

Rio Olympic Medals in relation to Population and Affluence

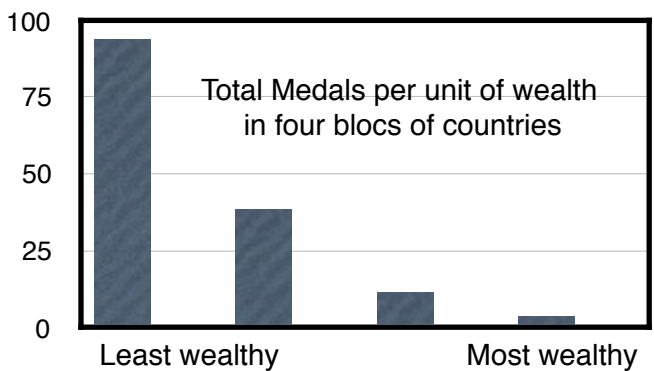
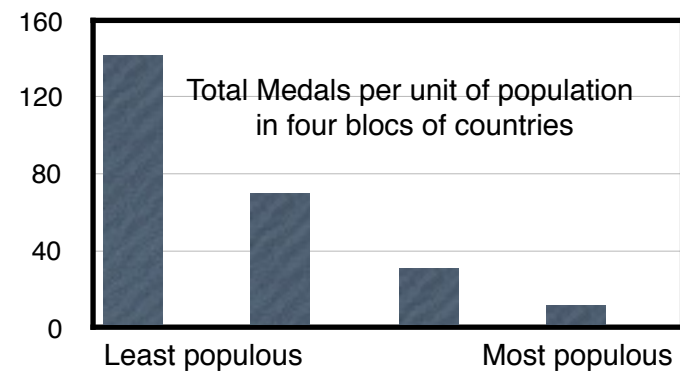
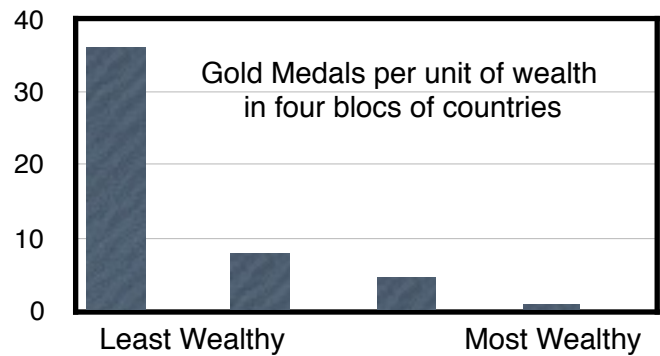
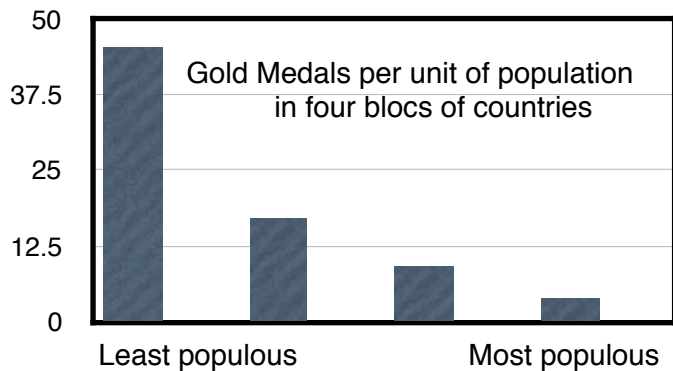
Success in the recent Olympics has been conspicuously focussed on medals, especially gold ones. The ranking of individual countries has been depicted mostly in terms of the numbers of medals won, but also, sometimes, as medals per million population and medals per \$100bn GDP.

The present analysis looks not at individual countries, but at clusters of countries, and reveals a different and interesting perspective on the relationship of medal-winning to population and wealth.

The 88 countries which won medals (975, of which 307 were gold) have been divided into four groups, or blocs, of countries according to their population or GDP. Within each bloc of 22 countries their medals and population or GDPs were lumped together. As if there were 4 and not 88 participants competing and sharing the rewards.

The result shows that the least populous bloc won far more medals (per 100 mill population: by a factor of ~12) – gold and total – than the most populous bloc. Similarly, the least wealthy bloc of countries won far more medals (per trill\$GDP: by a factor of ~30) than the wealthiest bloc. The significance of the difference is increased by the step-wise trend across the four blocs.

What do you make of that? The same relationships were found for the London Olympics. It may suggest that people in smaller, less affluent countries are generally more physically active, fit and sporty, and therefore produce more potential winners. The results also have relevance to comments that have been made to cost: the amount of money spent by participating countries, the return in terms of cost per medal won, and the perceived need to pour more money into winning more medals in the future.



Rio Paralympic Medals in relation to Population and Affluence

The Rio Paralympic medal tally (1598 medals, 529 of them gold, won by 83 countries) was analysed in the same way, looking at blocs of countries rather than individual ones. The results, generally similar to those for the main Olympics, are illustrated below.

