Comparing two scoring systems-

Point-a-rally scoring (Pars) and English Scoring

Report

1. **The two systems**

The Point-a-rally scoring, and English scoring methods are different from each other. For example, in PARS the winner of each rally wins the point and is the server for the next rally, while in the second method, the English scoring, if the winner of the rally is the server, he wins a point, but if the winner is the receiver, he does not get a point but gets to be the server in the next rally.

* 1. **Point-a-rally scoring (PARS)**

Point-a-rally scoring is a fair way to play squash, but it has a problem with the length of each game. The rules are these:

1. When a player wins the rally, he receives the point and gets to be the server for the next rally. It does not matter whether the player was the server or the receiver.
2. The first player to reach 11 points wins. But if the match is 10-10, the two players must have 2-point difference in order to be decided who is the winner.
3. The player who wins the point becomes the server.
   1. **English Scoring**

English scoring is a good method, but it also has a few problems.

The rules are:

1. Only the server is awarded a point if they win a point. If the receiver wins, he does not get a point but becomes the server for the next rally.
2. The player who reaches 9 points wins, unless the score is 8-8, then the player who reached the 8th point first decides whether to play to 9 or 10 points.
3. **Problem**

Which of the two scoring methods is better for playing squash, which one is fairer, and which is better for TV?

1. **Method**

The way to be investigated whether PARS or English scoring is better is comparing some data form the simulations of the two systems.

Both simulations will be played 10000 times in order to give as accurate results as possible. Player A will be given ability of 70 and Player B will have ability of 30.

**4. Assumptions**

It can be assumed PARS is going to have more rallies in each match, because the sought result can defer. It is supposed to be 11, but if the score is 10-10 and the players must play until 2-point difference. Therefore, it could be said that PARS does not have time limit.

The better player in English Scoring method has even bigger chance of winning the match, because he is going to be the server most of the time, and even if he loses a rally, the other player does not receive a point.

**5.Results**

Seeing the simulations of each scoring method, the win probability of the better player is higher when playing English Scoring instead of Pars:

English Scoring win probability-

Point-a-rally win probability-

Second thing to be considered is the length of the match using each method because the match must be streamed on TV and people prefer shorter matches.

When the two methods are put on a graph it can easily be seen that PARS has less rallies compared to English Scoring. To add up, PARS has less win probability for the better player, so the match can be more intensive and entertaining for the viewers.

**6.Conclusion**

To conclude, from the two methods the better one is PARS, because it is shorter and more interesting for the TV. The win probability for the better player is lower and that makes the game more intense because the worse player has a bigger chance of winning a few points or even the match.