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Does age modify the association between psychosocial factors at work and deterioration of self-rated health? ¹

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1 Supplementary tables

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Supplementary table A1. Poor self-rated health (SRH) at follow-up 2005 or 2010: 7717 observations from 6093 Danish employees^a 2000 or 2005 by combinations of psychosocial job factors and age group. Bold numbers denote significant risk ratios (RR). Baseline data: 2000, 2005 and follow-up data: 2005, 2010. Log binomial regressions controlled for repeated measurements. [95% CI=95% confidence interval, RERI=relative excess risk due to interaction.]

		High work pace and age					Low influence and age					Low possibility for development and age								
		N	Prevalence of poor SRH at follow-up (observed %)	RR ^b	95% CI	RERI ^c	95% CI	N	Prevalence of poor SRH at follow-up (observed %)	RR ^b	95% CI	RERI ^c	95% CI	N	Prevalence of poor SRH at follow-up (observed %)	RR ^b	95% CI	RERI ^c	95% CI	
Men	Not exposed, 18-32 years	511	14	1				350	16	1				405	17	1				
	Exposed, 18-32 years	309	20	1.29	.97 - 1.71			470	17	1.04	.78 - 1.39			415	16	.95	.72 - 1.25			
	Not exposed, 33-43 years	725	21	1.28	1.01 - 1.62			688	20	1.19	.91 - 1.54			612	19	1.08	.84 - 1.39			
	Exposed, 33-43 years	508	27	1.51	1.19 - 1.81	-.06	-.48 - .35	545	28	1.34	1.04 - 1.72	.11	-.25 - .47	621	28	1.28	1.02 - 1.62	.26	-.06 - .59	
	Not exposed, 44+ years	1047	26	1.57	1.27 - 1.94			949	23	1.38	1.08 - 1.75			839	23	1.30	1.03 - 1.62			
	Exposed, 44+years	687	30	1.59	1.28 - 1.98	-.26	-.68 - .15	785	33	1.51	1.19 - 1.92	.09	-.24 - .42	895	33	1.43	1.15 - 1.78	.19	-.11 - .49	
Women	Not exposed, 18-32 years	526	17	1				337	15	1				451	16	1				
	Exposed, 18-32 years	432	20	1.06	.83 - 1.37			621	20	1.21	.91 - 1.60			507	21	1.11	.86 - 1.45			
	Not exposed, 33-43 years	849	21	1.18	.96 - 1.46			664	19	1.21	.90 - 1.62			748	16	1.01	.78 - 1.31			
	Exposed, 33-43 years	628	22	1.19	.95 - 1.48	-.06	-.40 - .28	813	24	1.38	1.06 - 1.81	-.03	.42 - .36	729	28	1.37	1.08 - 1.73	.24	-.08 - .56	
	Not exposed, 44+ years	792	25	1.32	1.08 - 1.62			717	24	1.44	1.10 - 1.88			720	24	1.42	1.13 - 1.80			
	Exposed, 44+years	703	29	1.41	1.15 - 1.72	.02	-.29 - .33	778	30	1.57	1.21 - 2.04	-.07	-.45 - .30	775	29	1.43	1.13 - 1.79	-.11	-.46 - .24	

a Men aged 18–59 years; women aged 18–54 years. Regarding the gender-specific upper-age cut points, see population subsection in the Methods section.

b Adjusted for baseline SRH (dichotomous), social class (linear) and mode of data collection at baseline and follow-up.

c RERI=[RR (poor psychosocial working conditions & higher age)–1] – [RR (poor psychosocial working conditions & lower age)–1] – [RR (good psychosocial working conditions & higher age)–1].

Supplementary table A2. Poor self-rated health (SRH) at follow-up 2005 or 2010: 7717 observations from 6093 Danish employees^a 2000 or 2005 by combinations of psychosocial relational factors and age group. Bold numbers denote significant risk ratios (RR). Baseline data: 2000, 2005 and follow-up data: 2005, 2010. Log binomial regressions controlled for repeated measurements. [95% CI=95% confidence interval, RERI=relative excess risk due to interaction.]

		Low social support from supervisor					Low social support from colleagues						
Gender		N	Prevalence of poor SRH at follow-up (observed %)	RR ^b	95% CI	RERI ^c	95% CI	N	Prevalence of poor SRH at follow-up (observed %)	RR ^b	95% CI	RERI ^c	95% CI
Men	Not exposed, 18-32 years	476	15	1				592	15	1			
	Exposed, 18-32 years	344	19	1.13	.85 - 1.51			228	19	1.11	.81 - 1.52		
	Not exposed, 33-43 years	668	20	1.22	.95 - 1.55			776	22	1.24	1.00 - 1.54		
	Exposed, 33-43 years	565	27	1.41	1.11 - 1.78	.06	-.33 - .44	457	26	1.33	1.07 - 1.66	-.02	-.43 - .39
	Not exposed, 44+ years	896	24	1.43	1.15 - 1.78			1057	27	1.48	1.22 - 1.79		
	Exposed, 44+years	838	32	1.58	1.27 - 1.96	.01	-.34 - .37	677	29	1.44	1.17 - 1.77	-.14	-.54 - .25
Women	Not exposed, 18-32 years	589	17	1				736	17	1			
	Exposed, 18-32 years	369	21	1.14	.88 - 1.46			222	25	1.25	.95 - 1.63		
	Not exposed, 33-43 years	862	19	1.14	.93 - 1.41			1076	19	1.16	.96 - 1.40		
	Exposed, 33-43 years	615	25	1.29	1.05 - 1.60	.01	-.32 - .35	401	28	1.37	1.12 - 1.68	-.03	-.42 - .36
	Not exposed, 44+ years	845	25	1.38	1.13 - 1.68			1013	23	1.35	1.13 - 1.61		
	Exposed, 44+years	650	30	1.42	1.16 - 1.74	-.09	-.43 - .25	482	34	1.51	1.25 - 1.83	-.08	-.99 - .83

a Men aged 18–59 years; women aged 18–54 years. Regarding the gender-specific upper-age cut points, see population subsection in the Methods section.

b Adjusted for baseline SRH (dichotomous), social class (linear) and mode of data collection at baseline and follow-up.

c RERI=[RR (poor psychosocial working conditions & higher age)–1] – [RR (poor psychosocial working conditions & lower age)–1] – [RR (good psychosocial working conditions & higher age)–1].

Supplementary table B1. Five-year deterioration of SRH ^a.6453 observations from 5182 Danish employees ^b without poor health ^c at the baselines 2000-2005 by psychosocial job factor, age and interaction of psychosocial job factor with age. Betas

		Work pace			Influence			Possibilities for development		
		P	Beta ^d	95% CI	P	Beta ^d	95% CI	P	Beta ^d	95% CI
Men	Age	.015	.04	.01 - .08	.006	.05	.01 - .08	.017	.04	.01 - .08
	Psychosocial job factor	.042	.04	.00 - .07	.002	-.06	-.10 - -.02	.005	- .05	-.10 - -.02
	Interaction of age and psychosocial job factor	.694	.01	-.03 - .04	.730	-.01	-.04 -.03	.747	- .01	-.04 - .03
Women	Age	.021	.04	.01 - .07	.012	.04	.01 - .07	.019	.04	.01 - .07
	Psychosocial job factor	.027	.04	.00 - .07	.008	-.05	-.08 - -.01	.023	- .04	-.08 - -.01
	Interaction of age and psychosocial job factor	.790	.00	-.03 - .04	.153	-.02	-.06 -.01	.164	- .02	-.06 - .01

Bold numbers denote significant Betas.

In this linear regression, age (continuously) and the psychosocial working environment scales (see description of the scales in the variables subsection of the method section) were treated as linear variables. They were centered to the mean and transformed so that their standard deviations were equal to 1. These transformations were required in order to assess interaction.

a Highest value denote 'poor health', lowest value denote 'good health'.

b Men aged 18-59 years, women aged 18-54 years. Regarding the gender specific upper age cut points, see population subsection in the Methods section.

c I.e. employees without baseline poor SRH, i.e. poor comprising the categories 'fairly good', 'poor' and 'very poor'.

d Beta for SRH at follow-up. Adjusted for baseline SRH ('very good' or 'good'), job control (influence and possibilities for development) and social class.

Supplementary table B2. Five-year deterioration of SRH ^a.6453 observations from 5182 Danish employees ^b without poor health ^c at the baselines 2000-2005 by psychosocial relational factor, age and interaction of psychosocial relational factor with age. Betas

		Social support from supervisor			Social support from colleagues		
		P	Beta ^d	95% CI	P	Beta ^d	95% CI
Men	Age	.018	.04	.01 - .08	.018	.04	.01 - .08
	Psychosocial relational factor	.055	-.03	-.07 - .00	.654	-.01	-.04 - .03
	Interaction of age and psychosocial relational factor	.310	-.02	-.05 - .02	.908	.00	-.03 - .04
Women	Age	.019	.04	.01 - .07	.022	.04	.01 - .07
	Psychosocial relational factor	.133	-.03	-.06 - .01	.304	-.02	-.05 - .02
	Interaction of age and psychosocial relational factor	.938	.00	-.03 - .03	.597	-.01	-.04 - .02

Bold numbers denote significant Betas.

In this linear regression, age (continuously) and the psychosocial working environment scales (see description of the scales in the variables subsection of the method section) were treated as linear variables. They were centered to the mean and transformed so that their standard deviations were equal to 1. These transformations were required in order to assess interaction.

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Supplementary table C1. Five-year deterioration of SRH ^a. 7717 observations from 6093 Danish employees ^b by psychosocial job factor, age and interaction of psychosocial job factor with age at the baselines 2000 and 2005. Betas

		Work pace			Influence			Possibilities for development		
		P	Beta ^d	95% CI	P	Beta ^d	95% CI	P	Beta ^d	95% CI
Men	Age	.001	.05	.02 - .08	.000	.05	.03 - .08	.001	.04	.01 - .08
	Psychosocial job factor	.024	.03	.00 - .06	.001	-.05	-.08 - -.02	.004	-.05	-.10 - -.02
	Interaction of age and psychosocial job factor	.588	.01	-.02 - .04	.959	.00	-.03 - .03	.686	-.01	-.04 - .03
Women	Age	.000	.05	.03 - .08	.000	.06	.03 - .09	.000	.06	.03 - .08
	Psychosocial job factor	.037	.03	.00 - .06	.009	-.04	-.07 - -.01	.037	-.03	-.06 - -.00
	Interaction of age and psychosocial job factor	.283	.02	-.01 - .04	.154	-.02	-.05 - .01	.636	-.01	-.03 - .02

Bold numbers denote significant Betas.

In this linear regression, age (continuously) and the psychosocial working environment scales (see description of the scales in the variables subsection of the method section) were treated as linear variables. They were centered to the mean and transformed so that their standard deviations were equal to 1. These transformations were required in order to assess interaction.

a Highest value denote 'poor health', lowest value denote 'good health'.

b Men aged 18-59 years, women aged 18-54 years. Regarding the gender specific upper age cut points, see population subsection in the Methods section.

c I.e. employees without baseline poor SRH, i.e. poor comprising the categories 'fairly good', 'poor' and 'very poor'.

d Beta for SRH at follow-up. Adjusted for baseline SRH ('very good' or 'good'), job control (influence and possibilities for development) and social class.

Supplementary table C2. Five-year deterioration of SRH ^a. 7717 observations from 6093 Danish employees ^b by psychosocial relational factor, age and interaction of psychosocial relational factor with age at the baselines 2000 and 2005. Betas

		Social support from supervisor			Social support from colleagues		
		P	Beta ^d	95% CI	P	Beta ^d	95% CI
Men	Age	.000	.05	.02 - .08	.001	.05	.02 - .08
	Psychosocial relational factor	.329	-.01	-.04 - .02	.828	-.02	-.03 - .03
	Interaction of age and psychosocial relational factor	.371	-.01	-.04 - .02	.770	-.02	-.03 - .03
Women	Age	.000	.06	.03 - .08	.000	.05	.03 - .08
	Psychosocial relational factor	.123	-.02	-.05 - .01	.188	-.02	-.05 - .01
	Interaction of age and psychosocial relational factor	.718	-.01	-.03 - .02	.101	-.01	-.05 - .01

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