

ADDRESSING OPPOSITION QUALITY IN RUGBY LEAGUE PERFORMANCE

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Introduction

Performance indicators should be evaluated addressing opposition quality. An approach developed in netball and tennis classified performers according to ranking (1). This approach can be criticised for using broad categories of quality which assume similar quality of performance by all performers in a given classification. In English rugby league, there is a smoother relationship between league points and various indicators of quality. Therefore, the purpose of the current research was to develop a regression based model for rugby league performance so as performances could be evaluated against expected performances for the given opposition.

Methods

Performances of a rugby league team from the British Men's Co-operative Championship Division 1 were analysed in 19 of 21 matches played in the 2009-10 season. A computerized match analysis system yielded a set of 53 performance indicators. Relative quality (RQ) of a match was defined as the difference in points between the two teams at the end of the season. Possession time (PT) was used as an exemplar performance indicator to illustrate the approach. A regression equation for this performance indicator was determined using RQ as an independent variable. This allowed expected values of PT to be produced for the team and their opponents in each match. Actual values were compared with expected values to evaluate team performance addressing opposition quality.

Results & Discussion

PT had a negative association with RQ ($r = -0.506$, $r^2 = 0.256$) with the regression equation being $PT = 28.387 - 0.057 RQ$. The residual values allowed the team to determine that their PT was lower than expected in 14 out of 19 matches while the opponents had a higher than expected PT in 13 out of 19 matches. This not only allowed individual performances to be identified but also allowed general performance tendencies of the team to be analysed.

Conclusion

The approach developed in the current investigation allows teams to evaluate their performances addressing the effect of opposition when considering performance indicators.

References

1. O'Donoghue, P.G. (2009). *Int. J. Performance Analysis in Sport*, 9(1): 26-46.