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**A Comparison of Working Hours in
Four Nordic National Representative Surveys**



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1. Introduction

Humans have adapted to the alternating day/night pattern, which accompanies the 24 hour rotation of the earth and influences nearly every biological pathway. Work-time arrangements disrupting this naturally occurring circadian cycle, or causing a sleep deficit, may result in adverse health outcomes, cognitive impairment, sleep problems, increased risk of accidents, as well as negative social consequences. The shift from industrial towards post-industrial working time regimes includes aspects such as lengthening of working time, short part-time work and unsocial working hours. The last decades have seen increasing efforts in research on associations between non-standard working hours and adverse health-social outcomes. Such studies have two main aims: (i) assessment of status and trends over time, and (ii) an evaluation of differences between groups, defined by e.g. age, gender, educational level and country. A necessary prerequisite for a meaningful interpretation of data is however, the usage of comparable variables in each wave of a survey and between the countries.

Prevalence of shift work

According to recent American and European surveys, between 15 and 30% of adult workers are engaged in some type of shift work. For many workers, this also implies work at night. In Norway, the proportion of people working according to such schedules has increased during the recent years, with the highest increase in the health and social sector (Tynes, Sterud et al. 2015, p. 65).

Working time research in the Nordic countries

In 2016, representatives from Research Institutes in Denmark, Finland, Norway and Sweden, initiated the research project “Working-hours, health, well-being and participation into working life. Creating new working time models and solutions to Nordic countries” (WOW). Working life and working hours in the Nordic countries are assumed to be quite similar, the working conditions are monitored by national and EU wide surveys, and the results are used for policy decisions regarding work and health. Aims of such monitoring include the studying of status and policy-relevant trends within the workforce, the studying of differences between groups of workers, and identification of vulnerable groups for development of relevant interventions. One part of the WOW-study involves a comparative research of working hours in the Nordic countries, with a focus on societal and socioeconomic differences, and by applying working hour data from i) the European Working Condition Survey (EWCS) and ii) national working condition surveys from the four countries. The present report is an answer to the latter approach.

Aims

Thus, the aims of the present study were

- assessing the comparability of working hour variables from national surveys in Denmark, Finland, Norway and Sweden.
- comparing the within-country distribution of working hour variables on factors such as age, sex, occupation, educational level and nationality.
- evaluating whether data from these surveys add information on working hours in the Nordic countries to that obtained from the EWCS.
- discussing the need for harmonization of working hour variables in the national surveys

2. Material and methods

Initially, six national surveys were considered as eligible for comparisons of working hours. From Denmark two nationally representative surveys were relevant, *The Danish Work Environment Cohort Study (DWECS, 1995, 2000, n=8583 and 14453)*, and *the Working Environment and Health Study in Denmark (WEHD2012-WEHD2014, 1912-, n=50 000)*. Also two different Finnish studies were considered, *the Finnish Working Conditions Survey (FWCS, 1977, 1984, 1990, 1997, 2003, 2008, 2013, n=3000-6000)* based on nationally representative samples of the working-age population, and *the Finnish National Work and Health Survey (FNWHS)*. The most relevant survey in Norway, was the *Survey of Living Conditions - Working Environment (LKU, Statistics Norway, 2006, 2009, 2013, n=about 12 500)*, based on a nationally representative sample. A relevant study from Sweden was *the Swedish Longitudinal Occupational Survey of Health (SLOSH, 2006-2014, n=up to 40 000)*, a nationally representative longitudinal cohort survey. All these surveys include similar questions on the main dimensions of working hours. Although all surveys were repeated periodically, alterations of the working-hour questions from one version to the next hampered the inclusion of consecutive surveys from some surveys, and consequently the ability to evaluate trends.

Finally, the following four surveys were regarded optimal for the between-country comparisons, by researchers from the four countries involved in the WOW-project: From Denmark the WEHD, from Finland the FWCS, from Norway LKU, and from Sweden the SLOSH.

Professional translators in each country translated the questionnaires from their original language into English.

Representatives from the four countries agreed upon inclusion of the following working hour variables, and the categorization of these: actual weekly working hours, usual working hours, overtime (if full time employment), the timing of the work (day work, shift work, night work), affiliation to work site (temporary or permanent), whether work/family conflict. We also agreed on the categorization of the following demographic variables: age, educational level, occupation, whether self-employed or employee, family status and nationality.

Data at an individual level were only available for the researcher of the respective countries. Thus no comparisons between countries were possible, based on individual data.

Table 1. Working hour variables and demographic variables as included in the surveys

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
Actual weekly working hours	“How many hours per week do you work in your main occupation?” (< 20 h, 20–29 h, 0–39 h, 40–49 h, ≥ 50 hours)	“What are your agreed weekly working hours in your main job?” (Categorization as in Denmark)	“How many hours do you normally work in total per week in your main job? Include paid overtime and extra work done at home related to this job.” (Categorization as in Denmark)	“How many hours do you normally work in total per week in your main job (including overtime, work from home and missions)?” (Categorization as in Denmark)
Usual working time		Usual or normal working hours in main job (including overtime).		
Overtime (among full time workers)		“Do you sometimes work overtime for which you receive compensation: In money / Time off / Both / Neither?”	“You have said that you normally work longer than your agreed working hours. Is any of the overtime that you do paid, or are you able to take time off in lieu?”	Overtime if response is ‘yes’ on the following questions: -Do you work overtime at least once a week?” -How many hours of overtime have you worked during the last 3 months? (2008) -Do you work overtime at least once a week?

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
Working time arrangements	<p>“On which time of the day do you usually work?”</p> <p>1: Regular day work (06.00-18.00) 2: Regular evening work (15.00-24.00) 3: Regular night work (24.00-05.00) 4: Shiftwork with night shifts 5: Shiftwork without night shifts</p>	<p>“What kind of hours do you work?”</p> <p>Regular day work (between 6 am and 6 pm), Regular evening work, Regular night work, Two-shift work without night work, Two-shift work with night work, Three-shift work, Or other form of working hours?</p>	<p>“What are your normal working hours?”</p> <p>1. Daytime between 6 am and 6 pm 2. Shift or rota work 3. Other arrangement</p>	<p>“What are your normal working hours?”</p> <p>1. Daytime (ca 06-18) 2. Evening (ca 18-22) 3. Night (ca 18-06) 4. Shiftwork, no nightshifts 5. Shiftwork, with nightshifts 6. Scheduled work, no nightshifts 7. Scheduled work, with nightshifts 8. Unregulated worktime 9. Other</p>
Shift work	<p>“Question: On which time of the day do you usually work?”</p> <p>Shift work, if response is</p> <p>4. Shift work with night shifts or 5. Shift work without night shifts</p>	<p>“What kind of hours do you work?”</p> <p>Shift work, if response is ‘Two-shift work without night work’, or -Two-shift work with night work -Three-shift work</p>	<p>“What are your normal working hours?”</p> <p>Shift work, if response is -Shift or rota work -Other arrangement</p>	<p>“What are your normal working hours?”</p> <p>Shift work, if response is -Shiftwork, no nightshifts -Shiftwork, with nightshifts -Scheduled work, no nightshifts</p>
Night work	<p>“Question: On which time of the day do you usually work?”</p> <p>Night work, if response is</p>	<p>“What kind of hours do you work?”</p> <p>Night work if response is -Regular night work -Two-shift work with night work</p>	<p>“What are your normal working hours?”</p> <p>Night work if response is -Shift or rota work</p>	<p>“What are your normal working hours?”</p> <p>Night work if response is -Night (ca 6 pm–6 am)</p>

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
	3. Regular night work (24.00–05.00) 4. Shift work with night shifts And if night work during the last 12 weeks	-Three shift work.	-Other arrangement and if reported having worked at least one night during the last 12 weeks. “Number nights and number of nights in a row last 12 months”	-Scheduled work with night shifts
Temporary work		“Are you in permanent or temporary employment? (Temporary employment: a job that only lasts for a set amount of time)”	“Are you in permanent or temporary employment? (temporary employment: a job that only lasts for a set amount of time)” (YES/NO)	“What type of employment do you have? (permanent, project, substitute, hourly, self-employed, farmer, other employment)?” Temporary work if response is – -project -substitute -hourly
Work-family conflict	1) “How often do you experience that work takes up so much <i>time</i> that it conflicts with your personal life?” 2) “How often do you experience that work take up so much <i>energy</i>	“I feel that I am neglecting home matters because of my job”. Conflict if statement above categorized as ‘true’ or ‘about true’. “In my spouse's (partner's) opinion I work too hard“	“How often do the requirements of your job disturb your home and family life?” -Very seldom or never -Rather seldom -Sometimes -Rather often	I come home too tired to do things I would like to do. I often neglect my personal needs because of the demands of my work.

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
	that it conflicts with your personal life?” For both alternatives, conflict if response is ‘always’ or ‘often’.	Categories: Totally true, True to some extent, Untrue to some extent, Totally untrue	-Very often or always Work-family conflict if response is Rather often or very often	“My personal life suffers because of my work”. Conflict is <i>low</i> if response is either ‘not at all’, seldom’ or ‘sometimes’, <i>high</i> if response is ‘often’ or ‘almost all the time’.
Work location		“Do you sometimes do work connected with your main job at home?” Categories: Works occasionally or partially at home, Works at home only, Does not work at home at all. Teleworking refers to paid work done away from the actual workplace. (The essential characteristics of teleworking are working arrangements which are independent of time and place.) “Do you do telework or would you be interested in telework?”	“Which of the following descriptions fits your situation?” -Working at your employer -Working as a subcontractor for other businesses -Working as a consultant for other businesses -Working for your employer from home -Other	“Which of the following best describes your workplace?” (i.e. office type) (...) “How much of your regular working week do you normally spend working from home?”(2006)

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
		Categories: Am doing at the moment, Would be interested, Am not interested.		
Age	(17 thru 24 =1) (25 thru 34=2) (35 thru 44=3) (45 thru 54=4) (55 thru 67=5)	(Lowest thru 24=1) (25 thru 34=2) (35 thru 44=3) (45 thru 54=4) (55 thru 67=5)	(Lowest thru 24=1) (25 thru 34=2) (35 thru 44=3) (45 thru 54=4) (55 thru 67=5)	(Lowest thru 34=1) (35 thru 44=2) (45 thru 54=3) (55 thru 100=4)
Educational level	Information from Statistics Denmark. Highest completed education is categorized into four groups: 1) Primary education: not finished high school 2) Secondary education: finished 3 years of high school or vocational education 3) Higher education: finished 3 years of college / university 4) Unknown	Level of education (ISCED 1997/2011) 0 Pre-primary education 1 Primary education 2 Lower secondary education 3 Upper secondary level education 5 Lowest level tertiary education 6 Lower-degree level tertiary education 7 Higher-degree level tertiary education 8 Doctorate or equivalent level tertiary education	1 Primary education (not finished high school) 2 Secondary education (finished 3 years of high school education) 3 Higher education (at least finished 3 years of college education.)	1 Primary education (not finished high school) 2 Secondary education (finished 3 years of high school education) 3 Higher education (at least finished 3 years of college education).

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
Occupation	Classification of occupations based on ISCO-08: 0 'Armed forces and unspecified' 1 'Legislators, senior officials and managers' 2 'Professionals' 3 'Technicians and associate professionals' 4 'Clerks' 5 'Service, shop and market sales workers' 6 'Skilled agricultural and fishery workers' 7 'Craft and related trades workers' 8 'Plant and machine operators and assemblers' 9 'Elementary occupations'.	Finnish National Classification of Occupations (1979-2003). ISCO-88 COM (2003->), ISCO-08 (2010->) (as in Danish survey)	STYRK-08, Classification of occupations based on ISCO-08 (as in Danish survey)	Classification of occupations based on ISCO-08 (as in Danish survey)
Labour market status	What is your job currently? You are currently working: Regular wage earner", Wage earned with staff responsibility, Self-employed, Helping spouse, Student			

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
	<p>working at least 8 hours per week, Pupil or apprentice (apprenticeship or internship), In activation (e.g. company internship program, wage subsidy job, guidance and upgrading of qualifications), Light duties, flexible job, Compulsory military service.</p> <p>You are currently not working or on leave of absence:</p> <p>Student (pupil or student without after-school job or with after-school job less than 8 hours per week)</p> <p>On long term sick leave or rehabilitation</p> <p>Stay-at-home</p> <p>Unemployed with unemployment benefits</p> <p>Unemployed with social security</p> <p>Early retirement benefits or employment and support allowance</p>			

	Denmark Work Environment and Health in Denmark (WEHD2012–WEHD2014)	Finland The Finnish Working Conditions Survey (FWCS)	Norway The Survey of Living Conditions – Working Environment (LKU)	Sweden The Swedish Longitudinal Occupational Survey of Health (SLOSH)
	Leave of absence Other, that is not work			
Self employed/ employee	“What is your main occupation currently?” Self-employed if response is -Self-employed farmer -Self-employed	FWCS contains only employees	1. Self-employed/family workers 2. employee	“In your employment, are you employed by a company, do you work as a farmer or are you self-employed?”
Family status	1) Single-person household, no children 2) Single-person household with children 3) Cohabitant/ married, no children 4) Cohabitant/ married with children	Same categories as in Danish survey (WEHD2012)	Same categories as in Danish survey (WEHD2012)	Same categories as in Danish survey (WEHD2012)
National status	-----	Immigrant. Is your mother / father born in some other country than Finland.	Immigrant: Person born abroad of two foreign-born parents and four foreign-born grandparents	Immigrant: Person born abroad of two foreign-born parents and four foreign-born grandparents

3. Results

Further descriptions of the National surveys is presented in an Appendix.

Table 1 gives an overview of demographic variables and working hour variables in the four national surveys of Denmark, Finland, Norway and Sweden. However, for some of the working hour variables, deviation between the definitions of these variables in each country prevents comparison.

3.1 Comparable variables

Age

The following age-groups may be applied in all four countries: 17-34, 35-44, 45-54 and 55-67 years, as used by SLOSH-Sweden.

Occupation

In all four countries classification of occupation was based on ISCO-08.

Education

The following classification of highest education may be applied in all four countries:

- 1 'Primary education (not finished high school)'
- 2 'Secondary education (finished 3 years of high school education)'
- 3 'Higher education (at least finished 3 years of college education).'

Family status

In the four national surveys, family status may be categorized as follows:

- 1 'Single-person household'
- 2 'cohabitant/ married no children.'
- 3 'cohabitant/ married with children'
- 4 'Single parent'

Shift work

In all four countries, *shift work* is defined based on the reply to a question concerning what your normal or ordinary workhours are.

Denmark: Shift work, if response is 'Shift work with night shifts' or 'Shift work without night shifts'.

Finland: Shift work, if response is 'Two-shift work without night work', or 'Two-shift work with night work' or 'Three-shift work'.

Norway: Shift work, if response is 'Shift or rota work' or 'other arrangement'.

Sweden: Shift work, if response is 'Shiftwork, no nightshifts', 'Shiftwork, with nightshifts', or 'Scheduled work, no nightshifts'.

Night work

Based on the response to the same question as for shift work concerning normal working hours, a work schedule is defined as *night work* if the reply is one of the following:

Denmark: 'Night shift (mainly between 12 pm and 5 am)' or 'Shiftwork with night work'.

Finland: 'Regular night work', or 'Two-shift work with night work' or 'Three shift work'

Norway: 'Shift or rota work' or 'other arrangement', and if having worked at least one night during the last 12 weeks.

Sweden: 'Night (ca 6 pm-6 am)', 'Shiftwork with nightshifts' or 'Scheduled work with nightshifts'.

3.2 Non-comparable variables

Temporary/permanent work, overtime work

The Danish survey (WEHD) does not include these variables.

Actual and agreed/contracted weekly working hours

The Danish WEHD survey includes data on *typical* and *normal* working hours, however does not include information regarding contracted weekly working hours. As a general rule, working hours in Denmark are fixed in a collective agreement and for the majority of sectors and jobs the standard working hours are 37 hours weekly" (<https://workplacedenmark.dk/en/working-conditions/pay-and-working-hours>)

The Finnish working condition survey (FWCS) does not include information on the actual hours, however holds information on usual (contracted) working hours for the years 1977, 1984, 1990, 1997, 2003, 2008 and 2013 (Information by Jouko Nätti, University of Tampere, Finland).

The Norwegian Survey includes questions on actual and contracted number of working hours per week for all participants, for the years 2006, 2009, 2013 and 2016. From 2009 and onwards, the question on contracted working hours was only posed to the subgroup of workers who reported having the same contracted working hours every week (Information by Tom Sterud, National Institute of Occupational Health, Norway, February 2018).

In the Swedish Longitudinal Occupational Survey of Health (SLOSH) the participant is first asked whether the present work is full time or part time, and next about the weekly number of mean payed hours (Information from Viktor Persson, Stress research institute, Stockholm University, Sweden,

January 2018). Unfortunately, neither the actual nor the contracted number of working hours per week may be extracted from the response to these questions.

Work-family conflict

While the Finnish, Norwegian and Swedish surveys include a single question concerning work-family conflict, the Danish survey includes two questions regarding this variable: ‘How often do you experience that work takes up so much *time* that it conflicts with your personal life?’ and ‘How often do you experience that work take up so much *energy* that it conflicts with your personal life?’.

Self-employed /employee

Data on self-employed workers is not available from the Finnish survey, thus a between-country comparison of working hours is only possible for employees.

Work location

The Danish WEHD- survey does not include this information. For the other countries, the collected information on work location covers different aspects:

- Finland: Frequency of working at home.
- Norway: Working site: employer’s site, from home for employer, and other alternatives.
- Sweden: Work site, and proportion of the working week worked from home.

Nationality

The variable categorizing workers as national or immigrants, is not included in the Danish survey.

4. Discussion

The main purpose by the present study was to assess whether analyses of working hour variables from the national representative surveys in Denmark, Finland, Norway and Sweden might add information to that from the EWCS, regarding trends of working hours between the Nordic countries. The higher number of participants in the national surveys than in EWCS was thought to be an asset.

A comparison of the definitions of the relevant working hour variables from the four surveys, however reveals major differences. Not all of the suggested variables have been defined in all four countries, or if they do, they may not be comparable.

In all four surveys, the variable *night work* is defined according to the response to a question about normal working hours. While the question is similar in all four surveys, the response alternatives defining *night work* differ both in terms of the timing and frequency of the night shifts.

Reported working hours are defined as *night work* if the response is according to the actual national definition:

Danish survey: “regular night work (12 pm to 5 am)” or “shift work with night shifts” and if night work during the last 12 weeks.

Swedish survey: “ Work ca 6 pm to 6 am”, or "scheduled work both night shifts".

Finnish survey: “Regular night work”, “Two-shift work with night work”, or “Three shift work”.

Norwegian survey: ”Shift or rota work” or “Other arrangement”, and if at least one night shift during the last 12 weeks.’

Conclusion

A thorough evaluation of the variable definitions of the four national surveys discloses large discrepancies regarding the definition of both demographics and working hour variables. As a conclusion, these surveys are not fit for comparative research of working hours in the Nordic countries, and consequently, do not add any information to that from the EWCS.

For the establishment of future national surveys, or when revising the existing questionnaires, we recommend that the Nordic countries cooperate in defining the variables, in order to facilitate joint studies and comparisons between countries.

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Appendix: Descriptions of the included surveys

A.1 The Working Environment and Health Study in Denmark (WEHD)

is a survey of work environment and health launched in 2012 and implemented every second year after. The National Research Center for the Working Environment (NRCWE) is in charge of the study. The objective is to monitor changes in work environment and health of Danish employees from 2012 to 2020 and to examine how changes in work environment and health are related to each other.

The target population was the Danish working population between 18 and 65 years, employed for a minimum of 35 hours, and with an income of minimum 3000 DKK (approximately 400 €) per month in the last 3 months. In 2014, 50,875 employed workers received an invitation letter to complete a web-based questionnaire (35,023 randomly chosen, 15 852 cohort from 2012). Non-responders received a reminder with a paper version of the questionnaire. Finally, 29,166 answers were returned. The questionnaire includes 51 main questions on psychologic and physic work environment and on health outcomes. The results from the survey are used in the improvement of the work environment at Danish work places.” (Tynes, Aagestad et al. 2017), additional file 1.

A.2 The Finnish Working Condition Study (FWCS) / Finnish Quality of Work Life Survey (QWLS)

is a survey of work environment and health launched in 1977 by the Work Research Unit, Statistics Finland, with the objective to produce data on the state of working life to support labour policy decisions and the development of work organization. The surveys aim to provide information for public debate about Finnish people’s views on their working conditions and about how these conditions have changed. The surveys also supply material for the research, training and communication activities related to working conditions that take place in diverse quarters of society.

Population: Wage and salary earners aged 15 to 64 years who normally work at least 10 hours per week are selected from the population of the FLFS and are invited to participate. All economic activities, including private and public sectors.

Sample: *Register used for sample:* The sample of the QWLS is taken from the sample of the monthly Finnish Labour Force Survey (FLFS). The FLFS sample is a random selection from the population register applied by region in proportion to population weights.

Sampling strategy: The sampling for the QWLS is connected to FLFS rounds. In 2013, the target population was selected from the second, third, fourth and fifth rotation groups of the FLFS in September and October 2013. The QWLS sample is selected from FLFS interviewees during interview.

Sample size: QWLS 2013. Sample size: 7,000 wage and salary earners (N=4876).

Quality control procedures: Questionnaire design, fieldwork monitoring, data processing and weighting, public availability of survey documentation, questionnaire translation (where relevant), pre-test and follow-up interviews.

Interviews: Face-to-face interviews at home or elsewhere. The average duration was 60 minutes.

Source: (Cabrita and Peycheva 2014).

A.3 The Survey on Living Conditions – Working Environment (LKU) – Norway

was launched by Statistics Norway in 1989 and has been implemented every third year since. Prior to this launch, a group of Nordic researchers compiled the questionnaire with the purpose to make comparative analyses of the work environment possible in the Nordic countries. In 1987, the questionnaire was evaluated through pilot studies in Sweden and Denmark before the final version was introduced. The survey covers many topics where working hours is one of them. Before each launch of the survey, stakeholders (social partners, the Labour Inspectorate, the National Institute of occupational and other stakeholders) are invited to suggest revisions of the questionnaire. Eligible respondents for the Norwegian survey are community-living Norwegian residents aged 18–66 years registered in Statistics Norway's population database (BeReg). In 2006, the gross-sample for the survey was expanded from 5,000 subjects to 19,000 subjects and a panel design was introduced. The method of data collection is telephone interviews undertaken by professional interviewers at Statistics Norway. The data files with results from the interviews and statistical files with coded variables, linked information and weights are stored. Anonymized files are also available for researchers through the Norwegian Social Science Data Archives. In the 2013 survey the gross sample was 21,707 subjects, and the number of subjects interviewed were 10,875 (8,302 were in paid work).

Data were collected by a computer assisted personal interviews, from April 2013 through January 2014 (Vrålstad and Revold 2014).

A.4 The Swedish Longitudinal Occupational Survey of Health (SLOSH)

is a unique prospective study on work environment and health. SLOSH was initiated by the Stress Research Institute at Stockholm University in 2006 and aims to study the complex relationships between work organization, work environment, labour market participation and health. Commissioned by Stress Research Institute, Statistics Sweden (SCB) mails self-completion questionnaires to the participants every second year. Registry data are linked both retrospectively and prospectively. SLOSH is based on the Swedish Work Environment Surveys of 2003 and 2005 (SWES). The first follow-up was conducted in March 2006, when all the 9,200 participants of the SWES 2003 were mailed self-completion questionnaires. In 2008, the second follow-up was realized, where also participants of the 2005 SWES

were invited to participate. The core of the SLOSH therefore consists of a total of 18 915 persons. The third follow-up was conducted in 2010, which also included 2,553 participants from Stockholm and Västra Götaland who has responded to SWES 2007, a fourth follow-up in 2012, and a fifth data collection during spring 2014. Continued follow-ups are planned for every other year. The survey is available in two versions, one for participants in gainful employment and one for those who are not gainfully employed or work more than 30 percent. The survey for those in gainful employment is divided into three parts with the first part containing questions from SWES, but also new questions about changes in employment, demand and control at work, effort and reward, organizational justice, leadership etc. The second part is about health and wellbeing and the third section highlights the general life situation. Also the survey for those who have temporarily or permanently left the labour market is divided into three parts, where the second and third part is almost identical to the survey for workers. The first part deals with questions about current supply, reasons why for not working and the positive and negative aspects of not being gainfully employed. In order not to burden the participants with too many questions, questionnaire data is linked to register data on employment, sick leave, hospitalization etc. both prospectively and back in time.

(Source: <https://snd.gu.se/en/catalogue/study/ext0098>)

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