

The Ratio of Second-to-Fourth Digit Length (2D:4D) and the Physical Ability in Men and Women

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Abstract : Introduction: The digit length ratio (2D:4D) is generally higher in women compared to men. Lower 2D:4D is linked with greater physical ability, strength, and better sporting performance. Second-to-fourth digit lengths ratio (2D:4D) is an indicator of PT exposure. Lower 2D:4D indicates higher PT exposure and vice versa. Methods: The objectives of this paper were to investigate the relationship of 2D:4D with physical fitness in men and women. The study compared 137 female and 174 male students from Wrocław. Besides calculating 2D:4D for each hand, height and weight were also recorded. Assessment of physical fitness and endurance were performed through Eurofit tests. Handgrip strength was measured by a standardized isometric dynamometer. Results: Male participants had significantly lower 2D:4D than females on each hand. A weak relationship between 2D:4D and the results of strength tests was found.

Keywords : 2D:4D, physical fitness, prenatal testosterone, sexual dimorphism

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