

Comparison of the effect of resistance training on fat percentage, muscle percentage and waist to hip ratio of young non-athlete cold- and warm-tempered women

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Abstract:

Background and Purpose: Proper selection and guidance of athletes is one of the benefits of talent identification that will lead to great savings in resource consumption. Individual differences are one of the most important indicators and play a significant role in this regard. Persian Medicine deals with physical, physiological and psychological differences with regard to the concept of temperament (Mizaj). The aim of this study was to investigate the role of temperament in physiological differences during a period of resistance training in non-athlete women.

Materials and Methods: This research was a quasi-experimental study with a pre-course and post-course design with two experimental groups of cold temperament and warm temperament. The statistical populations in this study were young non-athlete women. Participants were divided into two groups of hot temperament (12 people) and cold temperament (12 people) by Salmannejad standard Mizaj questionnaire. Body composition indices were measured twice, both before and after resistance training. The exercise protocol targeted the pectoralis major, trapezius, abdominal muscles, and extensor and flexor thigh muscles. After collecting and entering the data in SPSS software (version 21), raw data was analyzed. Hypotheses were tested with a significance level of $p \leq 0.05$.

Results: The results showed significant between-group difference in muscle percentage in resistance training of young non-athlete warm- and cold-tempered women ($p=0.03$). There was no significant difference between warm and cold groups in the waist to pelvic ratio groups in a period of resistance training of warm- and cold- tempered young women ($p=0.13$). There was a significant difference in fat percentage between the groups in a period of resistance training of warm- and cold- tempered young women ($p=0.04$).

Conclusion: In resistance activities, cold-tempered individuals have better physiological changes in the field of health than the warm-tempered. Therefore, temperament can be considered effective in health and professional sports practices.

Keywords: Temperament, Body composition, Individual differences, Resistance training

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