Chess Analysis

Samad Karimov

Intro/Motivation

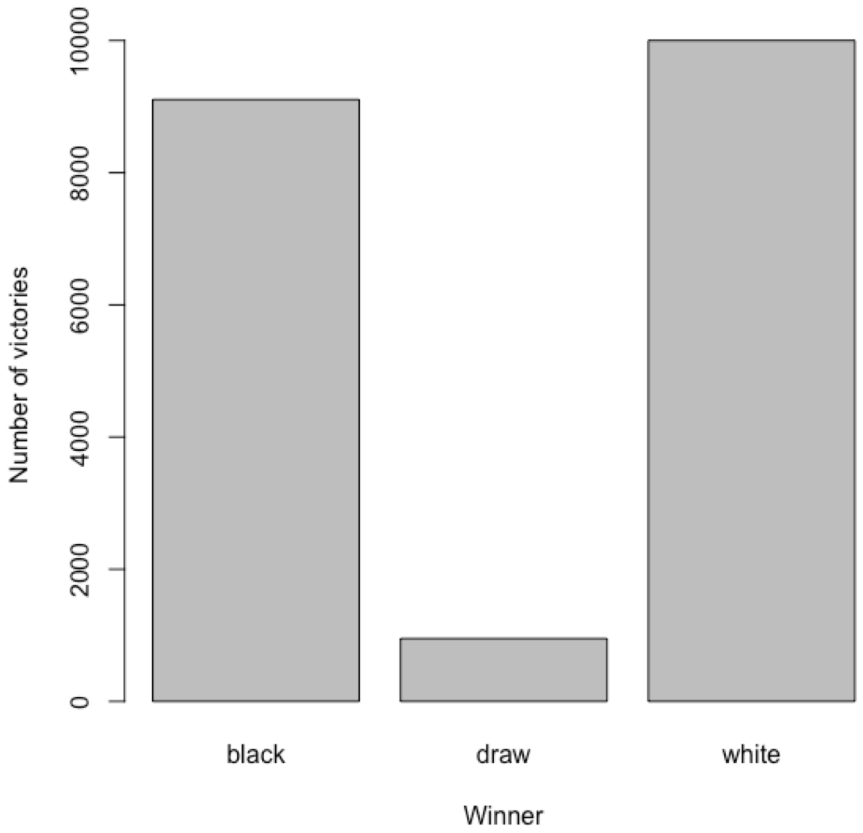
- Why Chess?
- Data sources: lichess.org & chess.com
- wrangled smaller data – formatting, cleaning, and new vars.

The game of chess

- Players: White – Black
- Outcome: loss, draw, win
  - wining/losing: Mate, Out of time, Resign
- Game time control: 1 to 5 min (blitz) – 8 to 15 min (rapid) - over (classical)
- Rating: 600 to 3000
- Rated vs Unrated games

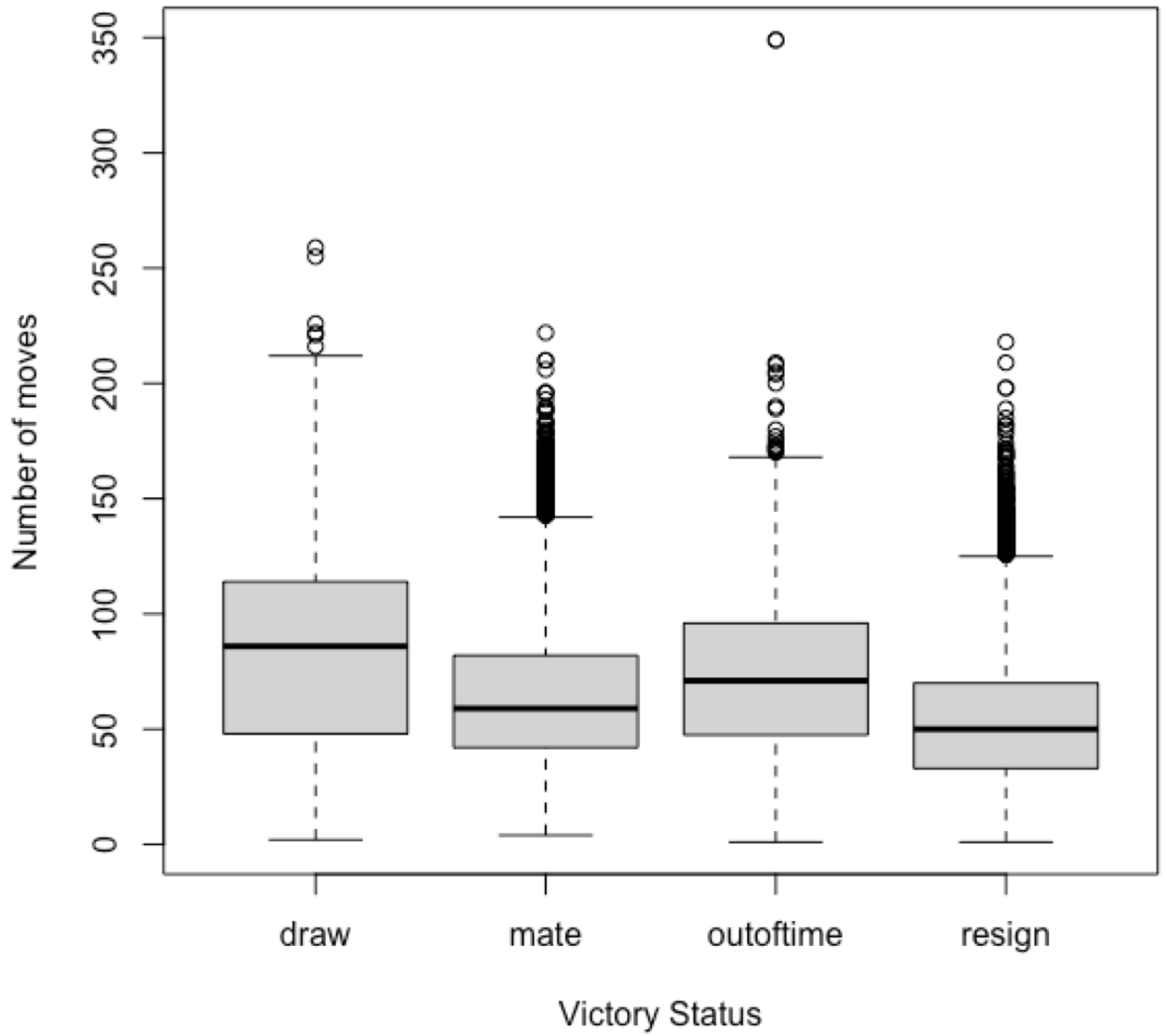
Questions to explore

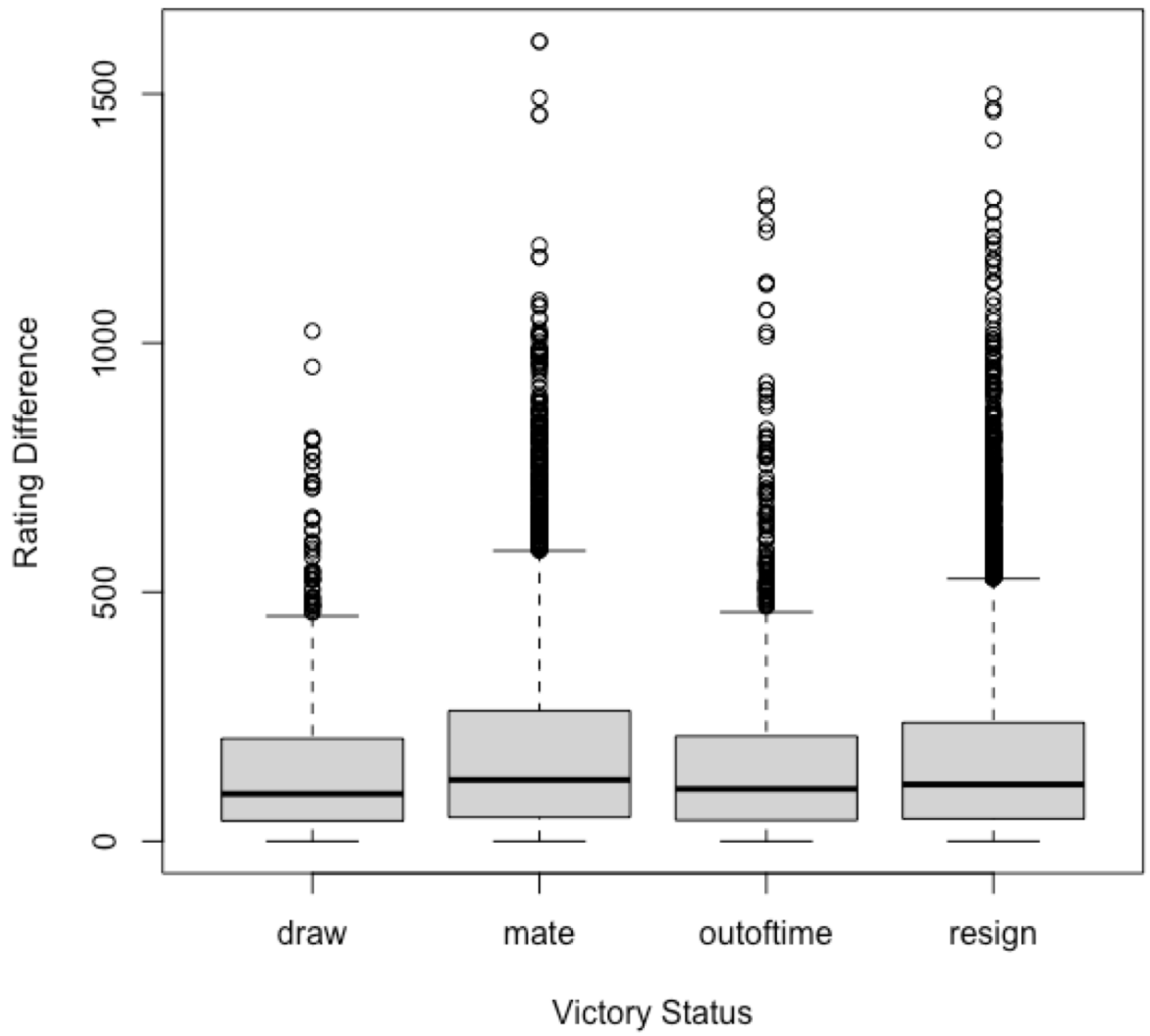
- What predicts wins? – Higher Rating (how high)? Openings (opening theory)? Playing with whites?

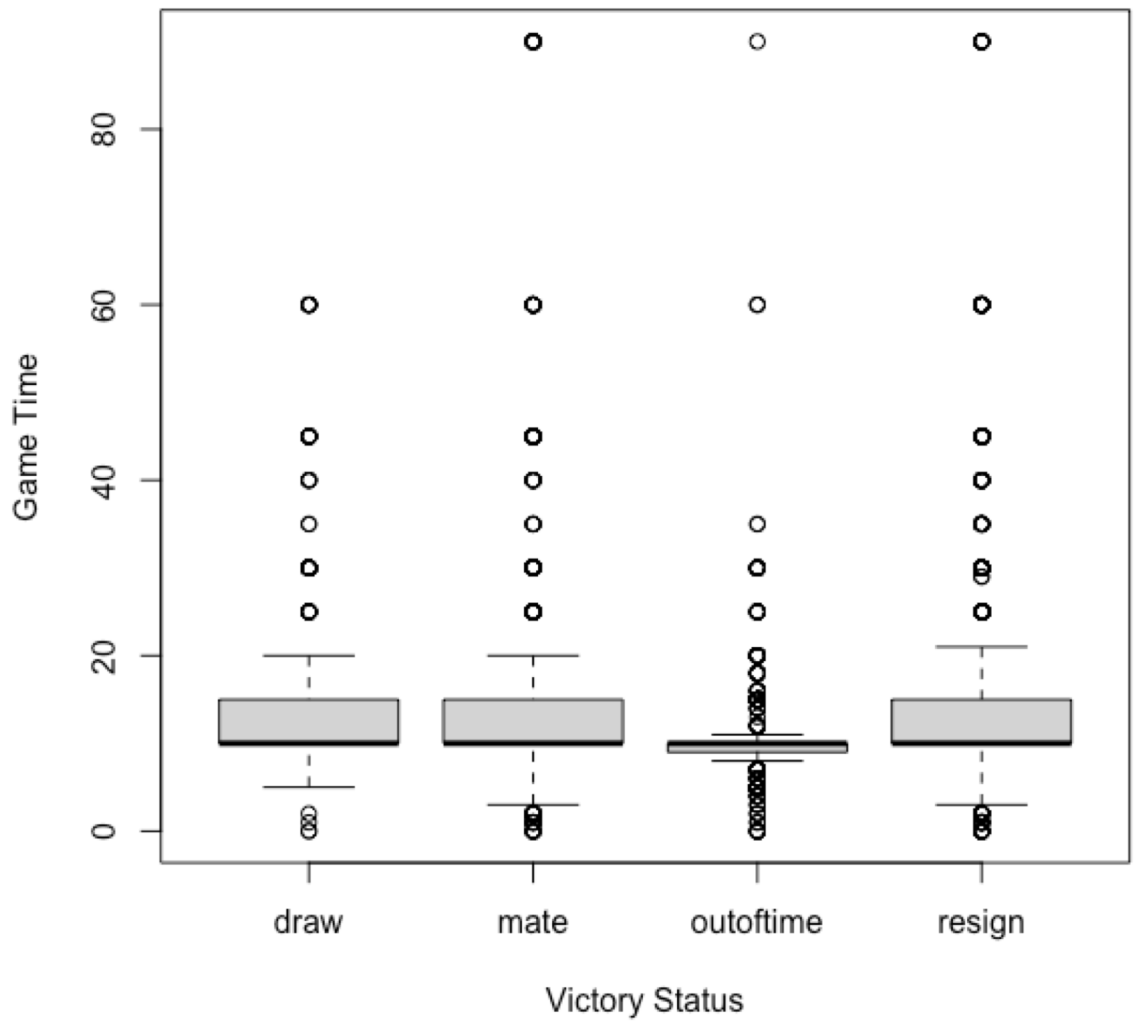


- Do the games of higher rated chess players end with more resigns than lower rated players?
- What explains wins for players with similar ratings?
  - Puzzle ratings? chess status such as FM, IM, GM?
- How rating differs across longer/shorter games?
- How rating improve: Playing more / analyzing games/ Solving puzzles

Descriptive Graphs




Rating Difference
0
500
1000
1500
draw
mate
outoftime
resign
Victory Status


Game Time
0
20
40
60
80
draw
mate
outoftime
resign
Victory Status

Thank you!

- Data sources: lichess.org (monthly) & chess.com (API)