Abstract

Studies of competitive balance in sport have considered primarily professional leagues and team sports. This paper investigates trends in competitive balance in a multi-sport event context – the Commonwealth Games – using three distinct indicators. The investigation demonstrated that the Games have become significantly less competitive overall between 1930 and 2010 (p < 0.01) according to two indicators – the percentage of nations to win a medal point and the coefficient of variation in nations’ market share (medal points won divided by medals points available). Conversely, one indicator – Herfindahl-Hirschman Index (the sum of the squares of nations’ market shares in a given edition) – revealed that there has been a strong, albeit insignificant, improvement in the overall standard of the competition over the last twenty years (p > 0.10). Events contested by ‘men only’ were found to be the most balanced relative to both ‘women only’ and ‘mixed / open’ events across all indicators. Boxing and athletics emerged as the most balanced sports compared with diving, cycling, swimming and, to a lesser extent, weightlifting. The findings are of value to competition authorities to determine whether to implement corrective measures in order to maintain or improve competitive balance.

Keywords

competition; elite performance; multi-sport events; uncertainty of outcome