Abstract

In this research, 'Generalised Attacking Performance' (GAP) ratings proposed by Wheatcroft (2020) using match statistics other than Shots on target, Shots off target, and corners are used to enhance the prediction of football match outcome probabilities. If match statistics were known in advance, it would be possible to make accurate match predictions. Since match statistics are never known before to a match, this leads to a simple concept. If match statistics can be accurately predicted before a match, then accurate forecasts of match outcomes can be produced. Ordinal logistic regression and a linear regression model are used to predict the match outcome (Home win, draw or away win) and the number of goals scored by each team, respectively. The best model is chosen using Akaike's Information Criterion (AIC). A combination of xG, Shots on target, Smart Passes, and Penalty Area Touches were discovered to be informative with both observed and GAP predicted match statistics in determining the match outcome. The Ranked Probability Score (RPS) is used to evaluate forecast performance. The fact that GAP ratings with goals are a relatively poor predictor of match results reflects the reality that goals are highly unpredictable events. Therefore, evaluating a team or a player based just on the number of goals scored in their most recent matches might be deceiving. So, the previously indicated combination of xG, Shots on target, Smart Passes, and Penalty Area Touches is both significant to match outcomes and reliable enough to gauge the teams' performance.