

Appendix

Table A1. Univariate odds ratios for the risk of a new lower extremity injury during the soccer season, calculated from generalized estimating equations taking into account that the right or left leg was the unit of analysis and belonged to the same player

Intrinsic factors	n=	Injured (n=128)	Non-injured (n=218)	OR	95% CI	p-value
		Mean ± SD	Mean ± SD			
Neuromuscular factors						
Quadriceps strength (Nm/kg)	326	2.43 ± 0.31	2.43 ± 0.35	1.01	[0.81-1.26]	0.95
Hamstrings strength (Nm/kg)	326	1.45 ± 0.19	1.42 ± 0.19	1.15	[0.91-1.46]	0.23
Hip abductor strength (kg/kg)*	336	0.21 ± 0.04	0.21 ± 0.04	0.89	[0.71-1.12]	0.32
1 RM leg press (kg/kg)*	310	3.11 ± 0.45	3.08 ± 0.46	1.08	[0.86-1.35]	0.53
Star Excursion Balance Test (cm)	322	98.3 ± 5.9	97.9 ± 5.9	1.07	[0.88-1.31]	0.49
Knee valgus angles (°)	314	3.7 ± 4.6	4.6 ± 5.9	0.83	[0.67-1.02]	0.08
Anatomic factors						
Knee joint laxity (mm)	342	5.7 ± 2.0	5.5 ± 2.1	1.10	[0.94-1.29]	0.24
Foot pronation (mm)	342	6.1 ± 3.3	5.3 ± 3.7	1.23	[1.00-1.51]	0.05
Generalized joint laxity (yes/no)	342	23/105	45/169	0.82	[0.47-1.44]	0.49
History of previous injury						
ACL injury (yes/no)**	342	9/119	9/205	1.97	[0.77-5.05]	0.16
Knee injury (yes/no)**	346	11/117	20/198	0.92	[0.44-1.91]	0.82
Ankle injury (yes/no)**	346	39/89	55/163	1.28	[0.81-2.01]	0.29
Hamstring injury (yes/no)**	346	18/110	35/183	0.86	[0.44-1.66]	0.64

The classifications injured and non-injured reflect the number of legs being injured for all players, where each leg was the unit of analysis, including both continuous (mean ± SD) and categorical (yes/no) independent variables.

Results are presented as mean ± SD for injured versus non-injured players. Odds ratios (OR) per SD unit of change in test scores are presented with 95% confidence intervals (CI) and p-values.

*Hip abductor strength measures and 1 RM leg press are adjusted for kg body mass.

**The history of previous injury to the knee, ankle and hamstring refers to injuries occurring within the year before the screening tests, while previous ACL injury refers to any previous injury ever.

Table A2. Univariate odds ratios for the risk of a new thigh injury during the soccer season, calculated from generalized estimating equations taking into account that the right or left leg was the unit of analysis and belonged to the same player

Intrinsic factors	n=	Injured (n=32)	Non-injured (n=314)	OR	95% CI	p-value
		Mean ± SD	Mean ± SD			
Demographic factors						
Age (years)	346	21.4 ± 3.8	21.5 ± 4.2	0.98	[0.70-1.38]	0.90
BMI (kg/m ²)	346	22.8 ± 1.6	22.3 ± 1.7	1.37	[0.95-1.98]	0.09
Neuromuscular factors						
Quadriceps strength (Nm/kg)	326	2.46 ± 0.33	2.43 ± 0.33	1.10	[0.72-1.66]	0.66
Hamstrings strength (Nm/kg)	326	1.49 ± 0.20	1.43 ± 0.19	1.38	[0.86-2.23]	0.18
Hip abductor strength (kg/kg)*	336	0.21 ± 0.04	0.21 ± 0.04	0.99	[0.65-1.51]	0.17
1 RM leg press (kg/kg)*	310	3.21 ± 0.46	3.08 ± 0.46	1.32	[0.87-2.00]	0.19
Star Excursion Balance Test (cm)	322	97.4 ± 6.1	98.1 ± 5.9	0.88	[0.62-1.25]	0.48
Anatomic factors						
Knee joint laxity (mm)	342	6.0 ± 1.6	5.5 ± 2.1	1.16	[0.93-1.44]	0.19
Foot pronation (mm)	342	5.9 ± 3.6	5.6 ± 3.5	1.13	[0.77-1.66]	0.54
Generalized joint laxity (yes/no)	342	7/25	61/249	1.14	[0.44-2.99]	0.79
History of previous injury						
Hamstring injury (yes/no)**	346	8/24	45/269	0.86	[0.44-1.66]	0.64

The classifications injured and non-injured reflect the number of legs being injured for all players, where each leg was the unit of analysis, including both continuous (mean ± SD) and categorical (yes/no) independent variables.

Results are presented as mean ± SD for injured versus non-injured players. Odds ratios (OR) per SD unit of change in test scores are presented with 95% confidence intervals (CI) and p-values.

*Hip abductor strength measures and 1 RM leg press are adjusted for kg body mass.

**The history of previous injury to the hamstring refers to injuries occurring within the year before the screening tests.

Table A3. Univariate odds ratios for the risk of a new knee injury during the soccer season, calculated from generalized estimating equations taking into account that the right or left leg was the unit of analysis and belonged to the same player

Intrinsic factors	n=	Injured (n=45)	Non-injured (n=301)	OR	95% CI	p-value
		Mean ± SD	Mean ± SD			
Demographic factors						
Age (years)	346	22.2 ± 4.3	21.4 ± 4.1	1.20	[0.91-1.58]	0.19
BMI (kg/m ²)	346	22.5 ± 1.5	22.3 ± 1.8	1.10	[0.85-1.42]	0.46
Neuromuscular factors						
Quadriceps strength (Nm/kg)	326	2.39 ± 0.30	2.43 ± 0.34	0.87	[0.62-1.23]	0.43
Hamstrings strength (Nm/kg)	326	1.41 ± 0.20	1.44 ± 0.19	0.84	[0.60-1.19]	0.32
Hip abductor strength (kg/kg)*	336	0.21 ± 0.03	0.21 ± 0.04	0.89	[0.64-1.23]	0.47
1 RM leg press (kg/kg)*	310	3.10 ± 0.45	3.10 ± 0.46	0.90	[0.65-1.25]	0.53
Star Excursion Balance Test (cm)	322	97.7 ± 5.7	98.1 ± 5.7	0.93	[0.70-1.23]	0.60
Knee valgus angles (°)	314	3.0 ± 5.0	4.4 ± 5.8	0.80	[0.59-1.08]	0.14
Anatomic factors						
Knee joint laxity (mm)	342	5.9 ± 2.1	5.5 ± 2.0	1.17	[0.95-1.43]	0.14
Foot pronation (mm)	342	6.4 ± 3.3	5.5 ± 3.6	1.32	[0.97-1.79]	0.08
Generalized joint laxity (yes/no)	342	8/37	60/237	0.85	[0.40-1.84]	0.69
History of previous injury						
ACL injury (yes/no)	342	6/39	12/285	3.70	[1.47-9.36]	0.01
Knee injury (yes/no)	346	3/42	28/273	0.67	[0.19-2.40]	0.54

The classifications injured and non-injured reflect the number of legs being injured for all players, where each leg was the unit of analysis, including both continuous (mean ± SD) and categorical (yes/no) independent variables.

Results are presented as mean ± SD for injured versus non-injured players. Odds ratios (OR) per SD unit of change in test scores are presented with 95% confidence intervals (CI) and p-values.

*Hip abductor strength measures and 1 RM leg press are adjusted for kg body mass.

**The history of previous injury to the knee refers to injuries occurring within the year before the screening tests, while previous ACL injury refers to any previous injury ever.

Table A4. Univariate odds ratios for the risk of a new ankle injury during the soccer season, calculated from generalized estimating equations taking into account that the right or left leg was the unit of analysis and belonged to the same player

Intrinsic factors	n=	Injured (n=32)	Non-injured (n=314)	OR	95% CI	p-value
		Mean ± SD	Mean ± SD			
Demographic factors						
Age (years)	346	20.1 ± 3.0	21.6 ± 4.2	0.64	[0.44-0.95]	0.03
BMI (kg/m ²)	346	22.7 ± 1.5	22.3 ± 1.7	1.25	[0.90-1.72]	0.18
Neuromuscular factors						
Quadriceps strength (Nm/kg)	326	2.46 ± 0.33	2.43 ± 0.33	1.12	[0.78-1.61]	0.54
Hamstrings strength (Nm/kg)	326	1.45 ± 0.17	1.43 ± 0.19	1.12	[0.81-1.57]	0.49
Hip abductor strength (kg/kg)*	336	0.22 ± 0.03	0.21 ± 0.04	1.11	[0.83-1.48]	0.47
1 RM leg press (kg/kg)*	310	3.25 ± 0.44	3.07 ± 0.46	1.47	[1.05-2.05]	0.02
Star Excursion Balance Test (cm)	322	98.0 ± 5.4	98.1 ± 6.0	0.99	[0.71-1.39]	0.96
Knee valgus angles (°)	314	2.1 ± 5.1	4.4 ± 5.7	0.66	[0.47-0.93]	0.02
Anatomic factors						
Knee joint laxity (mm)	342	5.5 ± 2.4	5.6 ± 2.0	0.98	[0.72-1.35]	0.92
Foot pronation (mm)	342	7.0 ± 2.9	5.4 ± 4.9	1.56	[1.13-2.15]	0.01
Generalized joint laxity (yes/no)	342	7/25	61/249	1.14	[0.49-2.66]	0.76
History of previous injury						
Knee injury (yes/no)**	346	2/30	29/285	0.67	[0.15-2.91]	0.59
Ankle injury (yes/no)**	346	11/21	83/231	1.44	[0.66-3.16]	0.36

The classifications injured and non-injured reflect the number of legs being injured for all players, where each leg was the unit of analysis, including both continuous (mean ± SD) and categorical (yes/no) independent variables.

Results are presented as mean ± SD for injured versus non-injured players. Odds ratios (OR) per SD unit of change in test scores are presented with 95% confidence intervals (CI) and p-values.

*Hip abductor strength measures and 1 RM leg press are adjusted for kg body mass.

**The history of previous injury to the knee and ankle refers to injuries occurring within the year before the screening tests.

Table A5. Univariate odds ratios for the risk of a new lower leg/foot injury during the soccer season, calculated from generalized estimating equations taking into account that the right or left leg was the unit of analysis and belonged to the same player

Intrinsic factors	n=	Injured (n=26)	Non-injured (n=320)	OR	95% CI	p-value
		Mean ± SD	Mean ± SD			
Demographic factors						
Age (years)	346	22.2 ± 4.3	21.4 ± 4.1	1.48	[1.00-2.21]	0.05
BMI (kg/m ²)	346	22.5 ± 1.5	22.3 ± 1.8	1.44	[0.84-2.49]	0.18
Neuromuscular factors						
Quadriceps strength (Nm/kg)	326	2.38 ± 0.26	2.43 ± 0.34	0.85	[0.61-1.19]	0.34
Hamstrings strength (Nm/kg)	326	1.45 ± 0.14	1.43 ± 0.19	1.14	[0.81-1.61]	0.44
Hip abductor strength (kg/kg)*	336	0.20 ± 0.04	0.21 ± 0.04	0.70	[0.42-1.17]	0.17
1 RM leg press (kg/kg)*	310	3.07 ± 0.51	3.09 ± 0.45	0.95	[0.59-1.52]	0.82
Star Excursion Balance Test (cm)	322	99.6 ± 6.0	97.9 ± 5.9	1.37	[0.84-2.24]	0.21
Knee valgus angles (°)	314	4.5 ± 4.5	4.2 ± 5.8	1.04	[0.76-1.42]	0.81
Anatomic factors						
Knee joint laxity (mm)	342	5.2 ± 2.1	5.6 ± 2.0	0.83	[0.58-1.19]	0.32
Foot pronation (mm)	342	5.6 ± 3.3	5.6 ± 3.6	1.01	[0.91-1.11]	0.94
Generalized joint laxity (yes/no)	342	4/22	64/252	0.72	[0.71-1.43]	0.55
History of previous injury						
Knee injury (yes/no)**	346	6/20	25/295	3.73	[1.47-9.46]	0.01
Ankle injury (yes/no)**	346	7/19	87/233	1.01	[0.41-2.47]	0.99

The classifications injured and non-injured reflect the number of legs being injured for all players, where each leg was the unit of analysis, including both continuous (mean ± SD) and categorical (yes/no) independent variables.

Results are presented as mean ± SD for injured versus non-injured players. Odds ratios (OR) per SD unit of change in test scores are presented with 95% confidence intervals (CI) and p-values.

*Hip abductor strength measures and 1 RM leg press are adjusted for kg body mass.

**The history of previous injury to the knee and ankle refers to injuries occurring within the year before the screening tests.