

Supplemental Table S1. Association between health problems and number of trainings and games. Data are based on mixed logistic models adjusted for age, position on ice, week, second-degree polynomial term of week and number of trainings and games in the current week.

Injury	Load	Parameter	OR (95% CI)	P-value	
Acute injury (n=451)	Difference load 2 weeks	Training sessions	0.99 (0.96 to 1.03)	0.68	
		Games	1.03 (0.91 to 1.17)	0.60	
		Intercept	0.00 (1.10e-07 to 3.32)	0.09	
		Age	1.43 (0.86 to 2.39)	0.17	
		POI 1	0.91 (0.36 to 2.33)	0.84	
		POI 2	0.35 (0.08 to 1.59)	0.17	
		Time (week)	0.98 (0.93 to 1.04)	0.55	
		Time (second-degree polynomial)	1.00 (1.00 to 1.00)	0.01	
		Training sessions current week	0.89 (0.85 to 0.94)	0.000	
		Games current week	0.67 (0.56 to 0.81)	0.000	
		Random effects	2.39 (1.98 to 2.88)	0.000	
		Cumulative load 2 weeks	Training sessions	1.01 (0.98 to 1.03)	0.61
			Games	0.97 (0.89 to 1.06)	0.49
	Intercept		0.00 (9.98e-08 to 3.13)	0.09	
	Age		1.44 (0.86 to 2.39)	0.17	
	POI 1		0.91 (0.36 to 2.34)	0.85	
	POI 2		0.34 (0.07 to 1.57)	0.17	
	Time (week)		0.98 (0.93 to 1.04)	0.55	
	Time (second-degree polynomial)		1.00 (1.00 to 1.00)	0.01	
	Training sessions current week		0.89 (0.85 to 0.92)	0.000	
	Games current week		0.69 (0.60 to 0.79)	0.000	
	Random effects		2.39 (1.98 to 2.88)	0.000	
	Cumulative load 3 weeks		Training sessions	0.96 (0.97 to 1.02)	0.69
			Games	0.97 (0.90 to 1.04)	0.40
		Intercept	0.00 (1.90 e-07 to 6.02)	0.12	
		Age	1.40 (0.84 to 2.33)	0.20	
		POI 1	0.92 (0.36 to 2.35)	0.86	
		POI 2	0.30 (0.06 to 1.41)	0.13	
		Time (week)	0.99 (0.93 to 1.05)	0.67	

		Time (second-degree polynomial)	1.00 (1.00 to 1.00)	0.01
		Training sessions current week	0.89 (0.86 to 0.93)	0.000
		Games current week	0.68 (0.60 to 0.79)	0.000
		Random effects	2.37 (1.97 to 2.87)	0.000
	Cumulative load 4 weeks	Training sessions	1.00 (0.98 to 1.02)	0.76
		Games	0.98 (0.92 to 1.04)	0.48
		Intercept	0.00 (2.23e-07 to 5.69)	0.12
		Age	1.39 (0.84 to 2.30)	0.20
		POI 1	0.95 (0.38 to 2.38)	0.91
		POI 2	0.29 (0.06 to 1.33)	0.11
		Time (week)	0.99 (0.93 to 1.05)	0.67
		Time (second-degree polynomial)	1.00 (1.00 to 1.00)	0.01
		Training sessions current week	0.89 (0.86 to 0.93)	0.000
		Games current week	0.69 (0.60 to 0.80)	0.000
		Random effects	2.33 (1.93 to 2.82)	0.000
Overuse injuries (n=468)	Difference load 2 weeks	Training sessions	1.00 (0.96 to 1.05)	0.99
		Games	0.98 (0.84 to 1.15)	0.79
		Intercept	0.00 (7.92e-12 to 38.25)	0.14
		Age	1.42 (0.60 to 3.38)	0.43
		POI 1	1.15 (0.21 to 6.23)	0.87
		POI 2	4.00 (0.37 to 42.70)	0.25
		Time (week)	0.91 (0.86 to 0.97)	0.01
		Time (second-degree polynomial)	1.00 (1.00 to 1.00)	0.19
		Training sessions current week	1.03 (0.96 to 1.10)	0.40
		Games current week	0.98 (0.77 to 1.23)	0.84
		Random effects	3.79 (3.14 to 4.58)	0.000
	Cumulative load 4 weeks	Training sessions	1.00 (0.98 to 1.02)	0.79
		Games	0.97 (0.88 to 1.05)	0.43
		Intercept	0.00 (3.41e-11 to 113.50)	0.19
		Age	1.34 (0.57 to 3.15)	0.50
		POI 1	1.22 (0.23 to 6.47)	0.81
		POI 2	3.88 (0.38 to 40.15)	0.26
		Time (week)	0.91 (0.85 to 0.98)	0.01

	Time (second-degree polynomial)	1.00 (1.00 to 1.00)	0.25
	Training sessions current week	1.03 (0.98 to 1.08)	0.25
	Games current week	0.93 (0.78 to 1.12)	0.44
	Random effects	3.70 (3.06 to 4.48)	0.000
Cumulative load 6 weeks	Training sessions	0.99 (0.98 to 1.01)	0.58
	Games	0.98 (0.91 to 1.06)	0.57
	Intercept	0.00 (4.34e-12 to 38.80)	0.14
	Age	1.45 (0.60 to 3.49)	0.40
	POI 1	1.24 (0.22 to 6.86)	0.81
	POI 2	4.35 (0.41 to 46.55)	0.22
	Time (week)	0.94 (0.88 to 1.01)	0.11
	Time (second-degree polynomial)	1.00 (1.00 to 1.00)	0.85
	Training sessions current week	1.04 (0.99 to 1.10)	0.11
	Games current week	0.92 (0.76 to 1.11)	0.38
	Random effects	3.70 (3.05 to 4.48)	0.000

Supplemental Table S2. Association between substantial health problems and number of trainings and games. Data are based on mixed logistic models adjusted for age, position on ice, week, 2nd degree polynomial term of week and number of trainings and games in the current week.

Injury	Load	Parameter	OR (95% CI)	P-value	
Acute injury (n=339)	Difference load 2 weeks	Training sessions	1.00 (0.95 to 1.04)	0.90	
		Games	0.96 (0.84 to 1.13)	0.74	
		Intercept	0.00 (3.00e-07 to 17.12)	0.18	
		Age	1.29 (0.76 to 2.19)	0.34	
		POI 1	1.52 (0.57 to 4.06)	0.41	
		POI 2	0.34 (0.07 to 1.74)	0.19	
		Time (week)	1.01 (0.94 to 1.09)	0.74	
		Time (2 nd degree polynomial)	1.00 (0.99 to 1.00)	0.004	
		Training sessions current week	0.84 (0.79 to 0.89)	0.000	
		Games current week	0.59 (0.47 to 0.75)	0.000	
		Random effects	2.39 (1.96 to 2.91)	0.000	
		Cumulative load 2 weeks	Training sessions	1.00 (0.97 to 1.03)	0.86
			Games	0.98 (0.88 to 1.09)	0.77
			Intercept	0.03 (3.47e-07 to 19.89)	0.19
	Age		1.29 (0.76 to 2.18)	0.35	
	POI 1		1.52 (0.57 to 4.06)	0.40	
	POI 2		0.3 (0.07 to 1.71)	0.19	
	Time (week)		1.01 (0.94 to 1.09)	0.73	
	Time (2 nd degree polynomial)		1.00 (0.99 to 1.09)	0.003	
	Training sessions current week		0.84 (0.80 to 0.88)	0.000	
	Games current week		0.58 (0.49 to 0.69)	0.000	
	Random effects		2.38 (1.96 to 2.90)	0.000	
	Cumulative load 3 weeks		Training sessions	0.99 (0.97 to 1.02)	0.69
			Games	0.96 (0.88 to 1.05)	0.38
			Intercept	0.00 (5.81 e-07 to 35.78)	0.24
		Age	1.26 (0.74 to 2.13)	0.40	
		POI 1	1.54 (0.58 to 4.11)	0.39	
		POI 2	0.28 (0.05 to 1.46)	0.13	
		Time (week)	1.01 (0.94 to 1.09)	0.74	

		Time (2 nd degree polynomial)	1.00 (0.99 to 1.00)	0.004
		Training sessions current week	0.85 (0.81 to 0.87)	0.000
		Games current week	0.56 (0.47 to 0.67)	0.000
		Random effects	2.37 (1.94 to 2.89)	0.000
	Cumulative load 4 weeks	Training sessions	1.00 (0.98 to 1.02)	0.84
		Games	0.97 (0.90 to 1.05)	0.49
		Intercept	0.00 (4.67e-07 to 28.76)	0.22
		Age	1.26 (0.75 to 2.14)	0.39
		POI 1	1.59 (0.60 to 4.21)	0.35
		POI 2	0.23 (0.04 to 1.25)	0.09
		Time (week)	1.02 (0.94 to 1.10)	0.68
		Time (2 nd degree polynomial)	1.00 (0.99 to 1.00)	0.004
		Training sessions current week	0.85 (0.81 to 0.89)	0.000
		Games current week	0.57 (0.47 to 0.68)	0.000
		Random effects	2.34 (1.13 to 2.87)	0.000
Overuse injuries (n=220)	Difference load 2 weeks	Training sessions	1.02 (0.97 to 1.07)	0.53
		Games	0.97 (0.80 to 1.19)	0.79
		Intercept	0.00 (1.37e-09 to 1014.32)	0.33
		Age	1.09 (0.48 to 2.46)	0.84
		POI 1	2.00 (0.40 to 9.90)	0.40
		POI 2	3.27 (0.33 to 32.09)	0.31
		Time (week)	0.88 (0.81 to 0.95)	0.001
		Time (2 nd degree polynomial)	1.00 (1.00 to 1.01)	0.01
		Training sessions current week	0.98 (0.91 to 1.05)	0.59
		Games current week	0.73 (0.54 to 0.98)	0.04
		Random effects	3.27 (2.62 to 4.07)	0.001
	Cumulative load 4 weeks	Training sessions	1.01 (0.98 to 1.03)	0.54
		Games	0.93 (0.84 to 1.04)	0.21
		Intercept	0.00 (3.04e-09 to 1069.89)	0.35
		Age	1.06 (0.48 to 2.33)	0.89
		POI 1	2.19 (0.46 to 10.34)	0.32
		POI 2	3.01 (0.33 to 27.83)	0.33
		Time (week)	0.88 (0.81 to 0.95)	0.002

	Time (2 nd degree polynomial)	1.00 (1.00 to 1.00)	0.03
	Training sessions current week	1.00 (0.94 to 1.05)	0.86
	Games current week	0.70 (0.55 to 1.89)	0.004
	Random effects	3.17 (2.51 to 3.99)	0.002
Cumulative load 6 weeks	Training sessions	0.99 (0.97 to 1.02)	0.55
	Games	0.93 (0.85 to 1.02)	0.12
	Intercept	0.00 (3.54e-10 to 373.99)	0.26
	Age	1.18 (0.52 to 2.67)	0.69
	POI 1	1.97 (0.40 to 9.60)	0.40
	POI 2	3.37 (0.34 to 33.15)	0.30
	Time (week)	0.90 (0.83 to 0.98)	0.02
	Time (2 nd degree polynomial)	1.00 (1.00 to 1.00)	0.15
	Training sessions current week	1.02 (0.96 to 1.08)	0.58
	Games current week	0.69 (0.53 to 0.89)	0.004
	Random effects	3.21 (2.52 to 4.09)	0.005