

SUPPLEMENTARY

Supplementary Table 1

Multiple regression for association between injury characteristics and pain interference (only for pain intensity >0; N=370), EQ-5D, and GOS-E recovery outcome.

Injury characteristics		Pain Interference				EQ-5D Summary Score				GOS-E Functional Outcome			
		M	(sd)	β	(95% CI)	M	(sd)	β	(95% CI)	N	%	OR	(95% CI)
Comorbidities	None	2.91	2.42	Ref		0.82	0.22	Ref		137	50.6	Ref	
	Present	3.27	2.62	0.23	-0.03,0.78	0.77	0.25	-0.05	-0.10,0	73	47.1	0.86	0.56,1.31
Work status at injury	Not working	3.97	2.87	Ref		0.72	0.33	Ref		37	68.5	Ref	
	Working	2.91	2.41	-1.00	-1.87,-0.13	0.82	0.21	0.10	0.01,0.19	173	46.5	0.40	0.20,0.80
Injury place	At home	2.48	2.39	Ref		0.82	0.24	Ref		44	57.9	Ref	
	Traffic/Road	3.60	2.61	1.02	0.26, 1.78	0.77	0.25	-0.03	-0.10,0.04	66	39.5	0.67	0.37,1.23
	Workplace	3.60	2.38	1.21	0.26, 2.16	0.74	0.25	-0.08	-0.17,0.01	14	31.1	0.37	0.17,0.80
	Other	2.43	2.24	0.15	-0.62, 0.92	0.86	0.18	0.04	-0.03,0.10	86	62.3	1.37	0.74,2.26
Injury severity	AIS region count			0.37	0.14, 0.61			-0.03	-0.06,-0.01			0.70	0.58,0.82
Hospital stay	1-2 days	2.48	2.35	Ref		0.83	0.24	Ref		95	60.5	Ref	
	3-6 days	3.26	2.46	0.72	0.06, 1.37	0.81	0.22	-0.01	-0.06,0.05	69	52.3	0.80	0.49,1.30
	7-13 days	2.88	2.52	0.30	-0.49, 1.09	0.82	0.19	0.01	-0.05,0.07	35	43.8	0.61	0.34,1.10
	≥ 14 days	4.34	2.49	1.65	0.76, 2.55	0.70	0.27	-0.10	-0.19,-0.02	10	17.9	0.18	0.08,0.42
Type of discharge	Home	2.65	2.29	Ref		0.84	0.22	Ref		168	55.6	Ref	
	Rehabilitation	3.91	2.72	0.99	0.38, 1.61	0.73	0.25	-0.08	-0.14,-0.03	42	33.9	0.51	0.32,0.82

Compensation status	None	2.53	2.32	Ref		0.84	0.22	Ref		155	58.7	Ref	
	TAC/Worksafe	3.82	2.57	1.16	0.61, 1.71	0.75	0.25	-0.07	-0.12,-0.02	55	34	0.44	0.28,0.67
Fault	At fault	2.42	2.14	Ref		0.85	0.19	Ref		124	57.9	Ref	
	Not at fault	3.63	2.68	1.15	0.66, 1.64	0.76	0.26	-0.09	-0.13,-0.05	83	39.9	0.51	0.34,0.76

Notes: all analysis adjusted for age, sex and injury severity, except for the injury severity analysis which only adjusted for age and sex.

Supplementary Table 2

Multiple regression for association between injury characteristics, pain catastrophising, pain self-efficacy, kinesiophobia and injustice experience.

Injury characteristics		PCS				PSEQ			
		M	(sd)	β^{**}	(95% CI)	M	(sd)	β^{**}	(95% CI)
Comorbidities	None	9.54	11.23	Ref		45.63	14.19	Ref	
	Present	9.30	10.6	0.32	-1.31,1.94	45.02	14.68	-0.34	-2.68,2.01
Work status at injury	Not working	11.65	12.61	Ref		40.99	15.12	Ref	
	Working	9.12	10.71	-0.06	-2.57,2.44	46.63	14.46	1.71	-1.22,4.65
Injury place	At home	8.18	10.67	Ref		47.41	12.01	Ref	
	Traffic/Road	11.38	11.81	0.85	-1.49,3.20	42.7	15.27	-2.32	-5.09,0.46
	Workplace	11.13	11.3	0.52	-2.48,3.53	43.11	15.41	-1.44	-6.26,3.38
	Other	7.18	9.49	-1.27	-3.55,1.00	48.43	13.37	-0.10	-2.97,2.76
Injury severity	AIS region count			0.28	-0.51,1.06			-0.94	-1.96,0.08
Hospital stay	1-2 days	7.91	10.00	Ref		49.11	12.57	Ref	
	3-6 days	9.77	11.3	0.69	-1.31,2.68	43.81	14.99	-3.34	-6.05,-0.63
	7-13 days	9.24	10.55	1.94	-0.09,3.98	45.33	13.96	-4.02	-7.27,-0.77
	≥ 14 days	13.25	12.76	2.40	-0.31,5.11	38.89	15.5	-5.70	-9.16,-2.23
Type of discharge	Home	7.92	9.67	Ref		47.41	13.61	Ref	
	Rehabilitation	13.08	12.97	2.56	0.63,4.50	40.71	15.01	-2.76	-5.10,-0.42
Compensation status	None	8.04	10.12	Ref		47.91	13.29	Ref	
	TAC/Worksafe	11.67	11.93	1.06	-0.72,2.84	41.43	15.12	-3.32	-5.55,-1.10

Fault	At fault	7.22	9.72	Ref		48.94	12.07	Ref	
	Not at fault	11.67	11.80	2.11	0.57,3.65	41.87	15.63	-4.29	-6.45,-2.11

Notes: all analysis adjusted for age, sex and injury severity, except for the injury severity analysis which only adjusted for age and sex.

Supplementary tables

(Supplementary Table 2 continued)

Injury characteristics		TSK				IEQ			
		M	(sd)	β^{**}	(95% CI)	M	(sd)	β^{**}	(95% CI)
Comorbidities	None	36.99	8.32	Ref		15.99	13.6	Ref	
	Present	37.32	7.99	0.80	-0.65,2.24	16.67	13.75	1.14	-1.17,3.46
Work status at injury	Not working	37.81	9.33	Ref		17.68	14.27	Ref	
	Working	37	8.01	0.47	-1.70,2.64	16.02	13.55	0.80	-2.83,4.42
Injury place	At home	36.97	7.86	Ref		12.57	11.06	Ref	
	Traffic/Road	37.53	8.05	-0.93	-2.82,0.95	19.22	14.43	4.20	1.25,7.16
	Workplace	39.76	7.63	0.96	-1.55,3.48	19.39	13.6	4.20	0.08,8.32
	Other	35.79	8.56	-1.78	-3.85,0.29	13.51	12.97	1.03	-2.17,4.24
Injury severity	AIS region count			-0.20	-0.76,0.35			0.95	-0.02,1.91
Hospital stay	1-2 days	36.66	7.77	Ref		12.54	12.57	Ref	
	3-6 days	37.45	8.62	-0.14	-1.82,1.54	17.41	13.82	3.71	1.04,6.37
	7-13 days	36.98	8.1	0.44	-1.47,2.36	16.81	13.11	4.84	1.50,8.19
	≥ 14 days	37.77	8.64	-0.96	-3.41,1.49	22.55	14.14	7.05	3.26,10.34
Type of discharge	Home	36.52	8.14	Ref		14.09	12.87	Ref	
	Rehabilitation	38.53	8.18	0.74	-0.85,2.33	21.31	14.12	4.35	1.88,6.81
Compensation status	None	36.3	8.05	Ref		13.66	12.51	Ref	
	TAC/Worksafe	38.37	8.28	0.86	-0.58,2.31	20.31	14.39	3.95	1.60,6.31

Fault	At fault	36.19	7.79	Ref		11.94	11.1	Ref	
	Not at fault	38.03	8.54	0.54	-0.81,1.89	20.5	14.62	6.35	4.23,8.48

Notes: all analysis adjusted for age, sex, pain intensity and injury severity.

Supplementary tables

Supplementary Table 3a

Direct and indirect effects between predictors and pain interference, adjusting for age, sex, pain intensity and injury severity

	Indirect effects			% of total effect mediated	Direct effects
	B	(95% CI)	p-value		p-value
Mediation via Pain Self-Efficacy					
Compensation status	0.24	0.07,0.41	0.006	36.9%	0.016
Fault	0.25	0.09,0.41	0.002	37.7%	0.010
Mediation via Pain Catastrophising					
Compensation status ^a	n/a	n/a	n/a	n/a	n/a
Fault	0.17	0.03,0.32	0.017	26.0%	0.001
Mediation via Perceived Injustice					
Compensation status	0.25	0.10,0.40	0.001	39.1%	0.017
Fault	0.34	0.19,0.48	<0.001	50.4%	0.027

Notes, all analysis adjusted only for age, sex, pain intensity and injury severity. ^a Compensation status was not associated with catastrophising, so mediation not examined.

Supplementary Table 3b

Combined mediation effects between predictors (fault attribution and compensation status) and pain interference

	Fault attribution	Compensation
Total indirect effect		
β (95% CI)	0.08 (0.04,0.12)	0.07 (0.03,0.10)
p-value	<0.001	<0.001
% of mediated		
Total effect	59.3%	48.7%
Pain self-efficacy	23.9%	25.1%
Perceived injustice	19.3%	23.6%
Pain Catastrophising	16.2%	n/a
Direct effect (p-value)		
β (95% CI)	0.05 (0.00, 0.11)	0.06 (0.00,0.12)
p-value	0.055	0.051

Notes: all analysis adjusted only for age, sex, pain intensity and injury severity.

Supplementary Table 3c

Direct and indirect effects between predictors and health status (EQ-5D), adjusting for age, sex and injury severity

	Indirect effects				Direct effects ^a	
	B	(95% CI)	p-value	% of total effect mediated		p-value
Mediation via Pain Self-Efficacy						
Compensation status	-0.016	-0.029,-0.002	0.022	34.8%		0.121
Fault	-0.020	-0.035,-0.004	0.012	33.5%		0.026
Mediation via Pain Catastrophising						
Compensation status ^a	n/a	n/a	n/a	n/a		n/a
Fault	-0.014	-0.026,-0.002	0.026	24.1%		0.011
Mediation via Perceived Injustice						
Compensation status	-0.017	-0.034,-0.008	0.008	37.0%		0.151
Fault	-0.026	-0.042,-0.015	<0.001	46.1%		0.070

Notes, all analysis adjusted only for age, sex, pain intensity and injury severity. ^a Compensation status was not associated with catastrophising, so mediation not examined.

Supplementary Table 3d

Combined mediation effects between predictors (fault attribution and compensation status) and EQ-5D

	Fault attribution	Compensation
Total indirect effect		
β (95% CI)	-0.068 (-0.103,-0.033)	-0.048 (-0.079,-0.016)
p-value	<0.001	0.002
% of mediated		
Total effect	54.0%	50.1%
Pain self-efficacy	21.7%	26.0%
Perceived injustice	16.9%	24.1%
Pain Catastrophising	15.5%	n/a
Direct effect (p-value)		
β (95% CI)	-0.058 (-0.130,0.014)	-0.047 (-0.130,0.035)
p-value	0.114	0.258

Notes, all analysis adjusted only for age, sex, pain intensity and injury severity.

Supplementary Table 3e

Direct and indirect effects between predictors and functional outcome (GOS-E), adjusting for age, sex and injury severity

	Indirect effects			Direct effects ^a	
	B	(95% CI)	p-value	% of total effect mediated	p-value
Mediation via Pain Self-Efficacy					
Compensation status	-0.025	-0.055,0.006	0.110	11.8%	0.004
Fault	-0.032	-0.062,-0.001	0.041	19.4%	0.032
Mediation via Pain Catastrophising					
Fault	-0.026	-0.054,0.002	0.065	16.4%	0.023
Mediation via Perceived Injustice					
Compensation status	-0.050	-0.087,-0.013	0.009	23.5%	0.006
Fault	-0.084	-0.125,-0.043	<0.001	50.9%	0.189

Notes, all analysis adjusted only for age, sex, pain intensity and injury severity.

Supplementary Table 3f

Combined mediation effects for the relationship between GoS-E and compensation status/fault

	Fault attribution	Compensation
Total indirect effect		
β (95% CI)	-0.089 (-0.133,-0.045)	-0.053 (-0.091,-0.016)
p-value	<0.001	0.006
% of mediated		
Total effect	55.6%	25.1%
Pain self-efficacy	5.6%	3.8%
Perceived injustice	43.5%	21.2%
Pain Catastrophising	6.5%	n/a
Direct effect (p-value)		
β (95% CI)	-0.071 (-0.192,0.051)	-0.159 (-0.278,-0.041)
p-value	0.255	0.009

Notes, all analysis adjusted only for age, sex, pain intensity and injury severity.