## Effect of Three Resistance Training Methods on Performance-Related Variables of Powerlifters

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Abstract : The purpose of the study was to find out the effect of three resistance training methods on performance-related variables of powerlifters. A total of forty male students (N=40) who had participated in Kannur University powerlifting championship were selected as subjects. The age group of the subjects ranged from 18 years old to 25 years old. The selected subjects were equally divided into four groups (n=10) of three experimental groups and a control group. The experimental Group I underwent traditional resistance training (TRTG), Group II underwent combined traditional resistance training and plyometrics (TRTPG), and Group III underwent combined traditional resistance training and resistance training with high rhythm (TRTHRG). Group IV acted as the control group (CG) receiving no training during the experimental period. The duration of the experimental period was sixteen weeks, five days per week. Powerlifting performance was assessed by the 1RM test in the squat, bench press and deadlift. Performance-related variables assessed were chest girth, arm girth, forearm girth, thigh girth, and calf girth. Pre-test and post-test were conducted a day before and two days after the experimental period on all groups. Analysis of covariance (ANCOVA) was applied to analyze the significant difference. The 0.05 level of confidence was fixed as the level of significance to test the F ratio obtained by the analysis of covariance. The result indicates that there is a significant effect of all the selected resistance training methods on the performance and selected performance-related variables of powerlifters. Combined traditional resistance training and plyometrics and combined traditional resistance training and resistance training with high rhythm proved better than the traditional resistance training in improving performance and selected performance-related variables of powerlifters. There was no significant difference between combined traditional resistance training and plyometrics and combined traditional resistance training and resistance training with high rhythm in improving performance and selected performance-related variables of powerlifters.

Keywords : girth, plyometrics, powerlifting, resistance training

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