

Question 3: Tennis

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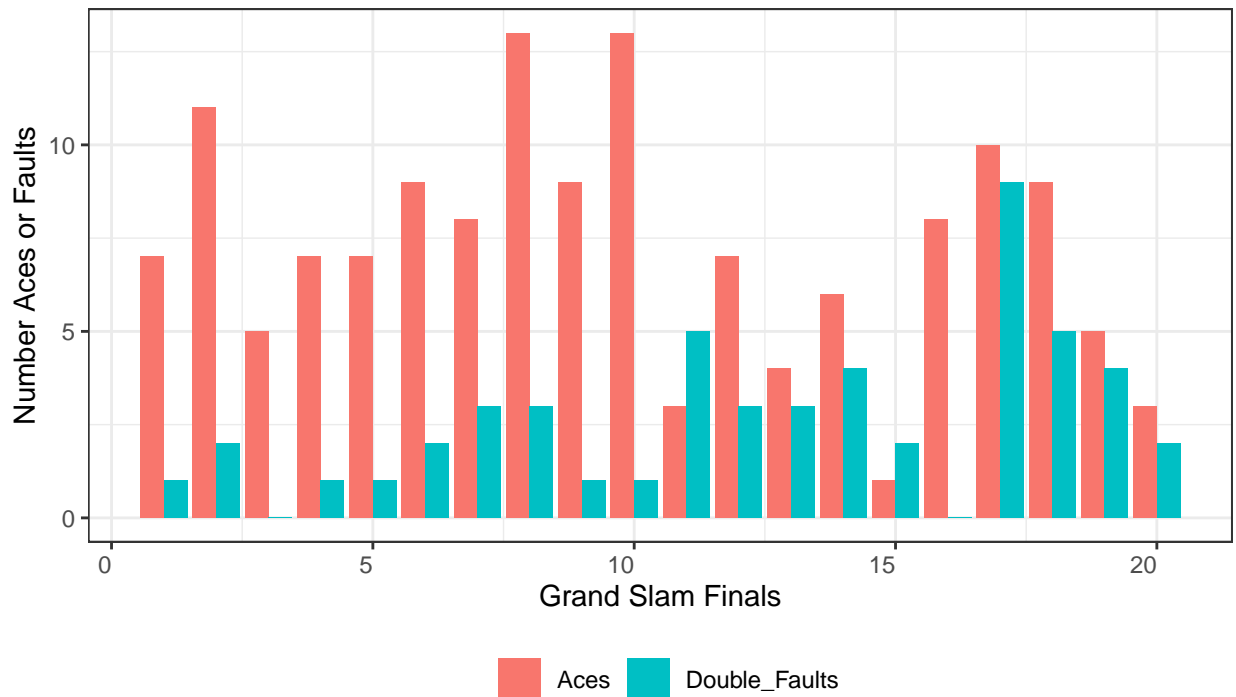
Interesting Tennis Statistics

Nadal vs Djokovic: Aces and Doubles Faults in Grand Slam Finals.

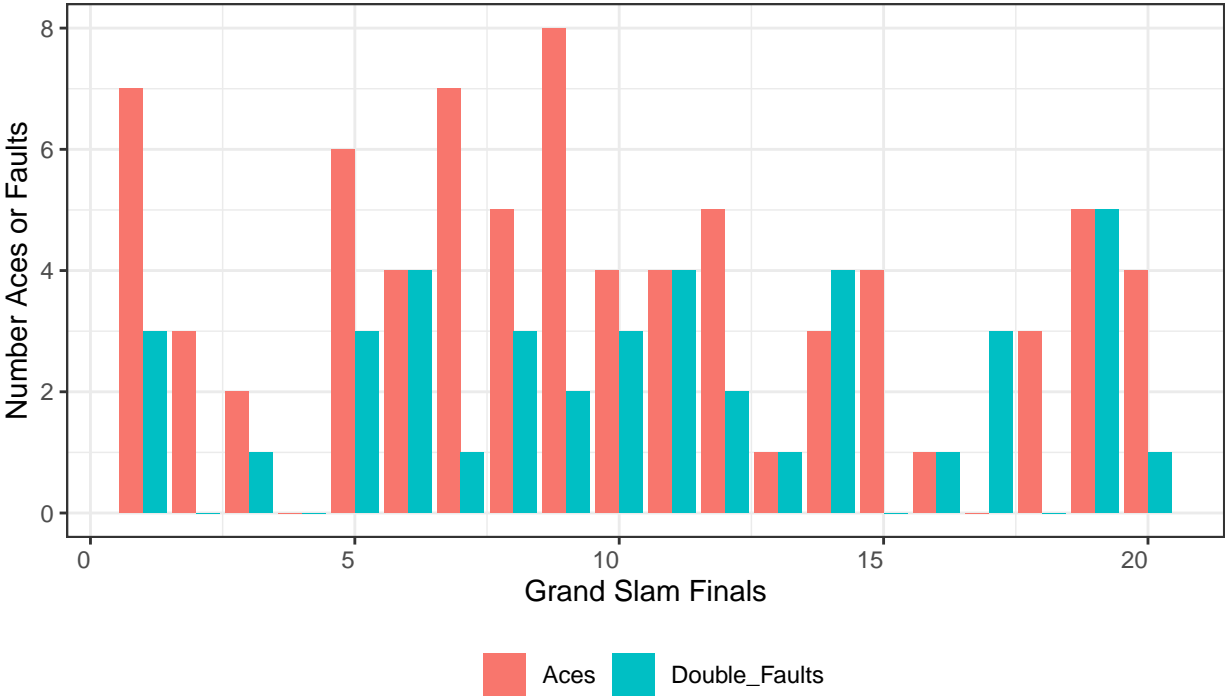
Both Rafael Nadal and Novak Djokovic have won at least 20 Grand Slams. The two graphs below shed some light on their consistency in on the biggest stage. Both players have performed incredibly well over the past years, but in Grand Slam Finals matches fine margins determine champions given the 5 set structure and the strength of opponent that reaches a final. Both players have recorded very few double faults in their finals wins, which is remarkable given the stage, pressure, and duration. And on average will serve more aces than doubles faults in the match. Djokovic even more impressively, has never served more double faults than aces in any of his final wins.

Djokovic: Consistency of Serve in Winning Grand Slam Finals

Aces and Double Faults



Nadal: Consistency of Serve in Winning Grand Slam Finals
Aces and Double Faults



1ST Serve Percentage: Gland Slam vs Masters 1000s

The graph below sets out to answer the question, do winning male tennis players have a better or worse 1st serve in percentage on a bigger stage, i.e. a Grand Slam, and has this been the case over time. From the graph, the difference between 1st serve in percentage during a Grand Slam (best of 5 sets) or Masters 1000 (best of 3 sets) tournament, appears to be reasonably even. However, there does seem to be a slight improvement for both tournaments over time. Lets investigate this further.

Percentage of 1st Serves In: Gland Slam vs Masters 1000s

Plot Comparing 1st Serve Percentage for All Male Players when winning matches (1990

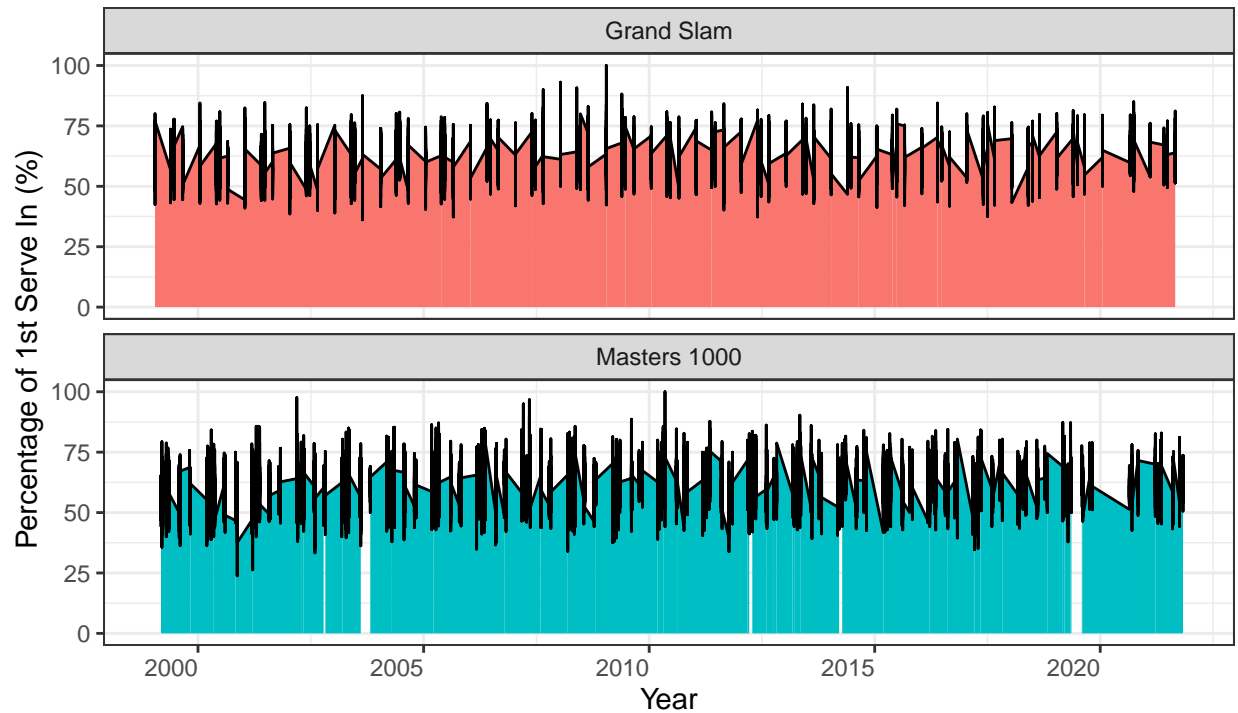


Table 1: Descriptive Statistics of Tennis Match Winners over the last 25 Years

Date	1st Serve In (%)	1st Serve Won (%)	Aces	Double Faults	Height
2021	63.25	48.39	8.98	3.17	191.58
2020	63.83	49.59	9.16	3.16	188.58
2019	63.73	49.80	6.27	2.03	187.12
2018	64.93	50.60	8.70	2.77	191.21
2017	64.33	48.77	8.49	2.76	187.94
2016	62.14	47.70	7.13	3.14	188.14
2015	62.56	48.86	7.33	2.33	188.39
2014	63.25	48.99	8.84	2.57	187.95
2013	63.48	48.42	6.72	1.88	186.49
2012	62.33	47.44	7.22	2.14	186.97
2011	63.56	48.69	7.29	2.21	187.59
2010	62.53	47.80	9.64	3.09	187.84
2009	63.39	48.68	8.11	2.47	187.55
2008	66.09	50.32	6.63	1.83	185.71
2007	64.62	48.48	6.88	2.10	184.00
2006	64.45	47.74	7.19	2.09	184.26
2005	62.13	46.52	7.94	2.41	184.06
2004	61.33	47.21	8.12	3.06	184.14
2003	60.43	45.23	8.13	3.09	183.29
2002	55.60	42.74	9.48	3.90	184.60
2001	59.98	45.67	9.93	3.44	183.42
2000	55.74	43.34	8.78	3.44	187.38
1999	59.01	46.79	8.00	3.23	186.95
1998	58.53	44.94	7.65	2.71	185.38
1997	59.66	46.53	7.95	2.67	184.38

From the table of reported statistics of the past 25 years one can see that 1st serve in percentage of male tennis players has increase steadily over the years. In addition to 1st serve in percentage, other averages are reported here. Most notably, the average height of winning male tennis players has been increasing over the past 25 years, as if to suggest that taller players win more often. However, it is far more likely that this is a result of more taller male players making it onto the pro circuit than before.