mean of squares	F. Value	Level of indication
Offensive collecting times	2010-2011	4148.73	1	4148.73	9.82	0.005
	2011-2012	0.11	1	0.11	0.00	0.980
	Mistake 2010-2011	8027.39	19	422.49		
	Mistake 2011-2012	3318.54	19	174.66		
Defensive collecting times	2010-2011	10409.11	1	10409.11	16.74	0.001
	2011-2012	2043.28	1	2043.28	4.61	0.045
	Mistake 2010-2011	11815.83	19	621.89		
	Mistake 2011-2012	8415.36	19	442.91		

Table F. value is at the level of  $0.05=4.38$

Table (5) Results of the multi ANOVA analysis for the variable of the opposite offensive times number and number of balls snatched by him through the years of 2010/2011/2012.

Variable	Source of ANOVA	Total of squares	Degrees of freedom	Mean of squares	F. Value	Level of indication
Times of opposite attack	2010-2011	16000.00	1	16000.00	53.34	0.000
	2011-2012	1097.91	1	1097.91	4.69	0.043
	Mistake 2010-2011	5699.61	19	299.98		
	Mistake 2011-2012	4449.72	19	234.20		
number of balls he snatched	2010-2011	8139.01	1	8139.01	62.69	0.000
	2011-2012	740.08	1	740.08	5.17	0.035
	Mistake 2010-2011	2466.84	19	129.83		
	Mistake 2011-2012	2721.92	19	143.26		

Table F. value is at the level of  $0.05=4.38$

Table (5) Shows the analysis of the multi ANOVA for the variable of the opposite attack times and number of balls he snatched through the years of 2010/2011/2012. And the counted F. value indicates to existence of differences with statistical indication for the number of times of the opposite attack. And the number of times he snatched the balls through the

years 2010/2011/2012, for the counted value was higher than the table value amounting to 4.38

Table (6) Results of the multi ANOVA analysis for the variable of the number of the assisting passes, and the number of balls he repulsed, the number of personal mistakes, the number of points he registered and the number of minutes he played through the years of 2010/2011/2012

Variable	Source of ANOVA	Total of squares	Degrees of freedom	Mean of squares	F. Value	Level of indication
Number of assisting passes	2010-2011	8167.56	1	8167.56	10.39	0.004
	2011-2012	1713.37	1	1713.37	3.72	0.069
	Mistake 2010-2011	14934.34	19	786.02		
	Mistake 2011-2012	8751.71	19	46.62		
Number of balls he repulsed	2010-2011	210.66	1	210.66	8.61	0.009
	2011-2012	362.14	1	362.14	13.54	0.002
	Mistake 2010-2011	464.69	19	24.46		
	Mistake 2011-2012	508.06	19	26.74		
Number of personal mistakes	2010-2011	9278.44	1	9278.44	55.92	0.00
	2011-2012	142.95	1	142.95	1.23	0.282
	Mistake 2010-2011	3152.30221	19	165.91		
	Mistake 2011-2012	2.43	19	116.44		
Number of points he registered	2010-2011	197987.12	1	197987.12	37.06	0.000
	2011-2012	28021.21	1	28021.21	6.96	0.016
Number of minutes he played	2010-2011	772006.22	1	772006.22	48.17	0.000
	2011-2012	14350.97	1	14350.97	1.07	0.313
	Mistake 2010-2011	304512.28	19	16026.96		
	Mistake 2011-2012	254337.78	19	13386.20		

Table F. value is at level 0.05=4.30

Table (6) shows the results of analyzing the multi ANOVA for the variable of a number of the assisting passes, number of balls he repulsed, number of the personal mistakes, number of points he registered, and the number of minutes he played through the years of 2010/2011/2012. And the value of the counted F. indicates to existence of differences with statistical indication on the mentioned variables during the years 2010/2011/2012, where the counted value was higher than the table value amounting to 4.38, except for the variables of the number of the assisting passes 3.72 and the number of the personal mistakes 1.23 and the number of minutes that he played 1.07 between both years 2011/2012.

#### 4. Discussions

It is clear from the statistical results in table number 1, which clears the arithmetic means and standard deviations of the technical performances results amongst players of the National Team of the

Basket Ball that the level of technical performances declined after the year 2010. It is clear that the arithmetic means of most performances in 2010 were higher than them in 2011/2012. These results pinpoint the technical level amongst the players in the years mentioned earlier.

In order to recognize the differences in the technical level for years of 2010/2011/2012, the multi ANOVA analysis was used, where it is cleared through the statistical results in the table no 2 and 3. There is no statistical indication for the variables of directing from two and three points, for the years 2010/2011/2012. This is a clear indication that there is no development in the technical level of those performances in the mentioned years.

But in tables (4),(5) and (6) the statistical results showed that there are differences with statistical indication in the number of times of the offensive collecting, number of times of defensive collecting, number of times of opposite attack, number of balls snatched by the player, number of balls repulsed by the player, number of personal mistakes, number of points registered by the player, and number of minutes he played. That is, for the interest of the year 2010 in the year 2011.

Meanwhile the statistical results indicated that there were no differences with statistical indication for the performances of assisting passes number, personal mistakes number, and the number of minutes he played between both years 2011/2012.

This is a clear indication of undevelopment of the level of technical performance in after the year 2010 for most of the technical performances submitted to study. Researchers ascribe that too many factors, that hinder promotion of the technical and skillful level, and it is, from the point of view of the researchers, the fewness of materialistic incentives made available by the Jordanian Union for the basket ball amongst the Jordanian players, and has no connection with raising the level of accomplishment. And if the salaries paid to foreign players compared with those paid to locals players, they are found excelling them, in addition to freedom of replacing the foreign player with another at anytime during the periodical championship that left a negative effect on developing the technical level of the local player.

And also researchers ascribe the fewness of matches and championships organized by the Jordanian Union for the Basket Ball are not the demanded quantity and enough to give local players the opportunity of common touch to develop their technical and skillful levels.

And from the important reasons, which the researchers view through their work, is the retreat of the technical level amongst players of the National Team and non-existence of a specialized trainer, who

concentrates on developing their technical levels, but concentration on the level of the foreign player in occurring change in realizing accomplishment.

### Conclusion

Preference in the level of technical performance for most of the performances, the subject of study was for the year 2010, where any improvement in the technical level for the years 2011/2012 did not emerge. The technical level for most performances did not emerge in improvement, since the year 2010 until the year that follows, and so the skillful level, is in retreat and decline.

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### References

- Hoffman, Lori and Joseph Maria (2005), a multivariate statically analysis of the (NBA) university of Wisconsin River Falls, United States of America.
- C .L Huang and B. Y Liao, (2001), "A robust scene change detection method for video segmentation", IEEE Trans. On CSVT, vol.11, No. 12, pp.1288-1291.
- Brian and Ward, Bryce R. Wells, (2006), "a spatial analysis of the NCAA Basket Ball Tournament", ESRI international User conference proceedings.
- Boettcher, G(1999): "Die Abwehrspieler sind auf schnelle Beinen Unterwege". Em- Analysis. Hand ball training 20, 8, 4-7.
- Tavares and Gomesn, (2003): the offensive process basket ball – a study in high performance junior teams, international Journal of performance analysis in sports vol.3
- Shaaban Ibrahim MOHAMMAD (1990), the Relationship of Types of Directing With Results of the Participating Teams In The World Championship 11th for the Basket Ball: Theories and Applications, Faculty of Physical Education For Boys in Alexandria No. 44.
- Shaaban Ibrahim Mohammad (2002), A Comparative Study of the individual Offensive performance for the Ball for the Egyptian Basket Ball Players and High Levels Players, Journal of Theories and applications, No. 44.
- Ahmed Kamel Hussein Mahdi (1993), a comparative Study for the common Directing of the participating clubs in the Arab championship for the Basket Ball, Asyut Journal for Athletics Sciences and Arts, Faculty of Physical Education for Boys, University of Asyut, No. 3.
- Husam Abdel Razzaq Barakat (2006), Analytical comparative Study of Effectiveness of Technical performance in the Game of the Basket Ball for the first Degree clubs in Jordan. Published research, Faculty of Physical Education University of Jordan, 5th. International Scientific Conference "Athletics in a changing world", Vol.1.

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