

Employing the Application (Steazzi Handball) to Analyze the performance of the Egyptian Team Participating in the Men's Handball World Championship in Sweden and Poland (2023)

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Summary

The research aims to conduct an analytical study of the level of performance of the Egyptian team participating in the World Cup Men's handball in Poland and Sweden 2023.

The researcher employed a descriptive approach in the survey studies for its suitability to the nature of the research and its objectives. The research sample included (9) matches of the championship matches for the Egyptian team in the tournament.

Among the most important findings of the research: (the effectiveness of the attack of the Egyptian national team players reached a success rate of (63.5%), the effectiveness of its defense reached a success rate of (24.3%), while the effectiveness of goalkeepers reached a success rate of (33.4%)- The most successful places in the attack are (from breakthroughs) with a success rate of (81.6%), while the least successful places are (from 9 meters) with a success rate of (49.2%) - the weakest places in defense are (from breakthroughs) with a success rate of only (15.9%)).

Among the most important recommendations of the research: (Permanent analysis of international and world championships on an ongoing basis to find out the new techniques in the offensive and defensive methods of play constantly to improve the level of Egyptian handball players -Taking advantage of modern technological applications in match analysis processes, such as in the use of the application (Steazzi Handball) to analyze handball matches - guided by the matches of the Danish national team as the best team in the world today (champion in the tournament). - The research also focuses on the integrated preparation of the team from all aspects during the training units of the national team players in the case of attack on the accuracy and strength of the aim (from a distance of 9 meters), and in the case of defense on the individual and collective



defensive tactical work, to reduce the success rate of penetrations of the players of the competing teams to the team's goal area).

Key words: Application (Steazzi Handball), Performance Analysis, Egyptian team.

توظیف تطبیق (Steazzi Handball) لتحلیل أداء الفریق المصري المشارك فی بطولة العالم لكرة الید رجال بالسوید وبولندا (۲۰۲۳م)

الملخص:

يهدف البحث إلى إجراء دراسة تحليلية لمستوى أداء الفريق المصري المشارك ببطولة كأس العالم لكرة اليد رجال ببولندا والسويد ٢٠٢٣م.

وقد استخدم الباحث المنهج الوصفي باسلوب الدراسات المسحية لمناسبته لطبيعة البحث وتحقيق أهدافه، واشتملت عينة البحث علي عدد (٩) مباريات من مباريات البطولة والخاصة بفريق المنتخب المصري بالبطولة.

ومن أهم استنتاجات البحث: (فعالية هجوم لاعبي المنتخب المصري بَلغت نسبة نجاحها (٥.٣٠%)؛ وفعالية دفاعه بَلغت نسبة نجاحها (٣٤٠%)؛ بينما فعالية حراس مرمي بلغت نسبة نجاحها (٣٠٠%)؛ بينما فعالية دفاعه بَلغت نسبة نجاحها (٣٠٠%)، بينما أكثر الأماكن نجاحًا في الهجوم هي (من عمليات الاختراق) بنسبة نجاح بَلغت (١٠٠٨%)، بينما أقلها نجاحًا هي (من ٩ أمتار) وبنسبة نجاح بَلغت (٢٠٠٤%) – أضعف الأماكن في الدفاع وهي (من الاختراق) بنسبة نجاح بَلغت فقط (١٠٠٩%)).



الدفاع علي العمل الخططي الدفاعي الفردي والجماعي؛ لتقليل نسبة نجاح اختراقات لاعبي المنتخبات المنافسة لمنطقة مرمى المنتخب.

Employing the Application (Steazzi Handball) to Analyze the performance of the Egyptian Team Participating in the Men's Handball World Championship in Sweden and Poland (2023)

Introduction and Research Problem:

Handball is one of the team games that has been positively and clearly affected by the development of various sciences related to the sports field, as well as the techniques and styles of preparing teams. Preparation always contributes to the high level of players physically, skillfully and tactically, and that is reflected clearly in the high level of performance in various tournaments and competitions, as it is considered one of the fastest competitive team games, which depends on scoring the largest number of goals within the opponent's goal at the time specified for the match. (3, 163-164)

The method of analyzing matches in handball is one of the coach's tools in objectively identifying the level of each player of the team or the level of the team as a whole when performing defensive or offensive skills, whether in training or in the matches themselves. The coach always seeks to collect information to help him comprehend and track the extent to which his players implement and follow the required plans and the level of their mastery of skills so that the focus later is merely on the weaknesses in the team's performance. (1,304)

This is confirmed by (**Pfeiffer,M., Perl, J**) (2006) in the following lines: the need to conduct scientific research that rely on codified observation of motor performance in team games, including handball, and based on those data based on performance analysis, we can reach some of the recommendations on improving tactical behavior and training on tactical processes. (9, 21)

Mohamed Yasser Hassan (2015) indicates that the tactical work in handball is conducted during competitive situations with heterogeneity. It is difficult to control them and subject them to measurement and evaluation, as they require special procedures, so that the measurement can be accurate, honest and consistent and during a competition, as observation



may be of one player, a group of players, or the team as a whole while they are implementing a plan component or tactical formations, whether offensive or defensive, throughout the events of the match, which are prompt and speedy. However, technological means of visual recording and analysis programs have made it possible to control this and the event as a whole, allowing the plans to be codified and to make sure of their effectiveness and production rates. (8, 202)

Through the researcher's reference survey of the results of the Egyptian national team during the men's world championships over the past two decades, he found fluctuations in the level of the team since obtaining its highest rating. In the men's world championships in the World Championship in France, achieving fourth place in (2001), then the national team ranked (15) in the Portugal Championship (2003), then ranked (14) in Tunisia (2005), then fell again to place (17) in the German Championship (2007), then climbed to position (14) in the Croatia (2009) and Sweden (2011) championships, then fell again to position (16) in Spain, then rose again to place (14). In the Qatar Championship (2015), then to the 13th place in the French Championship (2017), then there was an upward boom in the ranking of the Egyptian national team's position, it became one of the eight major teams in the world by obtaining the 8th place in the tournament organized by Germany and Denmark (2019), and finally the pace of the team's rise continued during the last world championship, which was held on the land of our dear Egypt in (2021), achieving position (7) among the top teams of the game at the global level.

In view of the great development witnessed in recent years in the rules of the game in the world, which necessitated the need for this development to keep pace with a similar development in the evaluation styles of the game and reliance on modern applications, including the application (Steazzi Handball), which is one of the best, fastest and most accurate scientific means used in evaluating the performance of players in matches on the field by analyzing the actual performance result and build the training program and develop the appropriate methods of playing for the team.

This is confirmed by (Abdel Fattah, Amr Hussein) (2009) that technical analysis is a basic and reliable diagnostic step in improving performance and reflects qualitative analysis and the possibility of predicting the nature of motor performance and the time stages of its



implementation and predicting the extent of skill development of players during actual matches. This is mainly as it is provided as a basis for understanding the method in which the match is performed as a first stage and training on it as a second stage. (2, 24)

This prompted the researcher to combine the use of modern technological applications in evaluating the performance of players during actual matches, such as the (Steazzi Handball) application in knowing the effectiveness of the performance of the Egyptian team during (the 2023 Men's World Handball Championship), which was held in Sweden and Poland from (11/1/2023) to (29/1/2023) in its twenty-eighth tournament.

Importance of research:

- 1- Identifying the points of strengths and weaknesses of the Egyptian team's performance during the Men's Handball World Championship Poland and Sweden 2023.
- 2- Benefiting from technological applications in analyzing the performance of handball teams during competitions.
- 3- The (Steazzi Handball) application helps to provide immediate feedback with information during the match about the level of team performance, which is associated with the making decisive decisions by the coach and helping him develop his team's performance.
- 4- Showing a factor for speeding of extracting reports on team performance compared to manual analysis.
- 5- This application is considered an auxiliary tool in the systems of selecting players by the coach, in the light of their results during the match.

Research Objective:

The research aims to conduct an analytical study of the level of performance of the Egyptian team participating in the championship Men's Handball World Cup in Poland and Sweden 2023, by identifying the following sub-goals:

- 1- Identifying the highest places successful shooting rates in the Egyptian team's attack during its matches in the tournament.
- 2- Identifying the weakest places defended by the Egyptian team during matches in the tournament.
- 3- The success rate of the Egyptian team's goalkeepers during their matches in the tournament.



Research Questions:

- 1- What are the most successful places in the Egyptian team's attack during its tournament matches?
- 2- What are the weakest places that the Egyptian team defends during its matches in the tournament?
- 3- What is the success rate of the Egyptian team's goalkeepers during their matches in the tournament?

Research terms:

Analysis:

(Abd al-Rahman, Kamal al-Din Darwish., et al.) (2002) defined it as "a statistical educational method to track the status and progress of the team, as it depends on identifying and clarifying the abilities of the player or team. Thus, it helps clarify the methods and possibilities of criticism in a tangible and thoughtful manner, and this provides opportunities for success and winning in matches; thus, achieving the goals set for the team. (3, 273)

Reference studies:

Study: (Gamal Al-Din, Muhammad Al-Dowi) (2022): It aims to identify the importance of the assist and its effectiveness at the level of the high-level teams of the World Handball Championship for men Egypt 2021, by identifying the percentage of goals scored from the assist compared to the total goals of the matches. The research sample, the most effective areas, and positions in decisive passing through the matches of the research sample, and the most effective areas and centers of receipt and termination through the matches of the research sample, and the researcher used the descriptive approach. The research sample consisted of matches of the final rounds of the Handball World Championship for men Egypt 2021, which numbered (4) matches. One of the most important results of the study was that the percentage of goals from the assist is the highest compared to the total goals of the match, and that the players who benefit most from the assist and the most scoring are the players of the circle, followed by the left wing, then the right wing, and then the left back defender. (4)

Study: (**Hussein, Wael Ahmed**) (2021): It aims to analyze the defensive and offensive performance of the national handball team in the 2021 World Championship. The researcher used the descriptive survey method, and the research sample reached the number of matches (7) matches, One of the most important findings of the study was that the offensive formation represents the highest repetition among the offensive



formations, and that the offensive formation (3:3) represents the highest repetition of offensive formations, while the defensive formation (6: 0) represents the highest frequency among defensive formations. (7)

Study: (Sayed, Mahmoud Thabet) (2021): It aims to identify the percentage of goals scored from the offensive performance (individual and collective) for both the Egyptian team and the competing teams during matches and runs in both cases of victory and defeat, and the researcher used the descriptive approach from survey studies due to its suitability to the nature of the research. The research sample included the Egyptian team's matches with the competing teams, which it played in the tournament, which numbered (6) matches in the World Cup in France 2017, and Egypt ranked (13) out of (24) teams. The most important outcome of the study is the effectiveness of the offensive skill performance of the Egyptian handball team players, due to the cohesion and strength of the offensive and defensive skill performance of the Egyptian national handball team players. (11)

Study: (Sayed, Amr Hassan) (2021): It aims to analyze the level of skill performance of the shooting skill of some high-level teams to determine the most goals scored according to search variables. The researcher used the descriptive approach from the survey studies due to its suitability to the nature of the research. The research sample included the quarter-final matches, the semi-finals, the match to determine the third place and the final match within the matches of the 2021 Men's World Cup in Egypt, in its version (27), and the number of teams participating in the tournament was (32) team which was held from 13/1/2021 AD to 31/1/2021 AD. One of the most important results of the study was that the front-line centers in the matches of the research sample teams achieved the highest success rate of front-line centers from the (6m) (L6- M6- R6), where the success rate of shooting from those centers was (73.82%).

Study: (Hatzimanouil, D.) (2022): It aims to analyze the performance of goalkeepers and the final ranking of the team in the men's international handball championships, where (65) matches of the European Men's Handball Championship (2020) were analyzed. The dependent variable was the final ranking of the team in the tournament, where they were divided into three groups of centers from (1:4), (5:12) and (13:24), and the independent variables were the statistics related to goalkeepers. One of the most important findings of the study was the existence of a positive and statistically significant correlation between the actions of



goalkeepers alone and their efficiency in saves from (7) meters and in the final order of their teams, as well as the existence of a positive and statistically significant correlation between the actions of goalkeepers with the efficiency of their defensive colleagues in saves from (9) meters and in the final order of their teams. (5)

Search Procedures:

Research Methodology:

The researcher relied on the descriptive approach in the style of survey studies for its suitability to the nature of the research and the achievement of its objectives.

Research Community:

The research sample included the matches of the Men's Handball World Cup 2023, which was held in Poland and Sweden from (11/1/2023) to (29/1/2023) in its twenty-eighth edition.

Research sample:

The research sample was selected purposefully, numbering (9) matches from the championship matches for the Egyptian national team in the tournament, and its description was as shown in Table (1):

Table (1): Description of the research sample of the matches according to the roles and the result of the match

	Round	Match	Match Date	Score	Winner	Final Place	
1-	Preliminary	Egypt x Croatia	13/1/2023	31:22			
2-	Round Group (G)	Egypt x Morocco	15/1/2023	30:19			
3-		Egypt x USA	17/1/2023	35:16	Egypt	Seventh	
4-		Egypt x Belgium	19/1/2023	33:28			
5-	Main Round	Egypt x Bahrain	21/1/2023	26:22			
6-		Egypt x Denmark	23/1/2023	25:30	Denmark	First (Champion)	
7-	Quarter- Finals	Egypt x Sweden	25/1/2023	22:26	Sweden	Fourth	
8-	Diagonant (5.0)	Egypt x Germany	27/1/2023	34:35	Germany	Fifth	
9-	Placement (5:8)	Egypt x Hungary	29/1/2023	36:35	Egypt	Seventh	



Reasons behind choosing the research sample:

- The World Handball Championship represents the meeting of the peaks of the level of physical, skill and tactical performance of handball players globally.
- The players of the national teams who participate in the World Championship represent several different pioneers of world handball.
- All matches are held in the same conditions in terms of organization, climate, stadiums, and strength of competition.

Research Areas:

- **The human field:** the Egyptian national team players participating in the tournament.
- **Spatial field:** Men's Handball World Cup (2023), held in Poland and Sweden, in its 28th edition.
- Time Range: The tournament was held from (11/1/2023) to (29/1/2023)

Techniques and Methods of data collection:

In line with the research methodology, the researcher employed:

- Structured observation as a tool for data collection by: Designed match analysis form by the International Game Federation (**IHF**) and translated by the researcher as shown in (**Appendix 1**).
- A modern high-potential laptop for the researcher to watch, record and then analyze the matches of the tournament. **Dell Inspiron Core (i7).**
- Simulation application (Blue Stacks 10), so that you can use mobile applications on your laptop.
- (Gold Plus) application: to watch and record matches from the laptop screen using the
 - (Win + G) feature to record screen events.
- **Steazzi Handball paid application**, to benefit from it with all its features and advantages in the analysis process, to detect the level of performance of the Egyptian team in the tournament.

Exploratory Study: (Appendix (3))

One match was analyzed from the research community and outside the main study sample, which is the opening match between the national team (France vs. Poland), on (1/11/2023), and the results of the exploratory study resulted in:

- Verifying the effectiveness of the researcher's laptop in recording the events of the match and the effectiveness of each of the applications used in this (Blue Stacks 10- Gold Plus).



- Verifying the effectiveness of the application (Steazzi Handball) in the process of analyzing the match and the possibility of exporting reports for the analysis of that match and dumping those analyzes in the relevant form.

Basic study:

The researcher recorded the matches of the Egyptian team in the tournament from (13-29/1/2023), after which the matches were analyzed by the (Steazzi Handball) application from (1/2/2023) until (15/6/2023), then the results of the matches under research were unloaded to conduct statistical treatments

Statistical Survey:

The researcher used the program (SPSS 29) for the following statistical treatments: (Frequency- Means- Percentage- Efficiency Equation).

Presentation and Discussion of results:

(A) Presentation of Results:

In light of the objective and questions of the research, and within the limits of the research sample, the results will be presented as follows:

(1) To answer the question, "What are the most successful shooting rates in the attack of the Egyptian team during its matches in the championship"?, the research proposes the following findings:

Table (2) Shooting rates of Egyptian national team players during their matches in the tournament

	Players	Shots							
Matches		Goals/shots (G/s)	From (6M)	From (Wing)	From (9M)	From (7M)	Fast Breaks (FB)	Breaks- throughs (BT)	Empty Goal (EG)
1-	Egypt x Croatia	31/42	6/7	3/3	12/20	0/2	2/2	7/7	1/1
2-	Egypt x Morocco	30/47	8/8	5/8	8/15	2/2	2/8	2/3	3/3
3-	Egypt x USA	35/50	11/14	3/3	11/21	2/2	6/7	2/3	
4-	Egypt x Belgium	33/48	13/23	4/6	5/5	2/1	4/5	5/5	1/2
5-	Egypt x Bahrain	26/39	11/19	3/3	1/4	2/3	6/6	3/4	
6-	EgyptxDenmark	25/45	10/13	5/9	4/16	1/2	2/2	3/3	
7-	Egypt x Sweden	22/39	8/12	2/5	8/16	1/3		3/3	0/1
8-	Egypt xGermany	34/60	4/15	3/6	6/14	4/4	4/4	13/17	
9-	Egypt x	36/58	8/13	7/10	10/22	5/5	4/4	2/4	



Hungary								
Totals	272/428	79/124	35/53	65/132	18/25	30/38	40/49	5/7
Efficiency Equation	63.5%	63.7%	66%	49.2%	72%	78.9%	81.6%	71.4%

It is clear from Table (2) that the Shooting rates of the Egyptian national team players during their matches in the tournament was (63.5%), which is above average according to the total number of successful shots compared to the number of attempts to aim at the goal of the teams competing with him in the tournament.

It is also clear from Table (2) that the most successful places in the Egyptian team's shooting from (Breaksthroughs - Fast Breaks) with rates of (81.6% - 78.9%) respectively; It is a high percentage that exceeded (75%), while the following places came in percentages above the average respectively, which are from (7 meters - empty goal - the wing - 6 meters) with percentages (72% - 71.4% - 66% - 63.7%) respectively.

It is also clear from Table (2) that the least successful places in the shooting rates of the Egyptian team are an area (of 9 meters) with a success rate of (49.2%) approaching the average level.

(2) To answer the question, "What are the weakest places defended by the Egyptian team during its matches in the tournament?", the researcher presents his findings as follows:

Table (3): The level of performance of the players of the rival teams of the Egyptian national team during its matches in the tournament

	Players	Shots									
Matches		Goals/shots (G/s)	From (6M)	From (Wing)	From (9M)	From (7M)	Fast Breaks (FB)	Breaks- throughs (BT)	Empty Goal (EG)		
1-	Croatia x Egypt	22/40	10/12	0/2	5/17	3/4	0/1	4/4			
2-	Morocco xEgypt	19/50	6/16	1/4	5/17	1/2	2/5	4/6			
3-	USA x Egypt	16/42	6/14	1/2	7/21	0/1	1/2	1/2			
4-	Belgium x Egypt	28/47	15/28	5/5	3/7		4/6	1/1			
5-	Bahrain x Egypt	22/50	7/23	0/3	2/8	3/4	3/3	6/8	1/1		
6-	DenmarkxEgypt	30/42	7/10	2/2	14/22	2/2	1/2	4/4			
7-	Sweden x Egypt	26/42	9/14	4/5	5/11	2/3	1/2	5/7			
8-	GermanyxEgypt	35/44	11/12	3/5	10/16	2/2	2/2	6/6	1/1		
9-	Hungary	35/61	13/17	2/3	9/25	2/4	3/6	6/6			



xEgypt								
Totals	233/418	84/146	18/31	60/144	15/22	17/29	37/44	2/2
tack Effectiveness Competing Teams	75.7%	57.5%	58.1%	41.7%	68.2%	58.6%	84.1%	100%
fectiveness Defense of Egyptian Team	24.3%	42.5%	41.9%	58.3%	31.8%	41.4%	15.9%	0%

It is evident from Table (3) that the effectiveness of the Egyptian team's defense reached (24.3%), which is a weak percentage below average, as can be noticed from the table that in cases of playing without a goalkeeper, the team's defense success rates are non-existent up to 0%, which is normal in those situations that are difficult to defend.

It is also evident from Table (3) that the least defensive places in cases of the presence of the goalkeeper, are from (Breaksthroughs - 7 meters) by (15.9.% - 31.8%) respectively, while the following places came with percentages close to the average are from (Fast breaks- the wing - 6 meters) with percentages of (41.4% - 41.9% - 42.5%) respectively.

It is also evident from Table (3) that the most successful places in the defense of the Egyptian team are an area (of 9 meters) with a success rate of (58.3%), which is a good percentage that exceeds the average level.

(3) To answer the question "What is the success rate of the Egyptian team's goalkeepers during their matches in the tournament"?

Table (4) The level of the Egyptian national team's goalkeepers during its matches in the tournament

	tional team oal Keepers	Saves									
Matches		Goals/shots (G/s)	From (6M)	From (Win)	From (9M)	From (7M)	Fast Breaks (FB)	Breaks- throughs (BT)			
1-	Egypt x Croatia	10/32	1/11	1/1	6/11	1/4	1/1	0/4			
2-	Egypt x Morocco	21/40	8/14	2/3	6/11	1/2	3/5	1/5			
3-	Egypt x USA	12/28	4/10	1/2	5/12	1/1	0/1	1/2			
4-	Egypt x Belgium	10/38	6/21	0/5	3/6		1/5	0/1			
5-	Egypt x	16/38	8/15	3/3	3/5	0/3	0/3	2/8			



	Bahrain							
6-	Egypt xDenmark	8/38	3/10	0/2	4/18	0/2	1/2	0/4
7-	Egypt x Sweden	11/37	3/12	1/5	4/9	1/3	1/2	1/6
8-	Egypt xGermany	8/43	1/12	2/5	5/15	0/2	0/2	0/6
9-	Egypt x Hungary	21/55	3/16	0/2	12/21	2/4	3/6	1/7
	Totals	117/350	37/121	10/28	48/108	6/21	10/27	6/43
	Efficiency Equation	33.4%	30.6%	35.7%	44.4%	28.6%	37 %	14%

Moreover, it is evident from Table (4) that the success rate of the Egyptian national team's goalkeepers in saving the shots of the players of the teams competing with them in the tournament reached (33.4%), which is a good percentage for the goalkeeper position .Which exceeded (25%) of the successful responses .

It is also clear from Table (4) that the most successful places in the Egyptian national team's goalkeepers saves for the incoming shots from (9 meters) by (44.4%), while the least successful places in the Egyptian national team's goalkeepers saves the shots coming to them from (Breaksthroughs) by (14%).

(B) Discussion of Results:

By reviewing the results of Table (2), it becomes clear that the percentage of the total number of goals scored by the Egyptian national team players during their matches in the tournament is (272) goals out of (428) successful attempts to target competitors, with a success rate of (63.5 %).

Also, the most successful places in the attack of the Egyptian team from (breaksthroughs) by achieving (40) goals from (49) attempts to correct from the process of penetration of the defenses of the rival teams, with a success rate of (81.6 %). This was followed by the operations (Fast breaks) with the achievement of (30) targets out of (38) attempts to aim from the fast breaks operation, with a percentage of (78.9 %).

The researcher may attribute this to the distinguished performance of the Egyptian national team players with the ability to exploit their skills in opening gaps in the defenses of the competing teams and then Breaksthroughs, whether by facing the defender, especially in deception,



Or through the reservation of players, especially the circle player, as well as the superiority of the Egyptian national team players in investing the defensive mistakes of the competing teams and then making the shift from defense to attack "Fast breaks", as a result of their ability to play fast-paced and physical superiority of the continuous pressure on the ball and the speed of reaction they have.

This result is consistent with the results of the study of (Sayed, Amr Hassan) (2021) (10), (Sayed, Mahmoud Thabet) (2021) (11), (Hussein, Khaled Mohamed) (2019) (6), as all their studies confirmed the lowest level of teams with the highest positions (the top eight in the game at the level of the Men's Handball World Cup), finding it difficult and weak to finish most of their attacks by scoring goals, which gives opportunities for rival teams with a high level of control and launch for the fast breaks and then distinguish in the success rates in scoring.

In addition to the majority of those high-level teams, they often respond to the opposing team's counterattack with a counterattack, with playmakers available in counterattacks who have the ability to exploit their individual skills through efficient performance and tactical configurations.

It is also clear from Table (2) that the least successful places in the Egyptian team's attack are from (9 meters) by achieving (65) goals from (132) shooting attempts from (the 9-meter area), with a success rate of (49.2 %).

The researcher may attribute this to the distinguished performance of the backline players of the competing teams of the Egyptian national team, especially the players of the high-level teams in the tournament, as the Egyptian team faced both teams (Denmark - Sweden - Germany - Hungary) and they are among the top eight in the final ranking of the teams' positions in the tournament,. Therefore, their backline players are characterized by great physical fitness in the corresponding skills and defensive repelling wall, as well as the distinction of their goalkeepers significantly to a large degree, and this was shown in the percentages of their saves on balls. From long-distance shooting during their tournament matches.

This is consistent with the result of shooting operations from the 9-meter area of the Egyptian team against Denmark (the champion of the championship) in the match that was held during the tournament, during which they achieved (4) goals from (16) shooting attempts with a success



rate of only (25%), and this is an affirmation of the possession of these high-level teams with high potential backline players on the defensive side.

By reviewing the results of Table (3), it becomes evident that the percentage of the total number of goals scored by the players of the competing teams of the Egyptian national team during their matches in the tournament is (233) goals out of (418) successful attempts to shoot, with a success rate of (75.7%), and therefore a success rate for the Egyptian team's defense of (24.3%), which is a weak percentage below the average, as it is clear from the table that in cases of playing without a goalkeeper, the success cases of the team's defense are non-existent, up to (0%) and this is normal in those situations, which are difficult to defend.

The researcher may attribute this to the excellence of the players of the competing teams with the speed of response and accuracy of shooting on the empty goal, in addition to their distinction with good visual vision and speed of corrections before completing the descent of the goalkeeper.

It is also clear from Table (3) that the least defensive places in cases of the presence of the goalkeeper, which is (from Breakthroughs), where the players of the rival teams achieved (37) goals from (44) attempts to shoot, and therefore a success rate for the defense of the Egyptian team amounted to only (15.9%).

The researcher may attribute this to the proficiency of the players of the competing teams in the ability to exploit their skills in opening gaps between the defenders of the Egyptian national team and Breakthroughs, whether by confronting the defender, especially in deception and solitary goal, or through players lockup, especially the players of the circle. In addition, it is difficult for goalkeepers to save those shots that come from breakthroughs due to the proximity of the aiming player to the goal.

It is also clear from Table (3) that shooting from a distance of (7 meters) is the second weakest place in the Egyptian team's defense, as the players of the rival teams achieved (15) goals from (22) attempts to shoot, and therefore a success rate of the Egyptian national team's goalkeepers amounted to only (31.8%).

It is worth noting that the players of the competing teams were efficient in terms of shooting without pressure, despite the high level of goalkeepers, but the aiming player is in direct confrontation with the



goalkeeper and their superiority in scoring goals in particular for high-level teams, as the Egyptian team has faced in the tournament (4) teams from (8) adult teams at the tournament level. For example, the percentage of both the Danish team and the German team in shooting from a distance of 7 meters in Their matches against the Egyptian national team (100%) through their argument in scoring each of them two goals from two chances to shoot from a distance of 7 meters.

It is also clear from Table (3) that the most successful places in the defense of the Egyptian national team are from a distance of (9 meters) with a success rate of (58.3%), which is a good percentage that exceeds the average level.

The researcher may attribute this to the excellence of the performance of the backline players of the Egyptian national team and their distinction in physical fitness significantly in the corresponding skills and the defensive wall of resistance, as well as the distinction of the team's goalkeepers significantly in the percentages of their tackling of balls from long shooting. This is in addition to the proficiency of the Egyptian team in the defense of the region (6-zero) and showing great cooperation between the players and the goalkeeper in forming a strong defensive wall against long shots on the team's goal.

This result is consistent with (Sayed, Mahmoud Thabet) (2021) (11), which confirmed the cohesion and strength of the offensive and defensive performance of the Egyptian national handball team players, and also with (Hussein, Wael Ahmed) (2021) (7), which confirmed that the most successful defensive formation of the Egyptian national team and the most frequent is the defensive formation (6: 0), which makes it difficult for the players of the rival teams to shoot from a distance (The 9 meters) on the national team's goal.

By reviewing the results of Table (4), it becomes clear that the percentage of the total number of successful saves for the goalkeepers of the Egyptian national team is (116) saves out of the total number of (349) shots on goal. It is a success rate of (33.4%), which represents a good percentage for the goalkeeper position, which exceeded (25%) of the successful saves, that the most successful places in the saves of the Egyptian national team goalkeepers for the shots coming to them (from 9 meters) by (44.4%), which indicates the efficiency of cooperation between goalkeepers and players in the case of formations and defensive formations



in countering the attacks of the rival teams of the Egyptian national team during its matches in the tournament.

This result is consistent with the results of (Hatzimanouil, D.) (2022) (5), which confirmed the existence of a positive and statistically significant correlation between the actions of goalkeepers with the efficiency of their defensive colleagues in saves from (9) meters and in the final order of their teams in the championship.

Thus, the research questions were answered, and its goal was verified in detecting the level of efficiency of the Egyptian team's performance in the tournament, and this is shown in the following figure:

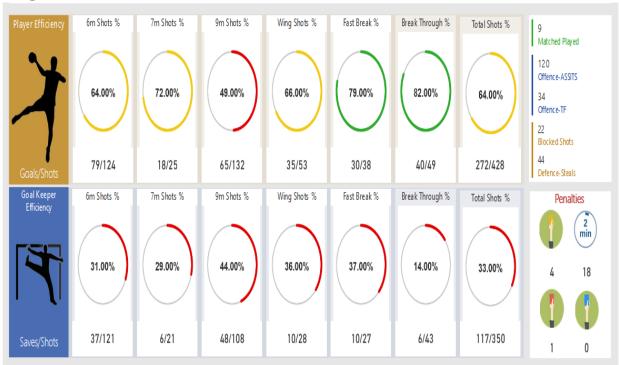


Figure (1) The level of effectiveness of the Egyptian team (players - goalkeepers) during its matches in Men's Handball World Cup in Sweden and Poland (2023)

Conclusions and recommendations:

(A) Conclusions: In light of the objectives and questions of the research and based on the scientific procedures and the results of analyzing the matches and conducting statistical survey, the researcher reached the following findings:



- (1) The effectiveness of the attack of Egyptian national team players reached a success rate of (63.5%), where (272) goals were scored from (428) attempt to shoot at the goal of their rival teams in the tournament.
- (2) The effectiveness of Egyptian team's defense reached a success rate of (24.3%), as the players of Egyptian national team's rival teams were able during their matches in the tournament (233) goals out of (418) successful attempts to shoot.
- (3) The effectiveness of Egyptian national team goalkeepers reached a success rate of (33.4%), where they achieved (116) saves out of a total number of (349) shots on their goal.
- (4) The most successful places of attack by Egyptian team are from (Breakthroughs) with a success rate of (81.6%), while the least successful is from 9 meters with a success rate of (49.2%).
- (5) The weakest places in the defense of Egyptian team, which is from (Breakthroughs), where the players of the rival teams achieved (37) goals from (44) attempts to shoot, and therefore a success rate for Egyptian team's defense of only (15.9%).

(B) Recommendations: Based on the conclusions of the research topic, the researcher makes the following recommendations:

- (1) Permanent analysis of international tournaments on an ongoing basis to find out what is new in offensive and defensive playing methods continuously to improve the level of Egyptian handball players.
- (2) Benefiting from modern technological applications in match analysis processes, such as the use of the (Steazzi Handball) application to analyze handball matches.
- (3) When preparing a team for world championships, the performance of the participating teams must be carefully studied; so that we comprehend the strengths and weaknesses of these teams.
- (4) Guided by the matches of the Danish national team as the best team in the world currently (champion in the tournament) in the implementation of the tactical work of the Hom and individual with high efficiency.
- (5) Focusing on the integrated preparation of the team from all aspects to ensure the stability of the level throughout the competition period.
- (6) Focusing on the accuracy and strength of the shooting (from a distance of 9 meters), during the training units of the national team players in the case of attack in order to achieve a high success rate in scoring goals against high-level teams (the top eight in the game)
- (7) Focusing on the defensive tactical work individually and collectively, during the training units of the national team players in the case of



defense to reduce the success rate of penetrations of players of competing teams to the team's goal area.

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