

Supplementary Information

Article title: A multi-component intervention (NEXpro) reduces neck pain-related work productivity loss: A randomized controlled trial among Swiss office workers

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Table S1 Neck pain-related work productivity loss (%), unadjusted model with 517 observations

	Coefficient	95 % confidence interval	p-value
Treatment, intervention (Ref = control)	-0.19	from -0.45 to 0.07	0.16
Measurement time point (Ref = Baseline, January 2020)			
Follow-up 1 (April 2020)	-0.08	from -0.32 to 0.17	0.54
Follow-up 2 (August 2020)	-0.08	from -0.14 to 0.30	0.49
Follow-up 3 (November 2020)	-0.08	from -0.35 to 0.20	0.60
Follow-up 4 (April 2021)	-0.001	from -0.36 to 0.36	0.99
Intervention cluster (Ref = Cluster 3, January to April 2021)			
Cluster 1 (January to April 2020)	-0.55	from -1.15 to 0.04	0.07
Cluster 2 (August to November 2020)	-0.20	from -0.73 to 0.34	0.47
<i>Model Constant</i>	2.00	from 1.54 to 2.47	< 0.001
<i>Random Intercept Variance (participants)</i>	1.20	from 0.78 to 1.84	
<i>Residual Variance</i>	151.65	from 132.85 to 173.11	

Table S2 Adherence to intervention

	(N=107)
Number of neck exercise training sessions, over 12 weeks	
Mean (SD)	31.2 (13.3)
Median (IQR)	31.0 (10.5)
Adherence to neck exercises ¹	
Adherent (%)	29 (27.1)
Exceeded the recommendation (> 3 training sessions a week)	25 (23.4)
Met the recommendation (= 3 training sessions a week)	4 (3.7)
Non-adherent (%)	78 (72.9)
Slightly below the recommendation (2 to < 3 training sessions a week)	56 (52.3)
Clearly the recommendation (1 to < 2 training sessions a week)	13 (12.2)
Very clearly below the recommendation (< 1 training session a week)	9 (8.4)
Number of health-promotion information group workshop attendances, over 12 weeks	
Mean (SD)	8.2 (2.8)
Median (IQR)	8.0 (3.0)
Adherence to health-promotion information ²	
Adherent (%)	66 (61.7)
Exceeded the recommendation (> 8 workshop attendances)	52 (48.6)
Met the recommendation (= 8 workshop attendances)	14 (13.1)
Non-adherent (%)	41 (38.3)
Slightly below the recommendation (5 to 7 workshop attendances)	32 (29.9)
Clearly below the recommendation (< 5 workshop attendances)	9 (8.4)
Adherence to workplace ergonomics ³	
Adherent (%)	104 (97.2)
Non-adherent (%)	3 (2.8)

Key: IQR = interquartile range; SD = standard deviation

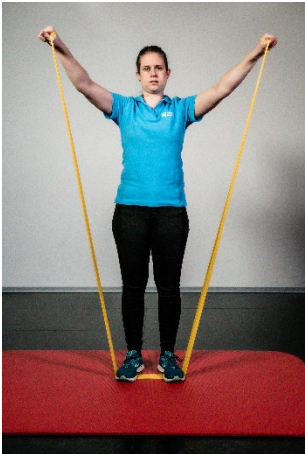
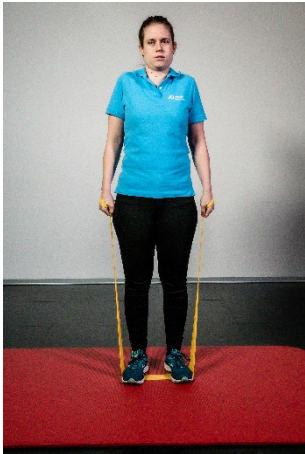
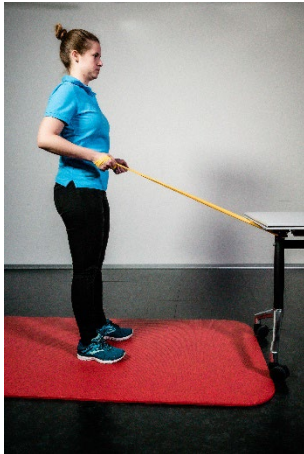
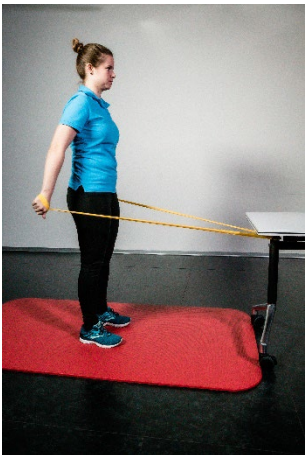
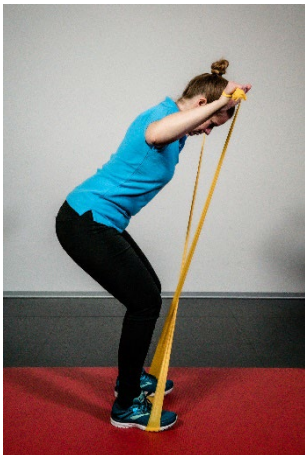
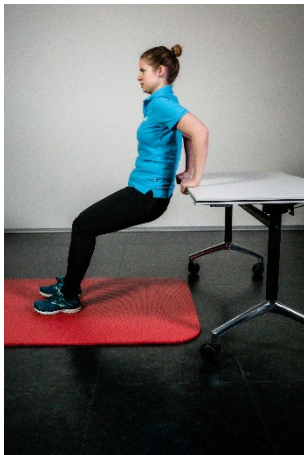
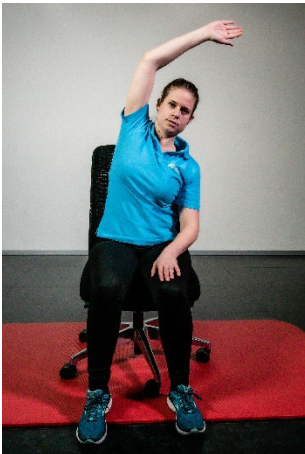
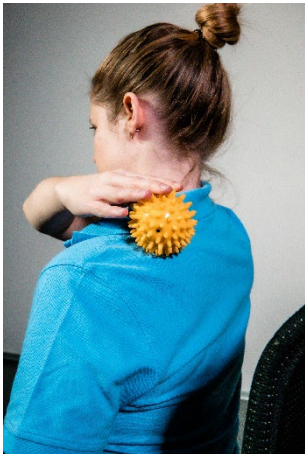
Multi-component intervention and work productivity loss

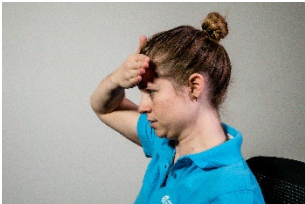
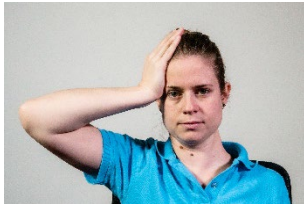
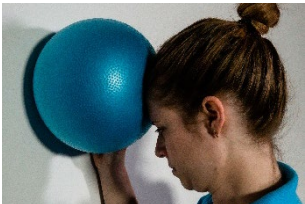
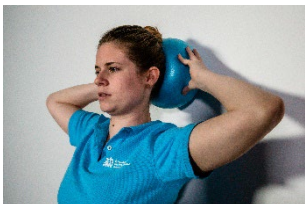
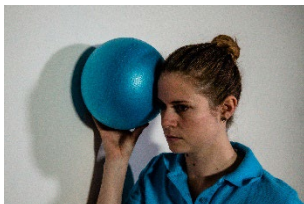
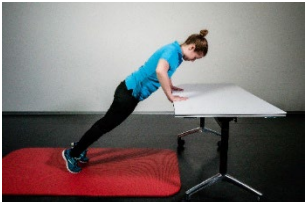
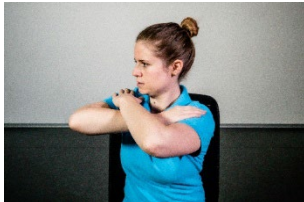
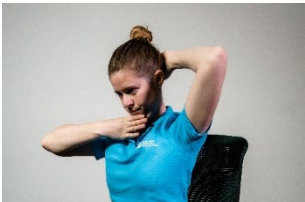
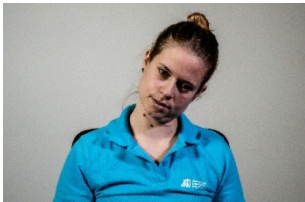
¹ Participants were classified as being “adherent to neck exercises” if they have followed our recommendation to exercise 3 times a week over a period of 12 weeks (≥ 36 training sessions over 12 weeks = adherent, < 36 training sessions over 12 weeks = non adherent).

² Participants were classified as being “adherent to health-promotion information” if they have followed our recommendation to attend at minimum 8 / 12 workshops (≥ 8 workshop attendances = adherent, < 8 workshop attendances = non adherent).

³ Participants were classified as being “adherent to workplace ergonomics” if they attended the 30-minute workplace ergonomics intervention.

Figure S1: Set of 16 neck exercises

Bilateral scapular raise <i>3x10 repetitions</i>	Bilateral shoulder shrugs <i>3x10 repetitions</i>	Row <i>3x10 repetitions</i>
		
Bilateral shoulder extension <i>3x10 repetitions</i>	Bilateral shoulder external rotation, 3x10 repetitions	Bench dips <i>3x10 repetitions</i>
		
Seated side stretch <i>3x20 seconds, each side</i>	Self-massage <i>3x20 seconds</i>	
		

Isometric neck flexion <i>5x5 seconds</i>	Isometric neck extension <i>5x5 seconds</i>	Isometric neck rotation <i>5x5 seconds, each side</i>
		
		
Push-ups <i>3x10 repetitions</i>	Bilateral shoulder circling <i>1x20 seconds</i>	Upper body rotation <i>1x20 seconds, each side</i>
		
Stretch of neck extensor <i>3x20 seconds</i>	Lateral neck stretch <i>3x20 seconds, each side</i>	
		

Key: They not only strengthen the neck, but also the shoulders, arms and back.