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# Factors associated with first return to work and sick leave durations in workers with common mental disorders

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Background: Associations are examined between socio-demographic, medical, work-related and organizational factors and the moment of first return to work (RTW) (within or after 6 weeks of sick leave) and total sick leave duration in sick leave spells due to common mental disorders. Methods: Data are derived from a Dutch database, build to provide reference data for sick leave duration for various medical conditions. The cases in this study were entered in 2004 and 2005 by specially trained occupational health physicians, based on the physician's assessment of medical and other factors. Odds ratios for first RTW and sick leave durations are calculated in logistic regression models. Results: Burnout, depression and anxiety disorder are associated with longer sick leave duration. Similar, but weaker associations were found for female sex, being a teacher, small company size and moderate or high psychosocial hazard. Distress is associated with shorter sick leave duration. Medical factors, psychosocial hazard and company size are also and analogously associated with first RTW. Part-time work is associated with delayed first RTW. The strength of the associations varies for various factors and for different sick leave durations. Conclusion: The medical diagnosis has a strong relation with the moment of first RTW and the duration of sick leave spells in mental disorders, but the influence of demographic and work-related factors should not be neglected.

#### Introduction

The management of sick leave is an important issue for employers and occupational health physicians (OHPs) in the Netherlands. One of the challenges OHPs face is to assess the risk for a long/prolonged duration of a sick leave spell. The duration of a sick leave spell is influenced by socio-demographic, medical, work-related and organizational factors, as well as by factors in the health-care and legislative systems. 1-3 In the Netherlands, the management of sick leave towards return to work (RTW) is embedded in the Gatekeeper Improvement Act (GIA). The employer is responsible for sickness benefit compensation in the first 2 years of sick leave. After 2 years and with continued sick leave, a disability pension can be granted. The RTW actions of the employer, employee and OHP to be taken according to GIA are described in the timetable (table 1). In the 6th week of sick leave, a problem analysis has to be made by the OHP, in which the OHP estimates as to whether a sick leave spell duration of >13 weeks is expected. In Week 52, the sick leave management (RTW process) has to be evaluated between employee and employer in view towards a RTW within the 2nd year of sick leave.

The medical diagnosis constitutes an important predictor for sick leave duration.<sup>4,5</sup> Mental disorders are associated with an increased risk of long-term sickness absence and disability pensioning,<sup>5–9</sup> and also with a high risk of recurrence of the disorder and sick leave absence.<sup>10,11</sup> The most common diagnosis in Dutch occupational health practice is adjustment disorder, accounting for about half of the sick leave due to mental disorders.<sup>12</sup> Adjustment disorders are short-lived, resolve with time<sup>13</sup> and have a good prognosis with regard to an early RTW.<sup>12</sup> Depression and anxiety disorders are known for a long duration of a

sick leave spell. <sup>14,15</sup> Besides medical factors, other factors, like socio-demographic and work-related factors, are considered to be associated with the duration of sick leave, but there are contradicting findings and little robust evidence as to which these factors prolong sick leave duration. <sup>16,17</sup> The effect of gender on sick leave duration for mental disorders is difficult to establish. <sup>6,17–19</sup> Older age seems to increase the risk for a longer duration of sick leave in mental disorders, <sup>16</sup> but as with gender the evidence is insufficient due to conflicting findings. <sup>17</sup> Part-time work has been associated with a longer sick leave duration and a higher risk for disability pension. <sup>20,21</sup>

Work-related factors, such as job demands, social support at work<sup>22–24</sup> and job satisfaction<sup>25</sup> are associated with the incidence and duration of mental disorders. Organizational factors have been shown to explain a significant proportion of the variance in sickness absence, with customer adaptation, i.e. the need to comply with customer wishes, as the most important characteristic.<sup>26</sup> But little is known about their role in prolonging sick leave duration in mental disorders. Schröer *et al.* found an increased risk for a long sick leave duration in non-profit companies, but no influence of company size.<sup>27</sup>

To date, little is known about the relationship between socio-demographic, medical, work-related and organizational factors and RTW within or after the 6th week of sick leave and different sick leave durations until full RTW in employees with common mental disorders. The influence of these factors may not be constant during a period of sick leave. The aims of this study are as follows (i) to identify whether socio-demographic, medical, work-related and organizational factors are associated with RTW within or after 6 weeks and (ii) to examine whether these factors are associated with different sick leave durations.

Table 1 Timetable and actions towards RTW of employer, employee and OHP in the Dutch social security system

Week 0-6	Week 6	Week 8	Week 13	Week 13-52	Week 52	Week 53-104	Week 104
Start sick leave spell	Problem analysis by OHP	Plan for RTW by employer and employee	Report of sick leave spell to social insurance institution	RTW process/ sick leave management	First years' evaluation of RTW process	Continuation of RTW process	Start of disability pension

#### **Methods**

#### Sampling frame

In May 2004, a group of 75 OHPs from different occupational health services in the Netherlands established the 'Laboretum project'. Purpose of the project was to build a database on RTW results for various medical conditions, i.e. information on sick leave duration was collected for use as a reference database for health-care professionals in sick leave management and RTW practice. In the present study, we used data from the Laboretum database.

In the Laboretum project, it was decided not to rely on self-report information provided by the employee, but on the assessment of factors relevant for RTW and sick leave duration by the OHP. Therefore, participating OHPs were trained to guarantee a uniform registration of socio-demographic, medical, work-related, and organizational factors and sick leave data. Data was entered at the end of a sick leave spell, when the employee received a disability pension or when the employee resigned from the job during sick leave. The OHP entered the following data according to protocolized definitions: duration of the sick leave spell, moment of first RTW, medical diagnosis, comorbidity, previous sick leave, cause of sick leave, psychosocial work characteristics, working hours, type and size of the employer and socio-demographic factors.

From the start of the Laboretum project in May 2004 until January 2006, a total of n=1352 employees on sick leave due to a mental disorder were registered. In the present study, only employees with one mental disorder diagnosed by the OHP, without comorbidity, and who did not resign during the sick leave period, were included. In all, n=312 employees with comorbidity and n=58 employees who resigned during sick leave were excluded. Among the employees with comorbidity were those five employees whose sick leave spell ended by receiving a disability pension. The final study population consisted of n=982 employees.

#### Outcome measures

Two outcome measures were defined: first (albeit partial) RTW within/ after the 6th week of sick leave and duration of sick leave until full RTW. First RTW within/after 6 weeks was chosen because of the obligation of the OHP to make a problem analysis at 6 weeks in the GIA process. Different durations of sick leave until full RTW were classified according to the GIA. Four phases were defined: '≤6 weeks', '7–13 weeks', '14–52 weeks' and '>52 weeks'.

#### **Determinants**

#### Socio-demographic factors

Information on gender and age was extracted from the Laboretum database.

#### Medical factors

Medical factors comprise the diagnosis and history of sick leave. Medical diagnoses were made by the OHP at the first visit, but could be adjusted during this process. Diagnoses were classified with a modified ICD 10 classification, as used in Dutch occupational health practice, into (ICD10-codings between brackets) distress (R45), depressive disorder (F32), anxiety disorder (F40-42), stress disorder (F43.0-43.1), somatoform disorder (F54), adjustment disorder (43.2) and burnout. Burnout (Z56), although not regarded as a diagnosis in ICD10, was added because it is, together with distress and adjustment disorder, specifically addressed in Dutch OHP guidelines for the management of mental disorders in employees. History of sick leave concerns a previous sick leave spell for a mental disorder during the past year; response categories are as follows: no; yes, in past 28 days; yes, in the past year.

Whether sick leave was work related or not was registered by the OHP, by indicating the most important reason, based on the patients' history. The OHP's registration of work-related factors was transcribed by the

authors into categories based on the Job Demand Control model.<sup>29,30</sup> The following categories were used: (i) job strain, (ii) lack of co-worker support, (iii) lack of supervisor support, (iv) job insecurity and (v) no work-related factors.

#### Work-related and organizational characteristics

For all cases, OHPs classified psychosocial hazard based on workload, emotional demands, decision authority and skill discretion in the job, as judged by the OHP. OHPs were instructed to classify psychosocial hazard as low when workload and emotional demands were low, and decision authority and skill discretion were sufficient. Psychosocial hazard was classified as moderate in case of reasonable workload, emotional demands, decision authority and skill discretion, and classified as high when workload and emotional demands were high, and with little decision authority and skill discretion. Information on the number of working hours (mean) before the sick leave spell, the type of work (education, health care, civil service, profit sector) and size of the company (micro <10 employees; small =10–49 employees; medium = 50–199 employees; large =>200 employees) was also obtained from the database.

#### Statistical analysis

To identify factors (socio-demographic, medical, work related and organizational) associated with first RTW (within or after 6 weeks of sick leave) and to examine the relationship with different sick leave durations, univariate and multiple logistic regression analyses were conducted. The categories for sick leave durations are based on the GIA. Those factors with a statistical significance of  $P \le 0.25^{31}$  in the univariate model were included in the multiple logistic regression models for RTW (within or after 6 weeks) and the different sick leave durations. Odds ratios (OR) and 95% confidence intervals (CIs) were calculated for all variables. The OR for age and hours at work/week are presented per standard deviation increase. Nagelkerkes pseudo  $R^2$  was calculated as a measure for explained variance.

#### Results

#### Characteristics of the study population

The study population consisted of n = 982 Dutch employees, sick listed with a mental disorder, who returned to work between May 2004 and January 2006, and who were under the care of an OHP during their sick leave spell. Employees were on average 42.2 years old at the start of sick leave and 45.5% were male. A total of 60.8% had a first RTW before 6 weeks. Overall, 28.2% had a total sick leave duration of  $\leq$ 6 weeks, 24.1% were sick listed for 7–13 weeks, 43.2% for 14–52 weeks and 4.5% for >52 weeks. A full description of the population is given in table 2.

#### Factors associated with first RTW within or after 6 weeks

As shown in table 3, burnout, depression and anxiety disorder are associated with first RTW after 6 weeks, while distress is associated with first RTW within 6 weeks. Working fewer hours per week before the sick leave spell, working in micro-sized companies and moderate psychosocial hazard were associated with a first RTW after 6 weeks. The explained variance for the full model is 0.19, for the model with diagnoses only 0.11.

## Factors associated with sick leave durations according to the GIA

In the first comparison of a sick leave duration of  $\leq 6$  weeks with a sick leave duration of 7–13 weeks, distress is associated with shorter duration of sick leave compared with the reference group of adjustment disorder. Moreover, a lack of supervisor support as reason for sick leave is associated with a shorter duration of a sick leave spell. Working in education and being female are associated with a longer sick leave duration. In comparison of the duration of 7–13 weeks with 14–52

Table 2 Characteristics of the study population (n = 982) by time to first RTW (6 weeks) and total sick leave duration in weeks

Variable	n	First RTW in weeks		Total sick lea	Total sick leave duration in weeks				
		<u>≤</u> 6 (%)	>6 (%)	<u>≤</u> 6 (%)	7–13 (%)	14–52 (%)	>52 (%)		
Mental disorder									
Distress	239	79.9	20.1	58.6	23.0	18.0	0.4		
Adjustment disorder	459	61.9	38.1	23.3	29.0	44.9	2.8		
Depressive disorder	127	37.8	62.2	7.1	11.8	70.9	10.2		
Anxiety disorder	46	47.8	52.2	10.9	23.9	54.3	10.9		
Stress-related disorder	36	58.3	41.7	16.7	30.6	50.0	2.8		
Burnout	47	34.0	66.0	4.3	6.4	66.0	23.4		
Somatoform disorder	28	53.6	46.4	28.6	32.1	39.3	0		
History of sick leave for mental diso	order								
Yes, in past 4 weeks	52	73.1	26.9	42.1	33.3	22.8	1.8		
Yes, in past year	98	68.4	31.6	34.9	27.4	34.9	2.8		
No	832	59.1	40.9	26.4	23.3	45.3	4.9		
Reason of sick leave									
Not work related	505	59.6	40.4	25.1	26.7	43.8	4.4		
Job strain	254	57.5	42.5	20.1	22.0	52.4	5.5		
Lack of co-worker support	54	53.7	46.3	40.7	16.7	42.6	0		
Lack of supervisor support	100	72.0	28.0	49.0	17.0	28.0	6.0		
Job insecurity	69	71.0	29.0	40.6	29.0	27.5	2.9		
Type of work									
Profit sector	453	65.6	34.4	33.6	24.7	38.6	3.1		
Education	141	56.0	44.0	13.5	24.1	51.8	10.6		
Civil service	179	63.7	36.3	29.6	26.8	42.5	1.1		
Health care	209	51.2	48.8	25.4	20.6	47.8	3.1		
Size of company									
Micro (<10 employees)	45	42.2	57.8	13.3	24.4	55.6	6.7		
Small (10–49 employees)	101	59.4	40.6	30.7	21.8	46.5	1.0		
Medium (50–199 employees)	184	65.2	34.8	36.4	22.8	34.2	6.5		
Large (200 and more)	652	61.0	39.0	26.5	24.8	44.3	4.3		
Hours at work/week (mean)	982	34.1	30.4	34.0	33.0	31.9	30.2		
Psychosocial hazard	302	<b>5</b>	30	5	33.0	5.1.5	30.2		
Low	123	68.3	21.7	43.1	26.8	29.3	0.8		
Moderate	675	60.1	29.9	27.7	24.7	43.6	4.0		
High	184	58.2	41.8	20.1	20.1	51.1	8.7		
Age (years) (mean)	982	40.7	41.9	40.9	40.6	41.3	44.1		
Gender	302	70.7	71.5	70.5	70.0	71.5	77.1		
Male	447	64.7	35.3	35.8	23.3	36.5	4.5		
Female	535	55.4	44.6	21.9	24.9	48.8	4.5		
Total n	982	597	385	277	24.9	40.0 424	4.5 44		

weeks, the medical diagnoses of burnout, anxiety disorder or depression are associated with longer sick leave duration. This association was also found for moderate or high psychosocial hazard. Again, distress was associated with a shorter sick leave duration, as was a history of a preceding sick leave spell within 28 days. Finally, when comparing the durations of 14–52 weeks with >52 weeks, the medical diagnoses of burnout, anxiety disorder and depression were associated with a longer sick leave duration. Moreover, high psychosocial hazard and being employed in a medium-sized company were associated with a longer sick leave duration. The explained variances for the full models vary from 0.17 to 0.27 and for the models with diagnoses only from 0.10 to 0.11. The results are shown in table 4.

#### Discussion

The aim of this study was to identify whether socio-demographic, medical, work-related and organizational factors are associated with the first RTW (within/after 6 weeks), and to study whether these factors are associated with different sick leave durations because of mental disorders. RTW (within/after 6 weeks) and sick leave duration were defined according to Dutch legislation as given in the GIA, containing regulations for sick leave management and the RTW process.

The factors examined in this study are related to the moment of first RTW and/or sick leave duration until full RTW. OHPs can assess these factors early in the sick leave spell, thus identifying patients with a bad prognosis for RTW. This is in line with the findings of Reiso *et al.*<sup>32</sup> Except for adjustment disorder, severity of the diagnosis was not registered in the Laboretum project. It is conceivable that the explained

variance for both the complete models and the models with only medical factors would have been greater if severity of diagnosis for all diagnoses was taken into account.<sup>33</sup> Moreover, it cannot be ruled out that the medical diagnosis has influence on the behaviour of the patients, their treating physicians and the OHPs. 14 The effect of the medical diagnosis, therefore, may be the result of medical impairment and expectations of patients and doctor about the course of recovery. Beside these possible effects of the medical diagnosis, work-related (and organizational) factors are associated with sick leave duration as well. The assessment of these factors is a process that takes place between employee, employer and OHP. In short sick leave spells, the associations of these factors with sick leave duration are weaker than those with the medical diagnosis, and in longer spells these associations become stronger than those with the diagnosis. It is interesting to note that a history of sick leave due to mental disorder was not associated with RTW or duration of a new sick leave spell due to mental disorder. This may seem strange, because the improvement in coping skills through therapy for the earlier spell might be expected to lead to shorter sick leave durations for the spell in the study. 12,34,35 Perhaps the explanation is to be found in the severity of the disorder, causing sick leave to relapse. A lack of supervisor support as reason for sick leave is also associated with a shorter sick leave duration. This is somewhat counterintuitive, since a problem with a supervisor could be expected to prolong the sick leave duration until full RTW. A possible explanation is the strong emphasis in the GIA on responsibility for both employer and employee to solve work-related problems. When psychosocial hazard is moderate or high as assessed by the OHP, longer sick leave durations can be expected. The assessment of moderate or high psychosocial hazard by the OHP as exposure has a stronger association

Table 3 First RTW (within or after 6 weeks)

Factor	After 6 weeks vs. within 6 weeks			
	n	OR (95% CI)		
Diagnosis of mental disorder				
Adjustment disorder (reference)	459	1.0		
Distress	239	<b>0.49</b> (0.33-0.72)		
Depressive disorder	127	<b>2.74</b> (1.78-4.19)		
Anxiety disorder	46	<b>2.01</b> (1.07–3.94)		
Stress-related disorder	36	1.24 (0.60-2.57)		
Burnout	47	3.09 (1.59-6.01)		
Somatoform disorder	28	1.63 (0.71-3.73)		
History of sick leave for mental disorder				
No (reference)	832	1.0		
Yes, in past 4 weeks	52	0.60 (0.30-1.19)		
Yes, in last year	98	0.65 (0.40-1.07)		
Reason of sick leave				
Not work related (reference)	505	1.0		
Job strain	254	0.96 (0.67-1.36)		
Lack of co-worker support	54	1.59 (0.85-2.98)		
Lack of supervisor support	100	0.71 (0.42-1.20)		
Job insecurity	69	0.69 (0.37-1.27)		
Type of work				
Profit sector (reference)	453	1.0		
Education	141	1.27 (0.80-2.01)		
Civil service	179	1.02 (0.67–1.56)		
Health care	209	1.25 (0.81–1.93)		
Size of company				
Large (>200 employees) (reference)	652	1.0		
Micro (<10 employees)	45	<b>2.96</b> (1.48-5.89)		
Small (10–49 employees)	101	1.62 (0.98–2.67)		
Medium (50–199 employees)	184	1.03 (0.70–1.50)		
Hours at work/week	982	<b>0.95</b> (0.93–0.97)		
Psychosocial hazard				
Low (reference)	123	1.0		
Moderate	675	<b>1.67</b> (1.04–2.68)		
High	184	1.69 (0.95–2.98)		
Gender		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Male (reference)	447	1.0		
Female	535	0.79 (0.55-1.13)		
Age	982	1.01 (1.00–1.03)		

OR and 95% CI. P<0.05 is given in bold values.

with sick leave duration than the assessment of job strain as a reason for the sick leave spell. As with the medical diagnosis, it cannot be ruled out that the OHP assessment of psychosocial hazard influences the decision whether a patient can return to work. In employees working in education, associations have been found with longer sick leave durations, while health-care workers and civil servants do not differ from the reference group of industrial workers. This was not expected, since these three groups are all in the non-profit sector and have to comply with customer wishes. <sup>26</sup> It is possible that for education this may be related to the solitary character of teaching. When a teacher returns to work too early, and fails before class, this may have negative implications for the teacher and for the children in the class. These aspects may be considered by the employee, employer and OHP in respect towards a full, early RTW.

#### Strength and limitations of the study

This study is based upon data gathered by OHPs, specially trained for the Laboretum project to register relevant factors for sick leave duration and RTW. Data are not obtained by self-report of the employee, all data are registered according the physician's assessment of the situation. The data are unique for the Netherlands. Since a change of legislation in 1996, registration of sick leave duration on a nationwide basis failed. The Laboretum project is a contribution to a new start for the registration of such data. However, there are some limitations in this study that should be mentioned. First of all, the fact that n=58 employees resigned during sick leave affects the outcome of sick leave duration. Since more employees resigned from small companies, the ORs for

these groups have to be interpreted with care, and also, because the small numbers in some groups of factors result in large confidence intervals

Diagnoses were made by OHPs, not by psychiatrists. This may have led to misclassification.<sup>36</sup> With respect to burnout, it should be acknowledged that it is a highly debated diagnosis. We used it in this study because it is part of the classification that Dutch OHPs use for rating the severity of adjustment disorder.

Because the diagnosis is registered retrospectively in the Laboretum project, the results have to be interpreted with caution. Although participating OHPs were carefully instructed about how to register diagnoses and other factors, it cannot be ruled out that the diagnosis is adjusted in retrospect to provide a better fit with sick leave duration. The resulting ORs may overestimate the effect. It is important to note that cases with comorbidity had to be excluded, because OHPs in the Laboretum project were instructed to register comorbidity only when sick leave duration had been prolonged as a result of comorbidity. Therefore, comorbidity was not included as a factor in our analyses. It is interesting to notice, that substance abuse was rarely diagnosed as comorbidity in only 3 of 314 excluded cases. After all, there is a high degree of comorbidity between mental disorders and substance abuse. Hence, substance abuse could be present in the studied objects and could have influenced sick leave duration. Since substance abuse is more prevalent in men than in women,<sup>37</sup> this may have decreased the gender difference we found in this study. And finally, the cross-sectional nature of this study does not allow for causal relationships between the factors studied and sick leave duration.

#### Implications for OHP practice and further research

Detecting factors associated with sick leave duration in early stages of sick leave provides guidance to early interventions, and also to preventive measures. Literature shows that workplace- and guideline-based interventions seem to be effective in case of stress-related disorders, 38-40 but less effective in case of psychiatric disorders.<sup>39,40</sup> A study by Van der Feltz-Cornelis et al. showed that early psychiatric consultation and treatment advice to the OHP leads to faster RTW.<sup>36</sup> When making plans for RTW after 8 weeks of sick leave, workplace factors should be considered in relation to the diagnosis, which preferably includes an advice of a psychiatric consultant. Because an adaptation of diagnosis to fit sick leave duration outcomes cannot be completely ruled out, more longitudinal, prospective research is needed to investigate the quality of the first diagnosis and the extent to which this first diagnosis has to be changed during the sick leave spell. Moreover, the severity of symptoms and comorbidity, including substance abuse, should be taken into account. To get a better understanding of the factors associated with different sick leave durations and the phase in the sick leave spell in which their influence is the most important, there is a need for longitudinal studies.

#### Conclusion

The medical diagnosis has a strong relation with the moment of first RTW and with the duration of sick leave spells in mental disorders, but the influence of demographic and work-related factors should not be neglected.

Conflicts of interest: None declared.

### **Key points**

- The medical diagnosis has a strong association with RTW and total sick leave duration, but especially in later phases of the sick leave spell other factors should not be neglected.
- In case of sick leave >13 weeks, OHPs should verify their initial diagnosis, preferably with assistance of a psychiatrist.
- More longitudinal research is needed for a better understanding of the RTW process in mental disorders.

Table 4 Factors associated with different sick leave durations

Factor	Duration of sick leave before full RTW in weeks							
	7–13 vs. ≤6		14–52 vs. 7–13		>52 vs. >14–52			
	n	OR (95% CI)	n	OR (95% CI)	n	OR (95% CI)		
Diagnosis of mental disorder								
Adjustment disorder (reference)	240	1.0	339	1.0	219	1.0		
Distress	195	<b>0.37</b> (0.24–0.57)	98	<b>0.54</b> (0.33–0.87)	44	0.34 (0.04-2.85)		
Depressive disorder	24	1.32 (0.53-3.27)	105	<b>4.74</b> (2.57–8.72)	103	<b>3.56</b> (1.37-9.23)		
Anxiety disorder	16	1.90 (0.60-6.05)	36	<b>2.38</b> (1.06–5.37)	30	<b>5.74</b> (1.52–21.72)		
Stress-related disorder	17	1.40 (0.48-4.07)	29	1.27 (0.57–2.86)	19	1.07 (0.12–9.79)		
Burnout	5	1.43 (0.21–9.60)	34	<b>5.70</b> (1.67–19.45)	42	<b>6.26</b> (2.21–17.65)		
Somatoform disorder	17	1.39 (0.47–4.10)	20	1.05 (0.40–2.81)	11	0.0 (0.0)		
History of sick leave for mental disorder		,		,		(, ,		
No (reference)	414	1.0	571	1.0	418	1.0		
Yes, in past 4 weeks	39	1.23 (0.59–2.57)	31	<b>0.31</b> (0.14–0.71)	13	1.26 (0.13–12.52)		
Yes, in past year	61	0.81 (0.44–1.49)	59	0.82 (0.45–1.50)	37	0.77 (0.16–3.66)		
Reason of sick leave	٠.	0.0 . (0.1.1 11.15)	33	0.02 (0.15 1.50)	<i>5.</i>	0.77 (0.1.0 5.00)		
Not work related (reference)	262	1.0	356	1.0	243	1.0		
Job strain	107	0.97 (0.59–1.59)	189	1.26 (0.83–1.94)	147	0.61 (0.26–1.45)		
Lack of co-worker support	31	0.57 (0.24–1.34)	32	1.43 (0.60–3.39)	23	0.0 (0.0)		
Lack of supervisor support	66	<b>0.34</b> (0.17–0.68)	45	1.16 (0.58–2.33)	34	1.68 (0.49–5.76)		
Job insecurity	48	0.87 (0.43–1.75)	39	0.76 (0.35–1.63)	21	0.60 (0.11–1.21)		
Type of work	10	0.07 (0.45 1.75)	33	0.70 (0.55 1.05)		0.00 (0.11 1.21)		
Profit sector (reference)	264	1.0	287	1.0	189	1.0		
Education	53	<b>2.76</b> (1.22–5.42)	107	1.43 (0.83–2.47)	88	2.42 (0.83–7.02)		
Civil service	101	1.13 (0.65–1.96)	124	1.05 (0.63–1.74)	78	0.28 (0.05–1.041)		
Health care	96	1.08 (0.59–1.99)	143	1.30 (0.76–2.23)	76 113	1.31 (0.46–3.79)		
Size of company	30	1.08 (0.39-1.99)	143	1.30 (0.70–2.23)	113	1.51 (0.40-5.73)		
Large (>200 employees) (reference)	335	1.0	451	1.0	317	1.0		
Micro (<10 employees)						2.39 (0.55–10.36		
Small (10–49 employees)	17 53	2.53 (0.81–7.94)	36 69	1.92 (0.83–4.41)	28	•		
Medium (50–49 employees)		1.07 (0.53–2.14)		1.71 (0.92–3.19)	48	0.34 (0.04–2.77)		
	109	0.68 (0.42–1.11)	105	1.07 (0.67–1.72)	75	<b>2.99</b> (1.26–7.07)		
Hours at work/week	514	1.02 (0.99–1.05)	661	1.0 (0.97–1.03)	468	0.95 (0.91–1.00)		
Psychosocial hazard								
Low (reference)	86	1.0	69	1.0	37	1.0		
Moderate	354	1.07 (0.62–1.85)	461	<b>1.91</b> (1.06–3.45)	321	6.42 (0.76–54.45)		
High	74	0.92 (0.43–1.95)	131	<b>2.46</b> (1.18–5.01)	110	<b>9.54</b> (1.03–88.00)		
Gender								
Male (reference)	264	1.0	267	1.0	183	1.0		
Female	250	<b>1.63</b> (1.01–2.63)	394	1.26 (0.82–1.93)	285	0.47 (0.18–1.21)		
Age	514	1.00 (0.98–1.02)	661	1.01 (0.99–1.03)	468	1.02 (0.98–1.06)		

n exposed, OR and 95% Cl. P < 0.05 is given in bold values.

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