## **Abstract**

According to previous research physical attractiveness plays an important role in our everyday life. People are treated differently on the basis of their physical appearance and from an evolutionary point of view physical attractiveness is a key factor in mate selection, being a cue of an individual's mate value and genetic qualities. Research shows that the highest attractiveness ratings tend to be given to physiques with a higher level of development of lean muscle mass and a V-shaped upper body. Such a physique body constitution could indicates how a high level of physical fitness and a man's health of man and be a cue of the man's qualities as a mating partner. However, results of the previous studies are inconclusive due to the methods and stimuli employed.

To address the shortcomings exhibited by the previous studies investigations, we ran two online studies. In the first study, women rated the attractiveness of a new and more extensive set of black-and-gray silhouettes derived from photos of the somatotypes. In the second study, we tested whether physical attractiveness of men can be increased by a voluntary change of their upper body shape. In both studies we were testing how interindividual differences of the female raters modulate the ratings of attractiveness.

Results of the first study show that attractiveness preferences are associated with an ecto-mesomorphic physique, with bodies showing a high level of physical fitness and health, but not with a highly muscular mesomorphic body type. Results of the second study suggest that an excessive upper body muscle mass significantly decreases ratings of attractiveness.

## **Key words**

Physical attractiveness; human male body; somatotype; human female preferences; signals