

Supplementary Materials:

Table S1 shows the descriptive results grouped by age and sex. The results show differences in the descriptive results. In male players, as the player grows, the results improve (in the RSA test the time decreases and in the jumping tests it increases). In female players, unlike male players, the worst results in the RSA test are found in U18 players. In the jumping tests, female players obtain a similar evolution to that obtained by male players, but the values are lower.

Table S1. Descriptive results of the analyzed variables grouped by age and sex.

	U14 Male		U14 Female		U16 Male		U16 Female		U18 Male		U18 Female		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Repeat Sprint Ability (RSA)	Time Total	14,13	1,08	13,83	0,64	13,58	1,81	14,12	0,95	13,27	0,83	14,98	0,73
	Time Avg.	2,82	0,22	2,77	0,13	2,60	0,36	2,82	0,19	2,65	0,17	2,99	0,15
	Time Max.	3,04	0,25	2,91	0,13	3,05	0,44	3,03	0,20	2,86	0,20	3,17	0,28
	Time Mín.	2,60	0,29	2,60	0,12	2,56	0,28	2,61	0,18	2,48	0,18	3,70	0,16
	Time Dif.	0,44	0,27	0,31	0,14	0,49	0,25	0,42	0,16	0,38	0,18	0,47	0,19
	PL	1,42	1,02	0,95	0,25	1,70	1,72	0,97	0,61	1,22	0,26	1,67	0,27
	PL/min	4,84	1,08	4,15	1,11	5,73	1,27	4,14	0,39	5,65	1,14	4,41	0,69
	PL Max	0,50	0,98	0,21	0,15	0,66	1,67	0,21	0,15	0,28	0,06	0,37	0,05
	PL Min.	0,21	0,06	0,18	0,08	0,23	0,05	0,18	0,11	0,20	0,07	0,30	0,06
	PL Dif.	0,29	1,01	0,34	0,16	0,43	0,66	0,32	0,16	0,81	0,58	0,69	0,36
	Step Time	283,91	11,35	282,59	10,92	266,39	21,13	290,77	46,61	266,92	16,28	272,47	18,91
	Contact Time	204,34	14,50	197,00	14,13	194,95	13,82	223,11	35,41	190,37	14,86	193,60	14,69
	Fly Time	79,56	7,58	84,86	7,86	71,43	10,21	67,66	15,33	76,40	12,82	78,86	10,20
	Acc (G)	2,38	0,38	1,97	0,31	2,93	0,50	1,89	0,40	2,97	0,56	2,35	0,27
Abalakov	Time (ms)	512,95	51,46	454,50	35,40	540,54	67,07	472,95	72,70	551,49	86,03	518,17	47,48
	Height (cm)	32,64	6,36	25,47	3,97	36,37	8,84	28,04	8,65	38,18	11,34	33,19	5,90
	Impulse (G)	2,73	1,63	2,31	1,30	2,95	1,06	2,08	0,61	3,26	1,35	2,09	0,49
Multi-Jump	Time	459,80	47,77	404,88	34,15	484,00	50,19	475,05	46,04	488,00	53,55	469,38	49,85
	Height	26,41	5,79	20,67	4,27	29,39	5,95	28,13	5,38	29,92	6,62	29,00	5,31
	Impulse (G)	3,24	1,05	3,19	2,04	3,13	0,96	3,04	0,71	4,06	0,67	3,46	0,78
	Between jump	535,50	97,43	464,72	81,42	572,71	122,00	370,12	122,74	518,00	81,21	441,52	83,79

Time Max: Maximum time in the sprint (slowest sprint); **Time Min:** Minimum time in the sprint (fastest sprint); **Time Dif:** Difference between the fastest and the slowest sprint; **PL Max:** Maximum PlayerLoad in a sprint; **PL Min:** Minimum PlayerLoad in a sprint; **PL Dif:** Difference between the maximum and minimum PlayerLoad; **Step Time:** total time of Contact Time and Fly Time; **Contact Time:** Contact time on the floor; **Fly Time:** Time in the air; **Acc Avg Step (G):** Average acceleration during the sprint (measured in G-force); **Time Jump:** Duration of the jump; **Height:** Maximum height reached in the jump; **Impulse (G):** Impulse performed (measured in G-force); **Between Jumps:** Time between jump and jump (contact time on the floor).