

## **An analytical study of some basket ball skills in the world Cup championship in Spain 2014**

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### **Research Summary**

This research aims to analyze some skills that influence the match result in all the first round matches of all the national teams participating in the World Cup of Basketball held in Spain 2014. It aims also to recognize the studied skills' differences between the Egyptian and the American national teams during the first round matches of the World Cup. The researcher used the descriptive method, and the research sample was chosen deliberately. The research sample to analyze the skill performance of all the world national teams during the 1<sup>st</sup> round of the championship (groups' league) included 248 players of 24 national teams from all over the world. The results showed the following:

The 2 points aiming was the most skill performed by the players, followed by the aiming from outside the 3 points arc by 27.4%, while the free throw came in the 3<sup>rd</sup> place in total aiming by 22.6%. The

Egyptian teams came in the last place

### **Research Introduction & Problem**

Considering the great superiority shown by the participating teams in the world championship of basket ball held in Spain in the period from 30 August to 14 September 2014, and the inability of the Egyptian national team to occupy advanced places in this championship, the researcher noticed during his work as a teaching staff member and basket ball coach, during which he was following the world championships and specially the world Cup matches 2014, he noticed the teams' high performance in the skill level particularly different attack and defense skills in a way that outperform the Egyptian players. And that the great teams enjoy a higher percentage in the skills affecting the game result, while this percentage is much less in

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the Egyptian players. The researcher sees that there is a necessity to study this important aspect which may clarify the reasons behind the bad results of the Egyptian basket ball compared with the international level. The research importance lies in the following points:

- Analyzing the performance of some skills affecting the matches' results of the teams participating in the world Cup championship in order to recognize the strength and weakness points of these national teams.

- Comparing the performance of the Egyptian national team with the American team (which occupied the first place in the championship).

### **Research Aims:**

This research aims to analyze some skills affecting the matches' results in all the matches of the first round of the basket ball world cup held in Spain 2014, hence to recognize the following:

1- The performance of some skills affecting the basket ball matches' results (aiming two points – aiming to achieve three points – free hit – the influencing pass- the attack

follow up – defense follow up) of the teams participating in the world Cup championship in the first round.

2- To recognize the order of aiming types affecting the match result.

3- To recognize the studied skills differences between the Egyptian and the American national teams during the 1<sup>st</sup> round matches of the World Cup championship.

### **Research Questions:**

This research attempts through: Analyzing the 1<sup>st</sup> round matches of the World Cup championship of Basketball held in Spain 2014 to answer the following questions:

1- What is the actual performance level of some skills affecting the result of basketball matches (2 points aiming – 3 points aiming – free throw – influential pass – the attack follow-up - the defense follow-up) of the national teams participating in the 1<sup>st</sup> round of the World Cup?

2- What is the order of aiming types affecting the match result?

3- Comparing the percentage of the studied skills of the Egyptian national team and the percentage of the studied skills of the American

team which occupied the 1<sup>st</sup> place during the 1<sup>st</sup> round.

### **Research Procedures:**

#### **First: Research Method:**

The researcher used the descriptive method following the survey technique as it suits the nature of the research.

#### **Second: Research Sample:**

The research sample was chosen deliberately, and included the following:

1- The research sample of skill performance analysis of all world national teams in the first round of the tournament (4 groups \* 6 teams each group). The teams' players in the basket ball world cup held in Spain were 248 players in 24 national teams from different places of the world in the period from 30 August to 14 September 2014.

### **Table (1)**

#### **World Cup Groups 2014**

2- The research sample of the technical performance analysis of the first four teams (US – Serbia – Lithuania – France) and the Egyptian team during their performance in the first round of the World Cup matches and the matches of the Egyptian team during the championship (60 players).

#### **Third: Means & Tools of Data Gathering:**

The researcher used several means and tools in gathering the data and information related to this research which are:

1- Scientific Observation:  
The researcher analyzed the matches (research sample) to get the data needed to be observed.

3- The pilot sample in the two matches of the semi-final and final rounds of Egypt's Cup for 48 players in the semi-final matches (Al-Ahly vs. Etisalat), (Al-Ithad vs. Sporting), and the final round match between (Al-Ahly vs. Sporting) during the period from 4/12/2013 to 8/12/2014.

2- Forms of Data Registration (analysis):

The researcher designed (3) forms to analyze the research sample of the selected skills studied in the research.

#### **3- Personal Interviews:**

The researcher used the content validity through displaying the forms he used in its primary form on (3) experts in the field of basketball sport; enclose (2) to know their opinions about if the forms achieved the aims it

was made for. Depending on the experts' opinions, the researcher divided the form into two parts (aiming skills) and (follow-up skills – the decisive pass). Thus, the two forms reached their final shape; enclose (3). The two forms were simple, easy, accurate and quick in registration in order to gather the data and tabulate them to be statistically treated.

- The scientific interactions of the two data registration forms (analysis):

- The two forms validity:

#### **4- Tools & Equipments used in the research:**

- (11) Computer CDs, (10) of them contained (60) matches as (6) matches in each CD, while the 11<sup>th</sup> CD contained (3) matches.

- A computer, Pentium 5, to display and analyze the matches using BS. Player program; which is one of the best programs in operating videos and audios, and can be used in Slow Motion and to make the picture Still and to control its size.

#### **Fifth: Basic Study:**

The researcher analyzed the matches (research sample) to confirm the validity of analysis operation in the period from Saturday 3/1/2015 to

Thursday 5/2/2015 using the three display techniques (Slow Motion, Still, and Normal) in order to analyze the technical performance of the teams participating in basket ball World Cup. After completing the analysis of all the matches (research sample), the data (which were registered) were gathered in the two registration forms related to the research. Then, they were put into tables in order to be statistically treated to obtain the results that answer the research questions and achieve its aims.

#### **Sixth: Statistical Treatments:**

In light of research aims and questions, the data were gathered and the statistical treatments were applied using SPSS 23 to calculate the arithmetic means, the standard deviation, the percentage and coefficient of correlation.

#### **Display & Discussion of Results:**

First: display & discussion of the results related to analyzing the attack skills in the World Cup championship, the following table shows the groups' order during the first round matches.

**Table (2)**

**The teams' order inside the groups during the matches of the first round of the World Cup 2014**

Table (2) shows the following:

The results of each team in its group and its order inside the group, it also shows the number of winning and defeat of each team and the number of scored points for or against it,

and the differences of what it gets and against it, and also shows the result of each match during the preliminary round which was the research topic.

### **Table (3)**

#### **The teams' order in the World Cup championship and the points' average of each team in the match (N= 76)**

Table (3) shows the following:

- The USA team achieved the first place in the championship by total points of 941 point, and points' average in one match is 104.6 point.
- The Serbian team achieved the second place in the championship by total points of 743 and points' average is one match is 82.6 points.
- The Egyptian team achieved the last place by total points: 311 and points' average in one match 62.2 points.
- The previous table shows that the results of the Egyptian team in the attack, as it got the worst attack and the worst defense during the championship.
- The researcher attributes the high percentage of points of the teams in the advanced places to their high performance and planning level of players during this championship, while he points

out that the more we get close to the late place, the lower the points get in the match .

- The researcher attributes the Egyptian results to 2 important factors:
  - first: the high skill & planning level of the teams of the group in which the Serbian national team participated and occupied the second place, while France came in the 3<sup>rd</sup> place, Spain in the 5<sup>th</sup> place and Brazil in the 6<sup>th</sup> place.
  - Second: the lack of experience of the Egyptian players compared to the teams participating the World Cup as they did not participate in the championship for 20 years. This agrees with the study of Shaaban Ibrahim (10), that there is a difference between the Egyptian national team and the world teams that is nearly twice in favor of the world teams.

**Table (4)**  
**The number of two points aiming which were registered during the first round matches (N= 60)**

Table (4) shows the following:

- The USA team had the greatest number of aiming on the circle as its players aimed during 5 matches 277 times, and achieved 167 successful aiming by percentage 603%, and occupied the second place among the teams.
- While the French team achieved the first place by total aiming of 178 and had the greatest percentage of scoring in the preliminary rounds by 61.8
- As for the Egyptian team, it came second from bottom by total aiming on the circle 203 from inside the arc and achieved 76 successful aiming by 41.9%, but it failed to achieve 110 aiming from inside the 3 points arc by 58.1%.

- The previous table shows that, there is a relation between the teams' order, the number of aiming and the success percentage in aiming. While it became clear that the more we get closer to the late places, the less gets the average of points in the match.
- This agrees with what Mahmoud Amer () concluded; that the huge progress in play tactics made this type of aiming gets the attention of most of the teams and players.
- The researcher also points out that the aiming from inside the 3 points arc included all types of 2 points aiming either the ladder or the jump aiming.

**Table (5)**  
**Aiming from outside the 3 points arc during the first round matches (N=60)**

Table (5) shows the following:

- The Australian team had the greatest percentage of successful aiming from outside the 3 points arc; as its players aimed 41 successful aiming from the total of 79 aiming (51.9%) during the five

- matches, through which the team came in the first place in aiming percentage on the circle.
- While the USA team occupied the first place in the 3 points aiming by total 90

aiming and performed 31 successful aiming (34.3%) in the match.

- From the previous table we notice that the Argentina team achieved 53 successful aiming from 137; by success percentage 38.7%, it was the greatest team in 3 points aiming.

- As for the Egyptian team, it came second from bottom in the championship by total of 35 successful aiming (28%) from 125 from outside the 3 points arc. Despite that the Egyptian team was one of the 6 most aiming teams; which puts it in second from bottom in the order of registration percentage from outside the 3 points arc by very

little percentage close to quarter meaning that each 4 aiming attempts it made one successful aiming.

- The researcher attributes this to that most of the teams paid attention to the organized defense which puts high pressures on the players aiming from outside the 3 points arc, and leads to the inability of the players to aim comfortably. Despite that the aiming from outside the 3 points arc gets the most concern of coaches and players as they pay great attention to increasing the training dose in order to develop accurate 3 points aiming all the year.

#### **Table (6)**

#### **The aiming from free throw during the first round of the championship (N= 60)**

Table (6) shows the following:

- The Spanish team had the biggest percentage of free throw (about 80%) from the total of 114 during the 5 matches in the preliminary round.

- While USA had 84 successful aiming from total of 118 were aimed in the first round (71.2%).

- The Egyptian team came second from bottom by 36

from 60 (61%); this percentage is very low specially that the free throw is the only skill that is performed in the match without any opponent.

- The researcher attributes the weak results of the Egyptian national team to that the players do not pay attention to the free throw during its performance especially the perfect free throw. It is known

that the free throw is one of the aiming types; it is the only skill that is performed without any presence of the opponents. It is also the only skill that must be performed by all the team players. This skill is very important in order to win; and it is necessary to pay attention

to it and to develop it. This agrees with the opinion of Mahmoud Abdel Dayem and Mohamed Sobhi Hassanin () that is important to train on executing the free throw successfully, as it affect most the matches and team results.

#### **Table (7)**

##### **The teams' order in the auxiliary pass skill**

- The American team had the greatest percentage in decisive pass (184) pass by 20.4 pass in one match, while the Spanish national team came in the 2<sup>nd</sup> place in passes number, and the Egyptian national team came in the last place in the decisive passes number by 10.2 passes in one

match which nearly half the percentage of the American team. This agrees with Tamer Mounir (2008) (3) as it proves the (positive) correlation that is statistically significant between using the swift attack and the level of the teams (research sample).

#### **Table (8)**

##### **The order of teams in the skill of attack and defense possession**

##### **From the 1<sup>st</sup> to the 24<sup>th</sup> (N= 60)**

The previous table and previous figures show that Angola national team came in the 1<sup>st</sup> place in the skill of attack follow-up by total 83, followed by New Zealand team which achieved 79 attack follow-up, then came in the 3<sup>rd</sup> place the American team by 63 follow-ups.

- It is clear that Spain national team came in the 1<sup>st</sup> place in defense follow-up skill by total of 159 follow-up,

followed by the Greek national team by 156, then in the 3<sup>rd</sup> place came the American team by 147 defense follow-up.

- It is also clear that the American team excelled in total general follow-up skill (attack & defense) by total of 210 follow-ups: 63 of them attack, and 147 defense. Despite that it occupied the 3<sup>rd</sup> place in both skills in the general order.



**Table (9)**  
**The percentage and order of the most influential aiming types (scoring points) of all teams' players during the preliminary round of all World Cup matches**

No.	Team	Total aiming	Aiming percentage to total aiming	Aiming percentage to total aiming	order
1	2 points aiming	4792	50.4	49.6	1
2	3 points aiming	2624	27.4	18.8	2
3	Free throw	2168	22.6	31.6	3
Complete total aiming		9584	100.0	100.0	

Figure (8)

Table (7) and figure (4) show the following:

The 2 points aiming was the most performed aiming types by 50%, followed by the aiming from outside the 3 points arc by 27.4% related to the number of aiming performed by all the teams, while the free throw came in the 3<sup>rd</sup> place by 22.6% of the aiming.

- 2 points aiming was most aiming type that contributed in scoring points by 49.6%, followed by the free throw by 31.6% of the number of aiming performed by all the teams. While aiming from outside the 3points arc came in the 3<sup>rd</sup> place by 18.8% of total number of aiming.

**Table (10)**  
**The comparison between the American & the Egyptian teams in aiming skills (N= 10)**

No.	skills	America	%	Egypt	%	Percentage difference
1	Aiming from inside the 3 points arc	167	60.3	85	41.9	18.4
2	Aiming from outside the 3 points arc	31	34.3	35	28	6.4
3	Free throw	84	71.2	36	61	10.2

Figure (9)

The USA (American) team occupied the 1<sup>st</sup> place in the championship by total points 941, and average of points' number in one match 104.6 points. While the Egyptian team came in the last place in the championship, and executed the worst attack during the championship by total 311 points and average of 62.2 points in one match.

- The USA team performed the biggest number of aiming on the circle from inside the 3 points arc; as its players aimed 277 times during the 5 matches and achieved 167 successful aiming by 60.3% though which it came in the second place among the teams. The Egyptian team came second from bottom in the championship by total 203

aiming at the circle, through which it achieved 85 successful aiming by 41.9%.

- The USA team came in the 13<sup>th</sup> in the order of the triple aiming by total 90 aiming achieved 31 of them by 34.4% in the match. As for the Egyptian team, it came second from bottom in the championship by total of 35 successful aiming by 28% from total of 125 aiming from outside the 3 points arc.

- The American team scored 84 free throws from total of 118 aimed in the 1<sup>st</sup> round of the championship by 71.2%. As for the Egyptian team it came second from bottom in the championship by 36 free throw from total of 60 by 61%.

**Table (11)****Comparison between the American & the Egyptian national teams in The auxiliary pass and follow-up (N= 10)**

- The American team achieved the greatest percentage of decisive pass by total number 184 by 20.4 pass in one match. The Egyptian national team came in the last place by 10.2 decisive pass in the match.
- The American national team excelled in total general follow-up skill (defense & attack) by total 210: 63 attack

**Conclusions & Recommendation:****Conclusions:**

In light of research aims and questions, we conclude the following results:

**First:** the conclusion of the performance of some skills affecting the basketball matches' results (2points aiming – 3 points aiming – free throw – influential pass - attack follow-up – defense follow-up) of the national teams participating in the 1<sup>st</sup> round of the World Cup Championship

1- France came in the 1<sup>st</sup> place in aiming from inside the 3 points arc by total 178, and had the greatest scoring percentage in the matches of the preliminary rounds by 1.8%.

and 147 defense follow-up despite it occupied the 3<sup>rd</sup> place in both skills in the general order. While the Egyptian team came in the 23<sup>rd</sup> place in the order of teams concerning the follow-up skill by total 142 follow-up divided on 48 attack and 94 defense follow-up.

2- The Australian team was the most scoring from outside the 3points arc; its players aimed 41 successfully from 79 by 51.9% during the 5 matches.

3- The Spanish team had the greatest percentage of free throw by 80% of total 114 free throw during the 5 matches in the preliminary round.

4- The American team had the greatest percentage of decisive pass by total of 184 pass and percentage 20.4 in one match.

5- Angola team performed the biggest number of attack follow-up skill by total 83.

6- The Spanish team came in the 1<sup>st</sup> place in defense follow-up skill by total 159.

7- The American team excelled in the total general follow-up skill (defense & attack) by total of 210; 63 attack follow-up and 147 defense follow-up, despite its occupation of the 3<sup>rd</sup> place in both skills in the general order.

**Second:** the conclusion of the aiming types' order in the match result:

1- It was clear that the 2points aiming was the most skill performed by the players by 50%, followed by aiming from outside the 3 points arc by 27.3% concerning the number of aiming performed by all the teams. The free throw skill came in the 3<sup>rd</sup> place by total of 22.6%.

2- The 2 points aiming was the most skill contributing in scoring points by 49.6%, followed by the free throw by 31.6% of the aiming performed by all the teams, while the aiming from outside the 3 points arc came in the 3<sup>rd</sup> place by 18.8% of total aiming.

**Third:** the conclusion of the comparison between the percentage of the studied skills of the Egyptian & the American national teams which occupied the 1<sup>st</sup> place in the 1<sup>st</sup> round of the championship.

1- The American team came in the 1<sup>st</sup> place in the championship by total 941 points and average of points in one match 104.6 points. While the Egyptian team came in the last place and also performed the worst attack during the championship by total of 311 points and average 62.2 points in one match.

2- The American team had the biggest number of aiming on the circle from inside the 3 points arc; its players aimed 277 times, achieved 167 successful aiming by 60.3 in 5 matches and came in the 2<sup>nd</sup> place among teams. As for the Egyptian team, it came in the last place by total of 203 aiming at the circle, achieved 85 successfully by 41.9%.

3- The American team came in the 13<sup>th</sup> place in the triple aiming by total of 90 times, achieved 31 of them by 34.4% in the match. While the Egyptian team came second from bottom in the championship by 35 successful aiming by 28% of total 125 aiming from outside the 3 points arc.

4- The American team scored 84 free throws from 118 aimed in the 1<sup>st</sup> round of the championship by 71.2%. As

for the Egyptian team, it came second from bottom by 36 free throws from total of 60 by 61%.

5- The American team had the biggest percentage of decisive pass by total of 184 and percentage 20.4 pass in one match. The Egyptian team came in the last place by 10.2 decisive pass in the match.

6- The American team excelled in the total general follow-up skills (defensive & attack) by total 210; 63 attack and 147 defensive follow-up despite it came in the 3<sup>rd</sup> place in both skills in the general order. The Egyptian team occupied the 23<sup>rd</sup> place in teams order in the follow-up skill by total of 142; divided as 48 attack and 94 defensive follow-up.

### **Recommendations:**

Depending on the results concluded in this research, the researcher recommends the following:

1- Analyzing the technical performance of the Egyptian men/women junior national teams, and comparing them with the technical performance of the winner teams in the championship so that to be able to develop and prepare the junior players.

2- To pay attention to training on the skill of aiming from inside the 3 points arc in all circumstances.

3- To pay attention to training on the skill of free throw and to designate enough time for training on this skill inside the training unit, besides taking care of training on it in special separated training units.

4- To pay attention to training on the swift attack performance.

5- To pay attention to training on the skill of follow-up specially the defensive for men/women juniors.

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