

Strategic Spotlight: Evaluating The Goal-Scoring Prowess Of Individual Players In Saudi Arabia Handball Team During Asian Men's Qualification For Olympic Games 2024 Clash Against India

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ABSTRACT

Analyzing Saudi Arabia's offensive strategies is crucial for identifying key attacking zones, pinpointing influential attacking players, and discerning the preferred scoring areas within the goalpost. Given that the competition was an Olympic qualifier, this examination aims to unravel the reasons behind the substantial score discrepancy observed between the two teams. This analysis was carried out via hand notation and visualization were done in Kinovea 0.9.5 software, where video procured via secondary source (YouTube) that reveals the 29 successful attacks going through the middle of the court, it became clear that this area was both the most vulnerable defensive zone and the preferred attack zone. Furthermore, it turned out that the lower right corner of the goal post was the most vulnerable, giving up the most successful throws (18). With seven goals, left-handed player with jersey number 15 was Saudi Arabia's most influential attacker. Closely behind, with six goals each, were jersey numbers 91 and 99. Saudi Arabia scored 25 goals in the first half and 21 goals in the second half of the match, each lasting 30 minutes, showcasing an impressive degree of consistency in their offensive actions. The defense was stronger in the game's fourth quarter than it was in the first, despite the fact that the number of goals conceded in each half was about the same (± 4). Alternatively, there's a chance that the attackers' weariness reduced their ability to score goals.

Keywords: Performance Analysis, Hand Notation, Handball, Saudi Arabia, opponent analysis

INTRODUCTION

Handball is regarded as a sport and is growing in popularity all over the world. Since it's derived from the way people naturally move. How the game plays out is also influenced by its attraction, which is derived from its fast-paced action and

in-person interactions with players. A solid physical foundation is vital for sportsmen, as this aggressive element highlights (Robert, 2023). Players of handball typically have toned bodies because the sport works for every muscle

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group in the body. Physical prowess is not the only factor in this sport, though. Like any physical exercise, handball requires careful planning and execution to be successful. Players must follow fair play and sports regulations to guarantee sportsmanlike behavior during the game (Hughes & Franks, 2015). At the Oldrup Gymnastics School, handball was first played in the late 1800s. In a running game with two goals in 1898, fourteen players passed the ball using their hands. The game's regulations were formalized in 1906. The development of handball is attributed to both Germany, alleging ties to “Königsbergerball,” and Czechoslovakia, relating it to “hazena.” The countries that comprise the International Amateur Handball Federation (IAHF) are Germany, Czechoslovakia, Holland, Belgium, Austria, USA, France, Ireland, Denmark, and Canada. The IAHF was established in 1928. To promote international handball after World War II, the International Handball Federation (IHF) was established in 1946. More than 130 countries now host handball matches. In Vienna in 1991, the European Handball Federation (EHF) was founded to oversee the expansion of handball across Europe. This brief history demonstrates the evolution of handball from a neighborhood running game to a well-liked, globally recognized sport (Jorg & Austin, 2021). The Handball Association India is in charge of overseeing handball in India. Jagat Singh Lohan, a native of Rohtak, Haryana, and a graduate of the YMCA College of Physical Education in Madras, founded it. His work during the Olympics in Munich contributed to the founding of HFI.

Andhra Pradesh, Uttar Pradesh, Haryana, Vidarbha, and Jammu & Kashmir were among the member states. In addition, he was chosen to serve as the Handball Federation of India's first secretary general.

METHODOLOGY

- Need analysis- Saudi Arabia offensive play analysis to determine the important attacking zones, key attacking players, and attackers' preferential area to score goals in the post.
- Since it was Olympic qualifiers therefore it was necessary to determine the offensive aspect of the winning team i.e. Saudi Arabia to understand the cause of the vast difference between the scores of both teams.

Procedure: To analyze the aforementioned match, the video was sourced from a secondary platform, namely YouTube, and manually processed through hand notation, bypassing the use of tagging in analysis software. The half-court of the handball game was divided into five segments: left wing (LW), left mid (LM), center (C), right mid (RM), and right winger (RW). Additionally, the goalpost was segmented into five parts: top right corner, bottom right corner, center, top left corner, and bottom left corner, as illustrated in Figure 1.

In the annotations, the penalty shots are indicated by pink dotted arrows, while the orange dotted arrows denote scores made from within the 9-meter line. Goals scored from behind the 9-meter line are represented by red dotted arrows. The graphical representation was created

using Kinovea v.0.9.5.

The process for hand notation has been developed based on the offensive aspect of Saudi Arabia which includes the pen-paper method. It consists of a picture of half court of the handball where the position of throw on goal has been marked and the trajectory of the ball into the goal post has been marked successively, as well the time of goal scored and the jersey number scoring the goal has also been noted down simultaneously along with the occurrence of the event.

Reliability and Validity

The panel of analysts has successfully established both interpersonal and intrapersonal reliability. Additionally, the gold standard validity has been effectively established.

RESULTS

The results illustrate the collabora-

tive strategy employed by Team Saudi Arabia in their offensive plays, with shots on goals distributed as follows: 2 in the top right corner, 18 in the bottom right corner, 8 in the center, 4 in the top left corner, and 14 in the bottom left corner. The zones of attack are specified as 1 shot from the left wing, 6 from the left mid, 29 from the center, 10 from the right mid, and none from the right wing, as depicted in Figure 1.

Concerning Figure 1, the following has been depicted:

- The different zones of the court used for scoring the respective number of goals.
- The different goal post areas used for the respective number of goals scored.
- The most impactful zone of the court. The most preferred scoring area of the goal post by the attackers.

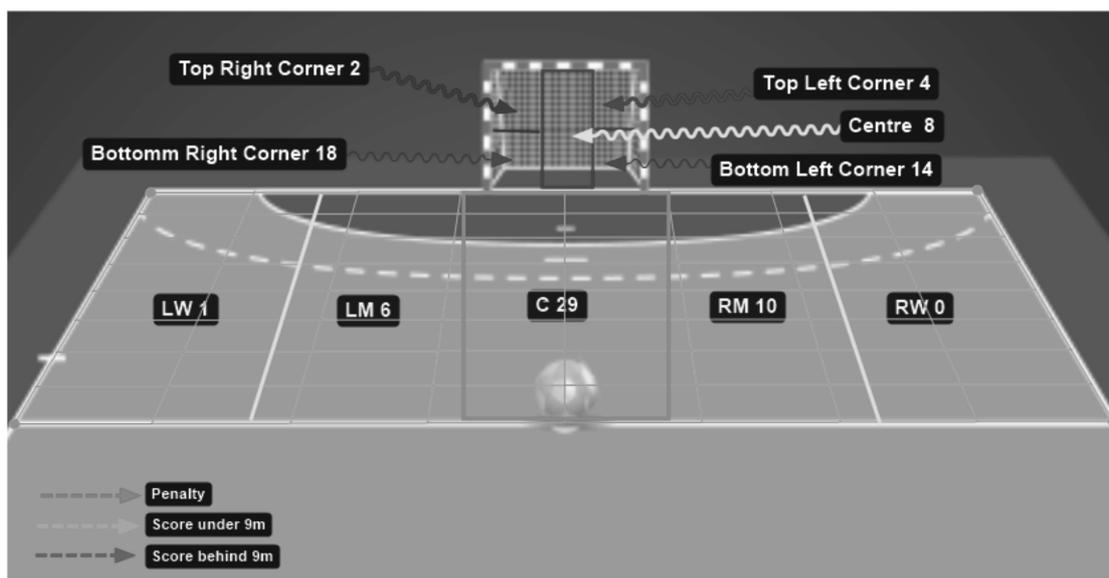


Figure 1: Zone of attack and goal post segmentation

Table 1: Goal Scored by Individual Players

JERSEY NO.	GOAL SCORED	JERSEY NO.	GOAL SCORED
1		55	3
4	3	73	4
5	1	75	2
12	0	77	2
14	0	78	2
15*	7	91*	6
19	1	94	2
34	0	97	3
37	4	99*	6

In respect to table 1, the following has been depicted:

- The individual players scoring respective number of goals.
- The most impactful attacker.

The ‘*’ marked athletes are most impactful as they scored most goals.

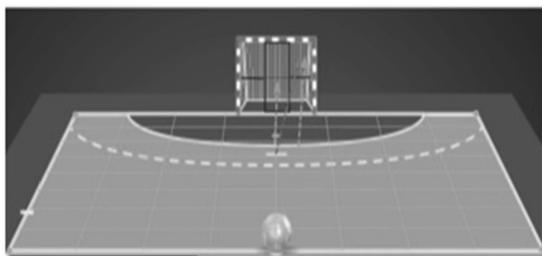


Figure 2: Jersey no. 4, C to C-1, C to LTC-1, P-1, total-3

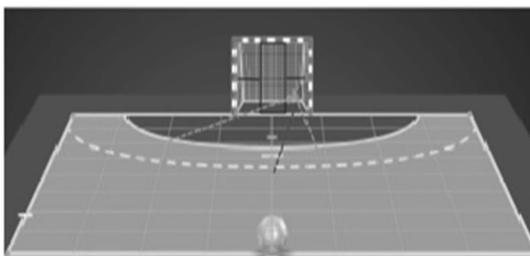


Figure 3: Jersey no. 97, LM to LBC-1, C(9m) to LBC-1, C to LBC-1, total-3

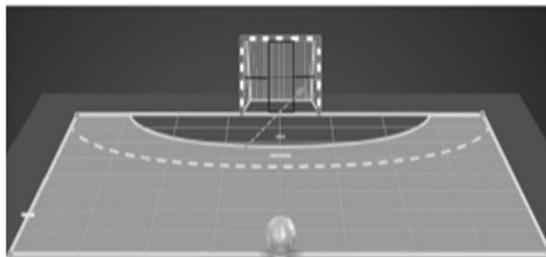


Figure 4: Jersey no. 19, C to LBC-1, total-1

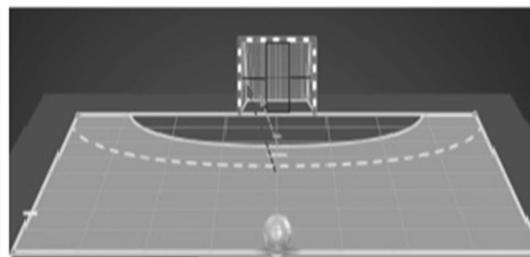


Figure 5: Jersey no. 78, c(9m) to RBC-1, C to RBC-1, total-2

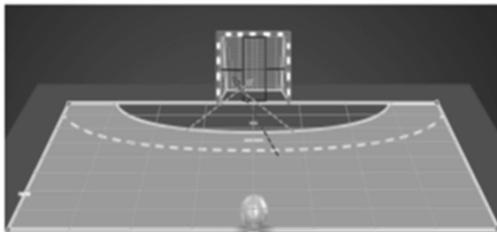


Figure 6: Jersey no. 55, LM to C-1, C(9m) to RBC-1, C to RBC-1, total-3

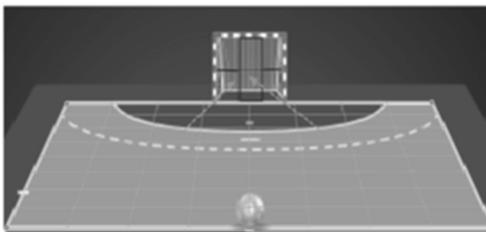


Figure 7: Jersey no. 75, LM to RBC-1, RM to C-1, total-2

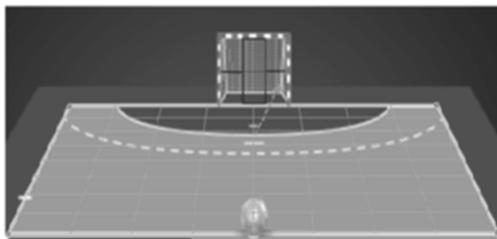


Figure 8: Jersey no. 5, C to LBC-1, total-1

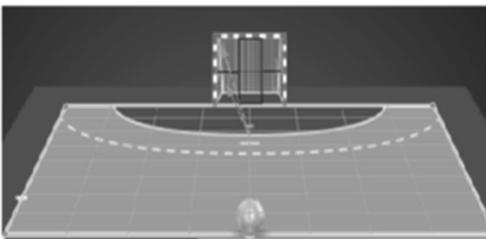


Figure 9: Jersey no. 77, C to RBC-1, C to RTC-1, total-2

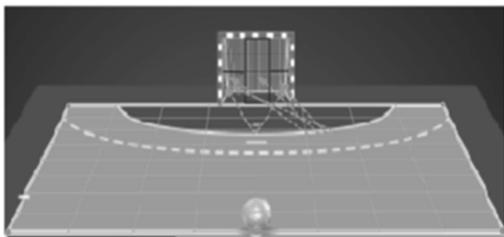


Figure 10: Jersey no. 91, C to RBC-1, C to LBC-1, RM to LBC-1, RM to C-1, RM to RBC-2, total-6

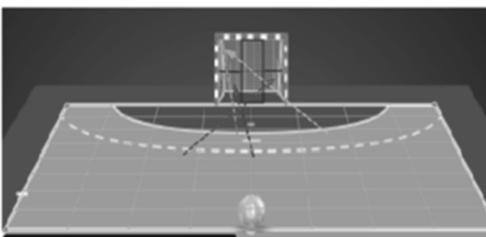


Figure 11: Jersey no. 37, LM(9m) to LBC-1, C(9m) to RBC-1, C to RTC-1, RM to RTC-1, total-4

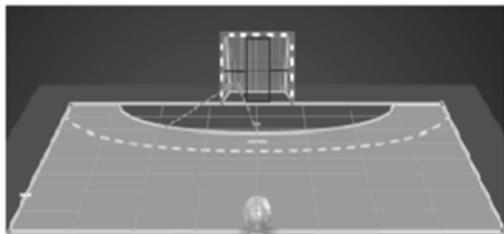


Figure 12: Jersey no. 94, LM to RBC-1, C to RBC-1, total-2

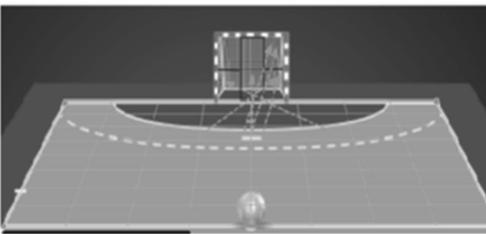


Figure 13: Jersey no. 99, C to LBC-2, C to LTC-2, C to C-1, RM to RBC-1, total-6

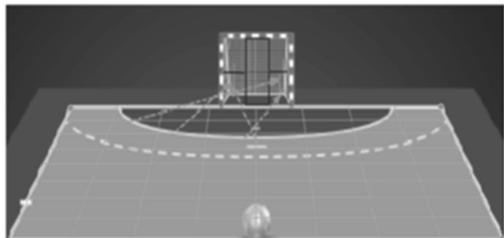


Figure 14: Jersey no. 73, LW to LBC-1, LM to RBC-1, C to RBC-1, C to LBC-1, total-4

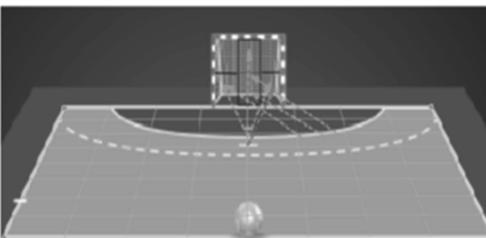


Figure 14: Jersey no. 15, C to RBC-1, C to C-1, C to LBC-1, RM to C-2, RM to RBC-1, p-1, total-7

DISCUSSION

According to the findings of this study, the offensive approach used by the Saudi Arabian handball team is clearly more effective than the Indian National Handball Team. Likewise, deficiencies were noticed in the Indian team's defensive tactics. The impact of left-handed attacks (7) which is recognized by jersey numbers 15 is also highlighted in the study. In addition, a specific attacking zone has been identified as the most effective zone (center) and (right wing) for the least effective zone.

An interesting fact can also be observed that few exceptional shots were made (highlighted with red arrows) outside the 9-meter line. This implies that the Saudi Arabian team also had proficiency and accuracy in long-range throws. Furthermore, the Indian national team's goalkeeper performance did not meet the standards expected in the Asian level game. It can also be derived that the team's defensive capabilities could be strengthened by developing the goalkeeper's abilities & tactics.

CONCLUSION

Furthermore, some important observations can be drawn from the examination of Saudi Arabia's attackers in their match versus India in the Asian Men's Olympic Qualification for 2024.2 The most impactful attackers, identified

by jersey numbers 15, 91, and 99, scored 7, 6, and 6 goals respectively. With 29 goals conceded to the Saudi Arabian team, the center of the court proved to be the weakest defending area for opponent i. e. India. However, with 18 goals scored, the Right Bottom Corner was the most favored goal post area. The most significant attacker is clearly the one wearing jersey number 15, who excels especially in the center zone. Out of total 46 goals scored 4 goals were scored from 9-meter line and beyond, that is the clear sign of excellent level of attacker and poor defense of India.

The respective analysis also depicts the number of goals conceded in each 15minute durations, by dividing two halves of the match consisting of 30 minutes each into four fractions. This approach leads to the following:

- a) Fraction consisting of highest number of goals shows best attackers' availability and coordination of the team; best attacking tactics; least defensive coordination and bad defenders of defending team available on the court.
- b) Fraction consisting of least number of goals scored shows best selection and coordination of defenders; best defending tactics; least attacker coordination and attacking tactics; bad attackers of attacking team available on court.

Table: 2 Trend of Scoring Goals

First Half		Second Half	
First Fraction	Second Fraction	Third Fraction	Fourth Fraction
14	11	11	10

Consistency of the goals scored by Saudi Arabia depicts the lack of versatility in defensive tactics of Indian team. Both the halves consist of approximately equal number of goals conceded (± 4) i.e. 25 goals in 1st half and 21 goals in second

half. Though we can consider that fourth fraction in the game in comparison to first fraction of the game has comparatively good defense or it might be the fatigue of attackers that has reduced their goal scoring capacity.

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