



Department of Clinical Neuroscience
Division of Insurance Medicine

Sustainable working life: early determinants and later predictors – a longitudinal twin study (SustWork)

Sustainable working life is in this project defined as the absence of labor market non-participation due to unemployment, rehabilitation, sickness absence (SA), or disability pension (DP). Labor market non-participation may cause adverse effects for individuals, their families, and the society, but may also be associated with negative relational, financial, and psychological factors. Risk factors for labor market non-participations in terms of SA and DP have been widely studied, but sustainable working life far less.

This project build on the Swedish Twin project Of Disability pension and Sickness absence (STODS) which is an extensive population-based data source of about 120 000 twin individuals with follow-up of comprehensive surveys and national registries. Similar data from Finland is available and will be used in comparative sub studies.

Aims are to investigate the associations between early life factors and sustainable working life and to study genetic and environmental influences on the causes of individual variation in liability to sustainable working life using twin design. With such design we will explore if the variation in sustainable working life is due to genetics, environmental factors shared by twins or environmental factors unique to each twin. In addition, we will explore societal variation by comparing Sweden and Finland.

Results may influence policy level recommendations for the promotion of sustainable working life to better maintain work capacity, provide guidance for promotion of health, wellbeing, and participation in the labor market for the general public, occupational health care and employers, and to increase knowledge on factors for sustainable working life.

Funding: Forte

Project period: July 2019- June 2023

Project group members:

Annina Ropponen, PhD, Associate professor (docent), Principal Investigator (PI)

Pia Svedberg, PhD, Ass.prof., Co-PI

Jurgita Narusyte, PhD, researcher

Auriba Raza, PhD, postdoctoral researcher

Mo Wang, PhD, research specialist

Postal address

Karolinska Institutet
Division of Insurance Medicine
Dept. Clinical neuroscience
SE-171 77 Stockholm
Sweden

Visiting address

Berzelius väg 3, 6th floor
17154 Solna

Telephone

+46 8 524 832 24 (admin)

Web

<http://ki.se/im>
<https://ki.se/en/cns/pia-svedbergs-research-group>

We also collaborate with a group of researchers in Finland.

Publications

Ropponen A, Narusyte J, Wang M, Kärkkäinen S, Mather L, Blom V, Bergström G, Svedberg P. Role of social benefits for future long-term sickness absence, disability pension and unemployment among individuals on sickness absence due to mental diagnoses: a competing risk approach. *Int Arch Occup Environ Health*. 2022 May;95(4):867-876. doi: 10.1007/s00420-021-01825-5.

Wang M, Svedberg P, Narusyte J, Farrants K, Ropponen A. Effects of age on psychosocial working conditions and future labour market marginalisation: a cohort study of 56,867 Swedish twins. *Int Arch Occup Environ Health*. 2022 Jan;95(1):199-211. doi: 10.1007/s00420-021-01704-z.

Ropponen A, Wang M, Narusyte J, Silventoinen K, Böckerman P, Svedberg P. Sustainable Working Life in a Swedish Twin Cohort-A Definition Paper with Sample Overview. *Int J Environ Res Public Health*. 2021 May 28;18(11):5817. doi: 10.3390/ijerph18115817.

Ropponen A, Wang M, Narusyte J, Kärkkäinen S, Blom V, Svedberg P. The role of sickness absence diagnosis for the risk of future inpatient- or specialized outpatient care in a Swedish population-based twin sample. *BMC Public Health*. 2021 May 20;21(1):957. doi: 10.1186/s12889-021-10942-2.

Ropponen A, Narusyte J, Silventoinen K, Svedberg P. Health behaviours and psychosocial working conditions as predictors of disability pension due to different diagnoses: a population-based study. *BMC Public Health*. 2020 Oct 6;20(1):1507. doi: 10.1186/s12889-020-09567-8.

Mather L, Ropponen A, Mittendorfer-Rutz E, Narusyte J, Svedberg P. Health, work and demographic factors associated with a lower risk of work disability and unemployment in employees with lower back, neck and shoulder pain. *BMC Musculoskelet Disord*. 2019 Dec 26;20(1):622. doi: 10.1186/s12891-019-2999-9.