

Analysis of FIFA 24 Capability Values for Football Players from Four Countries

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Overall

This article selects two European and two South American teams, all rich in talent and with good performances in international competitions, for comparison. It analyzes the characteristics of the top 100 players from each age group within these four teams and predicts their future styles.

Main Figure

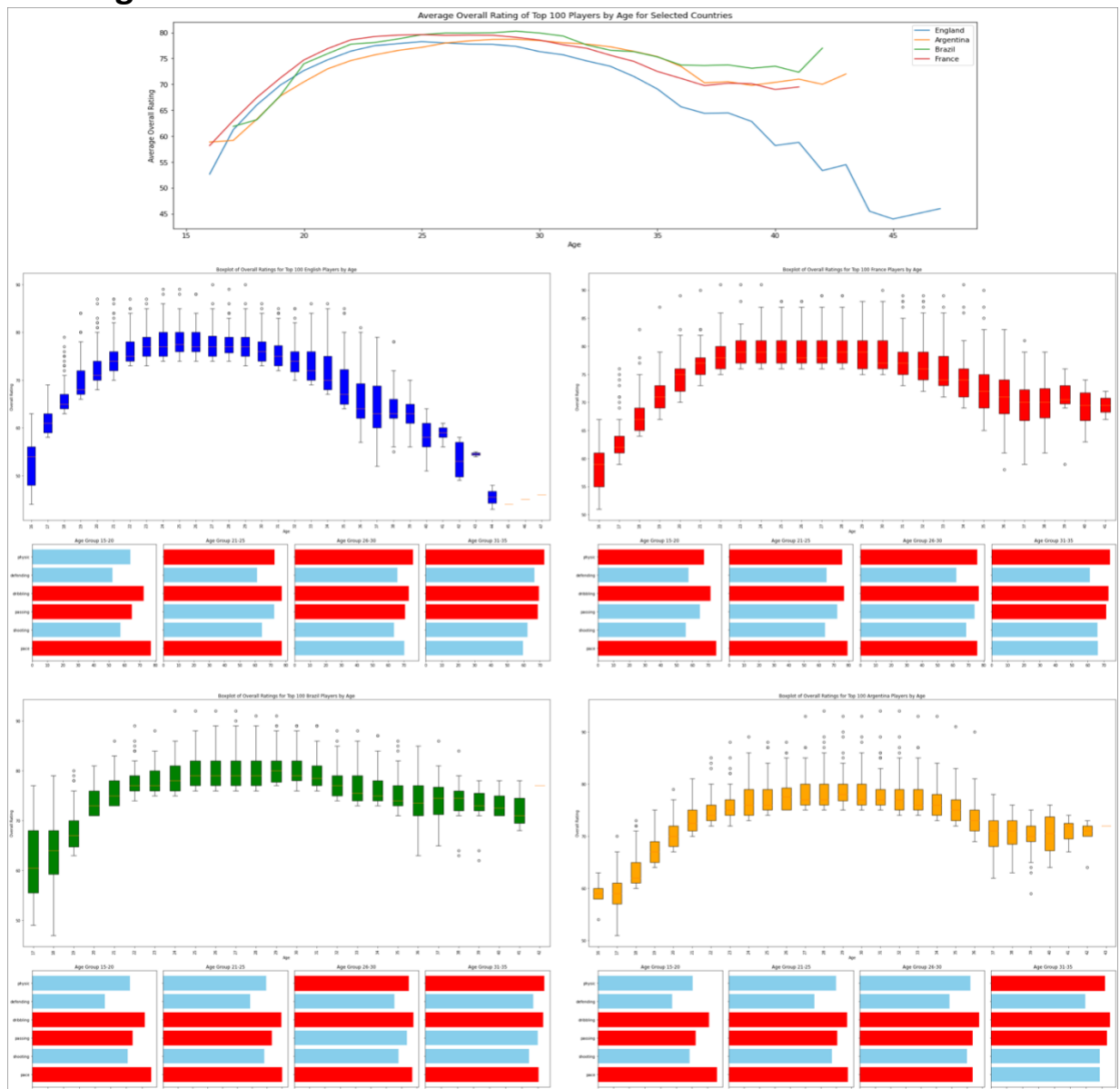


Figure 1: Distribution chart of the top 100 athletes' ability values across all age groups from four countries

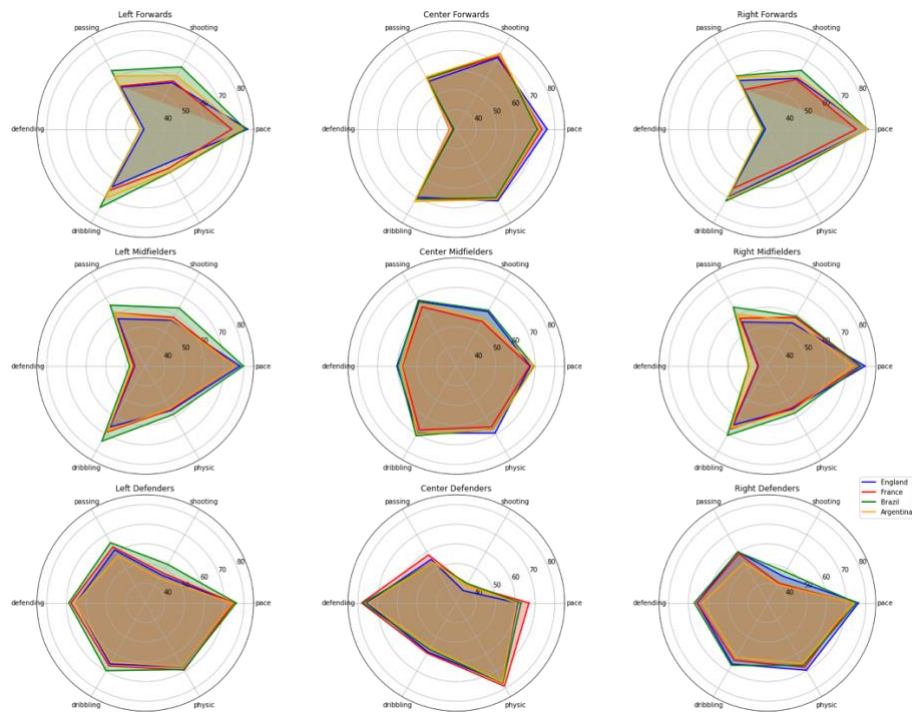


Figure 2: Comparison of capacity values at each position

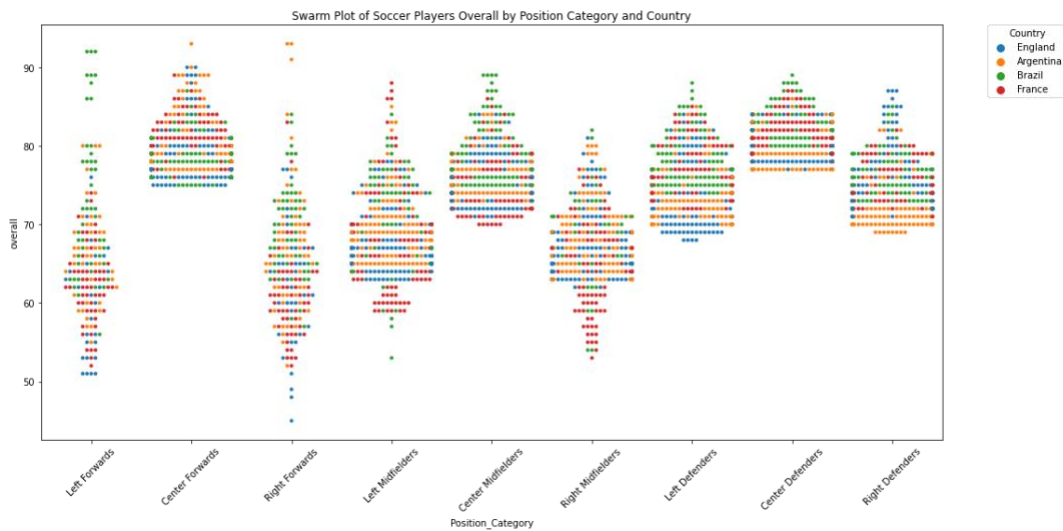


Figure 3: Distribution of capacity values in four countries by location

Legend explains

In all the charts, blue represents England, orange represents Argentina, green represents Brazil, and red represents France.

Finding

Figure 1 shows that athletes' abilities from all countries improve with age, peaking between 26 and 32. Each country shows distinct ability preferences: French and English players are physically stronger, Brazilians are faster, and Argentines excel in passing. England, France, and Brazil's prime players are aged 23-29, promising continued competitiveness, whereas Argentina's best is older, aged 28-32, which could lead to future challenges with age and injuries.

Figure 2 highlights that, from ages 20 to 28, Brazilian teams have standout wide players known for their speed and skill, while the English team's midfield excels in game control.

Figure 3 notes that, within the same age range, Brazil has top talent in all positions, particularly left forward. Argentina shines in right midfield and forward positions, England has a strong presence in center forward and right-sided positions, and France's key players dominate left midfield and center forward spots.

Data & Method

- Data provided by: <https://www.kaggle.com/datasets/rajatsurana979/fifafcmobile24>

This article uses the Fifa Mobile 24 capability value data from the Kaggle public dataset. The dataset covers player information including nationality, position, overall capability values, and other individual attributes such as shooting, passing, dribbling, defense, height, and physical fitness. The article primarily employs a method of filtering for capability values and then taking the average to obtain various visual images. Line graphs are used to show the trend of the top 100 scores by age, while box plots display the overall distribution of player scores across different age groups. Radar charts illustrate the scoring of players' various data capabilities from different countries and positions. Swarm plots reveal the density and variability of scores for different capabilities across positions for each country.

Significance statement

Soccer Strategic Planning: The charts present the performance of players across different age groups and positions, which is crucial for the strategic planning of football clubs and national teams. They assist coaches and managers in understanding when a player may reach their peak or begin to decline, informing decisions regarding transfers and the nurturing of new talent.

Player Development Analysis: The relationship between age and overall ratings reveals patterns in player development, offering significant guidance for the construction of youth training systems and the cultivation of young players.

International Soccer Level Comparison: Comparisons of player abilities across different countries highlight the variations in soccer development among nations, which is not only interesting for fans but also provides practical help in strategizing for international matches.

Github

https://github.com/chenyd27/INFSCI_2415_Final.git