

Table 2

Comparative results of isokinetic moments at 60°/sec in three types' warm-ups

Isokinetic moment	Upper legs' part	Warm-ups types			Kruskal-Wallis test	
		NWU	AWU	ASW	χ^2	P-value
Peak torque at 60°/sec	Flexor	96.23±26.47	95.73±27.02	94.88±24.52	0.007	0.996
	Extensor	183.5±39.94	176.81±42.62	177.35±40.01	0.307	0.858

Values are presented as mean±standard deviation.

NWU, non-warm-ups; AWU, aerobic-warm-ups; ASW, aerobic-stretch-warm-ups.

Table 3

Comparative results of isokinetic moments at 180°/sec in three types' warm-ups

Isokinetic moment	Upper legs' part	Warm-ups types			Kruskal-Wallis test	
		NWU	AWU	ASW	χ^2	P-value
Average power at 180°/sec	Flexor	75.62±20.29	79.04±20.72	78.27±18.59	0.427	0.808
	Extensor	127.31±28.82	127.85±30.71	130.62±29.36	0.335	0.846

Values are presented as mean±standard deviation.

NWU, non-warm-ups; AWU, aerobic-warm-ups; ASW, aerobic-stretch-warm-ups.

Table 4

Comparative results of isokinetic moments at 240°/sec in three types' warm-ups

Isokietic moment	Upper legs' part	Warm-ups types			Kruskal–Wallis test	
		NWU	AWU	ASW	χ^2	<i>P</i> -value
Total work at 240°/sec	Flexor	1,165.00±352.97	1,185.85±300.98	1,214.12±354.31	0.237	0.888
	Extensor	1,957.85±494.75	1,931.00±472.60	2,006.08±475.51	0.564	0.754

Values are presented as mean±standard deviation.

NWU, non-warm-ups; AWU, aerobic-warm-ups; ASW, aerobic-stretch-warm-ups.

The comparative analyses revealed no significant differences among NWU, AWU, and ASW, respectively, as follows: 96.23±26.47 vs. 95.73±27.02 vs. 94.88±24.52 for flexor peak torque ($\chi^2=0.007$, *P*=0.996) and 183.50±39.94 vs. 176.81±42.46 vs. 177.35±40.01 for

Table 5

Differences and changes of physical conditioning in three types' warm-ups

Warm-ups type	Prevalue	Postvalue	Wilcoxon-test	
			Z	P-value
NWU	3.08±1.04	3.00±1.15	-0.086	0.931
AWU	2.62±1.04	3.00±0.71	-1.508	0.132
ASW	3.08±0.76	3.77±0.60	-3.000	0.003
Kruskal-Wallis test				
χ^2	1.826	6.360		
P-value	0.401	0.042		
Mann-Whitney <i>post hoc</i>	-	AWU<ASW		

Values are presented as mean±standard deviation.

