

**Statistical analysis of the relationship between the velocity and body mass in human sport activities (running, swimming, skiing, skating, cycling and rowing)**

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A significant amount of data on the velocity and body mass of both female and male athletes professionals in Olympic sports (running, swimming, skiing, skating, cycling and rowing) was collected. The average values for different distances were calculated and the linear regression analysis was applied to find the relationships between the body mass and the velocity for every distance. For longer distances, results show that the most performing athletes are characterized by a lower body mass, except for skating.