



Finnish Institute of
Occupational Health

WELL-BEING
THROUGH WORK

Labour market outcomes before and after the first episode of part-time sickness absence

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Background

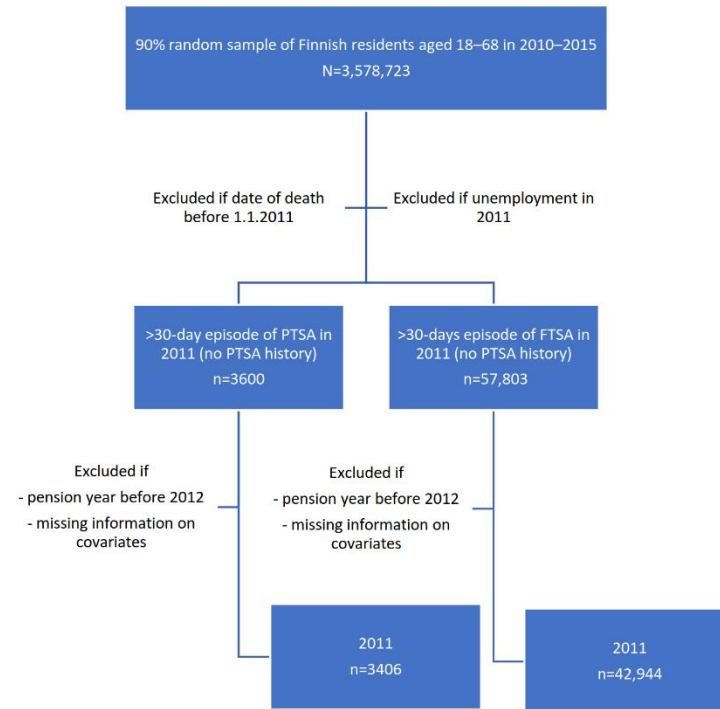
- Previous studies suggest that part-time sickness absence (PTSA) results in better work participation compared to full-time sickness absence (FTSA)
 - However, few studies have determined trends in labour market participation before and after long-term PTSA
- We determined the trends in FTSA and participation to vocational rehabilitation 4 years before and 4 years after the first episode of PTSA
 - For unemployment, we determined the trend (slope) for four years after PTSA
- We also determined the risk of FTSA and vocational rehabilitation after PTSA compared to before

Methods

- Finnish population-based study with register-linkage
 - **3406** individuals with first >30-days episode of PTSA in 2011
 - Reference group consisted of **42 944** individuals with >30-days episode of FTSA in 2011
- Labour market **outcomes** included FTSA and vocational rehabilitation in 2007–2015 (year 2011 was 'wash-out' period) and unemployment in 2012–2015
- Sociodemographic **covariates**, all measured at the event year (2011), were sex (men/women), age (continuous), and education (6 categories)

Flow chart of participant selection and observational periods

PTSA=part-time sickness absence; FTSA=full-time sickness absence



Labour market outcomes: All-cause full-time sickness absence, vocational rehabilitation days per year (2007-2015), unemployment days per year (2012-2015):



Statistical analysis

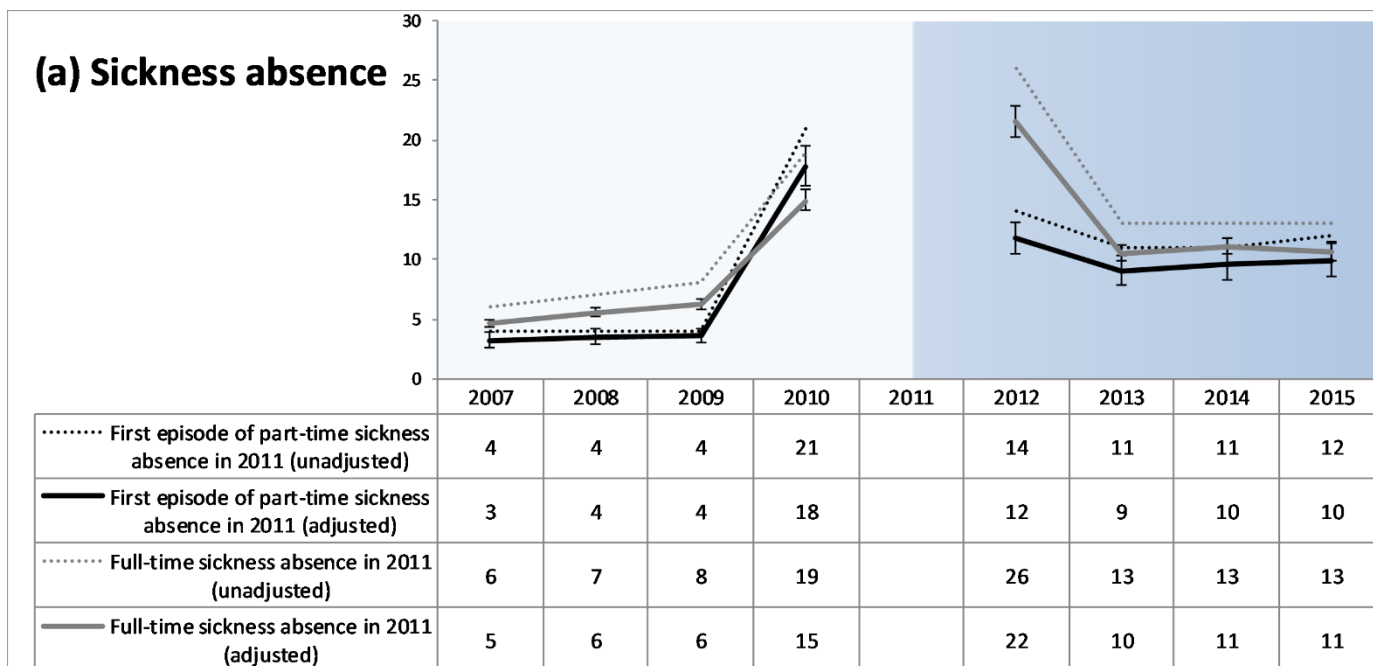
- To determine the occurrence of FTSA and vocational rehabilitation during the 4 years after relative to 4 years before the index year (2011), we applied **repeated-measures negative binomial regression** analyses using the generalized estimating equations (GEE) method with exchangeable correlation structure
 - This method considers the intraindividual correlation between the measurements, and results in **rate ratio** (RR) estimates of the risk after versus before the index year with 95% confidence intervals (CI)
- To examine whether the change in time was different across the two groups, we entered an **interaction term** 'group × time' into the model. Time was specified as a class (categorical) variable in the analyses
- In addition to RR estimates, the GEE models also produced the covariate-adjusted estimated marginal rate (i.e., sickness absence days per 1 person-year). The b-coefficients were exponentiated to represent the rates (i.e., annual adjusted means)

Results / Descriptives

- Those with long-term PTSD were more often women and they were older than those with long-term FTSA
- Participants with PTSD also had higher level of education than those with FTSA
- Retirement, morbidity, and mortality rates were highest among individuals with FTSA: a total of 18% of the FTSA group retired on health grounds during 2012–2015, whereas the corresponding percentage was 10 % for the PTSD group.

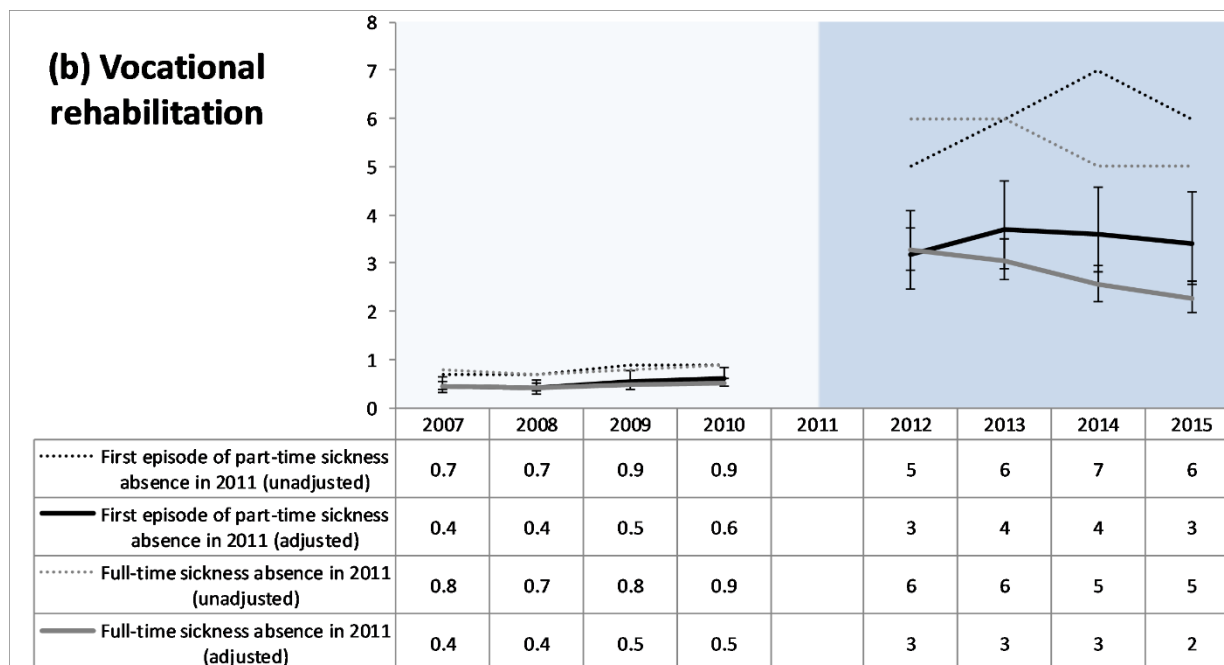
Results / Full-time sickness absence

	First episode of PTSA* in 2011		Episode of FTSA** in 2011		Group*time interaction
	RR	95% CI	RR	95% CI	P value
2007-2010	1	(ref)	1	(ref)	
2012-2015	1.94	1.75-2.15	1.83	1.78-1.88	<0.001

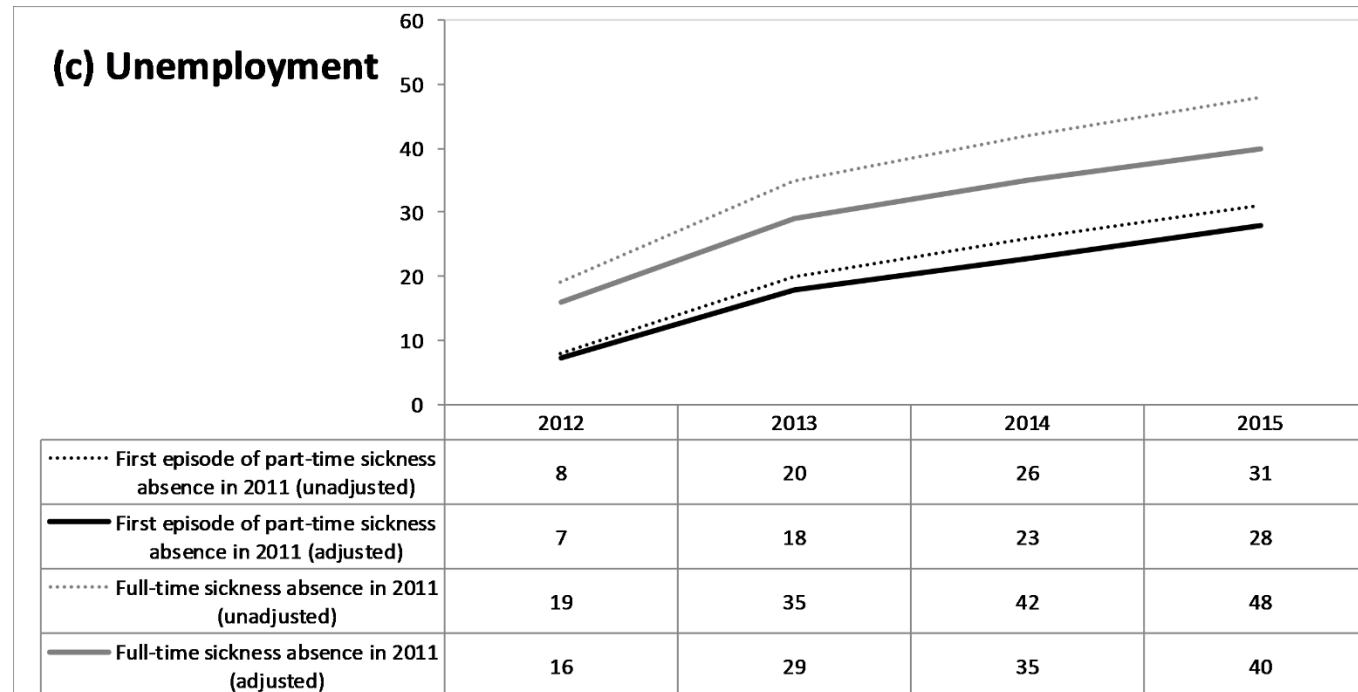


Results / Vocational rehabilitation

	First episode of PTSA* in 2011		Episode of FTSA** in 2011		Group*time interaction
	RR	95% CI	RR	95% CI	P value
2007-2010	1	(ref)	1	(ref)	
2012-2015	7.02	5.42-9.08	5.96	5.34-6.66	0.22



Results / Unemployment



- PTSA is not granted for the unemployed
 - Thus, we studied the trend after the index year only
- The absolute level of of unemployment was lower in the PTSA group than in the FTSA group
- However, there was a slightly steeper slope for future unemployment in the PTSA group

Conclusion

- Long-term PTSA marks a decline in labour market participation, but the decline is smaller than that in employees with long-term FTSA

Thank you for your attention!

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