

## Why can't a woman play tennis like a man?

## April 29 2016

Changing court conditions to address differences in men's and women's play might make women's tennis matches more competitive, according to a new study by Ben-Gurion University of the Negev (BGU) and other Israeli researchers.

Many sports adapt rules and equipment to better meet the needs of female competitors. For example, the net is lower in women's volleyball; basketballs are smaller; javelins are lighter; and hurdles are lower.

"Lowering court nets and playing with lighter tennis balls to accommodate <u>physiological differences</u> would help make women's matches more competitive, with scores closer to the <u>men</u>'s," says Dr. Mosi Rosenboim, of BGU's Guilford Glazer Faculty of Business and Management.

"It is important to note that the current disparity is not related to competitive drive. It is usually attributed to differences in strength and speed, particularly when serving," adds Dr. Alex Krumer from the University of St. Gallen in Switzerland. "While a men's set is typically a duel of ace serves, resulting in back-and-forth game wins, women break more serves, which results in shorter sets."

In the study, published in *Journal of Sports Economics* April issue, researchers examined the differences between men's and women's tournament scores from the 24 top men's and 23 top women's singles tournaments of the 2010 season. They evaluated the "tightness," or competitiveness of a match according to how close the set scores were.



Men's sets were consistently closer (6-4, 7-5), while women's sets tended to be more lopsided, with scores of 6-2, 6-1.

"The set-level analysis indicates that physical power, not competitiveness, is responsible for the different number of games per set," says Dr. Offer Moshe Shapir from New York University in Shanghai. When researchers re-evaluated the 2010 tournaments and controlled for physical characteristics, such as height and body mass index, the gender gap in final scores completely disappeared. Comparing matches of men and women who were as similar as possible in physical stature yielded the same results: no gender differences in the number of games per set.

"It's a much-debated subject in the tennis world," the researchers state. "Level of competitiveness is one of the most important factors in the sports industry, where uncertain outcomes generate more interest from fans and higher ticket sales. This argument also contributes to an earnings gap between professional female and male tennis players."

After analyzing 3,844 men's sets and 3,034 women's sets, Rosenboim and his colleagues Krumer and Shapir, found that men's scores were closer. For instance, when Novak Dojokovic beat Rafael Nadal in the men's final of the 2012 Australian Open with a score of 5-7, 6-4, 6-2, 6-7, 7-5, the match lasted nearly six hours. The day before, Victoria Azarenka defeated Maria Sharapova 6-3, 6-0 in 1 hour and 22 minutes.

"If no changes are made, playing on the same court makes men's and women's tennis a completely different game," Rosenboim says.

**More information:** A. Krumer et al, Gender, Competitiveness, and Physical Characteristics: Evidence From Professional Tennis, *Journal of Sports Economics* (2014). DOI: 10.1177/1527002514528516



## Provided by American Associates, Ben-Gurion University of the Negev

Citation: Why can't a woman play tennis like a man? (2016, April 29) retrieved 12 September 2024 from <a href="https://phys.org/news/2016-04-woman-tennis.html">https://phys.org/news/2016-04-woman-tennis.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.