

## 1. Getting Global Insight

1. Question: What is the relationship between how many years chess has been played in a country and its current popularity?
  - Historical Evolution and Game Entrenchment
  - Motivation: To determine whether traditional powers (e.g., Russia, Europe) still dominate due to historical momentum, or if emerging markets (e.g., India, China) are growing faster, signaling a shift in the game's geopolitical balance.
2. Question: How has the demographic composition of the global ranking changed in recent years?
  - Demographics and Gender Gap Analysis
  - Motivation: To verify if the game is becoming socially more inclusive or if it remains structurally dominated by specific demographic groups.
3. Question: Which nations have the highest concentration of professional players relative to their population size?
  - Geographical analysis and top-player distribution
  - Motivation: This metric distinguishes between nations that dominate simply because they are large and smaller nations where chess is disproportionately popular and culturally ingrained

## 2. Focusing on Subsets

1. Question: What is the relationship between match frequency and title acquisition for the best players of each continent?
  - Career Velocity and Strategies
  - Motivation: To discover whether incessant play is more effective than strategic pauses for study, and if different training cultures exist between Asia, Europe, and the Americas.
2. Question: Who are the most promising young players compared to the average growth curve, differentiated by Country and Gender?
  - U20 Scouting
  - Motivation: To identify future world champions before they reach the peak (talent scouting) and evaluate the future "health" of national federations for the coming decade.
3. Question: How does the volume of games played vary across different life stages of a Top Player? Is there a specific "intensity threshold" at some specific age to become a champion?
  - Workload Analysis and Career Intensity
  - Motivation: To quantify the level of sacrifice and effort required in the youth phase to become a professional, distinguishing the "experience accumulation" phase from the "rating maintenance" phase.
4. Question: How long do players maintain their highest achieved ranking?
  - Peak Rank Retention Analysis.
  - Motivation: To understand if reaching the summit is the hardest part, or if staying there is the true challenge.

## 3. Comparing Subsets

1. Question: What is the difference in ranking mobility between Low-Rating players and Top Players?
  - Rating Mobility High vs. Low ELO
  - Motivation: To demonstrate the structural nature of the ranking system: the ease of climbing positions from the bottom versus the extreme difficulty of maintaining a position at the top.

2. Question: Is there a correlation between the average age of a nation's players and its average competitive strength?

- Generational Clash (Youth vs. Experience)
- Motivation: To verify if the advent of modern training methods chess engines, online databases disproportionately favors nations with a lower average age compared to those relying on traditional experience.