

SUPPLEMENTARY MATERIAL

Table S1. Percentage of within-individual improvements and within-individual deteriorations in outcomes and predictors for all persons included in the fixed effects analysis (N=14,159) and persons with changes of at least 1 standard deviation.

	Within-individual improvements		Within-individual deteriorations	
	%		%	
Outcome measures	All	≥1 SD	All	≥1 SD
Work ability (0-10)	40%	31%	41%	32%
Self-rated health (1-5)	33%	32%	34%	33%
Working conditions				
Psychological job demands (1-5)	45%	32%	45%	31%
Emotional job demands (1-5)	44%	34%	43%	34%
Autonomy (1-5)	45%	32%	46%	32%
Social support (1-5)	45%	32%	47%	33%
Physical workload (1-5)	43%	31%	44%	32%
Health behaviours and BMI				
Moderate physical activity (0-7)	43%	34%	42%	33%
Vigorous physical activity (0-7)	42%	34%	42%	34%
Smoking (%yes)	29%	n/a	29%	n/a
BMI (kg/m ²)	46%	31%	52%	32%

SD standard deviation.

Table S2. Baseline sociodemographic characteristics of persons included in the fixed effects analysis (N=14,159) and persons not included in the fixed effects analysis (N=7,697).

	Fixed effects analysis	Not included in fixed effects analysis
Age	51.1 years old (SD 6.4) *	52.3 years old (SD=7.6)
Gender (male)	54.1%**	48.3%
Educational level		
Low	26.1%	34.3%
Intermediate	39.5%	37.4%
High	34.4%**	28.2%

SD standard deviation.

*Independent sample t-test, p<0.05.

**Chi-square, p<0.05.

Table S3. Sensitivity analysis of the effects of within-individual **improvements** (\geq SD of differences scores) in working conditions, health behaviours and BMI in a given year on changes in work ability and self-rated health in the same year among employed individuals aged 45–63 years.

	Change in self-reported work ability (0-10)		Change in self-rated health (1-5)	
	N ^a	b (95% CI)	N ^a	b (95% CI)
Working conditions				
Decrease of psychological job demands (1-5)	4787	0.05 (0.00;0.10)	4792	0.02 (-0.00;0.04)
Decrease of emotional job demands (1-5)	7579	0.07 (0.03;0.11)	7580	0.03 (0.02;0.05)
Increase of autonomy (1-5)	4964	0.09 (0.04;0.14)	4969	0.03 (0.01;0.06)
Increase of social support (1-5)	5726	0.07 (0.03;0.11)	5733	0.02 (0.00;0.03)
Decrease of physical workload (1-5)	3771	0.16 (0.09;0.22)	3776	0.05 (0.03;0.08)
Health behaviours and BMI				
Increase in moderate physical activity (0-7)	6972	-0.01 (-0.03;0.00)	6979	0.00 (-0.00;0.01)
Increase vigorous physical activity (0-7)	7186	-0.01 (-0.02;0.00)	7192	0.01 (0.00;0.01)
Stop smoking (1=yes, 0=no)	1002	-0.40 (-0.53;-0.26)	1000	-0.13 (-0.17;-0.08)
Decrease in BMI (kg/m ²)	2753	0.00 (-0.01;0.02)	2759	0.03 (0.02;0.03)

Bold: estimate is statistically significant at the 0.05 level

^a N=number of observations. Individuals may be included in the analyses several times since they could experience multiple improvements in working conditions and healthy behaviour during follow-up.

Table S4. Sensitivity analysis of the effects of within-individual **deteriorations** (\geq SD of differences scores) in working conditions, health behaviours and BMI in a given year on changes in work ability and self-rated health in the same year among employed individuals aged 45–63 years.

	Change in self-reported work ability (0-10)		Change in self-rated health (1-5)	
	N ^a	b (95% CI)	N ^a	b (95% CI)
Working conditions				
Increase of psychological job demands (1-5)	4766	-0.22 (-0.27;-0.17)	4773	-0.06 (-0.08;-0.05)
Increase of emotional job demands (1-5)	7295	-0.23 (-0.27;-0.19)	7302	-0.08 (-0.09;-0.06)
Decrease of autonomy (1-5)	5276	-0.24 (-0.30;-0.19)	5280	-0.09 (-0.11;-0.07)
Decrease of social support (1-5)	6165	-0.20 (-0.24;-0.17)	6172	-0.07 (-0.09;-0.06)
Increase of physical workload (1-5)	3806	-0.23 (-0.30;-0.17)	3811	-0.09 (-0.11;-0.06)
Health behaviours and BMI				
Decrease in moderate physical activity (0-7)	6625	-0.04 (-0.05;-0.02)	6632	-0.02 (-0.03;-0.02)
Decrease in vigorous physical activity (0-7)	6788	-0.03 (-0.04;-0.02)	6790	-0.02 (-0.03;-0.02)
Start smoking (1=yes, 0=no)	599	-0.05 (-0.21;0.11)	597	0.02 (-0.04;0.08)
Increase in BMI (kg/m ²)	2852	-0.04 (-0.05;-0.02)	2853	-0.02 (-0.03;-0.01)

Bold: estimate is statistically significant at the 0.05 level

^a N=number of observations. Individuals may be included in the analyses several times since they could experience multiple deteriorations in working conditions and healthy behaviour during follow-up.