

The influence of chronic health problems on work ability and productivity at work: A longitudinal study among older employees ¹

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1. Appendix. Supplementary tables A and B.
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Table A Longitudinal analyses using linear regression Generalized Estimating Equations (GEE) of the relation between individual and work-related factors with work ability and productivity in a sample of older employees (N=8401)

				Work ability		Productivity at work	
				B	95% CI	B	95% CI
Individual factors							
Age	45-49	1	Time-lag	0.20	0.11 – 0.29**	0.25	0.15 – 0.35**
	50-54			0.06	-0.03 – 0.15	0.18	0.08 – 0.28**
	55-59			0.03	-0.06 – 0.12	0.05	-0.05 – 0.14
Gender (male)		1	Time-lag	0.01	-0.05 – 0.07	-0.01	-0.07 – 0.05
Ed.	Low	1	Time-lag	- 0.14	-0.22 – -0.07**	-0.19	-0.28 – 0.10**
	Mid			-	-0.07 – 0.05	-0.05	-0.12 – 0.02

Table B. Longitudinal analyses using logistic regression Generalized Estimating Equations (GEE) of the relation between health problems with work ability and productivity in a sample of older employees (N=8401)

		Model		Work ability		Productivity at work	
				<8 (33%) vs. ≥8 (66%)		<5 (33%) vs. ≥5 (66%)	
				OR	95% CI	OR	95% CI
Individual factors							
Age	45-49	1	Time-lag	0.80	0.69 – 0.91**	0.93	0.76 – 1.13
	50-54			0.94	0.83 – 1.07	0.93	0.77 – 1.13
	55-59			1.02	0.89 – 1.15	0.86	0.71 – 1.05
Gender (male)		1	Time-lag	0.99	0.91 – 1.08	0.98	0.86 – 1.11
Ed.	Low	1	Time-lag	1.20	1.08 – 1.34**	1.05	0.89 – 1.24
	Mid			1.01	0.91 – 1.12	0.90	0.78 – 1.05
Health problem							
Musculoskeletal		1	Time-lag	1.59	1.47 – 1.73**	1.44	1.27 – 1.63**
		2	Autoregressive	1.49	1.37 – 1.61**	1.43	1.26 – 1.61**
		3	Incidence	1.53	1.43 – 1.75**	1.64	1.35 – 1.98**
			Recovery	0.77	0.66 – 0.89**	1.17	0.96 – 1.44
Severe headaches or migraines		1	Time-lag	1.29	1.13 – 1.48**	1.17	0.96 – 1.43
		2	Autoregressive	1.21	1.06 – 1.38**	1.17	0.97 – 1.43
		3	Incidence	1.55	1.22 – 1.97**	1.15	0.82 – 1.62
			Recovery	1.08	0.82 – 1.43	1.32	0.90 – 1.94

Circulatory	1	Time-lag	1.38	1.22 – 1.57**	1.18	0.97 – 1.44
	2	Autoregressive	1.26	1.12 – 1.43**	1.15	0.95 – 1.39
	3	Incidence	1.53	1.23 – 1.90**	1.72	1.30 – 2.28**
		Recovery	0.82	0.63 – 1.07	1.27	0.85 – 1.89
Respiratory	1	Time-lag	1.35	1.17 – 1.56**	1.47	1.20 – 1.81**
	2	Autoregressive	1.25	1.09 – 1.44**	1.41	1.16 – 1.72**
	3	Incidence	1.54	1.16 – 2.04**	1.44	0.98 – 2.11
		Recovery	0.89	0.64 – 1.22	1.08	0.70 – 1.68
Digestive	1	Time-lag	1.44	1.23 – 1.68**	1.44	1.16 – 1.79**
	2	Autoregressive	1.38	1.19 – 1.61**	1.40	1.13 – 1.73**
	3	Incidence	1.81	1.44 – 2.27**	1.49	1.12 – 2.00**
		Recovery	0.94	0.69 – 1.28	1.09	0.71 – 1.67
Diabetes mellitus	1	Time-lag	1.16	0.99 – 1.36	1.03	0.81 – 1.31
	2	Autoregressive	1.14	0.98 – 1.32	1.04	0.83 – 1.30**
	3	Incidence	0.93	0.63 – 1.40	1.29	0.77 – 2.15
		Recovery	0.81	0.47 – 1.42	0.64	0.21 – 1.91
Psychological	1	Time-lag	2.70	2.25 – 3.24**	2.10	1.64 – 2.68**
	2	Autoregressive	2.23	1.85 – 2.68**	1.90	1.51 – 2.40**
	3	Incidence	4.30	3.21 – 5.75**	3.79	2.82 – 5.08**
		Recovery	0.49	0.35 – 0.70**	0.96	0.60 – 1.55
Work-related factors						
Physical load	1	Time-lag	1.14	1.09 – 1.20**	0.98	0.91 – 1.06
Job demands	1	Time-lag	0.98	0.93 – 1.03	0.90	0.83 – 0.97**

Autonomy	1	Time-lag	0.79	0.75 – 0.84**	0.99	0.91 – 1.08
Support	1	Time-lag	0.84	0.80 – 0.88**	0.87	0.81 – 0.94**

Note: Multivariate analyses including: health problems, wave, age, gender, education, and work-related factors (i.e. physical load, psychological job demands, autonomy, support). Sample includes respondents at T1, T2, and T3 (n=7,322), respondents at T1 and T2 (n=1,089) and excludes persons with missing information on work-related factors (n=10). Correlation structures: Model 1=exchangeable, Models 2 & 3= independent.

** $p < 0.01$; * $p < 0.05$.