

## Supplementary Material

### **Associations between work-related factors and sickness presenteeism: a prospective study using the national French Working Conditions survey**

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Supplementary References

Supplementary Appendix

Supplementary Tables S1-S6

## Supplementary References

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Supplementary Appendix. List of domains and factors with corresponding number of items and Cronbach's alpha

Domains (number of factors)	Factors (number of items)	Example of items	Cronbach's alpha
<b>PSYCHOSOCIAL WORK FACTORS</b>			
<b>Demands at work (4 factors)</b>	Quantitative demands (7 items)	Work under pressure	0.72
	Cognitive demands (3 items)	Too many things	0.49
	Emotional demands (1 item)	Emotionally demanding work	-
	Demands for hiding emotions (2 items)	Hiding emotions	0.63
<b>Work organization and job content (4 factors)</b>	Influence (5 items)	Degree of influence	0.47
	Degree of freedom (3 items)	Degree of freedom	0.54
	Possibilities for development (3 items)	Possibility of learning	0.55
	Meaning of work (3 items)	Meaningful work	0.61
<b>Interpersonal relations (5 factors)</b>	Predictability (2 items)	Well informed	0.32
	Role clarity (1 item)	Work with clear objectives	-
	Role conflict (3 items)	Contradictory demands	0.57
	Social support (7 items)	Help and support from others	0.60
	Sense of community (3 items)	Good atmosphere/community	0.47
<b>Work-individual interface (5 factors)</b>	Job satisfaction (3 items)	Satisfaction with work prospects	0.64
	Work-family conflict (1 item)	Conflict between work and family	-
	Job insecurity (1 item)	Job insecurity	-
	Changes at work (2 items)	Unpredictable changes	0.58
	Temporary employment (1 item)	Temporary work contract	-
<b>Workplace violence (2 factors)</b>	Internal violence (6 items)	Workplace bullying	0.61
	External violence (4 items)	Tensions with the public	0.59
<b>WORKING TIME/HOURS FACTORS (4 factors)</b>			
<b>PHYSICAL WORK FACTORS (4 factors)</b>	Long working hours (>48h/week) (1 item)	48h/week or more	-
	Shift work (1 item)	Shift work	-
	Weekend work (>40/year) (1 item)	Work on weekend	-
	Night work (>50/year) (1 item)	Night work	-
<b>PHYSICAL WORK FACTORS (4 factors)</b>	Biomechanical exposure (6 items)	Manual materials handling	0.77
	Fumes/dust (1 item)	Fumes/dust	-
	Toxic/dangerous products (1 item)	Toxic/dangerous products	-
	Noise (1 item)	Noise	-

Each factor, assessed using more than one item, was constructed by summing all the items of the factor (beforehand each item was coded on a scale from 0 to 1, with 0 indicating no exposure and 1 exposure). Thus, each factor had a score ranging from 0 to a maximum value that corresponded to the number of items, and was then dichotomized at the median of the distribution in the total sample to classify workers into low (< median) or high ( $\geq$  median) exposure groups.

Supplementary Table S1. Description of the study sample according to covariates in 2013

	Men (N=6,815) n (w%)	Women (N=9,314) n (w%)	P-value
<b>Age (years)</b>			0.019
<30	789 (19.3%)	956 (17.7%)	
[30-40[	1,831 (28.8%)	2,364 (26.4%)	
[40-50[	2,414 (31.2%)	3,361 (32.7%)	
>=50	1,781 (20.6%)	2,633 (23.2%)	
<b>Marital status</b>			0.050
Living with a partner	5,436 (76.9%)	7,059 (74.6%)	
Alone	1,379 (23.1%)	2,255 (25.4%)	
<b>Occupation (4 groups)</b>			<0.001
Managers, professionals	1,579 (23.9%)	1,302 (15.7%)	
Associate professionals, technicians	1,943 (25.7%)	3,147 (29.3%)	
Clerks, service workers	1,102 (13.7%)	4,249 (46.7%)	
Blue-collar workers	2,186 (36.7%)	611 (8.3%)	
<b>Economic activity (4 groups)</b>			<0.001
Services	4,692 (64.7%)	8,520 (89.0%)	
Others	2,090 (35.3%)	764 (11.0%)	

n (w%): unweighted number (weighted %)

P-value for the comparison between genders (Rao-Scott Chi-2 test)

Supplementary Table S2. Prevalence of exposure to work-related factors among the study sample in 2013

	Men (N=6,815) n (w%)	Women (N=9,314) n (w%)	P-value
<b>PSYCHOSOCIAL WORK FACTORS</b>			
<b>Demands at work</b>			
High quantitative demands	3,370 (49.4%)	4,980 (51.1%)	0.221
High cognitive demands	3,554 (52.8%)	4,787 (49.4%)	0.011
High emotional demands	2,984 (38.3%)	5,898 (55.1%)	<0.001
High demands for hiding emotions	3,546 (49.8%)	6,000 (61.1%)	<0.001
<b>Work organization and job content</b>			
Low influence	3,181 (48.3%)	5,077 (53.6%)	<0.001
Low degree of freedom	3,256 (48.6%)	5,568 (55.9%)	<0.001
Low possibilities for development	3,849 (57.4%)	4,984 (56.6%)	0.559
Low meaning of work	3,574 (53.5%)	4,447 (49.6%)	0.004
<b>Interpersonal relations</b>			
Low predictability	4,274 (65.9%)	4,284 (47.4%)	<0.001
Low role clarity	1,406 (20.4%)	1,936 (19.8%)	0.573
High role conflict	3,725 (55.2%)	4,762 (48.7%)	<0.001
Low social support	3,842 (53.0%)	4,838 (48.1%)	<0.001
Low sense of community	3,474 (50.8%)	4,757 (51.3%)	0.711
<b>Work-individual interface</b>			
Low job satisfaction	3,599 (51.1%)	5,335 (54.7%)	0.007
Work-family conflict	4,506 (65.9%)	5,940 (62.5%)	0.006
Job insecurity	1,400 (23.6%)	1,890 (24.6%)	0.432
High changes at work	3,620 (52.4%)	4,963 (49.6%)	0.035
Temporary employment	508 (10.0%)	833 (11.7%)	0.048
<b>Workplace violence</b>			
High internal violence	3,495 (49.8%)	4,759 (48.4%)	0.286
High external violence	2,620 (34.8%)	4,361 (42.8%)	<0.001
<b>WORKING TIME/HOURS FACTORS</b>			
Long working hours (>48h/week)	735 (11.5%)	457 (5.6%)	<0.001
Shift work	636 (9.6%)	773 (6.7%)	<0.001
Weekend work	950 (15.2%)	1,831 (19.4%)	<0.001
Night work	566 (8.3%)	493 (4.0%)	<0.001
<b>PHYSICAL WORK FACTORS</b>			
Biomechanical exposure	3,938 (58.8%)	4,859 (48.4%)	<0.001
Fumes/dust	2,738 (44.0%)	1,531 (17.1%)	<0.001
Toxic/dangerous products	2,723 (40.2%)	2,275 (19.3%)	<0.001
Noise	1,413 (23.5%)	1,089 (12.2%)	<0.001

n (w%): unweighted number (weighted %)

P-value for the comparison between genders (Rao-Scott Chi-2 test)

Employees were classified into no/low or high exposure groups using the initial coding for the factors based on one item (emotional demands, role clarity, work-family conflict, job insecurity, temporary employment, and all working time/hours factors and physical work factors, except biomechanical exposure) and using the median of the distribution as cut-off for the factors based on more than one item

All psychosocial work factors had less than 1% missing values except job insecurity (3.9%)

Supplementary Table S3. Prevalence of multiple exposure to work-related factors among the study sample in 2013

	Men (N=6,815) n (w%)	Women (N=9,314) n (w%)	P-value
<b>NUMBER OF EXPOSURES FOR EACH DOMAIN OF PSYCHOSOCIAL WORK FACTORS OR QUINTILES OF THE TOTAL NUMBER OF EXPOSURES</b>			
<b>Demands at work (number of exposures)</b>			<0.001
0	1,029 (16.6%)	947 (12.9%)	
1	1,477 (22.5%)	1,642 (20.3%)	
2	1,755 (25.9%)	2,134 (23.6%)	
3	1,559 (23.7%)	2,345 (23.4%)	
4	927 (11.3%)	2,148 (19.8%)	
<b>Work organization and job content (number of exposures)</b>			<0.001
0	856 (12.8%)	707 (8.4%)	
1	1,464 (20.0%)	1,978 (21.5%)	
2	1,947 (28.1%)	2,924 (29.6%)	
3	1,637 (24.9%)	2,457 (26.9%)	
4	887 (14.2%)	1,203 (13.6%)	
<b>Interpersonal relations (number of exposures)</b>			<0.001
0	482 (7.5%)	976 (10.9%)	
1	1,298 (20.2%)	2,107 (25.4%)	
2	1,720 (24.0%)	2,297 (25.2%)	
3	1,647 (23.9%)	2,011 (19.7%)	
4 or 5	1,605 (24.3%)	1,790 (18.8%)	
<b>Work-individual interface (number of exposures)</b>			0.681
0	660 (10.5%)	845 (11.1%)	
1	1,550 (23.8%)	2,065 (23.6%)	
2	2,019 (30.5%)	2,653 (28.8%)	
3	1,595 (24.5%)	2,438 (25.4%)	
4 or 5	641 (10.7%)	851 (11.2%)	
<b>Workplace violence (number of exposures)</b>			<0.001
0	2,413 (38.0%)	2,961 (35.7%)	
1	2,676 (39.5%)	3,543 (37.4%)	
2	1,719 (22.6%)	2,787 (26.9%)	
<b>All psychosocial work factors (quintiles of the total number of exposures)</b>			0.674
Q1	1,640 (27.5%)	1,996 (26.2%)	
Q2	1,060 (16.4%)	1,355 (16.4%)	
Q3	1,705 (25.1%)	2,228 (24.7%)	
Q4	882 (13.8%)	1,393 (14.2%)	
Q5	1,073 (17.3%)	1,717 (18.6%)	
<b>NUMBER OF EXPOSURES TO WORKING TIME/HOURS FACTORS</b>			
0	4,480 (67.3%)	6,418 (71.8%)	
1	1,520 (23.5%)	1,930 (22.3%)	
2	438 (6.9%)	610 (5.3%)	
3 or 4	120 (2.2%)	82 (0.6%)	
<b>NUMBER OF EXPOSURES TO PHYSICAL WORK FACTORS</b>			
0	2,074 (29.5%)	3,701 (43.0%)	
1	1,346 (18.8%)	2,658 (29.4%)	
2	1,327 (19.0%)	1,918 (17.4%)	
3	1,384 (21.1%)	828 (8.2%)	
4	648 (11.6%)	186 (2.1%)	

n (w%): unweighted number (weighted %)

P-value for the comparison between genders (Rao-Scott Chi-2 test)

Supplementary Table S4. Interactions between work-related factors and gender in the prospective associations with sickness presenteeism

		<b>P-value for gender-related interactions</b>	
		At least one day of sickness presenteeism (Logistic model)	Number of days of sickness presenteeism among those with at least one day (Negative binomial model)
<b>PSYCHOSOCIAL WORK FACTORS</b>			
<b>Demands at work</b>	Quantitative demands	<b>0.008</b>	0.675
	Cognitive demands	<b>0.009</b>	0.245
	Emotional demands	0.956	0.287
	Demands for hiding emotions	0.235	0.083
<b>Work organization and job content</b>	Low influence	0.206	0.368
	Low degree of freedom	0.740	0.918
	Low possibilities for development	0.322	0.224
	Low meaning of work	0.941	0.082
<b>Interpersonal relations</b>	Low predictability	0.594	<b>0.037</b>
	Low role clarity	0.345	<b>0.042</b>
	Role conflict	0.582	<b>0.029</b>
	Low social support	0.571	0.473
	Low sense of community	0.796	0.560
<b>Work-individual interface</b>	Low job satisfaction	0.092	<b>0.041</b>
	Work-family conflict	0.356	0.315
	Job insecurity	0.060	0.528
	High changes at work	0.751	0.134
	Temporary employment	<b>0.023</b>	<b>0.009</b>
<b>Workplace violence</b>	Internal violence	0.764	<b>0.028</b>
	External violence	0.509	0.180
<b>WORKING TIME/HOURS FACTORS</b>	Long working hours (>48h/week)	<b>0.006</b>	0.631
	Shift work	0.077	0.115
	Weekend work	0.561	0.641
	Night work	0.638	0.690
<b>PHYSICAL WORK FACTORS</b>	Biomechanical exposure	<b>&lt;0.001</b>	0.644
	Fumes/dust	0.173	0.143
	Toxic/dangerous products	<b>0.026</b>	0.300
	Noise	0.139	<b>0.041</b>

Adjusted for age, marital status, occupation, and economic activity

Supplementary Table S5. Prospective associations between work-related factors in 2013 and sickness presenteeism and sickness absence in 2016: results from weighted multinomial logistic regression (each factor studied separately) adjusted for covariates

	Men RRR (95% CI)	RRR (95% CI)	RRR (95% CI)	Women RRR (95% CI)	RRR (95% CI)	RRR (95% CI)
	Sickness presenteeism alone	Sickness absence alone	Both sickness presenteeism and absence	Sickness presenteeism alone	Sickness absence alone	Both sickness presenteeism and absence
<b>PSYCHOSOCIAL WORK FACTORS</b>						
<b>Demands at work</b>						
High quantitative demands	<b>1.98 (1.60, 2.44)***</b>	1.02 (0.79, 1.32)	<b>1.74 (1.39, 2.17)***</b>	<b>2.16 (1.79, 2.60)***</b>	1.18 (0.93, 1.50)	<b>2.74 (2.24, 3.34)***</b>
High cognitive demands	<b>1.81 (1.47, 2.23)***</b>	0.97 (0.76, 1.23)	<b>1.45 (1.17, 1.80)**</b>	<b>2.04 (1.69, 2.45)***</b>	1.10 (0.87, 1.39)	<b>2.25 (1.85, 2.75)***</b>
High emotional demands	<b>1.49 (1.21, 1.85)***</b>	0.91 (0.71, 1.17)	<b>1.63 (1.30, 2.03)***</b>	<b>1.44 (1.19, 1.73)***</b>	1.20 (0.94, 1.52)	<b>1.78 (1.46, 2.18)***</b>
High demands for hiding emotions	<b>1.69 (1.37, 2.09)***</b>	0.98 (0.77, 1.25)	<b>2.01 (1.61, 2.50)***</b>	<b>1.94 (1.59, 2.36)***</b>	1.18 (0.94, 1.48)	<b>2.24 (1.81, 2.76)***</b>
<b>Work organization and job content</b>						
Low influence	1.10 (0.89, 1.36)	1.12 (0.89, 1.42)	1.21 (0.98, 1.50)	0.96 (0.80, 1.15)	<b>1.38 (1.09, 1.74)**</b>	<b>1.44 (1.19, 1.75)***</b>
Low degree of freedom	<b>1.58 (1.28, 1.93)***</b>	<b>1.35 (1.07, 1.70)*</b>	<b>1.65 (1.33, 2.04)***</b>	<b>1.45 (1.21, 1.75)***</b>	<b>1.28 (1.02, 1.62)*</b>	<b>1.71 (1.40, 2.08)***</b>
Low possibilities for development	<b>1.48 (1.20, 1.83)***</b>	1.05 (0.83, 1.32)	<b>1.81 (1.44, 2.28)***</b>	<b>1.48 (1.23, 1.78)***</b>	1.18 (0.94, 1.48)	<b>1.81 (1.49, 2.19)***</b>
Low meaning of work	<b>1.33 (1.09, 1.62)**</b>	1.04 (0.82, 1.30)	<b>1.38 (1.12, 1.70)**</b>	<b>1.37 (1.14, 1.64)**</b>	1.00 (0.80, 1.25)	<b>1.36 (1.13, 1.65)**</b>
<b>Interpersonal relations</b>						
Low predictability	1.09 (0.89, 1.35)	0.99 (0.78, 1.26)	1.00 (0.80, 1.25)	<b>1.24 (1.03, 1.48)*</b>	1.18 (0.94, 1.49)	1.20 (0.99, 1.46)
Low role clarity	<b>1.59 (1.25, 2.02)***</b>	1.32 (0.96, 1.80)	<b>2.05 (1.59, 2.66)***</b>	<b>1.82 (1.44, 2.28)***</b>	<b>1.53 (1.15, 2.03)**</b>	<b>2.32 (1.84, 2.93)***</b>
High role conflict	<b>1.66 (1.35, 2.04)***</b>	1.06 (0.84, 1.34)	<b>2.15 (1.73, 2.67)***</b>	<b>1.67 (1.39, 2.01)***</b>	1.25 (0.99, 1.58)	<b>2.61 (2.15, 3.18)***</b>
Low social support	<b>1.67 (1.36, 2.05)***</b>	1.01 (0.80, 1.27)	<b>1.84 (1.47, 2.30)***</b>	<b>1.59 (1.33, 1.91)***</b>	1.20 (0.96, 1.49)	<b>1.92 (1.59, 2.33)***</b>
Low sense of community	<b>1.35 (1.10, 1.66)**</b>	1.05 (0.83, 1.32)	<b>1.29 (1.04, 1.60)*</b>	<b>1.36 (1.13, 1.63)**</b>	1.13 (0.89, 1.42)	<b>1.50 (1.24, 1.81)***</b>
<b>Work-individual interface</b>						
Low job satisfaction	<b>1.65 (1.35, 2.03)***</b>	1.05 (0.84, 1.32)	<b>1.61 (1.30, 2.00)***</b>	<b>1.86 (1.55, 2.24)***</b>	<b>1.28 (1.02, 1.61)*</b>	<b>2.44 (2.00, 2.97)***</b>
Work, family conflict	<b>1.52 (1.22, 1.89)***</b>	0.96 (0.76, 1.21)	<b>1.45 (1.15, 1.83)**</b>	<b>1.60 (1.33, 1.93)***</b>	0.93 (0.74, 1.17)	<b>1.61 (1.32, 1.97)***</b>
Job insecurity	<b>1.59 (1.25, 2.03)***</b>	0.88 (0.66, 1.16)	<b>1.54 (1.21, 1.98)**</b>	1.14 (0.91, 1.43)	0.81 (0.62, 1.07)	<b>1.39 (1.10, 1.77)**</b>
High changes at work	<b>2.10 (1.72, 2.57)***</b>	1.03 (0.82, 1.30)	<b>1.89 (1.52, 2.35)***</b>	<b>1.72 (1.43, 2.07)***</b>	1.23 (0.98, 1.55)	<b>2.42 (1.99, 2.95)***</b>
Temporary employment	1.42 (0.97, 2.08)	1.09 (0.73, 1.63)	0.95 (0.63, 1.43)	<b>0.73 (0.54, 0.99)*</b>	0.67 (0.45, 1.00)	<b>0.54 (0.40, 0.73)***</b>



<b>Workplace violence</b>						
High internal violence	<b>1.76 (1.43, 2.16)***</b>	1.11 (0.88, 1.41)	<b>1.80 (1.45, 2.22)***</b>	<b>1.53 (1.28, 1.84)***</b>	<b>1.41 (1.12, 1.78)**</b>	<b>2.55 (2.09, 3.12)***</b>
High external violence	<b>2.12 (1.71, 2.63)***</b>	0.78 (0.62, 0.99)*	<b>1.78 (1.43, 2.20)***</b>	<b>1.78 (1.47, 2.14)***</b>	1.21 (0.95, 1.54)	<b>2.01 (1.65, 2.45)***</b>
<b>WORKING TIME/HOURS FACTORS</b>						
Long working hours (>48h/week)	1.13 (0.83, 1.54)	0.56 (0.35, 0.89)*	0.53 (0.36, 0.78)**	<b>1.79 (1.21, 2.64)**</b>	1.09 (0.61, 1.94)	1.05 (0.66, 1.67)
Shift work	1.27 (0.91, 1.78)	1.41 (0.95, 2.09)	<b>1.49 (1.05, 2.11)*</b>	1.06 (0.76, 1.48)	<b>1.75 (1.18, 2.59)**</b>	<b>1.55 (1.12, 2.14)**</b>
Weekend work	1.21 (0.92, 1.61)	1.16 (0.82, 1.64)	0.90 (0.68, 1.20)	<b>1.28 (1.00, 1.64)*</b>	0.96 (0.71, 1.30)	0.99 (0.77, 1.27)
Night work	1.20 (0.83, 1.75)	1.08 (0.72, 1.63)	0.98 (0.69, 1.37)	1.53 (0.94, 2.49)	1.40 (0.84, 2.36)	1.25 (0.80, 1.96)
<b>PHYSICAL WORK FACTORS</b>						
Biomechanical exposure	<b>1.87 (1.47, 2.36)***</b>	1.19 (0.93, 1.52)	<b>2.05 (1.58, 2.65)***</b>	<b>1.22 (1.00, 1.48)*</b>	0.95 (0.75, 1.19)	<b>1.54 (1.25, 1.89)***</b>
Fumes/dust	<b>1.40 (1.12, 1.75)**</b>	1.14 (0.87, 1.49)	<b>1.71 (1.33, 2.18)***</b>	<b>1.27 (1.00, 1.61)*</b>	1.05 (0.78, 1.41)	<b>1.79 (1.40, 2.30)***</b>
Toxic/dangerous products	<b>1.25 (1.01, 1.56)*</b>	1.04 (0.82, 1.31)	<b>1.64 (1.32, 2.05)***</b>	1.20 (0.98, 1.48)	1.13 (0.87, 1.46)	1.22 (0.98, 1.51)
Noise	<b>1.57 (1.22, 2.02)***</b>	1.15 (0.86, 1.53)	<b>1.51 (1.17, 1.96)**</b>	1.12 (0.83, 1.52)	1.17 (0.83, 1.64)	<b>1.97 (1.43, 2.71)***</b>

Employees were classified into no/low or high exposure groups using the initial coding for the factors based on one item (emotional demands, role clarity, work-family conflict, job insecurity, temporary employment, and all working time/hours factors and physical work factors, except biomechanical exposure) and using the median of the distribution as cut-off for the factors based on more than one item

Base outcome category was neither sickness presenteeism, nor sickness absence

CI: confidence interval, RRR: relative risk ratio

Adjusted for age, marital status, occupation, and economic activity in 2013

RRR in bold were significant at  $p < 0.05$

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Supplementary Table S6. Prospective associations between multiple exposures to work-related factors in 2013 and sickness presenteeism and sickness absence in 2016: results from weighted multinomial logistic regression adjusted for covariates

	Men RRR (95% CI)	RRR (95% CI)	RRR (95% CI)	Women RRR (95% CI)	RRR (95% CI)	RRR (95% CI)
	Sickness presenteeism alone	Sickness absence alone	Both sickness presenteeism and absence	Sickness presenteeism alone	Sickness absence alone	Both sickness presenteeism and absence
<b>NUMBER OF EXPOSURES FOR EACH DOMAIN OF PSYCHOSOCIAL WORK FACTORS OR QUINTILES OF THE TOTAL NUMBER OF EXPOSURES</b>						
<b>Demands at work (number of exposures)</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	<b>1.61 (1.13, 2.30)**</b>	0.96 (0.67, 1.37)	<b>1.78 (1.22, 2.59)**</b>	<b>1.44 (1.02, 2.03)*</b>	1.27 (0.84, 1.91)	<b>1.88 (1.21, 2.94)**</b>
2	<b>2.41 (1.69, 3.42)***</b>	0.99 (0.67, 1.46)	<b>2.09 (1.44, 3.03)***</b>	<b>1.92 (1.39, 2.67)***</b>	1.17 (0.78, 1.76)	<b>2.99 (1.92, 4.67)***</b>
3	<b>3.65 (2.53, 5.27)***</b>	0.96 (0.64, 1.45)	<b>2.88 (1.96, 4.24)***</b>	<b>2.83 (2.03, 3.94)***</b>	1.34 (0.87, 2.06)	<b>4.86 (3.13, 7.56)***</b>
4	<b>4.29 (2.86, 6.44)***</b>	0.87 (0.52, 1.47)	<b>4.79 (3.12, 7.35)***</b>	<b>4.76 (3.37, 6.72)***</b>	<b>1.63 (1.04, 2.55)*</b>	<b>7.92 (5.01, 12.52)***</b>
<b>Work organization and job content (number of exposures)</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	1.36 (0.94, 1.98)	0.82 (0.54, 1.23)	0.98 (0.64, 1.50)	1.30 (0.92, 1.85)	1.12 (0.69, 1.82)	1.31 (0.88, 1.96)
2	<b>1.59 (1.12, 2.27)*</b>	1.08 (0.73, 1.62)	1.28 (0.85, 1.93)	<b>1.55 (1.12, 2.16)**</b>	1.26 (0.80, 1.99)	<b>1.97 (1.35, 2.88)***</b>
3	<b>1.88 (1.30, 2.71)**</b>	1.19 (0.78, 1.82)	<b>1.84 (1.19, 2.83)**</b>	<b>1.91 (1.35, 2.71)***</b>	1.22 (0.76, 1.94)	<b>2.83 (1.92, 4.17)***</b>
4	<b>2.64 (1.73, 4.02)***</b>	1.23 (0.73, 2.06)	<b>2.66 (1.66, 4.26)***</b>	<b>2.31 (1.53, 3.51)***</b>	<b>2.02 (1.18, 3.47)*</b>	<b>3.77 (2.45, 5.80)***</b>
<b>Interpersonal relations (number of exposures)</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	0.98 (0.60, 1.59)	0.96 (0.57, 1.60)	1.05 (0.55, 2.02)	1.25 (0.90, 1.75)	0.87 (0.59, 1.27)	1.15 (0.78, 1.70)
2	1.22 (0.76, 1.98)	0.93 (0.55, 1.55)	1.55 (0.83, 2.90)	<b>2.05 (1.48, 2.86)***</b>	1.12 (0.77, 1.64)	<b>1.50 (1.04, 2.17)*</b>
3	1.60 (1.00, 2.55)	0.94 (0.56, 1.57)	<b>1.94 (1.03, 3.66)*</b>	<b>1.91 (1.36, 2.69)***</b>	1.09 (0.73, 1.62)	<b>2.35 (1.59, 3.46)***</b>
4 or 5	<b>2.23 (1.40, 3.57)**</b>	1.11 (0.66, 1.88)	<b>3.07 (1.62, 5.84)**</b>	<b>3.31 (2.32, 4.72)***</b>	<b>1.69 (1.13, 2.53)*</b>	<b>4.29 (2.89, 6.37)***</b>
<b>Work-individual interface (number of exposures)</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	1.31 (0.85, 2.02)	0.71 (0.48, 1.05)	1.15 (0.72, 1.84)	<b>1.70 (1.17, 2.48)**</b>	0.64 (0.43, 0.97)*	<b>1.66 (1.09, 2.52)*</b>
2	<b>2.11 (1.40, 3.18)***</b>	0.75 (0.51, 1.10)	1.41 (0.91, 2.19)	<b>2.33 (1.62, 3.36)***</b>	0.81 (0.54, 1.21)	<b>2.85 (1.89, 4.29)***</b>
3	<b>3.12 (2.04, 4.78)***</b>	0.81 (0.54, 1.22)	<b>2.41 (1.53, 3.78)***</b>	<b>3.71 (2.57, 5.36)***</b>	0.86 (0.57, 1.31)	<b>4.40 (2.95, 6.56)***</b>
4 or 5	<b>4.41 (2.77, 7.03)***</b>	0.88 (0.54, 1.41)	<b>2.90 (1.76, 4.78)***</b>	<b>2.97 (1.89, 4.66)***</b>	1.00 (0.57, 1.75)	<b>4.68 (2.85, 7.70)***</b>

<b>Workplace violence (number of exposures)</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	<b>2.23 (1.75, 2.85)***</b>	1.18 (0.90, 1.54)	<b>1.87 (1.45, 2.42)***</b>	<b>1.48 (1.20, 1.82)***</b>	<b>1.29 (1.00, 1.67)*</b>	<b>2.07 (1.63, 2.63)***</b>
2	<b>2.85 (2.18, 3.74)***</b>	0.84 (0.62, 1.14)	<b>2.50 (1.90, 3.30)***</b>	<b>2.24 (1.75, 2.87)***</b>	<b>1.54 (1.14, 2.08)**</b>	<b>3.78 (2.88, 4.96)***</b>
<b>All psychosocial work factors (quintiles of the total number of exposures)</b>						
Q1	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Q2	<b>1.52 (1.07, 2.15)*</b>	0.93 (0.66, 1.32)	1.11 (0.77, 1.61)	<b>1.37 (1.03, 1.83)*</b>	1.14 (0.80, 1.62)	<b>1.63 (1.16, 2.30)**</b>
Q3	<b>1.75 (1.29, 2.37)***</b>	0.93 (0.67, 1.27)	<b>1.95 (1.39, 2.72)***</b>	<b>2.25 (1.74, 2.90)***</b>	1.27 (0.91, 1.77)	<b>3.14 (2.35, 4.20)***</b>
Q4	<b>3.69 (2.55, 5.32)***</b>	1.08 (0.72, 1.60)	<b>3.36 (2.33, 4.86)***</b>	<b>2.97 (2.16, 4.09)***</b>	1.49 (0.97, 2.27)	<b>3.83 (2.73, 5.36)***</b>
Q5	<b>4.12 (2.94, 5.78)***</b>	1.03 (0.67, 1.60)	<b>4.03 (2.79, 5.83)***</b>	<b>4.25 (3.11, 5.80)***</b>	<b>2.07 (1.42, 3.02)***</b>	<b>7.41 (5.43, 10.11)***</b>
<b>NUMBER OF EXPOSURES TO WORKING TIME/HOURS FACTORS</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	1.25 (1.00, 1.58)	0.95 (0.72, 1.25)	1.12 (0.87, 1.44)	1.11 (0.89, 1.39)	0.89 (0.67, 1.19)	1.02 (0.81, 1.29)
2	1.41 (0.94, 2.11)	0.92 (0.58, 1.46)	0.84 (0.57, 1.24)	<b>1.82 (1.21, 2.73)**</b>	<b>1.67 (1.02, 2.73)*</b>	1.41 (0.92, 2.16)
3 or 4	0.99 (0.48, 2.02)	1.17 (0.47, 2.87)	0.60 (0.28, 1.31)	1.36 (0.68, 2.74)	<b>3.38 (1.19, 9.62)*</b>	1.37 (0.61, 3.08)
<b>NUMBER OF EXPOSURES TO PHYSICAL WORK FACTORS</b>						
0	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1	1.11 (0.83, 1.49)	0.85 (0.61, 1.17)	<b>1.55 (1.12, 2.13)**</b>	1.09 (0.87, 1.36)	<i>0.74 (0.56, 0.98)*</i>	<b>1.31 (1.03, 1.66)*</b>
2	<b>1.99 (1.44, 2.74)***</b>	0.94 (0.67, 1.33)	<b>1.71 (1.23, 2.37)**</b>	1.10 (0.84, 1.45)	1.04 (0.77, 1.41)	<b>1.52 (1.15, 2.00)**</b>
3	<b>2.03 (1.47, 2.80)***</b>	0.97 (0.67, 1.39)	<b>2.53 (1.79, 3.58)***</b>	<b>1.65 (1.20, 2.25)**</b>	1.21 (0.80, 1.83)	<b>2.83 (2.05, 3.90)***</b>
4	<b>2.26 (1.50, 3.40)***</b>	1.41 (0.89, 2.23)	<b>3.67 (2.39, 5.62)***</b>	<b>1.98 (1.03, 3.80)*</b>	1.05 (0.50, 2.20)	<b>3.49 (1.89, 6.46)***</b>

Base outcome category was neither sickness presenteeism, nor sickness absence

CI: confidence interval, RRR: relative risk ratio

Adjusted for age, marital status, occupation, and economic activity in 2013

RRR in bold were significant at  $p < 0.05$

\*  $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$