2.1

The research paper called "Goal Statistics and Scoring Attributes of the 2018 FIFA World Cup" done by Ankur Biswas and Nita Bandyopadhyay, analyses the patterns and trends of goals scored during the 2018 FIFA World Cup in Russia. This research was conducted using data obtained from the official FIFA database and it focused on key variables such as goals, shots, shots on target, ball possession, passes, pass accuracy, fouls, yellow cards, offsides and corners (Biswas & Bandyopadhyay, 2023).

The study called “Analysis of Goal Scoring Patterns in the 2018 FIFA World Cup”, done by Alliance Kubayi, also examines various goal-scoring patterns during the 2018 FIFA World Cup in Russia using InStat video analysis. The primary objective is to classify and analyse all goals scored during the tournament (Kubayi, 2020).

The study called "Prediction of the FIFA World Cup 2018 - A Random Forest Approach with an Emphasis on Estimated Team Ability Parameters" done by Andreas Groll, Christophe Ley, Gunther Schauberger, and Hans Van, compares three different modelling approaches Poisson Regression models, Random Forests, and Ranking methods to predict the scores of soccer matches based on data from the four previous FIFA World Cups (Groll and et al, 2018).

2.2

There is a research gap in the limited study of the direct correlation between ball possession and goal scoring when looking at data from matches held in the FIFA world cup 2018. Because when looking at a particular match between two teams, the team with the higher ball possession percentage lost. This situation changed when looking at different matches. This led to an interest in understanding the relationship between these two variables. Furthermore, while the studies conducted by Biswas et al. analysed various performance indicators, there is a need to pay more attention to how possession affects goal scoring. Future research could use advanced analytics and machine learning to explore this relationship in depth, providing valuable insights for coaches and analysts to improve game strategies.

References

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