

## Analysis of the performance of players of cricket world cup 2019 by principal component analysis

Wedage L.T. and Jayasekara L.A.L.W.\*

Department of Mathematics, University of Ruhuna, Matara, Sri Lanka

ICC Cricket World Cup is the international championship of One Day International cricket organized by the International Cricket Council (ICC). Top teams in the ICC world cricket rankings are automatically qualifying to the cricket world cup. The main objective of this study is to introduce a new method to rank the players by their recent performance and that would enable to select the most skilled players to the Sri Lankan cricket team. Subobjective of the study is to pose the rankings of the Sri Lankan players who perform well in the ICC Cricket World Cup 2019. Principal Component Analysis is used to rank the batsmen and bowlers by their performance in the ICC Cricket World Cup 2019. The first principal component is seen to explain 84% and 73% of the variation in a linear combination of some commonly used measures of the batting and bowling prowess respectively. Four batsmen and two bowlers in Sri Lankan team secure ranks out of 50 batsmen and 47 bowlers who performed well in the ICC Cricket World Cup 2019 respectively.

Keywords: cricket, principal component analysis and rank

\*Corresponding author: leslie@maths.ruh.ac.lk