

In sports, an upset occurs when the favored team loses against the underdog team, which can present significant implications for fans, teams, and the gambling industry. This study aims to understand the roles of travel fatigue and time zones in influencing game outcomes, analyzing international football games from the National Football League (NFL) over the past six seasons. Results revealed that underdog teams with more previous losses are significantly less likely to achieve an upset, suggesting that past losses decrease their chances of winning in international games. Differences in time zones showed a marginally significant effect on game outcome. Overall, this model has a strong level of significance, suggesting the variables in the model are reliable indicators of upsets in NFL international games. Many of the relationships between the variables had marginal significance, which can likely be attributed to the small sample size. The ability to predict upsets could impact sports betting and fantasy sports strategies. In the future, based on these findings, analysts could expand the dataset and explore other sports to generalize the results from factors that cause an upset.