

Why women's tennis rankings need an overhaul

Written by Stephanie Kovalchik, Research Fellow, Institute of Sport, Exercise and Active Living, Victoria University



Latvian Jelena Ostapenko won this year's French Open at the age of just 20. Reuters/Benoit Tessier

Even before the start of the 2017 French Open, many were already calling this year's tennis season one of the [most unpredictable](#) in recent history.

At the start of the French Open just over two weeks ago, the world number ones on both the men's and women's side had yet to win a title in a top tour event. Although the tournament returned some order [to the men's tour](#), chaos continued to reign on the women's side. World number one Angelique Kerber's 2017 slump fell deeper with [her first round loss](#) to the 41st-ranked Ekaterina Makarova.

But the surprises didn't end there. Only three of the top eight women's seeds reached the quarter-finals. This is 63% fewer than expected, and the lowest number of top seeds to reach the French Open quarter-finals since 2005.

An even greater shock came when third-seeded Simona Halep went up against the unseeded Jelena Ostapenko in the women's final. Ostapenko, who had just turned 20 and was without a single tour title to her credit, was the heavy underdog – [yet still won](#).

One might conclude from stats like these that top-ranked women's tennis players have underperformed in 2017. Yet this conclusion assumes the official rankings accurately reflect players' ability. The results of the Women's Tour Association (WTA) in 2017 should make us strongly question the performance of the official WTA rankings – and not simply the players' performances.

How do the rankings currently work?

[Official WTA rankings](#) are determined by the points earned at events in the past 52 weeks, counting only the 16 best results among tour-level events.

Why women's tennis rankings need an overhaul

Written by Stephanie Kovalchik, Research Fellow, Institute of Sport, Exercise and Active Living, Victoria University

Players who go deeper in the more prestigious events earn the most points. A Grand Slam champion earns 2,000 points, for example, while the champion of a WTA International event will earn just 280 points.

A major flaw with the points-based rankings system is the arbitrariness of the points assigned to different events and rounds. And the points that are assigned do not change with more difficult matches or more difficult opponents. A player who advances in a tournament due to a retirement or walkover earns the same ranking points as a player who advanced to the same round with a straight-sets victory.

Also, a player who defeats the same opponent in a Premier-level final (the tier just below Grand Slams) as opposed to in a Grand Slam final earns half the ranking points.

Ignoring opponent difficulty when scoring a player's match results has been a main cause of the peculiarities in the rankings that have caused consternation among tennis fans. This includes the world number one ranking Kerber has held for most of the 2017 season, or the 67-week period Caroline Wozniacki held top spot despite never having won a Grand Slam.

The quality of the official ranking system is a critical and often overlooked aspect of the function of the professional tennis tour. Official rankings are heavily relied on by professional tournaments to determine event seedings: positions in the draw given to the top players in an effort to provide them an easier path to the later stages of the event.

In this way, top seeds are a reflection of a tournament's expectations of which players have the best chances at winning the title. When those expectations don't align with the players' true abilities, it can result in less competitive matches in final rounds and the false perception that the "best" players haven't lived up to expectations.

Both of these outcomes are detrimental to the professional tour's ongoing success.

The need for an overhaul

Why women's tennis rankings need an overhaul

Written by Stephanie Kovalchik, Research Fellow, Institute of Sport, Exercise and Active Living, Victoria University

One of the most popular statistical systems for rating player ability is the Elo system, which has a long history of use in chess and underlies the [power rankings](#) maintained by the statistics website FiveThirtyEight for multiple sports.

The main distinction Elo provides compared to the current system is that points players earn (or lose) take into account the strength of their opponent and how easy (or difficult) the match is expected to be given the ratings of each player in the match.

By making a direct connection between rating points and match expectations, Elo has been [repeatedly shown](#) to outperform official rankings in picking the stronger player in a match.

One way we can judge whether a system like Elo would improve WTA rankings and event seedings is by comparing the two ranking systems for the top female players (quarter-finalists or better) at this year's French Open.

The table below shows the WTA rankings and the Elo rankings (also based on just 52 weeks of match results) at the start of the French Open. Elo would have put half of these players in the top eight, while the WTA rankings placed only three that high. And five of the eight players would have been rated higher overall under the Elo system.

Even more persuasive is Kerber would have had an Elo ranking of 13 going into the event, which is much more consistent with her early exit.

Slumps like Kerber's and upsets like Ostapenko's would be surprising no matter what ranking system you use. The WTA rankings system is certainly [not the sole cause](#) of the greater unpredictability in women's tennis in 2017. But it is an under-appreciated contributing factor that artificially exaggerates the surprise of women's tennis results by the inaccuracies in how it measures player strength.

The tour, players and fans deserve better.

Why women's tennis rankings need an overhaul

Written by Stephanie Kovalchik, Research Fellow, Institute of Sport, Exercise and Active Living, Victoria University

Stephanie Kovalchik is affiliated with Tennis Australia. The opinions expressed in this article are her own and do not necessarily reflect the official policy or position of Tennis Australia.

Authors: Stephanie Kovalchik, Research Fellow, Institute of Sport, Exercise and Active Living, Victoria University

Read more <http://theconversation.com/why-womens-tennis-rankings-need-an-overhaul-78389>