

OBSERVING FIFA 2021 DATA

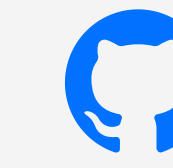
This report includes Data Analysis and Visualization observations for FIFA 2021 player data.

RESEARCHER

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DATASET SOURCE

<https://www.kaggle.com/stefanoleone992/fifa-21-complete-player-dataset>

01. INTRODUCTION

FIFA 21 is an association football simulation video game published by Electronic Arts as part of the FIFA series. It is the 28th installment in the FIFA series, and was released on 9 October 2020 for Microsoft Windows, Nintendo Switch, PlayStation 4 and Xbox One.

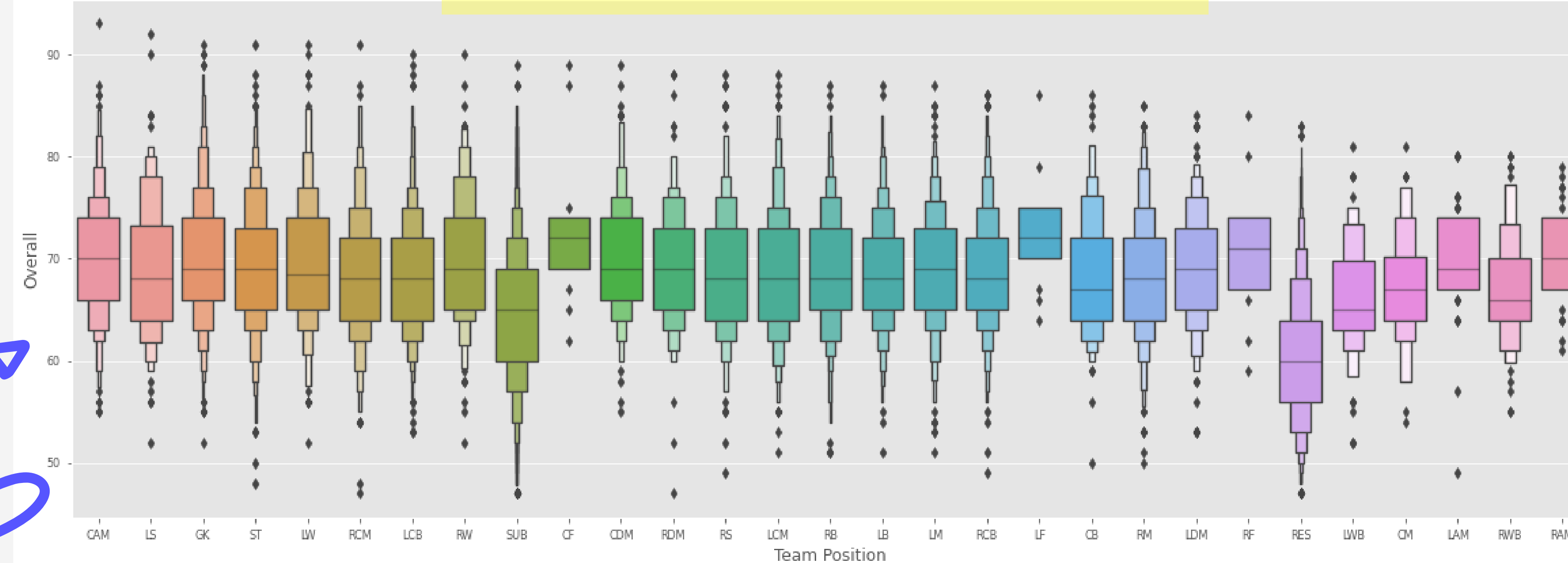
The dataset used contains a lot of information about the players. The purpose of this research is to understand and visualize FIFA 2021 dataset.

02. OBJECTIVE

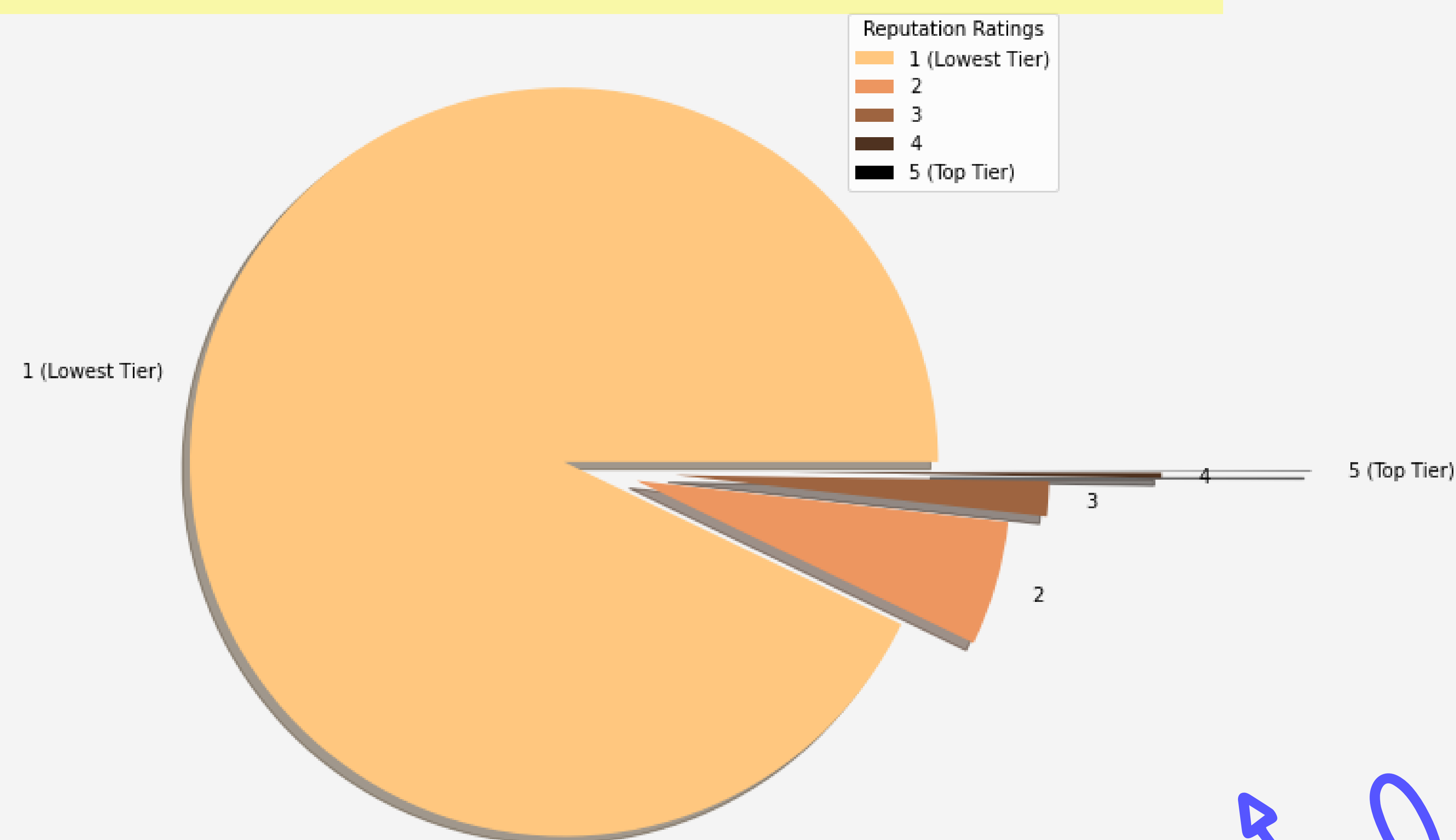
The main purpose is to research the players, clubs and other relevant columns in the FIFA 2021 dataset and to extract meaningful information from this data.

The second main goal is to find young and high potential players.

Overall Ranges of Players According to Team Position



Distribution of International Reputation Ratings of Footballers

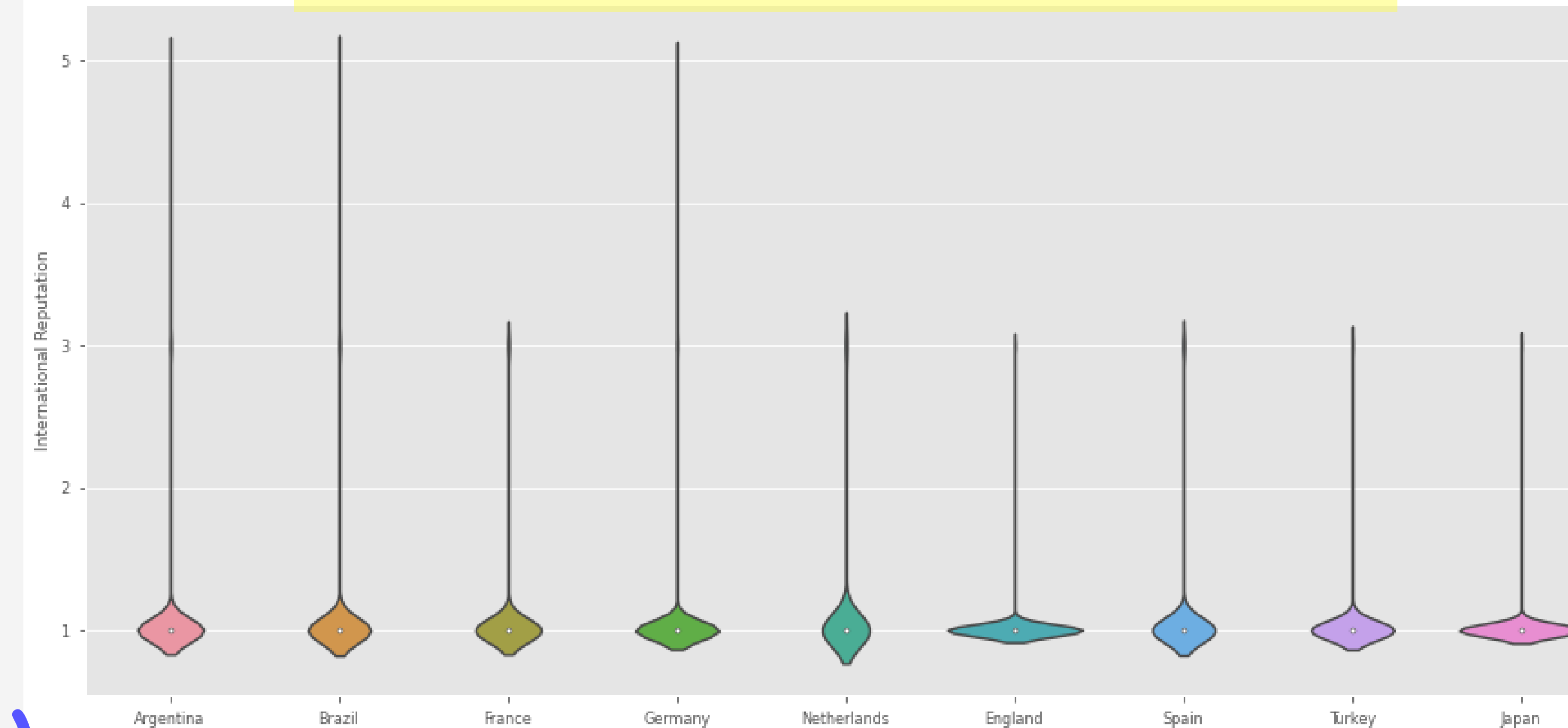


05. ANALYSIS

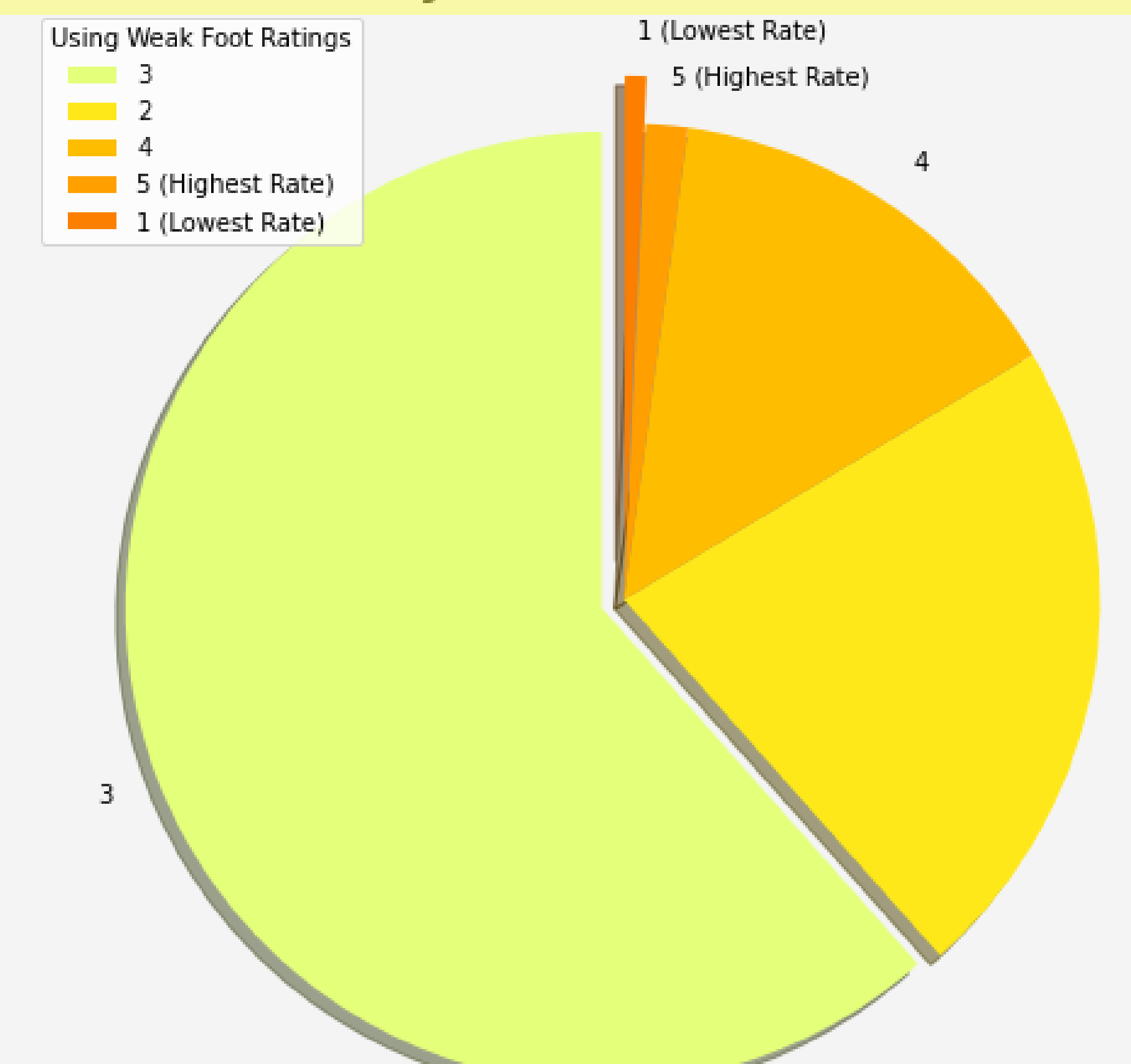
Pandas, Seaborn, Matplotlib and Numpy libraries were used to analyze and visualize the data. The studies were done using Colab Notebooks.

The dataset has 106 features.

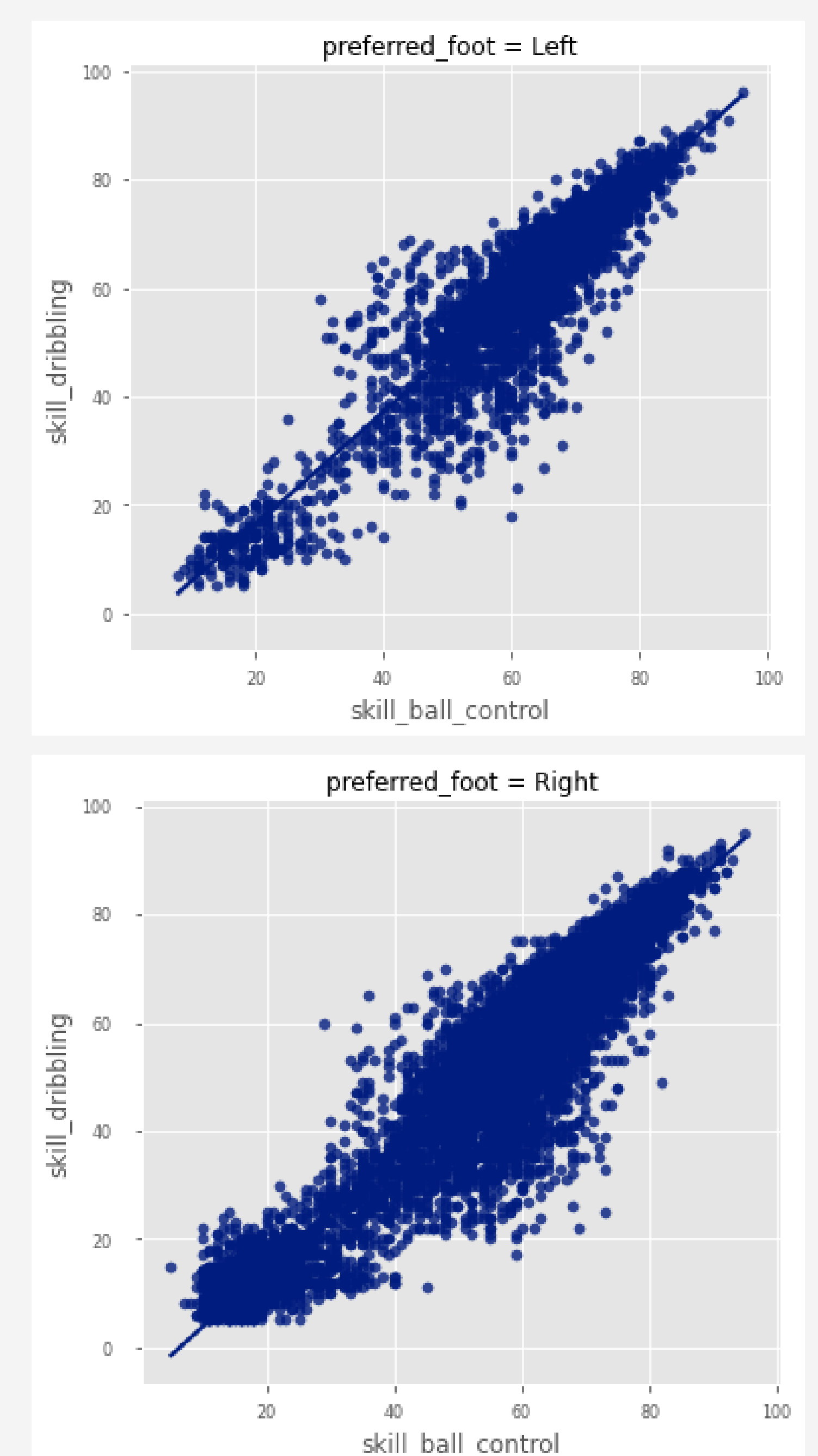
Distribution of International Reputation of Players from Different Countries



Distribution of Ability to Use Weak Foot of Footballers



Comparing the Performance of Left Footed and Right Footed Footballers (Ball Control vs Dribbling)

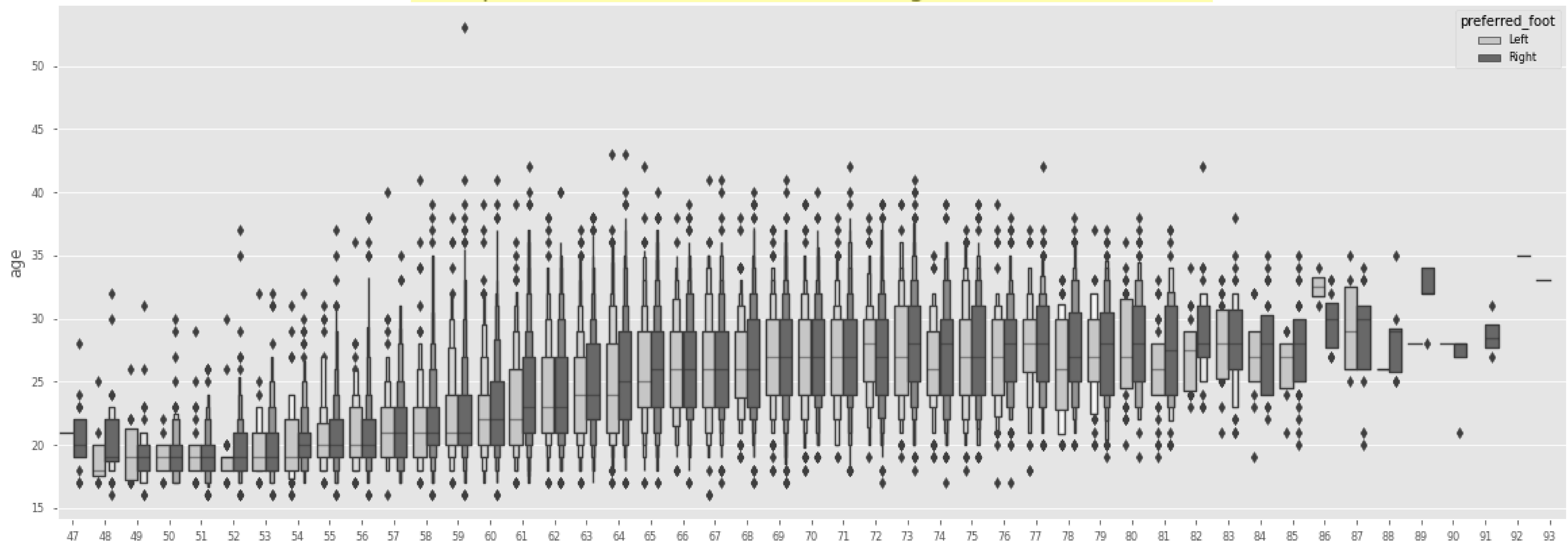


06. CONCLUSION

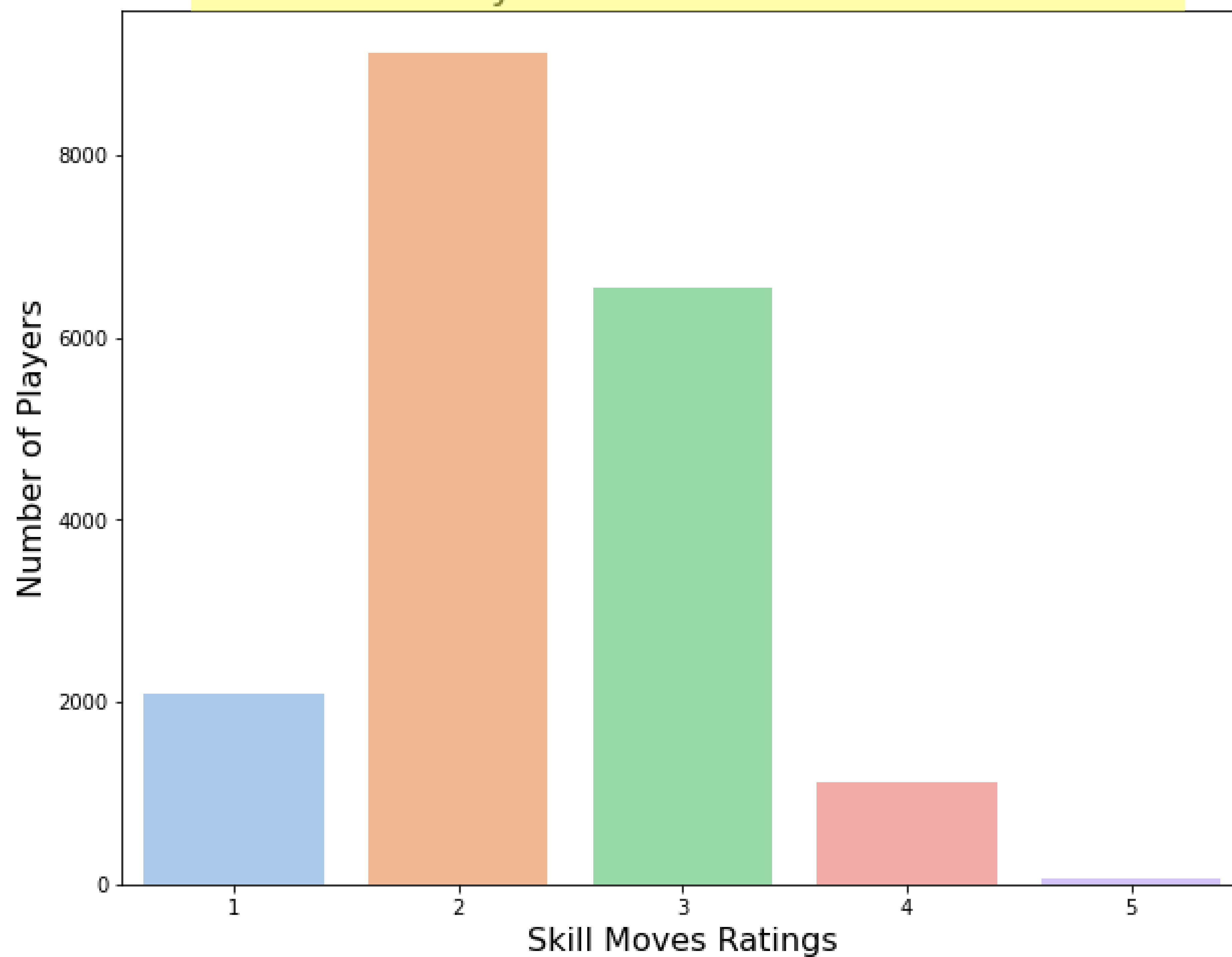
- **%77.7** of players are **Right-Footed**.
- **%1.4** of players use **both feet very well**.
- There is a **Gaussian Distribution** in the **Potential Scores** of players.
- The country that **produces** the **most football players** is **England** with **%8.8**.
- Based on their **Overall Scores**, **%34.4** of **top players** for each **Position** are **over 30**.
- Based on their **Potential Scores**, **%51.7** of **top players** for each **Position** are **under 25**.
- The **player** with the **longest membership** (**23 years**) in the **same club** (**Kashima Antlers**) is **H. Sogahata**.
- The **club** with **players** from the **maximum number of different countries** (**33**) is **Rosario Central**.

CHARTS

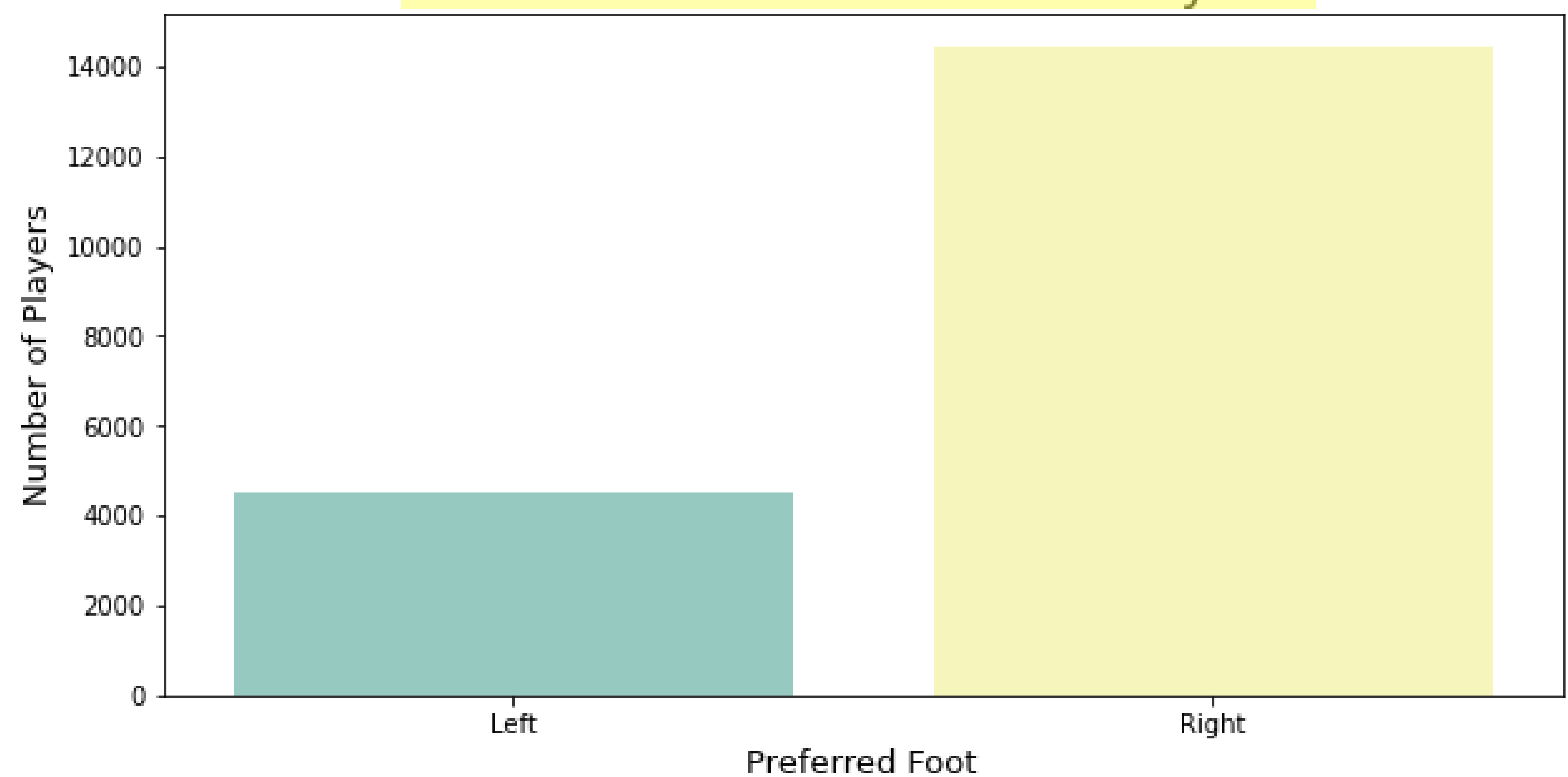
Comparison of Overall Scores and Age with Preferred foot



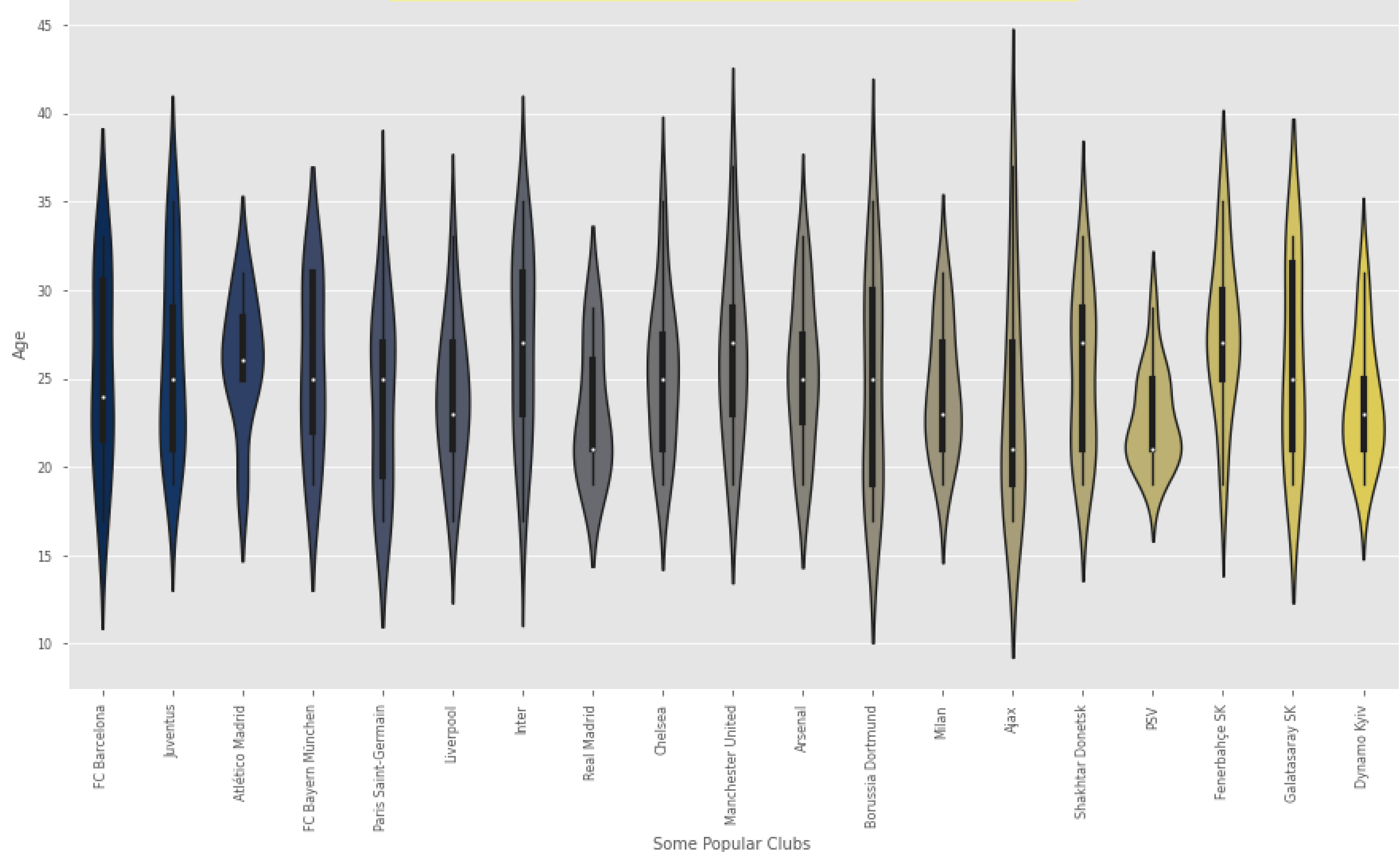
Number of Players on Basis of Their Skill Moves



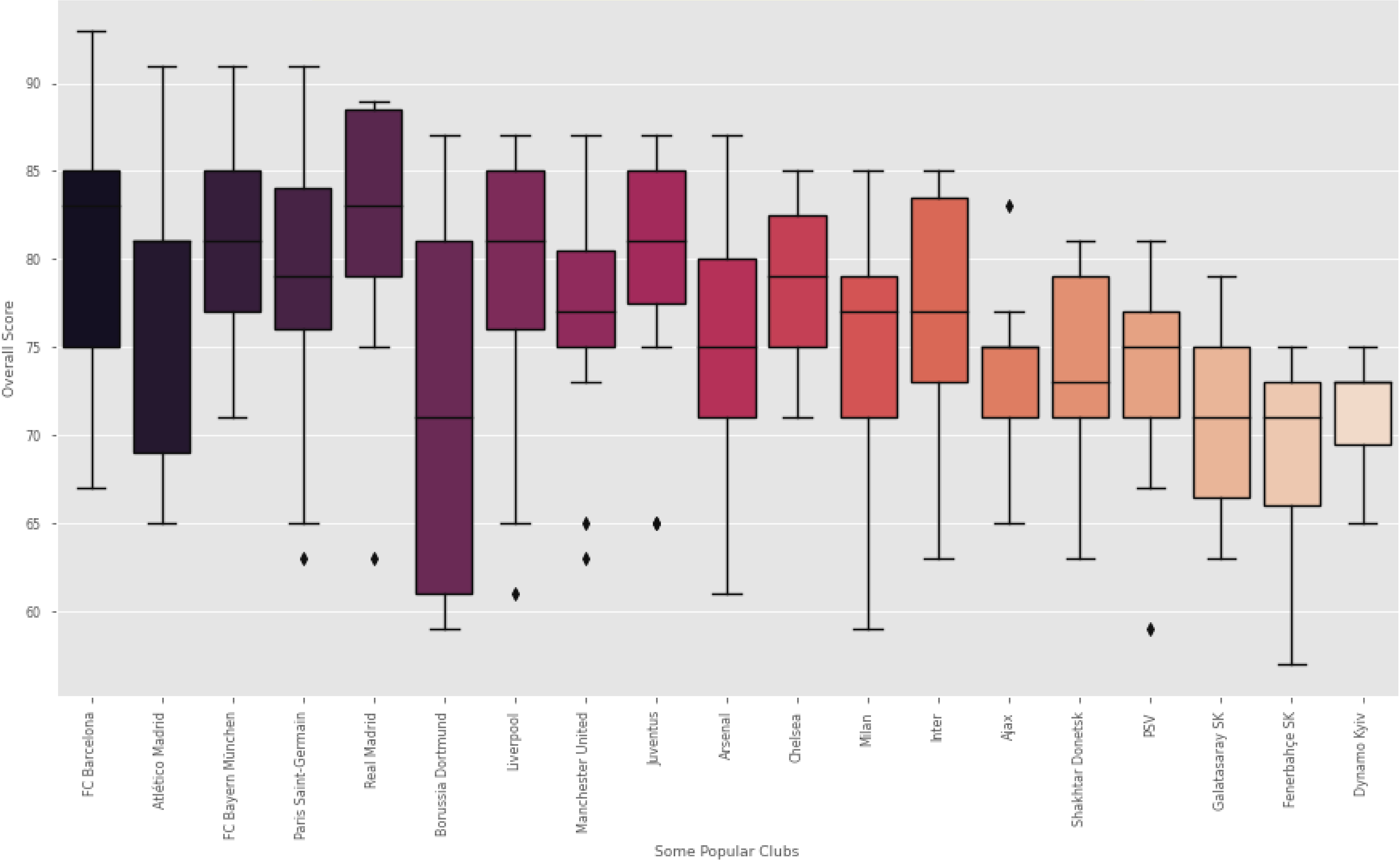
Most Preferred Foot of the Players



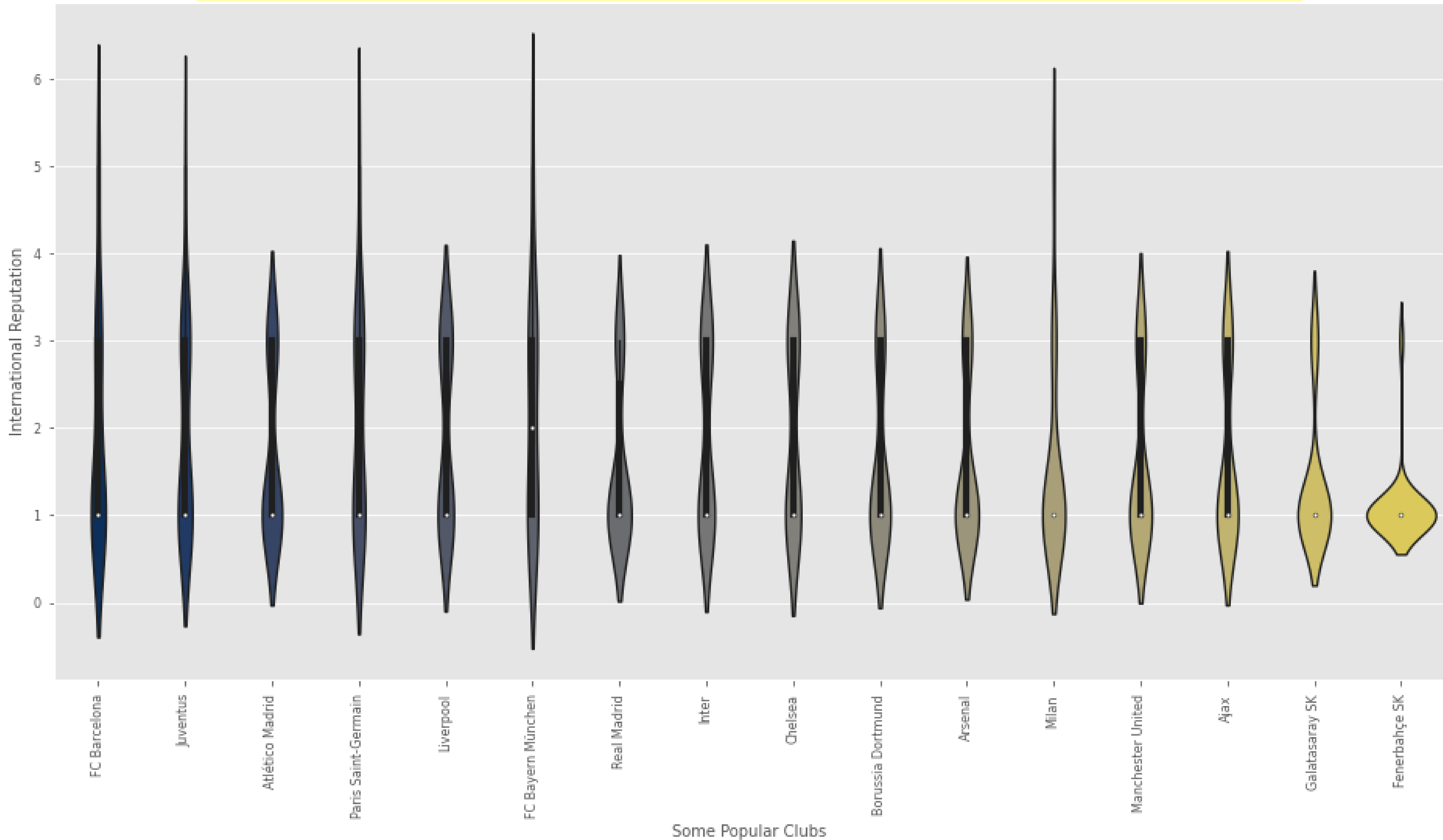
Distribution of Ages in Some Popular Clubs



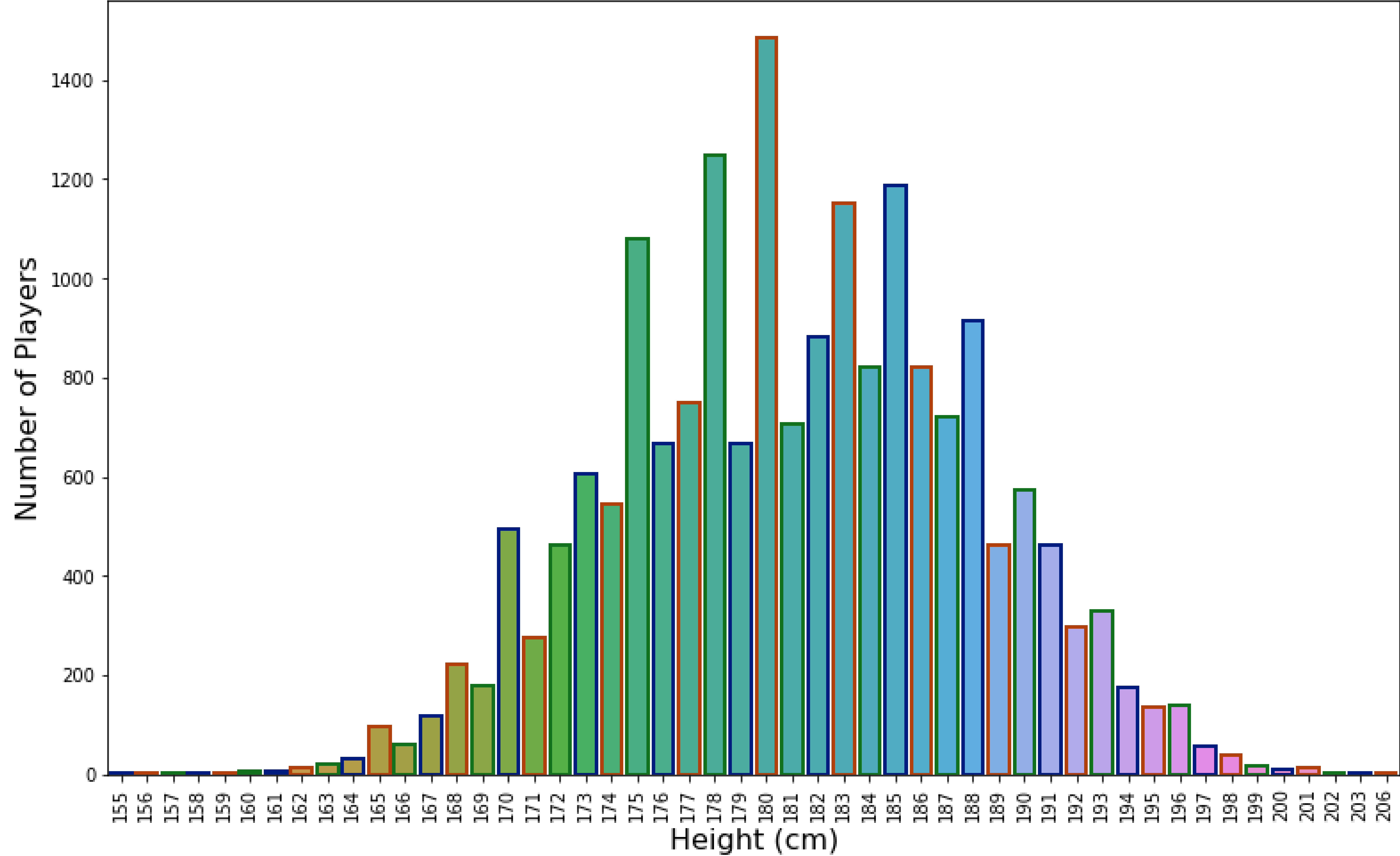
Distribution of Overall Score in Some Popular Clubs



Distribution of Players' International Reputation in some Popular Clubs

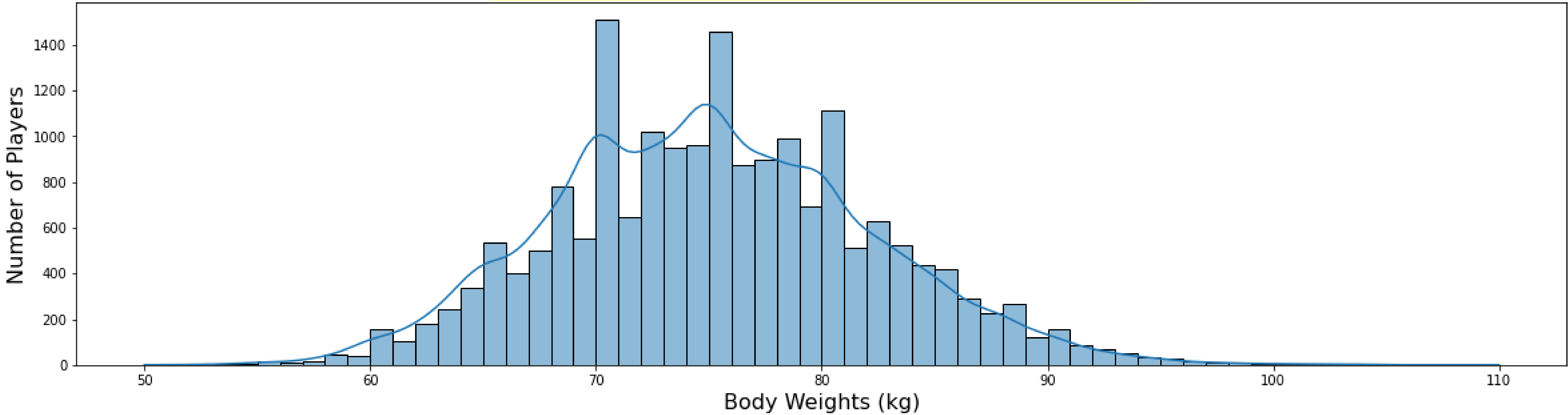


Distribution of Players on Basis of Height

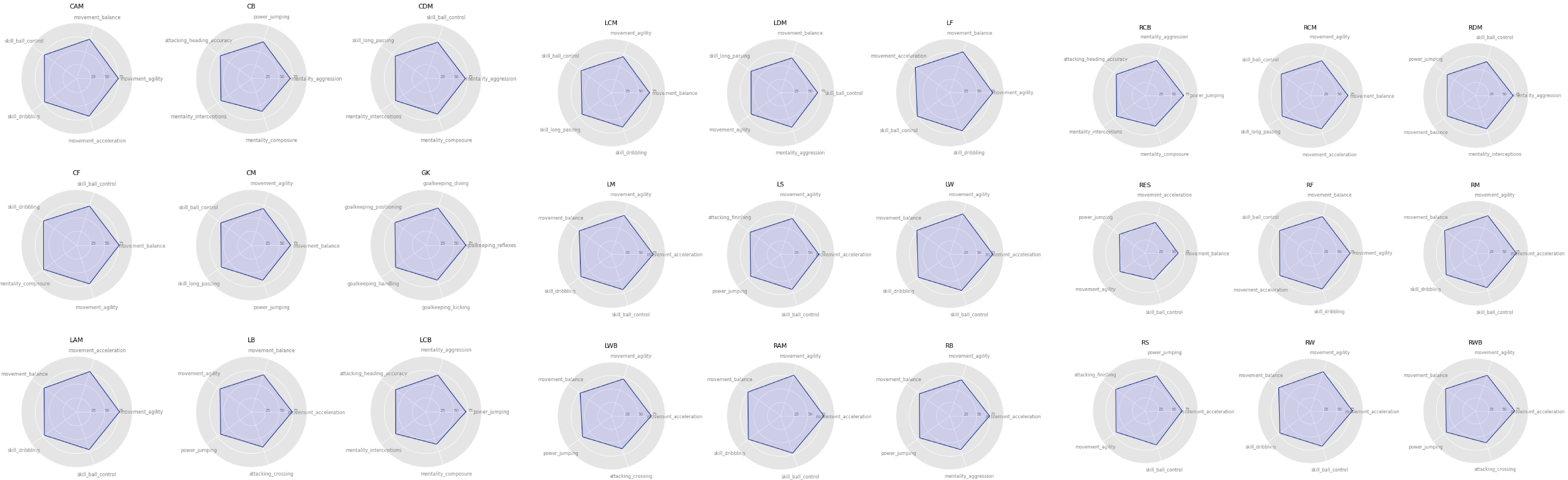


CHARTS

Distribution of Players on Basis of Body Weight



Relationship Between Player Positions and Features

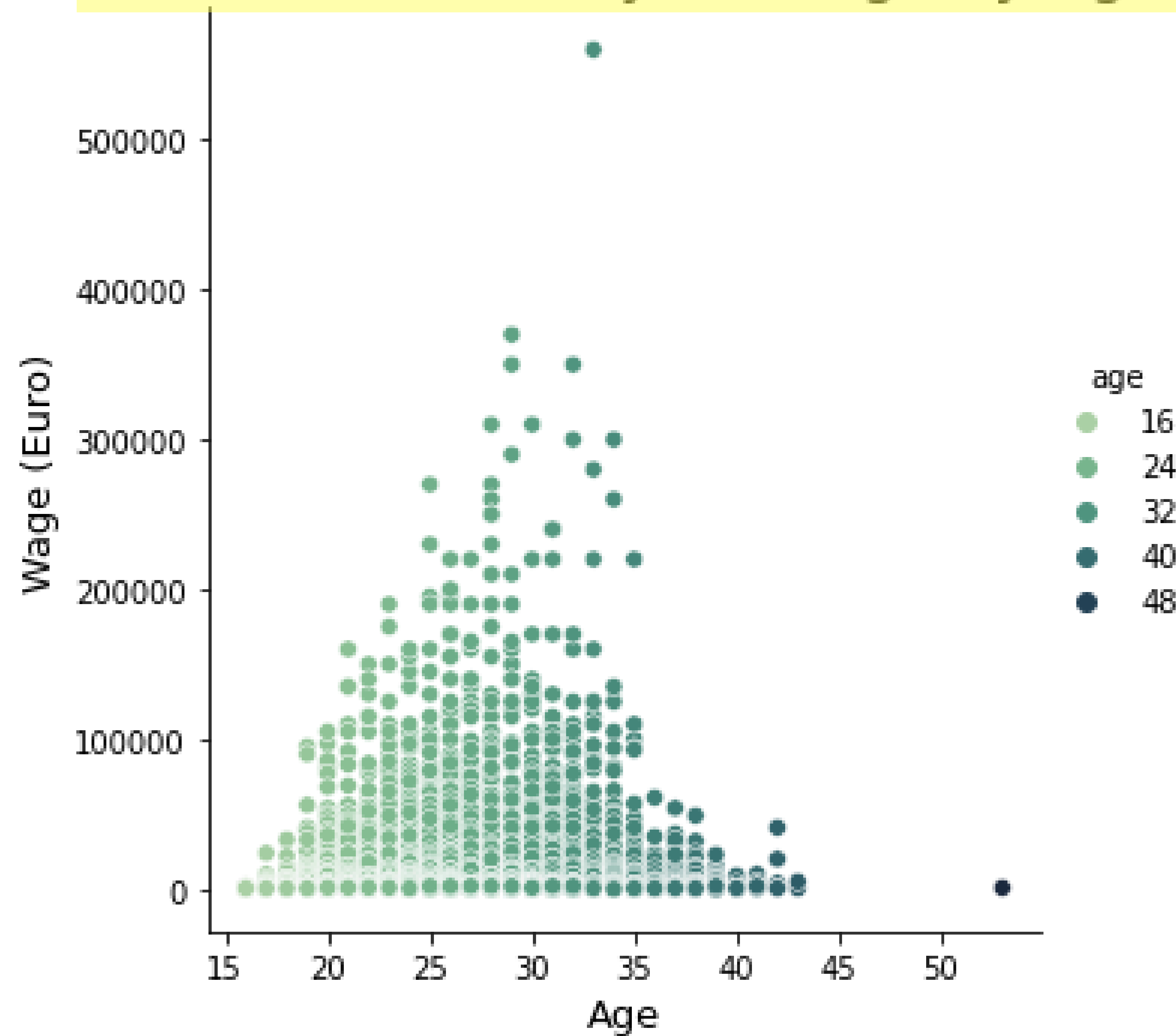


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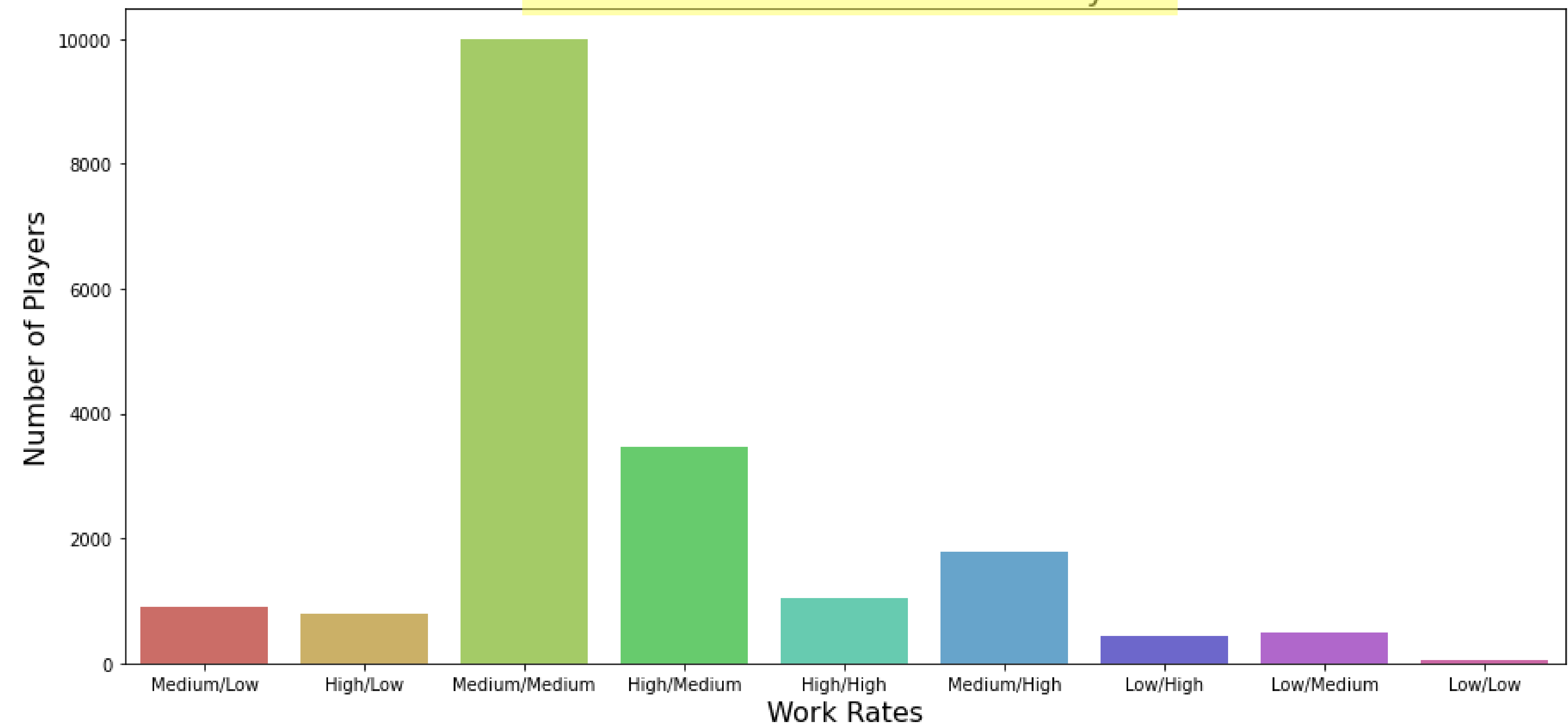
Distribution of Players Wages



Distribution of Players Wage by Age

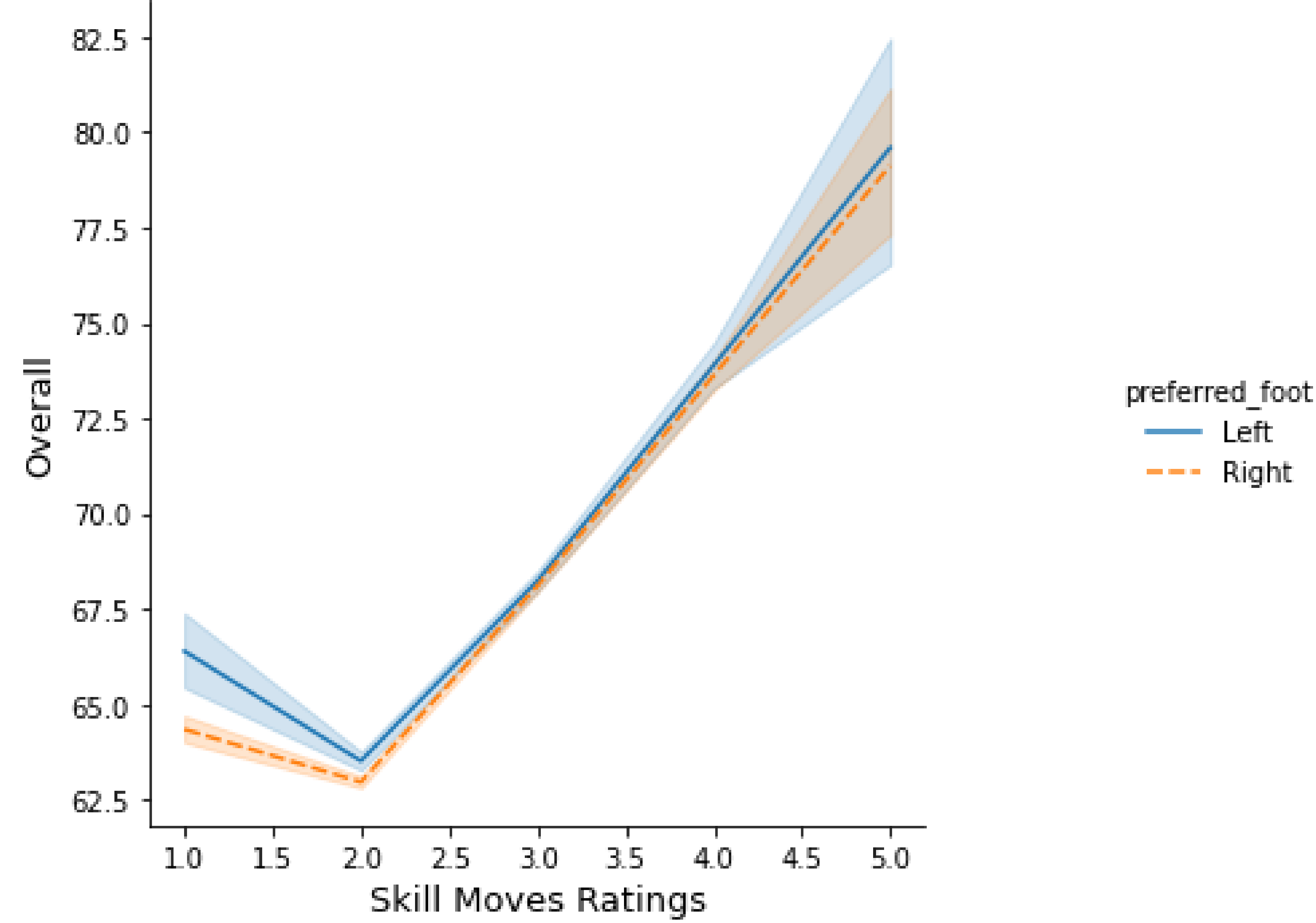


Distribution of Work Rates of Players

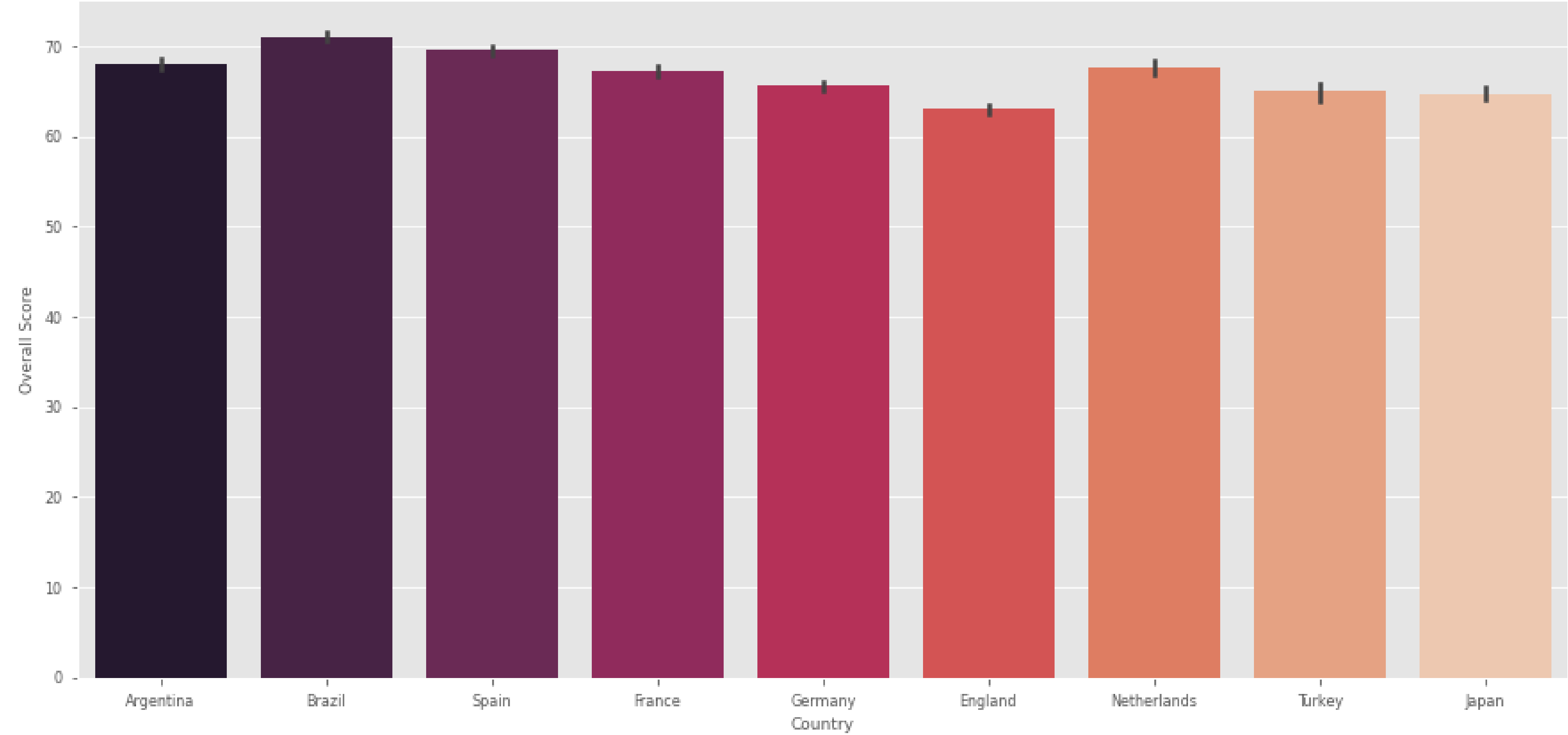


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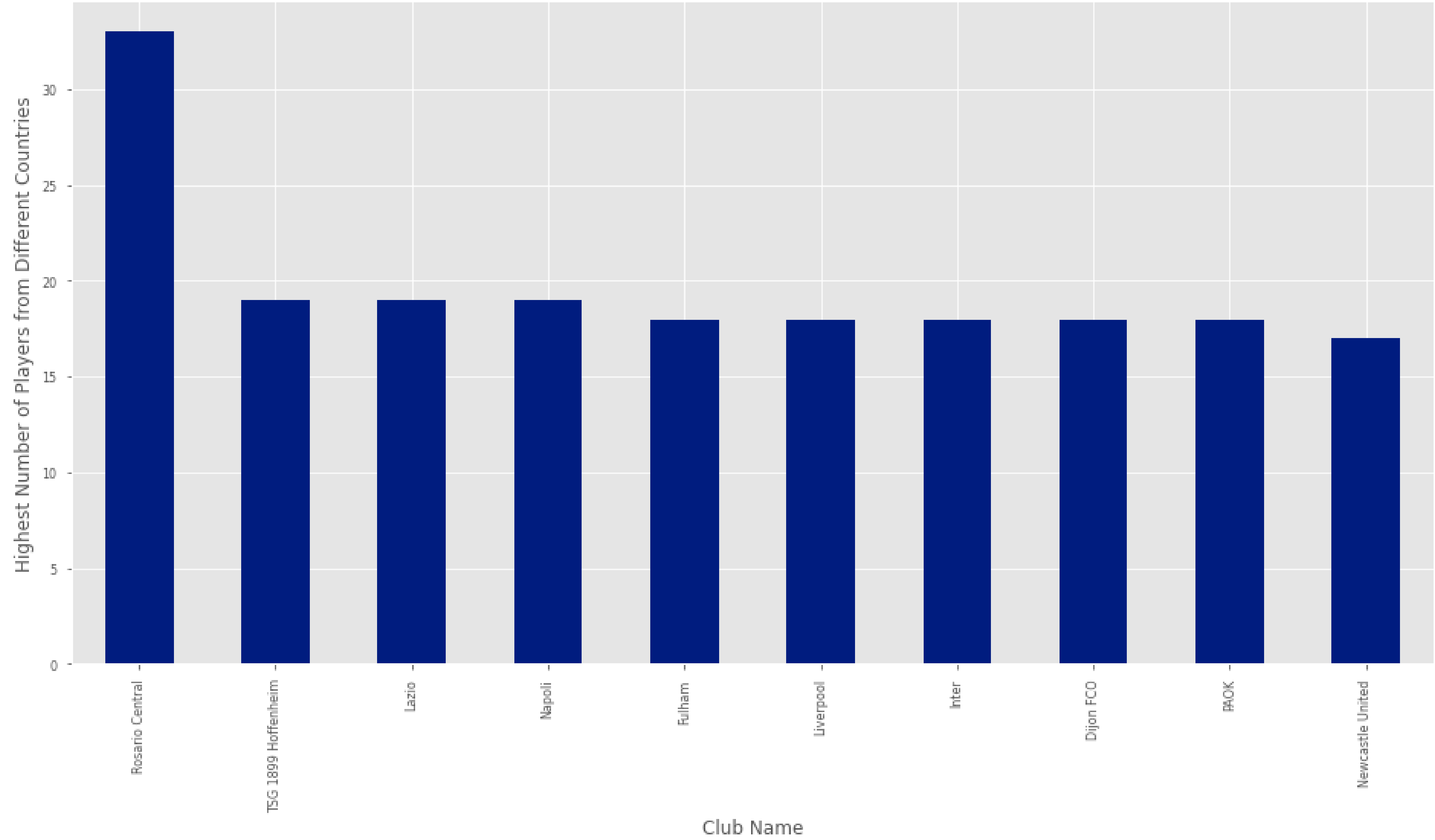
Effect of Skill Moves and Preferred Foot on Players Overall



Distribution of Overall Scores of Players from Different Countries

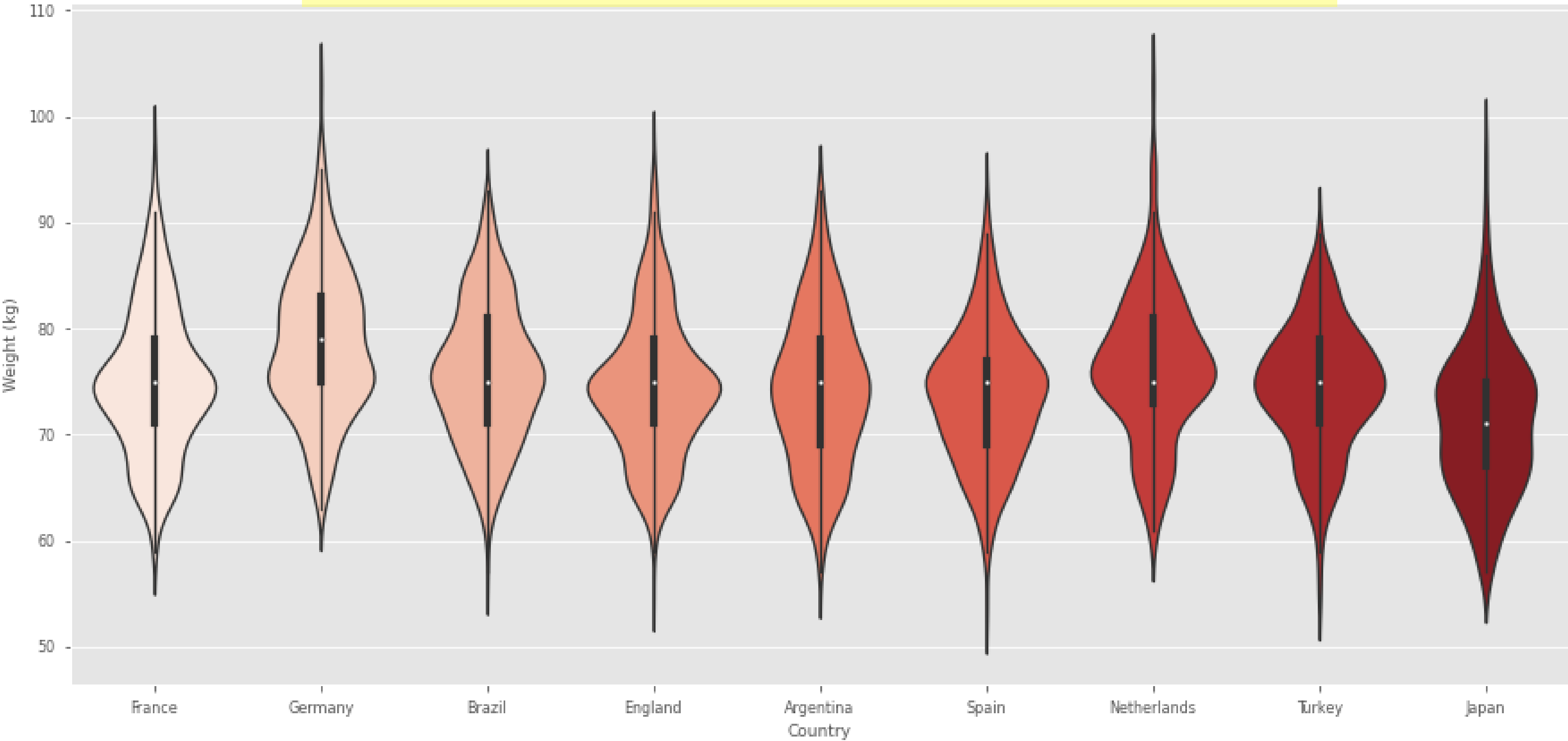


Visualizing Clubs with Maximum Number of Different Countries

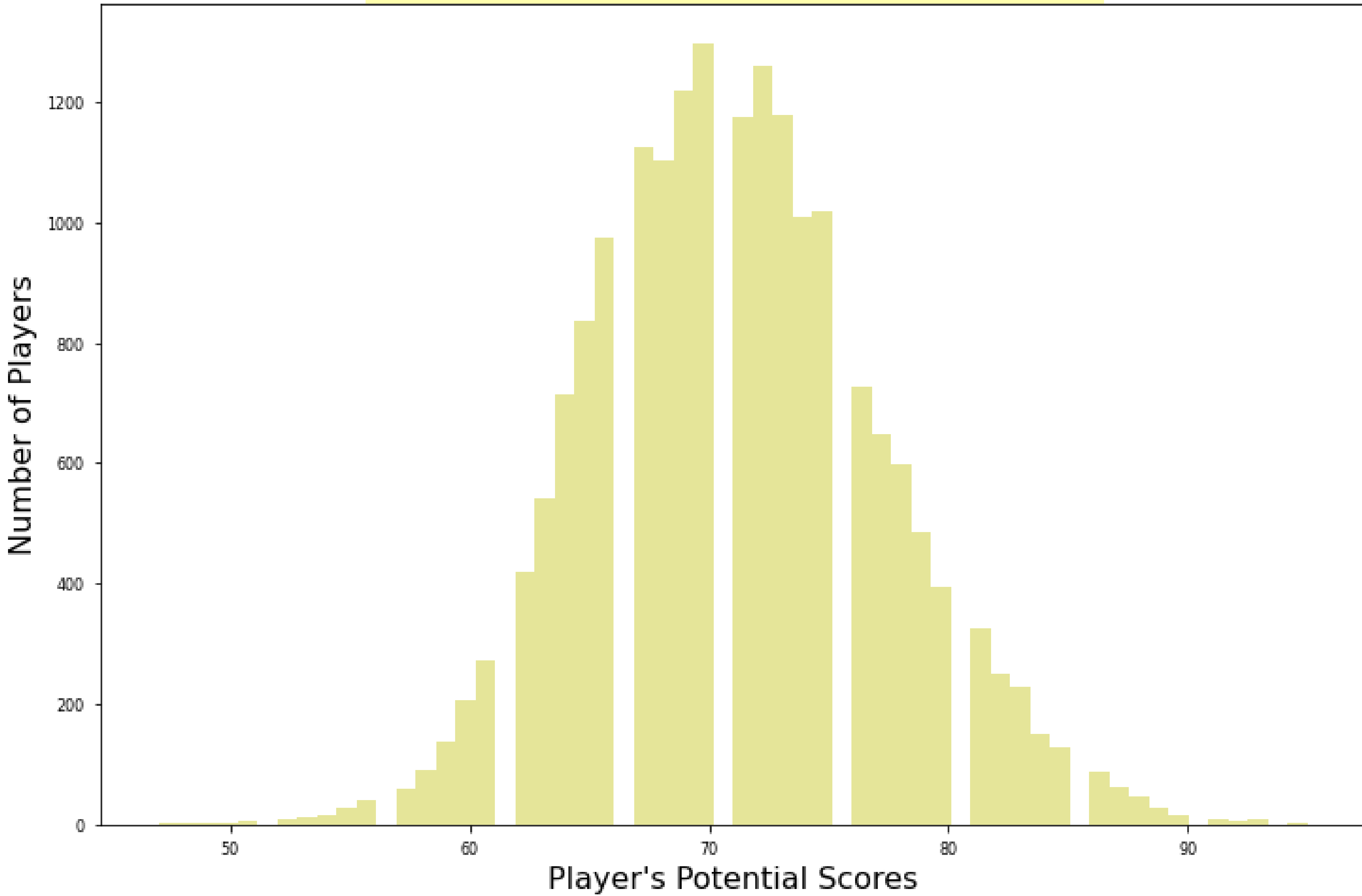


CHARTS

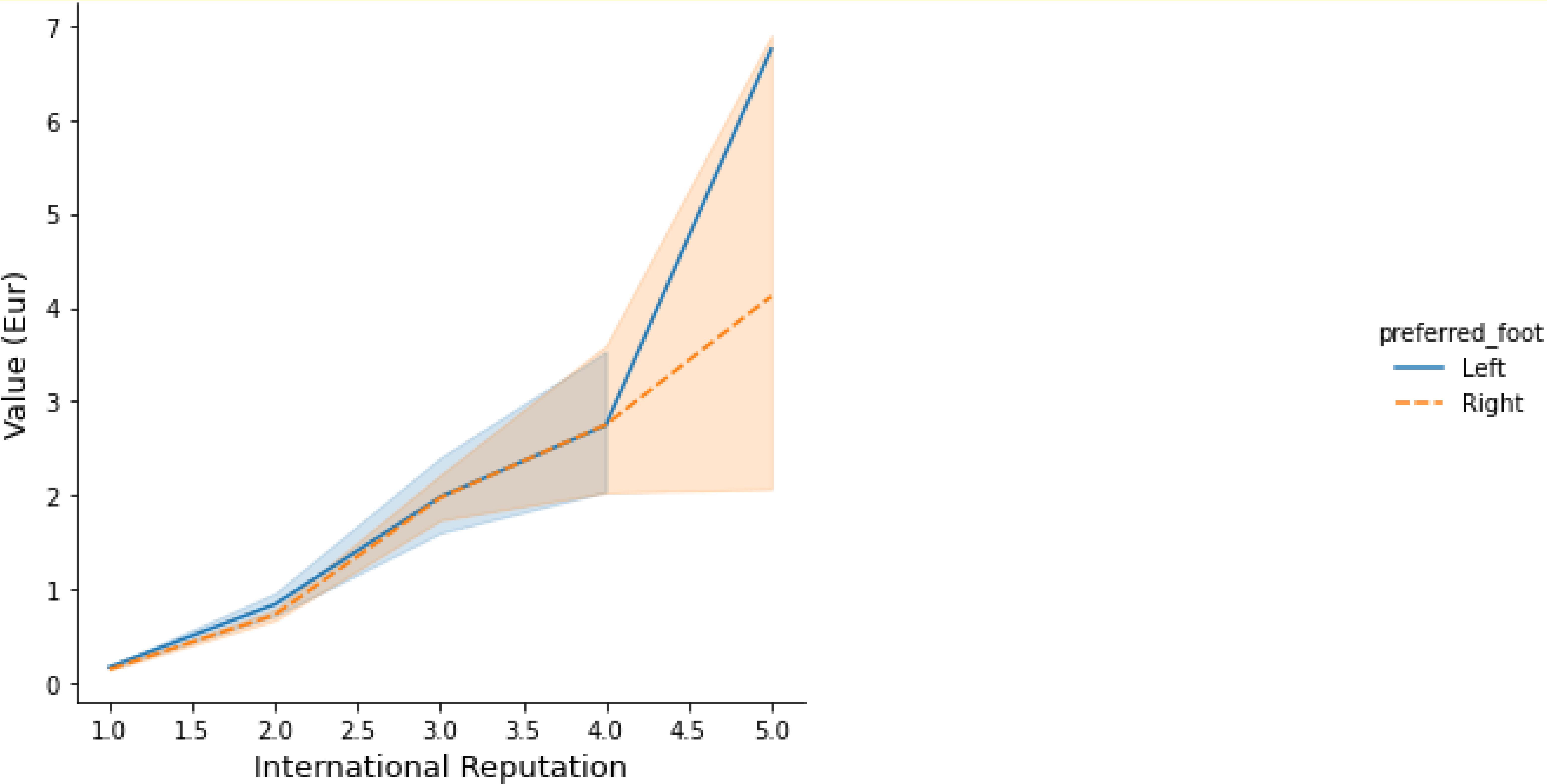
Distribution of Weight of Players from Different Countries



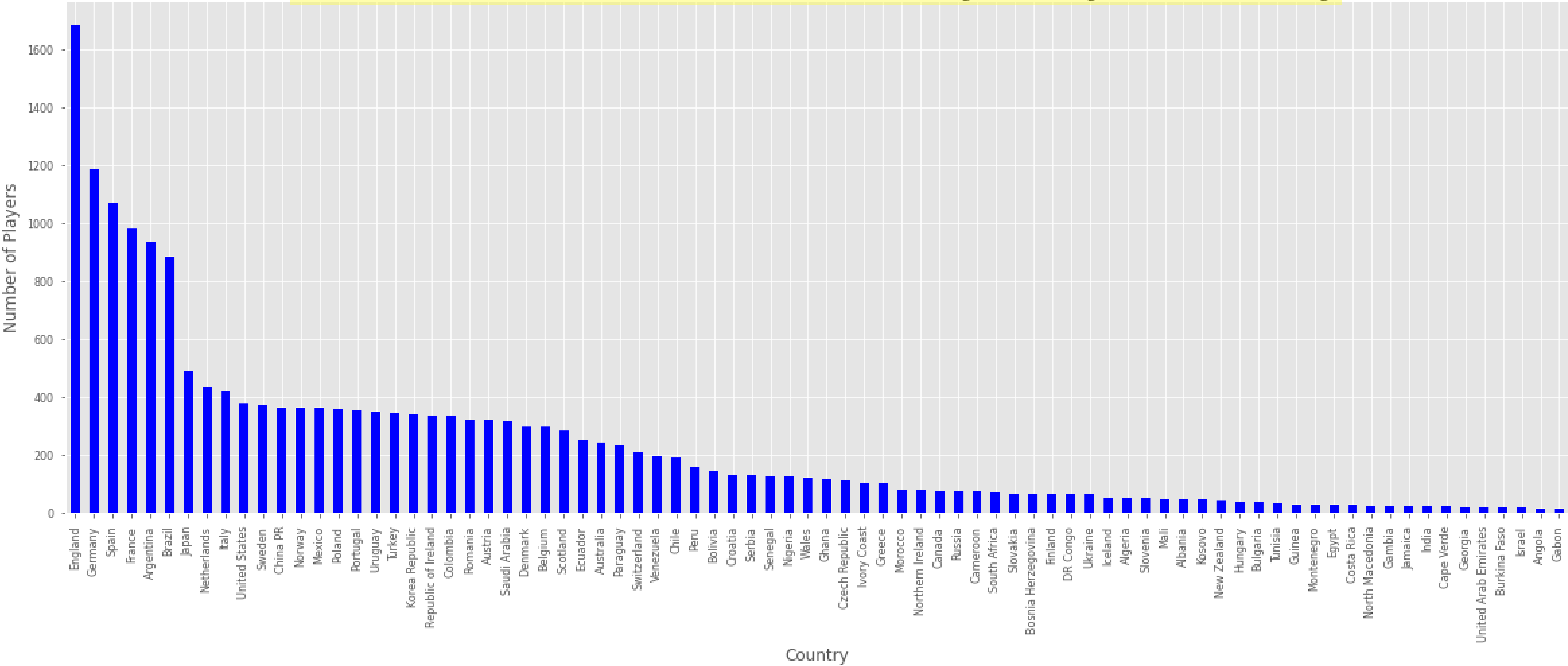
Histogram of Players Potential Scores



Distribution of Players Value (Euro) by Internation Reputation and Preferred Foot Informations



Distribution of the Number of Players by Nationality



Top 10 Right Footed Footballers

	short_name	age	club_name	nationality
1	Cristiano Ronaldo	35	Juventus	Portugal
2	J. Oblak	27	Atlético Madrid	Slovenia
3	R. Lewandowski	31	FC Bayern München	Poland
4	Neymar Jr	28	Paris Saint-Germain	Brazil
5	K. De Bruyne	29	Manchester City	Belgium
6	K. Mbappé	21	Paris Saint-Germain	France
7	M. ter Stegen	28	FC Barcelona	Germany
8	V. van Dijk	28	Liverpool	Netherlands
9	Alisson	27	Liverpool	Brazil
10	S. Mané	28	Liverpool	Senegal

Top 10 left Footed Footballers

	short_name	age	club_name	nationality
0	L. Messi	33	FC Barcelona	Argentina
11	M. Salah	28	Liverpool	Egypt
12	T. Courtois	28	Real Madrid	Belgium
18	Ederson	26	Manchester City	Brazil
22	P. Dybala	26	Juventus	Argentina
31	A. Laporte	26	Manchester City	France
33	A. Robertson	26	Liverpool	Scotland
34	Bernardo Silva	25	Manchester City	Portugal
35	G. Chiellini	35	Juventus	Italy
36	H. Lloris	33	Tottenham Hotspur	France

10 Eldest Players from the Dataset

	short_name	age	club_name	nationality
16065	K. Miura	53	Yokohama FC	Japan
11550	L. Butrón	43	Alianza Lima	Peru
11701	H. Sulaimani	43	Al Ahli	Saudi Arabia
239	G. Buffon	42	Juventus	Italy
4181	C. Lucchetti	42	Atlético Tucumán	Argentina
1026	Hilton	42	Montpellier HSC	Brazil
10323	S. Nakamura	42	Yokohama FC	Japan
14672	L. Fernández	42	SD Aucas	Colombia
2748	Cifuentes	41	Cádiz CF	Spain
7963	J. Gillet	41	Standard de Liège	Belgium

10 Youngest Players from the Dataset

	short_name	age	club_name	nationality
16191	M. Tanlongo	16	Rosario Central	Argentina
16628	O. Beyaz	16	Fenerbahçe SK	Turkey
15479	L. Gournou-Douath	16	AS Saint-Étienne	France
15467	D. Hoyo-Kowalski	16	Wisła Kraków	Poland
7314	R. Cherki	16	Olympique Lyonnais	France
7326	A. Karabec	16	Sparta Praha	Czech Republic
18822	R. Borges Rodrigues	16	Melbourne City FC	Australia
18819	M. Williamsen	16	Kristiansund BK	Norway
14875	Barredo	16	SD Ponferradina	Spain
17096	W. Faghir	16	Vejle Boldklub	Denmark