Historical and tactical development of the 6:0 defence system in handball

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ABSTRACT

Espina-Agulló JJ, Jove-Tossi MA. Historical and tactical development of the 6:0 defence system in handball. J. Hum. Sport Exerc. Vol. 7, No. 2, pp. 454-467, 2012. We start our study by describing the basic 6:0 Defence System in handball to identify the problem both conceptually and tactically. We then establish the origins of this system and provide a timeline that identifies when it came into being and how it developed from then on. The anthropometric, physical, technical and technical factors mentioned above have played a key role in said development. Finally, we will state the conclusions reached in the study. Key words: HANDBALL, SYSTEM OF PLAY, DEFENCE, EVOLUTION

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6:0 DEFENCE SYSTEM

Introduction
This study aims to summarise the structure and development of the 6:0 Defence System in Handball. It is the most widely used system in the sport, meaning that it can be studied to provide a conceptual overview of a part of the game that is relatively easy to implement. We should also bear in mind that its different variants have been influenced by the anthropometric, physical, technical and tactical factors applicable to each particular case and circumstance.

Basic structure
We should start by understanding that 6:0 Defence is the standard system used in handball. The six in its name indicates that six players (all field players) are in the 1st line of defence and, therefore, none in the 2nd, as shown in the figure below:

![Figure 1. Standard system 6:0 Defence.](image)

This is a perfect implementation of the defensive triangle (Espina, 2005), as can be seen in the figure below:

![Figure 2. Defensive triangle.](image)
It also clearly highlights the principle of *width* as opposed to *depth* (Bárcenas, 1979).

**Figure 3.** *Width and depth.*

The tactical denomination of the players is as follows:

**Figure 4.** *Tactical denomination.*
From a tactical point of view, four basic concepts underpin the system (Román, 2005):

**Figure 5. Sidestepping.**

**Figure 6. Mutual help (or coverage).**

**Figure 7. Defensive wall.**
Figure 8. Switching opponents.

It is regarded as the zone system par excellence, as each defender is responsible for a zone, regardless of the path taken by the attackers (Álvaro, 1996).

Figure 9. Each defender is responsible for a zone.

When sharing out responsibilities at the start, we come up against the first problem with the position of the pivot. Therefore, assuming that he/she is in the middle of the defence, we need to distinguish:

1. If the attacking pivot is in a clearly defined position beside one of the two centres.
2. If the attacking pivot is between the two centres, the centre furthest from the direction the ball is moving in will be directly responsible for marking him/her (in principle).

It is precisely this point, marking the pivot, where we find most of the differences in the various ways the 6:0 Defence System has been implemented. Having given this initial overview, a more detailed analysis is provided in the following sections.

**Origins**
The 6:0 Defence System was the first to be used when handball initially appeared in the 1930s in its 7 player version. At that time, it was structured and implemented solely to provide as much coverage as possible of the goal area and the goal itself (Espina, 1989). German, Swedish and Danish teams, as well as their national squads, were those who most successfully applied it in the 1938, 1954 and 1958 World Men's Handball Championships (Falkowski, 1992). However, it was not only used by these teams. If we regard the 1938 Championship as purely experimental (only Germany, Austria, Sweden and Denmark took part and finished in that order), our sport became more popular from 1954 onwards, as did the system analysed in this study. Therefore, in these first two World Men's Handball Championships (in reality the second and third), all the teams taking part used the 6:0 system. The final rankings were as follows:
2nd World Men’s Handball Championship 1954

1st  Sweden
2nd  Germany
3rd  Czechoslovakia
4th  Switzerland
5th  Denmark
6th  France

3rd World Men’s Handball Championship 1958

1st  Sweden
2nd  Czechoslovakia
3rd  Germany
4th  Denmark
5th  Poland
6th  Norway
7th  Hungary
8th  Yugoslavia

The 1st World Women’s Handball Championship was held in 1957. As with the men, all the teams used the 6:0 system. The final ranking was:

1st  Czechoslovakia
2nd  Hungary
3rd  Yugoslavia
4th  Germany
5th  Denmark
6th  Austria
7th  Poland
8th  Sweden
9th  Romania

In all this time, the 6:0 system only alternated regularly with the mixed 5:1 system. Indeed, at times during the matches played in said years, we saw the first individual man to man marking of players in the 1st offensive line, either because of their dangerous shooting or because of man advantage (Laguna, 2005). It was in the 1958 Men’s Tournament that the Swedish national team started showing the variant that bears its name, where the two centres are given a certain depth and alternate the marking of the pivot, using deterrence and anticipation to hinder, on the one hand, the play of the attacking centre (both when circulating the ball and when maintaining his/her tactical relationship with the pivot) and, on the other hand, the shots of the two back players in their paths towards the centre (Figure 12).
This system was perfected over time, reaching its peak 30 years later. Indeed, Bengt Johansson used it with great success when he coached his national team from 1988 to 2002, which bears witness to its extraordinary consistency.

Evolution of the system

From the first variants that appeared in Sweden in 1958, as regards the evolution of the centres described above, we witnessed the almost continuous appearance of different variants. In the early 1970s, both male and female handball began to endow the whole System with greater depth. This was called the "in line of pass" or "in depth" 6:0 Defence System.

It attempts to compensate for the system's intrinsic lack of depth by endowing it with greater mobility and vertical or diagonal movements of the four central defenders, who try to hinder long-distance shots and, to a certain degree, circulation of the ball (Equisoain, 2007).
Shortly after this, another variant was added to increase the depth of the whole system. This is the 6:0 Defence System with alternate pressure from the wing left and wing right. It aims to reduce offensive support points by not allowing the wings to receive the ball, and making it impossible for them to create situations of numerical superiority (Román, 1988).

![Figure 14. Pressure from the wing left.](image1)

![Figure 15. Pressure from the wing right.](image2)

From 1974 onwards, the men's teams from the old Soviet Union (both clubs and national teams, male and female alike) took advantage of the extraordinary anthropometric conditions of their players and started another line of work that was based (contrary to that described above) on a lack of depth, which was compensated for, as already mentioned, by the height, build and weight of the defending players. This is the “closed” or “in line of throw” 6:0 Defence System.
This system forced the attacking team to take the initiative in occupying the marking-free zones in the Free Throw area. Their defensive success depended on such tactical factors as sidestepping, blocking and switching opponents. The best example of this was at the Montreal Olympics in 1976, when the Soviet Union won the men’s and women’s Gold Medals\(^2\). This trend was based on the anthropometric conditions of each country’s players, was widely implemented in many areas and is still in use today. The best example of this in Spain was in 1984-5, when Branislav Pokrajac coached the Spanish Men’s Team. It was not as widely accepted in women’s handball, undoubtedly due to the relative lack of players with the required physical characteristics, meaning that they have always tended to adopt approaches with a degree of depth, whether with wings, halfs or centres (Späte, 2005), now not only in the U.S.S.R. but also in the rest of the world.

The mid-1980s witnessed the appearance of another line of research. This was the “Spanish” 6:0 Defence System. The 1986 Men’s World Championship in Switzerland was its international showcase. Juan de Dios Román, the Spanish coach, was the first to use it and its main champion. It was a variant whose main feature was the alternate depth of the defending halfs and centres according to the possession of the ball by their counterparts and the routes taken by them. Figures 17 and 18 show these concepts (Román, 1987).

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1 At the time, people talked about the “giants” in the Soviet Union teams. Later Russian teams never completely gave up on this, possibly as a result of the special racial characteristics of certain sectors of the population and the work of talent scouts in the country.
Figure 18. Alternate depth of the defending halves and centres according to the possession of the ball.

Juan de Dios Román himself explained the foundations of his approach at the I.H.F. International Symposium in Strasbourg, where he described his research work:

- The need to perfect the defensive base position, movement technique and the connection between both.
- Correct anthropometric selection of the team members.
- An increase in overall defensive depth.
- Requiring players to avoid sendings-off and raising their awareness of this.
- Improving individual tactics.
- Special importance is paid to the concepts of sidestepping and switching opponents (Román, 2000).

Finally, at the start of the 21st century, we come to the two latest variants. On the one hand we have the pivot marked by two players. The idea here is to prevent the attacking pivot from having an undue influence on the defensive work that obliges the centres to work harder to implement opponent switching, sliding and anticipation correctly. The Hungarian School offers a partial solution to the problem with what is known as “dual” pivot marking. As its name implies, it involves close zonal marking of the attacking pivot by the two closest defenders in line of pass (Figures 19, 20 and 21), (Constantini, 2001).

Figure 19. “Dual” pivot marking.

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Hungarian women's and men's clubs and, to a significant extent the national teams, use this system, which has made a decisive contribution to improving their defensive capacity and, therefore, their overall results. Of course, German handball is also involved in the development of a system that, given its long history and enormous potential, seems to have no end. Also at the dawn of the 21st century, Germany has offered ever more marked nuances aimed at creating a modern 6:0 Defence System that is both tactically rich and varied. The size of the German players, the rich defensive tactics that are instilled in them from the very start and, indeed, the quality of the clubs (largely men's) and national teams, mean that they continue to achieve excellent results.

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3 In recent years, the German Federation's Technical Management, based on the ideas of the I.H.F. experts Dietrich Späte and Frank Noremberg, have worked hard and successfully to improve the quality of the defensive play of all German teams.
CONCLUSIONS

1. - The 6:0 Defence System is regarded as the standard template for Handball Defence.

2. – It is also the most popular system worldwide in teams at all levels, as it offers the best blend of depth and width.

3. – Its appearance dates back to the start of 7-player handball itself when the rules were laid down in Germany in 1938 and in Sweden and Denmark in the early 1950s.

4. – The anthropometric, physical, technical and tactical characteristics of the players have had a great influence on the development of the 6:0 Defence System.

5. – In the early 1980s, anthropometric criteria were given priority at the highest levels of the sport, in detriment to depth, in order to endow the 6:0 Defence System with players with a significant height and arm span, which means that they occupy the maximum space within the free throw area. Its greatest exponents are the former Soviet Union teams.

6. – In the early 1990s, the Swedish and Spanish schools of thought developed tactical variants that affected the concepts of opponent switching and pivot marking.

7. – The first decade of the 21st century saw anthropometric, physical and tactical criteria blending perfectly to make the system more comprehensive. Here, the German school of thought is its greatest exponent.
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