

# Big Three Major Titles By Age

## Goal

We want to construct a line graph comparing the major titles of the Big Three (Djokovic, Federer, Nadal) by age. We want to see who won their major titles at a younger age and who won their titles at an older age.

## Data Collection

We use data scraping to collect data related to the major tennis titles won by each of the Big Three. We can store this data in a Google spreadsheet.

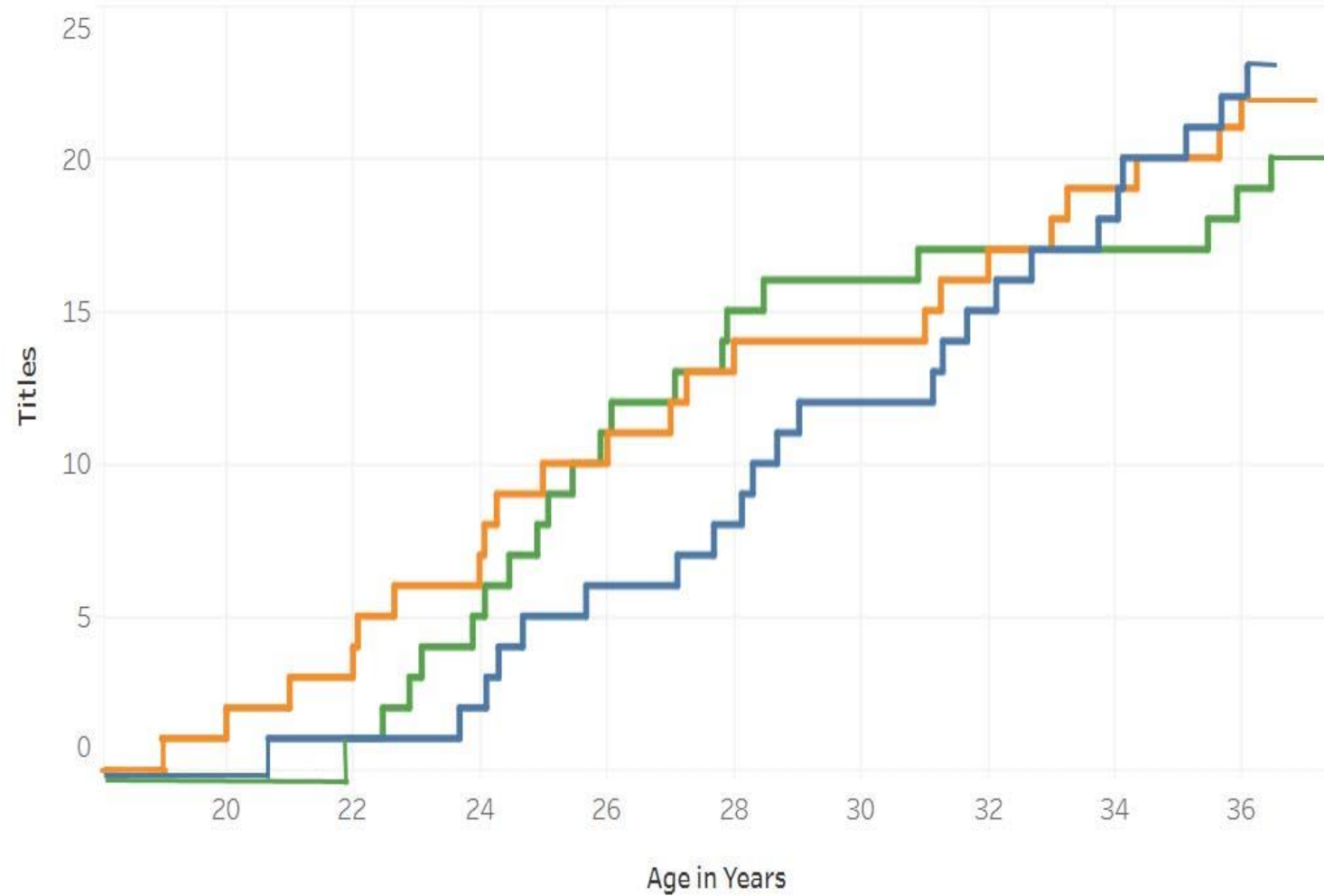
We can add a column to the table showing the date that each title was won. Then we can use the data difference function to determine the age of the player when they won each major title.

We gather the results in a table (see appendix).

## Data Visualization

In Tableau, we can visualize the data with a step-wise line graph. Each player is represented by a specific color. Can you understand why each player is represented by these specific colors?

## Big Three Tennis Titles By Age



### Players

- Novak Djokovic
- Rafael Nadal
- Roger Federer

## **Data Analysis**

Nadal got a head start on Federer and Djokovic by winning his first Grand Slam title at the age of 19. Nadal maintained this lead over Federer until the age of 25.5 years old when both had 10 major titles. At this age, Djokovic trailed them with 5 major titles.

By age 30, Federer had a clear lead over his two rivals. Federer led with 16 major titles, followed by Nadal with 14, and Djokovic with 12. It is interesting to note that all three players had a flat period around the ages of 29 to 31 when they didn't win any titles. One might have suspected that their title-winning ways were over at this point in their careers, but clearly, this is not what happened.

After age 30, all three players went on to win more major titles, but it seems that this is where the title race turned. Federer only won 4 more major titles after age 30, Nadal won 8 more, while Djokovic won 11 more major titles. This productivity after age 30 allowed Djokovic to surge ahead of his rivals and claim the all-time record in men's tennis with 23 grand slam titles.

Appendix

Player	Age in Years	Major Titles
Rafael Nadal	19.0	1
Rafael Nadal	20.0	2
Novak Djokovic	20.7	1
Rafael Nadal	21.0	3
Roger Federer	21.9	1
Rafael Nadal	22.0	4
Rafael Nadal	22.1	5
Roger Federer	22.5	2
Rafael Nadal	22.7	6
Roger Federer	22.9	3
Roger Federer	23.1	4
Novak Djokovic	23.7	2
Roger Federer	23.9	5
Rafael Nadal	24.0	7
Rafael Nadal	24.1	8
Roger Federer	24.1	6
Novak Djokovic	24.1	3
Rafael Nadal	24.3	9
Novak Djokovic	24.3	4
Roger Federer	24.5	7

Novak Djokovic	24.7	5
Roger Federer	24.9	8
Rafael Nadal	25.0	10
Roger Federer	25.1	9
Roger Federer	25.5	10
Novak Djokovic	25.7	6
Roger Federer	25.9	11
Rafael Nadal	26.0	11
Roger Federer	26.1	12
Rafael Nadal	27.0	12
Roger Federer	27.1	13
Novak Djokovic	27.1	7
Rafael Nadal	27.3	13
Novak Djokovic	27.7	8
Roger Federer	27.8	14
Roger Federer	27.9	15
Rafael Nadal	28.0	14
Novak Djokovic	28.1	9
Novak Djokovic	28.3	10
Roger Federer	28.5	16
Novak Djokovic	28.7	11
Novak Djokovic	29.0	12
Roger Federer	30.9	17

Rafael Nadal	31.0	15
Novak Djokovic	31.1	13
Rafael Nadal	31.3	16
Novak Djokovic	31.3	14
Novak Djokovic	31.7	15
Rafael Nadal	32.0	17
Novak Djokovic	32.1	16
Novak Djokovic	32.7	17
Rafael Nadal	33.0	18
Rafael Nadal	33.3	19
Novak Djokovic	33.8	18
Novak Djokovic	34.1	19
Novak Djokovic	34.1	20
Rafael Nadal	34.4	20
Novak Djokovic	35.1	21
Roger Federer	35.5	18
Rafael Nadal	35.7	21
Novak Djokovic	35.7	22
Roger Federer	35.9	19
Rafael Nadal	36.0	22
Roger Federer	36.5	20
Novak Djokovic	36.1	23