

Supplimentary materials

S1 Table. Summary of modifications to LESCA items.

Q	Original	Students	Non-students
19	Beginning a new school experience (beginning college, transferring college etc)	Beginning a new school experience (beginning university, transferring university etc)	Beginning a new work experience
21	Academic probation / ineligibility	<i>No change</i>	Removed
22	Being dismissed from dorm or other residence	Being dismissed from halls or other residence	Being asked to vacate house/home
27	Financial problems concerning school	<i>No change</i>	Financial problems
29	Conflict with room-mate	<i>No change</i>	Conflict within household
36	Suspended from team for non-academic reasons	<i>No change</i>	Removed
49	Being absent from school (classes) because of participation in sport	Being absent from university (classes) because of participation in sport	Being absent from work because of participation in sport
61	Major change in level of academic performance (doing better or worse)	<i>No change</i>	Major change in level of performance at work (doing better or worse)
62	Making career decisions (applying to graduate school,interviewing for jobs, etc)	Making career decisions (applying for Masters degree, interviewing for jobs, etc)	Making career decisions (applying for Masters degree, interviewing for jobs, etc)

S2 Table. All arc strengths greater than 0.3 included in the first network.

from	to	strength	direction
nlebase	nlelg_1	1.00	1.00
nlebase	nlelg_2	1.00	1.00
nlelg_1	injured_1	1.00	1.00
nlelg_2	injured_2	1.00	1.00
BIS_1	FFFS_1	0.98	0.70
FFFS_1	BIS_1	0.98	0.30
ind_team	hours	0.94	0.50
hours	ind_team	0.94	0.50
nlebase	RI_1	0.84	1.00
ind_team	nlebase	0.78	1.00
BIS_2	FFFS_2	0.74	0.71
FFFS_2	BIS_2	0.74	0.29
gender	stiffness_1	0.71	1.00
pi	stiffness_1	0.57	1.00
nlelg_1	BIS_1	0.55	0.97
BIS_1	nlelg_1	0.55	0.03
FFFS_1	BIS_2	0.52	1.00
clevel	balance_1	0.47	1.00
injured_2	stiffness_2	0.46	0.66
stiffness_2	injured_2	0.46	0.34
injured_1	stiffness_1	0.46	0.36
stiffness_1	injured_1	0.46	0.64
gender	stiffness_2	0.43	1.00
FFFS_1	injured_2	0.42	1.00
hours	injured_1	0.42	1.00
clevel	RI_2	0.42	1.00
nlebase	hrv_1	0.41	1.00
hours	hrv_1	0.40	1.00
hrv_1	nlelg_2	0.39	1.00
gender	FFFS_1	0.37	1.00
injured_2	hrv_2	0.37	0.89
nlelg_2	BIS_2	0.37	0.96
BIS_2	nlelg_2	0.37	0.04
hrv_2	injured_2	0.37	0.11
pi	nlelg_2	0.36	1.00
RI_1	BIS_1	0.36	0.41
BIS_1	RI_1	0.36	0.59
nlebase	RI_2	0.36	1.00
injured_1	balance_1	0.36	0.70
balance_1	injured_1	0.36	0.30
injured_2	balance_2	0.34	0.94
balance_2	injured_2	0.34	0.06
RI_1	balance_1	0.33	0.22
balance_1	RI_1	0.33	0.78
gender	FFFS_2	0.33	1.00
pi	clevel	0.32	0.50
clevel	pi	0.32	0.50
ind_team	FFFS_1	0.31	1.00

S2 Table continued

from	to	strength	direction
BIS_1	FFFS_2	0.31	1.00
pi	ind_team	0.30	0.46
ind_team	pi	0.30	0.54

S3 Table. All arc strengths greater than 0.3 included in the second network.

from	to	strength	direction
BIS	FFFS	1.00	0.76
FFFS	BIS	1.00	0.25
hours	injured	0.72	1.00
injured	stiffness	0.67	1.00
clevel	BIS	0.60	1.00
hrv	FFFS	0.58	0.69
FFFS	hrv	0.58	0.31
gender	stiffness	0.56	1.00
injured	nlec	0.45	1.00
pi	balance	0.43	1.00
pi	injured	0.38	1.00
stiffness	BIS	0.38	0.93
BIS	stiffness	0.38	0.07
RI	BIS	0.35	0.29
BIS	RI	0.35	0.71
pi	hrv	0.33	1.00

S4 Table. Probabilities of injury conditional on the variables in the Markov blanket for injured_1.

prob	clevel	hours	nlelg_1	stiffness_1	balance_1
0.53	club_university_county	High	Low	High	High
0.46	national_international	High	Low	High	Low
0.44	national_international	High	Low	High	High
0.39	club_university_county	Low	High	High	High
0.37	club_university_county	High	Low	High	Low
0.32	national_international	Low	High	High	Low
0.32	club_university_county	High	High	High	High
0.31	club_university_county	High	High	Low	High
0.3	national_international	Low	High	High	High
0.29	club_university_county	Low	High	Low	High
0.25	national_international	High	High	High	Low
0.25	national_international	High	High	Low	Low
0.25	club_university_county	Low	High	High	Low
0.24	national_international	High	High	Low	High
0.24	national_international	High	High	High	High
0.24	national_international	Low	High	Low	Low
0.22	national_international	Low	High	Low	High
0.19	club_university_county	High	High	Low	Low
0.19	club_university_county	High	High	High	Low
0.18	club_university_county	Low	High	Low	Low
0.17	club_university_county	Low	Low	High	High
0.16	club_university_county	High	Low	Low	High
0.13	national_international	Low	Low	High	Low
0.12	national_international	High	Low	Low	Low
0.12	national_international	Low	Low	High	High
0.12	national_international	High	Low	Low	High
0.09	club_university_county	Low	Low	High	Low
0.09	club_university_county	High	Low	Low	Low
0.07	club_university_county	Low	Low	Low	High
0.06	national_international	Low	Low	Low	Low
0.05	national_international	Low	Low	Low	High
0.04	club_university_county	Low	Low	Low	Low

S5 Table. Probabilities of injury conditional on the variables in the Markov blanket for injured_2.

prob	FFFS_1	nlelg_2	stiffness_2	hrv_2	balance_2
0.53	Low	Low	High	Low	High
0.46	Low	High	High	Low	High
0.41	Low	Low	High	High	High
0.39	Low	Low	High	Low	Low
0.35	Low	High	High	High	High
0.33	Low	High	High	Low	Low
0.32	Low	Low	Low	Low	High
0.28	Low	Low	High	High	Low
0.26	Low	High	Low	Low	High
0.25	High	Low	High	Low	High
0.23	Low	High	High	High	Low
0.23	Low	Low	Low	High	High
0.22	High	High	High	Low	High
0.21	Low	Low	Low	Low	Low
0.18	Low	High	Low	High	High
0.17	High	Low	High	High	High
0.17	Low	High	Low	Low	Low
0.16	High	Low	High	Low	Low
0.15	High	High	High	High	High
0.14	Low	Low	Low	High	Low
0.13	High	High	High	Low	Low
0.13	High	Low	Low	Low	High
0.11	Low	High	Low	High	Low
0.11	High	High	Low	Low	High
0.11	High	Low	High	High	Low
0.09	High	High	High	High	Low
0.08	High	Low	Low	High	High
0.08	High	Low	Low	Low	Low
0.07	High	High	Low	High	High
0.06	High	High	Low	Low	Low
0.05	High	Low	Low	High	Low
0.04	High	High	Low	High	Low

S6 Table. Highest and lowest probability of injury, conditional on the all variables in the Markov blanket for “injured”.

Probability	hours	pi	nle	stiffness
0.77	High	injury	+1SD	+1SD
0.74	High	no injury	+1SD	+1SD
0.72	Low	injury	+1SD	+1SD
0.70	High	injury	+1SD	mean
0.69	High	injury	+1SD	-1SD
0.68	High	no injury	+1SD	mean
0.66	High	no injury	+1SD	-1SD
0.65	Low	injury	+1SD	mean
0.64	Low	injury	+1SD	-1SD
0.61	High	injury	mean	+1SD
0.58	High	no injury	mean	+1SD
0.54	Low	injury	mean	+1SD
0.54	High	injury	mean	mean
0.51	High	injury	-1SD	+1SD
0.51	High	injury	mean	-1SD
0.50	High	no injury	mean	mean
0.48	High	no injury	mean	-1SD
0.48	Low	injury	mean	mean
0.47	High	no injury	-1SD	+1SD
0.46	Low	injury	mean	-1SD
0.44	Low	injury	-1SD	+1SD
0.44	High	injury	-1SD	mean
0.42	High	injury	-1SD	-1SD
0.41	High	no injury	-1SD	mean
0.38	High	no injury	-1SD	-1SD
0.37	Low	no injury	+1SD	+1SD
0.37	Low	injury	-1SD	mean
0.35	Low	injury	-1SD	-1SD
0.32	Low	no injury	+1SD	mean
0.29	Low	no injury	+1SD	-1SD
0.20	Low	no injury	mean	+1SD
0.18	Low	no injury	mean	mean
0.16	Low	no injury	mean	-1SD
0.15	Low	no injury	-1SD	+1SD
0.13	Low	no injury	-1SD	mean
0.11	Low	no injury	-1SD	-1SD