

EHF M18 CHAMPIONSHIP 2022 QUALITATIVE ANALYSIS

08 – 14 August 2022 Craiova, Romania Mark Hawkins/GBR

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1.Introduction:

The EHF Men's 18 Championship was held over 3 different tournaments contested by a total of 22 nations in 3 different venues (Israel, Latvia and Romania). This analyses focuses on the outcomes of the tournament which took place in Craiova, Romania from $8^{th} - 14^{th}$ August 2022.

2. Quantitative Aspects:

This tournament was contested by 8 nations split into two groups of four teams each.

Group A: Austria, Estonia, Slovakia, Ukraine

Group B: Finland, Great Britain, Moldova, Romania.

All 20 matches took place in the Sala Polivalenta Craiova.

The final rankings of the competition can be seen below;

| Rank | Team | W | D | L | Avg. Score | Avg. Goal Diff | |
|------|---------------|---|----|---|-------------|----------------|--|
| 1 | Austria | 3 | 1* | 1 | 29.4 – 25.8 | +3.6 | |
| 2 | Ukraine | 3 | 0 | 2 | 28.6 – 28.2 | +0.4 | |
| 3 | Romania | 4 | 1* | 0 | 38.8 – 27.4 | +12.2 | |
| 4 | Finland | 2 | 0 | 3 | 33.8 – 31.2 | +2.6 | |
| 5 | Slovakia | 3 | 0 | 2 | 29.6 – 26.2 | +3.2 | |
| 6 | Estonia | 2 | 0 | 3 | 29.0 – 30.2 | -1.2 | |
| 7 | Moldova | 2 | 0 | 3 | 28.8 – 32.8 | -4.0 | |
| 8 | Great Britain | 0 | 0 | 5 | 21.6 – 37.8 | -16.2 | |

Table 1. Final standings showing average score and average goal difference.

^{*}The match between Austria and Romania finished in a draw and was won by Austria after penalty throws.

| GROUP A | GP | w | D | L | GOALS | DIFF | PTS |
|------------------|----|---|---|---|--------|------|-----|
| 1. Ukraine | 3 | 2 | 0 | 1 | 84:78 | 6 | 4 |
| 2. Austria | 3 | 2 | 0 | 1 | 86:76 | 10 | 4 |
| 3. Estonia | 3 | 1 | 0 | 2 | 81:92 | -11 | 2 |
| 4. Slovakia | 3 | 1 | 0 | 2 | 72:77 | -5 | 2 |
| GROUP B | GP | w | D | | GOALS | DIFF | PTS |
| 1. Romania | 3 | 3 | 0 | 0 | 128:73 | 55 | 6 |
| 2. Finland | 3 | 2 | 0 | 1 | 103:84 | 19 | 4 |
| 3. Moldova | 3 | 1 | 0 | 2 | 89:99 | -10 | 2 |
| 4. Great Britain | 3 | 0 | 0 | 3 | 60:124 | -64 | 0 |

Table 2. Final standings of Group A and Group B.

As can be seen by firstly the results of the group stages; Group A was very even with all teams taking points and all relatively close matches with 4th place Slovakia finishing with a goal difference of only -5 after 3 matches. Group B however was far clearer cut with decisive results in all matches apart from Finland and Moldova playing a close match for 2nd place and advancement to the semi-finals.

The final rankings also show how equal the top 5 teams of the tournament were, characterised by the average goal different of the teams all being positive, Slovakia who eventually finished in fifth place had beaten second place Ukraine in the group stage despite finishing fourth in their group, and although they played in a group with the eventual 7th and 8th ranked teams Romania had by far the highest average goal difference and without losing any matches in 60 minutes, only finished in third place.

The top scorers from the competition were;

- 1. Frederik von Troil (Finland 49 Goals)
- 2. Daniel Stanciuc (Romania 38 Goals)
- 3. Marian Zaritchi (Romania 36 goals)

3. Qualitative Aspects:

3.1 Offence:

Most nations used a common structure to it's attacking format when playing six against six, teams were starting with a formation of three back players, one line player and two wing players. Finland were most prolific in playing 7v6 – doing so on occasion for complete matches and played approximately 50% of the competition in this system, the only nation who were noticeably using this as a primary attacking strategy. Both Great Britain and Estonia played 7v6 on occasions, Great Britain as one of two primary structures whereas Estonia was more noticeable as a apparent reaction to teams playing an open defence against them.

As is mentioned above the final rankings showed the top six teams to be very evenly matched, it was clear these teams whilst attacking against 6:0 defences were well prepared in using common trends such as pivot players moving away from situations where the ball is to open space for shooting or 1v1 chances, similarly with wing players to start an attack as a second pivot and then returning to the wing to change the perspective of the 1v1 duel.

Austria – who were eventual winners of the tournament – had an offence which was characterised mainly by its tempo, with a slower pace of the match at approximately 54 attacks per game, less than the average of 60. The slower tempo and control of the attack was a reason for success and resulted in very good proportions of their shooting patterns – Austria took 49% of their shots from the 6m (2nd highest proportion) and only 28% of their shots from 9m (3rd lowest proportion) this suggest the ability to get more shots from higher efficiency positions. Amongst the shots from 6m they had a very strong theme throughout all games to score between the number 1 and number 2 defenders.

The proportion of shots taken from various positions on the court as mentioned above is an interesting area to analyse, in the chart seen below we can see the proportion of their shots they took from which areas of the court.

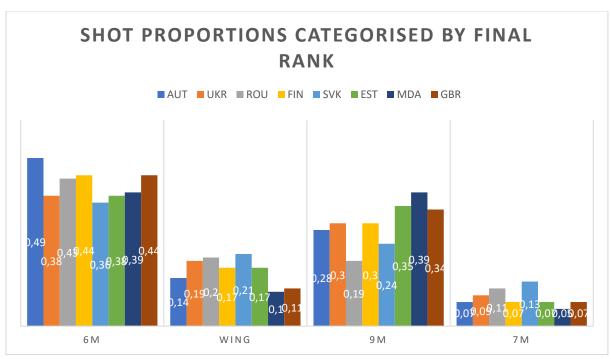


Table 3. Chart showing proportions of each teams shot in order of final ranking.

The chart is ordered left to right by their final rank. As has previously been mentioned the top 5 teams were very equal and could easily have finished in different positions and although there is not an obvious trend the main suggestion would be that the teams with the higher rank finished with a great proportion of their shots from 6m – Great Britain being the anomaly here, although it should be noted they made on average 13.08 TFs per 50 attacks when the average was 9.1 TFs/50 which would seriously affect the impact of their shot proportions as they would be attempting noticeably fewer shots. The other main trend is that the three lowest ranked teams finished with the three highest proportions of their shots taken from 9m – the least efficient area on the court to shoot from suggesting they were being forced to take more difficult shots or were unable to achieve higher efficiency shots which would suggest an inverse relationship to the problem that the less shots from 9m would be more indicative to final performance and ranking.

Many teams had very strong left-handed right back players, however the top ranked teams, who were very effective in varying the attack systems to use players running as an additional pivot player to create chances for right-handed players in the right back position to break through between number 1 & number 2 defenders by way of variation or when playing without a left-handed right back. This is an interesting tactical trend which makes far more effective us of this situation and players in the system to enhance the prospects specifically of a right-handed right back player. These chances are often breaking through between 1&2 defenders on this side, creating a high percentage shooting chance – this is possibly a trend which is an advent of increased use of right-handed right backs when using 7v6 and more commonly used ways of how to use them effectively in this position. Austria was particularly effective here as well as using the more commonly used system mentioned earlier to have pivots or wing player moving out of position to create attacking opportunities, they used back players moving into the pivot position to pull a defender away and create a space as seen in the images below.



Fig 1. Images showing Austria's use of a right back entering as an additional pivot player to open a space to breakthrough between number 1 & number 2 defenders.

There were some teams who also used 7v6 as an attacking strategy. Estonia played 7v6 during the second half of their match v Austria – who defended with a 3:2:1 defensive system, they did also utilise this as a variation against Ukraine, and in both matches v Slovakia as an alternate strategy where all three teams defended with a 6:0 defensive system. Ukraine also used 7v6 to attacks during the second half of the final v Austria seemingly because of their 3:2:1 defence as well as for spells against Finland because of a 3:3 defence. Ukraine played this to try and chase the game, and as a reactive tactic to open defensive system as opposed to a primary attacking strategy and didn't use this against any teams who were defending with a 6:0 defensive system.

There were two nations who used 7v6 more as a primary attacking strategy. Finland were one team who played a noticeable amount of 7v6 in attack. They were visibly using this as a deliberate tactical ploy and as a primary attacking strategy. This reflected in their shooting profile by taking approximately 61% of their shots from 6m or wing, and subsequently only three teams took a lower proportion of 9m shots – two of whom ranked 1st and 3rd. This would suggest they achieved the objective and was some way into helping them to achieve a higher overall ranking. Great Britain were another nation who did use 7v6 as a primary attacking strategy in certain situations – not as commonly as Finland, however this could help to explain a relatively high proportion of shots from 6m, however when not playing this system the reliance on 9m shots failed to see this be significantly effective as it was for Finland, and ultimately not impacting on their final ranking.

Moldova had a different attacking structure to the other teams and used a lot of screens to create breakthrough chances and better opportunities to score, as can be seen from the charts above, they were the team that shot the most from 9m and took the highest proportion of these less efficient shots. However, the use of screens was an interesting tactical consideration, they would often use some of these systems direct from free throws – sometimes whilst under passive play (or longer into the attack when they may have believed a passive play signal was imminent). This is notable as these systems often resulted in a clearly focussed opportunity to score even if it wasn't always successful it was clear to all players where the chance would come. It could be considered that this is going to be a more common occurrence due to the changes in the passive play ruling (6 passes reduced to 4) as it gives less opportunity to use a conventional attacking system or free play to create a scoring opportunity it would be recommended to have short systems of less than 4 passes which can

create a clearly defined scoring chance aiding the chance to score whilst under pressure as well as allowing players to better organise the return defence phase to prevent fast break goals against them.



Fig 2. Images showing a screening system used directly from a free-throw under a passive play warning.

With two teams in the competition almost exclusively playing open defensive systems (Austria and Finland) it provided many challenges to teams as to how they would attack against them. This was also interesting as they both qualified for the semi-finals, so they were visible in the decisive matches of the tournament. For both Romania and Ukraine, the primary tactics were to send in a second line player – often from the back court positions. This again is a common way to attack against open defences, although there were very limited attacking variations used here in comparison to how teams attacked v 6:0 defences. Interestingly very few teams used 7v6 as a weapon against these open defences (7v6 is often cited as a reason in which open defences may become less common as it an 'obvious' way to attack against an open defence as many defences react by retreating to 6m and playing a 6:0 to defend against 7 players). Moldova was one team who had more attacking variation against open defences; they were visibly using more screens (similarly to highlighted for other attacking situations) as well as other crossing systems designed to draw defences out of position for a shooting chance and therefore had more success when they played Finland's open defence where they were leading at half time and losing by only 3 goals in the end. It was noticeable that the teams who played the semi-final or final matches against the teams playing open defences had very little variation or alternative tactics to use and were very repetitive with their attacking systems. These teams when playing against 6:0 defences had much more variety and were far more effective at using current trends such as pivot players moving away from the definitive space to create 1v1 chances, or wing players doing the same thing which added more deception and different opportunities within attacking systems.

3.2 Defence:

As previously mentioned, two teams played with open defences. Austria played a 3:2:1 defence almost exclusively – the only exceptions to this was when 2 nations played 7v6 against them, the zonal defensive system allowed them to make a large number of steals and force turnovers to fuel the first wave fast break. Austria used more of a 'zonal' system to protect against situation such as a second line player coming from the back court. Finland played a very open 3:3 defence, again this created chances for steals and fast breaks. The Finnish system was more 'player oriented' and involved some following of players if they transitioned from other positions to a second line player. It is possible both systems could be influenced by the relative anthropometrics of each team as well as desired tactical considerations although it is interesting to note that these teams playing aggressive defensive systems both qualified for the semi-finals and ranked 1st and 4th respectively.

All other teams played a 6:0 defence and didn't deviate from it apart from Great Britain who played a 3:2:1 defensive system for 15 minutes vs Moldova.

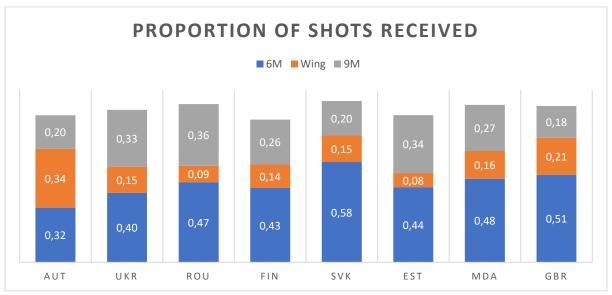


Table 4. Chart showing the proportion of shots received by each team from 6m, wing and 9m positions.

Table 4 above shows the proportion of shots received by each team, Austria in first place is very interesting – they receive by far the biggest proportion of shots from the wing and one of the lowest proportions from 9m. Relative to their defensive strategy playing a 3:2:1 defence this is consistent and speaks of a well-executed defensive strategy. Finland as mentioned also played a 3:3 defence, this succeeded in some aspects in that they received the 4th lowest proportion of shots from 9m which was possibly an aim of the strategy and although conceded only the 3rd fewest shots from 6m it was still of a similar range to Ukraine, Romania, Estonia and Moldova for example who conceded similar amounts of these shots, compared to a noticeable drop to first place Austria shows a potentially significant difference in the execution of that particular strategy. Estonia, Ukraine and Romania had very similar defensive profiles and were the 3 teams who conceded the most shots from 9m – again similar to Austria seemingly a well-executed defensive plan as this would be where a 6:0 defence would aim to receive most shots from. Moldova and Great Britain in the final 2 places in the standings whilst also playing a 6:0 defence received two out of the three highest proportions

from 6m which is an extremely negative sign and would suggest they failed to execute their strategy of playing 6:0 and taking the shots from outside and would be a contributing factor to their final placings because whilst aiming to receive more shots from 9m playing a 6:0 they in fact allowed more from the area they were primarily trying to protect. The Slovakian defence was a bit of an outlier in the sense the played 6:0 but conceded a large majority of shots from (the most of all teams) against what might have been expected. Although it doesn't entirely explain this the images below compare the setup of the 6:0 defences between Ukraine, Romania, Slovakia.

Ukraine:



Romania:



Slovakia:



Fig 3. Images comparing the defensive structure of 6:0 defences between Ukraine, Romania & Slovakia.

Whilst it is difficult to compare only images, the above show a more compact version of a 6:0 played by Ukraine and Romania, who were less willing to open the space and thus having more help from other defenders to protect space around the 6m line. The images for Slovakia

show a more open version of a 6:0 defence. We can see in the left hand image some of the defenders taking much higher positions on the court which would lead to more opportunity to play 1v1 against for breakthroughs or space for the line player, similarly on the right hand side we can see players on the far side of the court away from the ball are taking much more advanced positions and leaving the line player 1v1 against a middle defender where there are more chances to receive the ball here and again more 1v1 chances as the defenders are covering a bigger space which may account for why Slovakia conceded more shots from these areas.

3.3 Fast Break and Fast Throw-Off.

Austria, Estonia and Slovakia all used a fast throw off consistently after they conceded a goal, with the wing player receiving the pass from the restart and trying to overload one side of the court with an additional player to create a clear chance whilst if not possible allowing a continuation of pressure into the third phase of arrival. All 3 teams used the same fast throw off tactical system to try and score immediately after a goal was conceded. What is interesting with regards to Slovakia and Austria is how they used this system with great awareness to utilise attacking possibilities but then to slow the tempo and settle into set attacking systems if they were unable to score directly from the fast-throw off, there was a clear agreement about when not to take chances in this phase of the game but were willing to constantly push the tempo to try and achieve these chances, this is reflected in the fact that both Slovakia and Austria recorded the two lowest tempos in the tournament both playing under 55 attacks per game on average. This goes against a pre-conceived notion in which teams who might use a fast throw off are trying to speed up the game to play constantly at a high tempo, it can also have alternate advantages such as preventing teams from being able to make attack defence substitutions or being in control of aspects of the arrival phase to stress opponents in different ways.

The other teams on occasion would use a fast throw off but without any specific tactical structure – Finland most notably were operating this with some more regularity than other nations.

3.4 Superiority

There were 3 main systems used by teams when 1 player more in attach because of a 2-minute suspension, the most common system used by Romania, Estonia & Slovakia as one of two systems by Finland & Ukraine was to play with 2 pivot players to either create a 3v2 situation with 2 pivots or use the middle pivot player as a screen to create a 3v2 as seen below.



Fig 4. Images showing Romania's 6v5 attacking system.

Moldova used a screen similarly to what was highlighted in the first image, with only one pivot player as their primary strategy – Ukraine used this as an alternate system.

Austria and Finland however used a crossing system to draw the defence onto one side and create a 3v2 on the other side of the court as seen in the images below.



Fig 5. Austria's 6v5 attack system to use a cross on the left side to create a 3v2 situation on the right side.

Great Britain had no discernible system whilst playing 6v5. They also gained the fewest opportunities to play 6v5, they only provoked 2.2 2-minute suspensions per match, which could also be a contributing factor to their final rank, as they had far fewer opportunities — on average 4 minutes fewer per match to try and score in these advantageous situations where teams most commonly get higher quality shooting chances.

3.5 Minority

Six teams (Austria, Slovakia, Romania, Estonia, Ukraine, Finland) removed the goalkeeper to play with equality 6v6 whilst suffering a 2-minute suspension. Moldova and Great Britain did not don't take GK out and played with 5 field players against 6 defenders. In this scenario both

Moldova and Great Britain had the two lowest ratios of goals scored in inferiority to 2-minute suspensions of all the teams in the tournament.

This may not ordinarily be an overwhelmingly decisive factor in the outcome of matches (due to a limited number of occurrences per match) in this tournament there was an average of 4.05 2-minute suspensions per match for each team with on average teams playing 6-10 minutes with a player less. In other research it has been suggested that the shooting percentage of a team in superiority doesn't increase too much whilst playing with one additional player 6v5. The most impactful part of a suspension is the drop in shooting efficiency in attack. This would suggest it is an area of importance and would require focus – the possibility to play with equality at 6v6 without the goalkeeper shows a better success rate from all the teams that used it.

In addition to this Austria were very interesting during the minority phase, they were very efficient at scoring in this phase of the game, scoring 15 goals in the 18 occasions they suffered a 2 minute suspensions, it isn't possible to directly attribute the amount of attacks played with a suspension but a ration 0f 0.83 goals per suspension was comfortably the highest proportion of all teams and is very positive in negating the impact of a 2 minute suspension. There wasn't a specific or completely new system for this, however there was again a theme of using right-handed right backs breaking through between number 1& number 2 defenders. Not only is this a clear structure to organise this phase of the game but uniquely attempts to create a higher quality shot.



Table 5. Ratio of goals scored per 2 minute suspension ordered by team overall ranking.

3.6 Goalkeeping

As we could see from table 4 in the section regarding defence, we could see that Austria had by far the most shots against them from the wing position, it is also notable that they were by far the most effective at saving shots from the wing position with a near 40% save rate-specifically skilled in the area in which they would aim to provoke most shots from or the area they might give up most shots from being the wing positions again suggests the coherence in

their overall defensive strategy and their ability to execute it. Even if we combine shots from 6m and wing positions Austria were clearly most effective (only Slovakia came within 10% of their overall save percentage which is quite the significant difference.)

Finland's goalkeeping performance was similar in the makeup to Austria as they both played with open defensive allowing a higher proportion of shots from 6m and wing positions, in this instance the saving efficiency was 11% lower than Austria from 6m and 6% lower from the wing position.

Romania and Ukraine both had strong goalkeeping performances from 9m (43.9% and 41.7% save rate respectively) they received the 1st and 3rd most shots from 9m and had the 1st and 3rd best save percentage from this area. I feel it is an important note here that the teams who finished in the top 4 of the competition were the ones who had most coherence between their playing style and execution. It is a little easier to determine this given the defensive systems played and the statistics kept, however it would suggest the ability of the players to fulfil the roles in the given tactical systems – and conversely the ability to build a tactical structure around the strengths of the players was a key element in determining the outcome of the rankings in the tournament.

4.Trends:

There were 4 clear trends from the quantitative and qualitative analysis which it is felt is worth highlighting.

- Use of right-handed players to attack between number 1 & number 2 defenders in the right back position. For some teams this was due to an absence of left-handed back players for some it was during 7v6 or simply after an exchange of position with a left-handed back player. It was noted that teams especially finishing higher up the rankings made good use of this point of attack and created many chances to score or receive 7m throws from attacking this position. Partly due to the advent of 7v6 play and more right-handed players being used in this position of the court, the skill set appears to be developing and can be effective in all phases of the game as a viable attacking option. The teams with higher ranking had players who were more comfortable in this position and had the skillset to exploit this.
- Attacking against open defences (and the possibility to play open defences). 2 teams in the top four final positions, including the winning team played almost exclusively open defences. This itself is not necessarily a reason to finish in a top position however it should be prudent for all teams to have the ability to play with the same attacking fluency against an open defence as opposed to a closed defence. Teams who had to play games against these defences had far fewer options to attack against it as they did against a 6:0 defence for example. There was even a lack of teams playing 7v6 against an open defence often a criticism against the introduction of 7v6 that it would be too 'easy' to counter an open defence by playing 7v6. With the same reasoning it should also be considered that teams should be prepared and have a strategy to play attack as 7 players and how to defend against 7 players. This should be a consideration for all coaches to have variety in these phases of the game,

- although this can be difficult due to time constraints of teams competing YAC competitions, the teams who finished with higher rankings appeared more prepared for this.
- Attack whilst in inferiority situations after a 2-minute suspension. It was seen that some teams were very effective in this phase of the game and had a more considered attacking structure. The statistics suggest here that teams on average play 8 minutes with a player less, some up to 10. At most this could mean 1 in 6 attacks played with a player less and would therefore warrant more consideration so not to disregard 1 in 6 attacks.
- With similar considerations to attacking under inferiority, attacking whilst a passive play signal (or a long time into attack close to when a warning may be given) adds a pressure to the attack. Free throw systems or short attacking systems could be utilised to create a pre-determined focus to create a chance. This as above can create a shooting chance in a difficult situation but also helps to organise the teams to where the shooting chance comes from and helps to organise the return running which could be an area where teams can exploit with a fast break if there is confusion over the shooting chance or somebody takes a unexpected shot due to the passive play warning, and may be particularly effective for teams lower down overall rankings to organise more phases of the game and reduce the amount of fast break goals conceded.

5. Outstanding players:

The All-Star team for the championship is listed below.

Goalkeeper – Leon Bergmann (Austria)
Left wing – Marian Catalin Zaritchi (Romania)
Left back – Mykola Protsiuk (Ukraine)
Centre back – Hendrik Koks (Estonia)
Line player – William Malkamaki (Finland)
Right back – Nicolas Paulnsteiner (Austria)
Right wing – Frederik Von Troil (Finland)

MVP – Daniel Stanciuc (Romania) Best defender – Vladyslav Shcherbina (Ukraine)

6.Conclusions:

In conclusion it is fair to say we saw a very even grouping of teams towards the top of the final standings of the EHF M18 Championship in Romania.

Some of the key factors which shaped the teams who were able to reach the highest rankings were the ability to play less commonly used systems in defence such as a 3:2:1 and a 3:3, as well as being able to counter these strategies by being able to play against open defences as effectively as 6:0 defences.

Alongside this, the management of the game situation when the team is playing with a payer less via a 2 minute suspension has appeared to be quite decisive, it seems almost essential to utilise an extra player in place of the goalkeeper in accordance with the statistics and relevant rankings of the lowest ranked teams, but further to this, some teams showed significance in being able to attack effectively in this phase of the game gave an advantage in a very close competition where every goal counts.

Finally, the teams who finished high up the ranking had a very clear structure, clear organisation in more phases of the game and the strategy was very coherent between what was visible on the court and what the statistics showed as their strengths. This can be a challenge with national teams, especially with youth teams considering the time available, and the development pathway they are on, however has shown some benefit during the final tournament, as well as the being in control of seemingly infrequent parameters of the game such as playing in inferiority, fast restarts and free throws which can add up to be significant in an evenly contested competition such as this championship in Romania.