

## Comparison of some of the performance indicators of physical fitness in warm and cold temperament men

M. Rahati, S. Vahedi\*, SR. Attarzadeh Hosseini, M. Fathi

### Abstract

**Background and Purpose:** The Traditional Medicine of Iran is based on temperament. As a significant factor in creating individual differences, temperament can be effective in sports performance of human beings. The purpose of this study was to compare warm and cold temperaments with anaerobic power, anaerobic threshold and relative maximum power.

**Methods and Materials:** A descriptive study was conducted on 40 dormitory single students of Ferdowsi University of Mashhad who had not regular exercise for at least past six months. Volunteers were young healthy men in the age range of 18 to 22 years. Using a standard questionnaire, their temperament was determined. Anaerobic power was measured using Rast test while anaerobic threshold value and relative maximum power were measured by Dmax method and by hamstring muscles evaluation with bodybuilder, respectively.

**Results:** The number of warm tempered people was 21 and cold tempered people were 19. Significant differences were observed in cold and warm temperament groups in peak power, mean power, minimum anaerobic power ( $p < 0.05$ ), and maximum power ( $p = 0.016$ ) which was  $0.61 \pm 0.07$  kg in warm tempered people and  $0.54 \pm 0.06$  kg in cold tempered people. Moreover, the results showed that anaerobic threshold in warm temperament people (with a mean of  $163.7 \pm 4.9$  beats per minute) and cold temperaments (with a mean of  $167.2 \pm 4.1$  beats per minute) is significantly different ( $p = 0.019$ ).

**Conclusion:** It seems that warm tempered people have a relatively higher power in comparison to cold tempered people. They also have better anaerobic power. However, cold tempered people have an anaerobic threshold higher than those with warm temperament.

**Keywords:** Temperament, Maximum Relative Power, Anaerobic Threshold, Anaerobic Power.

Corresponding Author: saeedvahedi09@gmail.com