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## Finger Length Predicts Mental Toughness in Sport

Mental toughness and an aptitude for sport may be biologically determined.

This is one of the findings of an ongoing research project involving post-doctoral and doctoral research by Dr. Jim Golby and Jennifer Meggs from Teesside University who will present their work on November 10 at the Division of Sport and Exercise Psychology's Annual Conference being held at the Holiday Inn London -- Camden Lock.

Previous research has shown that the 2D:4D ratio (index finger/ring finger) has the potential to explain sporting success. An index finger that is much shorter than the ring finger is caused by exposure to testosterone in the womb. This research investigated the relationship between 2D:4D and mental toughness, optimism, aggression and performance.

Sixty-seven participants had their fingers measured and completed personality and aggression questionnaires.

The results showed that participants with 20:4D ratio were more likely to demonstrate mental toughness and have higher levels of sporting achievements.

Dr. Golby explained: "It appears that high prenatal levels of testosterone may result in increased mental toughness, optimism and hence aptitude towards sport. This provides tentative support for the conclusion that mental toughness may be partially biologically predetermined."