## Bi-directional relation between effort—reward imbalance and risk of neck-shoulder pain: assessment of mediation through depressive symptoms using occupational longitudinal data <sup>1</sup>

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- 1. Supplementary tables
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**Supplemental Table S1**. Risk ratios (RR, 95% Confidence Intervals) for affecting neck-shoulder pain in relation to Effort Reward Imbalance (ERI) using cut-off 1 from the mediation analyses.

Association	Controlled direct effect (CDE)		Natural direct effect (NDE)		Natural indirect effect (NIE) through mediator		Total effect (TE)		Percentag e mediated
From ERI to neck-shoulder	RR	95% CI	RR	95% CI	RR	95% CI	RR	95% CI	
pain									
Model 1	1.21	0.83 - 1.75	1.06	0.91-1.25	1.06	1.03-1.10	1.13	0.97-1.13	52
Model 2	1.20	0.81 - 1.81	1.05	0.88-1.24	1.06	1.03-1.10	1.11	0.94-1.31	59
Depressive symptoms at T1									
excluded									
Model 1	1.08	0.71 - 1.65	1.08	0.92-1.28	1.05	1.02-1.08	1.14	0.96-1.34	39
Model 2	1.07	0.68 - 1.68	1.07	0.89-1.28	1.05	1.02-1.08	1.12	0.94-1.34	43

Model 1 adjusted for age, sex and panel

Model 2 adjusted for age, sex, panel, marital status, education, chronic disease and physical work

**Supplemental Table S2.** Risk ratios (RR, 95% Confidence Intervals) for Effort Reward Imbalance (ERI) with cut-off 1 in relation to affecting neck-shoulder pain from the mediation analyses.

Association	Controlled direct		Natural direct		Natural indirect effect (NIE)		Total effect (TE)		Percentag
Association Mediator	Controlled direct effect (CDE)		effect (NDE)		through mediator				e mediated
From neck-shoulder pain to	RR	95% CI	RR	95% CI	RR	95% CI	RR		<u> </u>
ERI									
Model 1	1.10	0.66-1.83	1.17	0.95-1.45	1.05	1.00-1.10	1.23	1.00-1.51	26
Model 2	1.14	0.67-1.94	1.22	0.97-1.52	1.06	1.01-1.12	1.29	1.04-1.60	25
Depressive symptoms at T1									
excluded									
Model 1	1.08	0.61-1.92	1.15	0.92-1.44	1.04	1.00-1.09	1.20	0.97-1.49	25
Model 2	1.10	0.60-1.99	1.19	0.94-1.50	1.05	1.00-1.10	1.25	0.99-1.57	24

Model 1 adjusted for age, sex and panel

Model 2 adjusted for age, sex, panel, marital status, education, chronic disease and physical work