



Det Nationale Forskningscenter
for Arbejdsmiljø

Litteratur- gennemgang med supplerende analyser af årsagerne til ufrivillig, førtidig tilbagetrækning fra arbejdsmarkedet

**Appendiks til afslutningsrapport
til Arbejdsmiljøforskningsfonden**

Karina Glies Vincents Seeberg, Helena Breth Nielsen, Heidi Vendelbo Eich-horn Andersen, Lars L. Andersen, Elizabeth Bengtsen, Julie Eskildsen Bruun, Anne Louise Nyboe Christiansen, Line Marie Toft Dyhr, Elisabeth Framke, Sophie Korsgaard Møhl Keller, Dea Busk Larsen, Henriette Bjørn Nielsen, Mads Nordentoft, Jeppe Karl Sørensen, Kathrine Sørensen, Anne Windolf-Nielsen, Ida Elisabeth Huitfeldt Madsen, Reiner Rugulies

Appendiks til afslutningsrapporten:

Seeberg KGV et al. Litteraturgennemgang med supplerende analyser af årsagerne til ufrivillig, førtidig tilbagetrækning fra arbejdsmarkedet.

Afslutningsrapport til Arbejds miljø forskningsfonden.

Det Nationale Forskningscenter for Arbejds miljø, 2020.

Indhold

Appendiks 1. Protokol og søgestreng	4
Appendiks 2. Udsnit af dataekstraktionstabel i litteraturgennemgangen.	27
Appendiks 3. Ekskluderede studier	28
Appendiks 4. Studiekarakteristik af de inkluderede studier	42
Appendiks 5. Studiekarakteristik af de inkluderede studier samt estimater, som ikke er med i metaanalyserne.....	60
Appendiks 6. Studiekarakteristik af de inkluderede studier samt estimater, som er med i metaanalyserne	86
Appendiks 7. Forest- og funnelplots for fysiske krav i arbejdet (alle kvalitetsniveauer af studier)	149
Appendiks 8. Forest- og funnelplots for psykosocialt arbejdsmiljø (alle kvalitetsniveauer af studier)	154
Appendiks 9. Forest- og funnelplots for sundhedsadfærd (alle kvalitetsniveauer af studier).....	161
Appendiks 10. Forest- og funnelplots for mentale helbredsproblemer (alle kvalitetsniveauer af studier).....	170
Appendiks 11. Forest- og funnelplots for somatiske helbredsproblemer (alle kvalitetsniveauer af studier).....	175
Appendiks 12. Resultater fra alle domæner, både på alle kvalitetsniveauer og høj-kvalitetsniveauer	179
Appendiks 13. Forest- og funnelplots for fysiske krav i arbejdet (høj-kvalitetsstudier).....	181
Appendiks 14. Forest- og funnelplots for psykosocialt arbejdsmiljø (høj-kvalitetsstudier)	186
Appendiks 15. Forest- og funnelplots for sundhedsadfærd (høj-kvalitetsstudier)	193
Appendiks 16. Forest- og funnelplots for mentale helbredsproblemer (høj-kvalitetsstudier)	202
Appendiks 17. Forest- og funnelplots for somatiske helbredsproblemer (høj-kvalitetsstudier)	207
Appendiks 18. Oversigt over spørgeskemaspørgsmål opdelt efter domæne	211
Appendiks 19. Model 5: Yderligere analyser med justeringer på tværs af domæner (supplerende analyser).....	214

Appendiks 1. Protokol og søgestreng

Protocol for a systematic review and meta-analysis of determinants of involuntary early withdrawal from the labour market

Kathrine Sørensen¹, Karina G.V. Seeberg¹, Ida E. H. Madsen¹, Line Marie Toft Dyhr¹, Anne Windolf-Nielsen¹, Lars L. Andersen^{1,2} and Reiner Rugulies^{1,3,4}

¹ National Research Centre for the Working Environment, Copenhagen, Denmark

² Department of Health Science and Technology, Aalborg University, Denmark

³ Department of Public Health, University of Copenhagen, Denmark

⁴ Department of Psychology, University of Copenhagen, Denmark

Corresponding author

Kathrine Sørensen

National Research Centre for the Working Environment

Lersø Parkallé 105

DK-2100 Copenhagen

Phone: +4539165366

Email: ksn@nfa.dk

This protocol was finalized and uploaded to the PROSPERO website on the 14th of September 2018

(<https://www.crd.york.ac.uk/PROSPERO/>)

Amendments to this protocol will be listed on the PROSPERO website with a date of amendment and accompanied with a description of the change and the rationale for this change.

Financial support

This project was funded by the Danish Work Environment Research Fund (Arbejdsmiljøforskningsfonden (AMFF)), Grant number: AMFF 01-2018-03

ABSTRACT

Aim: The aim of this paper is to present a protocol for a systematic review and meta-analysis on involuntary early withdrawal from the labour market.

Methods: We will search for studies that examined the relation of determinants from five domains (physical work demands, psychosocial work environment, health behaviours, somatic health problems, mental health problems) with risk of involuntary early withdrawal from the labour market. We will include prospective cohort studies, randomized controlled trials and natural experiments published from 1998 to 2018 and indexed in PubMed, EMBASE, Web of Science and PsycINFO. In addition, we will search research reports published on the homepage of the Danish Work Environment Research Fund, reference lists of included articles and previous reviews, our own article collections and a citation database. We will also contact selected experts from Denmark and the Nordic countries. Two review authors will independently assess eligibility of the studies using pre-defined eligibility criteria. Disagreements will be solved through discussion and a third review author, if necessary. Study quality will be assessed by established instruments. To obtain summary estimates on the association of the potential determinants and risk of involuntary early withdrawal from the labour market, we will pool the study-specific estimates and their standard errors in meta-analyses. In addition, we plan several subgroup analyses, if allowed by the data.

Results: Results will be reported in a Danish language report submitted to the funding source and an English language article submitted to a peer-reviewed research journal.

Conclusion: We expect that this review and meta-analysis will provide new insights into the determinants of involuntary early withdrawal from the labour market.

INTRODUCTION

Involuntary early withdrawal from the labour market, e.g., due to disability pension, is a major challenge for modern welfare states (OECD, 2010). The ability of an individual to participate in the labour market, called workability, is a multidimensional construct determined by factors from various domains, including but not limited to the health of the individual and conditions at the workplace (WHO, 2007).

To the best of our knowledge, no previous systematic reviews have comprehensively examined the various domains that potentially determine labour market participation. However, some reviews have examined specific domains.

A Dutch research group reported in a systematic review published in 2014 that poor self-rated health, poor mental health and chronic diseases were associated with higher risk of withdrawal from the labour market, in particular withdrawal due to disability pension or unemployment (van Rjin et al. 2014). Another review from the same research group identified obesity as a strong predictor of withdrawal (Robroek et al. 2017).

The role of psychological, social and organisational work environment factors for disability pension was examined in a systematic review and meta-analysis of a research group from Norway, Finland and Denmark in 2017. The review concluded that there was moderate evidence for that exposure to low job control and to the combination of high psychological demands and low job control (called job strain) was a predictor of disability pension (Knardahl et al. 2017).

The aim of this protocol is to describe a systematic literature review of determinants of involuntary early withdrawal from the labour market that is not limited to determinants from one specific domain but considers determinants from five different domains: physical work demands, psychosocial work environment, health behaviours, somatic health problems, and mental health problems.

METHODS

Protocol and registration

We conduct this review and meta-analysis in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Shamseer et al. 2015). The review will be registered on the PROSPERO website (<https://www.crd.york.ac.uk/PROSPERO/>).

Eligibility criteria

We will include studies that have examined the relation of variables from the five domains of 1) physical work demands, 2) psychosocial work environment, 3) health behaviours, 4) somatic health problem and 5) mental health problems with risk of involuntary early withdrawal from the labour market. The studies have to be published in peer reviewed research journals from 1st January 1998 to 31st August 2018. In addition, we will consider research reports published on the homepage of the Danish Work Environment Research Fund (<https://arbejdstilsynet.dk/da/om%20arbejdstilsynet/arbejds miljø forsknings fonden/projekter>).

The following types of studies will be eligible: 1) prospective epidemiologic (observational) studies of the association between exposures from the above-listed five domains and the risk of involuntary early withdrawal from the labour market. 2) Randomized controlled intervention studies (including cluster-randomized studies) that examined if an intervention on one of the five domains affected the

likelihood of involuntary early withdrawal from the labour market. 3) Natural experiments on the association of changes in one of the five domains and the likelihood of involuntary early withdrawal from the labour market.

Studies will be included if the participants of the study are adult individuals (≥ 18 years) who are at risk of involuntary early withdrawal from the labour market, i.e. who are active in the labour market and have not reached statutory retirement age at baseline. Studies will be excluded if the participants of the study are individuals who are younger than 18 years old, who are older than the statutory retirement age of the country they live in, or who are not active in the labour market at baseline.

We will include articles written in English, Danish, Norwegian, Swedish and German.

Definition and measurement of the determinants (exposures)

The determinants of interest are defined within the following five domains: 1) physical work demands, 2) psychosocial work environment, 3) health behaviours, 4) mental health problems, 5) somatic health problems.

Physical work demands pertain to factors at work such as lifting, carrying, pushing or pulling objects, working with the arms above shoulder height, repetitive and forceful work, twisting and bending of the back, standing, walking and seated work. It can also include bodily perceptions of physical exertion during work, e.g. measured by the Borg scale. The **psychosocial working environment** includes psychological and social exposures at work and the organization of work. Both physical and psychosocial working environment can be measured by Self reported measures (e.g., questionnaires) and non-Self reported measures (e.g., register data, rating by external observers, technical measures).

Health behaviours will include diet, tobacco use, alcohol consumption, and exercise. For the definition of unhealthy diet, we will rely on the study specific definitions under the precondition that the study specific definitions were based on established guidelines or documented evidence from previous research. Otherwise, the study will not be included. We will also use a body mass index (BMI) below 18.5 or above 25 as a proxy for unhealthy diet. Tobacco use will include smoking and passive smoking in any amount. Regarding alcohol intake we will, to the extent the measures in the studies allow this, define low risk and high risk limits in accordance with the guidelines by the Danish Health Authorities: Among men, low risk is defined as ≤ 14 units pr. week and high risk as > 21 units pr. week. Among women, low risk is defined as ≤ 7 units pr. week and high risk as > 14 units pr. week. Regarding exercise, we will, to the extent the measures in the studies allow this, categorise duration and intensity of exercise in accordance with the "Saltin–Grimby Physical Activity Level Scale" with the four levels "Sedentary", "Some physical activity", "Moderate physical activity" and "Vigorous physical

activity” (Grimby et al. 2015). If this categorisation is not possible, we might use the study-specific scale and their cut-points, if they appear appropriate.

Somatic health problems include any disease or somatic health problem defined in the “International Classification of Disease, 10th version” (ICD-10) from WHO. The disease or health problem must be diagnosed by a qualified professional or registered in administrative data, registry data or by hospital admission. Self reported disease or self-rated health will not be included.

Mental health problems include any psychiatric disorder (coded with an F-diagnose in ICD-10 or defined in “Diagnostic and Statistical Manual of Mental Disorders” (DSM) by the American Psychiatric Association). The disorder will be measured by either a psychiatric diagnostic interview, a diagnosis by a qualified professional, administrative data, registry data, and data of hospital admission. In the case of mental health problems we will, contrary to somatic health problems, also include measures with self-administered rating scales for the disorder, but only if the rating scale was previously validated against a clinical measure and had dichotomized respondents into cases versus non-cases.

Definition and measurement of the outcome

The outcome we study is the risk of involuntary early withdrawal from the labour market. This is defined as involuntarily moving to disability pension, part-time disability pension, reduced working hours jobs, specific types of non-regular employment such as “sheltered employment” or “light jobs” or entering a work rehabilitation program.

Time periods of unemployment, long-term sickness absence and social welfare benefits will be included as outcomes if the following two circumstances are both fulfilled: 1) The time period has been at least a year and 2) the period of unemployment, long-term sickness absence and social welfare was immediately followed by permanent withdrawal from the labour market, for example by entering early retirement or statutory retirement age.

Population and comparators

We include adult individuals (≥ 18 years) who are at risk of involuntary early withdrawal from the labour market, i.e. who are active in the labour market and have not reached statutory retirement age at baseline.

We will compare individuals who have been influenced by determinants in the five domains of interest with individuals with zero or low exposure.

For the two domains of work environment: Depending on the type of exposure we will compare individuals who are exposed to the work factor to individuals with zero or low exposure.

For the domain pertaining health behaviour, we will compare individuals with risky health behaviours, with individuals without this behaviour.

For the domains of somatic and mental health, we will compare individuals with a disease or disorder with individuals without this particular disease or disorder.

Search strategy and sources

The search strategy contains six elements: 1) searching electronic academic databases: Pubmed, EMBASE, Web of Science and PsycINFO. We search the last 20 years, i.e. from 1st January 1998 to 31st August 2018; 2) searching reports available on the homepage of the Danish Work Environment Research Fund (<https://arbejdstilsynet.dk/da/om%20arbejdstilsynet/arbejdsmiljoforskningsfonden/projekter>) as this contains results from most relevant Danish studies during the search period; 3) screening the reference list of all eligible studies and from previously published reviews to identify studies that we missed in the electronic search; 4) identifying studies citing one or more of our included studies through the citation database of Web of Science ; 5) searching the article collection of the review authors; 6) contacting selected experts from Denmark and the Nordic countries to ensure that we have included all relevant studies.

For a detailed search string we refer to the appendix titled: “Development and testing of search strategy for a systematic review on determinants of involuntary early withdrawal from the labour market”, published at the Prospero registration of this protocol.

Software and study record

We will download the results of the search to Endnote and keep all studies in an Endnote library. We will use the review software programme Covidence to do the screening and data extraction. All records found in the search will be screened by title and abstract independently by two members from the project group. Disagreement will be resolved by a third group member. If the inclusion criteria are met, the full text of the studies will be retrieved, and further assessed for eligibility by two members of the project group. Disagreement will be resolved by a third group member, and reasons for excluding the studies will be documented during the full-text screening. To summarise the process of the study selection a PRISMA flow chart will be generated.

We will also use Covidence for data extraction. Two different reviewers extract the data using standardised forms. Disagreement will be resolved by a discussion and the involvement of a third reviewer, if necessary.

Data items – data extraction

We will extract the following information from each eligible study: Reference, publication year, country, population (including industrial sector), type of exposure (or type of intervention), type of outcome (e.g. withdrawal due to full disability pension vs. part-time disability pension), study design, covariates used for analysis, sample size, risk and effect estimates and the uncertainty (for instance confidence intervals).

If a study has more than one risk or effect estimates we choose the most adjusted estimate, unless two reviewers, doing the data extraction independently of each other, assess that the estimate is over adjusted and that a different estimate from the analyses should be selected.

Risk of bias assessment

For the risk of bias assessment we will use different tools to the different types of studies.

For observational studies we will use the “Newcastle-Ottawa scale” designed for assessing the quality of nonrandomised studies in meta-analyses. We will use the Assessment Scale for Cohort Studies (Wells et al. 2008), available at: http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp. Each study will be assigned a number of stars, with a total maximum of nine stars. A maximum of four stars can be given on account of the selection of study population, two stars can be given in terms of comparability and three stars can be given based on the outcome. Disagreement between the two review authors will be resolved by discussion, with involvement of a third review author where necessary. A study will be rated as good quality if the study obtained: Three or four stars in the Selection domain AND one or two stars in the Comparability domain AND two or three stars in the Outcome domain. The study will be rated as fair quality if the study obtained: Two stars in the Selection domain AND one or two stars in the Comparability domain AND two or three stars in the Outcome domain. The study will be rated as poor quality if the study obtained: Zero or one star in the Selection domain OR zero stars in the Comparability domain OR zero or one star in the Outcome domain.

For the intervention studies we will use the “risk of bias tool” from the Cochrane Collaboration Handbook available at: https://handbook-5-1.cochrane.org/chapter_8/8_assessing_risk_of_bias_in_included_studies.htm. Each included intervention study will be investigated by two reviewers based on the following six domains with a rating of low, high or unclear risk of bias; sequence generation, allocation concealment, blinding, incomplete outcome data, selective outcome reporting and other biases. Disagreement between the reviewers will be solved by a discussion and involvement of a third reviewer if necessary.

For natural experiments, we will use the ROBINS-I tool (Thomson et al. 2018) to assess risk of bias. Each study will be assessed for risk of bias based on signalling questions within the following domains: confounding, selection of participants, classification of the interventions, deviation from intended interventions, missing data, measurement of outcomes, selection of reported result. Options for each signalling question is “low risk of bias”, “moderate risk of bias”, “serious risk of bias”, “critical risk of bias”, and “no information”. The tool prerequisites that the confounding variables and possible co-interventions must be specified in advance at protocol-level, but since this review is not restricted to one but many different determinants it is not possible to define this in advance. If we find any natural experiment studies, we will define confounders and co-interventions as early as possible in the screening/assessment process.

If other risk of bias (quality) assessment instruments become available at the time of screening and if we consider these new instruments superior to the currently selected instruments, then we may switch to these new instruments.

The risk of bias assessment will be used as part of the quality of evidence assessment that will state the confidence in the different estimates from the meta-analysis.

Data synthesis

We will present the data from each study in tables stratified by the 5 domains of exposure. If at least two studies are found within each domain, we will conduct a random effect meta-analysis within the domains.

The meta-analyses will be conducted separately for observational studies, intervention studies and natural experiments. For early retirement the meta-analyses will also be conducted separately, since this kind of retirement can be both voluntary and involuntary.

Heterogeneity across studies in the 5 domains will be measured with I^2 statistics as described in Higgins et al. (2003).

If heterogeneity is high ($I^2 \geq 75\%$) within a domain we will do more analyses by grouping factors of exposure inside the domain and examine if this improves the analyses. We will use meta-regression techniques to examine whether the total effect is modified by a third variable.

If there is sufficient data we will conduct subgroup analysis based on sex, age, and job type.

We will also stratify the analysis by study origin distinguishing first studies from Denmark vs other countries, and second distinguishing studies from all Nordic countries (Norway, Sweden, Denmark, Iceland, and Finland) vs other countries.

Finally, we will also stratify the analysis according to our risk of bias assessment (low versus high risk of bias).

Strength of evidence

For assessment of the strength of the evidence and the confidence in the pooled estimates found we will use "The Grading of Recommendations Assessment, Development and Evaluation" (GRADE) as described in Morgan et al. (2016). The study types establish an initial level of certainty. Next, it will be considered if the certainty will be raised or lowered by considering a list of predefined concepts. The list of concepts include risk of bias, inconsistency, indirectness, imprecision, publication bias, large effects, dose response, and direction and impact of confounding variables. We will do this assessment for each pooled estimate.

RESULTS

Results will be reported in a report in Danish language, submitted to the Danish Working Environment Research Fund and in a manuscript in English language, submitted to a peer-reviewed research journal.

REFERENCES

Grimby G, Borjesson M, Jonsdottir IH, Schnohr P, Thelle DS, Saltin, B. The "Saltin-Grimby Physical Activity Level Scale" and its application to health research. *Scandinavian Journal of Medicine & Science in Sports* 2015; 25: 119-125. doi:10.1111/sms.12611

Higgins JPT, Thompson SG, Deeks JJ, Altman DG. Measuring inconsistency in meta-analyses. *British Medical Journal* 2003; 327(7414): 557-560. doi:DOI 10.1136/bmj.327.7414.557

Knardahl S, Johannessen HA, Sterud T, Harma M, Rugulies R, Seitsamo J, Borg, V. The contribution from psychological, social, and organizational work factors to risk of disability retirement: A systematic review with meta-analyses. *Bmc Public Health* 2017; 17(176). doi: ARTN 176 10.1186/s12889-017-4059-4

Morgan RL, Thayer KA, Bero L, Bruce, N, Falck-Ytter Y, Gherzi D, Guyatt G, Hooijmans C, Langendam M, Mandrioli D, Mustafa RA, Rehfuss EA, Rooney AA, Shea B, Silbergeld EK, Sutton P, Wolfe MS, Woodruff TJ, Verbeek JH, Holloway AC, Santesso, N, Schünemann HJ. GRADE: Assessing the quality of

evidence in environmental and occupational health. *Environment International* 2016;92-93:611-616. doi:10.1016/j.envint.2016.01.004

Organisation for Economic Co-operation and Development (OECD). *Sickness, disability and work: Breaking the barriers*. 2010 [accessed 13 September 2018]. Available from: <http://www.oecd.org/publications/sickness-disability-and-work-breaking-the-barriers-9789264088856-en.htm>.

Robroek SJW, Jarvholm B, van der Beek A J, Proper KI, Wahlstrom J, Burdorf A. (2017). Influence of obesity and physical workload on disability benefits among construction workers followed up for 37 years. *Occupational and Environmental Medicine* 2017;74(9):621-627. doi:10.1136/oemed-2016-104059

Shamseer L, Moher D, Clarke M, Gherzi D, Liberati A, Petticrew M, Shekelle P, Stewart LA, the PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *BMJ* 2015;350:g7647. doi:10.1136/bmj.g7647

Thomson H, Craig P, Hilton-Boon M, Campbell M, Katikireddi SV. Applying the ROBINS-I tool to natural experiments: an example from public health. *Systematic Reviews* 2018;7:15. doi:10.1186/s13643-017-0659-4

van Rijn RM, Robroek SJ, Brouwer S, Burdorf A. Influence of poor health on exit from paid employment: a systematic review. *Occupational and Environmental Medicine* 2014; 71(4), 295-301. doi:10.1136/oemed-2013-101591

World Health Organization. *The International Classification of Functioning, Disability and Health (ICF)* [2007] [accessed March, 3rd 2015]. Available from: <http://www.who.int/classifications/icf/en/>.

Development and testing of the search strategy for a systematic review on determinants of involuntary early withdrawal from the labour market.

This document describes the development and testing of the search strategy for the systematic review “Determinants of involuntary early withdrawal from the labour market: a systematic review with meta-analysis” that is registered on the PROSPERO website.

Development of search strategy

According to the project description in the grant proposal for this review and the subsequent PROSPERO registration, the search has to be conducted in four academic databases that is Pubmed, EMBASE, Web of Science, and PsycINFO. The search covers articles published in the last 20 years that is articles published between January 1st, 1998 and August 31st, 2018.

Our strategy was developed in Pubmed, and will afterward be translated to the search engine of other databases.

The strategy was based on two blocks of search terms.

1. to capture articles on early involuntary withdrawal from the labour market according to our definition of this
2. to capture articles about the 5 domains of determinants of early involuntary withdrawal from the labour market

Combining block 1 AND block 2 would give articles relevant for this review, but also a large number of false positive articles. Therefore, we added a block of terms that would limit the search to articles that reported determinants and risks. This block is called 3.

We also added a filter of “year of publication” and “human studies”.

Preliminary search of all three blocks combined (September 10)

History

[Download history](#)[Clear history](#)

Recent queries				
Search	Add to builder	Query	Items found	Time
#9	Add	Search (#1 AND #5 AND #6) Filters: Publication date from 1998/01/01 to 2018/08/31; Humans	6117	04:50:26
#8	Add	Search (#1 AND #5 AND #6) Filters: Publication date from 1998/01/01 to 2018/08/31	6709	04:50:25
#7	Add	Search (#1 AND #5 AND #6)	8304	04:50:11
#6	Add	Search (((((((((((((((((((((((risk[Title/Abstract]) OR risks[Title/Abstract]) OR determinant[Title/Abstract]) OR determinants[Title/Abstract]) OR determinate[Title/Abstract]) OR hazard[Title/Abstract]) OR hazards[Title/Abstract]) OR subsequent[Title/Abstract]) OR predictor[Title/Abstract]) OR predictors[Title/Abstract]) OR predict[Title/Abstract]) OR predicts[Title/Abstract]) OR association[Title/Abstract]) OR	68094 55	04:48:25

		associations[Title/Abstract]) OR associated[Title/Abstract]) OR relationship[Title/Abstract]) OR causal[Title/Abstract]) OR odds[Title/Abstract]) OR cause[Title/Abstract]) OR causes[Title/Abstract]) OR likelihood[Title/Abstract])		
#5	Add	Search (#2 OR #3 OR #4)	79691 14	04:44: 18
#4	Add	Search (((((((("Disease"[MeSH]) OR "Syndrome"[MeSH]) OR "Diagnosis"[Mesh:NoExp]) OR "Chronic Disease"[Mesh]) OR "Communicable Diseases"[Mesh]) OR "Health"[Mesh]) OR "Mental Health"[Mesh]) OR "Mental Disorders"[Mesh]) OR (((((((("Disorder"[Title/Abstract]) OR "Disease"[Title/Abstract]) OR "Illness"[Title/Abstract]) OR "Sickness"[Title/Abstract]) OR "Syndrome"[Title/Abstract]) OR "Diagnose"[Title/Abstract]) OR "diagnosed"[Title/Abstract]) OR "health problem"[Title/Abstract]) OR "health problems"[Title/Abstract]) OR "health status"[Title/Abstract]) OR "poor health"[Title/Abstract]) OR "bad health"[Title/Abstract]) OR "suboptimal health"[Title/Abstract]))	54460 09	04:44: 09
#3	Add	Search (((("Health Behavior"[Mesh:NoExp]) OR "Health Risk Behaviors"[Mesh]) OR (((((((("health behaviour"[Text Word]) OR "health behaviours"[Text Word]) OR "health behavior"[Title/Abstract]) OR "health behaviors"[Title/Abstract]) OR "healthy behaviour"[Text Word]) OR "healthy behaviours"[Text Word]) OR "unhealthy behaviour"[Text Word]) OR "unhealthy behaviours"[Text Word]) OR "health risk behaviour"[Text Word]) OR "health risk behaviours"[Title/Abstract]) OR "health risk behavior"[Text Word]) OR "health risk behaviors"[Title/Abstract]) OR (((("Life Style"[MeSH]) OR "Risk Reduction Behavior"[Mesh:NoExp]) OR "Risk Factors"[MeSH]) OR "life style"[Title/Abstract]) OR "risk reduction behavior"[Title/Abstract]) OR (((((((("Smoking Cessation"[MeSH]) OR "Smoking Reduction"[MeSH]) OR "Tobacco Use Cessation"[MeSH]) OR "Smoking"[MeSH]) OR "Tobacco Use"[MeSH]) OR "smoking"[Title/Abstract]) OR "tobacco"[Title/Abstract]) OR (((("Diet"[Mesh:NoExp]) OR nutrition[MeSH]) OR diet[Title/Abstract]) OR nutrition[Text Word]) OR consumption[Title/Abstract]) OR (((("Exercise"[MeSH]) OR exercise[Title/Abstract]) OR "Sedentary Lifestyle"[Mesh]) OR "sedentary lifestyle"[Title/Abstract]) OR ((Alcohol Drinking[MeSH]) AND "Alcohol"[Title/Abstract]))	19968 42	04:44: 00
#2	Add	Search (((((((((((("Work"[MeSH]) OR "Workload"[Mesh]) OR "Workplace"[Mesh]) OR "Occupational Health"[Mesh]) OR "Occupational Diseases"[Mesh]) OR "Occupational Groups"[Mesh]) OR "Occupational Exposure"[Mesh]) OR "Occupations"[Mesh]) OR "Women, Working"[Mesh]) OR "Employment"[Mesh:NoExp]) OR "Burnout, Professional"[Mesh]) OR (((((((((((((((((((((((work[Title]) OR worker[Title/Abstract]) OR workers[Title/Abstract]) OR work-related[Title/Abstract]) OR work-load*[Title/Abstract]) OR workload*[Title/Abstract]) OR workplace*[Title/Abstract]) OR work-place*[Title/Abstract]) OR work environment*[Title/Abstract]) OR working condition*[Title/Abstract]) OR work stress[Title/Abstract]) OR work demand[Title/Abstract]) OR work demands[Title/Abstract]) OR occupation[Title/Abstract]) OR occupational[Title/Abstract]) OR occupationally[Title/Abstract]) OR job[Title/Abstract]) OR jobs[Title/Abstract]) OR employ[Title/Abstract]) OR employed[Title/Abstract]) OR	17204 27	04:43: 52

		employee[Title/Abstract]) OR employees[Title/Abstract]) OR employment[Title/Abstract]) OR employments[Title/Abstract]) OR organization[Title/Abstract]) OR organisation[Title/Abstract]) OR organizational[Title/Abstract]) OR organisational[Title/Abstract]) OR organizations[Title/Abstract]) OR organisations[Title/Abstract]) OR company[Title/Abstract]) OR companies[Title/Abstract])		
#1	Add	Search (((((((("withdrawal"[Text Word]) OR "retirement"[Text Word]) OR "expulsion"[Text Word]) OR "pension"[Text Word])) AND (((("labour market"[Text Word]) OR "labor market"[Text Word]) OR "job market"[Text Word]) OR (((((((((((("early retirement"[Text Word]) OR "disability pension"[Text Word]) OR "disability pensioning"[Text Word]) OR "disability retirement"[Text Word]) OR "disability compensation"[Text Word]) OR "work disability"[Text Word]) OR "part-time disability pension"[Text Word]) OR "disability insurance"[Text Word]) OR "reduced working hours"[Text Word]) OR "reduced work hour"[Text Word]) OR "reduced hours"[Text Word]) OR "light job"[Text Word]) OR "flexible job"[Text Word]) OR "flex job"[Text Word]) OR "long-term benefits"[Text Word]) OR "state pension"[Text Word]) OR ("rehabilitation program"[Text Word]) AND (((((((((((work[Title]) OR working[Text Word]) OR job[Text Word]) OR jobs[Text Word]) OR labour[Text Word]) OR labor[Text Word]) OR employee[Text Word]) OR employment[Text Word]) OR retirement[Text Word]) OR retire[Text Word]) OR occupation[Text Word])) OR (((("Disabled Persons"[Mesh]) OR disability[Title/Abstract]) OR "rehabilitation program"[Title/Abstract])) AND "Retirement"[Mesh]) OR (((("Insurance, Disability"[Mesh]) OR "Social Security"[Mesh]) OR "Retirement"[Mesh]) OR "Pensions"[Mesh]) OR (((("long term sickness absence "[Text Word]) OR "long term sick leave"[Text Word]) OR "long term sickleave"[Text Word]) OR "social welfare benefits"[Text Word]) OR unemployment[Text Word])) AND ((retire*[Text Word]) OR pension*[Text Word])) OR (((pension*[Title/Abstract]) OR retire*[Title/Abstract])) AND early[Title/Abstract]) OR (((((((workability[Text Word]) OR "work role functioning"[Text Word]) OR "work ability"[Text Word]) OR "work disability"[Text Word])) AND ((retirement[Text Word]) OR pension*[Text Word])) OR (statutory[All Fields] AND ("retirement"[MeSH Terms] OR "retirement"[All Fields]) AND ("age"[All Fields]))	35449	04:43:19

Block 1 – terms related to involuntary early withdrawal from the labour market

Involuntary early withdrawal from the labour market is defined as follows in the PROSPERO registration:

The primary outcome of this review is the risk of involuntary early withdrawal from the labour market. This is defined as involuntary moving to either disability pension, part-time disability pension reduced working hours jobs, specific types of non-regular employment such as “sheltered employment” or “light jobs” or entering a work rehabilitation program.

Time periods of unemployment, long-term sickness absence, and social welfare benefits will be included of two circumstances are fulfilled: 1) The time period has been at least a year and 2) the

period of unemployment, long-term sickness absence, and social welfare was immediately followed by permanent withdrawal from the labour market, for example by entering early retirement or statutory retirement age.

Block 1 is set up in the following way:

(((((("withdrawal"[Text Word]) OR "retirement"[Text Word]) OR "expulsion"[Text Word]) OR "pension"[Text Word])) AND (((("labour market"[Text Word]) OR "labor market"[Text Word]) OR "job market"[Text Word]))

OR

((((((((((((((("early retirement"[Text Word]) OR "disability pension"[Text Word]) OR "disability pensioning"[Text Word]) OR "disability retirement"[Text Word]) OR "disability compensation"[Text Word]) OR "work disability"[Text Word]) OR "part-time disability pension"[Text Word]) OR "disability insurance"[Text Word]) OR "reduced working hours"[Text Word]) OR "reduced work hour"[Text Word]) OR "reduced hours"[Text Word]) OR "light job"[Text Word]) OR "flexible job"[Text Word]) OR "flex job"[Text Word]) OR "long-term benefits"[Text Word]) OR "state pension"[Text Word]))

OR

((("rehabilitation program"[Text Word]) AND (((((((((((work[Title]) OR working[Text Word]) OR job[Text Word]) OR jobs[Text Word]) OR labour[Text Word]) OR labor[Text Word]) OR employee[Text Word]) OR employment[Text Word]) OR retirement[Text Word]) OR retire[Text Word]) OR occupation[Text Word]))

OR

(((((("Disabled Persons"[Mesh]) OR disability[Title/Abstract]) OR "rehabilitation program"[Title/Abstract])) AND "Retirement"[Mesh]))

OR

(((((("Insurance, Disability"[Mesh]) OR "Social Security"[Mesh]) OR "Retirement"[Mesh]) OR "Pensions"[Mesh]))

OR

((((((("long term sickness absence "[Text Word]) OR "long term sick leave"[Text Word]) OR "long term sickleave"[Text Word]) OR "social welfare benefits"[Text Word]) OR unemployment[Text Word])) AND ((retire*[Text Word]) OR pension*[Text Word]))

OR

(((((pension*[Title/Abstract]) OR retire*[Title/Abstract])) AND early[Title/Abstract]))

OR

((((((workability[Text Word]) OR "work role functioning"[Text Word]) OR "work ability"[Text Word]) OR "work disability"[Text Word])) AND ((retirement[Text Word]) OR pension*[Text Word]))

OR

(statutory[All Fields] AND ("retirement"[MeSH Terms] OR "retirement"[All Fields]) AND ("age"[All Fields]))

Results from the preliminary search (September 7)

History

[Download history](#)[Clear history](#)

Recent queries				
Search	Add to builder	Query	Items found	Time
#20	Add	Search (#3 OR #4 OR #7 OR #9 OR #10 OR #13 OR #15 OR #18 OR #19)	35433	04:19:37
#19	Add	Search (statutory[All Fields] AND ("retirement"[MeSH Terms] OR "retirement"[All Fields]) AND ("age"[All Fields]))	58	04:16:58
#18	Add	Search (((((workability[Text Word]) OR "work role functioning"[Text Word]) OR "work ability"[Text Word]) OR "work disability"[Text Word])) AND ((retirement[Text Word]) OR pension*[Text Word]))	393	04:16:00
#17	Add	Search (retirement[Text Word]) OR pension*[Text Word]	22617	04:15:55
#16	Add	Search (((workability[Text Word]) OR "work role functioning"[Text Word]) OR "work ability"[Text Word]) OR "work disability"[Text Word]	3578	04:15:35
#15	Add	Search (((pension*[Title/Abstract]) OR retire*[Title/Abstract])) AND early[Title/Abstract]	2492	04:14:28
#14	Add	Search (pension*[Title/Abstract]) OR retire*[Title/Abstract]	23166	04:14:01
#13	Add	Search ((((((("long term sickness absence "[Text Word]) OR "long term sick leave"[Text Word]) OR "long term sickleave"[Text Word]) OR "social welfare benefits"[Text Word]) OR unemployment[Text Word])) AND ((retire*[Text Word]) OR pension*[Text Word]))	806	04:13:17

Recent queries

Search	Add to builder	Query	Items found	Time
#12	Add	Search (retire*[Text Word]) OR pension*[Text Word]	27621	04:13:05
#11	Add	Search (((("long term sickness absence "[Text Word]) OR "long term sick leave"[Text Word]) OR "long term sickleave"[Text Word]) OR "social welfare benefits"[Text Word]) OR unemployment[Text Word]	13402	04:12:38
#10	Add	Search (((("Insurance, Disability"[Mesh]) OR "Social Security"[Mesh]) OR "Retirement"[Mesh]) OR "Pensions"[Mesh])	27166	04:11:01
#9	Add	Search (((("Disabled Persons"[Mesh]) OR disability[Title/Abstract]) OR "rehabilitation program"[Title/Abstract])) AND "Retirement"[Mesh]	594	04:09:37
#8	Add	Search ((("Disabled Persons"[Mesh]) OR disability[Title/Abstract]) OR "rehabilitation program"[Title/Abstract])	183309	04:09:17
#7	Add	Search ("rehabilitation program"[Text Word]) AND ((((((((((work[Title]) OR working[Text Word]) OR job[Text Word]) OR jobs[Text Word]) OR labour[Text Word]) OR labor[Text Word]) OR employee[Text Word]) OR employment[Text Word]) OR retirement[Text Word]) OR retire[Text Word]) OR occupation[Text Word])	599	04:07:24
#6	Add	Search ((((((((((work[Title]) OR working[Text Word]) OR job[Text Word]) OR jobs[Text Word]) OR labour[Text Word]) OR labor[Text Word]) OR employee[Text Word]) OR employment[Text Word]) OR retirement[Text Word]) OR retire[Text Word]) OR occupation[Text Word])	605557	04:07:17
#5	Add	Search "rehabilitation program"[Text Word]	7537	04:05:22
#4	Add	Search (((((((((((("early retirement"[Text Word]) OR "disability pension"[Text Word]) OR "disability pensioning"[Text Word]) OR "disability retirement"[Text Word]) OR "disability compensation"[Text Word]) OR "work disability"[Text Word]) OR "part-time disability pension"[Text Word]) OR "disability insurance"[Text Word]) OR "reduced working hours"[Text Word]) OR "reduced work hour"[Text Word]) OR "reduced hours"[Text Word]) OR "light job"[Text Word]) OR "flexible	9324	04:04:32

Recent queries				
Search	Add to builder	Query	Items found	Time
		job"[Text Word]) OR "flex job"[Text Word]) OR "long-term benefits"[Text Word]) OR "state pension"[Text Word]		
#3	Add	Search (((("withdrawal"[Text Word]) OR "retirement"[Text Word]) OR "expulsion"[Text Word]) OR "pension"[Text Word])) AND ((("labour market"[Text Word]) OR "labor market"[Text Word]) OR "job market"[Text Word])	428	04:01:13
#2	Add	Search (((("withdrawal"[Text Word]) OR "retirement"[Text Word]) OR "expulsion"[Text Word]) OR "pension"[Text Word])	118 772	04:01:01
#1	Add	Search (((("labour market"[Text Word]) OR "labor market"[Text Word]) OR "job market"[Text Word])	427 9	04:00:23

Block 2 – terms related to the 5 domains of determinants of interest

The 5 domains of determinants were captured in 3 different groups of terms. The first group includes terms related to work. These terms were meant to identify articles in the domain of “physical work environment” and “psychosocial work environment”. The second group includes terms related to the health behaviors of interest to this review. The last group includes terms meant to identify articles related to somatic and mental health problems.

Work environment

For this group of terms, we used words associated with work and employment.

The search looks like this:

((((((((((("Work"[MeSH]) OR "Workload"[Mesh]) OR "Workplace"[Mesh]) OR "Occupational Health"[Mesh]) OR "Occupational Diseases"[Mesh]) OR "Occupational Groups"[Mesh]) OR "Occupational Exposure"[Mesh]) OR "Occupations"[Mesh]) OR "Women, Working"[Mesh]) OR "Employment"[Mesh:NoExp]) OR "Burnout, Professional"[Mesh])

OR

((work[Title] OR worker[Title/Abstract] OR workers[Title/Abstract] OR work-related[Title/Abstract] OR work-load*[Title/Abstract] OR workload*[Title/Abstract] OR workplace*[Title/Abstract] OR work-place*[Title/Abstract] OR work environment*[Title/Abstract] OR working condition*[Title/Abstract] OR work stress[Title/Abstract] OR work demand[Title/Abstract] OR work demands[Title/Abstract] OR occupation[Title/Abstract] OR occupational[Title/Abstract] OR occupationally[Title/Abstract] OR job[Title/Abstract] OR jobs[Title/Abstract] OR employ[Title/Abstract] OR employed[Title/Abstract] OR employee[Title/Abstract] OR employees[Title/Abstract] OR employment[Title/Abstract] OR employments[Title/Abstract] OR organization[Title/Abstract] OR organisation[Title/Abstract] OR organizational[Title/Abstract] OR organisational[Title/Abstract] OR organizations[Title/Abstract] OR organisations[Title/Abstract] OR company[Title/Abstract] OR companies[Title/Abstract]

Results from the preliminary search (September 10)

History

[Download history](#)[Clear history](#)

Recent queries				
Search	Add to builder	Query	Items found	Time
#1 <u>1</u>	Add	Search (#1 OR #10)	172 010 0	07: 40: 56
#1	Add	Search (((((((((((("Work"[MeSH] OR "Workload"[Mesh] OR "Workplace"[Mesh] OR "Occupational Health"[Mesh] OR "Occupational Diseases"[Mesh] OR "Occupational Groups"[Mesh] OR "Occupational Exposure"[Mesh] OR "Occupations"[Mesh] OR "Women, Working"[Mesh] OR "Employment"[Mesh:NoExp] OR "Burnout, Professional"[Mesh]))	800 014	07: 40: 47
#1 <u>0</u>	Add	Search (((work[Title] OR worker[Title/Abstract] OR workers[Title/Abstract] OR work-related[Title/Abstract] OR work-load*[Title/Abstract] OR workload*[Title/Abstract] OR workplace*[Title/Abstract] OR work-place*[Title/Abstract] OR work environment*[Title/Abstract] OR working condition*[Title/Abstract] OR work stress[Title/Abstract] OR work demand[Title/Abstract] OR work demands[Title/Abstract] OR occupation[Title/Abstract] OR occupational[Title/Abstract] OR occupationally[Title/Abstract] OR job[Title/Abstract] OR jobs[Title/Abstract] OR employ[Title/Abstract] OR employed[Title/Abstract] OR employee[Title/Abstract] OR employees[Title/Abstract] OR employment[Title/Abstract] OR employments[Title/Abstract] OR organization[Title/Abstract] OR organisation[Title/Abstract] OR organizational[Title/Abstract] OR organisational[Title/Abstract] OR organizations[Title/Abstract] OR organisations[Title/Abstract] OR company[Title/Abstract] OR companies[Title/Abstract]	115 211 1	07: 39: 58

Health behavior

For this group of terms, we used words associated with health behavior including diet, smoking, alcohol, and exercise according to our inclusion criteria.

The search string become this:

("Health Behavior"[Mesh:NoExp]) OR "Health Risk Behaviors"[Mesh])

OR

(((((("health behaviour"[Text Word]) OR "health behaviours"[Text Word]) OR "health behavior"[Title/Abstract]) OR "health behaviors"[Title/Abstract]) OR "healthy behaviour"[Text Word]) OR "healthy behaviours"[Text Word]) OR "unhealthy behaviour"[Text Word]) OR "unhealthy behaviours"[Text Word]) OR "health risk behaviour"[Text Word]) OR "health risk behaviours"[Title/Abstract]) OR "health risk behavior"[Text Word]) OR "health risk behaviors"[Title/Abstract])

OR

((("Life Style"[MeSH]) OR "Risk Reduction Behavior"[Mesh:NoExp]) OR "Risk Factors"[MeSH]) OR "life style"[Title/Abstract]) OR "risk reduction behavior"[Title/Abstract])

OR

(((((("Smoking Cessation"[MeSH]) OR "Smoking Reduction"[MeSH]) OR "Tobacco Use Cessation"[MeSH]) OR "Smoking"[MeSH]) OR "Tobacco Use"[MeSH]) OR "smoking"[Title/Abstract]) OR "tobacco"[Title/Abstract])

OR

((("Diet"[Mesh:NoExp]) OR nutrition[MeSH]) OR diet[Title/Abstract]) OR nutrition[Text Word]) OR consumption[Title/Abstract])

OR

((("Exercise"[MeSH]) OR exercise[Title/Abstract]) OR "Sedentary Lifestyle"[Mesh]) OR "sedentary lifestyle"[Title/Abstract])

OR

((Alcohol Drinking[MeSH]) AND "Alcohol"[Title/Abstract])

Results from the preliminary search (September 7)

History

[Download history](#)[Clear history](#)

Recent queries

Search	Add to builder	Query	Items found	Time
#32	Add	Search (#25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31)	199 598 4	04: 42: 05
#31	Add	Search (Alcohol Drinking[MeSH]) AND "Alcohol"[Title/Abstract]	477 26	04: 40: 53
#30	Add	Search (((("Exercise"[MeSH Terms]) OR exercise[Title/Abstract]) OR "Sedentary Lifestyle"[Mesh]) OR "sedentary lifestyle"[Title/Abstract])	331 150	04: 39: 22
#29	Add	Search (((("Diet"[Mesh:NoExp]) OR nutrition[MeSH Terms]) OR diet[Title/Abstract]) OR nutrition[Text Word]) OR consumption[Title/Abstract]	754 877	04: 38: 38
#28	Add	Search (((((((("Smoking Cessation"[MeSH Terms]) OR "Smoking Reduction"[MeSH Terms]) OR "Tobacco Use Cessation"[MeSH Terms]) OR "Smoking"[MeSH Terms]) OR "Tobacco Use"[MeSH Terms]) OR "smoking"[Title/Abstract]) OR "tobacco"[Title/Abstract])	301 058	04: 37: 16
#27	Add	Search (((("Life Style"[MeSH Terms]) OR "Risk Reduction Behavior"[Mesh:NoExp]) OR "Risk Factors"[MeSH]) OR "life style"[Title/Abstract]) OR "risk reduction behavior"[Title/Abstract]	813 064	04: 35: 49
#26	Add	Search (((((((((((("health behaviour"[Text Word]) OR "health behaviours"[Text Word]) OR "health behavior"[Title/Abstract]) OR "health behaviors"[Title/Abstract]) OR "healthy behaviour"[Text Word]) OR "healthy behaviours"[Text Word]) OR "unhealthy behaviour"[Text Word]) OR "unhealthy behaviours"[Text Word]) OR "health risk behaviour"[Text Word]) OR "health risk behaviours"[Title/Abstract]) OR "health risk behavior"[Text Word]) OR "health risk behaviors"[Title/Abstract]	222 11	04: 33: 48
#25	Add	Search ("Health Behavior"[Mesh:NoExp]) OR "Health Risk Behaviors"[Mesh]	451 52	04: 32: 01

Health problems

For this group of terms, we used words associated with health problems including diseases or disorder according to our inclusion criteria; the health problems should be an ICD and DSM classification.

The search string become this:

(((((("Disease"[MeSH]) OR "Syndrome"[MeSH]) OR "Diagnosis"[Mesh:NoExp]) OR "Chronic Disease"[Mesh]) OR "Communicable Diseases"[Mesh]) OR "Health"[Mesh]) OR "Mental Health"[Mesh]) OR "Mental Disorders"[Mesh])

OR

((((((((((("Disorder"[Title/Abstract]) OR "Disease"[Title/Abstract]) OR "Illness"[Title/Abstract]) OR "Sickness"[Title/Abstract]) OR "Syndrome"[Title/Abstract]) OR "Diagnose"[Title/Abstract]) OR "diagnosed"[Title/Abstract]) OR "health problem"[Title/Abstract]) OR "health problems"[Title/Abstract]) OR "health status"[Title/Abstract]) OR "poor health"[Title/Abstract]) OR "bad health"[Title/Abstract]) OR "suboptimal health"[Title/Abstract]

Results from preliminary search (September 7)

History

[Download history](#)[Clear history](#)

Recent queries				
Search	Add to builder	Query	Items found	Time
#35	Add	Search (#33 OR #34)	544 350 1	04:48:47
#34	Add	Search (((((((((((("Disorder"[Title/Abstract]) OR "Disease"[Title/Abstract]) OR "Illness"[Title/Abstract]) OR "Sickness"[Title/Abstract]) OR "Syndrome"[Title/Abstract]) OR "Diagnose"[Title/Abstract]) OR "diagnosed"[Title/Abstract]) OR "health problem"[Title/Abstract]) OR "health problems"[Title/Abstract]) OR "health status"[Title/Abstract]) OR "poor health"[Title/Abstract]) OR "bad health"[Title/Abstract]) OR "suboptimal health"[Title/Abstract]	425 293 4	04:48:30
#33	Add	Search ((((((("Disease"[MeSH]) OR "Syndrome"[MeSH]) OR "Diagnosis"[Mesh:NoExp]) OR "Chronic Disease"[Mesh]) OR "Communicable Diseases"[Mesh]) OR "Health"[Mesh]) OR "Mental Health"[Mesh]) OR "Mental Disorders"[Mesh])	185 682 5	04:44:19

Preliminary search of block 2 in total (September 10)

History

[Download history](#)[Clear history](#)

Recent queries				
Search	Add to builder	Query	Items found	Time
#6	Add	Search (#3 OR #4 OR #5)	7412377	07:27:31

Block 3 – terms related to “determinants”

This block was added to limit the search to studies of determinants, effects of certain exposures and risk.

The search looks like this:

((((((((((((((((((((((risk[Title/Abstract]) OR risks[Title/Abstract]) OR determinant[Title/Abstract]) OR determinants[Title/Abstract]) OR determinate[Title/Abstract]) OR hazard[Title/Abstract]) OR hazards[Title/Abstract]) OR subsequent[Title/Abstract]) OR predictor[Title/Abstract]) OR predictors[Title/Abstract]) OR predict[Title/Abstract]) OR predicts[Title/Abstract]) OR association[Title/Abstract]) OR associations[Title/Abstract]) OR associated[Title/Abstract]) OR relationship[Title/Abstract]) OR causal[Title/Abstract]) OR odds[Title/Abstract]) OR cause[Title/Abstract]) OR causes[Title/Abstract]) OR likelihood[Title/Abstract])

Preliminary search (September 11)

History

[Download history](#)[Clear history](#)

Recent queries				
Search	Add to builder	Query	Items found	Time
#6	Add	Search (((((((((((((((((((((((risk[Title/Abstract]) OR risks[Title/Abstract]) OR determinant[Title/Abstract]) OR determinants[Title/Abstract]) OR determinate[Title/Abstract]) OR hazard[Title/Abstract]) OR hazards[Title/Abstract]) OR subsequent[Title/Abstract]) OR predictor[Title/Abstract]) OR predictors[Title/Abstract]) OR predict[Title/Abstract]) OR predicts[Title/Abstract]) OR association[Title/Abstract]) OR associations[Title/Abstract]) OR associated[Title/Abstract]) OR relationship[Title/Abstract]) OR causal[Title/Abstract]) OR odds[Title/Abstract]) OR cause[Title/Abstract]) OR causes[Title/Abstract]) OR likelihood[Title/Abstract])	680 945 5	04: 48: 25

Comparing our search results with search results from two previous reviews

We know of two reviews with similar or parallel topics (Knardahl et al. 2017; van Rijn et al. 2014). Of the articles identified in these two reviews, 56 were indexed in Pubmed. Without using the filters of “publication date” and “humans” our search identified 49 of these 56 articles.

The remaining 7 articles were all from the review by van Rijn et al. (2014) and all had unemployment as the outcome. In our review, we only include unemployment if unemployment is followed by permanent withdrawal from the labour market (e.g., if an individual moves directly from unemployment to retirement). All 7 articles studied unemployment without further examining permanent withdrawal from the labour market, and consequently would not have been eligible for our review. Thus, our search strategy identified all relevant articles from the two previous reviews.

Appendiks 2. Udsnit af dataekstraktionstabel i litteraturgennemgangen.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S		
1	Reference				Study																
2	Reference	Reference number in Coviden	Reference name (first author+year)	INITIALER på datatjekker	Study type	Study data	n	Country	Selection	If selection specify	% of females	Mean age (std)	Median age (min-max)	Comment_Study	Physical work demands	Psychosocial work environment	Health behavior	Somatic health problems	Mental health problems		
3	Airaksinen, J., Jokel	#15104	Airaksinen 2017		Cohort study	Finnish Publi	65775	Finland	occupation	Public sector e	80	43.7 (9.71)			This paper includes al	x	x				
4																					
	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ				
1	Outcome					Model				Exposure domain: Physical work demands											
2	Study outcome	Outcome measure	Follow-up year	Cases in total	Comment_outcome	Table of final medication	Hazard ratio	Age, self-rated medication	Covariate	Comment_model	Physical work exposure	Validated measure of exposure_physical	Measure_physical	Main exposure of study_physic	Categories_physical	Estimate	Lower confidence limit_physical	Upper confidence limit_physical			
3	Disability pen	Registerbased fu	8.59 years	5332		Supplementary r	Beta	Self-rated heal	This information extracted for health behaviours												
4																					
	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
1	Results stratified by gender					Exposure domain: Psychosocial work environment										Results stratified by gender					
2	STRATIFIED: MALE	STRATIFIED: MALE	STRATIFIED: MALE	STRATIFIED: FEMALE	STRATIFIED: FEMALE	STRATIFIED: FEMALE	Psychosocial work environment factor (measure)	Validated measure of exposure_psych	Measure_psych	Main exposure of study_psycho	Categories_psycho	Estimate	Lower confidence limit_psycho	Upper confidence limit_psycho	Estimate	Lower confidence limit_psycho	Upper confidence limit_psycho	Estimate	Lower confidence limit_psycho	Upper confidence limit_psycho	
3	relation justice						No	No	6 items	model	Mean value	-0.0416	0.0196								
4	32_MOESM_ESM.pdf						procedural justice	No	No	7 items	model	Mean value	0.0341	0.0215							
	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK									
1	UDFYLD				Risk of Bias Assessment - Cohort study - Ottawa Quality Assessment Scale, Cohort Studies																
2	Competing risk model? (yes/no)	*Model: Er den mest justerede model valgt? (Ja/Nej)*	Model comments	Generelle kommentar	Selection - Representativeness of the Exposed Cohort	Selection of the Non-Exposed Cohort	Selection - Ascertainment of Exposure	Selection - Demonstration The Outcom of Interest Was Not Present at Start of Study	Comparability - Comparability of Cohorts on the Basis of the Design or Analy	Outcome - Assessment of Outcome	Outcome - Was Follow-Up Long Enough for Outcomes to Occur	Outcome - Adequacy of Follow Up of Cohorts									
3	no	Ja		Overjusteret mod	C. Selected group of users eg nu	A. Drawn from the same	C. written self report	A. Yes	A. Study controls for all B. Record linkage		A. Yes: ≥3 years of fo	A. complete follow up -									
4																					

Appendiks 3. Ekskluderede studier

Oversigt af de ekskluderede studier

Reference	Covidence reference (#)	År	Grund for eksklusion	Kommentarer til eksklusion
Allaire, S.H., Li, W., LaValley, M.P., 2003. Reduction of job loss in persons with rheumatic diseases receiving vocational rehabilitation: a randomized controlled trial. <i>Arthritis and rheumatism</i> 48, 3212–8. https://doi.org/10.1002/art.11256	#5824	2003	Wrong exposure	Determinanten i dette studie er vocational rehabilitaion program.
Arndt, V., Rothenbacher, D., Daniel, U., Zschenderlein, B., Schuberth, S., Brenner, H., 2005. Construction work and risk of occupational disability: a ten year follow up of 14,474 male workers. <i>Occupational and environmental medicine</i> 62, 559–66. https://doi.org/10.1136/oem.2004.018135	#5739	2005	Wrong exposure	De sammenligner jobgrupper, som deres eksponering og ikke de faktorer som vi leder efter
Backstrom, P., Sandow, E., Westerlund, O., 2016. Commuting and timing of retirement. <i>Ann. Reg. Sci.</i> 56, 125–152. https://doi.org/10.1007/s00168-015-0723-8	#14972	2016	Wrong exposure	Forkert eksponering og ikke brugbare estimater
Barra, L., Borchin, R.L., Burroughs, C., Casey, G.C., McAlear, C.A., Sreih, A.G., Young, K., Merkel, P.A., Pagnoux, C., 2018. Impact of vasculitis on employment and income. <i>Clinical and experimental rheumatology</i> 36 Suppl 111, 58–64.	#6100	2018	Wrong study design	Cross-sectional
Bengtsson, T., Nilsson, A., 2018. Smoking and early retirement due to chronic disability. <i>Econ. Hum. Biol.</i> 29, 31–41. https://doi.org/10.1016/j.ehb.2017.12.005	#14793	2018	Wrong study design	Forkert studiedesign estimaterne er tvivlsomt brugbare. Der mangler followup.
Berezne, A., Seror, R., Morell-Dubois, S., De Menthon, M., Fois, E., Dzeing-Ella, A., Nguyen, C., Hachulla, E., Guillevin, L., Poiraudau, S., Mouthon, L., 2011. Impact of systemic sclerosis on occupational and professional activity with attention to patients with digital ulcers. <i>Arthritis Care and Research</i> 63, 277–285. https://doi.org/10.1002/acr.20342	#10771	2011	Wrong study design	Cross-sectional
Bergstrom, G., Hagberg, J., Busch, H., Jensen, I., Bjorklund, C., 2014. Prediction of sickness	#5996	2014	Wrong exposure	Selvrapporteret smerte

absenteeism, disability pension and sickness presenteeism among employees with back pain. *Journal of occupational rehabilitation* 24, 278–86. <https://doi.org/10.1007/s10926-013-9454-9>

Bendix, A.F., Bendix, T., Haestrup, C., 1998. Can it be predicted which patients with chronic low back pain should be offered tertiary rehabilitation in a functional restoration program? A search for demographic, socioeconomic, and physical predictors. <i>Spine</i> 23, 1775–83; discussion 1783.	#6026	1998	Wrong study population	Populationen er ikke i arbejde ved baseline
Brenner, H., Ahern, W., 2000. Sickness absence and early retirement on health grounds in the construction industry in Ireland. <i>Occupational and environmental medicine</i> 57, 615–20.	#5357	2000	No eligible estimates	Ingen brugbare estimater
Callhoff, J., Albrecht, K., Schett, G., Zink, A., Westhoff, G., 2015. Depression is a stronger predictor of the risk to consider work disability in early arthritis than disease activity or response to therapy. <i>RMD Open</i> 1, 5. https://doi.org/10.1136/rmdopen-2014-000020	#14875	2015	Wrong outcome	Desire to retire som udfald
Canivet, C., Staland-Nyman, C., Lindeberg, S.I., Karasek, R., Moghaddassi, M., Ostergren, P.O., 2014. Insomnia symptoms, sleep duration, and disability pensions: a prospective study of Swedish workers. <i>International journal of behavioral medicine</i> 21, 319–28. https://doi.org/10.1007/s12529-013-9315-0	#5272	2014	Wrong exposure	Det er symptomer på insomina og ikke insomnia
Chen, L., Glimelius, I., Neovius, M., Eloranta, S., Ekberg, S., Martling, A., Smedby, K.E., 2015. Risk of disability pension in patients following rectal cancer treatment and surgery. <i>The British journal of surgery</i> 102, 1426–1432. https://doi.org/10.1002/bjs.9885	#10323	2015	Wrong study design	
Dalton, S.O., Schuz, J., Engholm, G., Johansen, C., Kjaer, S.K., Steding-Jessen, M., Storm, H.H., Olsen, J.H., 2008. Social inequality in incidence of and survival from cancer in a population-based study in Denmark, 1994-2003: Summary of findings. <i>European Journal of Cancer</i> 44, 2074–2085. https://doi.org/10.1016/j.ejca.2008.06.018	#10579	2008	Wrong study design	
de Boer, A., Geuskens, G.A., Bultmann, U., Boot, C.R.L., Wind, H., Koppes, L.L.J., Frings-Dresen,	#14339	2018	Wrong outcome	De slår unemployment,

M.H.W., 2018. Employment status transitions in employees with and without chronic disease in the Netherlands. <i>Int. J. Public Health</i> 63, 713–722. https://doi.org/10.1007/s00038-018-1120-8				disability pension og early pension sammen i analyserne
Dong, L., Agnew, J., Mojtabai, R., Surkan, P.J., Spira, A.P., 2017. Insomnia as a predictor of job exit among middle-aged and older adults: results from the Health and Retirement Study. <i>Journal of epidemiology and community health</i> 71, 750–757. https://doi.org/10.1136/jech-2016-208630	#5044	2017	Wrong outcome	De slår retired, unemployed, disabled and other sammen i analyserne
Elfving, P., Puolakka, K., Rantalaiho, V., Kautiainen, H., Virta, L.J., Kaipainen-Seppanen, O., 2018. Impact of early systemic lupus erythematosus on work disability-results from the Finnish nationwide register 2000-2007. <i>Clinical rheumatology</i> 37, 1413–1416. https://doi.org/10.1007/s10067-018-4066-6	#4586	2018	Wrong outcome	De slår sick leave over 10+ days, temporary, part-time and permanent work disability pensions sammen i outcome
Ervasti, J., Mattila-Holappa, P., Joensuu, M., Pentti, J., Lallukka, T., Kivimaki, M., Vahtera, J., Virtanen, M., 2017. Predictors of Depression and Musculoskeletal Disorder Related Work Disability Among Young, Middle-Aged, and Aging Employees. <i>Journal of occupational and environmental medicine</i> 59, 114–119. https://doi.org/10.1097/jom.0000000000000921	#4543	2017	Wrong outcome	De slår sickness absence og work disability pension sammen i analyserne
Ervasti, J., Virtanen, M., Pentti, J., Lallukka, T., Tingham, P., Kjeldgard, L., Mittendorfer-Rutz, E., Alexanderson, K., 2015. Work disability before and after diabetes diagnosis: a nationwide population-based register study in Sweden. <i>American journal of public health</i> 105, e22–9. https://doi.org/10.2105/ajph.2015.302646	#4537	2015	Wrong outcome	Nævner noget med work disability days
Friberg, E., Jansson, C., Mittendorfer-Rutz, E., Rosenhall, U., Alexanderson, K., 2012. Sickness absence due to otoaudiological diagnoses and risk of disability pension: a nationwide Swedish prospective cohort study. <i>PloS one</i> 7, e29966. https://doi.org/10.1371/journal.pone.0029966	#4734	2012	Wrong comparator	Reference gruppe er på sick leave
Friberg, E., Rosenhall, U., Alexanderson, K., 2014. Sickness absence and disability pension due to otoaudiological diagnoses: risk of premature death-a nationwide prospective cohort study. <i>BMC public</i>	#4733	2014	Wrong exposure	Disability pension + sick leave

health 14, 137. <https://doi.org/10.1186/1471-2458-14-137>

Friis, K., Ekholm, O., Hundrup, Y.A., Obel, E.B., Gronbaek, M., 2007. Influence of health, lifestyle, working conditions, and sociodemography on early retirement among nurses: the Danish Nurse Cohort Study. <i>Scandinavian journal of public health</i> 35, 23–30. https://doi.org/10.1080/14034940600777278	#4723	2007	Wrong outcome	PEW som udfald er ikke det same som disability pension
Gariepy, G., Wang, J., Lesage, A., Schmitz, N., 2011. Obesity and the risk of disability in a 12-year cohort study: The role of psychological distress. <i>Social Psychiatry and Psychiatric Epidemiology</i> 46, 1173–1179. https://doi.org/10.1007/s00127-010-0284-1	#19108	2011	Wrong outcome	
Gjesdal, S., Haug, K., Ringdal, P.R., Vollset, S.E., Maeland, J.G., 2005. [Risk of disability pension among young persons on long-term sick leave]. <i>Tidsskrift for den Norske laegeforening : tidsskrift for praktisk medicin, ny raeke</i> 125, 1801–5.	#4269	2005	Wrong study design	
Gustafsson, K., Aronsson, G., Marklund, S., Wikman, A., Floderus, B., 2014a. Peripheral labour market position and risk of disability pension: a prospective population-based study. <i>BMJ open</i> 4, e005230. https://doi.org/10.1136/bmjopen-2014-005230	#4094	2014	Wrong exposure	
Hakola, R., Kauppi, P., Leino, T., Ojajarvi, A., Pentti, J., Oksanen, T., Haahtela, T., Kivimaki, M., Vahtera, J., 2011. Persistent asthma, comorbid conditions and the risk of work disability: a prospective cohort study. <i>Allergy</i> 66, 1598–603. https://doi.org/10.1111/j.1398-9995.2011.02729.x	#4063	2011	Wrong outcome	De lægger disability pension og all-cause long-term sickness absences >90 days sammen
Hannerz, H., Spangenberg, S., Tuchsén, F., Albertsen, K., 2005. Disability retirement among former employees at the construction of the Great Belt Link. <i>Public health</i> 119, 301–4.	#4023	2005	Wrong exposure	
Hernaes, U.J., Andersen, J.R., Norheim, O.F., Vage, V., 2015. Work participation among the morbidly obese seeking bariatric surgery: an exploratory study from Norway. <i>Obesity surgery</i> 25, 271–8.	#3856	2015	Wrong study design	Cross-sectional study design
Hintsa, T., Kouvonen, A., McCann, M., Jokela, M., Elovainio, M., Demakakos, P., 2015. Higher effort-reward imbalance and lower job control predict exit from the labour market at the age of 61 years or younger: evidence from the English Longitudinal	#3827	2015	Wrong outcome	Udfaldet er kombineret og ikke disability pension alene.

Study of Ageing. Journal of epidemiology and community health 69, 543–9.

Holma, I.A., Holma, K.M., Melartin, T.K., Rytala, H.J., Isometsa, E.T., 2012. A 5-year prospective study of predictors for disability pension among patients with major depressive disorder. Acta psychiatrica Scandinavica 125, 325–34. https://doi.org/10.1111/j.1600-0447.2011.01785.x	#3786	2012	No eligible estimates	Estimaterne er ikke brugbare
Holmberg, S.A., Thelin, A.G., 2006. Primary care consultation, hospital admission, sick leave and disability pension owing to neck and low back pain: a 12-year prospective cohort study in a rural population. BMC musculoskeletal disorders 7, 66. https://doi.org/10.1186/1471-2474-7-66	#3784	2006	No eligible estimates	Estimaterne er ikke brugbare
Houston, D.K., Cai, J., Stevens, J., 2009. Overweight and obesity in young and middle age and early retirement: the ARIC study. Obesity (Silver Spring, Md.) 17, 143–9. https://doi.org/10.1038/oby.2008.464	#3739	2009	Wrong outcome	Estimaterne er ikke brugbare og udfaldet måler ikke disability pension
Hubertsson, J., Petersson, I.F., Thorstensson, C.A., Englund, M., 2013. Risk of sick leave and disability pension in working-age women and men with knee osteoarthritis. Annals of the rheumatic diseases 72, 401–5. https://doi.org/10.1136/annrheumdis-2012-201472	#3722	2013	Wrong study design	Cross-sectional study
Jarvholm, B., Burdorf, A., 2017. Effect of reduced use of organic solvents on disability pension in painters. Occupational and environmental medicine 74, 827–829.	#3655	2017	No eligible estimates	Estimaterne er ikke brugbare
Kang, Y.J., Kang, M.Y., 2016. Chronic Diseases, Health Behaviors, and Demographic Characteristics as Predictors of Ill Health Retirement: Findings from the Korea Health Panel Survey (2008-2012). PloS one 11, e0166921. https://doi.org/10.1371/journal.pone.0166921	#3471	2016	Wrong outcome	De lægger DP udfald sammen med mortality udfald
Korkeila, J., Oksanen, T., Virtanen, M., Salo, P., Nabi, H., Pentti, J., Vahtera, J., Kivimaki, M., 2011. Early retirement from work among employees with a diagnosis of personality disorder compared to anxiety and depressive disorders. European psychiatry : the journal of the Association of	#3100	2011	Wrong outcome	De differentierer ikke på udfald

European Psychiatrists 26, 18–22.

<https://doi.org/10.1016/j.eurpsy.2009.12.022>

Kruse, M., Sorensen, J., Davidsen, M., Gyrd-Hansen, #3048 D., 2009. Short and long-term labour market consequences of coronary heart disease: a register- based followup study. European journal of cardiovascular prevention and rehabilitation : official journal of the European Society of Cardiology, Working Groups on Epidemiology & Prevention and Cardiac Rehabilitation and Exercise Physiology 16, 387–91.	2009	Wrong outcome	De definerer ikke deres udfald
Lahelma, E., Pietilainen, O., Rahkonen, O., Lallukka, #3040 T., 2015. Common mental disorders and cause- specific disability retirement. Occupational and environmental medicine 72, 181–7. https://doi.org/10.1136/oemed-2014-102432	2015	Wrong exposure	Der er brugt GHQ-12 skala og det er sværhedsgraden af disse 12 items som er determinaten
Lund, T., Csonka, A., 2003. Risk factors in health, #2777 work environment, smoking status, and organizational context for work disability. American journal of industrial medicine 44, 492–501. https://doi.org/10.1002/ajim.10298	2003	Wrong outcome	De differentierer ikke på udfald
Lund, T., Iversen, L., Poulsen, K.B., 2001. Work #2776 environment factors, health, lifestyle and marital status as predictors of job change and early retirement in physically heavy occupations. American journal of industrial medicine 40, 161–9.	2001	Wrong outcome	De differentierer ikke på udfald
Lund, T., Villadsen, E., 2005. Who retires early and #18237 why? Determinants of early retirement pension among Danish employees 57-62 years. European Journal of Ageing 2, 275–280. https://doi.org/10.1007/s10433-005-0013-x	2005	Wrong outcome	Frivillig tilbagetrækning
Mandel, M.D., Balint, A., Lovasz, B.D., Gulacsi, L., #2676 Strbak, B., Golovics, P.A., Farkas, K., Kurti, Z., Szilagy, B.K., Mohas, A., Molnar, T., Lakatos, P.L., 2014. Work disability and productivity loss in patients with inflammatory bowel diseases in Hungary in the era of biologics. The European journal of health economics : HEPAC : health economics in prevention and care 15 Suppl 1, S121– 8.	2014	Wrong study design	Økonomisk: Activity loss mm.
Mein, G., Martikainen, P., Stansfeld, S.A., Brunner, #2429 E.J., Fuhrer, R., Marmot, M.G., 2000. Predictors of	2000	Wrong outcome	

early retirement in British civil servants. Age and ageing 29, 529–36.

Nexo, M.A., Watt, T., Pedersen, J., Bonnema, S.J., Hegedus, L., Rasmussen, A.K., Feldt-Rasmussen, U., Bjorner, J.B., 2014. Increased risk of long-term sickness absence, lower rate of return to work, and higher risk of unemployment and disability pensioning for thyroid patients: a Danish register-based cohort study. The Journal of clinical endocrinology and metabolism 99, 3184–92.	#1903	2014	Wrong study population	De eksaminerer mere trinene fra en overgang til en anden.
Nielsen, F.E., Sorensen, H.T., Skagen, K., 2004. A prospective study found impaired left ventricular function predicted job retirement after acute myocardial infarction. Journal of clinical epidemiology 57, 837–42. https://doi.org/10.1016/j.jclinepi.2003.12.022	#1880	2004	Wrong outcome	De differentierer ikke på udfald
Osler, M., Martensson, S., Prescott, E., Carlsen, K., 2014. Impact of gender, co-morbidity and social factors on labour market affiliation after first admission for acute coronary syndrome. A cohort study of Danish patients 2001-2009. PloS one 9, e86758.	#2333	2014	Wrong outcome	De differentierer ikke på udfald
Pietikainen, S., Silventoinen, K., Svedberg, P., Alexanderson, K., Huunan-Seppala, A., Koskenvuo, K., Koskenvuo, M., Kaprio, J., Ropponen, A., 2011. Health-related and sociodemographic risk factors for disability pension due to low back disorders: a 30-year prospective Finnish Twin Cohort Study. Journal of occupational and environmental medicine 53, 488–96. https://doi.org/10.1097/JOM.0b013e31821576dd	#2611	2011	Wrong comparator	Exclude - wrong comparison group. De har slået DP other reason sammen med ikke DP, og sammenligner den gruppe med DP due to LBP.
Polvinen, A., Gould, R., Lahelma, E., Martikainen, P., 2013. Socioeconomic differences in disability retirement in Finland: the contribution of ill-health, health behaviours and working conditions. Scandinavian journal of public health 41, 470–8. https://doi.org/10.1177/1403494813482400	#2153	2013	Wrong exposure	
Riihimaki, K., Vuorilehto, M., Isometsa, E., 2015. A 5-year prospective study of predictors for functional and work disability among primary care patients with depressive disorders. European psychiatry : the journal of the Association of European	#1630	2015	Wrong outcome	

Psychiatrists 30, 51–7.

<https://doi.org/10.1016/j.eurpsy.2014.02.005>

Ropponen, A., Alexanderson, K., Svedberg, P., 2014a. Part-time work or social benefits as predictors for disability pension: a prospective study of Swedish twins. <i>International journal of behavioral medicine</i> 21, 329–36. https://doi.org/10.1007/s12529-013-9303-4	#1526	2014	Wrong exposure	
Rudolph, K.E., Eaton, W.W., 2016. Previous anxiety and depression as risk factors for early labour force exit. <i>Journal of epidemiology and community health</i> 70, 390–5. https://doi.org/10.1136/jech-2015-206202	#1505	2016	Wrong outcome	
Sidorchuk, A., Hemmingsson, T., Romelsjo, A., Allebeck, P., 2012b. Alcohol use in adolescence and risk of disability pension: a 39 year followup of a population-based conscription survey. <i>Eur. J. Public Health</i> 22, 118–118.	#1120	2012	Dublet for #11799	
Soteriades, E.S., Hauser, R., Kawachi, I., Christiani, D.C., Kales, S.N., 2008. Obesity and risk of job disability in male firefighters. <i>Occupational Medicine</i> 58, 245–250.	#16474	2008	Wrong outcome	
Suoyrjo, H., Oksanen, T., Hinkka, K., Pentti, J., Kivimaki, M., Klaukka, T., Vahtera, J., 2009. A comparison of two multidisciplinary inpatient rehabilitation programmes for fibromyalgia: a register linkage study on work disability. <i>Journal of rehabilitation medicine</i> 41, 66–72. https://doi.org/10.2340/16501977-0278	#823	2009	Wrong exposure	
van Solinge, H., Henkens, K., 2007. Involuntary retirement: The role of restrictive circumstances, timing, and social embeddedness. <i>Journals of Gerontology Series B-Psychological Sciences and Social Sciences</i> 62, S295–S303. https://doi.org/10.1093/geronb/62.5.S295	#11768	2007	Wrong exposure	Exclude - wrong study design, exposure, study population
Virtanen, M., Kivimaki, M., Zins, M., Dray-Spira, R., Oksanen, T., Ferrie, J.E., Okuloff, A., Pentti, J., Head, J., Goldberg, M., Vahtera, J., 2015. Lifestyle-related risk factors and trajectories of work disability over 5 years in employees with diabetes: findings from two prospective cohort studies. <i>Diabetic medicine</i> : a	#350	2015	Wrong exposure	Selvrappporteret og udfald er sygedage

journal of the British Diabetic Association 32, 1335–41. <https://doi.org/10.1111/dme.12787>

Sivertsen, B.; Overland, S.; Neckelmann, D.; Glozier, N.; Krokstad, S.; Pallesen, S.; Nordhus, I. H.; Bjorvatn, B.; Mykletun, A. The long-term effect of insomnia on work disability: the HUNT-2 historical cohort study	#1044	2006	Wrong exposure	Selvrapporteret insomnia og spørgerskema ikke validerede
Sharif, B.; Garner, R.; Sanmartin, C.; Flanagan, W. M.; Hennessy, D.; Marshall, D. A. Risk of work loss due to illness or disability in patients with osteoarthritis: a population-based cohort study	#1184	2016	Wrong outcome	Vi ved ikke om det er permanent kun work loss i en periode. De har ikke stratifiseret på illnes/disability
Herquelot, E.; Gueguen, A.; Bonenfant, S.; Dray-Spira, R. Impact of diabetes mellitus on work cessation in the gazel cohort study. Diabetes 2010;(1): 2010	#9166	2010	Wrong exposure	Diabetes er selv rapporteret
Schmidt, C., Bernert, S., Spyra, K., 2014. [Concerning the impact of psychological comorbidity for chronic back pain: frequency, reduced earning capacity pension and rehabilitation aftercare in the course of the rehabilitation cohorts 2002-2009]. Die Rehabilitation 53, 384–9. https://doi.org/10.1055/s-0034-1394449	#1288	2014	Wrong study population	
Damkjaer, L.H., Deltour, I., Suppli, N.P., Christensen, J., Kroman, N.T., Johansen, C., Dalton, S.O., 2011. Breast cancer and early retirement: Associations with disease characteristics, treatment, comorbidity, social position and participation in a six-day rehabilitation course in a register-based study in Denmark. Acta oncologica (Stockholm, Sweden) 50, 274–81. https://doi.org/10.3109/0284186x.2010.531048	#4670	2011	Wrong exposure	Målte depression ved antidepressiv behandling
Charlotte Chruzander a,b, Petter Tinghög c,d, Charlotte Ytterberg a,b, Lotta Widén Holmqvist a,b,e, Kristina Alexanderson c, Jan Hillert e, Sverker Johansson a,b,*	#4903	2016	Wrong exposure	Målte disease severity for ultipel sclerose, ingen rask sammenligningsgruppe
2016				
Ropponen, A., Korhonen, T., Svedberg, P., Koskenvuo, M., Silventoinen, K., Kaprio, J., 2013a.	#1525	2013	Duplicate manuel	Er ekskluderet, da der i vores

Persistent smoking as a predictor of disability pension due to musculoskeletal diagnoses: a 23 year prospective study of Finnish twins. *Preventive medicine* 57, 889–93.
<https://doi.org/10.1016/j.ypmed.2013.10.001>

litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Lahti, J., Holstila, A., Manty, M., Lahelma, E., Rahkonen, O., 2016. Changes in leisure time physical activity and subsequent disability retirement: A register-linked cohort study. *The international journal of behavioral nutrition and physical activity* 13, 99.
<https://doi.org/10.1186/s12966-016-0426-2>

#3038

2016

Duplicate manuel

Er ekskluderet, da der i vores litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Koskenvuo, K., Brooms, U., Korhonen, T., Laitinen, L.A., Huunan-Seppala, A., Keistinen, T., Autti-Ramo, I., Kaprio, J., Koskenvuo, M., 2011. Smoking strongly predicts disability retirement due to COPD: the Finnish Twin Cohort Study. *The European respiratory journal* 37, 26–31.
<https://doi.org/10.1183/09031936.00008910>

#3094

2011

Duplicate manuel

Er ekskluderet, da der i vores litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Karnehed, N., Rasmussen, F., Kark, M., 2007. Obesity in young adulthood and later disability

#3444

2007

Duplicate manuel

Er ekskluderet, da der i vores

pension: a population-based cohort study of 366,929 Swedish men. *Scandinavian journal of public health* 35, 48–54.
<https://doi.org/10.1080/14034940600858524>

litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Kark, M., Neovius, M., Rasmussen, F., 2010. Obesity #3454 status and risk of disability pension due to psychiatric disorders. *International journal of obesity* (2005) 34, 726–32.
<https://doi.org/10.1038/ijo.2009.298>

2010

Duplicate manuel

Er ekskluderet, da der i vores litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Kark, M., Karnehed, N., Rasmussen, F., 2007. Blood #3455 pressure in young adulthood and later disability pension. A population-based study on 867 672 men from Sweden. *Blood pressure* 16, 362–6.
<https://doi.org/10.1080/08037050701538113>

2007

Duplicate manuel

Er ekskluderet, da der i vores litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Fimland, M.S., Vie, G., Johnsen, R., Nilsen, T.I., #4426 Krokstad, S., Bjorngaard, J.H., 2015. Leisure-time

2015

Duplicate manuel

Er ekskluderet, da der i vores

physical activity and disability pension: 9 years follow-up of the HUNT Study, Norway. *Scandinavian journal of medicine & science in sports* 25, e558–65.

litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Dorner, T.E., Alexanderson, K., Svedberg, P., Tinghog, P., Ropponen, A., Mittendorfer-Rutz, E., 2016. Synergistic effect between back pain and common mental disorders and the risk of future disability pension: a nationwide study from Sweden. *Psychological medicine* 46, 425–36. <https://doi.org/10.1017/s003329171500197x>

#5036

2016

Duplicate manuel

Er ekskluderet, da der i vores litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Bockerman, P., Maczulskij, T., 2018. Unfit for work: Health and labour-market prospects. *Scandinavian journal of public health* 46, 7–17. <https://doi.org/10.1177/1403494817720871>

#5477

2018

Duplicate manuel

Er ekskluderet, da der i vores litteraturgennemgang også er multikohorte studier, som vi prioriterer over enkelte kohorte studier. De er kun blevet ekskluderet hvis ikke de bidrog med andre estimater i andre analyser, hvor multikortestudiernes estimater ikke var præsenteret.

Neovius, M.; Kark, M.; Rasmussen, F. Association between obesity status in young

#7867

2008

Duplicate

Er ekskluderet, da der i vores

adulthood and disability pension
International Journal of Obesity 2008;32(8):1319-1326 2008

litteraturgennemgang
også er multikohorte
studier, som vi
prioriterer over
enkelte kohorte
studier. De er kun
blevet ekskluderet hvis
ikke de bidrog med
andre estimater i
andre analyser, hvor
multikortestudiernes
estimer ikke var
præsenteret.

Ropponen, A., Svedberg, P., Koskenvuo, M., Silventoinen, K., Kaprio, J., 2014b. Physical work load and psychological stress of daily activities as predictors of disability pension due to musculoskeletal disorders. Scandinavian journal of public health 42, 370–6. https://doi.org/10.1177/1403494814525005	#1515	2014	Duplicate	Gengangere af de samme kohorter
Krokstad, S., Johnsen, R., Westin, S., 2002. Social determinants of disability pension: a 10-year follow-up of 62 000 people in a Norwegian county population. International journal of epidemiology 31, 1183–91.	#3056	2002	Duplicate	Gengangere af de samme kohorter
Virtanen, M.; Lallukka, T.; Ervasti, J.; Rahkonen, O.; Lahelma, E.; Pentti, J.; Pietilainen, O.; Vahtera, J.; Kivimaki, M.	#349 a	2017	Duplicate	Gengangere af de samme kohorter
Hublin, C., Partinen, M., Koskenvuo, K., Silventoinen, K., Koskenvuo, M., Kaprio, J., 2010. Shift-work and cardiovascular disease: a population-based 22-year follow-up study. European journal of epidemiology 25, 315–23. https://doi.org/10.1007/s10654-010-9439-3	#3720	2010	Duplicate	Gengangere af de samme kohorter
Kouwenhoven-Pasmooij, T.A., Burdorf, A., Roos-Hesselink, J.W., Hunink, M.G.M., Robroek, S.J.W., 2016. Cardiovascular disease, diabetes and early exit from paid employment in Europe; The impact of work-related factors. International Journal of Cardiology 215, 332–337. https://doi.org/10.1016/j.ijcard.2016.04.090	#8705	2016	Duplicate	Gengangere af de samme kohorter

Bockerman, P., Hyytinen, A., Maczulskij, T., 2016. Devil in disguise: Does drinking lead to a disability pension? Preventive medicine 86, 130–5. https://doi.org/10.1016/j.jpmed.2016.03.008	#5479	2016	Duplicate	Gengangere af de samme kohorter
---	-------	------	-----------	---------------------------------------

Appendiks 4. Studiekarakteristik af de inkluderede studier

Reference (First author, year) and Covidence reference (#)	Population	Outcome	Domains	Factors	Quality
Airaksinen (2017), #15104	Finland, n=65775, Public sector employees, number of females in %: 80, age: 43.7	Disability pension, The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study, Cases: 5332	Psychosocial work environment. Health behavior.	Relational justice. Procedural justice. Participatory safety. Support for innovation. Vision. Task orientation. Job strain. Effort-reward imbalance. Shift work. Night shift. Smoking. BMI.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Alavinia (2009), #5849	The Netherlands, n=850, Construction workers, Participants in a voluntary occupational health examination, number of females in %: 0, age: 48.4	Disability pension, Self reported, Cases: 40	Physical work demands. Psychosocial work environment.	Often awkward postures. Often kneeling and squatting. Often manual material handling. Exposure to whole-body vibration. Exposure to hand-arm vibration. High job demands. Lack of job control. Lack of skill discretion.	Low quality (selection: 2, comparability: 2, outcome: 0)
Biering-Sorensen (1999), #5941	Denmark, n=892 Random sample, number of females in %: 50.4, age: 28-59	Disability pension, Danish national Register, Cases: 84	Health behavior.	BMI. Physical activity. Smoking.	Good quality (selection: 3, comparability: 1, outcome: 2)
Ahola (2011), #5875	Finland, n=3164, Random sample, number of females in %: 50.7, age: 30-58	Disability pension, Finnish Centre for Pensions, Cases: 208	Physical work demands. Psychosocial work environment. Health behavior. Mental health problems.	Physical strain. Weekly hours. Team climate. Job insecurity. Job strain. Daily smoking. BMI. Physical activity. Frequency of alcohol consumption. Any Mental disorder.	Good quality (selection: 3, comparability: 2, outcome: 3)
Arvilommi (2015), #5725	Finland, n=151, Psychiatric inpatients and outpatients with DSM-IV bipolar I disorder and bipolar II disorder, number of females in %: 52.3, age: 35.5	Disability pension, Interviews, patient records, and registers of the Social Insurance Institution of Finland and the Finnish Centre for Pensions, Cases: 38	Mental health problems.	Any Mental disorder.	Moderate quality (selection: 2, comparability: 1, outcome: 2)

Carlsen (2008), #5258	Denmark, n=236993, Random sample, number of females in %: 70.3, age: 30-60	Disability pension, Danish administrative registers, Cases: 27300	Somatic health problems. Mental health problems.	Cancer: Leukemia, Ovary, Prostate. Non-Hodgkins. Colorectum. Breast. Kidney. Bladder. Cervix. Hodgkins. Uterus. Melanoma. Testis. Depression.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Clausen (2014), #5384	Denmark, n=40554, Random sample, number of females in %: 78, age: 42	Disability pension, DREAM, Cases: 929	Psychosocial work environment.	Psychosocial work conditions. Quantitative demands. Work pace. Influence at work. Quality of leadership.	Good quality (selection: 3, comparability: 1, outcome: 3)
Christensen (2008), #4910	Denmark, n=8298, Random sample, number of females in %: 49.3, age: 18-59	Disability pension, DREAM, Cases: 447	Psychosocial work environment.	Psychosocial work environment factors. Decision authority. Information. Variation in work.	Good quality (selection: 3, comparability: 1, outcome: 3)
Canivet (2013), #5273	Sweden, n=6540, Random samle, number of females in %: 51.4, age: 45-65	Disability pension, Swedish Social Insurance Agency, Cases: 1124	Psychosocial work environment.	Demands. Decision latitude. Low strain. Passive. Active. High strain. Mixed.	Good quality (selection: 3, comparability: 2, outcome: 3)
Bultmann (2008), #5672	Denmark, n=5106, Random sample, number of females in %: 48, age: 18-59	Disability pension, DREAM, Cases: 111	Mental health problems.	Severe depressive symptoms.	Good quality (selection: 3, comparability: 2, outcome: 3)
Brenner (2014), #10668	Sweden, n=4750, MS-patients without DP, number of females in %: 70.8, age: 47	Disability pension, Swedish Social Insurance Agency, Cases: 6525	Mental health problems.	Psychiatric diagnosis.	Good quality (selection: 3, comparability: 2, outcome: 3)
Ervasti (2016) b, #4538	Sweden, n=53402, Diabetes + 1% random sample of population without diabetes, number of females in %: 47, age: 43.8	Disability pension, Swedish Social Insurance Agency, Cases: 1876	Somatic health problems. Mental health problems.	Diabetes. Cardiovascular disaese. Musculoskeletal disorder. Depression. Other mental disorder.	Good quality (selection: 4, comparability: 2, outcome: 3)
Ervasti (2017), #4539	Sweden, n=20498, IHD/stroke patients + Random sample, number of females in %: Unknown, age: 25-60	Disability pension, Swedish Social Insurance Agency, Cases: 3454	Somatic health problems. Mental health problems.	Diabetes. Mental disorder.	Good quality (selection: 3, comparability: 2, outcome: 3)

Eaker (2011), #4970	Sweden, n=4762, Breast Cancer + Random sample, number of females in %: 100, age: 20-59	Disability pension, Swedish Social Insurance Agency, Cases: 1103	Somatic health problems.	Breast cancer.	Moderate quality (selection: 2, comparability: 1, outcome: 3)
Fimland (2018), #4427	Norway, n=32362, People from Nord- Trøndelag, number of females in %: Unknown, age: 20-65	Disability pension, The National Insurance Administration (NIA), Cases: 3837	Physical work demands.	Occupational physical activity.	Good quality (selection: 3, comparability: 2, outcome: 3)
Jorgensen (2017), #3578	Denmark, n=17690, Random sample, number of females in %: 47, age: 18-60	Disability pension, DREAM, Cases: 1047	Health behavior.	Alcohol intake. Binge drinking.	Good quality (selection: 3, comparability: 2, outcome: 3)
Karkkainen (2013), #3452	Finland, n=16028, Twins, number of females in %: 44, age: 18-64	Disability pension, Social Insurance Institution & Finnish Centre for Pensions, Cases: 1297	Physical work demands. Psychosocial work environment.	Out- or indoor work. Work type (MSD). Nature of work monotonous (MSD). Nature of work monotonous (OA). Physical work loading. Stress of daily activities.	Good quality (selection: 3, comparability: 2, outcome: 3)
Dorner (2015), #5037	Sweden, n=4823069, Random sample, number of females in %: 47.5, age: 16-64	Disability pension, Swedish Social Insurance Agency, Cases: 81994	Somatic health problems. Mental health problems.	Back pain (BP). Musculoskeletal disorder excluding BP. Depressive episode (DE). Mental disorder excluding DE.	Good quality (selection: 4, comparability: 2, outcome: 3)
Karkkainen (2017), #3451	Sweden, n=27165, Random sample, number of females in %: 51, age: 41-64	Disability pension, Swedish Social Insurance Agency, Cases: 1338	Psychosocial work environment.	Night work.	Good quality (selection: 3, comparability: 2, outcome: 3)
Jensen (2012), #9473	Denmark, n=3332, Nurses' aides, number of females in %: 98.3, age: 41.9	Disability pension, DREAM, Cases: 540	Physical work demands. Psychosocial work environment. Health behavior.	Heaviness of care duties. RPE (range 0- 14). Work hours. Decision latitude. Demand. Current smoking. BMI. Physical activity.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Labriola (2009) a, #3486	Denmark, n=8475, Random sample, number of females in %: 48.6, age: 18-59	Disability pension, DREAM, Cases: 453	Psychosocial work environment.	Job satisfaction.	Good quality (selection: 3, comparability: 1, outcome: 3)

Labriola (2009) b, #3485	Denmark, n=8289, Random sample, number of females in %: 49.3, age: 18-59	Disability pension, DREAM, Cases: 446	Physical work demands.	Physically demanding work. Working with hands lifted. Squatting and kneeling. Monotonous work.	Good quality (selection: 3, comparability: 1, outcome: 3)
Lahelma (2012), #3041	Finland, n=6525, Random sample, number of females in %: 78.5, age: 40-60	Disability pension, Finnish Centre for Pensions, Cases: 525	Physical work demands. Psychosocial work environment.	Physical working conditions. Work arrangements. Psychosocial work conditions.	Good quality (selection: 3, comparability: 2, outcome: 3)
Juvani (2018), #9405	Finland, n=41862, Random sample, number of females in %: 80, age: Unknown	Disability pension, Finnish Centre for Pensions, Cases: 976	Psychosocial work environment.	Job strain. Effort-reward imbalance. Injustice	Good quality (selection: 3, comparability: 2, outcome: 3)
Lahti (2013), #3036	Finland, n=6275, Employees of the City of Helsinki, number of females in %: 78.4, age: 40-60	Disability pension, Finnish Centre for Pensions, Cases: 435	Health behavior.	Physical activity.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Lund (2010), #8273	Denmark, n=8287, Random sample, number of females in %: 49.3, age: 18-59	Disability pension, DREAM, Cases: 446	Health behavior.	Smoking. BMI.	Good quality (selection: 4, comparability: 1, outcome: 3)
Nielsen (2017) a, #1879	Norway, n=12303, Random sample, number of females in %: 55.6, age: 18-62	Disability pension, The Norwegian Labor and Welfare Administration (NAV), Cases: 553	Psychosocial work environment.	Workplace bullying. Decision demands. Quantitative demands. Lack of control over work place. Lack of control over decisions.	Good quality (selection: 3, comparability: 2, outcome: 3)
Niederkröenthaler (2016), #1884	Sweden, n=5649, Suicide attempts, number of females in %: 63.1, age: 16-30	Disability pension, Swedish Social Insurance Agency, Cases: 1461	Mental health problems.	Schizophrenia. Affective disorders. Substance abuse. Neurotic, somatoform and stress-related disorders. Organic or retardation. Developmental disorders. Personality disorders. No previous inpatient care.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Pérez-Vigil (2018), #16958	Sweden, n=173443, OCD patients and people without, number of females in %: 58.1 (patients), 57.9 (general population), age: 16-64	Disability pension, Swedish Social Insurance Agency, Cases: 4878	Mental health problems.	OCD.	Good quality (selection: 4, comparability: 2, outcome: 3)

Neovius (2010), #1921	Sweden, n=45920, Men, number of females in %: 0, age: 18.7	Disability pension, Swedish Social Insurance Agency, Cases: 4631	Health behavior.	Obesity status. Smoking status.	Good quality (selection: 4, comparability: 2, outcome: 3)
Norrback (2018), #1805	Sweden, n=50015, Random sample, number of females in %: 49, age: 19-64	Disability pension, Swedish Social Insurance Agency, Cases: 2296	Health behavior.	Weight status and mobility disability.	Good quality (selection: 4, comparability: 2, outcome: 3)
Overland (2008), #2314	Norway, n=37302, Random sample, number of females in %: 53.4, age: 20-66	Disability pension, The National Insurance Administration (NIA), Cases: 909	Mental health problems.	Insomnia. Depression.	Good quality (selection: 4, comparability: 2, outcome: 3)
Laine (2009), #3033	Finland, n=25150, Public sector employees, number of females in %: 81, age: 40.2	Disability pension, Self reported, Cases: 93	Psychosocial work environment.	Job demands. Job control. Job strain.	Moderate quality (selection: 2, comparability: 2, outcome: 2)
Lee (2018), #12993	Korea, n=2708, Random sample, number of females in %: 32.1, age: 54.44	Early retirement, Self reported, Cases: 124	Health behavior.	Alcohol consumption. Exercise. Obesity or underweight. Smoking history.	Low quality (selection: 3, comparability: 2, outcome: 1)
Mansson (1999), #2572	Sweden, n=3751, Men, number of females in %: 0, age: 48.1	Disability pension, Swedish Social Insurance Agency, Cases: 498	Health behavior.	Alcohol consumption.	Low quality (selection: 3, comparability: 0, outcome: 3)
Mantyniemi (2012), #2568	Finland, n=69842, Random sample, number of females in %: 76.2, age: 44.3	Disability pension, Finnish Centre for Pensions, Cases: 2572	Psychosocial work environment.	Job strain.	Good quality (selection: 3, comparability: 2, outcome: 3)
Haukenes (2013), #3933	Norway, n=16422, Random sample, number of females in %: 51.7, age: 40-46	Disability pension, National register of health insurance, Cases: 488	Health behavior.	Smoking status.	Good quality (selection: 3, comparability: 1, outcome: 3)
Markkula (2017), #2545	Finland, n=275, Random sample, number of females in %: 66.5, age: 44	Disability pension, Self reported, Cases: 41	Psychosocial work environment.	Karasek job demand. Karasek job control.	Good quality (selection: 4, comparability: 2, outcome: 2)

Lallukka (2015), #3016	Finland, n=6390, Employees of the City of Helsinki, number of females in %: 78.5, age: 49.4	Disability pension, Finnish Centre for Pensions, Cases: 608	Health behavior.	Smoking and physical activity.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Mittendorfer-Rutz (2018), #8504	Sweden, n=4823069, Random sample, number of females in %: 48.5, age: 16-64	Disability pension, Swedish Social Insurance Agency, Cases: 81994	Somatic health problems. Mental health problems.	IHD.	Good quality (selection: 4, comparability: 2, outcome: 3)
Robroek (2013), #1571	Europe, n=4923, Random sample, number of females in %: 44, age: 55.2	Disability pension, Longitudinal Survey of Health, Ageing, and Retirement in Europe (SHARE), Cases: 98	Physical work demands. Psychosocial work environment. Health behavior.	Physically demanding job. High time pressure. Low job control. Low rewards. BMI. Smoking. Lack of physical activity. Excessive alcohol intake.	Low quality (selection: 3, comparability: 2, outcome: 1)
Rabiee (2015), #1748	Sweden, n=45375, Random sample, number of females in %: 0, age: 20-59	Disability pension, Swedish Social Insurance Agency and LISA database, Cases: 5707	Health behavior.	Cardiorespiratory fitness.	Good quality (selection: 3, comparability: 2, outcome: 3)
Nielsen (2017) b, #1878	Norway, n=14501, Random sample, number of females in %: 55.7, age: 42.8	Disability retirement, The Norwegian Labor and Welfare Administration (NAV), Cases: 553	Psychosocial work environment.	Human resource primacy.	Good quality (selection: 3, comparability: 1, outcome: 3)
Robroek (2015), #1572	Netherlands, n=14708, Random sample, number of females in %: 41.2, age: 39	Disability benefits, Dutch tax register, Cases: 388	Physical work demands. Psychosocial work environment. Health behavior.	Physically demanding work. Job demands. Lifestyle-related factors. Smoking. Heavy alcohol intake. How many hours per week doing sports. BMI.	Low quality (selection: 3, comparability: 2, outcome: 1)
Rod (2017), #1565	Sweden, n=364171, People with sleep apnea, number of females in %: 26.1, age: 46	Disability pension, Swedish Social Insurance Agency, Cases: 14530	Somatic health problems.	Sleep apnea.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Roos (2013), #1528	Finland, n=6542, Employees of the City of Helsinki, number of females in %:	Disability pension, Finnish Centre for Pensions, Cases: Unknown	Health behavior.	BMI.	Moderate quality (selection: 2,

	78.4, age: 40, 45, 50, 55, 60				comparability: 2, outcome: 3)
Wedegaertner (2013), #607	Germany, n=125019, Random sample, number of females in %: 33.2, age: 15-57	Disability pension, Mettmann Regional Office of the AOK Rheinland, Cases: 5282	Mental health problems.	Anxiety, outpatient. Anxiety, inpatient. Depression, outpatient. Depression, inpatient.	Good quality (selection: 4, comparability: 2, outcome: 3)
Ropponen (2014) a, #1517	Sweden, n=31206, Random sample, number of females in %: 52, age: 42-64	Disability pension, Swedish Social Insurance Agency, Cases: 3864	Health behavior.	Alcohol consumption. Physical activity. Tobacco consumption.	Good quality (selection: 4, comparability: 2, outcome: 3)
Ropponen (2018), #12142	Sweden, n=27165, Twins, number of females in %: 51, age: <65 years	Disability pension, Swedish Social Insurance Agency, Cases: 3290	Psychosocial work environment.	Night work. All-cause.	Good quality (selection: 4, comparability: 2, outcome: 3)
Ropponen (2013) b, #1523	Sweden, n=24543, Twins, number of females in %: 50.5, age: 45	Disability pension, Swedish National Social Insurance Agency, Cases: 4254	Psychosocial work environment.	Job demands. Job strain.	Good quality (selection: 3, comparability: 2, outcome: 3)
Tuchsen (2008), #633	Denmark, n=8005, Random sample, number of females in %: 49.7, age: 18-59	Disability pension, DREAM, Cases: 426	Psychosocial work environment.	Shift work.	Good quality (selection: 3, comparability: 2, outcome: 3)
Tuchsen (2010), #632	Denmark, n=4215, Men, number of females in %: 0, age: 38.2	Disability pension, DREAM, Cases: 188	Physical work demands.	Whole-body-vibrations.	Good quality (selection: 3, comparability: 1, outcome: 3)
Vahtera (2005), #464	Finland, n=19273, Random sample, number of females in %: 74, age: 40.7	Disability pension, Local Government Pensions Institution & State Treasury, Cases: 223	Psychosocial work environment.	Organizational downsizing.	Good quality (selection: 4, comparability: 2, outcome: 3)
Vahtera (2010), #463	Finland, n=30700, Public sector employees, number of females in %: 78, age: 44.8	Disability pension, Finnish Centre for Pensions, Cases: 1178	Psychosocial work environment.	Worktime control.	Moderate quality (selection: 2, comparability: 2, outcome: 3)

Karpansalo (2005), #3440	Finland, n=1726, Men, number of females in %: 0, age: 51.8	Disability pension, Social Insurance Institution & Central Pension Security Institute + some smaller pension institutions, Cases: 839	Mental health problems.	Depression score.	Good quality (selection: 3, comparability: 2, outcome: 3)
Everhov (2016), #4520	Sweden, n=1971, Cervical cancer patient, number of females in %: 100, age: 42	Disability pension, The Swedish Social Insurance Agency, Cases: 1498	Somatic health problems.	Cervical cancer.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Helgesson (2017), #3889	Sweden, n=1753544, Random sample, number of females in %: 49, age: 20-35	Disability pension, Swedish Social Insurance Agency, Cases:	Mental health problems.	Mental disorder. Affective disorders. Behavioural/emotional/developmental disorders. Organic disorders/mental retardation. Personality disorders. Schizophrenia/non-affective psychoses. Neurotic/stress-related/somatoform disorders. Substance abuse disorders.	Good quality (selection: 4, comparability: 2, outcome: 3)
Upmark (1999), #479	Sweden, n=49285, Random sample, number of females in %: 0, age: 18-21	Disability pension, Swedish Social Insurance Agency, Cases: 1276	Health behavior. Mental health problems.	Risky use of alcohol. Smoking. Psychiatric diagnosis at conscription.	Low quality (selection: 4, comparability: 0, outcome: 3)
Juvani (2014), #3565	Finland, n=51874, Random sample, number of females in %: 75, age: 44.3	Disability pension, Finnish Centre for Pensions, Cases: 4642	Psychosocial work environment.	Work unit-level ERI. Individual-level ERI.	Good quality (selection: 3, comparability: 2, outcome: 3)
Mansson (2001), #2576	Sweden, n=5313, Random sample, number of females in %: 0, age: 48.1	Disability pension, Swedish Social Insurance Agency, Cases: 645	Health behavior.	Obesity.	Good quality (selection: 3, comparability: 1, outcome: 3)
Lamberg (2010), #3010	Finland, n=14487, Random sample, number of females in %: 42.5, age: 20-24, 30-34, 40-44, 50-54	Disability pension, Self reported, Cases: 329	Mental health problems.	Depressiveness.	Good quality (selection: 3, comparability: 2, outcome: 2)
Ropponen (2016), #1521	Finland, n=17169, Random sample, number of	Disability pension, Finnish Centre for	Health behavior.	Overweight, Obesity.	Good quality (selection: 3,

	females in %: 52, age: 34.3	Pensions, Cases: 2853			comparability: 2, outcome: 3)
Ropponen (2012), #1520	Finland, n=16028, Random sample, number of females in %: 44, age: Unknown	Disability pension, Finnish Centre for Pensions, Cases: 470	Physical work demands. Psychosocial work environment. Health behavior.	Indoor or outdoor work. Work physical loading. Work type, stress of daily activities. Exercise.	Good quality (selection: 3, comparability: 2, outcome: 3)
Sidorchuk (2012), #11799	Sweden, n=49321, Men, number of females in %: 0, age: 18-21	Disability pension, Swedish Social Insurance Agency, Cases: 6342	Health behavior.	Alcohol consumption.	Good quality (selection: 3, comparability: 2, outcome: 3)
Siebert (2001), #1119	Germany, n=10809, Construction workers, number of females in %: 0, age: 15-64	Early retirement (permanent disability), Workers pension fund, Cases: 359	Somatic health problems.	Obesity (diseases). Disorders of lipid metabolism. Ischemic heart disease. Hypertension. Asthma. Chronic bronchitis. Chronic obstructive lung diseases. Liver diseases. Disorders of the back and spine. Arthropathies. Skin diseases. Gout.	Good quality (selection: 3, comparability: 2, outcome: 3)
Van den Berg (2010), #445	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece, n=4611, People >50 years, number of females in %: 45, age: 50-63	Disability pension, Self reported , Cases: 784	Physical work demands. Psychosocial work environment. Health behavior.	High physical work demands. High time pressure at work. Lack of job control. Effort-reward imbalance at work. BMI. Current smoker. Problematic alcohol use. Lack of leisure time physical activity.	Low quality (selection: 2, comparability: 2, outcome: 0)
Rask (2015), #1713	Denmark, n=1785, Patients consulting their family physician, number of females in %: Unknown, age: 18-65	Disability pension, Self reported, Cases: 107	Mental health problems	Somatoform disorder.	Moderate quality (selection: 2, comparability: 1, outcome: 3)
Kouzis (2000), #3086	USA, n=11981, Random sample, number of females in %: 59, age: >18	Disability pension, Self reported, Cases: 261	Mental health problems.	Major depressive disorder. Alcohol abuse or dependence. Panic disorder. Phobic disorder. Schizophrenia. Obsessive-compulsive disorder.	Low quality (selection: 4, comparability: 2, outcome: 1)

Korhonen (2015), #3101	Finland, n=21719, Random sample, number of females in %: 51, age: 32.6 (men), 33.0 (women)	Disability pension, Social Insurance Institution & the Finnish Centre for Pensions, Cases: 4251	Health behavior.	Smoking status. Alcohol consumption. Binge drinking.	Good quality (selection: 3, comparability: 2, outcome: 3)
Lundin (2016), #2769	Sweden, n=12064, Random sample, number of females in %: 45.6, age: 18-60	Disability pension, Swedish Social Insurance Agency, Cases: 299	Physical work demands. Psychosocial work environment. Health behavior.	Physical demands. Demands Control. Smoking. Binge drinking.	Good quality (selection: 3, comparability: 2, outcome: 3)
Lassemo (2016), #2970	Norway, n=1230, Random sample, number of females in %: 51.5, age: 42	Disability pension, The Norwegian Labor and Welfare Administration (NAV), Cases: 138	Mental health problems.	Life-time ever depression. Current depression.	Good quality (selection: 4, comparability: 2, outcome: 3)
Kuoppala (2011), #3517	Finland, n=967, Civil servants, number of females in %: 53, age: 45.1	Disability pension, Social Insurance Institution, Cases: 44	Psychosocial work environment.	Job satisfaction. Job enjoyment.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Kendler (2017), #3386	Sweden, n=670000-1100000, Random sample, number of females in %: 48.2, age: 28-42	Early retirement, Swedish population-based registers, Cases: 181837	Mental health problems.	Alcohol use disorder.	Good quality (selection: 4, comparability: 2, outcome: 3)
Lundh (2014), #2770	Sweden, n=2641, Breast cancer patients, number of females in %: 100, age: 25-62	Disability pension, Swedish Social Insurance Agency, Cases: unknown	Somatic health problems.	Breast cancer (post diagnosis). Breast cancer (post diagnosis).	Moderate quality (selection: 2, comparability: 1, outcome: 3)
Kivimaki (2007), #3309	Sweden, n=176629, Random sample, number of females in %: 49, age: 16-49	Disability pension, Swedish Social Insurance Agency, Cases: 12540	Somatic health problems. Mental health problems.	Sick leave (somatic disorders). Sick leave (mental disorders).	Good quality (selection: 4, comparability: 1, outcome: 3)
Rissanen (2002), #1590	Finland, n=535, Random sample, number of females in %: 50.1, age: 30-64	Work disability, Social Insurance Institution, Cases: 56	Physical work demands. Psychosocial work environment.	Physical labour at work. Trunk flexion performance. Trunk extension performance. Mental stress at work. BM.I Physical activity at leisure. History of smoking.	Good quality (selection: 4, comparability: 2, outcome: 3)

			Health behavior.		
Claesens (2010), #4886	Germany, n=14483, Construction workers, number of females in %: 0, age: 25-59	Disability pension, German Pension Fund, Cases: 2643	Health behavior.	Daily smoking.	Good quality (selection: 3, comparability: 2, outcome: 3)
Claesens (2009), #4887	Germany, n=16875, Construction workers, number of females in %: 0, age: 41.9	Disability pension, German Pension Fund, Cases: 3064	Health behavior.	BMI.	Good quality (selection: 3, comparability: 1, outcome: 3)
Hagen (2006), #4071	Norway, n=26832, Random sample, number of females in %: 41.4, age: 25-59	Disability pension due to BP, The National Insurance Administration (NIA), Cases: 715	Physical work demands. Psychosocial work environment. Health behavior.	Physically demanding work. Concentration and attention. Stress and tension. Authority to plan own work. Current smoker. Physical exercise. Body mass index. Alcohol consumption. Job satisfaction.	Good quality (selection: 3, comparability: 1, outcome: 3)
Hoivik (2013), #3800	Norway, n=501, Patients with Inflammatory bowel disease (IBD) - ulcerative colitis and Crohn's disease, number of females in %: 49.9, age: 41.9	Disability pension, Self reported, Cases: 63	Somatic health problems.	Ulcerative colitis. Crohn's disease.	Moderate quality (selection: 2, comparability: 2, outcome: 2)
Hinkka (2013), #3828	Finland, n=967, Random sample, number of females in %: 53, age: 45.1 (23-65)	Disability pension, Actuary Division of State Treasury, Cases: 44	Physical work demands. Psychosocial work environment.	Monotonous movements. Crowdedness at work. Other physical factors. Type of work. Time form of work. Physical work environment. Support from supervisor. Feedback from supervisor. Work control. Opportunities for mental growth. Work pressure. Team climate at work. Communication. Appreciation at work. Bullying and discrimination.	Good quality (selection: 3, comparability: 2, outcome: 3)
Horsboel (2014), #3760	Denmark, n=31821, Cancer patients, number of females in %: 41, age: 45 (19-55)	Disability pension, DREAM, CRS and SKAT, Cases: 2061	Somatic health problems.	Cancer diagnosis after 2 years. Cancer diagnosis after 4 years. Cancer diagnosis after 6 years.	Moderate quality (selection: 2, comparability: 2, outcome: 3)
Husemoen (2004), #3695	Denmark, n=9035, Random sample, number of females in %: 37.9, age: 20-62	Disability pension, Danish Statistics, Cases: 506	Physical work demands. Health behavior.	Physical activity at work. Smoking status < 60 years. Smoking status, 60-67 years. BMI. Number of drinks per day. Exercise in leisure time.	Good quality (selection: 3, comparability: 2, outcome: 3)

Jansson (2013) , #9498	Sweden, n=4980882, Random sample, number of females in %: 48, age: 17-64	Disability pension, Swedish Social Insurance Agency, Cases: 142192	Somatic health problems.	Insomnia.	Good quality (selection: 4, comparability: 2, outcome: 3)
Karpansalo (2002), #3437	Finland, n=1755, Men, number of females in %: 0 age: 42-65	Disability pension, Social insurance Institution and the Central pension Security Institute, Cases: 861	Physical work demands.	Sitting. Standing. Walking. Lifting and moving pieces. Static muscular loading. Uncomfortable work positions. Physical workload.	Good quality (selection: 3, comparability: 2, outcome: 3)
Lassemo (2018), #2971	Norway, n=1238, Random sample, number of females in %: 51.7, age: 40.2 (women), 40.6 (men)	Disability pension, FD Trygd, Cases: 114	Mental health problems.	Posttraumatic stress disorder. Potentially traumatic events.	Good quality (selection: 4, comparability: 2, outcome: 3)
Salonsalmi (2012) , #1442	Finland, n=6275, Random sample, number of females in %: 78.3, age: 40-60	Disability pension, Finnish Centre for Pensions, Cases: 592	Health behavior.	Drinking habits Quantity of drinking). Drinking habits (frequency of drinking). Drinking habits (binge drinkers). Problem drinking (CAGE).	Good quality (selection: 3, comparability: 2, outcome: 3)
Samuelsson (2013) b, #1419	Sweden, n=42715, Twins, number of females in %: 49.4, age: 32-62	Disability pension due to mental diagnosis, Swedish Social Insurance Agency, Cases: 7709	Psychosocial work environment.	Job demands. Job control. Social support.	Good quality (selection: 3, comparability: 2, outcome: 3)
Samuelsson (2013) a, #1420	Sweden, n=28613, Random sample, number of females in %: 52, age: 52,9	Disability pension due to mental disorder , Swedish Social Insurance Agency, Cases: 3073	Health behavior.	Leisure time. BMI. Tobacco use. Alcohol consumption.	Good quality (selection: 3, comparability: 2, outcome: 3)
Kjellberg (2016), #3303	Sweden, n=21809, Random sample, number of females in %: 49.1, age: 25-74	Disability pension, Swedish Social Insurance Agency, Cases: 1626	Physical work demands. Psychosocial work environment.	Physical workload. Job control.	Good quality (selection: 3, comparability: 2, outcome: 3)

Singer (2014), #1059	Germany , n=491, Cancer patients , number of females in %: 47, age: 46	Health-related early retirement pension, Self reported, Cases: 41	Mental health problems.	Depression. Anxiety. Adjustment disorder. Alcohol dependence.	Low quality (selection: 3, comparability: 2, outcome: 1)
Sjosten (2009), #1041	Finland, n=4593, Random sample, number of females in %: 40.5, age: 20-62	Disability pension among other, Finnish Centre for Pensions, Cases: 422	Somatic health problems.	Sleep apnea status.	Good (selection: 3, comparability: 2, outcome: 3)
Skogen (2012), #1032	Norway, n=72395, Random sample, number of females in %: 67, age: 20-61	Disability pension among other, The National Insurance Administration (NIA), Cases: 3207 (Alcohol consumption) , 3016 (problem drinking)	Health behavior.	Alcohol consumption. Problem drinking.	Good quality (selection: 3, comparability: 2, outcome: 3)
Solovieva (2018), #6815	Finland, n=1135654, Random sample, number of females in %: 49.4, age: 30-60	Disability pension due to hip OA, Finnish Centre for Pensions, Cases: 2212	Physical work demands.	Lifting. Sitting. Physical work.	Good quality (selection: 3, comparability: 2, outcome: 3)
Sommer (2016), #1354	Denmark , n=25292, Patients with musculoskeletal symptoms, number of females in %: 57, age: 18-64	Disability pension or flexjob, DREAM, Cases: 119	Physical work demands. Psychosocial work environment. Health behavior.	Occupational mechanical exp. Job strain. Social support BMI. Leisure time physical activity.	Moderate quality (selection: 2, comparability: 1, outcome: 2)
Stover (2013), #903	Norway, n=5749, Random sample, number of females in %: 46.6, age: 40-42	Disability Pension, Statistics Norway and Norway Social Insurance service, Cases: 1944	Physical work demands. Psychosocial work environment.	Vibrations. Heavy lifting. Monotonous work. Exhaust fumes. Exposed to noise. Poor lighting. Climatic change. Smoke from welding. Other chemicals. Gases and solvents. Visually intensive work. Radiation. Passive smoking. Good fellowship/community. Worry about reorganizations. Job satisfaction. Bullying/harassment. Help/support with problems. Contact/collaboration with supervisors. Work varied enough. Influence on working conditions. Feedback. Work too demanding. Too much to do.	Good quality (selection: 3, comparability: 2, outcome: 3)

Torske (2015), #660	Norway, n=29016, Random sample, number of females in %: 49,2, age: 42,2	Disability pension, Statistics Norway, Cases: 4215 (anxiety), 4232 (depression)	Mental health problems.	Anxiety. Depression.	Good quality (selection: 3, comparability: 2, outcome: 3)
Tinghog (2014), #679	Sweden, n=4976693, MS-patients with risk for DP, number of females in %: 70.8 (MS patients), 49.2 (general population), age: 17-64	Disability pension, Swedish Social Insurance Agency, Cases: unknown	Somatic health problems. Mental health problems.	Musculoskeletal disorders. Cardiovascular disorders. Mental disorders.	Good quality (selection: 3, comparability: 2, outcome: 3)
Braekkan (2016), #5396	Norway, n=66005, Random sample, number of females in %: 51.2, age: 41.3	Disability Pension, The National Insurance Administration (NIA), Cases: 9862	Somatic health problems.	Venous thromboembolism.	Good quality (selection: 4, comparability: 2, outcome: 3)
Gustafsson (2014), #4093	Sweden, n=10936, Women, number of females in %: 100, age: 16-43	Disability pension, Swedish Social Insurance Agency, Cases: 303	Somatic health problems. Mental health problems.	No long-standing illness Musculoskeletal diagnoses. Nervous system diagnoses. Respiratory diagnoses. Digestive organs. No long-standing illness Psychiatric diagnoses.	Good quality (selection: 3, comparability: 1, outcome: 3)
Hauglann (2012), #3939	Norway, n=3096, Women, number of females in %: 100, age: 45-54	Disability pension, The Norwegian Labor and Welfare Administration (NAV), Cases: 1052	Somatic health problems.	Breast cancer.	Moderate quality (selection: 2, comparability: 1, outcome: 3)
Kaila-Kangas (2015), #3552	Finland, n=3621, Random sample, number of females in %: 50, age: 30-55	Disability pension, Finnish Centre for Pensions, Cases: 396	Health behavior. Mental health problems.	Alcohol use. Alcohol use (disorder)	Good quality (selection: 3, comparability: 2, outcome: 3)
Virtanen (2017) b, #349 b	Finland, n=6283, Random sample, number of females in %: 78.5, age: 49.2	Disability pension, Finnish Centre for Pensions, Cases: 391	Somatic health problems.	Cardiovascular disease.	Good quality (selection: 4, comparability: 2, outcome: 3)
Pietilainen (2018), #2610	Finland, n=170510, Random sample, number of females in %:	Disability pension, Finnish Centre for Pensions, Cases: 13162	Somatic health problems. Mental health problems.	Cardiovascular disease. Musculoskeletal disorder. Malignant neoplasm. Respiratory disease. Any Mental disorder.	Good quality (selection: 3, comparability: 2, outcome: 3)

	70.3, age: unknown				
Ostby (2014), #2331	Norway, n=2770, Random sample, number of females in %: 63.3, age: 28.2 (19-36)	Disability pension, The National Insurance Administration (NIA) , Cases: 76	Mental health problems.	Personality disorder.	Good quality (selection: 4, comparability: 2, outcome: 3)
Puolakka (2008) , #2084	Finland , n=152, Patients surgically treated on lumbar disc herniation , number of females in %: 43.4, age: 39	Disability pension, Self reported, Cases: 15	Physical work demands. Health behavior.	Physically demanding work. BMI.	Low quality (selection: 2, comparability: 0, outcome: 1)
Friis (2008), #4724	Denmark, n=12028, Nurses, number of females in %: 100, age: > 44	Disability pension, Danish Integrated Database for Labour Market Research (IDA), Cases: 691	Physical work demands. Psychosocial work environment. Health behavior.	Physical demands. Physical demands. Day work. Evening work. Night work. Shift work. Influence at work. Smoking. BMI. Physically active lifestyle.	Low quality (selection: 2, comparability: 0, outcome: 3)
Albertsen(2007), #5844	Denmark, n=5940, Random sample, number of females in %: unknown, age: 38.8 (women), 38.6 (men)	Disability pension, DREAM, Cases: 87	Physical work demands. Psychosocial work environment. Health behavior.	Physical demands. Repetitive monotonous work. Standing work. Arms lifted. Bending neck. Job insecurity. Decision authority. Role conflicts. Social support High psychological demands. High responsibility. High concentration. Conflicts. Violence. Teasing. Sexual harassment. Smoking. BMI	Low quality (selection: 3, comparability: 0, outcome: 3)
Ervasti (2016) a, #4545	Finland, n=14514, Public sector, number of females in %: 74, age: 50.8	Disability pension, Finnish Centre for Pensions, Cases: 1439	Somatic health problems.	Chronic hypertension. Diabetes. Heart or cerebrovascular disease.	Low quality (selection: 1, comparability: 2, outcome: 3)
Hagen (2002), #4072	Norway, n=34754, Random sample, number of females in %: 40.3, age: 25-59	Disability pension, The National Insurance Administration (NIA), Cases: 715	Physical work demands. Psychosocial work environment. Health behavior. Somatic health problems.	Physically demanding work. Excessive job demands. Concentration and attention. Authority to plan own work. Job satisfaction. Current smoker. Physical exercise. Body mass index. Alcohol consumption.	Good quality (selection: 3, comparability: 1, outcome: 3)
Jensen (2016), #3632	Denmark, n=1430, Cleaners,	Disability pension,	Psychosocial work environment.	Quantitative demands. Decision latitude. BMI.	Low quality (selection: 1,

	number of females in %: 100, age: 50.3	DREAM, Cases: 269	Health behavior.		comparability: 0, outcome: 3)
Kang (2015), #3472	Korea, n=3371, Random sample, number of females in %: 31.7, age: 54.33	Involuntary early retirement, Self reported, Cases: 325	Health behavior. Somatic health problems.	Smoking. Problem drinking. Lack of exercise. BMI.	Good quality (selection: 3, comparability: 2, outcome: 3)
Kaila-Kangas (2014), #3553	Finland, n=3943, Random sample, number of females in %: 49, age: 44.3	Disability pension, Finnish Centre for Pensions, Cases: 476	Somatic health problems. Mental health problems.	Musculoskeletal disorder. Common mental disorder.	Good quality (selection: 3, comparability: 2, outcome: 3)
Robroek (2017), #1570	Sweden, n=328743, Construction workers, number of females in %: 0, age: 32.4	Disability pension, Swedish Social Insurance Agency, Cases: 61176	Physical work demands. Health behavior.	Physical workload. BMI.	Low quality (selection: 2, comparability: 0, outcome: 3)
Ropponen (2011) a, #1524	Sweden, n=16713, Random sample, number of females in %: 52, age: unknown	Disability pension, Swedish Social Insurance Agency, Cases: 1843	Health behavior.	Leisure-time physical activity. BMI. Change in use of tobacco products. Alcohol consumption.	Good quality (selection: 3, comparability: 2, outcome: 3)
Ropponen (2011) b, #1519	Finland, n=24043, Random sample, number of females in %: 49.2, age: unknown	Disability pension, Finnish Centre for Pensions, Cases: 2496	Health behavior.	Leisure time physical activity. BMI. Smoking status. Alcohol consumption.	Good quality (selection: 3, comparability: 1, outcome: 3)
Sundstrup (2018) b, #832	Denmark, n=5076, Random sample, number of females in %: 30, age: 54.3	Disability pension, DREAM, Cases: 85	Psychosocial work environment.	Quantitative demands. Work pace. Cognitive demands. Emotional demands. Influence at work. Possibilities for development. Recognition from management. Role clarity. Role conflict. Social support from colleagues. Social support from supervisors. Social community.	Good quality (selection: 3, comparability: 2, outcome: 3)
Sundstrup (2017), #833	Denmark, n=5076, Random sample, number of females in %: 30, age: 54.3	Disability pension, DREAM, Cases: 85	Physical work demands.	Ton-years. Lifting-years. Kneeling-years. Vibration-years.	Good quality (selection: 3, comparability: 2, outcome: 3)
Sundstrup (2018) a, #20988	Denmark, n=5076, Random sample, number of females in %: 30, age: 54.3	Disability pension, DREAM, Cases: 85	Physical work demands. Psychosocial work environment.	Quantitative demands. Ton-years. Lifting-years. Kneeling-years. Vibration-years. Vibration. Noise. Lifting/carrying. Pushing/pulling. Back severely bended/twisted. Back twisted/bended frequently. Repetitive frequent movements.	Good quality (selection: 3, comparability: 2, outcome: 3)

				Appreciation. Cognitive demands. Emotional demands. Influence at work. Possibilities for development. Time pressure. Role clarity. Role conflicts. Social support from colleagues. Social support from supervisors. Social community.	
Zetterstrom (2015), #43	Sweden, n=34643, Heart disease, number of females in %: 16.4, age: 30-63	Disability pension within 5 years following a first CABG or PCI, Swedish Social Insurance Agency, Cases: 11217	Somatic health problems.	Acute coronary. Diabetes mellitus. Musculoskeletal disorder.	Good quality (selection: 3, comparability: 2, outcome: 3)
vanderBurg (2014), #441	Netherland, n=12140, Random sample, number of females in %: 26.9, age: 41	Disability pension, Self reported, Cases: 131	Somatic health problems.	Rheumatic diseases. Cardiovascular disease.	Low quality (selection: 3, comparability: 2, outcome: 1)
Roy (2018), #12119	USA, n=4128, Persons >50 years, number of females in %: unknown, age: >=50	Disability pension, Self reported, Cases: 192	Health behavior. Somatic health problems.	Physical exercise. Life style. Cancer.	Good quality (selection: 3, comparability: 2, outcome: 2)
Hauglann (2014), #3937	Norway, n=1480, Patients with cancer + controls without, number of females in %: 48.5, age: 45-54	Disability pension, The Norwegian Labor and Welfare Administration (NAV), Cases: 481	Somatic health problems.	Colorectal cancer.	Good quality (selection: 3, comparability: 2, outcome: 3)
Hansen (2017), #4015	Denmark, n=63632, Patients with rheumatoid arthritis + controls without, number of females in %: 73.6 (patients), 73.3 (controls), age: 18-59	Disability pension, DREAM, Cases: 1502	Somatic health problems.	Rheumatoid arthritis.	Good quality (selection: 3, comparability: 2, outcome: 3)
Pfleger (2010), #7466	Denmark, n=2186, MS-patients, number of females in %: Unknown, age: Unknown	Disability pension, The Prevention Registry, Cases: unknown	Physical work demands.	Physical work.	Good quality (selection: 4, comparability: 1, outcome: 3)
Halford (2012), #9250	Sweden, n=11880, Random sample,	Disability pension, Swedish Social	Health behavior.	Leisure-time physical activity.	Good quality (selection: 3,

	number of females in %: 47.1, age: 52.3 (women), 56.5 (men)	Insurance Agency, Cases: 962			comparability: 2, outcome: 3)
Claussen (2009), #4878	Norway, n=9195, Oslo citizens (40, 45 and 59-60 years), number of females in %: 53.3, age: 40, 45 and 59-60	Disability pension, The National Insurance Administration (NIA), Cases: 498	Physical work demands. Psychosocial work environment.	Physically demanding work. Job control. Shift work.	Good quality (selection: 3, comparability: 2, outcome: 3)
Shiri (2018), #6893	Finland, n=3676, Random sample, number of females in %: 49, age: 44.2	Disability pension due to musculoskeletal disorder ("permanent or temporary disability retirement due to musc as primary cause of work disability"), Finnish Centre for Pensions, Cases: 170	Physical work demands. Health behavior.	Work demanding. Hands above shoulder girdle. Moderate or poor physical work ability. Sedentary lifestyle.	Good quality (selection: 4, comparability: 2, outcome: 3)
Brauer (2002), #5388	Germany, n=110, Economically active individuals with early rheumatoid arthritis, number of females in %: 61, age: 47	Disability pension, Self reported, Cases: 31	Psychosocial work environment.	Time pressure. Shift work. Piece-work/Assembly line work. Job satisfaction. Work tempo. Poor work climate. High job demand.	Low quality (selection: 2, comparability: 0, outcome: 1)
Emberland (2017)	Norway, n=12438, Random sample, number of females in %: 55.5, age: 41.8	Disability pension, The Norwegian Labor and Welfare Administration (NAV), Cases: 553	Psychosocial work environment. Physical work demands.	Decision demands. Quantitative demands. Role clarity. Role conflict. Positive challenge. Control over work intensity. Decision control. Predictability during the next month. Support from immediate superior. Empowering leadership. Fair leadership. Innovative climate. Social climate. Human resource primacy. Physical workload. Working with arms raised to or above shoulder level.	Good quality (selection: 3, comparability: 2, outcome: 3)

Appendiks 5. Studiekarakteristik af de inkluderede studier samt estimater, som ikke er med i metaanalyserne.

Reference	Outcome measure	Cohorts	Country	Follow-up	Population	Stratified	Mean age	Median age	Domain	Factor	Estimate
Ahola (2011)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Mental health problems	Alcohol dependence	1.44
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009-2011, 2011-2015	5076	No		54.3	Psychosocial work environment	Appreciation at work	3.59
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Appreciation at work	0.40
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Arthropathies	3.03
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Asthma	0.93
Brenner (2014)	Swedish Social Insurance Institution	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	Behavioral	1.23
Helgesson (2017)	Swedish Social Insurance Agency	Statistics Sweden	Sweden	2005-2011	1753544	No		20-35	Mental health problems	Behavioural/emotional/developmental disorders	8.54
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Psychosocial work environment	Bullying/harassment	2.35

Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992- 2007	5749	No		40-42	Psychosocial work environment	Bullying/harassment	1.33
Nielsen (2017) a	The Norwegian Labor and Welfare Administration (NAV)	"The new workplace II: work factors, sickness absence, and exit from working life among Norwegian employees"	Norway	2005-2015	12303	No		18-62	Psychosocial work environment	Bullying/harassment	1.18
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Chronic bronchitis	3.18
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Chronic obstructive lung	3.00
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992- 2007	5749	No		40-42	Physical work demands	Climatic change	1.51
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Communication	0.69
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Psychosocial work environment	Conflicts	0.75
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Male	38.8 (women), 38.6 (men)		Psychosocial work environment	Conflicts	1.31

Hoivik (2013)	Self reported	Inflammatory Bowel in Southern Eastern Norway cohort + Statistics Norway, Norwegian Labour and Welfare Administration (background population)	Norway	1990-1993, 2000-2003	501	No	41.9		Somatic health problems	Crohn's disease	1.98
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Physical work demands	Crowdedness at work	1.13
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Female		30-63	Somatic health problems	Diabetes	1.42
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Male		30-63	Somatic health problems	Diabetes	1.49
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Female		30-63	Somatic health problems	Diabetes	1.52

Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Male		30-63	Somatic health problems	Diabetes	1.61
Ervasti (2016) b	Swedish Social Insurance Agency	The nationwide population-based Insurance Medicine All-Sweden (IMAS)	Sweden	2007-2010	53402	No	43.8		Somatic health problems	Diabetes	1.63
Ervasti (2017)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	5 years	20498	No		25-60	Somatic health problems	Diabetes	1.40
Ervasti (2017)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	5 years	20498	No		25-60	Somatic health problems	Diabetes	2.49
Ervasti (2016) a	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2005-2011	14514	No	50.8		Somatic health problems	Diabetes	1.84
Kivimaki (2007)	Swedish Social Insurance Agency	Entire working population of a Swedish county	Sweden	1985-1996	176629	No		16-49	Somatic health problems	Digestive disorder	4.57
Gustafsson (2014)	Swedish Social Insurance Agency	Swedish Surveys of Living Conditions (SSLC)	Sweden	1991-2003	10936	Female		16-43	Somatic health problems	Digestive disorder	2.87
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Disorders of lipid metabolism	1.88

Juvani (2014)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2000-2002, 2002-2010	51874	No	44.3		Psychosocial work environment	Effort-reward imbalance	1.42
VandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No		50-63	Psychosocial work environment	Effort-reward imbalance	1.62
Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No		18-64	Psychosocial work environment	Evening work	1.39
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female		> 44	Psychosocial work environment	Evening work	1.92
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Psychosocial work environment	Evening work	1.29
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No		40-42	Physical work demands	Exhaust fumes	1.57
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Physical work demands	Hazardous exposures	1.06
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Physical work demands	Hazardous exposures	1.63
Ervasti (2016) a	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2005-2011	14514	No	50.8		Somatic health problems	Heart or cerebrovascular disorder	2.88

Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Physical work demands	Heaviness of care duties	0.98
Kuoppala (2011)	Social Insurance Institution	All Well at Work survey 2000 (civil servants)	Finland	Not specified	967	No	45.1		Psychosocial work environment	High job satisfaction	0.47
Kuoppala (2011)	Social Insurance Institution	All Well at Work survey 2000 (civil servants)	Finland	Not specified	967	No	45.1		Psychosocial work environment	High job satisfaction	0.70
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Recognition and feedback	1.28
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999–2008	14708	No	39		Health behaviour	How many hours pr week do	1.64
Nielsen (2017) b	The Norwegian Labor and Welfare Administration (NAV)	"The new workplace II: work factors, sickness absence, and exit from working life among Norwegian employees"	Norway	Not specified	14501	No	42.75		Psychosocial work environment	Human resource primacy	0.85
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12468	No	41.8		Psychosocial work environment	Human resource primacy	0.79
Christensen (2008)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2000, 2000-2006	8298	Male		18-59	Psychosocial work environment	Level of Information	1.06

Christensen (2008)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2000, 2000-2006	8298	Female		18-59	Psychosocial Level of Information work environment	1.46
Juvani (2018)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2008-2011	41862	No			Psychosocial Injustice work environment	1.26
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems Ischaemic heart disease	2.95
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial Job insecurity work environment	1.57
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Psychosocial Job insecurity work environment	0.84
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Psychosocial Job insecurity work environment	1.03
Vahtera (2005)	Finnish Centre for Pensions	Statistics Finland	Finland	1994-1998	19273	No	40.7		Psychosocial Job insecurity work environment	1.81
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No		40-42	Psychosocial Job insecurity work environment	1.24
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Psychosocial Job rewards work environment	1.51

Roy (2018)	Self reported	Health and Retirement Study (HRS)	US	1992-2010	4128	No		>=50	Health behaviour	Life style	1.02
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Liver disease	2.00
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No		40-42	Psychosocial work environment	Low job demand	0.96
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No		40-42	Psychosocial work environment	Low job demand	1.02
Labriola (2009) a	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990,1995,2000-2006	8475	Male		18-59	Psychosocial work environment	Low job satisfaction	1.22
Labriola (2009) a	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990,1995,2000-2006	8475	Female		18-59	Psychosocial work environment	Low job satisfaction	1.40
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987-1993	26832	No		25-59	Psychosocial work environment	Low job satisfaction	1.90
Brauer (2002)	Self reported	Multicenter study with patients with early rheumatoid arthritis	Germany	6.5 years	110	No	47		Psychosocial work environment	Low job satisfaction	2.20

Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Psychosocial work environment	Low job satisfaction	1.53
Robroek (2013)	Longitudinal Survey of Health, Ageing and Retirement in Europe (SHARE)	Survey of Health, Ageing and Retirement in Europe (SHARE)	Europe	2004-2005, 2008-2009	4923	No	55.2	50-64	Psychosocial work environment	Low rewards	1.76
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009,2011,2015	5076	No		54.3	Psychosocial work environment	Low role clarity	1.74
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009,2011,2015	5076	No		54.3	Psychosocial work environment	Low role clarity	2.72
Sommer (2016)	DREAM	Musculoskeletal research database (MRD)	Denmark	2001-2004	25292	No		18-64	Psychosocial work environment	Low social support	2.19
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009,2011,2015	5076	No		54.3	Psychosocial work environment	Low social support	1.19
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009,2011,2015	5076	No		54.3	Psychosocial work environment	Low social support	1.34
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009,2011,2015	5076	No		54.3	Psychosocial work environment	Low social support	8.36
Ahola (2011)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial work environment	Low social support	1.25

Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No	40-42	Psychosocial work environment	Low social support	1.23
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No	40-42	Psychosocial work environment	Low social support	1.32
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No	40-42	Psychosocial work environment	Low social support	1.54
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Somatic health problems	Malignant neoplasm	2.01
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Somatic health problems	Malignant neoplasm	2.42
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Somatic health problems	Malignant neoplasm	2.46

Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Somatic health problems	Malignant neoplasm	2.73
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Malignant neoplasm	3.72
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Malignant neoplasm	3.86
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Malignant neoplasm	4.78

Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male			Somatic health problems	Malignant neoplasm	5.11
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992-1994, 1994-2005	6540	Female		45-65	Psychosocial work environment	Mixed (Psychosocial work environment factors)	1.30
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992-1994, 1994-2005	6540	Male		45-65	Psychosocial work environment	Mixed (Psychosocial work environment factors)	1.40
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Physical work demands	Mixed working hours	0.97
Shiri (2018)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2001-2011	3676	No	44.2	30-60	Physical work demands	Moderate or poor physical	1.72
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	No bullying/discrimination	0.63
Pfleger (2010)	The Prevention Registry	The Danish Multiple Sclerosis registry	Denmark	Mean: 11.5 years	2186	Nej			Physical work demands	No physical demand	0.70
Sundstrup (2018) b	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009-2015	5076	No	54.3		Psychosocial work environment	No recognition and feedback	2.04
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No		40-42	Psychosocial work environment	No recognition and feedback	1.03

Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No		54.3	Physical work demands	Noise	2.57
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Physical work demands	Noise	1.44
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male		20-62	Health behaviour	Normalweight	0.50
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female		20-62	Health behaviour	Normalweight	0.70
Hagen (2002)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health behaviour Study (HUNT)	Norway	1987-1993	34754	No		25-59	Health behaviour	Normalweight	1.10
Claessen (2009)	German Pension Fund	German construction industry, working as bricklayers	Germany	Mean: 10.8 years	16875	Male	41.9		Health behaviour	Normalweight	0.80
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Obesity vs group without	1.71
Sommer (2016)	DREAM	Musculoskeletal research database (MRD)	Denmark	2001-2004	25292	No		18-64	Physical work demands	Occupational mechanical exposure	1.33

Pérez-Vigil (2018)	Swedish Social Insurance Agency	Insurance Medicine All Sweden project	Sweden	2001-2013	173443	No		16-64	Mental health problems	Obsessive Compulsive Disorder	16.99
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Opportunities for mental work environment	1.07
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Male			Physical work demands	Outdoor work	1.13
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Male			Physical work demands	Outdoor work	1.15
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Female			Physical work demands	Outdoor work	1.17
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Female			Physical work demands	Outdoor work	2.25
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Part time work	2.29
Airaksinen (2017)	The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial work environment	Participatory safety	1.00
Ropponen (2013) b	Swedish Social Insurance Agency	Swedish Twin Register	Sweden	1993-2008	24543	No	45	32-62	Psychosocial work environment	Passive (job strain)	1.33
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Passive (job strain)	1.56

Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Passive (job strain)	2.85
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992,1994-2005	6540	Female		45-65	Psychosocial work environment	Passive (job strain)	1.20
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992,1994-2005	6540	Male		45-65	Psychosocial work environment	Passive (job strain)	1.30
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial work environment	Passive (low demands and control)	1.22
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 -2007	5749	No		40-42	Physical work demands	Passive smoking	1.16
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Physical work demands	Physical work load (computer work)	1.28
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Physical work demands	Physical work load (computer work)	1.74
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Physical work demands	Physical work	1.54
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Physical work demands	Poor lighting	1.29
Brauer (2002)	Self reported	Multicenter study with patients with early	Germany	6.5 years	110	No	47		Psychosocial work environment	Poor work climate	2.90

rheumatoid
arthritis

Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial work environment	Positive challenge	0.56
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial work environment	Predictability during the	1.22
Airaksinen (2017)	The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial work environment	Procedural justice	1.03
Lassemo (2018)	FD Trygd	Oslo-lofoten study (OsLof)-statistic norway	Norway	2000, 2001-2011	1238	Female	40.2 (women) , 40.6 (men)	18-66	Mental health problems	potentially traumatic events exposed	1.34
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial work environment	Quality of leadership	0.56
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial work environment	Quality of leadership	0.86

Clausen (2014)	DREAM	Project on Burnout, Motivation and Job Satisfaction (PUMA-I, PUMA-II, PUMA-III) The Danish Work Environment Cohort Study (DWECS) The Copenhagen Psychosocial Questionnaire Study (COPSOQ-I, COPSOQ-II) Social and Health Care Study (SOSU-I, SOSU-II, SOSU-III) Nursing: Work Environment, Wellbeing and Health (SATH-I, SATH-II)	Denmark	1997-2008, 2008-2010	40554	No	42		Psychosocial Quality of leadership work environment	0.91
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992- 2007	5749	No	40-42	Physical work demands	Radiation/gases/chemicals	1.21
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No	40-42	Physical work demands	Radiation/gases/chemicals	1.24
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No	40-42	Physical work demands	Radiation/gases/chemicals	1.27
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No	40-42	Physical work demands	Radiation/gases/chemicals	1.34

Airaksinen (2017)	The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7	Psychosocial work environment	Relational justice	0.96
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male		Somatic health problems	Respiratory disease	1.69
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Somatic health problems	Respiratory disease	1.71
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male		Somatic health problems	Respiratory disease	1.75
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Somatic health problems	Respiratory disease	1.80

register of the
city of Helsinki

Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Respiratory disease	1.80
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Respiratory disease	1.81
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Somatic health problems	Respiratory disease	1.82
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The Finnish Centre for pensions, personnel	Finland	1990-2013	170510	Female	Somatic health problems	Respiratory disease	1.93

register of the
city of Helsinki

Gustafsson (2014)	Swedish Social Insurance Agency	Swedish Surveys of Living Conditions (SSLC)	Sweden	1991–2003	10936	Female		16-43	Somatic health problems	Respiratory disease	1.35
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Male	38.8 (women), 38.6 (men)		Psychosocial work environment	Responsibility	1.05
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Psychosocial work environment	Responsibility	1.42
Niederkröthaler (2016)	Swedish Social Insurance Agency	Individuals treated for inpatient suicide attempt	Sweden	1995–2010	5649	No		16-30	Mental health problems	Retardation	2.37
Niederkröthaler (2016)	Swedish Social Insurance Agency	Individuals treated for inpatient suicide attempt	Sweden	1995–2010	5649	No		16-30	Mental health problems	Retardation	3.38
Helgesson (2017)	Swedish Social Insurance Agency	Statistics Sweden	Sweden	2005-2011	1753544	No		20-35	Mental health problems	Retardation	19.37
Brenner (2014)	Swedish Social Insurance Institution	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	Retardation	3.59

Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Health behaviour	Risky use of alcohol	1.80
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Health behaviour	Risky use of alcohol	10.2
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Health behaviour	Risky use of alcohol	2.20
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Health behaviour	Risky use of alcohol	20.1
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial work environment	Role clarity	0.70
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	Role conflict	1.31
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial work environment	Role conflict	1.55
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Physical work demands	Rated perceived exertion (range 0-14)	1.23
Brenner (2014)	Swedish Social Insurance Institution	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	schizophrenia	1.06

Niederkrotenthaler (2016)	Swedish Social Insurance Institution	Individuals treated for inpatient suicide attempt	Sweden	1995–2010	5649	No	16-30	Mental health problems	schizophrenia	5.41
Kouzis (2000)	Self reported	National Institute of Mental Health Epidemiologic Catchment Area ECA Survey	US	1 year	11981	No	>18	Mental health problems	schizophrenia	4.50
Helgesson (2017)	Swedish Social Insurance Institution	Statistics Sweden	Sweden	2005-2011	1753544	No	20-35	Mental health problems	schizophrenia	38.85
Karpansalo (2002)	Social Insurance Institution	The Kuopio Ischemic Heart Disease Risk Factor Study (KIHD)	Finland	1984-2000	1755	Male	42-65	Physical work demands	Sitting	0.54
Solovieva (2018)	Finnish Centre for Pensions	Population based study	Finland	2005- 2013	1135654	Male	30-60	Physical work demands	Sitting	0.28
Solovieva (2018)	Finnish Centre for Pensions	Population based study	Finland	2005- 2013	1135654	Female	30-60	Physical work demands	Sitting	0.35
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male	15-64	Somatic health problems	Skin disease	1.44
Labriola (2009) b	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8289	Female	18-59	Physical work demands	Squatting and kneeling	1.39
Labriola (2009) b	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8289	Male	18-59	Physical work demands	Squatting and kneeling	1.41

Airaksinen (2017)	The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial Support for innovation work environment	1.003
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Psychosocial Support for innovation work environment	1.04
Airaksinen (2017)	The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial Task orientation work environment	0.98
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Psychosocial Teasing work environment	0.89
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No		30-64	Health behaviour Trunk extension performance	0.72
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No		30-64	Health behaviour Trunk flexion performance	0.63
Hoivik (2013)	Self reported	Inflammatory Bowel in Southern Eastern Norway cohort + Statistics Norway, Norwegian Labour and Welfare Administration	Norway	1990-1993, 2000-2003	501	No	41.9		Somatic health problems Ulcerative colitis (UC)	1.80

(background population)

Kivimaki (2007)	Swedish Social Insurance Agency	Entire working population of a Swedish county	Sweden	1985-1996	176629	No		16-49	Somatic health problems	Urinary disease	4.25
Christensen (2008)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995,2000-2006	8298	Female		18-59	Psychosocial	Variation in work environment	1.49
Christensen (2008)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995,2000-2006	8298	Male		18-59	Psychosocial	Variation in work environment	1.95
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Psychosocial	Variation in work environment	1.56
Braekkan (2016)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	1994,1997-2008	66005	No	41.3		Somatic health problems	Venous thromboembolism	1.62
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Nether	2002-2004	850	Male	48.4		Physical work demands	Vibration	1.15
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Nether	2002-2004	850	Male	48.4		Physical work demands	Vibration	1.15
Tuchsen (2010)	DREAM	Danish Work Environment	Denmark	2000-2006	4215	Male	38.17		Physical work demands	Vibration	1.89

Sundstrup (2017)	DREAM	Cohort Study (DWECS) Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009-2015	5076	No	54.3		Physical work demands	Vibration	1.89
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Physical work demands	Vibration	1.76
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Violence	2.38
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Psychosocial work environment	Violence	1.84
Airaksinen (2017)	The Finnish Public Sector study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial work environment	Vision	0.98
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Physical work demands	Visually intensive work	1.10
Ahola (2011)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial work environment	Weekly hours < 35	1.23
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Work pressure	1.51
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No		30-64	Psychosocial work	Work stress	1.33

Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No		18-64	Psychosocial Work stress work environment	1.06
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987 -1993	26832	No		25-59	Psychosocial Work stress work environment	0.90
Blekesaune (2005)	Statistics Norway and The National Insurance Administration (NIA)	Norwegian Social Science Data Services (NSD), Statistics Norway and The National Insurance Administration (NIA)	Norway	1991-1999	19114	No	62.3	60-67	Psychosocial Work stress work environment	1.17
Ahola (2011)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial Working overtime work environment	0.60
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Psychosocial Working overtime work environment	0.95
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Psychosocial Working overtime work environment	1.02

Appendiks 6. Studiekarakteristik af de inkluderede studier samt estimater, som er med i metaanalyserne

Reference	Outcome measure	Cohorts	Country	Follow-up	Population	Stratified	Mean age	Median age	Domain	Factor	Estimate
Roy (2018)	Self reported	Health and Retirement Study (HRS)	US	1992-2010	4128	No		≥50	Health behaviour	Physical Activity	1.08
Lee (2018)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2014	2708	No	54.44		Health behaviour	Physical Activity	0.70
Sommer (2016)	DREAM	Musculoskeletal reserach database (MRD)	Denmark	2001-2004	25292	No		18-64	Health behaviour	Physical Activity	0.49
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998-2008	28613	No	52.9		Health behaviour	Physical Activity	1.03
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Physical Activity	0.73
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Physical Activity	0.96
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Physical Activity	1.01
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Female			Health behaviour	Physical Activity	0.88

Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Male		Health behaviour	Physical Activity	1.19
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No	30-64	Health behaviour	Physical Activity	0.80
Lahti (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	6 years	6275	Male	40-60	Health behaviour	Physical Activity	0.20
Lahti (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	6 years	6275	Female	40-60	Health behaviour	Physical Activity	0.37
Lahti (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	6 years	6275	Female	40-60	Health behaviour	Physical Activity	0.39
Lahti (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	6 years	6275	Male	40-60	Health behaviour	Physical Activity	0.56
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female	20-62	Health behaviour	Physical Activity	0.69
Halford (2012)	Swedish Social Insurance Agency	Eight population-based cohorts in southern and central Sweden: The Men Born in 1913, the Men Born in 1923, The Men Born in 1943, the Women and Men Born in 1953, The Eskil subsample, The Uppsala Public Health Cohort, The Beda II, The	Sweden	1971-2001	11880	Male	52.3 (women), 56.5 (men)	Health behaviour	Physical Activity	0.69

		Uppsala-Örebro Women Study									
Halford (2012)	Swedish Social Insurance Agency	Eight population-based cohorts in southern and central Sweden: The Men Born in 1913, the Men Born in 1923, The Men Born in 1943, the Women and Men Born in 1953, The Eskil subsample, The Uppsala Public Health Cohort, The Beda II, The Uppsala-Örebro Women Study	Sweden	1971-2001	11880	Female	52.3 (women), 56.5 (men)		Health behaviour	Physical Activity	0.69
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Health behaviour	Physical Activity	0.94
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Active jobs (job strain)	1.42
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Active jobs (job strain)	1.71
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992, 1994-2005	6540	Male		45-65	Psychosocial work environment	Active (job strain)	1.60
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992, 1994-2005	6540	Female		45-65	Psychosocial work environment	Active (job strain)	1.60
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial work environment	Active (job strain)	1.34

Singer (2014)	Self reported	Collected at four different hospitals in Germany - interviews	Germany	15 month	491	No	46	19-55	Mental health problems	Affective disorder	0.80
Singer (2014)	Self reported	Collected at four different hospitals in Germany - interviews	Germany	15 month	491	No	46	19-55	Mental health problems	Affective disorder	3.60
Niederkrotenthaler (2016)	Swedish Social Insurance Agency	Individuals treated for inpatient suicide attempt	Sweden	1995–2010	5649	No		16-30	Mental health problems	Affective disorder	2.68
Overland (2008)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	18-48 months	37302	No		20-66	Mental health problems	Affective disorder	2.05
Ostby (2014)	The National Insurance Administration (NIA)	The Norwegian Institute of Public Health Twin Panel, Norwegian Medical Birth Registry	Norway	1998–2008	2770	No	28.2	19-36	Mental health problems	Affective disorder	2.36
Lassemo (2016)	The Norwegian Labor and Welfare Administration (NAV)	Oslo-Iofoten study (OsLof)- statistic norway	Norway	2000, 2001-2010	1230	Female	42 (1.5–42.6)		Mental health problems	Affective disorder	1.90
Lassemo (2016)	The Norwegian Labor and Welfare Administration (NAV)	Oslo-Iofoten study (OsLof)- statistic norway	Norway	2000, 2001-2010	1230	Male	42 (1.5–42.6)		Mental health problems	Affective disorder	4.10
Lamberg (2010)	Self reported	The HeSSup study	Finland	2003-2008	14487	No		20-54	Mental health problems	Affective disorder	4.29

Kouzis (2000)	Self reported	National Institute of Mental Health Epidemiologic Catchment Area ECA Survey	US	1 year	11981	No		>18	Mental health problems	Affective disorder	1.40
Karpansalo (2005)	Social Insurance Institution	Kuopio ischaemic heart disease risk factor study (KIDH)	Finland	1984-2000	1726	Male	51.8		Mental health problems	Affective disorder	1.89
Helgesson (2017)	Swedish Social Insurance Agency	Statistics Sweden	Sweden	2005-2011	1753544	No		20-35	Mental health problems	Affective disorder	10.42
Ervasti (2016) b	Swedish Social Insurance Agency	The nationwide population-based Insurance Medicine All-Sweden (IMAS)	Sweden	2007-2010	53402	No	43.8		Mental health problems	Affective disorder	2.93
Dorner (2015)	Swedish Social Insurance Agency	Nationwide, population-based registers used: Statistics Sweden, The Longitudinal Investigations into Supportive and Ancillary health services (LISA), SIA, The National Board of Health and Welfare	Sweden	2006-2010	4823069	No		16-64	Mental health problems	Affective disorder	15.32
Carlsen (2008)	Danish Administrative registers	Danish Cancer Registry	Denmark	1981-2000	236993	Female		30-60	Mental health problems	Affective disorder	1.97
Carlsen (2008)	Danish Administrative registers	Danish Cancer Registry	Denmark	1981-2000	236993	Male		30-60	Mental health problems	Affective disorder	2.11
Bultmann (2008)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1996-2005	5106	No		18-59	Mental health problems	Affective disorder	2.90

Arvilommi (2015)	Interviews, patient records, and registers of the Social Insurance Institution of Finland and the Finnish Centre for Pensions	Jorvi Bipolar Study (JoBS)	Finland	18 months	151	No	35.5	18–59	Mental health problems	Affective disorder	1.86
Arvilommi (2015)	Interviews, patient records, and registers of the Social Insurance Institution of Finland and the Finnish Centre for Pensions	Jorvi Bipolar Study (JoBS)	Finland	18 months	151	No	35.5	18–59	Mental health problems	Affective disorder	2.15
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Mental health problems	Affective disorder	2.67
Wedegaertner (2013)	Mettmann Regional Office of the AOK	Mettman Regional Office of the AOK Rheinland (a German public health insurance company)	Germany	6.4 years	125019	No		15-57	Mental health problems	Affective disorder	1.48
Wedegaertner (2013)	Mettmann Regional Office of the AOK	Mettman Regional Office of the AOK Rheinland (a German public health insurance company)	Germany	6.4 years	125019	No		15-57	Mental health problems	Affective disorder	3.13
Sidorchuk (2012)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969-2008	49321	Male		18-21	Health behaviour	Alcohol consumption (high)	1.98
Lee (2018)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2014	2708	No	54.44		Health behaviour	Alcohol consumption (high)	1.18

Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998–2008	28613	No	52.9		Health behaviour	Alcohol consumption (high)	1.12
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998–2008	28613	No	52.9		Health behaviour	Alcohol consumption (high)	1.27
Salonsalmi (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6275	No		40-60	Health behaviour	Alcohol consumption (high)	1.02
Salonsalmi (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6275	No		40-60	Health behaviour	Alcohol consumption (high)	1.36
Salonsalmi (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6275	No		40-60	Health behaviour	Alcohol consumption (high)	1.43
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Alcohol consumption (high)	0.64
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Alcohol consumption (high)	0.69
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Alcohol consumption (high)	0.79
Robroek (2013)	Longitudinal survey of Health, Ageing, and	Survey of Health, Ageing and Retirement in Europe (SHARE)	Europe	2004, 2005-2008, 2009	4923	No	55.2	50-64	Health behaviour	Alcohol consumption (high)	1.51

Retirement in Europe (SHARE)											
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999–2008	14708	No	39		Health behaviour	Alcohol consumption (high)	0.85
Mansson (1999)	Swedish Social Insurance Agency	Five complete birth-year cohorts	Sweden	1975-1986	3751	Male	48.1		Health behaviour	Alcohol consumption (high)	2.10
Lundin (2016)	Swedish Social Insurance Agency	Swedish Total Population Register	Sweden	2004-2010	12064	No		18-60	Health behaviour	Alcohol consumption (high)	1.63
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men), 33.0 (women)		Health behaviour	Alcohol consumption (high)	1.33
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men), 33.0 (women)		Health behaviour	Alcohol consumption (high)	1.40
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men), 33.0 (women)		Health behaviour	Alcohol consumption (high)	1.44
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men), 33.0 (women)		Health behaviour	Alcohol consumption (high)	1.49
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Female		18-60	Health behaviour	Alcohol consumption (high)	0.59
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Male		18-60	Health behaviour	Alcohol consumption (high)	0.63
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Female		18-60	Health behaviour	Alcohol consumption (high)	0.93

Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Male		18-60	Health behaviour	Alcohol consumption (high)	1.54
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male		20-62	Health behaviour	Alcohol consumption (high)	3.50
Hagen (2006)	The National Insurance Administration (NIA)	National Insurance Administration NIA, The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987 -1993	26832	No		25-59	Health behaviour	Alcohol consumption (high)	1.20
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Health behaviour	Alcohol consumption (high)	1.65
Skogen (2012)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	1995-2004	72395	No		20-61	Health behaviour	Alcohol consumption (none)	1.16
Skogen (2012)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	1995-2004	72395	No		20-61	Health behaviour	Alcohol consumption (none)	1.20
Sidorchuk (2012)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969-2008	49321	Male		18-21	Health behaviour	Alcohol consumption (none)	1.35
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998–2008	28613	No	52.9		Health behaviour	Alcohol consumption (none)	2.40

Salonsalmi (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6275	No		40-60	Health behaviour	Alcohol consumption (none)	1.64
Salonsalmi (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6275	No		40-60	Health behaviour	Alcohol consumption (none)	1.94
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Alcohol consumption (none)	0.88
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Alcohol consumption (none)	1.25
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Alcohol consumption (none)	1.53
Mansson (1999)	Swedish Social Insurance Agency	Five complete birth-year cohorts	Sweden	1975-1986	3751	Male	48.1		Health behaviour	Alcohol consumption (none)	1.80
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men), 33.0 (women)		Health behaviour	Alcohol consumption (none)	1.17
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men), 33.0 (women)		Health behaviour	Alcohol consumption (none)	1.32
Kaila-Kangas (2015)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2011	3621	No		30-55	Health behaviour	Alcohol consumption (none)	1.05

Kaila-Kangas (2015)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2011	3621	No	30-55	Health behaviour	Alcohol consumption (none)	1.52
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Male	18-60	Health behaviour	Alcohol consumption (none)	2.72
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Female	18-60	Health behaviour	Alcohol consumption (none)	2.76
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Male	18-60	Health behaviour	Alcohol consumption (none)	2.78
Jorgensen (2017)	DREAM	The Danish Health and Morbidity Survey	Denmark	2000-2015	17690	Female	18-60	Health behaviour	Alcohol consumption (none)	2.82
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Mental health problems	AnyMental disorder	11.02
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female		Mental health problems	AnyMental disorder	12.81
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions,	Finland	1990-2013	170510	Male		Mental health problems	AnyMental disorder	14.58

Pietilainen (2018)	Finnish Centre for Pensions	personnel register of the city of Helsinki Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Mental health problems	AnyMental disorder	14.73
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Mental health problems	AnyMental disorder	6.46
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Mental health problems	AnyMental disorder	7.27
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register	Finland	1990-2013	170510	Male	Mental health problems	AnyMental disorder	8.72

									of the city of Helsinki		
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male			Mental health problems	AnyMental disorder	9.42
Kivimaki (2007)	Swedish Social Insurance Agency	Entire working population of a Swedish county	Sweden	1985-1996	176629	No		16-49	Mental health problems	AnyMental disorder	8.68
Gustafsson (2014)	Swedish Social Insurance Agency	Swedish Surveys of Living Conditions (SSLC)	Sweden	1991–2003	10936	Female		16-43	Mental health problems	AnyMental disorder	8.77
Ervasti (2016) b	Swedish Social Insurance Agency	The nationwide population-based Insurance Medicine All-Sweden (IMAS)	Sweden	2007–2010	53402	No	43.8		Mental health problems	AnyMental disorder	2.04
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Mental health problems	AnyMental disorder	14.6
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Mental health problems	AnyMental disorder	5.40
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Mental health problems	AnyMental disorder	7.50
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male		18-21	Mental health problems	AnyMental disorder	7.70

Dorner (2015)	Swedish Social Insurance Agency	Nationwide, population-based registers used: Statistics Sweden, The Longitudinal Investigations into Supportive and Ancillary health services (LISA), SIA, The National Board of Health and Welfare	Sweden	2006-2010	4823069	No	16-64	Mental health problems	AnyMental disorder	11.71
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No	30-58	Mental health problems	AnyMental disorder	3.63
Tinghog (2014)	Swedish Social Insurance Agency	PAR (hospitalization or outpatient specialist visit due to MS as a main or secondary diagnosis during 2000-2005)	Sweden	2006-2010	4976693	No	17-64	Mental health problems	AnyMental disorder	1.56
Tinghog (2014)	Swedish Social Insurance Agency	PAR (hospitalization or outpatient specialist visit due to MS as a main or secondary diagnosis during 2000-2005)	Sweden	2006-2010	4976693	No	17-64	Mental health problems	AnyMental disorder	6.15
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No	54.3	Physical work demands	Body exposure	2.50
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No	54.3	Physical work demands	Body exposure	3.06

Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No	54.3	Physical work demands	Body exposure	4.23
Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No	18-64	Physical work demands	Body exposure	1.19
Labriola (2009) b	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8289	Female	18-59	Physical work demands	Body exposure	1.01
Labriola (2009) b	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8289	Female	18-59	Physical work demands	Body exposure	1.90
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male	20-62	Physical work demands	Body exposure	1.65
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female	20-62	Physical work demands	Body exposure	2.05
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male	20-62	Physical work demands	Body exposure	2.64
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population	Denmark	1980-1985	9035	Female	20-62	Physical work demands	Body exposure	2.90

Study	Organization	Study Name	Country	Age Group	Sample Size	Gender	Prevalence (%)	Age Range	Work Demands	Health Outcome	OR
Fimland (2018)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	Median: 9.3 years	32362	No		20-65	Physical work demands	Body exposure	1.26
Fimland (2018)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	Median: 9.3 years	32362	No		20-65	Physical work demands	Body exposure	1.44
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Physical work Demands	Body exposure	1.21
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Netherlands	2002-2004	850	Male	48.4		Physical work demands	Body exposure	1.69
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Netherlands	2002-2004	850	Male	48.4		Physical work demands	Body exposure	1.70
Shiri (2018)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2001-2011	3676	No	44.2	30-60	Physical work demands	Body exposure	1.55
Sundstrup (2017)	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009-2015	5076	No	54.3		Physical work demands	Body exposure	1.38
Roy (2018)	Self reported	Health and Retirement Study (HRS)	US	1992-2010	4128	No		>=50	Somatic health problems	Cancer	0.92
Lundh (2014)	Swedish Social Insurance Agency	The Swedish Cancer Register, The regional Breast Cancer	Sweden	3 years	2641	Female		25-62	Somatic health problems	Cancer	1.60

		Quality Register (BCQR)									
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	2.20
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	3.01
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	3.20
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	3.24
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	3.45
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	4.21
Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	5.38

Horsboel (2014)	DREAM	Danish Cancer Registry, The Danish Civil Registration system (CRS)	Denmark	2000, 2007-2012	31821	No	45	19-55	Somatic health problems	Cancer	8.93
Hauglann (2014)	The Norwegian Labor and Welfare Administration (NAV)	The Cancer Registry of Norway (CRN), the Event data base (FD-Trygd) of Statistics Norway (SSB), The Norwegian Population Registry	Norway	1992-2005	1480	No		45-54	Somatic health problems	Cancer	1.53
Everhov (2016)	Swedish Social Insurance Agency	The Swedish Cancer Register & The Swedish National Patient Register	Sweden	2003,2009-2013	1971	Female	42		Somatic health problems	Cancer	2.40
Eaker (2011)	Swedish Social Insurance Agency	Uppsala/Örebro Regional Quality Register of Breast Cancer	Sweden	1992-2006	4762	Female		20-59	Somatic health problems	Cancer	1.47
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Cardiovascular disease	2.60
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female			Somatic health problems	Cardiovascular disease	1.76

Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Somatic health problems	Cardiovascular disease	1.82
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Somatic health problems	Cardiovascular disease	1.87
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Somatic health problems	Cardiovascular disease	2.40
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Cardiovascular disease	3.18
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions,	Finland	1990-2013	170510	Male	Somatic health problems	Cardiovascular disease	3.27

Pietilainen (2018)	Finnish Centre for Pensions	personnel register of the city of Helsinki Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male		Somatic health problems	Cardiovascular disease	3.42
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male		Somatic health problems	Cardiovascular disease	3.91
Virtanen (2017) b	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	6.2 years	6283	No	49.2	Somatic health problems	Cardiovascular disease	2.05
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Male	30-63	Somatic health problems	Cardiovascular disease	0.96
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient	Sweden	1994-2003	34643	Female	30-63	Somatic health problems	Cardiovascular disease	0.98

		register and death register									
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Female		30-63	Somatic health problems	Cardiovascular disease	1.05
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Male		30-63	Somatic health problems	Cardiovascular disease	1.13
vanderBurg (2014)	Self reported	Maastricht cohort (MCS)	Netherland	1998-2008	12140	No	41		Somatic health problems	Cardiovascular disease	6.48
Ervasti (2016) b	Swedish Social Insurance Agency	The nationwide population-based Insurance Medicine All-Sweden (IMAS)	Sweden	2007-2010	53402	No	43.8		Somatic health problems	Cardiovascular disease	1.35
Ervasti (2016) a	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2005-2011	14514	No	50.8		Somatic health problems	Cardiovascular disease	1.50
Tinghog (2014)	Swedish Social Insurance Agency	PAR (hospitalization or outpatient specialist visit due to MS as a main or secondary diagnosis during 2000-2005)	Sweden	2006-2010	4976693	No		17-64	Somatic health problems	Cardiovascular disease	1.09
Tinghog (2014)	Swedish Social Insurance Agency	PAR (hospitalization or outpatient specialist visit due	Sweden	2006-2010	4976693	No		17-64	Somatic health problems	Cardiovascular disease	2.16

									to MS as a main or secondary diagnosis during 2000-2005)		
Mittendorfer-Rutz (2018)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA), MiDAS, National patient register, causes of death register, the prescribed drug register	Sweden	2006-2010	4823069	Female		16-64	Somatic health problems	Cardiovascular disease	4.03
Mittendorfer-Rutz (2018)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA), MiDAS, National patient register, causes of death register, the prescribed drug register	Sweden	2006-2010	4823069	Male		16-64	Somatic health problems	Cardiovascular disease	4.06
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998–2008	28613	No	52.9		Health behaviour	Ex smokers	1.59
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Ex smokers	1.02

Ropponen (2014) a	Swedish Social Insurance Agency register,	Swedish twin register, participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Ex smokers	1.23
Robroek (2013)	Longitudinal survey of Health, Ageing, and Retirement in Europe (SHARE)	Survey of Health, Ageing and Retirement in Europe (SHARE)	Europe	2004, 2005-2008, 2009	4923	No	55.2	50-64	Health behaviour	Ex smokers	1.14
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No		30-64	Health behaviour	Ex smokers	1.15
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men), 33.0 (women)		Health behaviour	Ex smokers	0.87
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men), 33.0 (women)		Health behaviour	Ex smokers	0.88
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men), 33.0 (women)		Health behaviour	Ex smokers	1.42
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men), 33.0 (women)		Health behaviour	Ex smokers	1.44
Kang (2015)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2010	3371	No	54.33		Health behaviour	Ex smokers	1.47
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female		20-62	Health behaviour	Ex smokers	0.51

Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male	20-62	Health behaviour	Ex smokers	1.44
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male	20-62	Health behaviour	Ex smokers	1.80
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female	20-62	Health behaviour	Ex smokers	2.33
Haukenes (2013)	National Register of Health Insurance	The Hordaland Health Study (HUSK)	Norway	1999-2004	16422	Male	40-46	Health behaviour	Ex smokers	0.83
Haukenes (2013)	National Register of Health Insurance	The Hordaland Health Study (HUSK)	Norway	1999-2004	16422	Female	40-46	Health behaviour	Ex smokers	1.15
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Male	18-59	Health behaviour	Ex smokers	0.86
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Female	18-59	Health behaviour	Ex smokers	0.96
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in an	Sweden	1998-2008	31206	No	42-64	Health behaviour	Ex smokers	1.37

		telephone interview (SALT)									
Ropponen (2013) b	Swedish Social Insurance Agency Register	Swedish Twin Register	Sweden	1993-2008	24543	No	45	32-62	Psychosocial work environment	High job control	0.85
Markkula (2017)	Self reported	The Health 2000 survey	Finland	2000-2011	275	No	44	30-63	Psychosocial work environment	High job control	0.42
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Psychosocial work environment	High job control	0.75
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Psychosocial work environment	High job control	1.13
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	High job control	0.25
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12468	No	41.8		Psychosocial work environment	High job control	0.62
Vahtera (2010)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2000, 2001-2005	30700	No	44.8		Psychosocial work environment	High job control	0.80
Vahtera (2010)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2000, 2001-2005	30700	No	44.8		Psychosocial work environment	High job control	0.80
Samuelsson (2013) b	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1990-2008	42715	No		32-62	Psychosocial work environment	High job demand	1.07
Ropponen (2013) b	Swedish Social Insurance Agency Register	Swedish Twin Register	Sweden	1993-2008	24543	No	45	32-62	Psychosocial work environment	High job demand	1.31

Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999–2008	14708	No	39		Psychosocial work environment	High job demand	0.91
Nielsen (2017) a	The Norwegian Labor and Welfare Administration (NAV)	"The new workplace II: work factors, sickness absence, and exit from working life among Norwegian employees"	Norway	2005-2015	12303	No		18-62	Psychosocial work environment	High job demand	0.86
Nielsen (2017) a	The Norwegian Labor and Welfare Administration (NAV)	"The new workplace II: work factors, sickness absence, and exit from working life among Norwegian employees"	Norway	2005-2015	12303	No		18-62	Psychosocial work environment	High job demand	1.24
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	High job demand	0.69
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	High job demand	0.78
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	High job demand	0.85
Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	High job demand	1.16
Markkula (2017)	Self reported	The Health 2000 survey	Finland	2000-2011	275	No	44	30-63	Psychosocial work environment	High job demand	1.36
Lundin (2016)	Swedish Social Insurance Agency Register	Swedish Total Population Register	Sweden	2009, 2011, 2015	12064	No		18-60	Psychosocial work environment	High job demand	1.45

Jensen (2016)	DREAM	The population to be included in the cohort was identified in registers of members hold by the 2 tradeunions including name, addresses, duration of membership together with the Danish Civil Registration number(CPR)	Denmark	2001-2012	1430	Female	50.3		Psychosocial High job work environment demand	0.99
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12468	No	41.8		Psychosocial High job work environment demand	0.86
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987-1993	26832	No		25-59	Psychosocial High job work environment demand	2.60
Clausen (2014)	DREAM	Project on Burnout, Motivation and Job Satisfaction (PUMA-I, PUMA-II, PUMA-III) The Danish Work Environment Cohort Study (DWECS) TheCopenhagen Psychosocial Questionnaire Study (COPSOQ-I, COPSOQ-II)Social	Denmark	1997, 2008-2010	40554	No	42		Psychosocial High job work environment demand	0.93

		and Health Care Study (SOSU-I, SOSU-II, SOSU-III) Nursing: Work Environment, Wellbeing and Health (SATH-I, SATH-II)								
Clausen (2014)	DREAM	Project on Burnout, Motivation and Job Satisfaction (PUMA-I, PUMA-II, PUMA-III) The Danish Work Environment Cohort Study (DWECS) The Copenhagen Psychosocial Questionnaire Study (COPSOQ-I, COPSOQ-II) Social and Health Care Study (SOSU-I, SOSU-II, SOSU-III) Nursing: Work Environment, Wellbeing and Health (SATH-I, SATH-II)	Denmark	1997, 2008-2010	40554	No	42	Psychosocial work environment	High job demand	1.06
Brauer (2002)	Self reported	Multicenter study with patients with early rheumatoid arthritis	Germany	6.5 years	110	No	47	Psychosocial work environment	High job demand	3.10
Brauer (2002)	Self reported	Multicenter study with patients with early rheumatoid arthritis	Germany	6.5 years	110	No	47	Psychosocial work environment	High job demand	3.60

Brauer (2002)	Self reported	Multicenter study with patients with early rheumatoid arthritis	Germany	6.5 years	110	No	47		Psychosocial work environment	High job demand	3.70
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Netherlands	2002-2004	850	Male	48.4		Psychosocial work environment	High job demand	1.24
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Psychosocial work environment	High job demand	0.92
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	High job demand	1.81
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	High job demand	1.39
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No		50-63	Psychosocial work environment	High job demand	1.23
Samuelsson (2013) b	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1990-2008	42715	No		32-62	Psychosocial work environment	High social support	1.12
Ropponen (2013) b	Swedish Social Insurance Agency	Swedish Twin Register	Sweden	1993-2008	24543	No	45	32-62	Psychosocial work environment	High social support	1.05

Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Psychosocial work environment	High social support	0.88
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Psychosocial work environment	High social support	0.92
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	High social support	0.39
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	High social support	0.41
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12468	No	41.8		Psychosocial work environment	High social support	0.92
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12468	No	41.8		Psychosocial work environment	High social support	0.96
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in a telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Inactive/low	1.24
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in a telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Inactive/low	1.51
Ropponen (2014) a	Swedish Social Insurance Agency	Swedish twin register, participate in a telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Inactive/low	1.58

Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Female		Health behaviour	Inactive/low	0.69
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Male		Health behaviour	Inactive/low	0.76
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Male		Health behaviour	Inactive/low	0.77
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Female		Health behaviour	Inactive/low	0.91
Ropponen (2011) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998, 2003-2008	16713	No		Health behaviour	Inactive/low	0.94
Rabiee (2015)	National Social Insurance Board	Military Service Conscription Register (MSCR) and the National Social Insurance Board and The Longitudinal Investigations into Supportive and Ancillary health services (LISA),	Sweden	1971-2008	45375	Male	20-59	Health behaviour	Inactive/low	1.50
Rabiee (2015)	National Social Insurance Board	Military Service Conscription Register (MSCR) and the National Social Insurance Board and The Longitudinal Investigations into Supportive and Ancillary health services (LISA),	Sweden	1971-2008	45375	Male	20-59	Health behaviour	Inactive/low	1.64
Rabiee (2015)	National Social Insurance Board	Military Service Conscription Register (MSCR) and the National	Sweden	1971-2008	45375	Male	20-59	Health behaviour	Inactive/low	2.69

Author (Year)	Source	Study Name	Country	Period	N	Gender	Age	Health	Activity	Ratio
Lallukka (2015)	Finnish Centre for Pensions	The Helsinki Health Study cohort	Finland	2002-2010	6390	No	49.4	Health behaviour	Inactive/low	2.08
Kang (2015)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2012	3371	No	54.33	Health behaviour	Inactive/low	1.15
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987 -1993	26832	No	25-59	Health behaviour	Inactive/low	2.20
Hagen (2002)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	1987-1993	34754	No	25-59	Health behaviour	Inactive/low	2.10
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No	50-63	Health behaviour	Inactive/low	0.98
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female	> 44	Health behaviour	Inactive/low	1.52
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No	30-58	Health behaviour	Inactive/low	1.45

Biering-Sorensen (1999)	Danish National Register	Glostrup survey linked with register	Denmark	1977-1992	892	No		28-59	Health behaviour	Inactive/low	2.33
Ropponen (2013) b	Swedish Social Insurance Agency	Swedish Twin Register	Sweden	1993-2008	24543	No	45	32-62	Psychosocial work environment	Job strain	0.88
Ropponen (2013) b	Swedish Social Insurance Agency	Swedish Twin Register	Sweden	1993-2008	24543	No	45	32-62	Psychosocial work environment	Job strain	1.32
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Job strain	2.27
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Job strain	2.66
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992, 1994-2005	6540	Male		45-65	Psychosocial work environment	Job strain	1.90
Canivet (2013)	Swedish Social Insurance Agency	Malmö Shoulder and Neck Study (MSNS)	Sweden	1992, 1994-2005	6540	Male		45-65	Psychosocial work environment	Job strain	2.10
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Psychosocial work environment	Job strain	2.64
Juvani (2018)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	2008-2011	41862	No			Psychosocial work environment	Job strain	1.73
Karpansalo (2002)	Social Insurance Institution	The Kuopio Ischemic Heart Disease Risk Factor Study (KIHD)	Finland	1984-2000	1755	Male		42-65	Physical work demands	Lifting	2.50

Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No		18-64	Physical work demands	Lifting	1.83
Solovieva (2018)	Finnish Centre for Pensions	Population based study	Finland	2005-2013	1135654	Female		30-60	Physical work demands	Lifting	1.89
Solovieva (2018)	Finnish Centre for Pensions	Population based study	Finland	2005-2013	1135654	Male		30-60	Physical work demands	Lifting	2.34
Sundstrup (2017)	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009-2015	5076	No	54.3		Physical work demands	Lifting	2.07
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Physical work demands	Lifting	1.65
Samuelsson (2013) b	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1990-2008	42715	No		32-62	Psychosocial work environment	Low job control	0.93
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Psychosocial work environment	Low job control	1.34
Nielsen (2017) a	The Norwegian Labor and Welfare Administration (NAV)	"The new workplace II: work factors, sickness absence, and exit from working life among Norwegian employees"	Norway	2005-2015	12303	No		18-62	Psychosocial work environment	Low job control	1.25
Nielsen (2017) a	The Norwegian Labor and Welfare Administration (NAV)	"The new workplace II: work factors, sickness absence, and exit from working life among Norwegian employees"	Norway	2005-2015	12303	No		18-62	Psychosocial work environment	Low job control	1.27

Sundstrup (2018) a	DREAM	Copenhagen Aging Denmark and midlife Biobank (CAMB)		2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	Low job control	4.68
Sundstrup (2018) a	DREAM	Copenhagen Aging Denmark and midlife Biobank (CAMB)		2009, 2011, 2015	5076	No		54.3	Psychosocial work environment	Low job control	4.97
Lundin (2016)	Swedish Social Insurance Agency	Swedish Total Population Register	Sweden	2004-2010	12064	No		18-60	Psychosocial work environment	Low job control	3.00
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Low job control	1.74
Laine (2009)	Self reported	Finnish Public Sector study (FPS)	Finland	2002-2005	25150	No	40.2	19-50	Psychosocial work environment	Low job control	2.09
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Psychosocial work environment	Low job control	1.34
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Psychosocial work environment	Low job control	1.41
Kjellberg (2016)	Swedish Social Insurance Agency	Two cohorts of Swedish schoolchildren "evaluation through follow up"	Sweden	1991-2009	21809	Male	25-74		Psychosocial work environment	Low job control	2.19
Kjellberg (2016)	Swedish Social Insurance Agency	Two cohorts of Swedish schoolchildren "evaluation through follow up"	Sweden	1991-2009	21809	Female	25-74		Psychosocial work environment	Low job control	2.41

Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987 -1993	26832	No		25-59	Psychosocial work environment	Low job control	1.50
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No		50-63	Psychosocial work environment	Low job control	2.68
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female		> 44	Psychosocial work environment	Low job control	1.48
Claussen (2009)	The National Insurance Administration (NIA)	The Oslo Health Survey	Norway	2001-2004	9195	No		40-60	Psychosocial work environment	Low job control	2.04
Clausen (2014)	DREAM	Project on Burnout, Motivation and Job Satisfaction (PUMA-I, PUMA-II, PUMA-III) The Danish Work Environment Cohort Study (DWECS) TheCopenhagen Psychosocial Questionnaire Study (COPSOQ-I, COPSOQ-II)Social and Health Care Study (SOSU-I, SOSU-II, SOSU-III) Nursing: Work	Denmark	1997, 2008-2010	40554	No	42		Psychosocial work environment	Low job control	1.28

		Environment, Wellbeing and Health (SATH-I, SATH-II)									
Brauer (2002)	Self reported	Multicenter study with patients with early rheumatoid arthritis	Germany	6.5 years	110	No	47		Psychosocial work environment	Low job control	3.80
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Netherlands	2002-2004	850	Male	48.4		Psychosocial work environment	Low job control	0.85
Alavinia (2009)	Self reported	A sample of male Dutch construction workers	The Netherlands	2002-2004	850	Male	48.4		Psychosocial work environment	Low job control	1.63
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992 - 2007	5749	No		40-42	Psychosocial work environment	Low job control	1.10
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Psychosocial work environment	Low job control	0.90
Blekesaune (2005)	Statistics Norway and The National Insurance Administration (NIA)	Norwegian Social Science Data Services (NSD), Statistics Norway and The National Insurance Administration (NIA)	Norway	1991-1999	19114	No	62.3	60-67	Psychosocial work environment	Low Job control	1.20
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Female			Physical work demands	Monotonous work	1.47
Ropponen (2012)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1975-2004	16028	Male			Physical work demands	Monotonous work	1.68

Sundstrup (2018) a	DREAM	Copenhagen Aging and midlife Biobank (CAMB)	Denmark	2009, 2001-2015	5076	No		54.3	Physical work demands	Monotonous work	1.91
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Physical work demands	Monotonous work	2.61
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Physical work demands	Monotonous work	0.54
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Male	38.8 (women), 38.6 (men)		Physical work demands	Monotonous work	1.59
Stover (2013)	Statistics Norway	The Nordland health study	Norway	1992-2007	5749	No		40-42	Physical work demands	Monotonous work	1.44
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Musculoskeletal Disorders	1.47
Siebert (2001)	Workers pension fund	Employees of the construction industry	Germany	1986-1994	10809	Male		15-64	Somatic health problems	Musculoskeletal Disorders	2.53
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male			Somatic health problems	Musculoskeletal Disorders	1.68
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions,	Finland	1990-2013	170510	Female			Somatic health problems	Musculoskeletal Disorders	2.11

Pietilainen (2018)	Finnish Centre for Pensions	personnel register of the city of Helsinki Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Musculoskeletal Disorders	2.14
Pietilainen (2018)	Finnish Centre for Pensions	personnel register of the city of Helsinki Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female	Somatic health problems	Musculoskeletal Disorders	2.16
Pietilainen (2018)	Finnish Centre for Pensions	personnel register of the city of Helsinki Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Musculoskeletal Disorders	2.27
Pietilainen (2018)	Finnish Centre for Pensions	personnel register of the city of Helsinki Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Male	Somatic health problems	Musculoskeletal Disorders	2.40

Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female			Somatic health problems	Musculoskeletal Disorders	2.51
Pietilainen (2018)	Finnish Centre for Pensions	Finnish National Institute for Health and Welfare, The finnish centre for pensions, personnel register of the city of Helsinki	Finland	1990-2013	170510	Female			Somatic health problems	Musculoskeletal Disorders	2.75
Kivimaki (2007)	Swedish Social Insurance Agency	Entire working population of a Swedish county	Sweden	1985-1996	176629	No		16-49	Somatic health problems	Musculoskeletal Disorders	6.94
Kaila-Kangas (2014)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2011	3943	No	44.3		Somatic health problems	Musculoskeletal Disorders	2.53
Hansen (2017)	DREAM	DANBIO registry	Denmark	1994-2011	63632	No		18-59	Somatic health problems	Musculoskeletal Disorders	12.20
Gustafsson (2014)	Swedish Social Insurance Agency	Swedish Surveys of Living Conditions (SSLC)	Sweden	1991-2003	10936	Female		16-43	Somatic health problems	Musculoskeletal Disorders	3.76
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Female		30-63	Somatic health problems	Musculoskeletal Disorders	1.42

Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Female		30-63	Somatic health problems	Musculoskeletal Disorders	1.59
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Male		30-63	Somatic health problems	Musculoskeletal Disorders	1.62
Zetterstrom (2015)	Swedish Social Insurance Agency	Swedehart register, national board of health and welfares national patient register and death register	Sweden	1994-2003	34643	Male		30-63	Somatic health problems	Musculoskeletal Disorders	1.83
vanderBurg (2014)	Self reported	Maastricht cohort (MCS)	Netherland	1998-2008	12140	No	41		Somatic health problems	Musculoskeletal Disorders	13.37
Ervasti (2016) b	Swedish Social Insurance Agency	The nationwide population-based Insurance Medicine All-Sweden (IMAS)	Sweden	2007-2010	53402	No	43.8		Somatic health problems	Musculoskeletal Disorders	1.73
Dorner (2015)	Swedish Social Insurance Agency	Nationwide, population-based registers used: Statistics Sweden, The Longitudinal Investigations into Supportive and Ancillary health services (LISA), SIA, The National	Sweden	2006-2010	4823069	No		16-64	Somatic health problems	Musculoskeletal Disorders	10.24

Dorner (2015)	Swedish Social Insurance Agency	Board of Health and Welfare Nationwide, population-based registers used: Statistics Sweden, The Longitudinal Investigations into Supportive and Ancillary health services (LISA), SIA, The National Board of Health and Welfare	Sweden	2006-2010	4823069	No		16-64	Somatic health problems	Musculoskeletal Disorders	9.48
Tinghog (2014)	Swedish Social Insurance Agency	PAR (hospitalization or outpatient specialist visit due to MS as a main or secondary diagnosis during 2000-2005)	Sweden	2006-2010	4976693	No		17-64	Somatic health problems	Musculoskeletal Disorders	1.16
Tinghog (2014)	Swedish Social Insurance Agency	PAR (hospitalization or outpatient specialist visit due to MS as a main or secondary diagnosis during 2000-2005)	Sweden	2006-2010	4976693	No		17-64	Somatic health problems	Musculoskeletal Disorders	3.34
Sjosten (2009)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	1994-2005	4593	Male		20-62	Somatic health problems	Nervous disorder	2.20
Sjosten (2009)	Finnish Centre for Pensions	Finnish Public Sector study (FPS)	Finland	1994-2005	4593	Female		20-62	Somatic health problems	Nervous disorder	2.70
Rod (2017)	Swedish Social Insurance Agency	Public registers, Swedish Patient Register	Sweden	2000, 2009-2010	364171	Male	46		Somatic health problems	Nervous disorder	1.96

Rod (2017)	Swedish Social Insurance Agency	Public registers, Swedish Patient Register	Sweden	2000, 2009-2010	364171	Female	46		Somatic health problems	Nervous disorder	2.41
Rod (2017)	Swedish Social Insurance Agency	Public registers, Swedish Patient Register	Sweden	2000, 2009-2010	364171	Male	46		Somatic health problems	Nervous disorder	3.34
Rod (2017)	Swedish Social Insurance Agency	Public registers, Swedish Patient Register	Sweden	2000, 2009-2010	364171	Female	46		Somatic health problems	Nervous disorder	4.51
Overland (2008)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	18-48 months	37302	No		20-66	Somatic health problems	Nervous disorder	2.23
Kivimaki (2007)	Swedish Social Insurance Agency	Entire working population of a Swedish county	Sweden	1985-1996	176629	No		16-49	Somatic health problems	Nervous disorder	4.71
Gustafsson (2014)	Swedish Social Insurance Agency	Swedish Surveys of Living Conditions (SSLC)	Sweden	1991-2003	10936	Female		16-43	Somatic health problems	Nervous disorder	2.52
Jansson (2013)	Swedish Social Insurance Agency	The national patient register PAR	Sweden	2006-2010	4980882	No		17-64	Somatic health problems	Nervous disorder	1.52
Ropponen (2018)	National Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998, 2003-2013	27165	No	<65 years		Psychosocial work environment	Night work	1.20
Airaksinen (2017)	The Finnish Public Sector Study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial work environment	Night work	0.93
Karkkainen (2017)	Swedish Social Insurance Agency	Swedish Twin Register	Sweden	1998-2013	27165	No		41-64	Psychosocial work environment	Night work	1.39

Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No		18-64	Psychosocial work environment	Night work	0.86
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female		> 44	Psychosocial work environment	Night work	1.84
Jensen (2012)	DREAN	PENSAM	Denmark	1993-2008	3332	No	41.9		Psychosocial work environment	Night work	1.18
Sommer (2016)	DREAM	Musculoskeletal reserach database (MRD)	Denmark	2001-2004	25292	No		18-64	Health behaviour	Obesity	2.20
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998-2008	28613	No	52.9		Health behaviour	Obesity	1.38
Airaksinen (2017)	The Finnish Public Sector Study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Health behaviour	Obesity	1.19
Ropponen (2016)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1981-2004	17169	No	34.3		Health behaviour	Obesity	2.59
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	Male		40-60	Health behaviour	Obesity	1.45
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	No		40-60	Health behaviour	Obesity	1.94
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	Female		40-60	Health behaviour	Obesity	2.05

Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	Male		40-60	Health behaviour	Obesity	3.32
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	No		40-60	Health behaviour	Obesity	3.45
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	Female		40-60	Health behaviour	Obesity	3.47
Robroek (2017)	Swedish Social Insurance Agency	National occupational health service (byggghalsan)	Sweden	1980-2008	328743	Male	32.4		Health behaviour	Obesity	1.70
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Health	Obesity	1.22
Norrback (2018)	Swedish Social Insurance Agency	The National Survey of Living conditions (ULF/SILC)	Sweden	1996, 2011-2012	50015	No		19-64	Health behaviour	Obesity	1.75
Neovius (2010)	Swedish Social Insurance Agency	Military Service Conscription Register (MSCR), Social Insurance Register, Register of the Total Population, Population and Housing Censuses	Sweden	1969-2007	45920	Male	18.7		Health behaviour	Obesity	1.55
Mansson (2001)	Swedish Social Insurance Agency	Five complete birth-year cohorts	Sweden	1975-1986	5313	Male	48.1		Health behaviour	Obesity	2.20
Kang (2015)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2012	3371	No	54.33		Health behaviour	Obesity	1.36
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population	Denmark	1980-1985	9035	Male		20-62	Health behaviour	Obesity	0.77

Husemoen (2004)	Danish Statistics	Studies, The Copenhagen Male Study Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female	20-62	Health behaviour	Obesity	1.21
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987-1993	26832	No	25-59	Health behaviour	Obesity	1.70
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No	50-63	Health behaviour	Obesity	1.71
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female	> 44	Health behaviour	Obesity	1.59
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No	30-58	Health behaviour	Obesity	1.53
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Male	18-59	Health behaviour	Obesity	1.15
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Female	18-59	Health behaviour	Obesity	1.81

Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Health behaviour	Obesity	0.85
Sommer (2016)	DREAM	Musculoskeletal reserach database (MRD)	Denmark	2001-2004	25292	No		18-64	Health behaviour	Overweight	0.67
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998-2008	28613	No	52.9		Health behaviour	Overweight	1.25
Airaksinen (2017)	The Finnish Public Sector Study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Health behaviour	Overweight	1.07
Ropponen (2016)	Finnish Centre for Pensions	Finnish Twin Cohort	Finland	1981-2004	17169	No	34.3		Health behaviour	Overweight	1.62
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	No		40-60	Health behaviour	Overweight	1.42
Robroek (2017)	Swedish Social Insurance Agency	National occupational health service (byggghalsan)	Sweden	1980-2008	328743	Male	32.4		Health behaviour	Overweight	1.21
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Health behaviour	Overweight	1.44
Norrback (2018)	Swedish Social Insurance Agency	The National Survey of Living conditions (ULF/SILC)	Sweden	1996, 2011-2012	50015	No		19-64	Health behaviour	Overweight	1.13
Neovius (2010)	Swedish Social Insurance Agency	Military Service Conscription Register (MSCR), Social Insurance Register, Register of the Total	Sweden	1696-2007	45920	Male	18.7		Health behaviour	Overweight	1.34

		Population, Population and Housing Censuses									
Kang (2015)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2012	3371	No	54.33		Health behaviour	Overweight	1.12
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male		20-62	Health behaviour	Overweight	0.51
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female		20-62	Health behaviour	Overweight	0.72
Hagen (2002)	The National Insurance Administration (NIA)	The Nord- Trøndelag Health Study (HUNT)	Norway	1987-1993	34754	No		25-59	Health behaviour	Overweight	1.40
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No		50-63	Health behaviour	Overweight	0.97
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female		> 44	Health behaviour	Overweight	1.18
Claessen (2009)	German Pension Fund	German construction	Germany	Mean: 10.8 years	16875	Male	41.9		Health behaviour	Overweight	0.74

Claessen (2009)	German Pension Fund	industry, working as bricklayers German construction industry, working as bricklayers	Germany	Mean: 10.8 years	16875	Male	41.9		Health behaviour	Overweight	0.81
Biering-Sorensen (1999)	Danish National Register	Glostrup survey linked with register	Denmark	1977-1992	892	No		28-59	Health behaviour	Overweight	0.84
Biering-Sorensen (1999)	Danish National Register	Glostrup survey linked with register	Denmark	1977-1992	892	No		28-59	Health behaviour	Overweight	2.44
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Male		18-59	Health behaviour	Overweight	0.73
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Female		18-59	Health behaviour	Overweight	1.19
Brenner (2014)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	Personality disorder	5.42
Niederkrotenthaler (2016)	Swedish Social Insurance Agency	Individuals treated for inpatient suicide attempt	Sweden	1995-2010	5649	No		16-30	Mental health problems	Personality disorder	3.85
Ostby (2014)	NIA	The Norwegian Institute of Public Health Twin Panel, Norwegian Medical Birth Registry	Norway	1998-2008	2770	No	28.2	19-36	Mental health problems	Personality disorder	7.00
Helgesson (2017)	Swedish Social Insurance Agency	Statistics Sweden	Sweden	2005-2011	1753544	No		20-35	Mental health problems	Personality disorder	20.08

Arvilommi (2015)	Interviews, patient records, and registers of the Social Insurance Institution of Finland and the Finnish Centre for Pensions	Jorvi Bipolar Study (JoBS) Finland		18 months	151	No	35.5	18–59	Mental health problems	Personality disorder	1.93
Arvilommi (2015)	Interviews, patient records, and registers of the Social Insurance Institution of Finland and the Finnish Centre for Pensions	Jorvi Bipolar Study (JoBS) Finland		18 months	151	No	35.5	18–59	Mental health problems	Personality disorder	3.70
Lundin (2016)	Swedish Social Insurance Agency	Swedish Total Population Register	Sweden	2004-2010	12064	No		18-60	Physical work demands	Physical demand	2.60
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987-1993	26832	No		25-59	Physical work demands	Physical demand	6.56
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)		Physical work demands	Physical demand	0.50
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Male	38.8 (women), 38.6 (men)		Physical work demands	Physical demand	2.02
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Physical work demands	Physical demand	2.45

Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Physical work demands	Physical demand	1.36
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No		30-64	Physical work demands	Physical demand	2.61
Puolakka (2008)	Self reported	Jyväskylä Central Hospital	Finland	5 years	152	No	39		Physical work demands	Physical demand	1.03
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No		50-63	Physical work demands	Physical demand	1.57
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female		> 44	Physical work demands	Physical demand	1.22
Claussen (2009)	The National Insurance Administration (NIA)	The Oslo Health Survey	Norway	2001-2004	9195	No		40-60	Physical work demands	Physical demand	1.24
Robroek (2017)	Swedish Social Insurance Agency	National occupational health service (bygghalsan)	Sweden	1980-2008	328743	Male	32.4		Physical work demands	Physical work load	2.28
Blekesaune (2005)	Statistics Norway and The National Insurance Administration (NIA)	Norwegian Social Science Data Services (NSD), Statistics Norway and The National Insurance Administration (NIA)	Norway	1991-1999	19114	No	62.3	60-67	Physical work demands	Physical Work load	1.02

Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Physical work demands	Physical work load	1.73
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Physical work demands	Physical work load	1.75
Karpansalo (2002)	Social Insurance Institution	The Kuopio Ischemic Heart Disease Risk Factor Study (KIHD)	Finland	1984-2000	1755	Male		42-65	Physical work demands	Physical work load	2.01
Kjellberg (2016)	Swedish Social Insurance Agency	Two cohorts of Swedish schoolchildren "evaluation through follow up"	Sweden	1991-2009	21809	Male	25-74		Physical work demands	Physical work load	1.43
Kjellberg (2016)	Swedish Social Insurance Agency	Two cohorts of Swedish schoolchildren "evaluation through follow up"	Sweden	1991-2009	21809	Female	25-74		Physical work demands	Physical work load	1.93
Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No		18-64	Physical work demands	Physical work load	2.08
Fimland (2018)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	Median: 9.3 years	32362	No		20-65	Physical work demands	Physical work load	1.49
Emberland (2017)	The Norwegian Labor and Welfare Administration (NAV)	96 organizations	Norway	5.8 years	12438	No	41.8		Physical Work demands	Physical work load	1.93
Solovieva (2018)	Finnish Centre for Pensions	Population based study	Finland	2005-2013	1135654	Female		30-60	Physical work demands	Physical work load	2.24

Solovieva (2018)	Finnish Centre for Pensions	Population based study	Finland	2005-2013	1135654	Male		30-60	Physical work demands	Physical work load	2.42
Airaksinen (2017)	The Finnish Public Sector Study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Psychosocial work environment	Shift work	0.93
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Female		40-60	Psychosocial work environment	Shift work	1.02
Lahelma (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2000, 2001, 2002-2008	6525	Male		40-60	Psychosocial work environment	Shift work	1.16
Karkkainen (2013)	Social Insurance Institution	Finnish Twin Cohort	Finland	1975-2004	16028	No		18-64	Psychosocial work environment	Shift work	1.24
Hinkka (2013)	Actuary Division of State Treasury	All Well at Work survey 2000 (civil servants)	Finland	7 years	967	No	45.1	23-65	Psychosocial work environment	Shift work	3.64
Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female		> 44	Psychosocial work environment	Shift work	1.02
Claussen (2009)	The National Insurance Administration (NIA)	The Oslo Health Survey	Norway	2001-2004	9195	No		40-60	Psychosocial work environment	Shift work	1.21
Brauer (2002)	Self reported	Multicenter study with patients with early rheumatoid arthritis	Germany	6.5 years	110	No	47		Psychosocial work environment	Shift work	3.10
Tuchsen (2008)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990, 1995, 2000-2006	8005	No		18-59	Psychosocial work environment	Shift work	1.19

Airaksinen (2017)	The Finnish Public Sector Study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Health behaviour	Smokers	1.18
Ropponen (2014) a	Swedish Social Insurance Agency register,	Swedish twin participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Smokers	1.5
Ropponen (2014) a	Swedish Social Insurance Agency register,	Swedish twin participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Smokers	1.74
Ropponen (2014) a	Swedish Social Insurance Agency register,	Swedish twin participate in an telephone interview (SALT)	Sweden	1998-2008	31206	No		42-64	Health behaviour	Smokers	1.77
Ropponen (2011) a	Swedish Social Insurance Agency study of disability pension and sickness absence (STODS)	Swedish twin	Sweden	1998, 2003-2008	16713	No			Health behaviour	Smokers	1.41
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Health behaviour	Smokers	1.42
Rissanen (2002)	Social Insurance Institution	Mini-Finland Health Survey	Finland	1982-1994	535	No		30-64	Health behaviour	Smokers	3.25
Neovius (2010)	Swedish Social Insurance Agency	Military Service Conscription Register (MSCR), Social Insurance Register, Register of the Total Population,	Sweden	1969-1994	45920	Male	18.7		Health behaviour	Smokers	2.01

Population and
Housing Censuses

Lundin (2016)	Swedish Social Insurance Agency	Swedish Total Population Register	Sweden	2004-2010	12064	No	18-60	Health behaviour	Smokers	1.88
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men) & 33.0 (women)	Health behaviour	Smokers	1.18
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Female	32.6 (men) & 33.0 (women)	Health behaviour	Smokers	1.28
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men) & 33.0 (women)	Health behaviour	Smokers	1.95
Korhonen (2015)	Social Insurance Institution	Finnish Twin Cohort and Central Population Registry	Finland	1975-2004	21719	Male	32.6 (men) & 33.0 (women)	Health behaviour	Smokers	1.99
Kang (2015)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2010	3371	No	54.33	Health behaviour	Smokers	1.53
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female	20-62	Health behaviour	Smokers	0.40
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The	Denmark	1980-1985	9035	Male	20-62	Health behaviour	Smokers	2.96

		Copenhagen Male Study								
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Male	20-62	Health behaviour	Smokers	5.25
Husemoen (2004)	Danish Statistics	Copenhagen City Heart Study, The Glostrup Population Studies, The Copenhagen Male Study	Denmark	1980-1985	9035	Female	20-62	Health behaviour	Smokers	7.01
Haukenes (2013)	National Register of Health Insurance	The Hordaland Health Study (HUSK)	Norway	1999-2004	16422	Male	40-46	Health behaviour	Smokers	1.33
Haukenes (2013)	National Register of Health Insurance	The Hordaland Health Study (HUSK)	Norway	1999-2004	16422	Female	40-46	Health behaviour	Smokers	2.22
Hagen (2006)	The National Insurance Administration (NIA)	The National Insurance Administration (NIA), The Nord-Trøndelag Health Study (HUNT), Statistics Norway	Norway	1987-1993	26832	No	25-59	Health behaviour	Smokers	1.50
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No	50-63	Health behaviour	Smokers	1.46

Friis (2008)	IDA	The Danish Nurse Cohort Study	Denmark	1993-2002	12028	Female	> 44	Health behaviour	Smokers	1.50
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male	18-21	Health behaviour	Smokers	1.20
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male	18-21	Health behaviour	Smokers	1.50
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male	18-21	Health behaviour	Smokers	5.30
Upmark (1999)	Swedish Social Insurance Agency	Conscripted into military service	Sweden	1969, 1970-1993	49285	Male	18-21	Health behaviour	Smokers	5.90
Claessen (2010)	German Pension Fund	A routine occupational health examination by the Institution for Statutory Accident Insurance and Prevention in the Building Trade in Württemberg	Germany	Mean: 10.8 years	14483	Male	25-59	Health behaviour	Smokers	1.95
Claessen (2009)	German Pension Fund	German construction industry, working as bricklayers	Germany	Mean: 10.8 years	16875	Male	41.9	Health behaviour	Smokers	1.36
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Female	38.8 (women), 38.6 (men)	Health behaviour	Smokers	3.13
Albertsen (2007)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1995-2004	5940	Male	38.8 (women), 38.6 (men)	Health behaviour	Smokers	3.70
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No	30-58	Health behaviour	Smokers	1.68

Biering-Sorensen (1999)	Danish National Register	Glostrup survey linked with register	Denmark	1977-1992	892	No		28-59	Health behaviour	Smokers	2.44
Jensen (2012)	DREAM	PENSAM	Denmark	1993-2008	3332	No	41.9		Health behaviour	Smokers	1.20
Singer (2014)	Self reported	Collected at four different hospitals in Germany - interviews	Germany	15 months	491	No	46	19-55	Mental health problems	Neurotic, stress-related and somatoform disorder	1.50
Singer (2014)	Self reported	Collected at four different hospitals in Germany - interviews	Germany	15 months	491	No	46	19-55	Mental health problems	Neurotic, stress-related and somatoform disorder	2.30
Brenner (2014)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	Neurotic, stress-related and somatoform disorder	1.72
Brenner (2014)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	Neurotic, stress-related and somatoform disorder	2.03
Rask (2015)	DREAM	Functional Illness in Primary Care study	Denmark	10 years	1785	No		18-65	Mental health problems	Neurotic, stress-related and somatoform disorder	4.04
Niederkrotenthaler (2016)	Swedish Social Insurance Agency	Individuals treated for inpatient suicide attempt	Sweden	1995-2010	5649	No		16-30	Mental health problems	Neurotic, stress-related and somatoform disorder	2.00
Ostby (2014)	The National Insurance Administration (NIA)	The Norwegian Institute of Public Health Twin Panel, Norwegian Medical Birth Registry	Norway	1998-2008	2770	No	28.2	19-36	Mental health problems	Neurotic, stress-related and somatoform disorder	3.79

Lassemo (2018)	FD Trygd	Oslo-lofoten study Norway (OsLof)- statistic norway		2000, 2001-2011	1238	Female	40.2 (women), 40.6 (men)	18-66	Mental health problems	Neurotic, stress-related and somatoform disorder	4.13
Kouzis (2000)	Self reported	National Institute of Mental Health Epidemiologic Catchment Area ECA Survey	US	1 year	11981	No		>18	Mental health problems	Neurotic, stress-related and somatoform disorder	1.40
Kouzis (2000)	Self reported	National Institute of Mental Health Epidemiologic Catchment Area ECA Survey	US	1 year	11981	No		>18	Mental health problems	Neurotic, stress-related and somatoform disorder	2.30
Kouzis (2000)	Self reported	National Institute of Mental Health Epidemiologic Catchment Area ECA Survey	US	1 year	11981	No		>18	Mental health problems	Neurotic, stress-related and somatoform disorder	5.20
Helgesson (2017)	Swedish Social Insurance Agency	Statistics Sweden	Sweden	2005-2011	1753544	No		20-35	Mental health problems	Neurotic, stress-related and somatoform disorder	7.71
Arvilommi (2015)	Interviews, patient records, and registers of the Social Insurance Institution of Finland and the Finnish Centre for Pensions	Jorvi Bipolar Study (JoBS)	Finland	18 months	151	No	35.5	18-59	Mental health problems	Neurotic, stress-related and somatoform disorder	4.86
Ahola (2011)	Finnish Pension Registers	The Health 2000 survey	Finland	2000-2007	3164	No		30-58	Mental health problems	Neurotic, stress-related and somatoform disorder	3.34

Wedegaertner (2013)	Mettmann Regional Office of the AOK	Mettman Regional Office of the AOK Rheinland (a German public health insurance company)	Germany	Mean: 6.4 years	125019	No		15-57	Mental health problems	Neurotic, stress-related and somatoform disorder	1.25
Wedegaertner (2013)	Mettmann Regional Office of the AOK	Mettman Regional Office of the AOK Rheinland (a German public health insurance company)	Germany	Mean: 6.4 years	125019	No		15-57	Mental health problems	Neurotic, stress-related and somatoform disorder	1.26
Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.51
Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.62
Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.63
Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.65
Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.66
Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.70

Torske (2015)	Statistics Norway	The Nord-Trøndelag Health Study (HUNT)	Norway	1995, 1997-2010	29016	No	42.2		Mental health problems	Neurotic, stress-related and somatoform disorder	1.75
Skogen (2012)	The National Insurance Administration (NIA)	The Nord-Trøndelag Health Study (HUNT)	Norway	1995-2004	72395	No		20-61	Mental health problems	Substance abuse	2.79
Singer (2014)	Self reported	Collected at four different hospitals in Germany - interviews	Germany	15 months	491	No	46	19-55	Mental health problems	Substance abuse	3.10
Brenner (2014)	Swedish Social Insurance Agency	The Longitudinal Investigations into Supportive and Ancillary health services (LISA)	Sweden	2006-2010	4750	No	47		Mental health problems	Substance abuse	2.20
Salonsalmi (2012)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6275	No		40-60	Mental health problems	Substance abuse	1.44
Niederkrötenhaler (2016)	Swedish Social Insurance Agency	Individuals treated for inpatient suicide attempt	Sweden	1995-2010	5649	No		16-30	Mental health problems	Substance abuse	2.18
Mansson (1999)	Swedish Social Insurance Agency	Five complete birth-year cohorts	Sweden	1975-1986	3751	Male	48.1		Mental health problems	Substance abuse	1.5
Kendler (2017)	Swedish population-based registers	Swedish population-based registers	Sweden	1992-2009	670000-1100000	Female		28-42	Mental health problems	Substance abuse	3.68
Kendler (2017)	Swedish population-based registers	Swedish population-based registers	Sweden	1992-2009	670000-1100000	Male		28-42	Mental health problems	Substance abuse	4.00
Kang (2015)	Self reported	Korean Longitudinal Study of Ageing (KLoSA)	Korea	2006-2012	3371	No	54.33		Mental health problems	Substance abuse	0.88

Kaila-Kangas (2015)	Finnish Centre for Pensions	The Health 2000 survey	Finland	2000-2011	3621	No		30-55	Mental health problems	Substance abuse	2.94
Helgesson (2017)	Swedish Social Insurance Agency	Statistics Sweden	Sweden	2005-2011	1753544	No		20-35	Mental health problems	Substance abuse	5.38
vandenBerg (2010)	Self reported	Survey of Health, Ageing and Retirement in Europe (SHARE)	Sweden, Denmark, the Netherlands, Belgium, Germany, Austria, Switzerland, France, Italy, Spain, Greece	2004-2006	4611	No		50-63	Mental health problems	Substance abuse	1.65
Samuelsson (2013) a	Swedish Social Insurance Agency	Swedish twin study of disability pension and sickness absence (STODS)	Sweden	1998-2008	28613	No	52.9		Health behaviour	Underweight	2.45
Airaksinen (2017)	The Finnish Public Sector Study (FPS) and the Health and Social Support (HeSSup) study	Finnish Public Sector study (FPS)	Finland	2000, 2002, 2004-2008	65775	No	43.7		Health behaviour	Underweight	1.19
Roos (2013)	Finnish Centre for Pensions	Helsinki Health Study cohort (HHS)	Finland	2002-2010	6542	No		40-60	Health behaviour	Underweight	1.16
Robroek (2015)	Dutch Tax Register	Permanent Survey on Living Conditions (POLS)	The Netherlands	1999-2008	14708	No	39		Health behaviour	Underweight	2.40
Neovius (2010)	Swedish Social Insurance Agency	Military Service Conscription Register (MSCR), Social Insurance Register, Register of the Total Population,	Sweden	1969-2007	45920	Male	18.7		Health behaviour	Underweight	1.07

Population and
Housing Censuses

Claessen (2009)	German Pension Fund	German construction industry, working as bricklayers	Germany	Mean: 10.8 years	16875	Male	41.9	Health behaviour	Underweight	1.13
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Female	18-59	Health behaviour	Underweight	1.89
Lund (2010)	DREAM	Danish Work Environment Cohort Study (DWECS)	Denmark	1990-2006	8287	Male	18-59	Health behaviour	Underweight	3.07

Appendiks 7. Forest- og funnelplots for fysiske krav i arbejdet (alle kvalitetsniveauer af studier)

Akavede arbejdsstillinger (Body exposure)

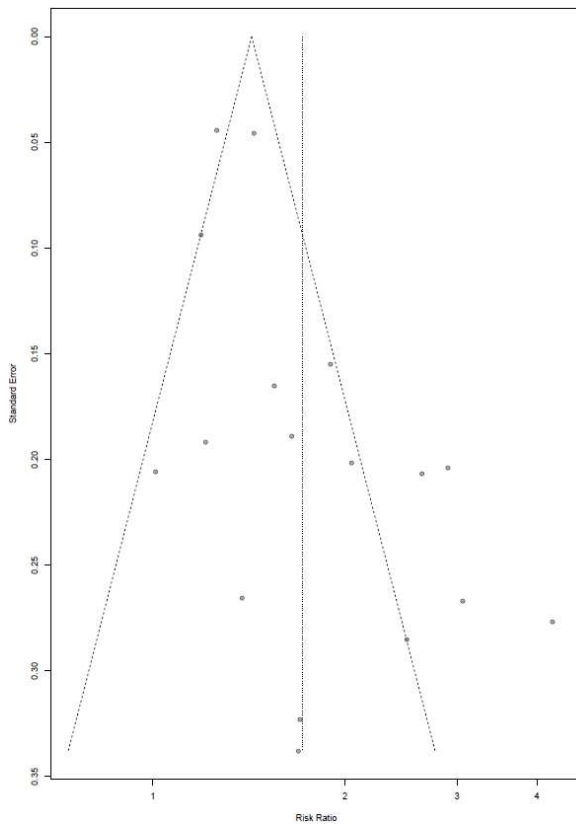
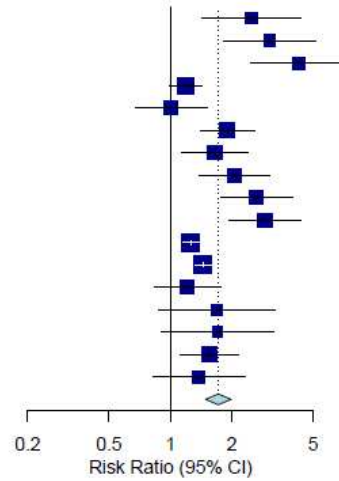
Source

Sundstrup (2018) a, pushing/pulling
 Sundstrup (2018) a, Back twisted/bended frequently
 Sundstrup (2018) a, Back severely bended/twisted
 Karkkainen (2013), Body exposed
 Labriola (2009) b, Working with hands lifted, Men
 Labriola (2009) b, Working with hands lifted, Women
 Husemoen (2004), Body exposed, Standing, Men
 Husemoen (2004), Body exposed, Mostly standing/walking, Women
 Husemoen (2004), Body exposed, Walking/lift, Men
 Husemoen (2004), Body exposed, Mostly walking/lifting/physical exhausting, Women
 Fimland (2018), Much walking
 Fimland (2018), Much walking + lifting
 Emberland (2017), Working with arms raised
 Alavinia (2009), Often kneeling and squatting, Men
 Alavinia (2009), Often awkward postures, Men
 Shiri (2018), work demanding hands above shoulder girdle
 Sundstrup (2017), Kneeling
 Total

RR (95% CI)

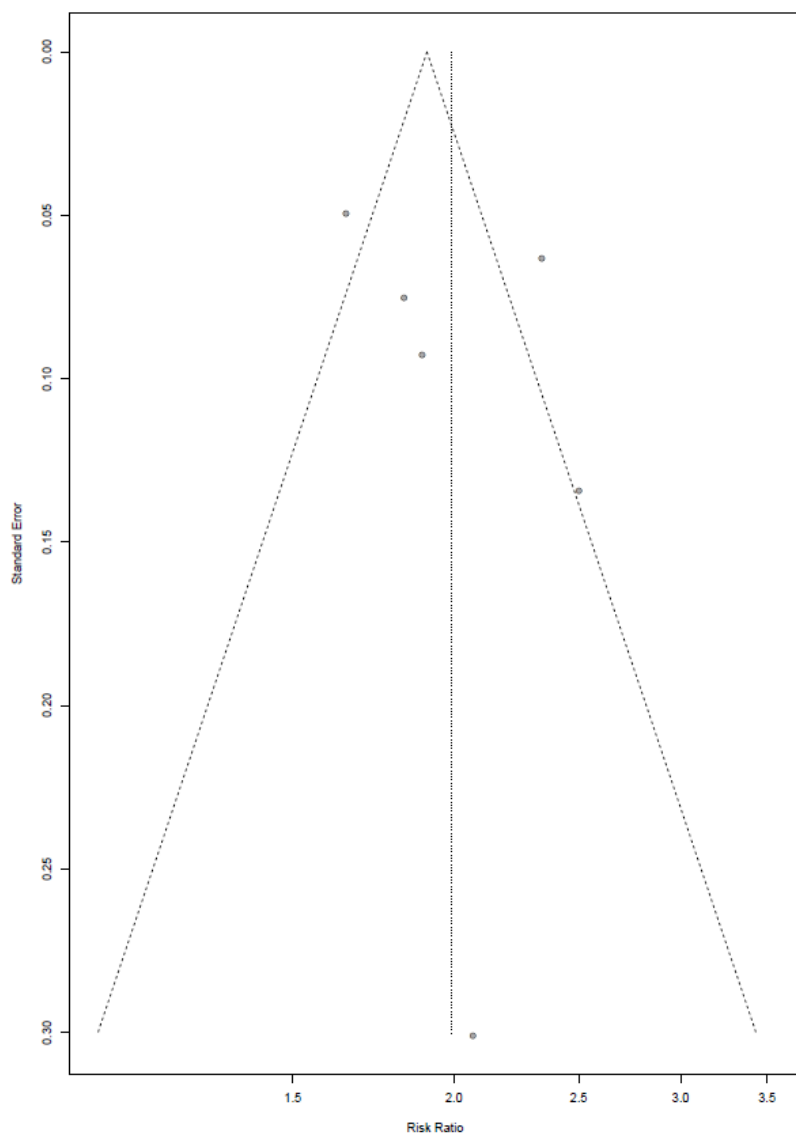
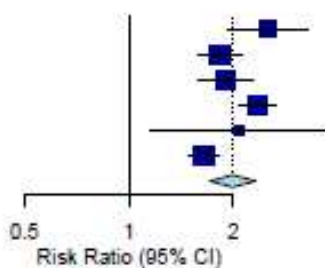
2.50 (1.43–4.37)
 3.06 (1.81–5.16)
 4.23 (2.46–7.28)
 1.19 (0.99–1.43)
 1.01 (0.68–1.51)
 1.90 (1.40–2.57)
 1.65 (1.14–2.39)
 2.05 (1.38–3.04)
 2.64 (1.76–3.96)
 2.90 (1.94–4.33)
 1.26 (1.16–1.37)
 1.44 (1.32–1.58)
 1.21 (0.83–1.76)
 1.69 (0.87–3.28)
 1.70 (0.90–3.20)
 1.55 (1.12–2.14)
 1.38 (0.82–2.32)
 1.72 (1.49–1.98)

Heterogeneity: $\chi^2_{16} = 71.67$ ($P < .01$), $I^2 = 78\%$

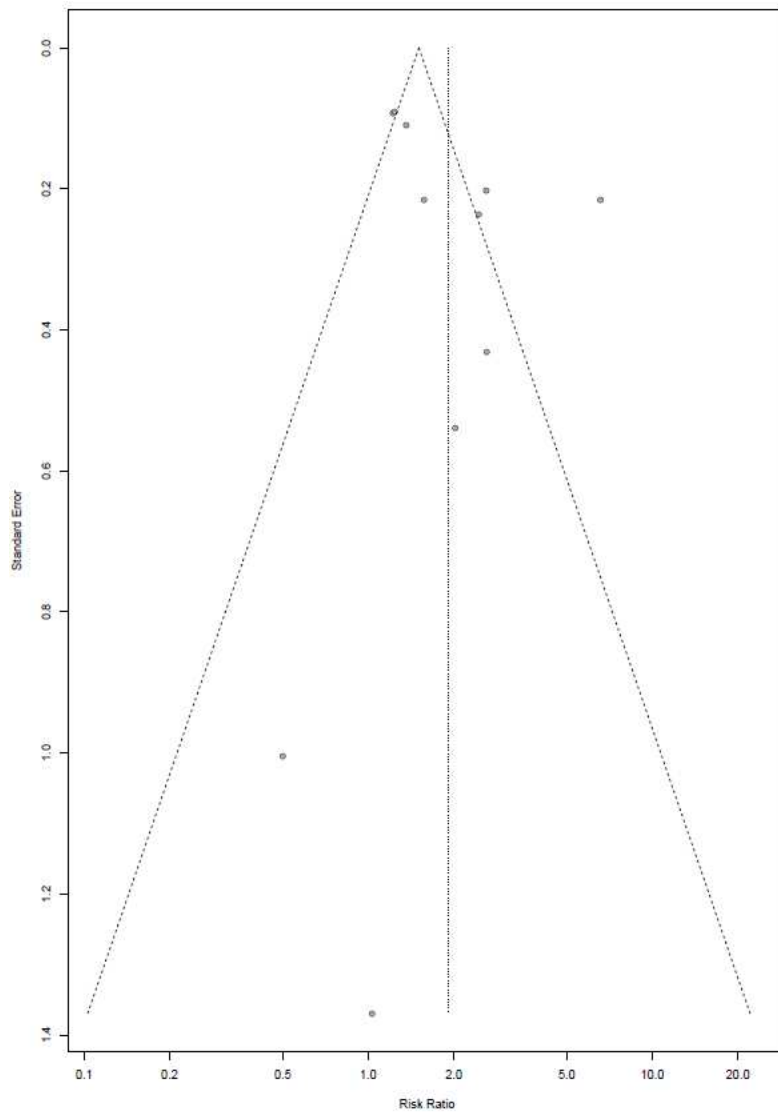
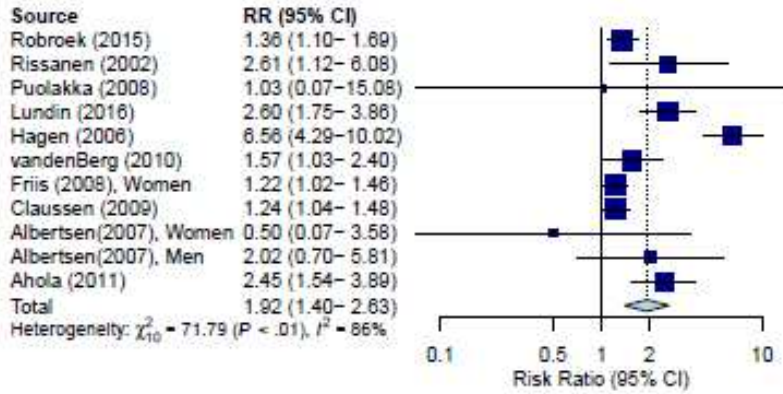


Løft (Lifting)

Source	RR (95% CI)
Karpansalo (2002), Men	2.50 (1.92-3.25)
Karkkainen (2013)	1.83 (1.58-2.12)
Solovieva (2018), Women	1.89 (1.58-2.27)
Solovieva (2018), Men	2.34 (2.07-2.65)
Sundstrup (2017)	2.07 (1.15-3.73)
Stover (2013)	1.65 (1.50-1.82)
Total	1.99 (1.71-2.32)
Heterogeneity: $\chi^2 = 23.61$ ($P < .01$), $I^2 = 79\%$	



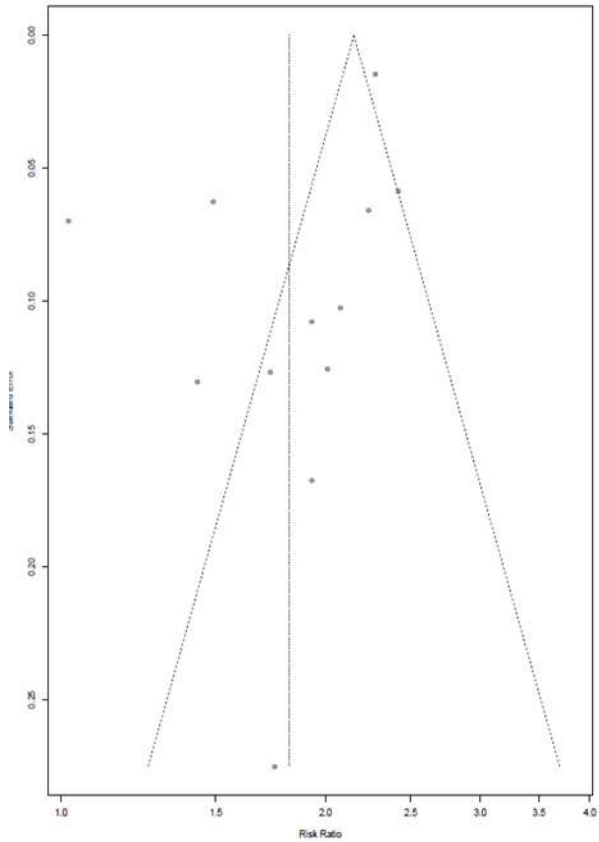
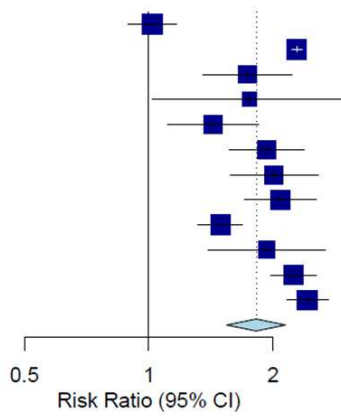
Fysiske krav i arbejdet (Physical demands)



Fysisk arbejdsbelastning (Physical work load)

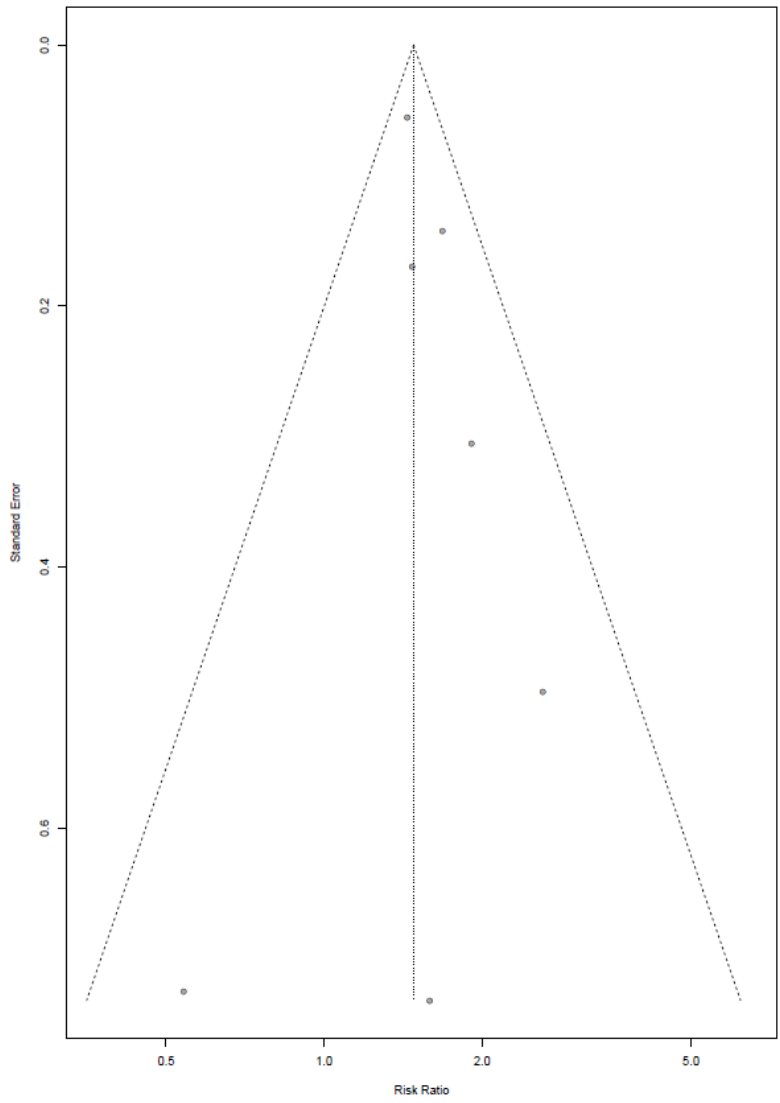
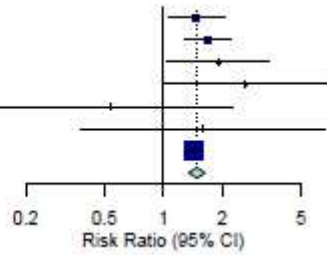
Source	RR (95% CI)
Blekesaune (2005)	1.02 (0.89–1.17)
Robroek (2017), Men	2.28 (2.22–2.35)
Lahelma (2012), Women	1.73 (1.35–2.22)
Lahelma (2012), Men	1.75 (1.57–3.00)
Kjellberg (2016), Men	1.43 (1.11–1.85)
Kjellberg (2016), Women	1.93 (1.56–2.38)
Karpansalo (2002), Men	2.01 (1.57–2.57)
Karkkainen (2013)	2.08 (1.70–2.54)
Fimland (2018)	1.49 (1.32–1.68)
Emberland (2017)	1.93 (1.39–2.68)
Solovieva (2018), Women	2.24 (1.97–2.55)
Solovieva (2018), Men	2.42 (2.16–2.72)
Total	1.82 (1.54–2.14)

Heterogeneity: $\chi^2_{11} = 183.48$ ($P < .01$), $I^2 = 94\%$



Monotont arbejde (Monotonous work)

Source	RR (95% CI)
Ropponen (2012), Women	1.47 (1.05-2.05)
Ropponen (2012), Men	1.68 (1.27-2.22)
Sundstrup (2018) a	1.91 (1.05-3.47)
Hinkka (2013)	2.81 (0.99-8.89)
Albertsen(2007), Women	0.54 (0.13-2.24)
Albertsen(2007), Men	1.59 (0.38-6.67)
Stover (2013)	1.44 (1.29-1.60)
Total	1.48 (1.35-1.63)

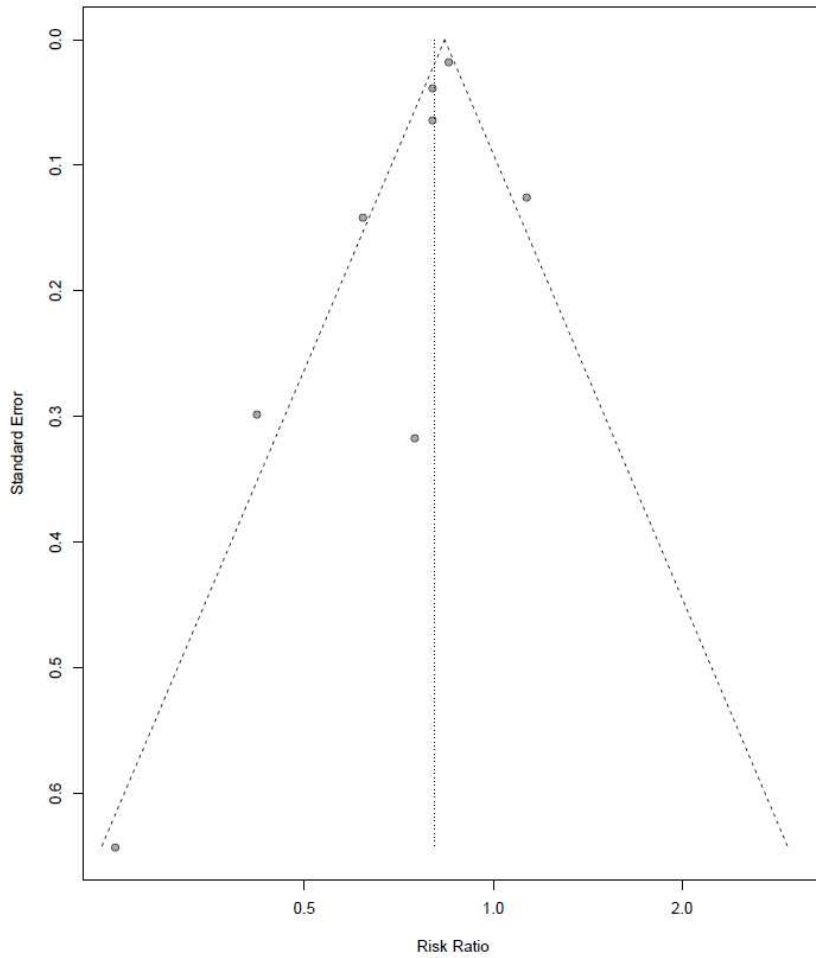
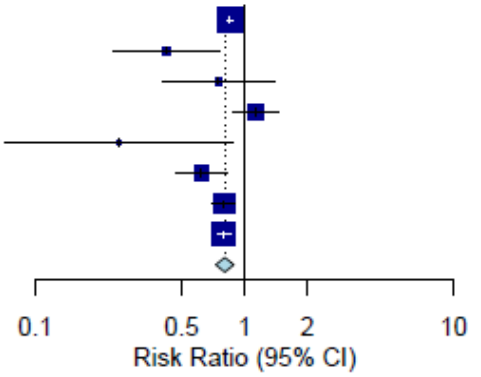


Appendiks 8. Forest- og funnelplots for psykosocialt arbejdsmiljø (alle kvalitetsniveauer af studier)

Høj job-kontrol (High job control)

Source	RR (95% CI)
Ropponen (2013) b	0.85 (0.82–0.88)
Markkula (2017)	0.42 (0.23–0.75)
Lahelma (2012), Men	0.75 (0.40–1.40)
Lahelma (2012), Women	1.13 (0.88–1.45)
Hinkka (2013)	0.25 (0.07–0.88)
Emberland (2017)	0.62 (0.47–0.82)
Vahtera (2010), Worktime control, Co-worker assessed	0.80 (0.71–0.91)
Vahtera (2010), Worktime control, Self-assessed	0.80 (0.74–0.86)
Total	0.80 (0.73–0.89)

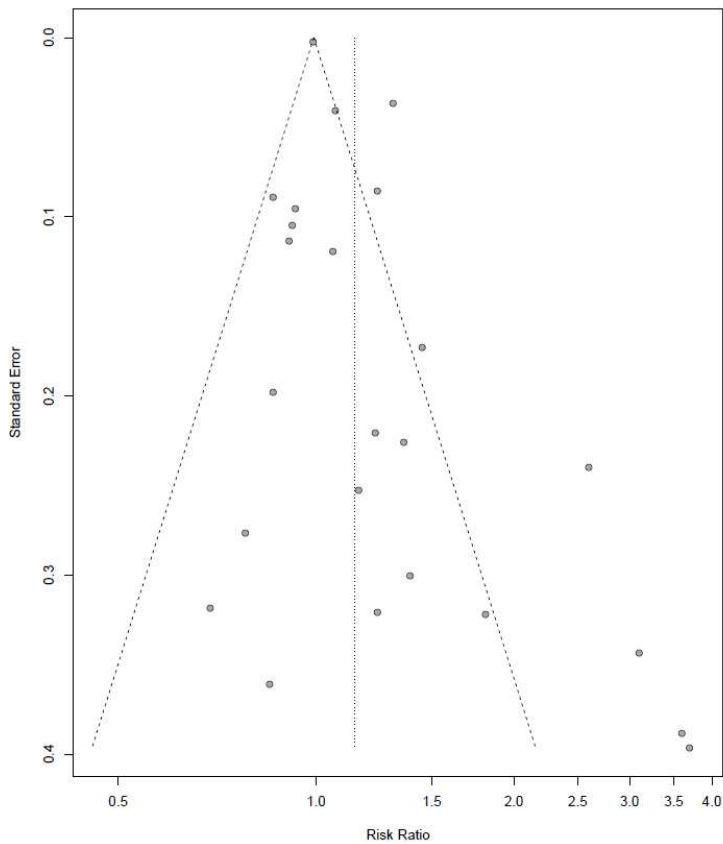
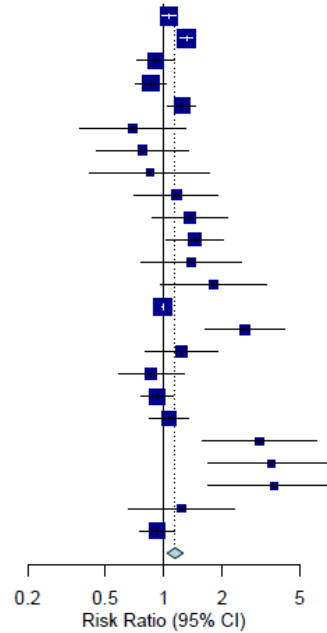
Heterogeneity: $\chi^2_7 = 21.80$ ($P < .01$), $I^2 = 68\%$



Høje psykiske krav i arbejdet (High job demand)

Source	RR (95% CI)
Samuelsson (2013) b, High job demand	1.07 (0.99–1.16)
Ropponen (2013) b, High job demand	1.31 (1.22–1.41)
Robroek (2015), High job demand	0.91 (0.73–1.14)
Nielsen (2017) a, Decision demands	0.86 (0.72–1.02)
Nielsen (2017) a, Quantitative demands	1.24 (1.05–1.47)
Sundstrup (2018) a, Quantitative demands	0.69 (0.37–1.29)
Sundstrup (2018) a, Cognitive demands	0.78 (0.45–1.34)
Sundstrup (2018) a, High time pressure	0.85 (0.42–1.73)
Sundstrup (2018) a, Emotional demands	1.16 (0.71–1.90)
Markkula (2017), High job demand	1.36 (0.87–2.12)
Lundin (2016), Demands (work fast)	1.45 (1.03–2.04)
Laine (2009), High job demand, Work unit-assessed	1.39 (0.77–2.50)
Laine (2009), High job demand, Self-assessed	1.81 (0.96–3.40)
Jensen (2016), High Quantitative demand, Women	0.99 (0.99–0.99)
Hagen (2006), Concentration and attention	2.60 (1.62–4.16)
vandenBerg (2010), High time pressure	1.23 (0.80–1.90)
Emberland (2017), Decision demands	0.86 (0.58–1.27)
Clausen (2014), Quantitative demands	0.93 (0.77–1.12)
Clausen (2014), Work pace	1.06 (0.84–1.34)
Brauer (2002), Time pressure	3.10 (1.58–6.08)
Brauer (2002), Not being able to cope with work demands	3.60 (1.68–7.71)
Brauer (2002), Problems with work tempo	3.70 (1.70–8.05)
Alavinia (2009), High job demand, Men	1.24 (0.66–2.32)
Jensen (2012), High job demand	0.92 (0.75–1.13)
Total	1.15 (1.04–1.26)

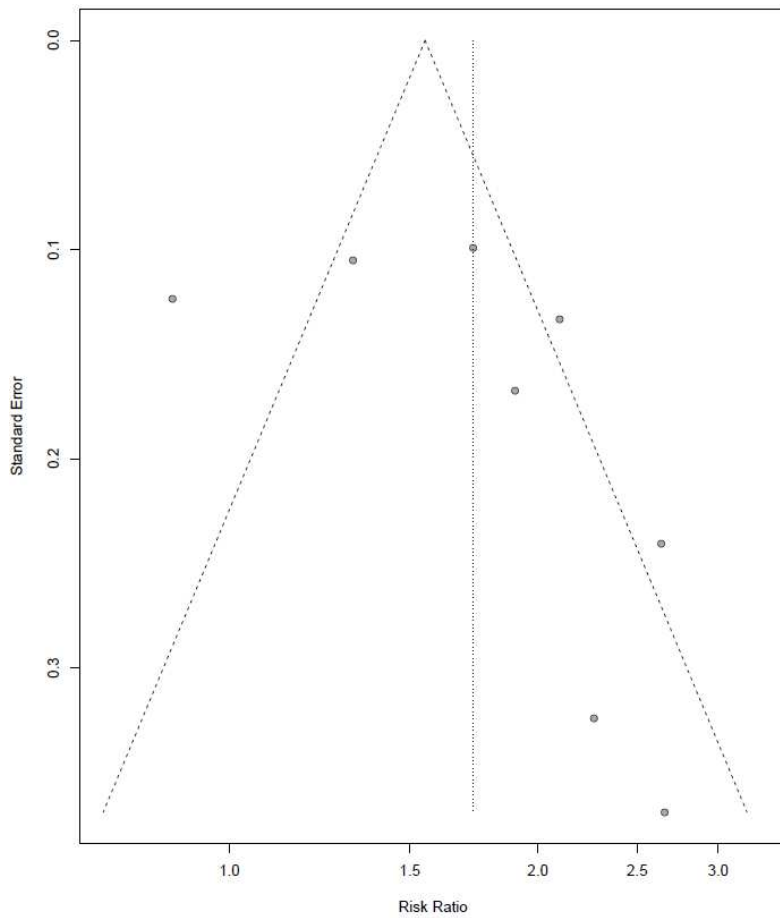
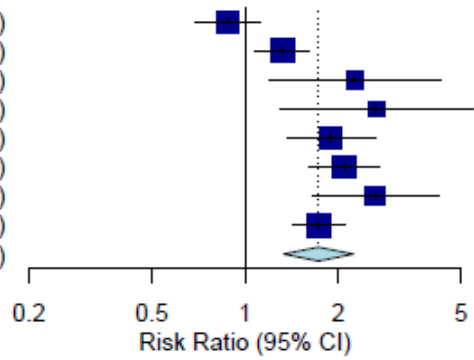
Heterogeneity: $\chi^2_{23} = 137.23$ ($P < .01$), $I^2 = 83\%$



Kombination af høje krav og lav job kontrol (Job strain)

Source	RR (95% CI)
Ropponen (2013) b, High strain	0.88 (0.69–1.12)
Ropponen (2013) b, Iso-strain	1.32 (1.07–1.62)
Laine (2009), Job strain, Work unit-assessed	2.27 (1.20–4.29)
Laine (2009), Job strain, Self-assessed	2.66 (1.29–5.48)
Canivet (2013), Men	1.90 (1.37–2.64)
Canivet (2013), Women	2.10 (1.62–2.73)
Ahola (2011)	2.64 (1.65–4.23)
Juvani (2018)	1.73 (1.42–2.10)
Total	1.73 (1.33–2.25)

Heterogeneity: $\chi^2_7 = 39.62$ ($P < .01$), $I^2 = 82\%$



Lav job-kontrol (Low job control)

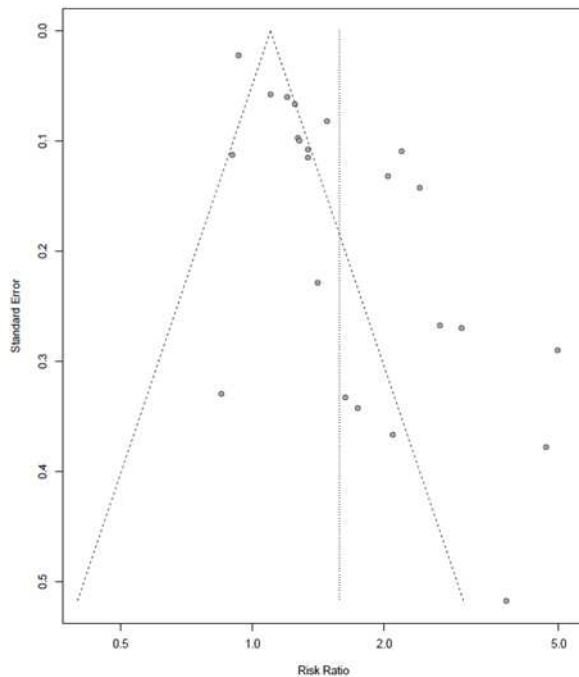
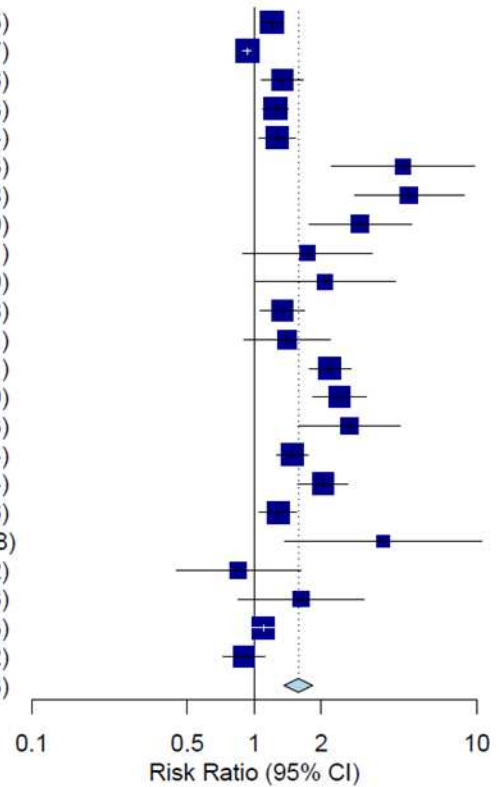
Source

Blekesaune (2005), Low autonomy
 Samuelsson (2013) b, Low job control
 Robroek (2015), Low job control
 Nielsen (2017) a, Lack of control over work place
 Nielsen (2017) a, Lack of control over decisions
 Sundstrup (2018) a, Possibilities for development
 Sundstrup (2018) a, Influence at work
 Lundin (2016), Low job control,
 Laine (2009), Low job control, Work unit-assessed
 Laine (2009), Low job control, Self-assessed
 Lahelma (2012), Psychosocial work conditions, Women
 Lahelma (2012), Psychosocial work conditions, Men
 Kjellberg (2016), Low job control, Men
 Kjellberg (2016), Low job control, Women
 vandenBerg (2010), Lack of job control
 Friis (2008), Low job control
 Claussen (2009), Low job control
 Clausen (2014), Influence at work
 Brauer (2002), Piece-work/Assembly line work
 Alavinia (2009), Lack of job control
 Alavinia (2009), Lack of skill discretion
 Stover (2013), Influence on working conditions
 Jensen (2012), Decision latitude

Total
 Heterogeneity: $\chi^2_{22} = 263.14$ ($P < .01$), $I^2 = 92\%$

RR (95% CI)

1.20 (1.07- 1.35)
 0.93 (0.89- 0.97)
 1.34 (1.08- 1.66)
 1.25 (1.10- 1.43)
 1.27 (1.05- 1.54)
 4.68 (2.23- 9.83)
 4.97 (2.81- 8.78)
 3.00 (1.77- 5.09)
 1.74 (0.89- 3.41)
 2.09 (1.02- 4.29)
 1.34 (1.07- 1.68)
 1.41 (0.90- 2.21)
 2.19 (1.77- 2.71)
 2.41 (1.82- 3.19)
 2.68 (1.59- 4.53)
 1.48 (1.26- 1.74)
 2.04 (1.58- 2.64)
 1.28 (1.05- 1.56)
 3.80 (1.38-10.48)
 0.85 (0.45- 1.62)
 1.63 (0.85- 3.13)
 1.10 (0.98- 1.23)
 0.90 (0.72- 1.12)
 Total
 1.58 (1.36- 1.83)



Natarbejde (Night work)

Source **RR (95% CI)**

Ropponen (2018) 1.20 (1.08–1.34)

Airaksinen (2017) 1.05 (0.99–1.11)

Karkkainen (2017) 1.39 (1.18–1.64)

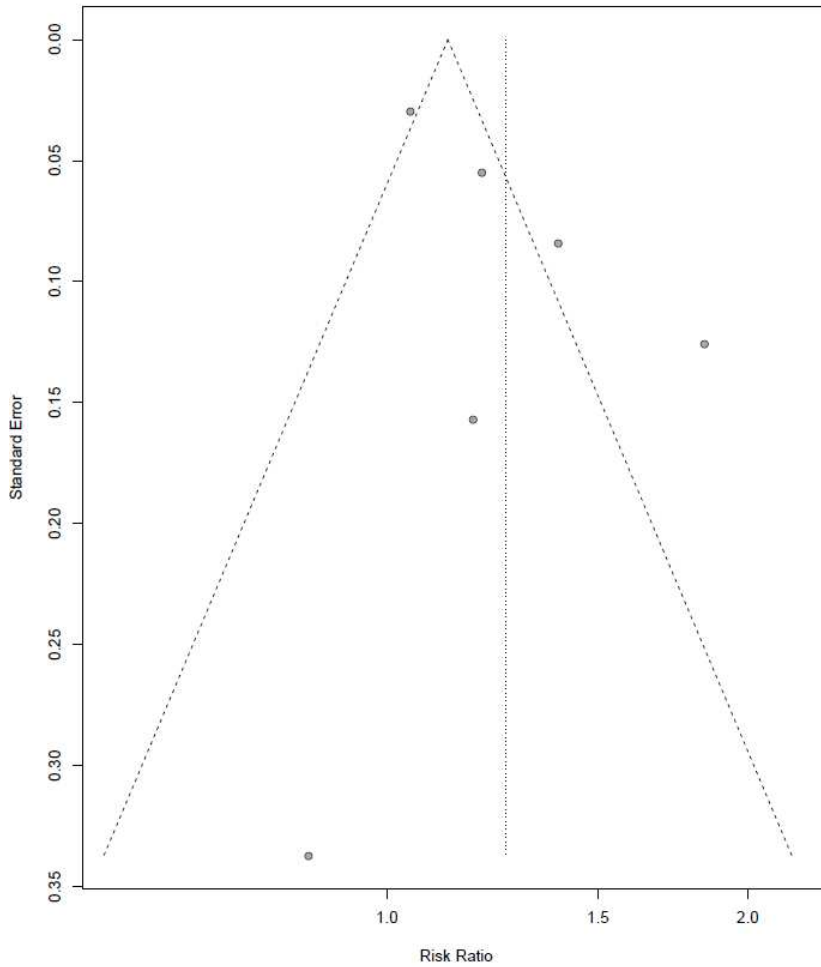
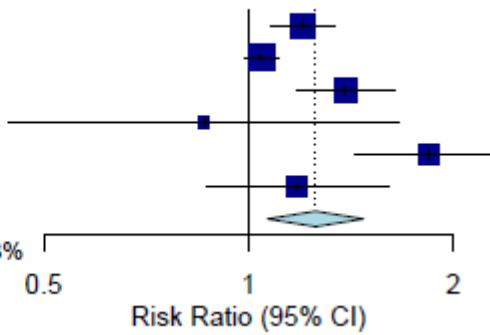
Karkkainen (2013) 0.86 (0.44–1.67)

Friis (2008), Women 1.84 (1.44–2.36)

Jensen (2012) 1.18 (0.87–1.61)

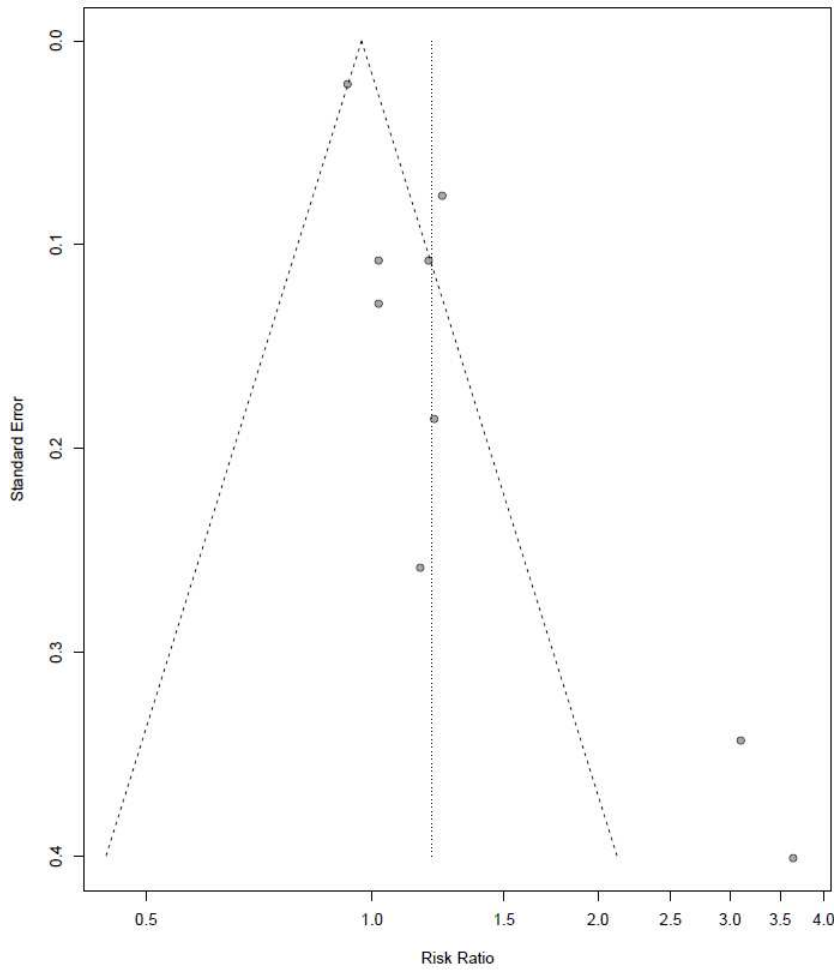
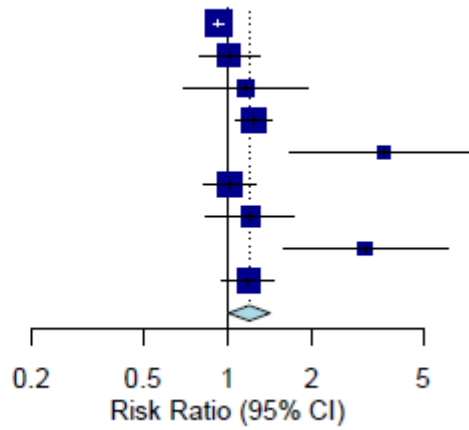
Total 1.26 (1.07–1.48)

Heterogeneity: $\chi^2_5 = 29.73$ ($P < .01$), $I^2 = 83\%$



Skifteholdsarbejde (Shift work)

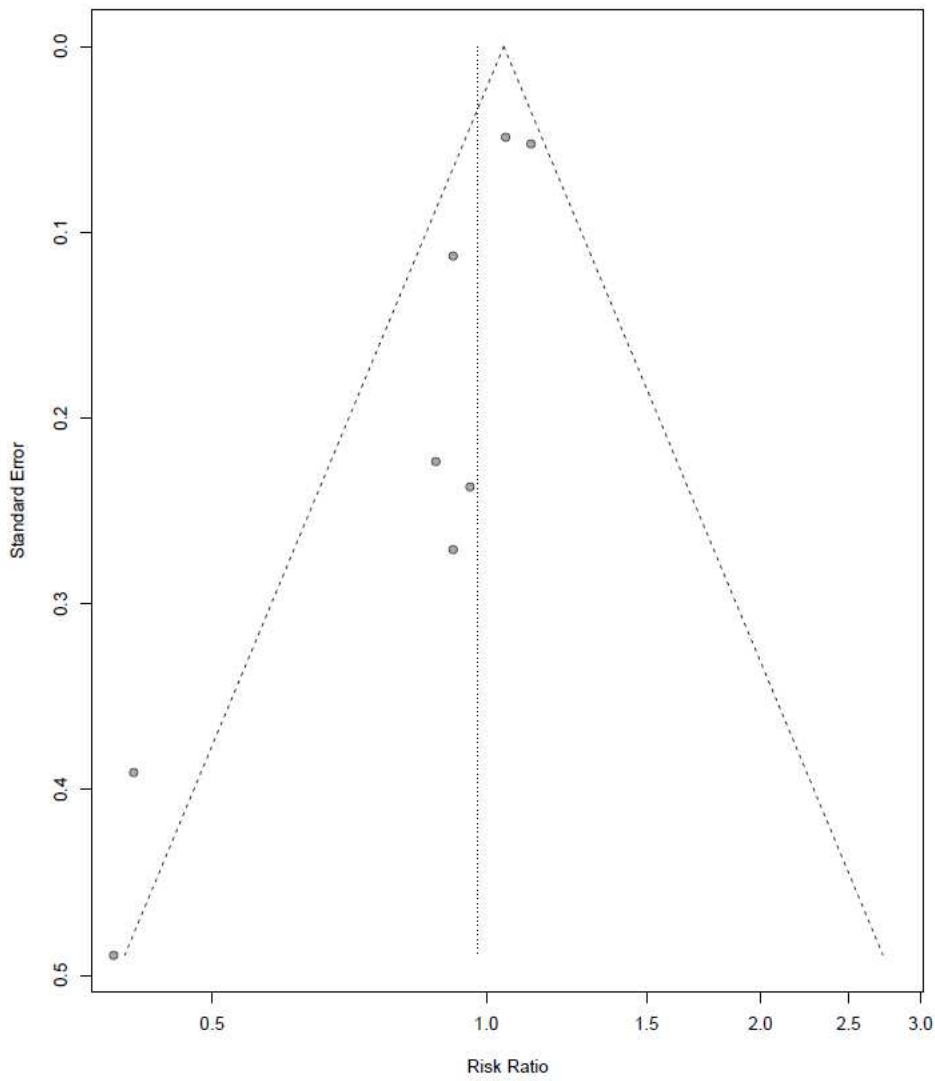
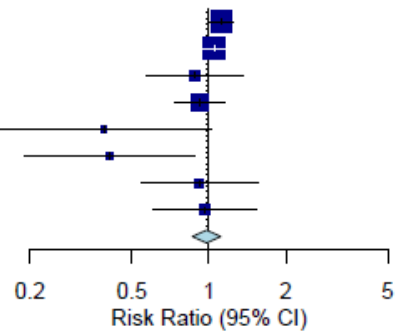
Source	RR (95% CI)
Airaksinen (2017)	0.93 (0.89–0.97)
Lahelma (2012), Women	1.02 (0.79–1.31)
Lahelma (2012), Men	1.16 (0.70–1.93)
Karkkainen (2013)	1.24 (1.07–1.44)
Hinkka (2013)	3.64 (1.66–7.99)
Friis (2008), Women	1.02 (0.83–1.26)
Claussen (2009)	1.21 (0.84–1.74)
Brauer (2002)	3.10 (1.58–6.08)
Tuchsen (2008)	1.19 (0.96–1.47)
Total	1.20 (1.01–1.42)
Heterogeneity: $\chi^2_8 = 43.19$ ($P < .01$), $I^2 = 81\%$	



Høj social støtte (High social support)

Source	RR (95% CI)
Samuelsson (2013) b, High social support	1.12 (1.01-1.24)
Ropponen (2013) b, High social support	1.05 (0.95-1.16)
Lahelma (2012), High social support, Men	0.88 (0.57-1.36)
Lahelma (2012), High social support, Women	0.92 (0.74-1.15)
Hinkka (2013), Support from supervisor	0.39 (0.15-1.02)
Hinkka (2013), Team climate at work	0.41 (0.19-0.88)
Emberland (2017), Social climate	0.92 (0.54-1.56)
Emberland (2017), Support from immediate superior	0.96 (0.60-1.53)
Total	0.98 (0.86-1.11)

Heterogeneity: $\chi^2_7 = 13.77$ ($P = .06$), $I^2 = 49\%$

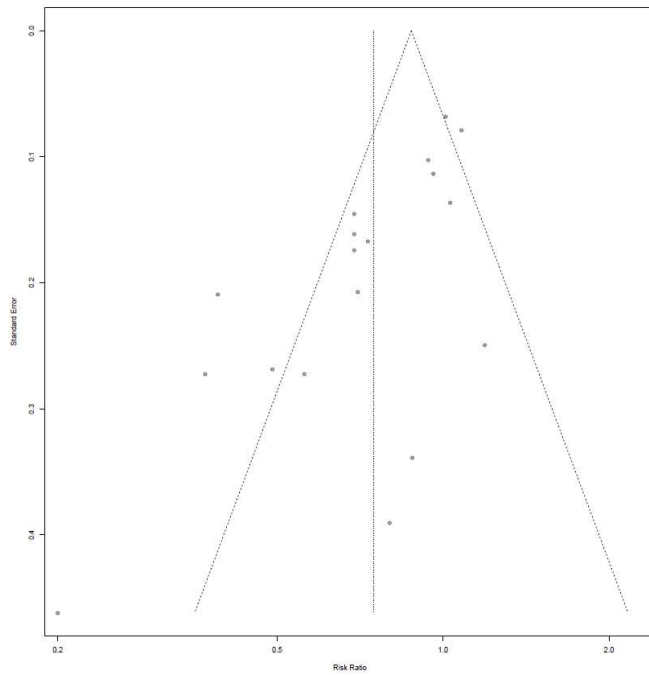
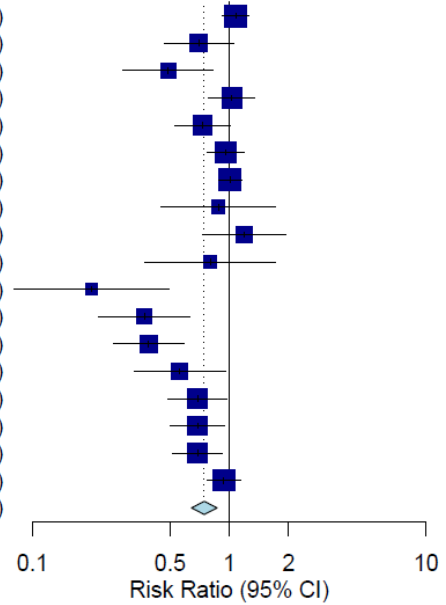


Appendiks 9. Forest- og funnelplots for sundhedsadfærd (alle kvalitetsniveauer af studier)

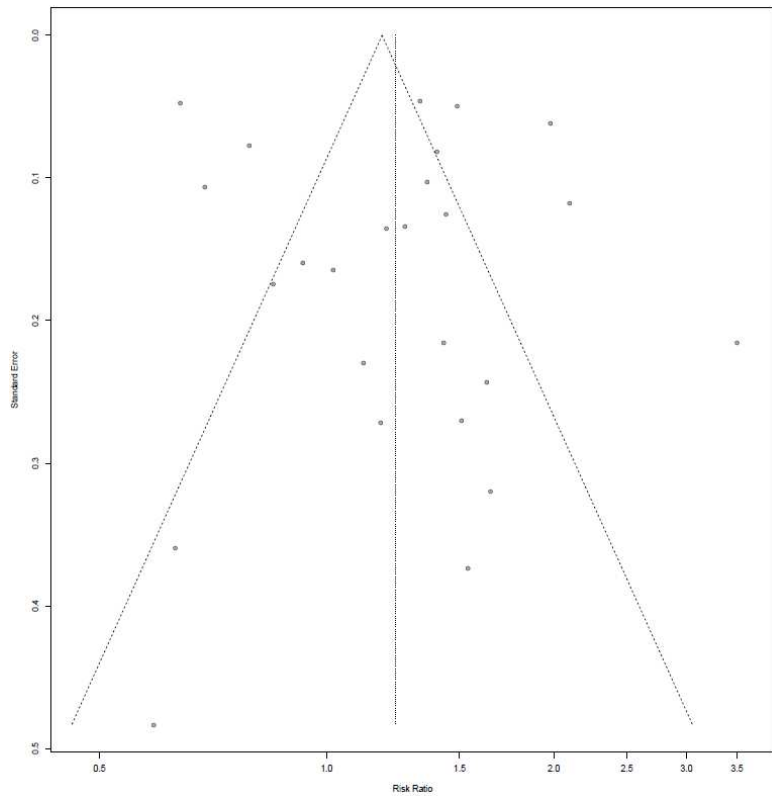
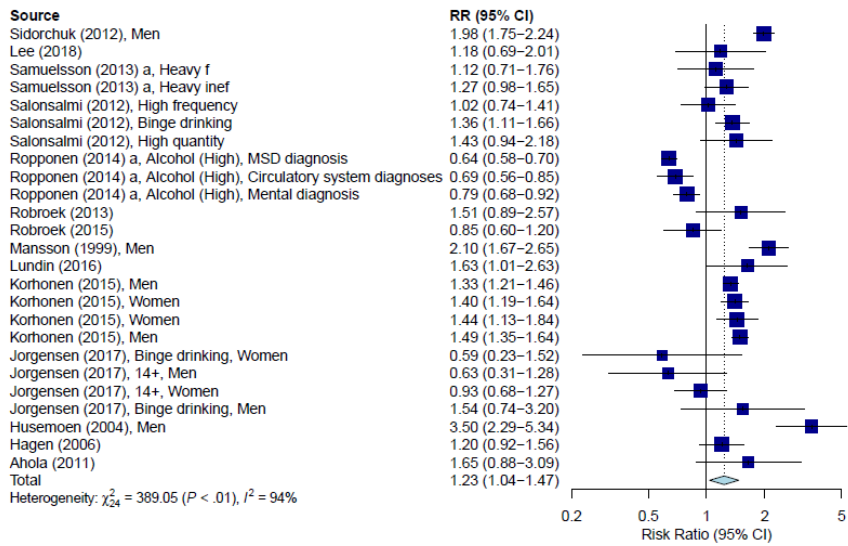
Fysisk aktiv (Active)

Source	RR (95% CI)
Roy (2018)	1.08 (0.93–1.26)
Lee (2018)	0.70 (0.47–1.05)
Sommer (2016)	0.49 (0.29–0.83)
Samuelsson (2013) a	1.03 (0.79–1.35)
Ropponen (2014) a, Active, Circulatory system diagnoses	0.73 (0.53–1.01)
Ropponen (2014) a, Active, Mental diagnosis	0.96 (0.77–1.20)
Ropponen (2014) a, Active, MSD diagnosis	1.01 (0.88–1.15)
Ropponen (2012), Women	0.88 (0.45–1.71)
Ropponen (2012), Men	1.19 (0.73–1.94)
Rissanen (2002)	0.80 (0.37–1.72)
Lahti (2013), Conditioning	0.20 (0.08–0.49)
Lahti (2013), Conditioning	0.37 (0.22–0.63)
Lahti (2013), Vigorous	0.39 (0.26–0.59)
Lahti (2013), Vigorous	0.56 (0.33–0.96)
Husemoen (2004), Women	0.69 (0.49–0.97)
Halford (2012), Men	0.69 (0.50–0.95)
Halford (2012), Women	0.69 (0.52–0.92)
Jensen (2012)	0.94 (0.77–1.15)
Total	0.75 (0.64–0.87)

Heterogeneity: $\chi^2_{17} = 67.22$ ($P < .01$), $I^2 = 75\%$



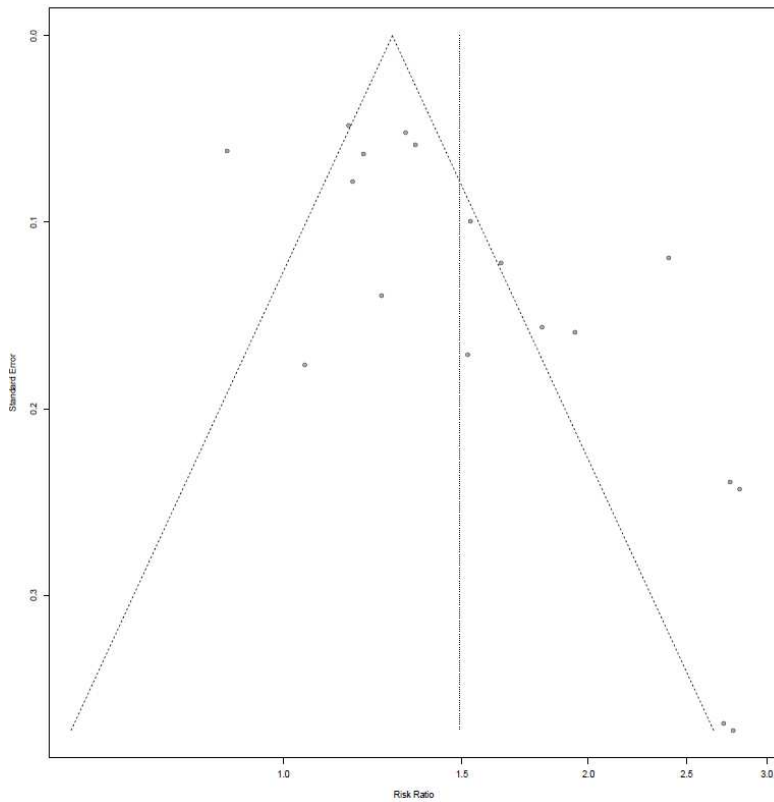
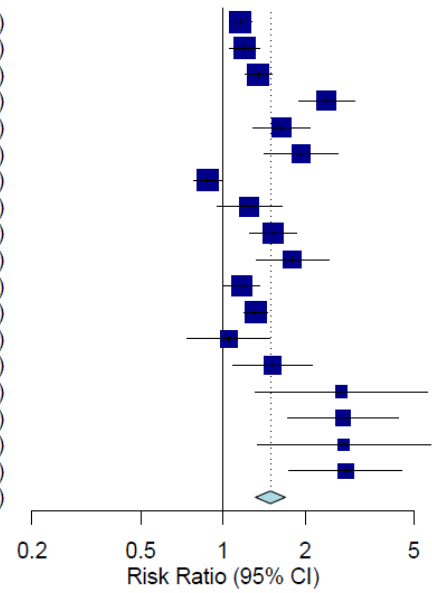
Højt alkoholindtag (Alcohol consumption high)



Intet alkoholindtag (Alcohol consumption none)

Source	RR (95% CI)
Skogen (2012), Non-consumption	1.16 (1.06–1.27)
Skogen (2012), Abstainers	1.20 (1.06–1.36)
Sidorchuk (2012), Men	1.35 (1.20–1.51)
Samuelsson (2013) a	2.40 (1.90–3.03)
Salonsalmi (2012), Drinking habits (frequency of drinking)	1.64 (1.29–2.08)
Salonsalmi (2012), Drinking habits Quantity of drinking)	1.94 (1.42–2.65)
Ropponen (2014) a, Alcohol (none), MSD diagnosis	0.88 (0.78–0.99)
Ropponen (2014) a, Alcohol (none), Circulatory system diagnoses	1.25 (0.95–1.64)
Ropponen (2014) a, Alcohol (none), Mental diagnosis	1.53 (1.26–1.86)
Mansson (1999), Men	1.80 (1.32–2.45)
Korhonen (2015), Men	1.17 (1.00–1.36)
Korhonen (2015), Women	1.32 (1.19–1.46)
Kaila-Kangas (2015), Lifelong abstainer	1.05 (0.74–1.48)
Kaila-Kangas (2015), Former drinker	1.52 (1.09–2.12)
Jorgensen (2017), No intake	2.72 (1.32–5.61)
Jorgensen (2017), No intake	2.76 (1.73–4.41)
Jorgensen (2017), No intake	2.78 (1.34–5.77)
Jorgensen (2017), No intake	2.82 (1.75–4.54)
Total	1.49 (1.32–1.69)

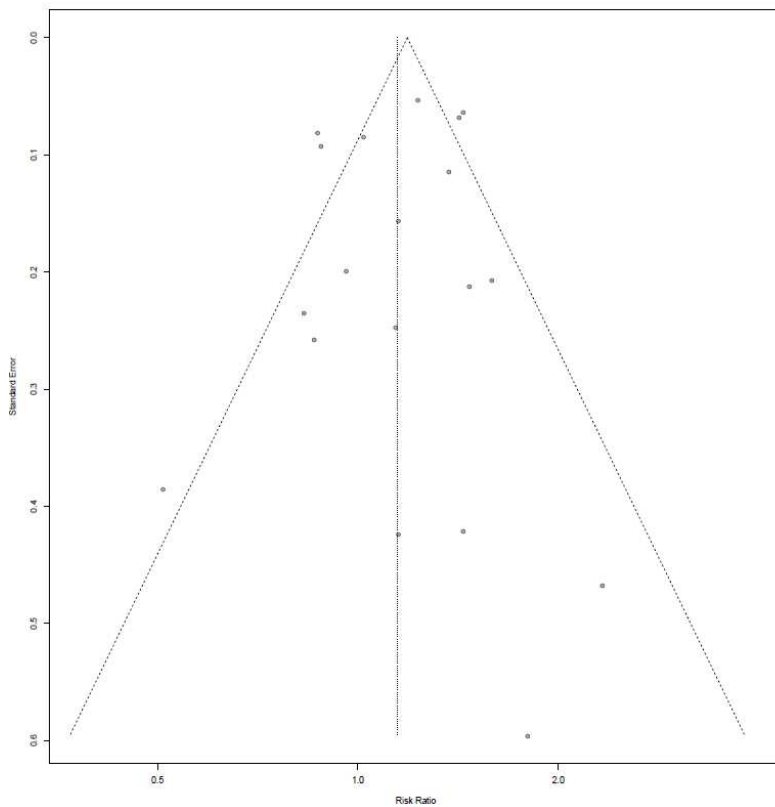
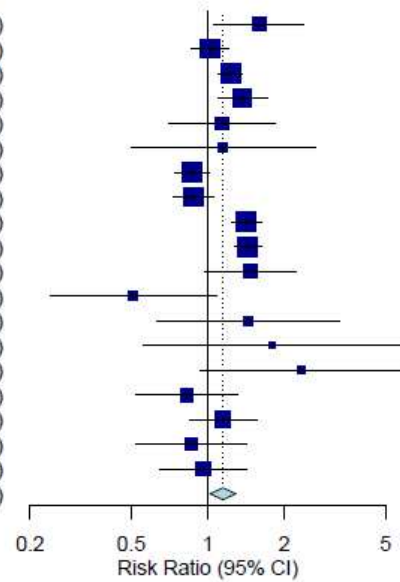
Heterogeneity: $\chi^2_{17} = 122.73$ ($P < .01$), $I^2 = 86\%$



Tidligere ryger (Ex-smokers)

Source	RR (95% CI)
Samuelsson (2013) a	1.59 (1.06–2.39)
Ropponen (2014) a, Ex smokers, Mental diagnosis	1.02 (0.86–1.20)
Ropponen (2014) a, Ex smokers, MSD diagnosis	1.23 (1.11–1.37)
Ropponen (2014) a, Ex smokers, Circulatory system diagnoses	1.37 (1.09–1.72)
Robroek (2013)	1.14 (0.70–1.85)
Rissanen (2002)	1.15 (0.50–2.64)
Korhonen (2015), Women	0.87 (0.74–1.02)
Korhonen (2015), Women	0.88 (0.73–1.06)
Korhonen (2015), Men	1.42 (1.24–1.62)
Korhonen (2015), Men	1.44 (1.27–1.63)
Kang(2015)	1.47 (0.97–2.23)
Husemoen (2004), Smoking status, 60–67 years, Women	0.51 (0.24–1.09)
Husemoen (2004), Smoking status, 60–67 years, Men	1.44 (0.63–3.29)
Husemoen (2004), Smoking status < 60 years, Men	1.80 (0.56–5.79)
Husemoen (2004), Smoking status < 60 years, Women	2.33 (0.93–5.83)
Haukenes (2013), Men	0.83 (0.52–1.32)
Haukenes (2013), Women	1.15 (0.85–1.56)
Lund (2010), Men	0.86 (0.52–1.43)
Lund (2010), Women	0.96 (0.65–1.42)
Total	1.15 (1.02–1.29)

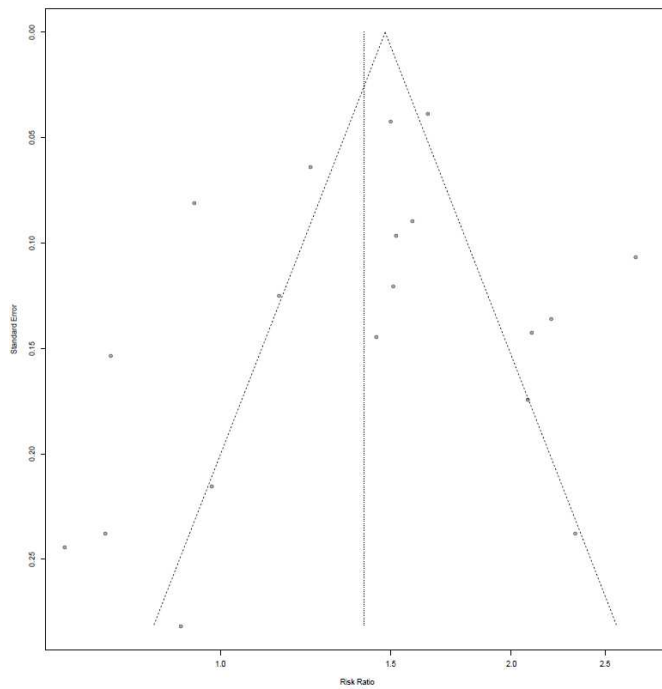
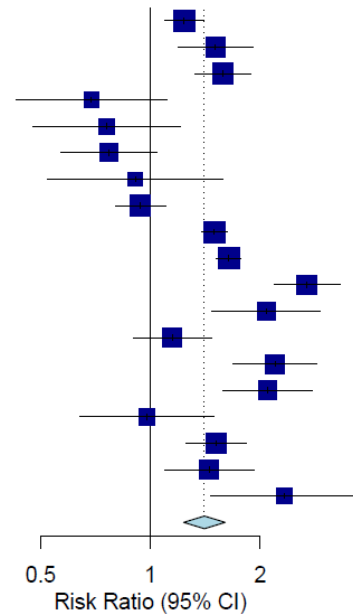
Heterogeneity: $\chi^2_{18} = 61.75$ ($P < .01$), $I^2 = 71\%$



Fysisk inaktiv (Inactive/low)

Source	RR (95% CI)
Ropponen (2014) a, Inactive/low, MSD diagnosis	1.24 (1.09–1.41)
Ropponen (2014) a, Inactive/low, Circulatory system diagnoses	1.51 (1.19–1.91)
Ropponen (2014) a, Inactive/low, Mental diagnosis	1.58 (1.33–1.88)
Ropponen (2012), Women	0.69 (0.43–1.11)
Ropponen (2012), Men	0.76 (0.48–1.21)
Ropponen (2012), Men	0.77 (0.57–1.04)
Ropponen (2012), Women	0.91 (0.52–1.58)
Ropponen (2011) a	0.94 (0.80–1.10)
Rabiee (2015), Men	1.50 (1.38–1.63)
Rabiee (2015), Men	1.64 (1.52–1.77)
Rabiee (2015), Men	2.69 (2.18–3.31)
Lallukka (2015)	2.08 (1.48–2.93)
Kang(2015)	1.15 (0.90–1.47)
Hagen (2006)	2.20 (1.68–2.87)
Hagen (2002)	2.10 (1.59–2.78)
vandenBerg (2010)	0.98 (0.64–1.50)
Friis (2008), Women	1.52 (1.26–1.84)
Ahola (2011)	1.45 (1.09–1.92)
Biering–Sorensen (1999)	2.33 (1.46–3.71)
Total	1.41 (1.24–1.61)

Heterogeneity: $\chi^2_{18} = 146.47$ ($P < .01$), $I^2 = 88\%$



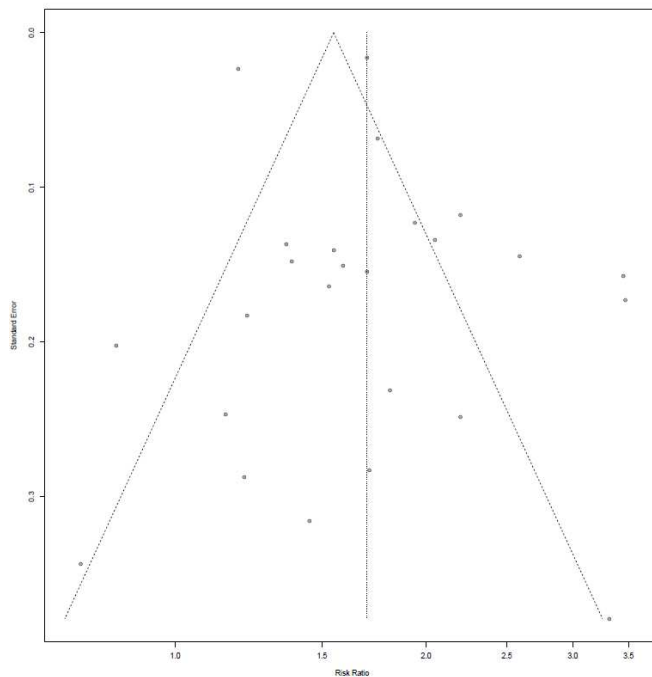
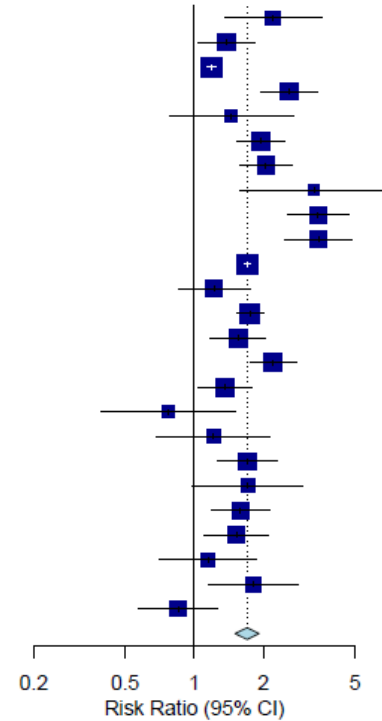
Fedme (Obesity)

Source

Sommer (2016), Obese, >30
 Samuelsson (2013) a, Obese
 Airaksinen (2017), BMI, 30+
 Ropponen (2016), Obese, Stable obesity
 Roos (2013), Obese, 30–34.9, Men
 Roos (2013), Obese, 30–34.9
 Roos (2013), Obese, 30–34.9, Women
 Roos (2013), Obese, >35, Men
 Roos (2013), Obese, >35
 Roos (2013), Obese, >35, Women
 Robroek (2017), Obese
 Robroek (2015), Obese
 Norrback (2018), Obese, Obese without mobility disability
 Neovius (2010), Obese
 Mansson (2001), Obesity. Was defined as BMI > 30.0 kg/m², Men
 Kang(2015), Obese
 Husemoen (2004), Obese, > 29 kg/m², Men
 Husemoen (2004), Obese, > 29 kg/m², Women
 Hagen (2006), Obese
 vandenBerg (2010), Obese, > 30 kg/m²
 Friis (2008), Obese, above 30, Women
 Ahola (2011), Obese, 30 or over
 Lund (2010), Obese, >=30, Men
 Lund (2010), Obese, >=30, Women
 Jensen (2012), Obese, severe overweight >30
 Total
 Heterogeneity: $\chi^2_{24} = 263.12$ ($P < .01$), $I^2 = 91\%$

RR (95% CI)

2.20 (1.35–3.58)
 1.38 (1.03–1.84)
 1.19 (1.14–1.25)
 2.59 (1.95–3.44)
 1.45 (0.78–2.69)
 1.94 (1.52–2.47)
 2.05 (1.58–2.66)
 3.32 (1.58–6.98)
 3.45 (2.53–4.70)
 3.47 (2.47–4.87)
 1.70 (1.65–1.76)
 1.22 (0.85–1.75)
 1.75 (1.53–2.00)
 1.55 (1.18–2.04)
 2.20 (1.75–2.77)
 1.36 (1.04–1.78)
 0.77 (0.39–1.51)
 1.21 (0.69–2.13)
 1.70 (1.26–2.30)
 1.71 (0.98–2.98)
 1.59 (1.18–2.14)
 1.53 (1.11–2.11)
 1.15 (0.71–1.87)
 1.81 (1.15–2.85)
 0.85 (0.57–1.26)
 1.70 (1.51–1.91)



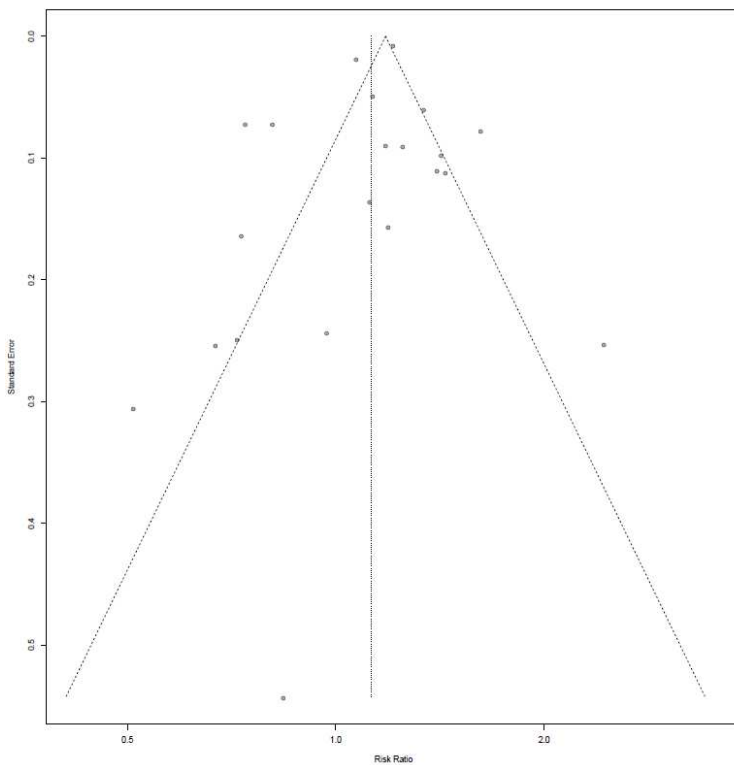
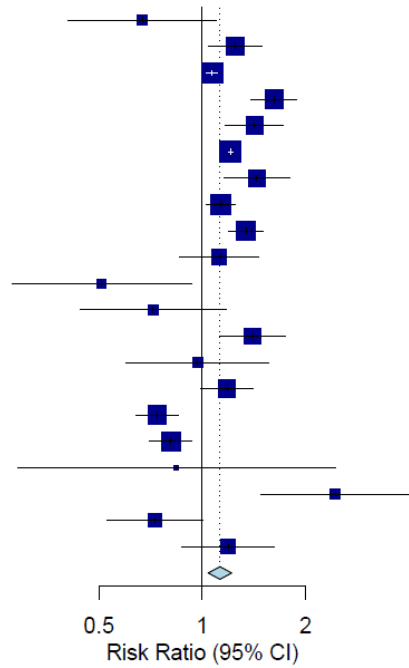
Overvægt (Overweight)

Source

Sommer (2016), Overweight, 25-30
 Samuelsson (2013) a, Overweight
 Airaksinen (2017), BMI, 25-29.99
 Ropponen (2016), Overweight, Stable overweight
 Roos (2013), Overweight, 25-29.9
 Robroek (2017), Overweight, Men
 Robroek (2015), Overweight
 Norrback (2018), Overweight, Overweight without mobility disability
 Neovius (2010), Overweight, Men
 Kang(2015), Overweight
 Husemoen (2004), Overweight, 25-29 kg/m², Men
 Husemoen (2004), Overweight, 25-29 kg/m², Women
 Hagen (2002), Overweight, 26.4-28.6
 vandenBerg (2010), Overweight, 25-30 kg/m²
 Friis (2008), Overweight, 25-30, Women
 Claessen (2009), Overweight, 25.0-27.4 kg/m², Men
 Claessen (2009), Overweight, 27.5-29.9 kg/m², Men
 Biering-Sorensen (1999), Overweight
 Biering-Sorensen (1999), Overweight
 Lund (2010), Overweight, 25-29.9, Men
 Lund (2010), Overweight, 25-29.9, Women
 Total
 Heterogeneity: $\chi^2_{20} = 168.87$ ($P < .01$), $I^2 = 88\%$

RR (95% CI)

0.67 (0.41-1.10)
 1.25 (1.05-1.49)
 1.07 (1.03-1.11)
 1.62 (1.39-1.89)
 1.42 (1.17-1.72)
 1.21 (1.19-1.23)
 1.44 (1.15-1.80)
 1.13 (1.02-1.25)
 1.34 (1.19-1.51)
 1.12 (0.86-1.46)
 0.51 (0.28-0.93)
 0.72 (0.44-1.17)
 1.40 (1.13-1.74)
 0.97 (0.60-1.56)
 1.18 (0.99-1.41)
 0.74 (0.64-0.85)
 0.81 (0.70-0.93)
 0.84 (0.29-2.44)
 2.44 (1.48-4.01)
 0.73 (0.53-1.01)
 1.19 (0.87-1.62)
 1.13 (1.04-1.22)

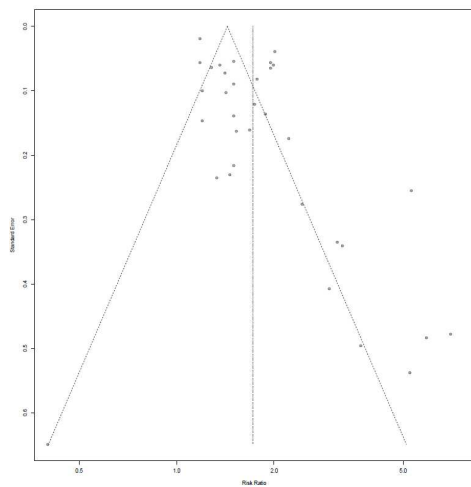
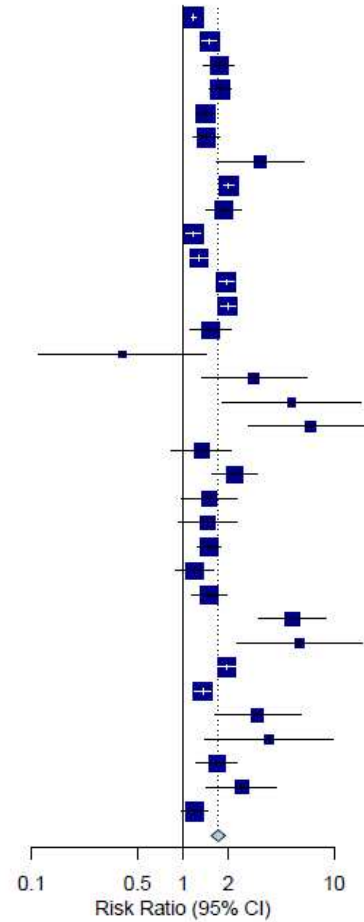


Ryger (Smokers)

Source

Source	RR (95% CI)
Airaksinen (2017)	1.18 (1.14– 1.23)
Ropponen (2014) a, Smokers, MSD diagnosis	1.50 (1.35– 1.67)
Ropponen (2014) a, Smokers, Circulatory system diagnoses	1.74 (1.37– 2.20)
Ropponen (2014) a, Smokers, Mental diagnosis	1.77 (1.51– 2.08)
Ropponen (2011) a	1.41 (1.22– 1.62)
Robroek (2015)	1.42 (1.16– 1.74)
Rissanen (2002)	3.25 (1.67– 6.34)
Neovius (2010), Men	2.01 (1.86– 2.17)
Lundin (2016)	1.88 (1.44– 2.46)
Korhonen (2015), Women	1.18 (1.06– 1.32)
Korhonen (2015), Women	1.28 (1.13– 1.45)
Korhonen (2015), Men	1.95 (1.75– 2.18)
Korhonen (2015), Men	1.99 (1.77– 2.24)
Kang(2015)	1.53 (1.11– 2.10)
Husemoen (2004), Smoking status, 60–67 years, Women	0.40 (0.11– 1.43)
Husemoen (2004), Smoking status, 60–67 years, Men	2.96 (1.33– 6.58)
Husemoen (2004), Smoking status < 60 years, Men	5.25 (1.83–15.07)
Husemoen (2004), Smoking status < 60 years, Women	7.01 (2.75–17.88)
Haukenes (2013), Men	1.33 (0.84– 2.11)
Haukenes (2013), Women	2.22 (1.58– 3.12)
Hagen (2006)	1.50 (0.98– 2.29)
vandenBerg (2010)	1.46 (0.93– 2.30)
Friis (2008), Women	1.50 (1.26– 1.79)
Upmark (1999), Smokers, DP (psychosis), Men	1.20 (0.90– 1.60)
Upmark (1999), Smokers, DP (other psychiatric diagnose), Men	1.50 (1.14– 1.97)
Upmark (1999), Smokers, Alcoholrelated DP, Men	5.30 (3.21– 8.74)
Upmark (1999), Smokers, Drug-related DP, Men	5.90 (2.29–15.22)
Claessen (2010), Men	1.95 (1.72– 2.22)
Claessen (2009), Men	1.36 (1.21– 1.53)
Albertsen(2007), Women	3.13 (1.62– 6.04)
Albertsen(2007), Men	3.70 (1.40– 9.77)
Ahola (2011)	1.68 (1.23– 2.30)
Biering-Sorensen (1999)	2.44 (1.42– 4.20)
Jensen (2012)	1.20 (0.99– 1.46)
Total	1.72 (1.55– 1.91)

Heterogeneity: $\chi^2_{33} = 374.79$ ($P < .01$), $I^2 = 91\%$



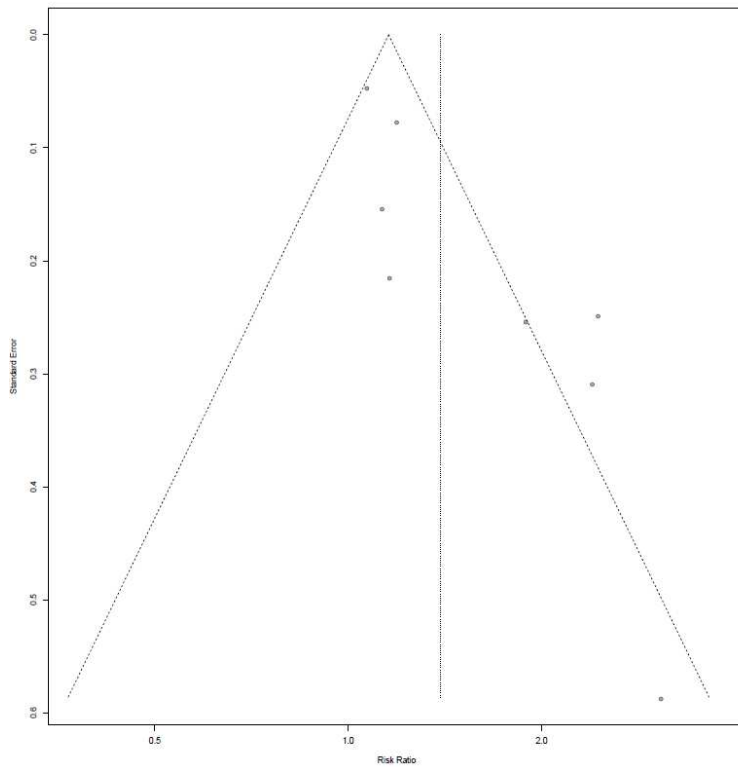
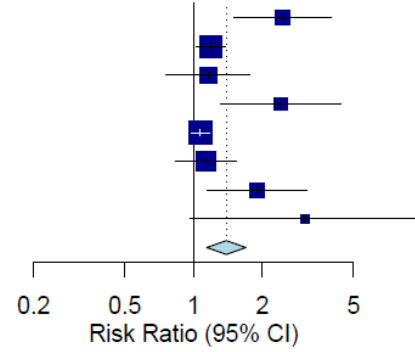
Undervægt (Underweight)

Source

Samuelsson (2013) a, Underweight
 Airaksinen (2017), BMI, < 18.5
 Roos (2013), Underweight, <20
 Robroek (2015), Underweight
 Neovius (2010), Underweight, Men
 Claessen (2009), Underweight, < 20.0 kg/m², Men
 Lund (2010), Underweight, <18.5, Women
 Lund (2010), Underweight, <18.5, Men
 Total
 Heterogeneity: $\chi^2 = 23.94$ ($P < .01$), $I^2 = 71\%$

RR (95% CI)

2.45 (1.50–3.99)
 1.19 (1.02–1.39)
 1.16 (0.76–1.77)
 2.40 (1.31–4.40)
 1.07 (0.97–1.18)
 1.13 (0.83–1.53)
 1.89 (1.15–3.11)
 3.07 (0.97–9.71)
 1.39 (1.14–1.70)

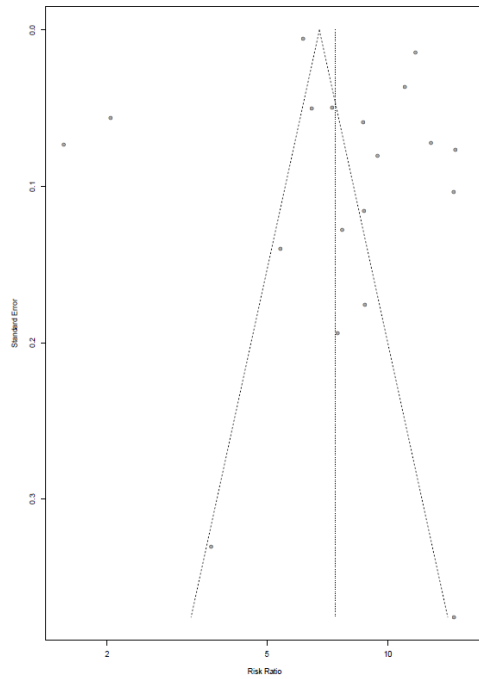
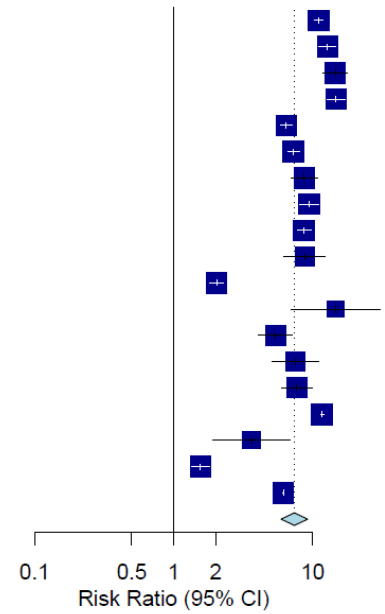


Appendiks 10. Forest- og funnelplots for mentale helbredsproblemer (alle kvalitetsniveauer af studier)

Generelle mentale lidelser (Any mental disorder)

Source	RR (95% CI)
Pietilainen (2018), Mental disorder in Routine non-manual workers	11.02 (10.26–11.84)
Pietilainen (2018), Mental disorder in Semi-professionals	12.81 (11.12–14.75)
Pietilainen (2018), Mental disorder in Professionals	14.58 (11.90–17.87)
Pietilainen (2018), Mental disorder in Professionals	14.73 (12.67–17.12)
Pietilainen (2018), Mental disorder in Manual workers	6.46 (5.86– 7.13)
Pietilainen (2018), Mental disorder in Manual workers	7.27 (6.60– 8.01)
Pietilainen (2018), Mental disorder in Semi-professionals	8.72 (6.95–10.95)
Pietilainen (2018), Mental disorder in Routine non-manual workers	9.42 (8.05–11.03)
Kivimaki (2007)	8.68 (7.73– 9.74)
Gustafsson (2014), Women	8.77 (6.21–12.38)
Ervasti (2016) b	2.04 (1.83– 2.28)
Upmark (1999), Men	14.60 (6.99–30.48)
Upmark (1999), Men	5.40 (4.10– 7.11)
Upmark (1999), Men	7.50 (5.13–10.96)
Upmark (1999), Men	7.70 (5.99– 9.89)
Dorner (2015)	11.71 (11.38–12.05)
Ahola (2011)	3.63 (1.90– 6.94)
Tinghog (2014), MS patients	1.56 (1.35– 1.80)
Tinghog (2014), General population	6.15 (6.08– 6.22)
Total	7.39 (5.93– 9.20)

Heterogeneity: $\chi^2_{18} = 3010.08$ ($P = 0$), $I^2 = 99\%$



Affektive lidelser (Affective disorder)

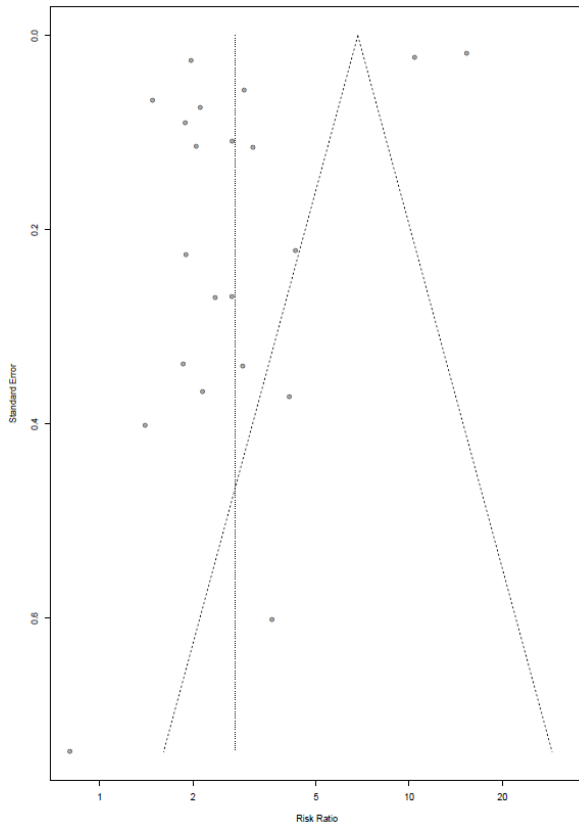
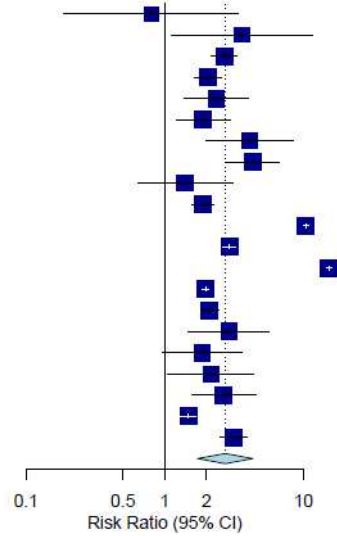
Source

Singer (2014), Depression, Below poverty threshold
 Singer (2014), Depression, Above poverty threshold
 Niederkrotenthaler (2016), Affective disorders
 Overland (2008), Depression
 Ostby (2014), Affective, Mood disorder
 Lassemo (2016), Current depression, Women
 Lassemo (2016), Current depression, Men
 Lamberg (2010), Depresiveness
 Kouzis (2000), Type of psychopathology
 Karpansalo (2005), Depression score, Men
 Helgesson (2017), Affective disorders
 Ervasti (2016) b, Depression
 Dornier (2015), Depressive episode (DE)
 Carlsen (2008), Depression, Women
 Carlsen (2008), Depression, Men
 Bultmann (2008), Severe depressive symptoms
 Arvilommi (2015), Mental disorder
 Arvilommi (2015), Mental disorder
 Ahola (2011), Depression only (major depressive disorder or dysthymic disorder)
 Wedegaertner (2013), Depression, outpatient
 Wedegaertner (2013), Depression, inpatient
 Total

Heterogeneity: $\chi^2_{20} = 6219.64$ ($P = 0$), $I^2 = 100\%$

RR (95% CI)

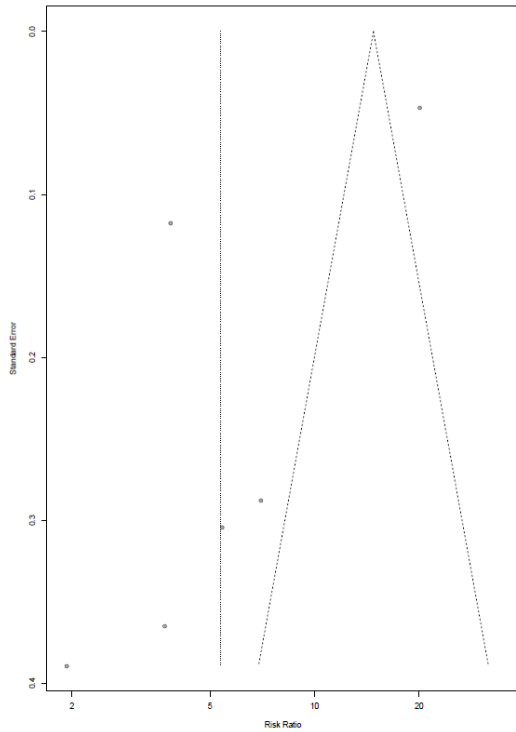
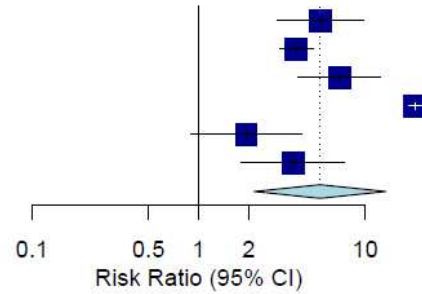
0.80 (0.19–3.39)
 3.60 (1.11–11.69)
 2.68 (2.16–3.32)
 2.05 (1.64–2.56)
 2.36 (1.39–4.00)
 1.90 (1.22–2.95)
 4.10 (1.98–8.50)
 4.29 (2.78–6.63)
 1.40 (0.64–3.07)
 1.89 (1.58–2.26)
 10.42 (9.98–10.88)
 2.93 (2.63–3.27)
 15.32 (14.78–15.88)
 1.97 (1.87–2.07)
 2.11 (1.83–2.44)
 2.90 (1.49–5.65)
 1.86 (0.96–3.61)
 2.15 (1.05–4.41)
 2.67 (1.58–4.52)
 1.48 (1.30–1.69)
 3.13 (2.50–3.92)
 2.73 (1.72–4.33)



Personlighetsforstyrrelser (Personality disorder)

Source	RR (95% CI)
Brenner (2014), Personality	5.42 (2.98– 9.84)
Niederkrötenhaler (2016), Personality	3.85 (3.05– 4.85)
Ostby (2014), Personality	7.00 (3.98–12.31)
Helgesson (2017), Personality	20.08 (18.32–22.00)
Arvilommi (2015), Borderline personality disorder	1.93 (0.90– 4.14)
Arvilommi (2015), Avoidant personality disorder	3.70 (1.81– 7.57)
Total	5.37 (2.16–13.34)

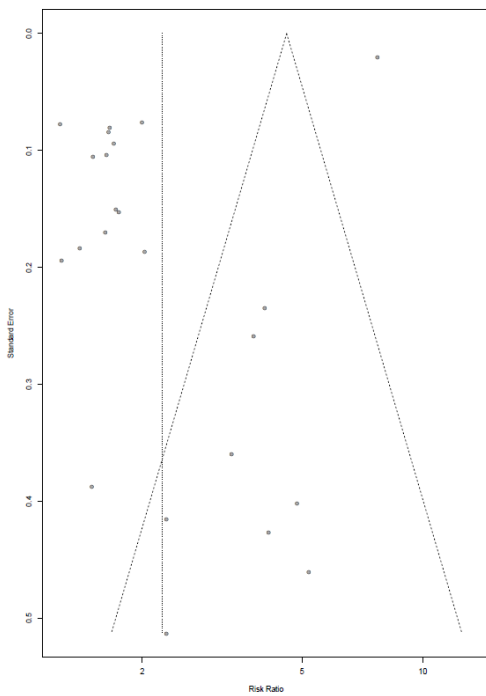
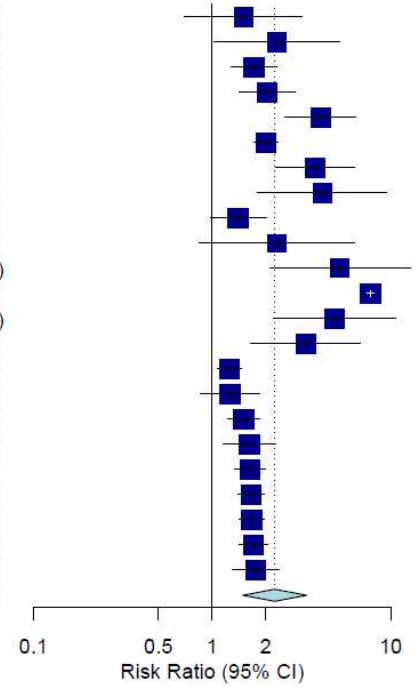
Heterogeneity: $\chi^2_5 = 232.31$ ($P < .01$), $I^2 = 98\%$



Neurologiske, stressrelaterede og somatoforme lidelser (Neurotic, stress-related and somatoform disorder)

Source	RR (95% CI)
Singer (2014), Adjustment disorder	1.50 (0.70– 3.21)
Singer (2014), Anxiety	2.30 (1.02– 5.19)
Brenner (2014), Neurotic, somatoform	1.72 (1.28– 2.31)
Brenner (2014), Stress-related	2.03 (1.41– 2.93)
Rask (2015), Somatoform disorder	4.04 (2.55– 6.40)
Niederkrotenthaler (2016), Neurotic, somatoform and stress-related disorders	2.00 (1.72– 2.32)
Ostby (2014), Stress, Anxiety disorder	3.79 (2.28– 6.30)
Lassemo (2018), PTSD exposed, Women	4.13 (1.79– 9.53)
Kouzis (2000), Phobic disorder	1.40 (0.98– 2.01)
Kouzis (2000), Obsessive-compulsive disorder	2.30 (0.84– 6.29)
Kouzis (2000), Panic disorder	5.20 (2.11–12.82)
Helgesson (2017), Neurotic/stress-related/somatoform disorders	7.71 (7.40– 8.03)
Arvilommi (2015), Stress, Generalized anxiety disorder	4.86 (2.21–10.68)
Ahola (2011), Mental disorder	3.34 (1.65– 6.77)
Wedegaertner (2013), Anxiety, outpatient	1.25 (1.07– 1.46)
Wedegaertner (2013), Anxiety, inpatient	1.26 (0.86– 1.84)
Torske (2015), Stress, Farmers	1.51 (1.23– 1.86)
Torske (2015), Stress, Higher grade professionals	1.62 (1.16– 2.26)
Torske (2015), Stress, Skilled manual workers	1.63 (1.33– 2.00)
Torske (2015), Stress, Unskilled manual workers	1.65 (1.40– 1.95)
Torske (2015), Stress, Non manual workers	1.66 (1.42– 1.95)
Torske (2015), Stress, Lower grade professionals	1.70 (1.41– 2.04)
Torske (2015), Stress, Self-employed	1.75 (1.30– 2.36)
Total	2.24 (1.48– 3.38)

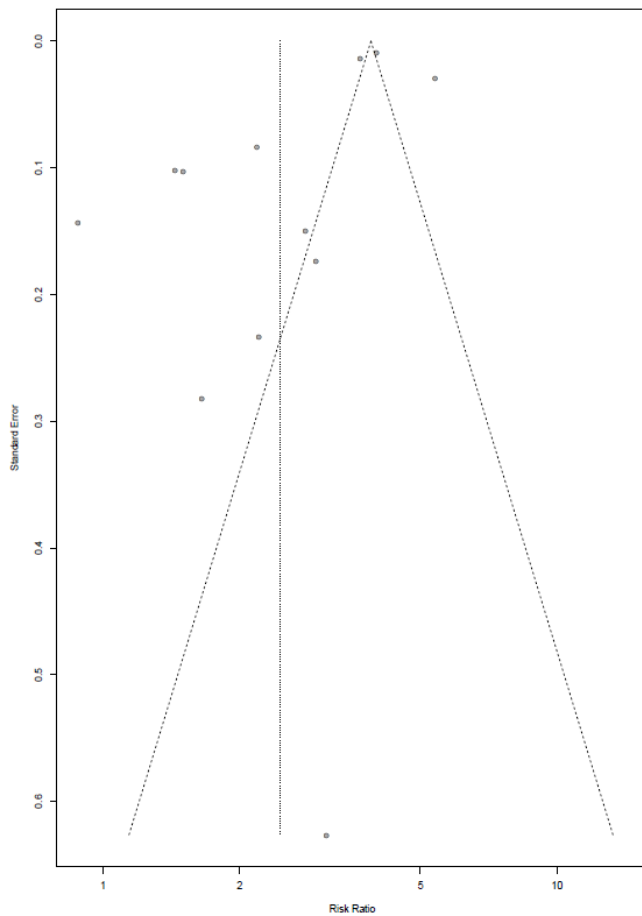
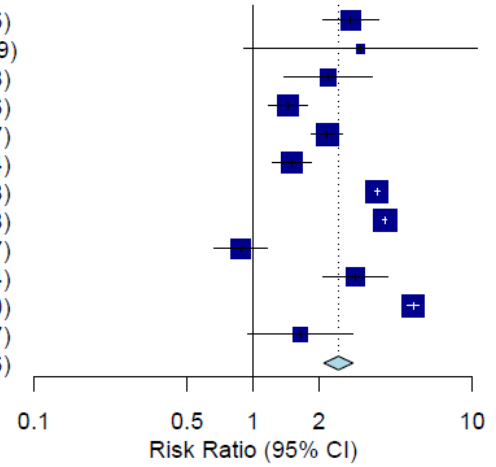
Heterogeneity: $\chi^2_{22} = 1884.46$ ($P = 0$), $I^2 = 99\%$



Misbrug (Substance abuse)

Source	RR (95% CI)
Skogen (2012), Problem drinking	2.79 (2.08– 3.75)
Singer (2014), Alcohol dependence	3.10 (0.91–10.59)
Brenner (2014), Substance abuse	2.20 (1.39– 3.48)
Salonsalmi (2012), Problem drinking (CAGE)	1.44 (1.18– 1.76)
Niederkrötenhaier (2016), Substance abuse	2.18 (1.85– 2.57)
Mansson (1999), Alcohol consumption, Men	1.50 (1.22– 1.84)
Kendler (2017), AUD (alcohol use disorder), Women	3.68 (3.58– 3.78)
Kendler (2017), AUD (alcohol use disorder), Men	4.00 (3.93– 4.08)
Kang(2015), problem drinking	0.88 (0.66– 1.17)
Kaila-Kangas (2015), Alcohol use	2.94 (2.09– 4.14)
Helgesson (2017), Substance abuse disorders	5.38 (5.08– 5.70)
vandenBerg (2010), Problematic alcohol use	1.65 (0.95– 2.87)
Total	2.45 (2.10– 2.86)

Heterogeneity: $\chi^2_{11} = 503.43$ ($P < .01$), $I^2 = 98\%$

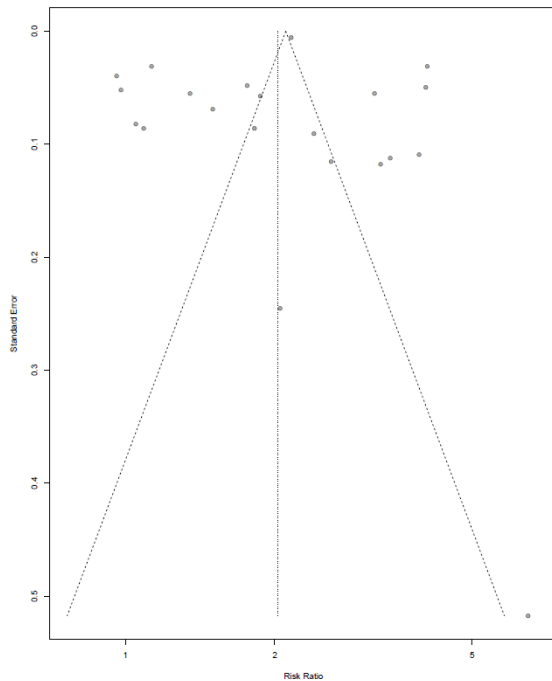
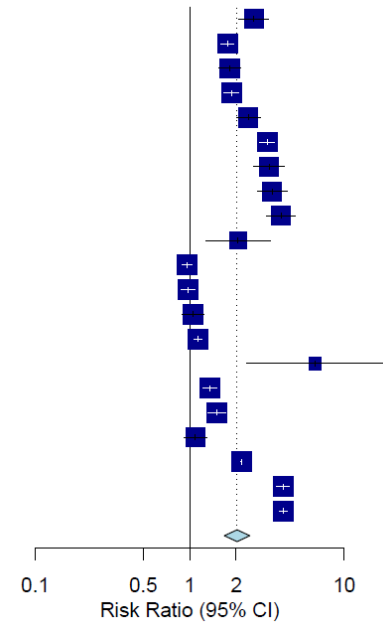


Appendiks 11. Forest- og funnelplots for somatiske helbredsproblemer (alle kvalitetsniveauer af studier)

Kardiovaskulære sygdomme (Cardiovascular diseases)

Source	RR (95% CI)
Siebert (2001), Hypertension, Men	2.60 (2.07– 3.26)
Pietilainen (2018), Cardiovascular disease, CVD in Routine non-manual workers	1.76 (1.60– 1.93)
Pietilainen (2018), Cardiovascular disease, CVD in Semi-professionals	1.82 (1.54– 2.16)
Pietilainen (2018), Cardiovascular disease, CVD in Manual workers	1.87 (1.67– 2.09)
Pietilainen (2018), Cardiovascular disease, CVD in Professionals	2.40 (2.01– 2.87)
Pietilainen (2018), Cardiovascular disease, CVD in Manual workers	3.18 (2.85– 3.54)
Pietilainen (2018), Cardiovascular disease, CVD in Semi-professionals	3.27 (2.60– 4.12)
Pietilainen (2018), Cardiovascular disease, CVD in Professionals	3.42 (2.74– 4.26)
Pietilainen (2018), Cardiovascular disease, CVD in Routine non-manual workers	3.91 (3.16– 4.84)
Virtanen (2017) b, CVD (cardiovascular disease)	2.05 (1.27– 3.31)
Zetterstrom (2015), Acute coronary, CABG, Men	0.96 (0.89– 1.04)
Zetterstrom (2015), Acute coronary, PCI, Women	0.98 (0.88– 1.09)
Zetterstrom (2015), Acute coronary, CABG, Women	1.05 (0.89– 1.23)
Zetterstrom (2015), Acute coronary, PCI, Men	1.13 (1.06– 1.20)
vanderBurg (2014), Cardiovascular disease	6.48 (2.35– 17.86)
Ervasti (2016) b, CVD	1.35 (1.21– 1.50)
Ervasti (2016) a, Chronic hypertension	1.50 (1.31– 1.72)
Tinghog (2014), Cardiovascular disorders, MS patients	1.09 (0.92– 1.29)
Tinghog (2014), Cardiovascular disorders, General population	2.16 (2.14– 2.19)
Mittendorfer-Rutz (2018), IHD, Women	4.03 (3.65– 4.44)
Mittendorfer-Rutz (2018), IHD, Men	4.06 (3.82– 4.32)
Total	2.03 (1.68– 2.45)

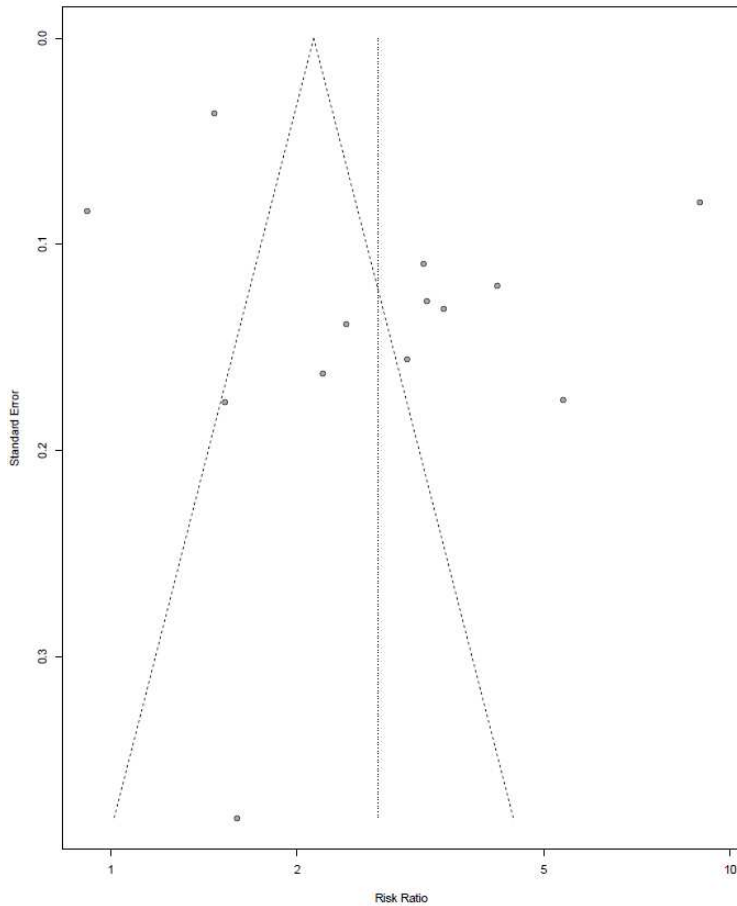
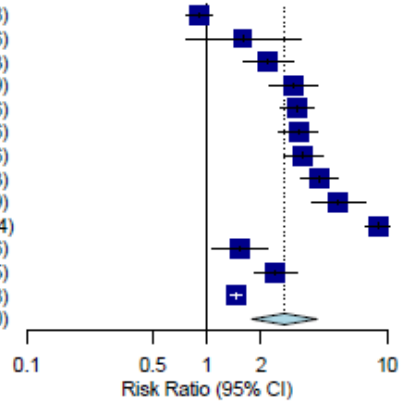
Heterogeneity: $\chi^2_{20} = 1995.66$ ($P = 0$), $I^2 = 99\%$



Cancer

Source	RR (95% CI)
Roy (2018), Cancer	0.92 (0.78– 1.08)
Lundh (2014), Breast cancer (post diagnosis), Women	1.60 (0.76– 3.36)
Horsboel (2014), Hodgkin lymphoma	2.20 (1.60– 3.03)
Horsboel (2014), Chronic lymphoid leukaemia	3.01 (2.22– 4.09)
Horsboel (2014), Cancer	3.20 (2.58– 3.96)
Horsboel (2014), Diffuse large B cell lymphoma	3.24 (2.52– 4.16)
Horsboel (2014), Follicular lymphoma	3.45 (2.67– 4.46)
Horsboel (2014), Acute myeloid/lymphoid leukaemia	4.21 (3.32– 5.33)
Horsboel (2014), Chronic myeloid leukaemia	5.38 (3.81– 7.59)
Horsboel (2014), Multiple myeloma	8.93 (7.64– 10.44)
Hauglann (2014), Colorectal cancer (CRC)	1.53 (1.08– 2.16)
Everhov (2016), Cervical cancer, Women	2.40 (1.83– 3.15)
Eaker (2011), Breast cancer, Women	1.47 (1.37– 1.58)
Total	2.70 (1.78– 4.10)

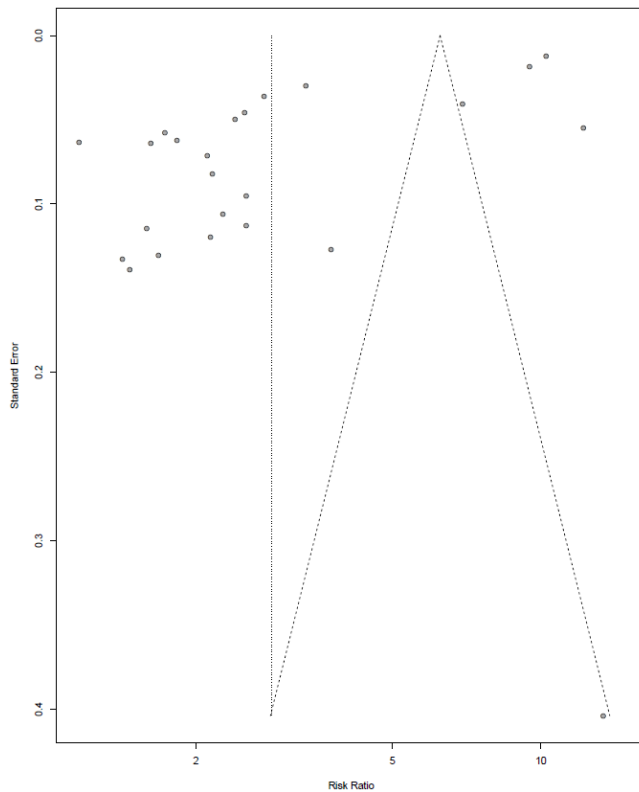
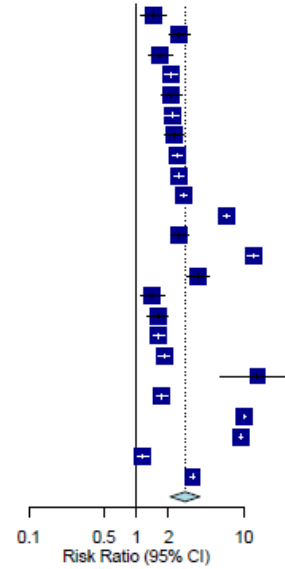
Heterogeneity: $\chi^2_{12} = 634.15$ ($P < .01$), $I^2 = 98\%$



Muskel- og skeletbesvær (Musculoskeletal disorder)

Source	RR (95% CI)
Siebert (2001), Gout, Men	1.47 (1.12– 1.93)
Siebert (2001), Disorders of the back and spine, Men	2.53 (2.03– 3.16)
Pietilainen (2018), Musculoskeletal disorder, MSD in Professionals	1.68 (1.30– 2.17)
Pietilainen (2018), Musculoskeletal disorder, MSD in Semi-professionals	2.11 (1.83– 2.43)
Pietilainen (2018), Musculoskeletal disorder, MSD in Semi-professionals	2.14 (1.69– 2.70)
Pietilainen (2018), Musculoskeletal disorder, MSD in Professionals	2.16 (1.84– 2.54)
Pietilainen (2018), Musculoskeletal disorder, MSD in Routine non-manual workers	2.27 (1.84– 2.80)
Pietilainen (2018), Musculoskeletal disorder, MSD in Manual workers	2.40 (2.18– 2.65)
Pietilainen (2018), Musculoskeletal disorder, MSD in Manual workers	2.51 (2.30– 2.74)
Pietilainen (2018), Musculoskeletal disorder, MSD in Routine non-manual workers	2.75 (2.56– 2.95)
Kivimaki (2007), Musculoskeletal disorder	6.94 (6.41– 7.51)
Kaila-Kangas(2014), Musculoskeletal disorder (MSD)	2.53 (2.10– 3.05)
Hansen (2017), Rheumatoid arthritis	12.20 (10.96– 13.58)
Gustafsson (2014), Diagnostic groups, Women	3.76 (2.93– 4.82)
Zetterstrom (2015), Musculoskeletal disorder, CABG, Women	1.42 (1.09– 1.84)
Zetterstrom (2015), Musculoskeletal disorder, PCI, Women	1.59 (1.27– 1.99)
Zetterstrom (2015), Musculoskeletal disorder, CABG, Men	1.62 (1.43– 1.84)
Zetterstrom (2015), Musculoskeletal disorder, PCI, Men	1.83 (1.62– 2.07)
vanderBurg (2014), Rheumatic diseases	13.37 (6.06– 29.50)
Ervasti (2016) b, Musculoskeletal	1.73 (1.55– 1.94)
Domer (2015), Musculoskeletal excluding BP	10.24 (9.99– 10.49)
Domer (2015), Back pain (BP)	9.48 (9.14– 9.83)
Tinghog (2014), Musculoskeletal disorders, MS patients	1.16 (1.02– 1.31)
Tinghog (2014), Musculoskeletal disorders, General population	3.34 (3.15– 3.54)
Total	2.85 (2.08– 3.92)

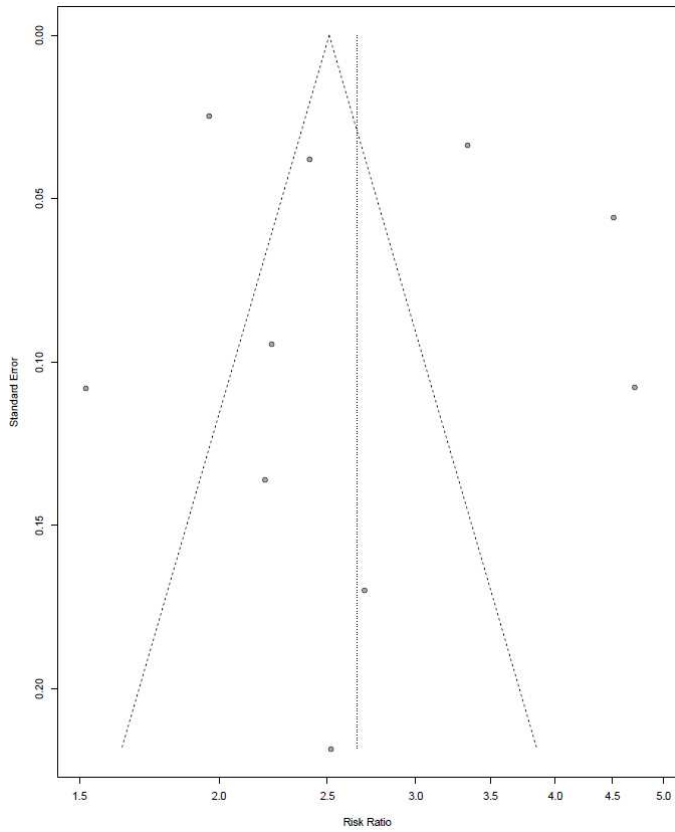
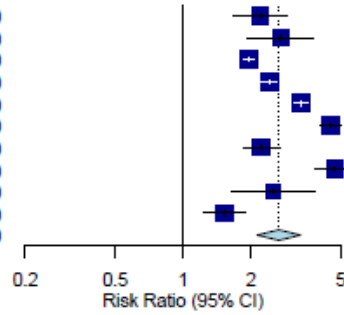
Heterogeneity: $\chi^2_{33} = 7209.10$ ($P = 0$), $I^2 = 100\%$



Neurologiske sygdomme (Nervous disorder)

Source	RR (95% CI)
Sjosten (2009), Sleep apnoea status, Men	2.20 (1.68–2.87)
Sjosten (2009), Sleep apnoea status, Women	2.70 (1.93–3.77)
Rod (2017), Sleep apnea, Outpatient, Men	1.96 (1.87–2.06)
Rod (2017), Sleep apnea, Outpatient, Women	2.41 (2.24–2.60)
Rod (2017), Sleep apnea, Inpatient, Men	3.34 (3.13–3.57)
Rod (2017), Sleep apnea, Inpatient, Women	4.51 (4.04–5.03)
Overland (2008), Insomnia	2.23 (1.85–2.68)
Kivimaki (2007), Nervous system diagnoses	4.71 (3.81–5.82)
Gustafsson (2014), Diagnostic groups, Women	2.52 (1.64–3.87)
Jansson (2013), Insomnia	1.52 (1.23–1.88)
Total	2.66 (2.13–3.32)

Heterogeneity: $\chi^2_9 = 342.09$ ($P < .01$), $I^2 = 97\%$



Appendiks 12. Resultater fra alle domæner, både på alle kvalitetsniveauer og højkvalitetsniveauer

Domæne/eksponeringer	Risk ratio (RR)	RR_høj kvalitet	I ²	I ² _høj kvalitet
Fysiske krav i arbejdet				
Akavede arbejdsstillinger (Body exposure)	1,72 (1,49-1,98)	1,77 (1,51-2,07)	78%	82%
Løft (Lifting)	1,99 (1,71-2,32)	1,99 (1,71-2,32)	79%	79%
Fysiske krav i arbejdet (Physical demand)	1,92 (1,40-2,63)	2,64 (1,36-5,14)	86%	93%
Fysisk arbejdsbelastning (Physical work load)	1,82 (1,54-2,14)	1,76 (1,44-2,16)	94%	92%
Monotont arbejde (Monotonous work)	1,48 (1,35-1,63)	1,49 (1,35-1,63)	0%	0%
Psykosocialt arbejdsmiljø				
Høje krav i arbejdet (High job demands)	1,15 (1,04-1,26)	1,13 (0,99-1,27)	83%	77%
Kombination af høje krav og lav job kontrol (Job strain)	1,73 (1,33-2,25)	1,62 (1,22-2,16)	82%	86%
Lav job-kontrol (Low job control)	1,58 (1,36-1,83)	1,63 (1,35-1,95)	92%	94%
Høj job-kontrol (High job control)	0,80 (0,73-0,89)	0,77 (0,57-1,03)	68%	72%
Høj social støtte (High social support)	0,98 (0,86-1,11)	0,97 (0,84-1,13)	49%	63%
Natarbejde (Night work)	1,26 (1,07-1,48)	1,25 (1,09-1,45)	83%	41%
Skifteholdsarbejde (Shift work)	1,20 (1,01-1,42)	1,22 (1,04-1,44)	81%	47%
Sundhedsadfærd				
Fysisk aktiv (Active)	0,75 (0,64-0,87)	0,89 (0,79-1,01)	75%	49%
Fysisk inaktiv (Inactive/low)	1,41 (1,24-1,61)	1,39 (1,20-1,61)	88%	89%
Høj alkoholindtag (Alcohol use (High))	1,23 (1,04-1,47)	1,21 (1,01-1,47)	94%	94%
Intet alkoholindtag (Alcohol use (None))	1,49 (1,32-1,69)	1,48 (1,30-1,68)	86%	86%
Ryger (Smokers)	1,72 (1,55-1,91)	1,72 (1,55-1,91)	91%	86%
Tidligere ryger (Ex-smokers)	1,15 (1,02-1,29)	1,15 (1,02-1,30)	71%	72%
Fedme (Obesity)	1,70 (1,51-1,91)	1,62 (1,41-1,87)	91%	61%
Overvægt (Overweight)	1,13 (1,04-1,22)	1,08 (0,92-1,27)	88%	89%
Undervægt (Underweight)	1,39 (1,14-1,70)	1,52 (1,08-2,16)	71 %	78%
Mentale helbredsproblemer				
Generelle mentale lidelser (Any mental disorder)	7,39 (5,93-9,20)	7,30 (5,71- 9,33)	99%	100%
Affektive lidelser (Affective disorder)	2,73 (1,72-4,33)	3,30 (2,06- 5,28)	100%	100%
Personlighedsforstyrrelse (Personality disorder)	5,37 (2,16-13,34)	9,45 (3,66-24,37)	98%	93%
Neurologiske, stressrelaterede og somatoforme lidelser (Neurotic, stress-related and somatoform disorders)	2,24 (1,48-3,38)	2,09 (1,23-3,54)	99%	99%
Misbrug (Substance abuse)	2,45 (2,10-2,86)	2,76 (2,36-3,23)	98%	98%

Somatiske helbredsproblemer				
Muskel- og skeletbesvær (Musculoskeletal disorder)	2,85 (2,08-3,92)	2,70 (1,96- 3,74)	100%	100%
Cancer	2,70 (1,78- 4,10)	1,16 (0,70-1,91)	98%	85%
Neurologiske sygdomme (Nervous Disorder)	2,66 (2,13-3,32)	2,49 (1,75-3,53)	97%	91%
Kardiovaskulære sygdomme (Cardiovascular diseases)	2,03 (1,68- 2,45)	2,01 (1,65-2,45)	99%	99%

Appendiks 13. Forest- og funnelplots for fysiske krav i arbejdet (høj kvalitetsstudier)

Akavede arbejdsstillinger (Body exposed)

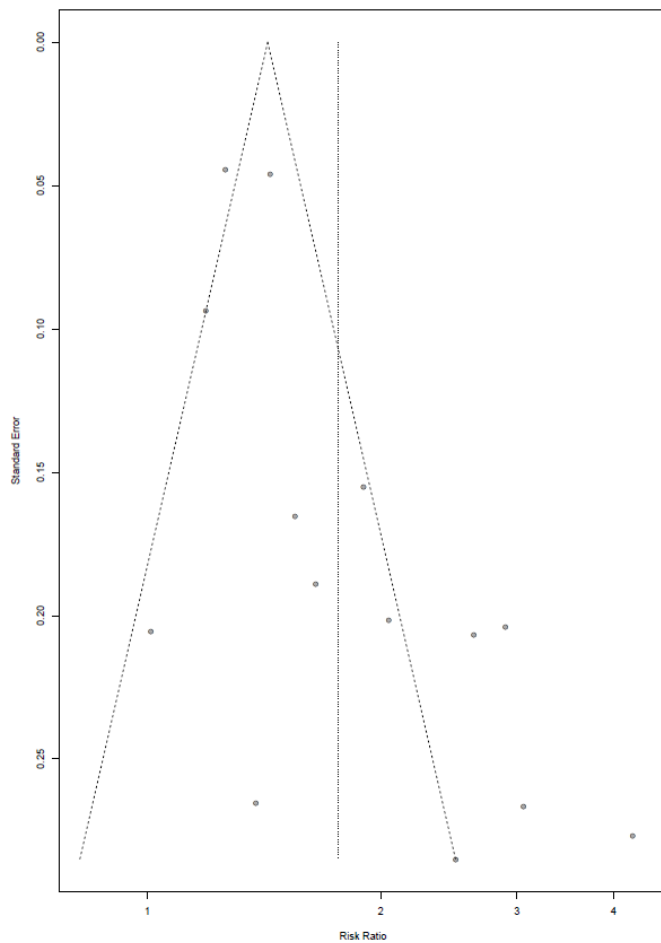
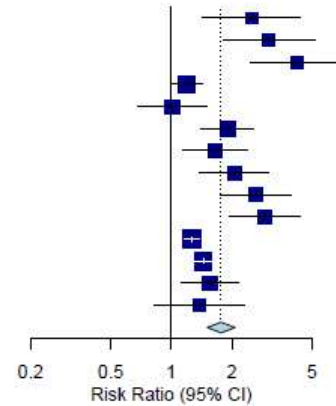
Source

Sundstrup (2018) a, pushing/pulling	2.50 (1.43-4.37)
Sundstrup (2018) a, Back twisted/bended frequently	3.06 (1.81-5.16)
Sundstrup (2018) a, Back severely bended/twisted	4.23 (2.46-7.28)
Karkkainen (2013), Body exposed	1.19 (0.99-1.43)
Labriola (2009) b, Working with hands lifted, Men	1.01 (0.68-1.51)
Labriola (2009) b, Working with hands lifted, Women	1.90 (1.40-2.57)
Husemoen (2004), Body exposed, Standing, Men	1.65 (1.14-2.39)
Husemoen (2004), Body exposed, Mostly standing/walking, Women	2.05 (1.38-3.04)
Husemoen (2004), Body exposed, Walking/lift, Men	2.64 (1.76-3.96)
Husemoen (2004), Body exposed, Mostly walking/lifting/physical exhausting, Women	2.90 (1.94-4.33)
Finland (2018), Much walking	1.26 (1.16-1.37)
Finland (2018), Much walking + lifting	1.44 (1.32-1.58)
Shiri (2018), work demanding hands above shoulder girdle	1.55 (1.12-2.14)
Sundstrup (2017), Kneeling	1.38 (0.82-2.32)
Total	1.77 (1.51-2.07)

Heterogeneity: $\chi^2_{13} = 70.38$ ($P < .01$), $I^2 = 82\%$

RR (95% CI)

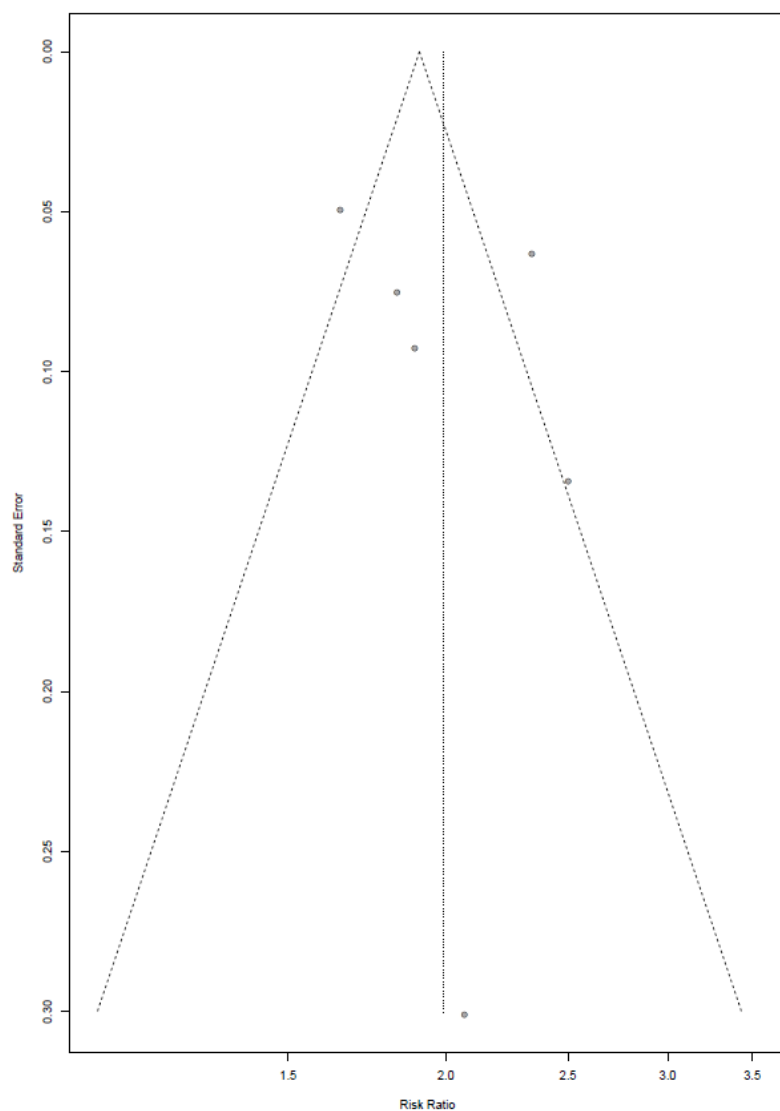
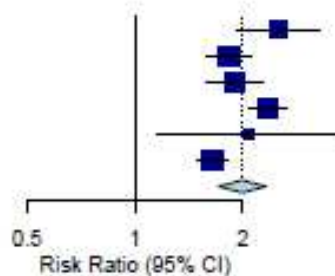
2.50 (1.43-4.37)
3.06 (1.81-5.16)
4.23 (2.46-7.28)
1.19 (0.99-1.43)
1.01 (0.68-1.51)
1.90 (1.40-2.57)
1.65 (1.14-2.39)
2.05 (1.38-3.04)
2.64 (1.76-3.96)
2.90 (1.94-4.33)
1.26 (1.16-1.37)
1.44 (1.32-1.58)
1.55 (1.12-2.14)
1.38 (0.82-2.32)
1.77 (1.51-2.07)



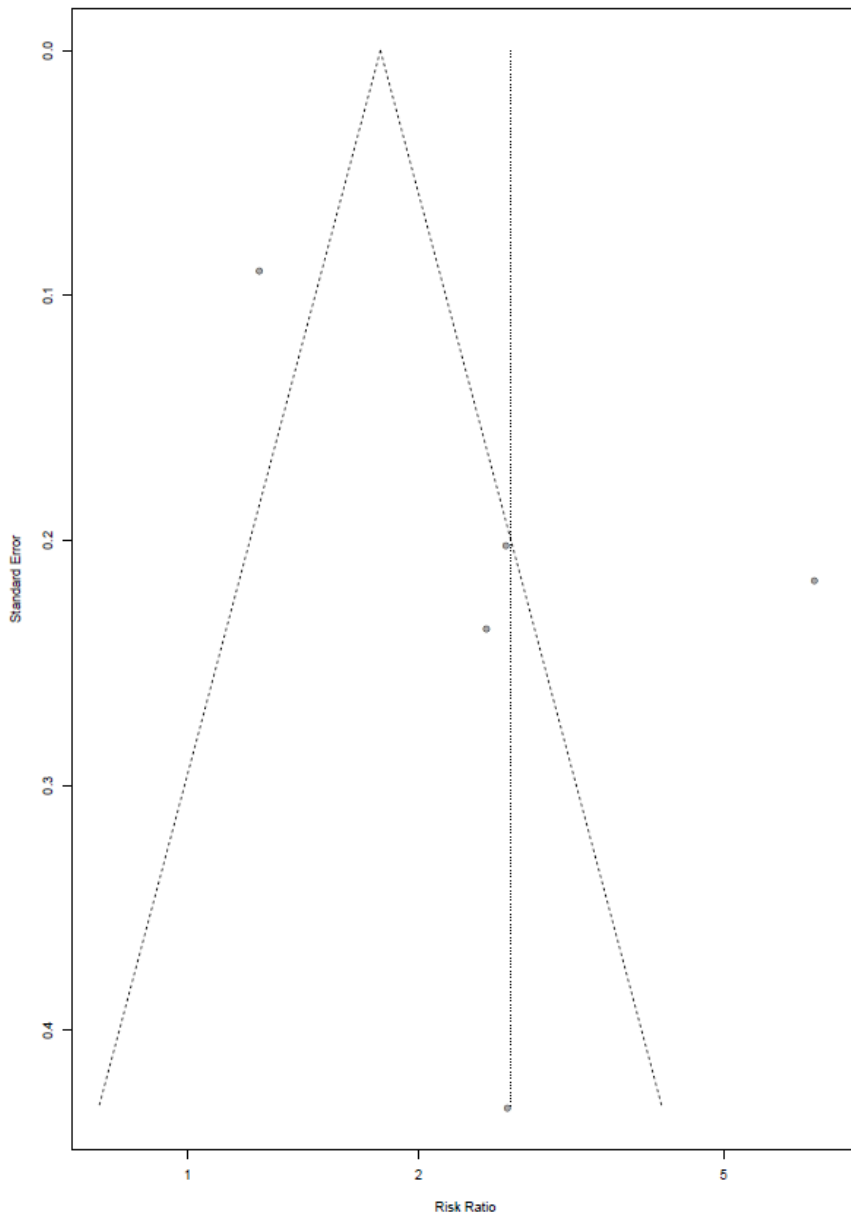
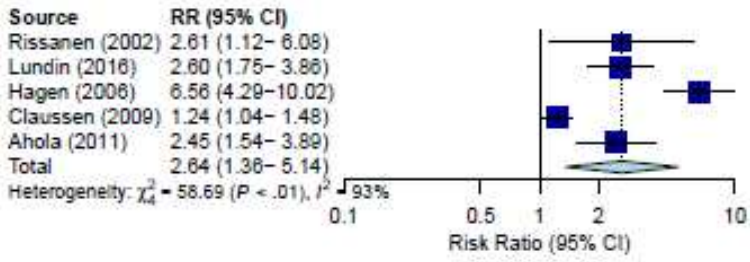
Løft i arbejdet (Lifting)

Source	RR (95% CI)
Karpansalo (2002), Men	2.50 (1.92–3.25)
Karkkainen (2013)	1.83 (1.58–2.12)
Solovieva (2018), Women	1.89 (1.58–2.27)
Solovieva (2018), Men	2.34 (2.07–2.65)
Sundstrup (2017)	2.07 (1.15–3.73)
Stover (2013)	1.65 (1.50–1.82)
Total	1.99 (1.71–2.32)

Heterogeneity: $\chi^2 = 23.61$ ($P < .01$), $I^2 = 79\%$



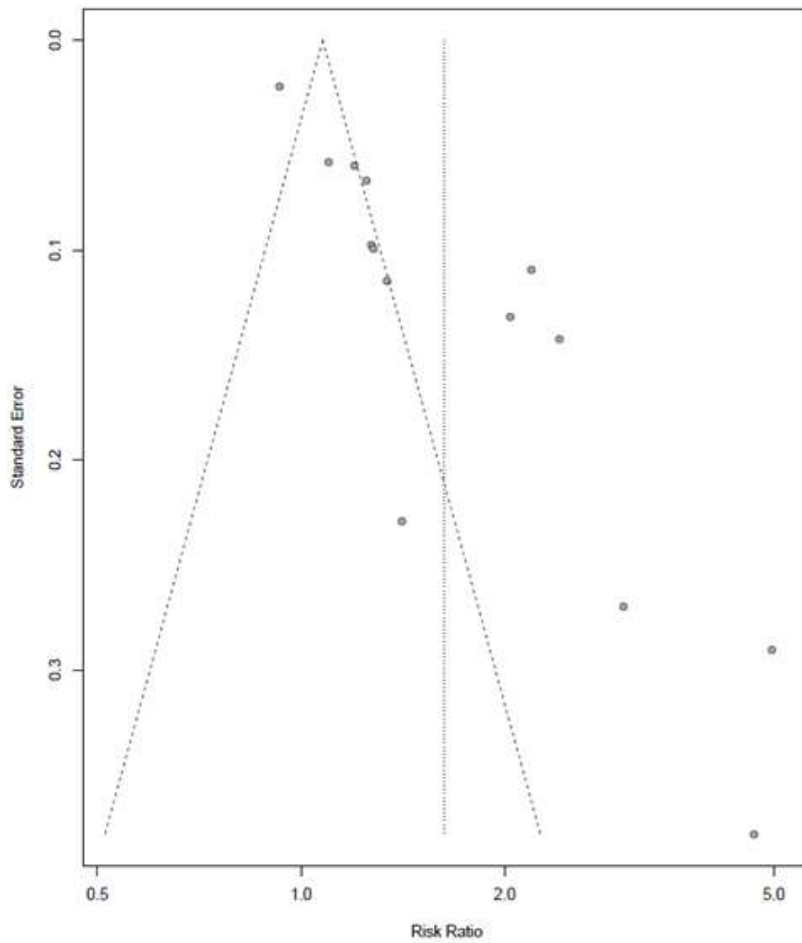
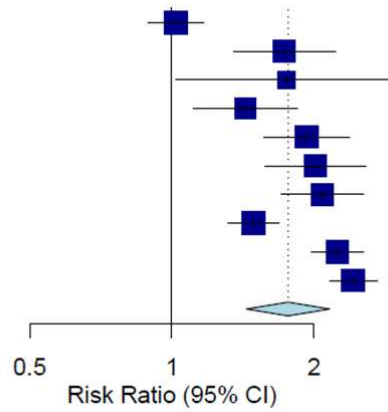
Fysiske krav i arbejdet (Physical demands)



Fysisk arbejdsbelastning (physical work load)

Source	RR (95% CI)
Blekesaune (2005)	1.02 (0.89-1.17)
Lahelma (2012), Women	1.73 (1.35-2.22)
Lahelma (2012), Men	1.75 (1.02-3.00)
Kjellberg (2016), Men	1.43 (1.11-1.85)
Kjellberg (2016), Women	1.93 (1.56-2.38)
Karpansalo (2002), Men	2.01 (1.57-2.57)
Karkkainen (2013)	2.08 (1.70-2.54)
Fimland (2018)	1.49 (1.32-1.68)
Solovieva (2018), Women	2.24 (1.97-2.55)
Solovieva (2018), Men	2.42 (2.16-2.72)
Total	1.76 (1.44-2.16)

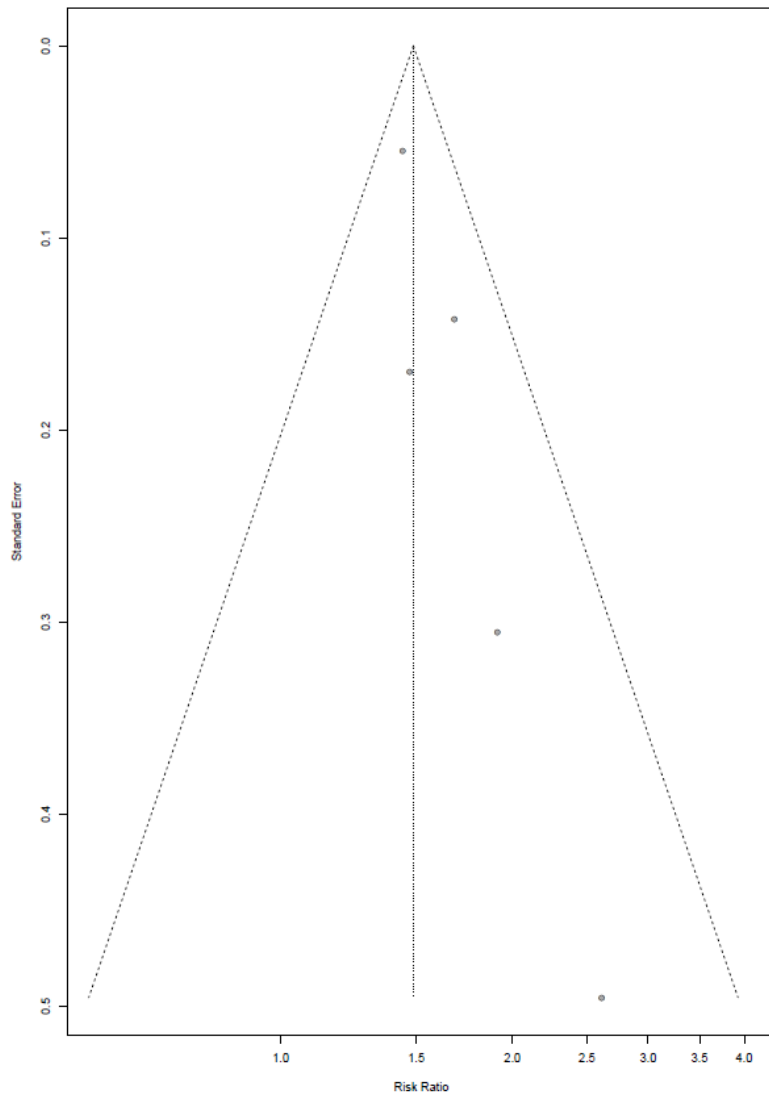
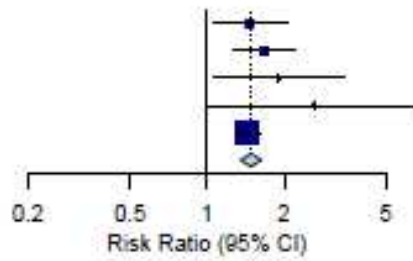
Heterogeneity: $\chi^2_9 = 117.49$ ($P < .01$), $I^2 = 92\%$



Monotont arbejde (monotonous work)

Source	RR (95% CI)
Ropponen (2012), Women	1.47 (1.05-2.05)
Ropponen (2012), Men	1.68 (1.27-2.22)
Sundstrup (2018) a	1.91 (1.05-3.47)
Hinkka (2013)	2.61 (0.99-6.89)
Stover (2013)	1.44 (1.29-1.60)
Total	1.49 (1.35-1.63)

Heterogeneity: $\chi^2 = 3.04$ ($P = .55$), $I^2 = 0\%$

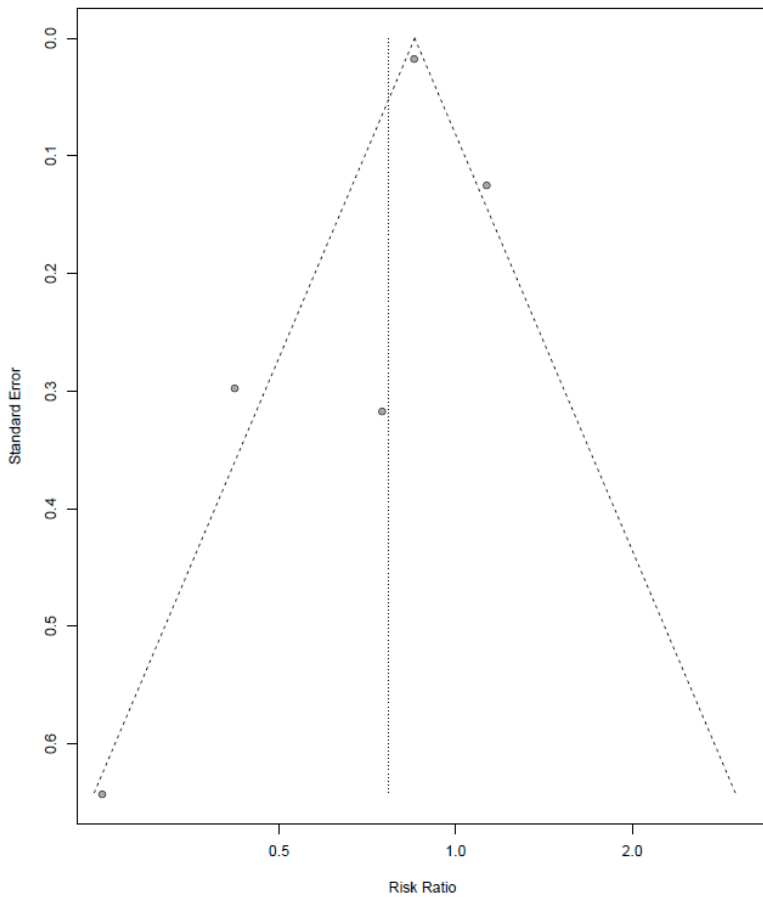
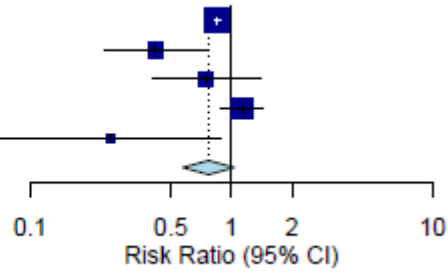


Appendiks 14. Forest- og funnelplots for psykosocialt arbejdsmiljø (højkvalitetsstudier)

Høj job-kontrol (high job control)

Source	RR (95% CI)
Ropponen (2013) b	0.85 (0.82–0.88)
Markkula (2017)	0.42 (0.23–0.75)
Lahelma (2012), Men	0.75 (0.40–1.40)
Lahelma (2012), Women	1.13 (0.88–1.45)
Hinkka (2013)	0.25 (0.07–0.88)
Total	0.77 (0.57–1.03)

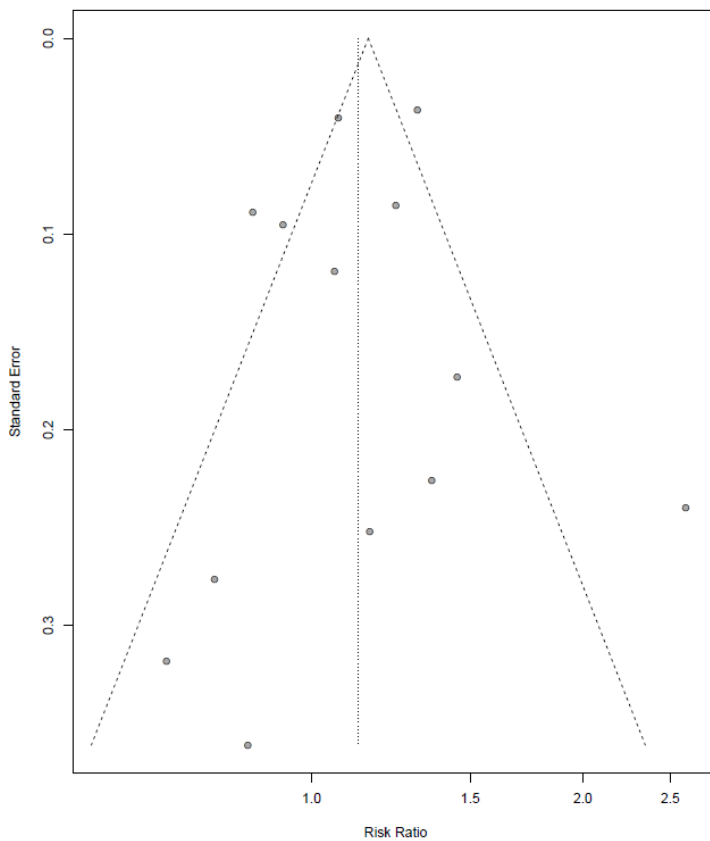
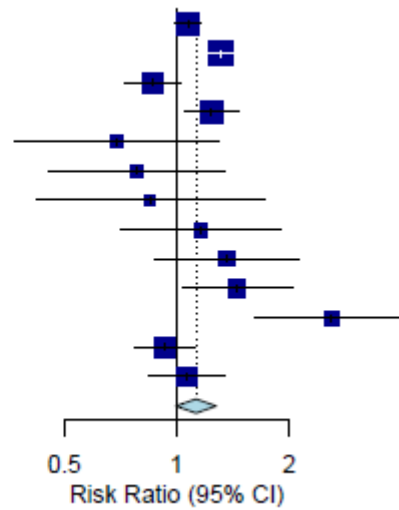
Heterogeneity: $\chi^2_4 = 14.50$ ($P < .01$), $I^2 = 72\%$



Høje psykiske krav i arbejdet (high job demands)

Source	RR (95% CI)
Samuelsson (2013) b, High job demand	1.07 (0.99–1.16)
Ropponen (2013) b, High job demand	1.31 (1.22–1.41)
Nielsen (2017) a, Decision demands	0.86 (0.72–1.02)
Nielsen (2017) a, Quantitative demands	1.24 (1.05–1.47)
Sundstrup (2018) a, Quantitative demands	0.69 (0.37–1.29)
Sundstrup (2018) a, Cognitive demands	0.78 (0.45–1.34)
Sundstrup (2018) a, High time pressure	0.85 (0.42–1.73)
Sundstrup (2018) a, Emotional demands	1.16 (0.71–1.90)
Markkula (2017), High job demand	1.36 (0.87–2.12)
Lundin (2016), Demands (work fast)	1.45 (1.03–2.04)
Hagen (2006), Concentration and attention	2.60 (1.62–4.16)
Clausen (2014), Quantitative demands	0.93 (0.77–1.12)
Clausen (2014), Work pace	1.06 (0.84–1.34)
Total	1.13 (0.99–1.27)

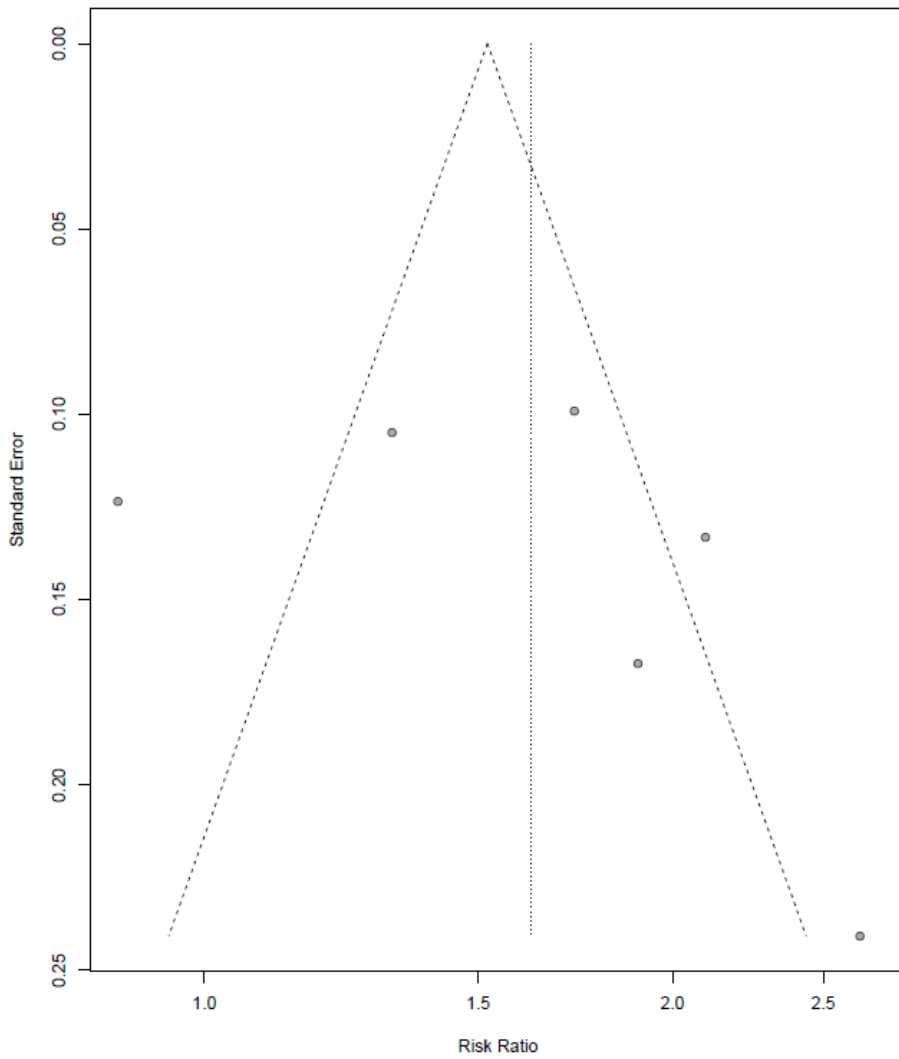
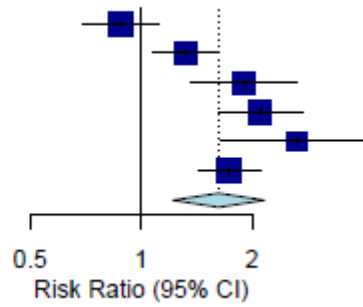
Heterogeneity: $\chi^2_{12} = 51.53$ ($P < .01$), $I^2 = 77\%$



Psykiske arbejdsbelastning (job strain)

Source	RR (95% CI)
Ropponen (2013) b, High strain	0.88 (0.69–1.12)
Ropponen (2013) b, Iso-strain	1.32 (1.07–1.62)
Canivet (2013), Men	1.90 (1.37–2.64)
Canivet (2013), Women	2.10 (1.62–2.73)
Ahola (2011)	2.64 (1.65–4.23)
Juvani (2018)	1.73 (1.42–2.10)
Total	1.62 (1.22–2.16)

Heterogeneity: $\chi^2_5 = 35.96$ ($P < .01$), $I^2 = 86\%$

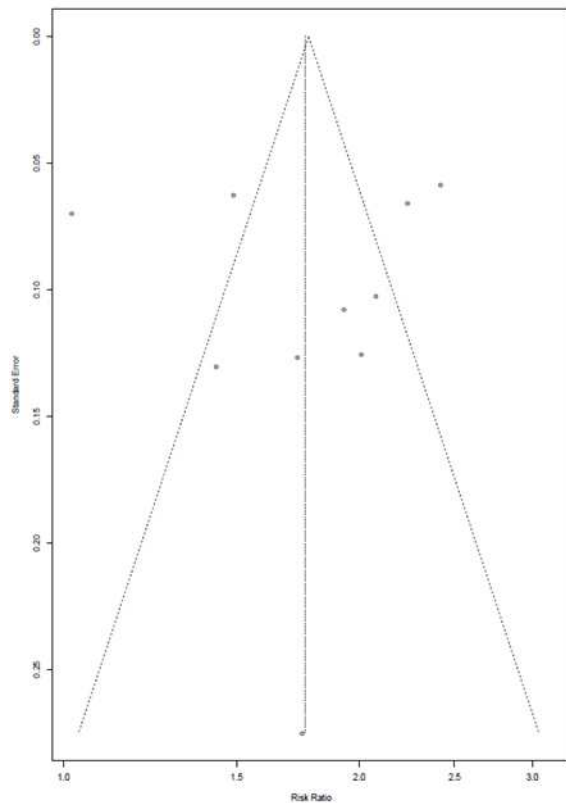
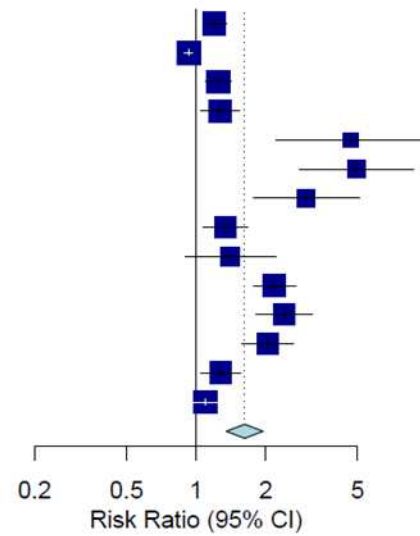


Lav job-kontrol (low job control)

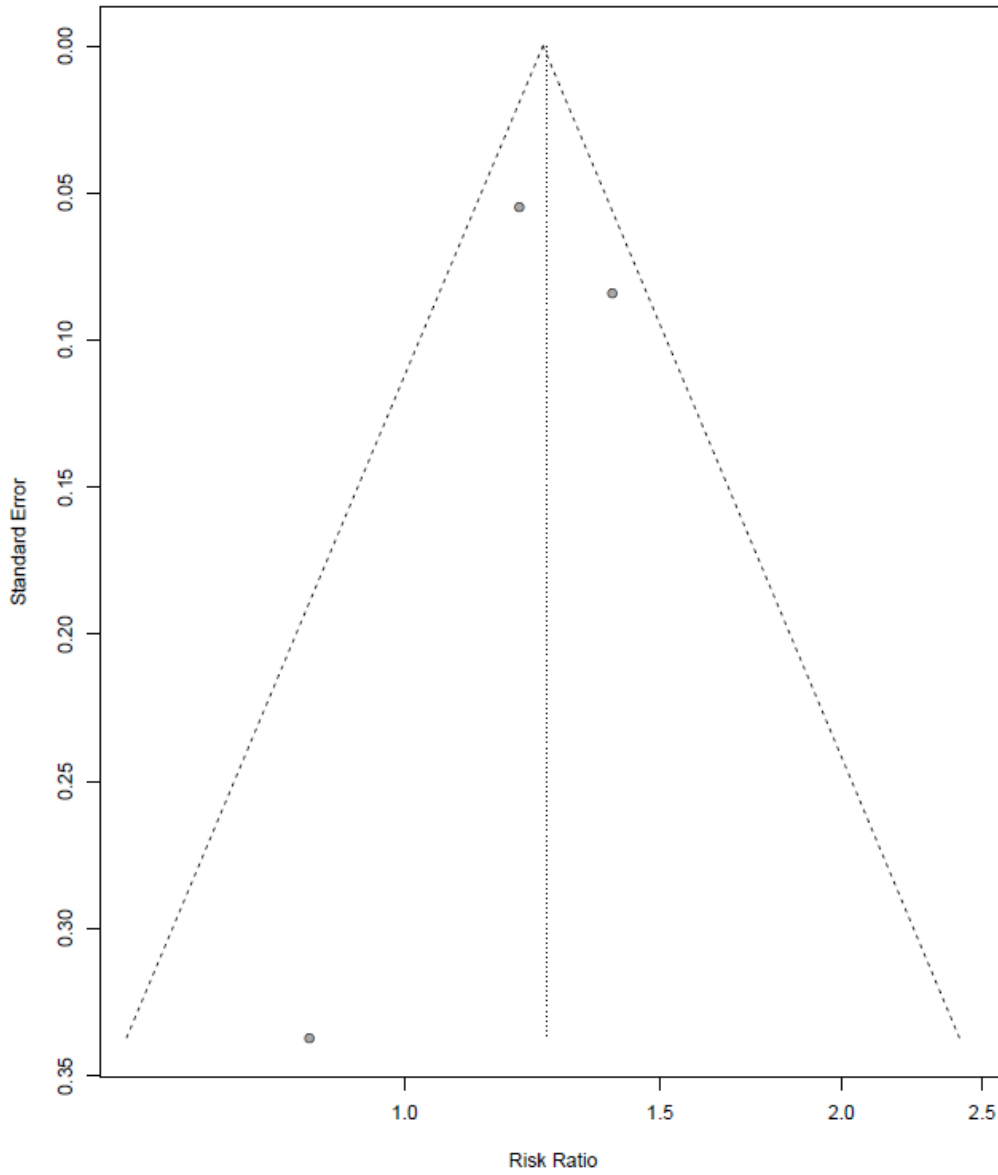
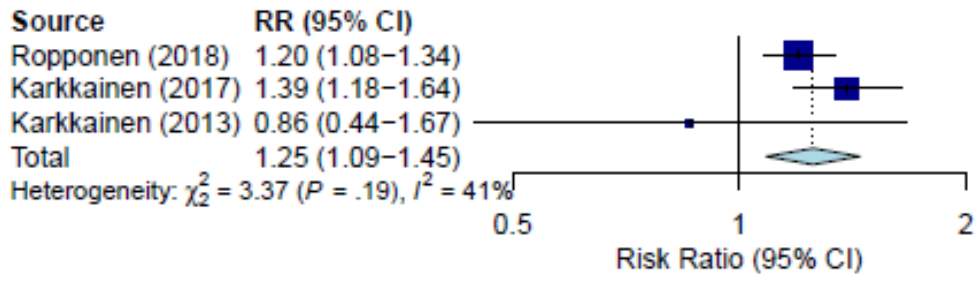
Source

Source	RR (95% CI)
Blekesaune (2005), Low autonomy	1.20 (1.07–1.35)
Samuelsson (2013) b, Low job control	0.93 (0.89–0.97)
Nielsen (2017) a, Lack of control over work place	1.25 (1.10–1.43)
Nielsen (2017) a, Lack of control over decisions	1.27 (1.05–1.54)
Sundstrup (2018) a, Possibilities for development	4.68 (2.23–9.83)
Sundstrup (2018) a, Influence at work	4.97 (2.81–8.78)
Lundin (2016), Low job control,	3.00 (1.77–5.09)
Lahelma (2012), Psychosocial work conditions, Women	1.34 (1.07–1.68)
Lahelma (2012), Psychosocial work conditions, Men	1.41 (0.90–2.21)
Kjellberg (2016), Low job control, Men	2.19 (1.77–2.71)
Kjellberg (2016), Low job control, Women	2.41 (1.82–3.19)
Claussen (2009), Low job control	2.04 (1.58–2.64)
Clausen (2014), Influence at work	1.28 (1.05–1.56)
Stover (2013), Influence on working conditions	1.10 (0.98–1.23)
Total	1.63 (1.35–1.95)

Heterogeneity: $\chi^2_{13} = 218.46$ ($P < .01$), $I^2 = 94\%$

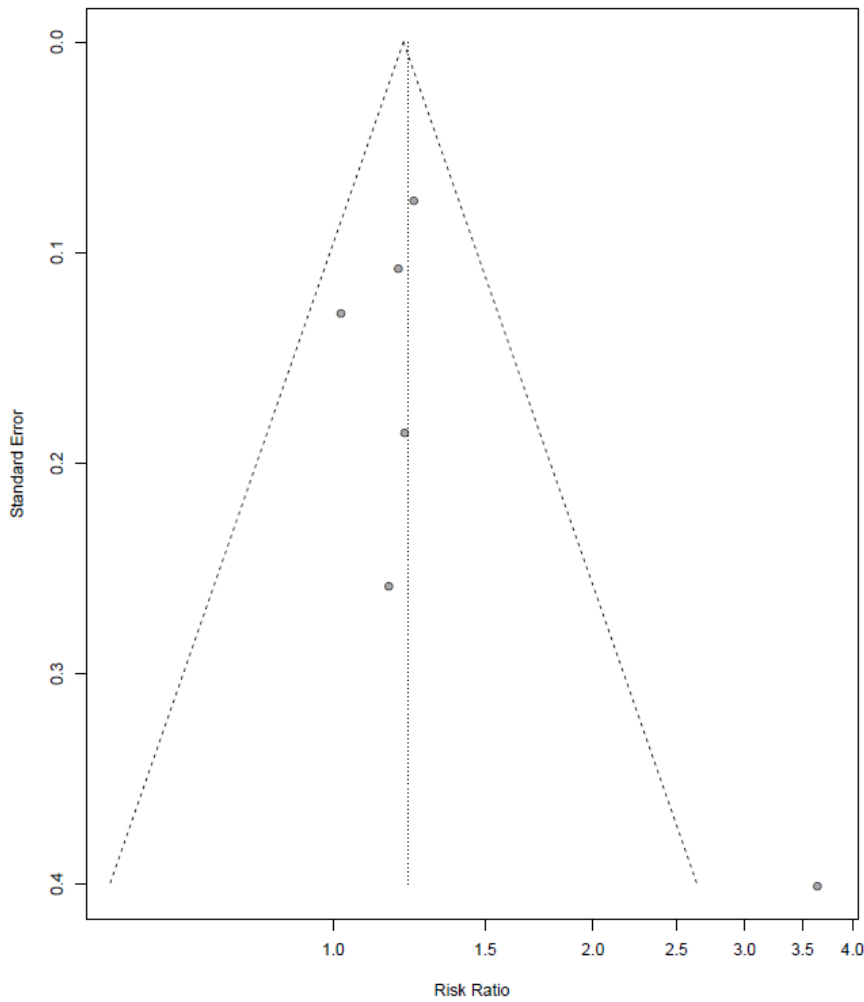
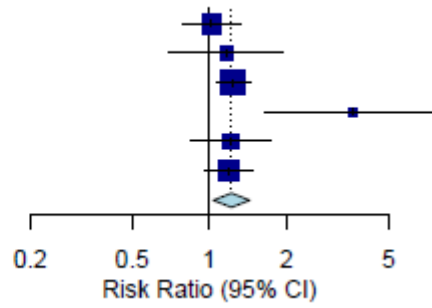


Natarbejde (night work)



Skrifteholdsarbejde (shift work)

Source	RR (95% CI)
Lahelma (2012), Women	1.02 (0.79-1.31)
Lahelma (2012), Men	1.16 (0.70-1.93)
Karkkainen (2013)	1.24 (1.07-1.44)
Hinkka (2013)	3.64 (1.66-7.99)
Claussen (2009)	1.21 (0.84-1.74)
Tuchsen (2008)	1.19 (0.96-1.47)
Total	1.22 (1.04-1.44)
Heterogeneity: $\chi^2_5 = 9.45$ ($P = .09$), $I^2 = 47\%$	

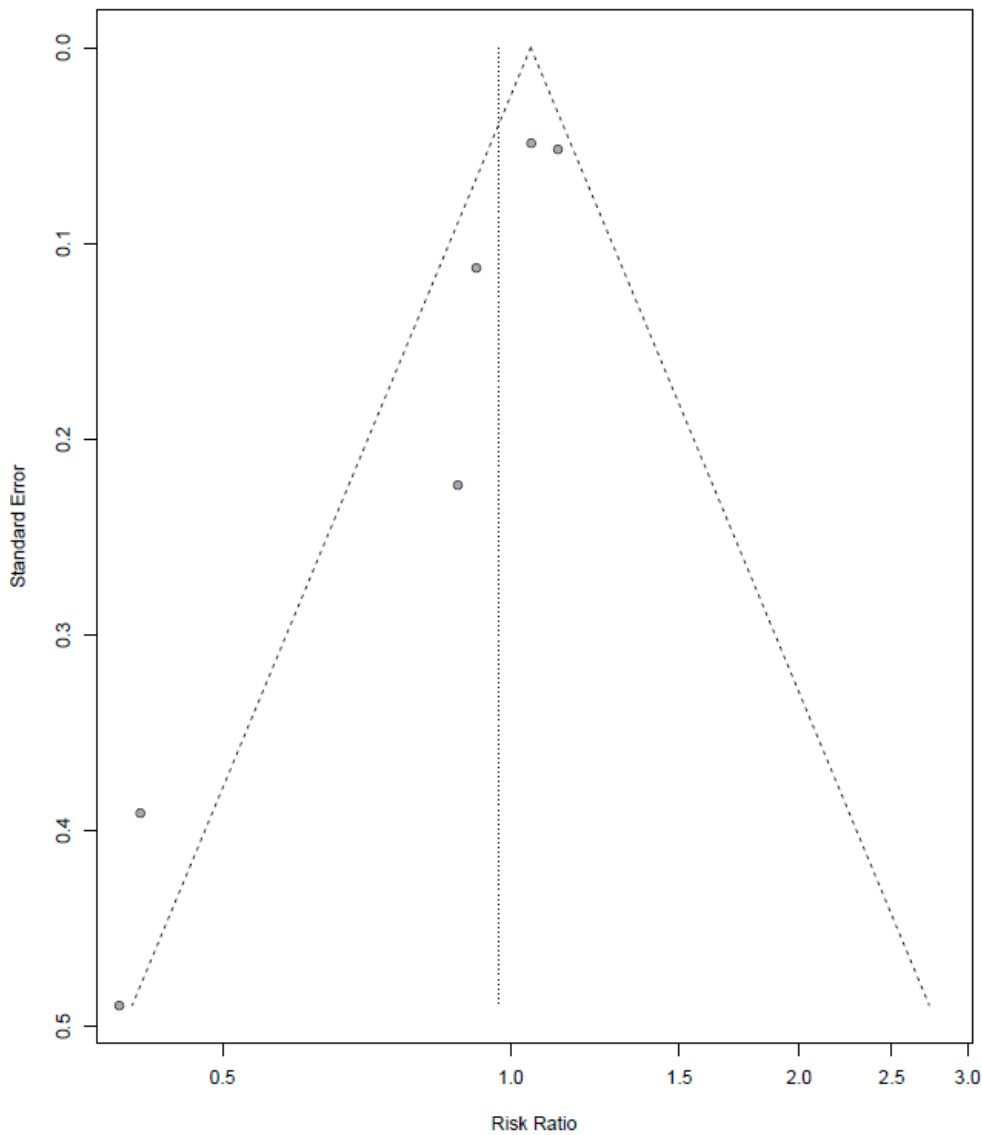
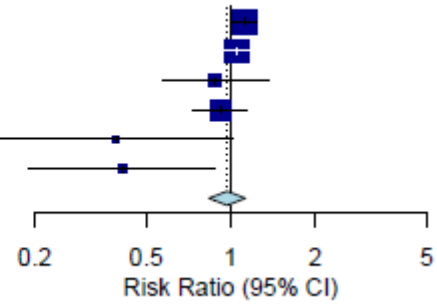


Høj social støtte (high social support)

Source

Source	RR (95% CI)
Samuelsson (2013) b, High social support	1.12 (1.01-1.24)
Ropponen (2013) b, High social support	1.05 (0.95-1.16)
Lahelma (2012), High social support, Men	0.88 (0.57-1.36)
Lahelma (2012), High social support, Women	0.92 (0.74-1.15)
Hinkka (2013), Support from supervisor	0.39 (0.15-1.02)
Hinkka (2013), Team climate at work	0.41 (0.19-0.88)
Total	0.97 (0.84-1.13)

Heterogeneity: $\chi^2_5 = 13.41$ ($P = .02$), $I^2 = 63\%$

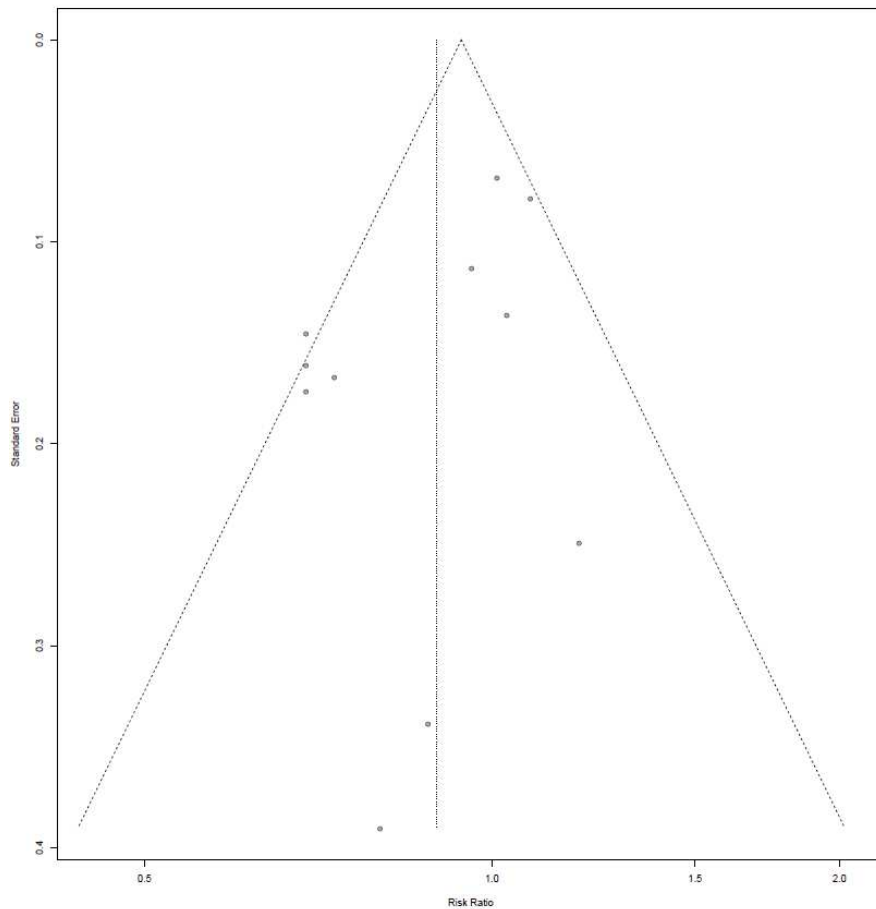
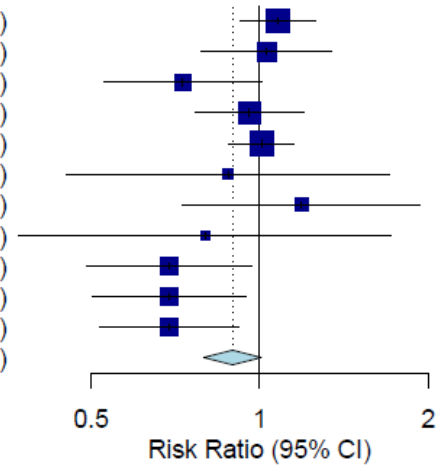


Appendiks 15. Forest- og funnelplots for sundhedsadfærd (høj kvalitetsstudier)

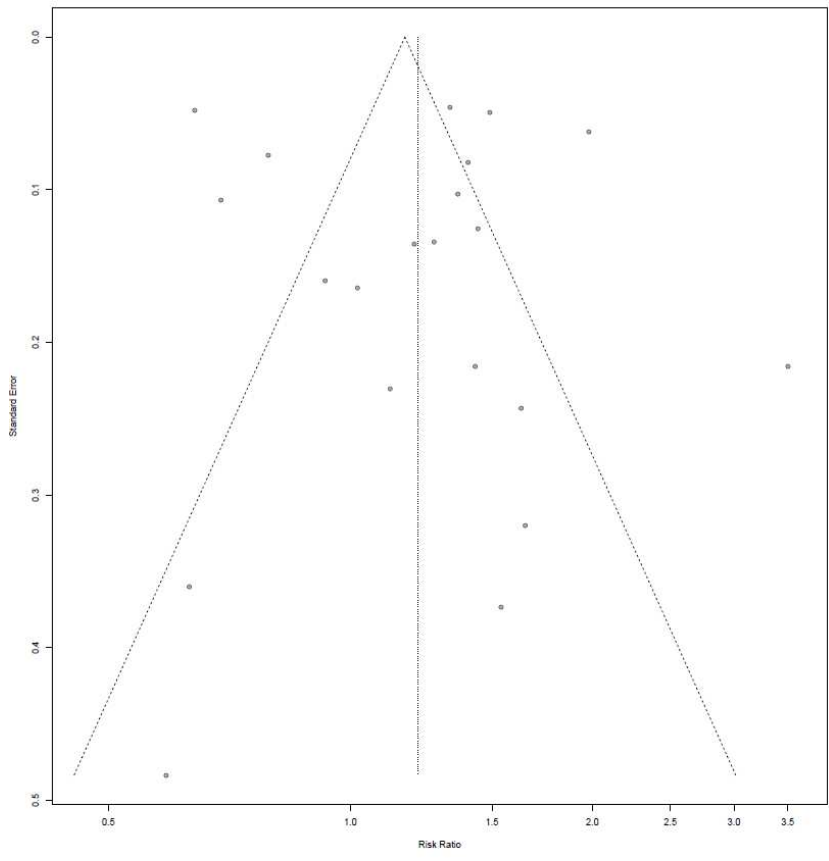
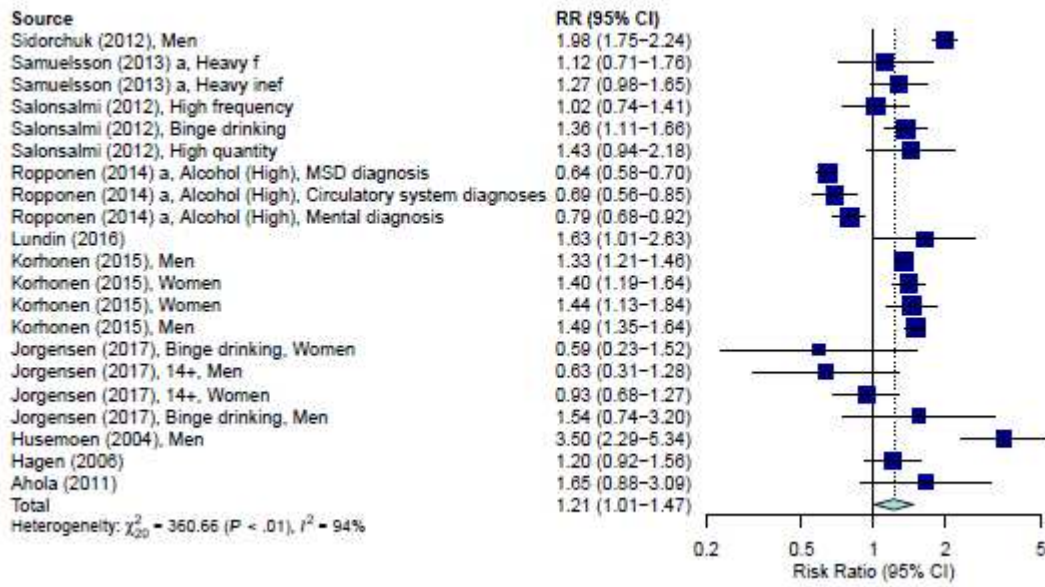
Fysisk aktiv (active)

Source	RR (95% CI)
Roy (2018)	1.08 (0.93–1.26)
Samuelsson (2013) a	1.03 (0.79–1.35)
Ropponen (2014) a, Active, Circulatory system diagnoses	0.73 (0.53–1.01)
Ropponen (2014) a, Active, Mental diagnosis	0.96 (0.77–1.20)
Ropponen (2014) a, Active, MSD diagnosis	1.01 (0.88–1.15)
Ropponen (2012), Women	0.88 (0.45–1.71)
Ropponen (2012), Men	1.19 (0.73–1.94)
Rissanen (2002)	0.80 (0.37–1.72)
Husemoen (2004), Women	0.69 (0.49–0.97)
Halford (2012), Men	0.69 (0.50–0.95)
Halford (2012), Women	0.69 (0.52–0.92)
Total	0.89 (0.79–1.01)

Heterogeneity: $\chi^2_{10} = 19.43$ ($P = .04$), $I^2 = 49\%$



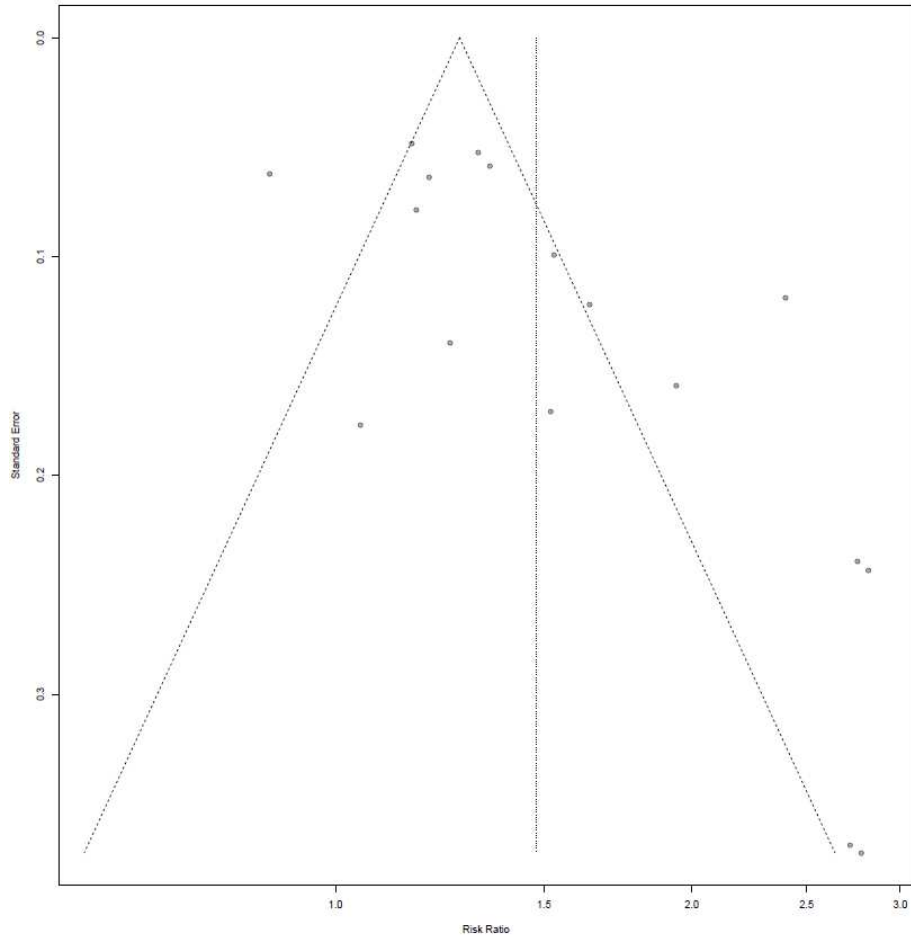
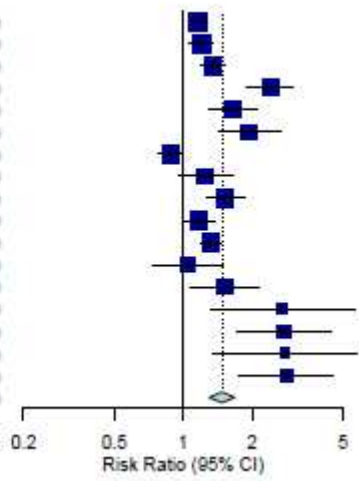
Højt alkoholindtag (alcohol use high)



Intet alkoholindtag (alcohol use none)

Source	RR (95% CI)
Skogen (2012), Non-consumption	1.16 (1.06-1.27)
Skogen (2012), Abstainers	1.20 (1.06-1.36)
Sidorchuk (2012), Men	1.35 (1.20-1.51)
Samuelsson (2013) a	2.40 (1.90-3.03)
Salonsalmi (2012), Drinking habits (frequency of drinking)	1.64 (1.29-2.08)
Salonsalmi (2012), Drinking habits Quantity of drinking)	1.94 (1.42-2.65)
Ropponen (2014) a, Alcohol (none), MSD diagnosis	0.88 (0.78-0.99)
Ropponen (2014) a, Alcohol (none), Circulatory system diagnoses	1.25 (0.95-1.64)
Ropponen (2014) a, Alcohol (none), Mental diagnosis	1.53 (1.26-1.86)
Korhonen (2015), Men	1.17 (1.00-1.36)
Korhonen (2015), Women	1.32 (1.19-1.46)
Kaila-Kangas (2015), Lifelong abstainer	1.05 (0.74-1.48)
Kaila-Kangas (2015), Former drinker	1.52 (1.09-2.12)
Jorgensen (2017), No intake	2.72 (1.32-5.61)
Jorgensen (2017), No intake	2.76 (1.73-4.41)
Jorgensen (2017), No intake	2.78 (1.34-5.77)
Jorgensen (2017), No intake	2.82 (1.75-4.54)
Total	1.48 (1.30-1.68)

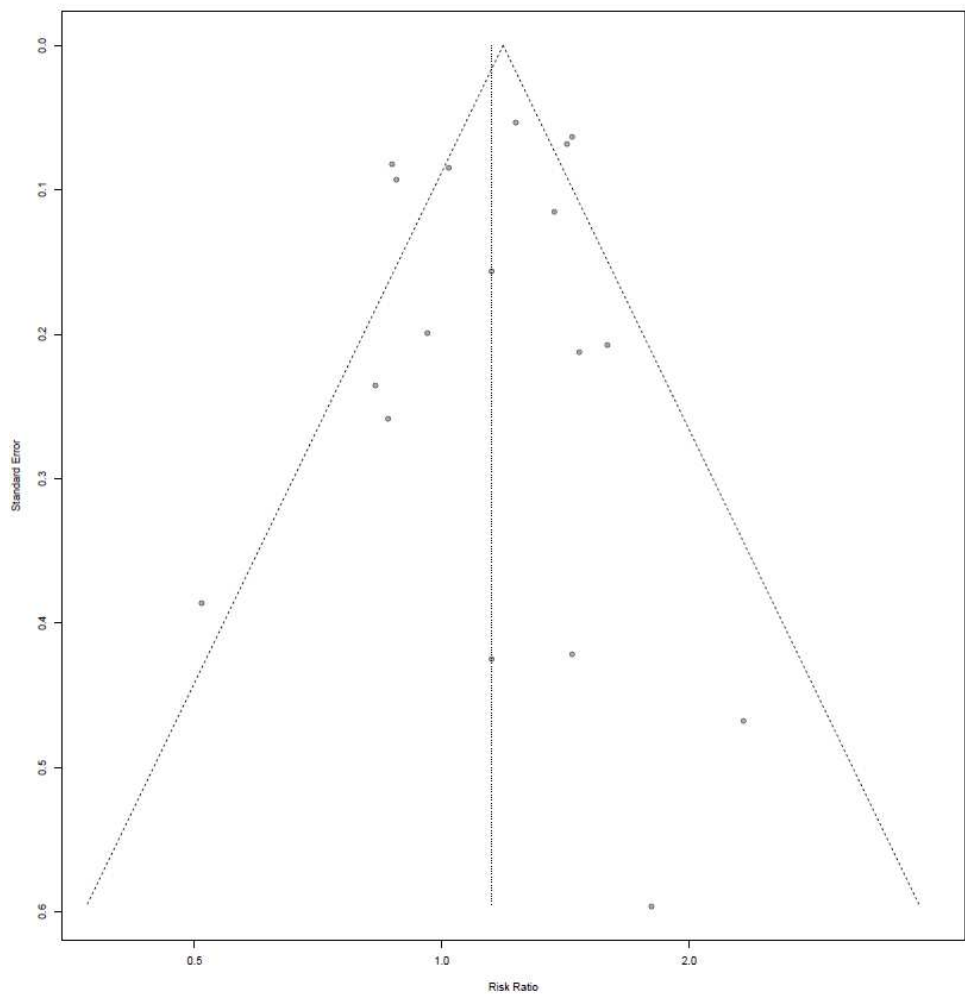
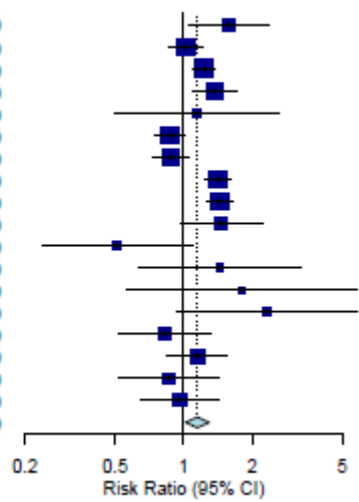
Heterogeneity: $\chi^2_{16} = 117.91$ ($P < .01$), $I^2 = 86\%$



Tidligere ryger (ex smokers)

Source	RR (95% CI)
Samuelsson (2013) a	1.59 (1.06-2.39)
Ropponen (2014) a, Ex smokers, Mental diagnosis	1.02 (0.86-1.20)
Ropponen (2014) a, Ex smokers, MSD diagnosis	1.23 (1.11-1.37)
Ropponen (2014) a, Ex smokers, Circulatory system diagnoses	1.37 (1.09-1.72)
Rissanen (2002)	1.15 (0.50-2.64)
Korhonen (2015), Women	0.87 (0.74-1.02)
Korhonen (2015), Women	0.88 (0.73-1.06)
Korhonen (2015), Men	1.42 (1.24-1.62)
Korhonen (2015), Men	1.44 (1.27-1.63)
Kang(2015)	1.47 (0.97-2.23)
Husemoen (2004), Smoking status, 60-67 years, Women	0.51 (0.24-1.09)
Husemoen (2004), Smoking status, 60-67 years, Men	1.44 (0.63-3.29)
Husemoen (2004), Smoking status < 60 years, Men	1.80 (0.56-5.79)
Husemoen (2004), Smoking status < 60 years, Women	2.33 (0.93-5.83)
Haukenes (2013), Men	0.83 (0.52-1.32)
Haukenes (2013), Women	1.15 (0.85-1.56)
Lund (2010), Men	0.88 (0.52-1.43)
Lund (2010), Women	0.96 (0.65-1.42)
Total	1.15 (1.02-1.30)

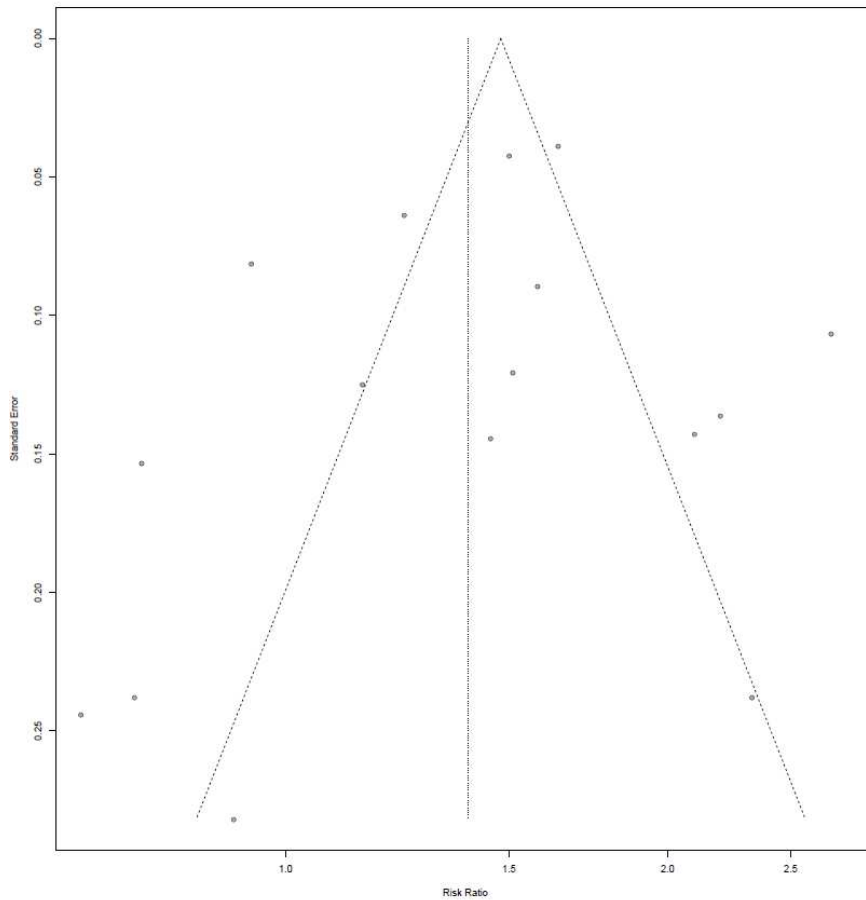
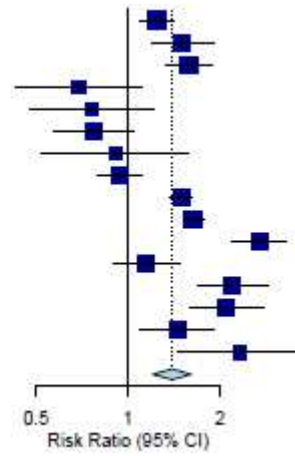
Heterogeneity: $\chi^2_{17} = 61.73$ ($P < .01$), $I^2 = 72\%$



Inaktiv (inactive/low)

Source	RR (95% CI)
Ropponen (2014) a, Inactive/low, MSD diagnosis	1.24 (1.09-1.41)
Ropponen (2014) a, Inactive/low, Circulatory system diagnoses	1.51 (1.19-1.91)
Ropponen (2014) a, Inactive/low, Mental diagnosis	1.58 (1.33-1.88)
Ropponen (2012), Women	0.69 (0.43-1.11)
Ropponen (2012), Men	0.76 (0.48-1.21)
Ropponen (2012), Men	0.77 (0.57-1.04)
Ropponen (2012), Women	0.91 (0.52-1.58)
Ropponen (2011) a	0.94 (0.80-1.10)
Rabiee (2015), Men	1.50 (1.38-1.63)
Rabiee (2015), Men	1.64 (1.52-1.77)
Rabiee (2015), Men	2.69 (2.18-3.31)
Kang(2015)	1.15 (0.90-1.47)
Hagen (2006)	2.20 (1.68-2.87)
Hagen (2002)	2.10 (1.59-2.78)
Ahola (2011)	1.45 (1.09-1.92)
Biering-Sorensen (1999)	2.33 (1.46-3.71)
Total	1.39 (1.20-1.61)

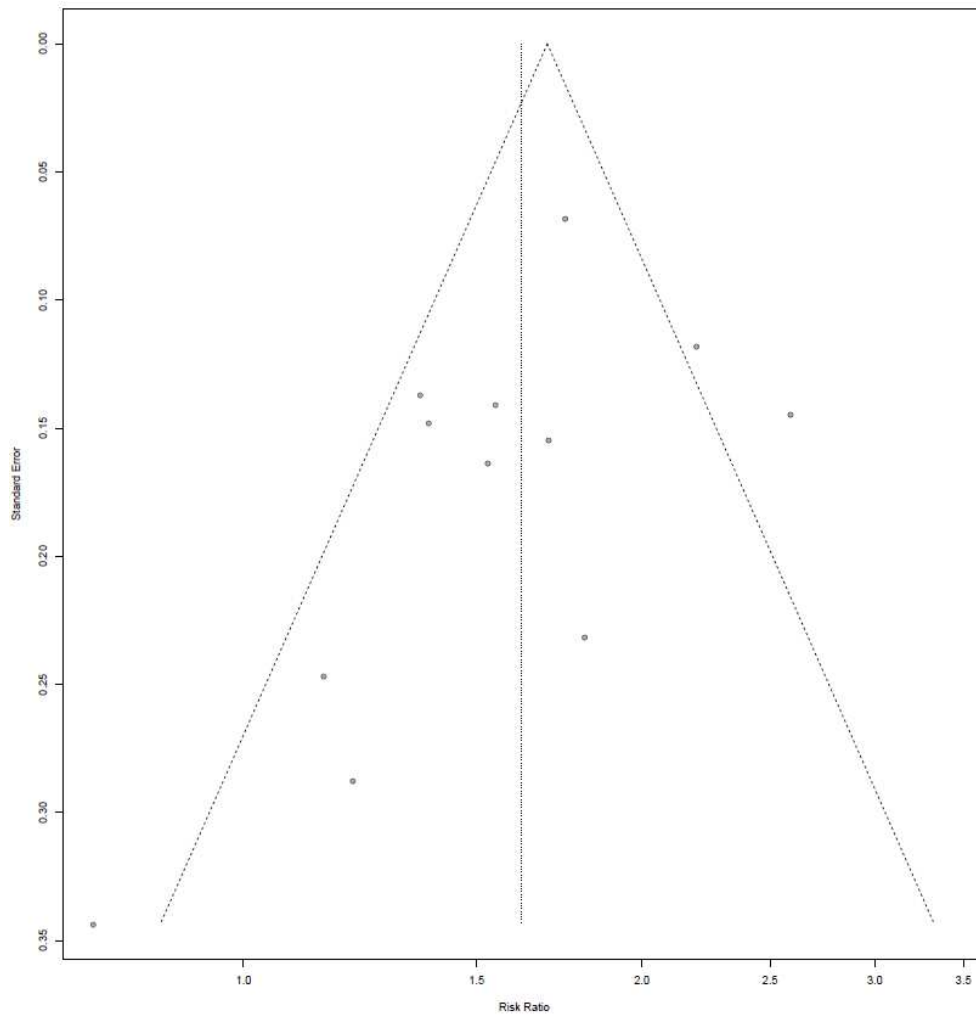
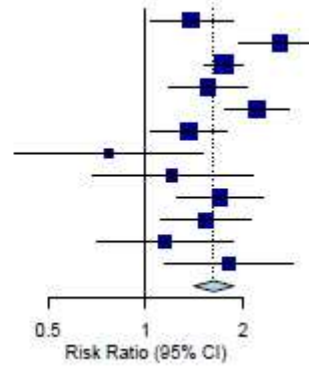
Heterogeneity: $\chi^2_{15} = 138.91$ ($P < .01$), $I^2 = 89\%$



Fedme (obesity)

Source	RR (95% CI)
Samuelsson (2013) a, Obese	1.38 (1.03-1.84)
Ropponen (2016), Obese, Stable obesity	2.59 (1.95-3.44)
Norrback (2018), Obese, Obese without mobility disability	1.75 (1.53-2.00)
Neovius (2010), Obese	1.55 (1.18-2.04)
Mansson (2001), Obesity. Was defined as BMI > 30.0 kg/m ² , Men	2.20 (1.75-2.77)
Kang(2015), Obese	1.36 (1.04-1.78)
Husemoen (2004), Obese, > 29 kg/m ² , Men	0.77 (0.39-1.51)
Husemoen (2004), Obese, > 29 kg/m ² , Women	1.21 (0.69-2.13)
Hagen (2006), Obese	1.70 (1.26-2.30)
Ahola (2011), Obese, 30 or over	1.53 (1.11-2.11)
Lund (2010), Obese, >=30, Men	1.15 (0.71-1.87)
Lund (2010), Obese, >=30, Women	1.81 (1.15-2.85)
Total	1.62 (1.41-1.87)

Heterogeneity: $\chi^2 = 28.17$ ($P < .01$), $I^2 = 61\%$

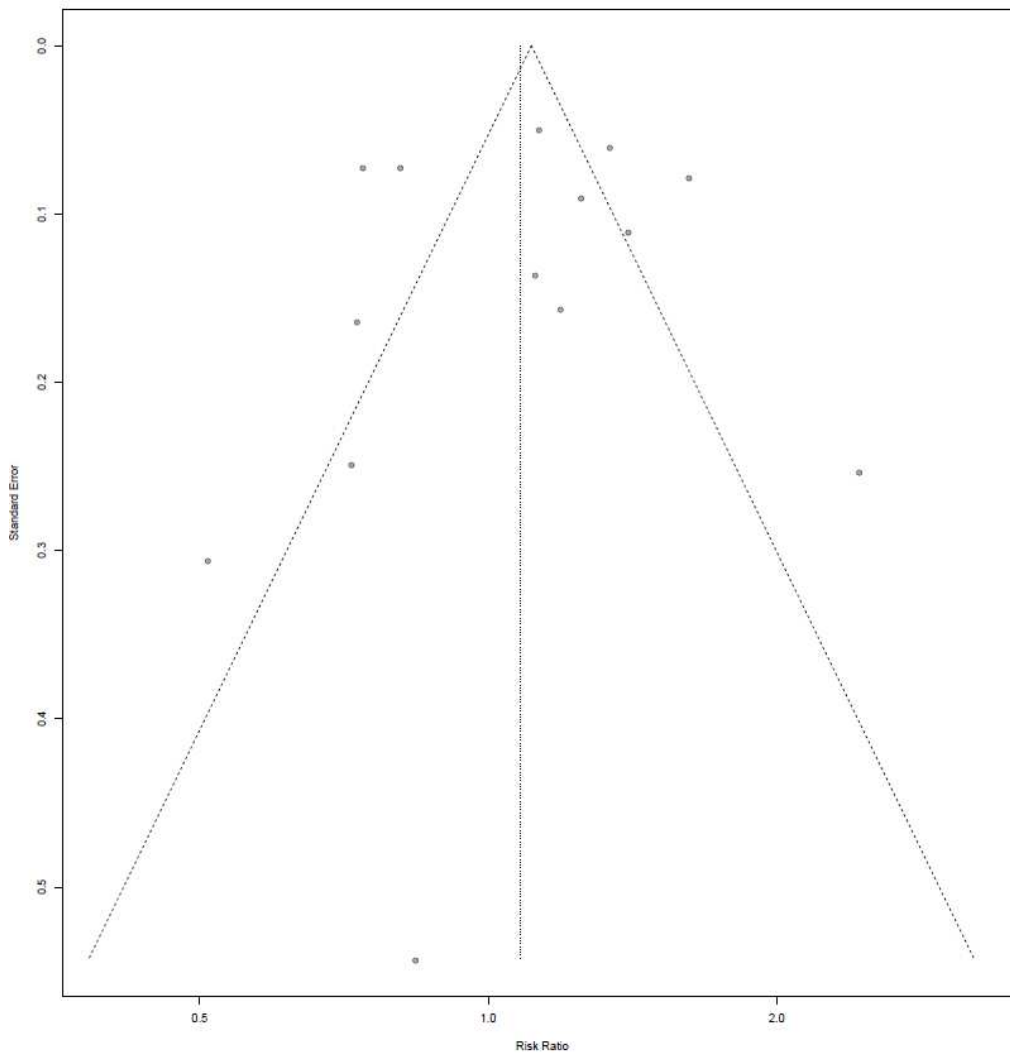
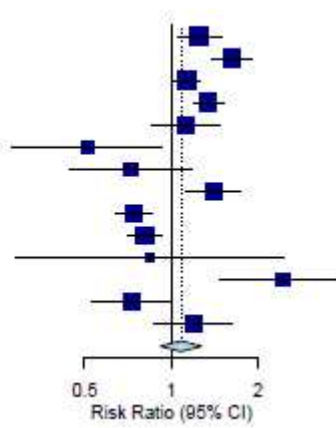


Overvægt (overweight)

Source

Source	RR (95% CI)
Samuelsson (2013) a, Overweight	1.25 (1.05–1.49)
Ropponen (2016), Overweight, Stable overweight	1.62 (1.39–1.89)
Norrbäck (2018), Overweight, Overweight without mobility disability	1.13 (1.02–1.25)
Neovius (2010), Overweight, Men	1.34 (1.19–1.51)
Kang(2015), Overweight	1.12 (0.88–1.46)
Husemoen (2004), Overweight, 25–29 kg/m ² , Men	0.51 (0.28–0.93)
Husemoen (2004), Overweight, 25–29 kg/m ² , Women	0.72 (0.44–1.17)
Hagen (2002), Overweight, 26.4–28.6	1.40 (1.13–1.74)
Claesens (2009), Overweight, 25.0–27.4 kg/m ² , Men	0.74 (0.64–0.85)
Claesens (2009), Overweight, 27.5–29.9 kg/m ² , Men	0.81 (0.70–0.93)
Biering-Sorensen (1999), Overweight	0.84 (0.29–2.44)
Biering-Sorensen (1999), Overweight	2.44 (1.48–4.01)
Lund (2010), Overweight, 25–29.9, Men	0.73 (0.53–1.01)
Lund (2010), Overweight, 25–29.9, Women	1.19 (0.87–1.62)
Total	1.08 (0.92–1.27)

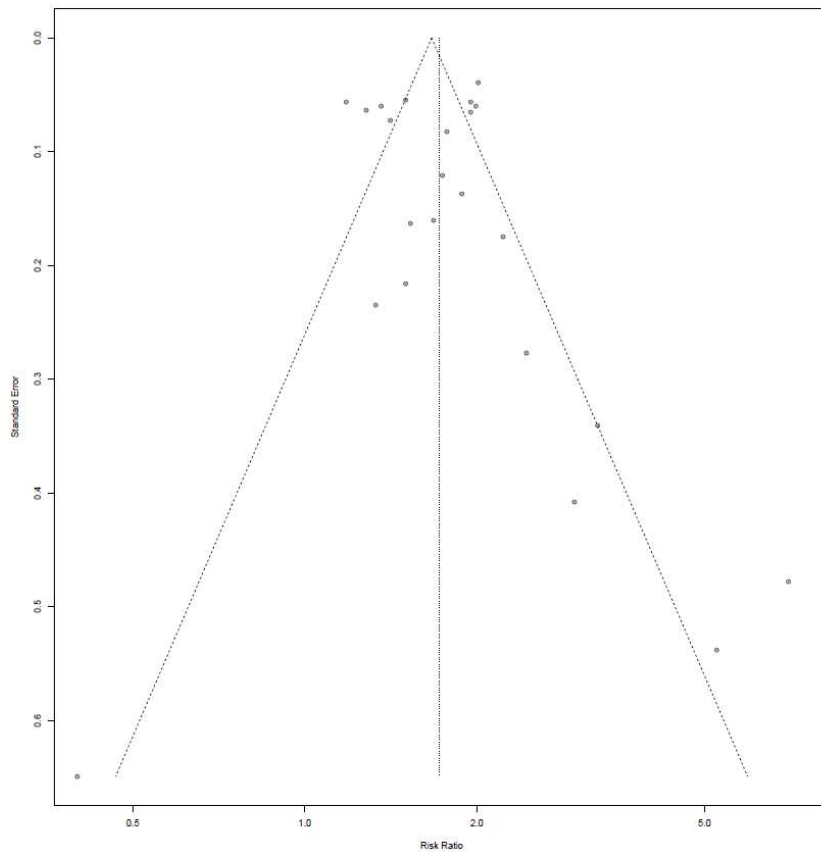
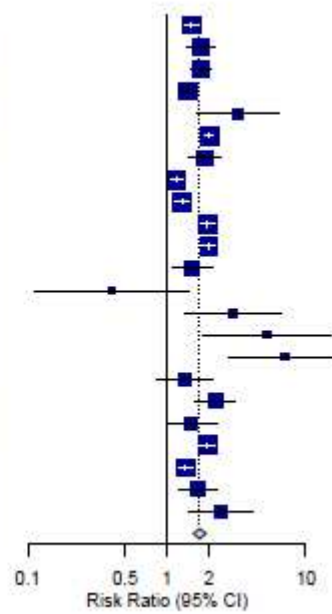
Heterogeneity: $\chi^2_{13} = 115.40$ ($P < .01$), $I^2 = 89\%$



Rygere (smokers)

Source	RR (95% CI)
Ropponen (2014) a, Smokers, MSD diagnosis	1.50 (1.35- 1.67)
Ropponen (2014) a, Smokers, Circulatory system diagnoses	1.74 (1.37- 2.20)
Ropponen (2014) a, Smokers, Mental diagnosis	1.77 (1.51- 2.08)
Ropponen (2011) a	1.41 (1.22- 1.62)
Rissanen (2002)	3.25 (1.67- 6.34)
Neovius (2010), Men	2.01 (1.86- 2.17)
Lundin (2016)	1.88 (1.44- 2.46)
Korhonen (2015), Women	1.18 (1.06- 1.32)
Korhonen (2015), Women	1.28 (1.13- 1.45)
Korhonen (2015), Men	1.95 (1.75- 2.18)
Korhonen (2015), Men	1.99 (1.77- 2.24)
Kang(2015)	1.53 (1.11- 2.10)
Husemoen (2004), Smoking status, 60-67 years, Women	0.40 (0.11- 1.43)
Husemoen (2004), Smoking status, 60-67 years, Men	2.96 (1.33- 6.58)
Husemoen (2004), Smoking status < 60 years, Men	5.25 (1.83-15.07)
Husemoen (2004), Smoking status < 60 years, Women	7.01 (2.75-17.88)
Haukenes (2013), Men	1.33 (0.84- 2.11)
Haukenes (2013), Women	2.22 (1.58- 3.12)
Hagen (2006)	1.50 (0.98- 2.29)
Claessen (2010), Men	1.95 (1.72- 2.22)
Claessen (2009), Men	1.36 (1.21- 1.53)
Ahola (2011)	1.68 (1.23- 2.30)
Biering-Sorensen (1999)	2.44 (1.42- 4.20)
Total	1.72 (1.55- 1.91)

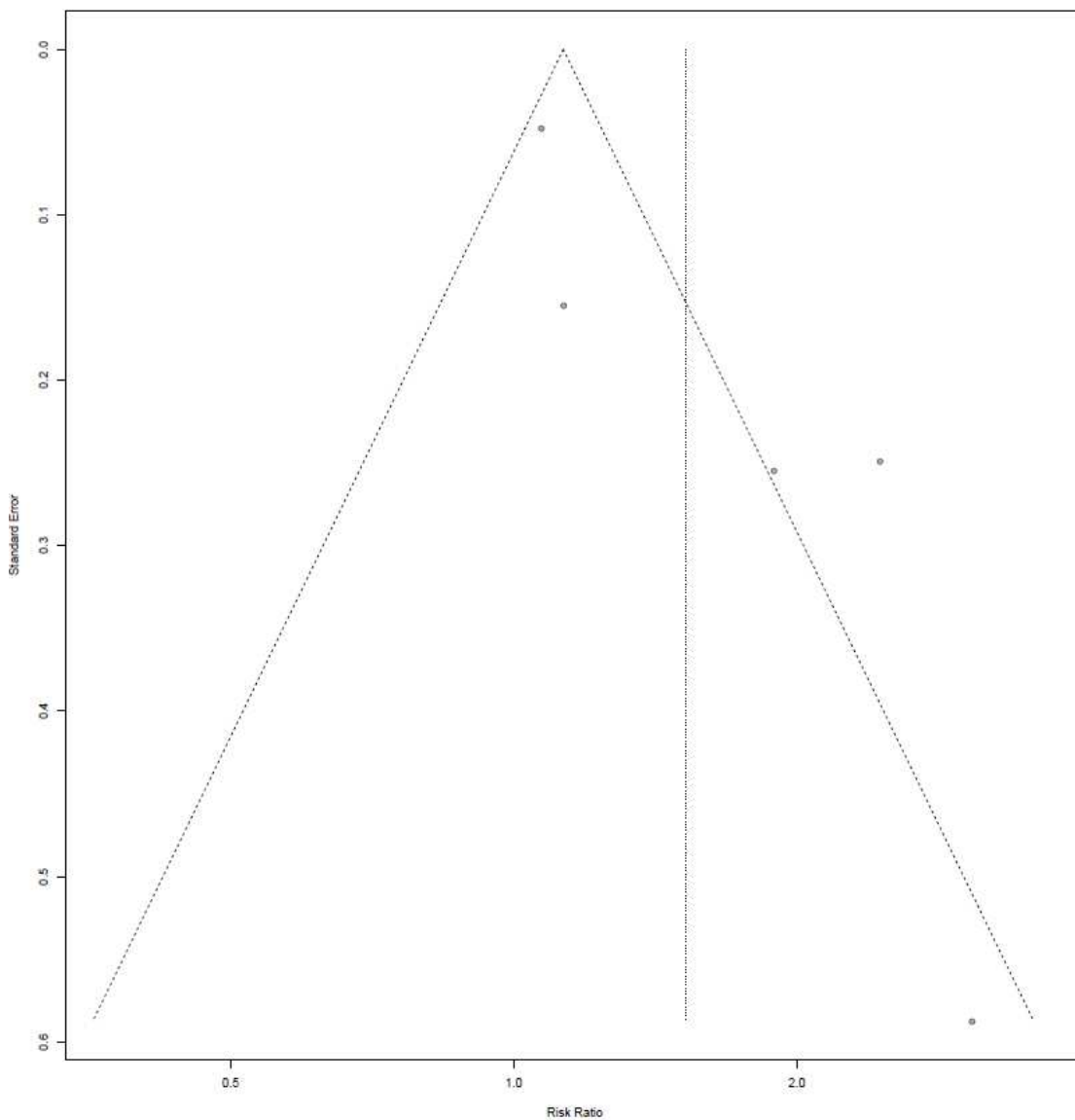
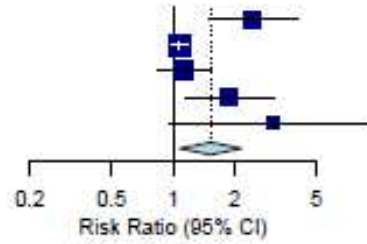
Heterogeneity: $\chi^2 = 152.10$ ($P < .01$), $I^2 = 86\%$



Undervægt (underweight)

Source	RR (95% CI)
Samuelsson (2013) a, Underweight	2.45 (1.50-3.99)
Neovius (2010), Underweight, Men	1.07 (0.97-1.18)
Claessen (2009), Underweight, < 20.0 kg/m ² , Men	1.13 (0.83-1.53)
Lund (2010), Underweight, <18.5, Women	1.89 (1.15-3.11)
Lund (2010), Underweight, <18.5, Men	3.07 (0.97-9.71)
Total	1.52 (1.08-2.16)

Heterogeneity: $\chi^2_4 = 17.94$ ($P < .01$), $I^2 = 78\%$

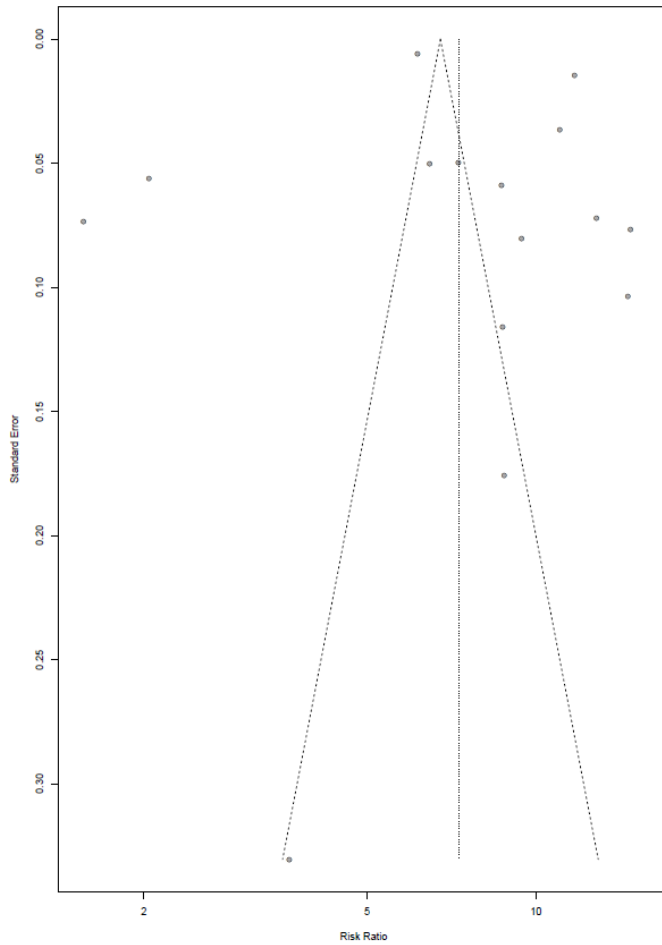
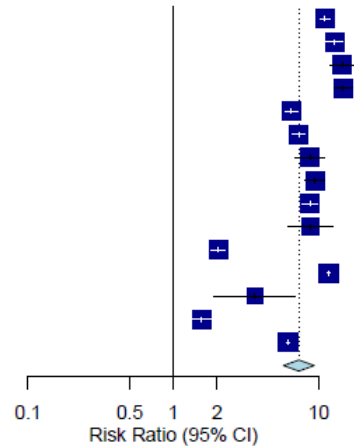


Appendiks 16. Forest- og funnelplots for mentale helbredsproblemer (høj kvalitetsstudier)

Generelle mentale lidelser (any mental disorder)

Source	RR (95% CI)
Pietilainen (2018), Mental disorder in Routine non-manual workers	11.02 (10.26–11.84)
Pietilainen (2018), Mental disorder in Semi-professionals	12.81 (11.12–14.75)
Pietilainen (2018), Mental disorder in Professionals	14.58 (11.90–17.87)
Pietilainen (2018), Mental disorder in Professionals	14.73 (12.67–17.12)
Pietilainen (2018), Mental disorder in Manual workers	6.46 (5.86–7.13)
Pietilainen (2018), Mental disorder in Manual workers	7.27 (6.60–8.01)
Pietilainen (2018), Mental disorder in Semi-professionals	8.72 (6.95–10.95)
Pietilainen (2018), Mental disorder in Routine non-manual workers	9.42 (8.05–11.03)
Kivimaki (2007)	8.68 (7.73–9.74)
Gustafsson (2014), Women	8.77 (6.21–12.38)
Ervasti (2016) b	2.04 (1.83–2.28)
Dorner (2015)	11.71 (11.38–12.05)
Ahola (2011)	3.63 (1.90–6.94)
Tinghog (2014), MS patients	1.56 (1.35–1.80)
Tinghog (2014), General population	6.15 (6.08–6.22)
Total	7.30 (5.71–9.33)

Heterogeneity: $\chi^2_{14} = 3001.97$ ($P = 0$), $I^2 = 100\%$

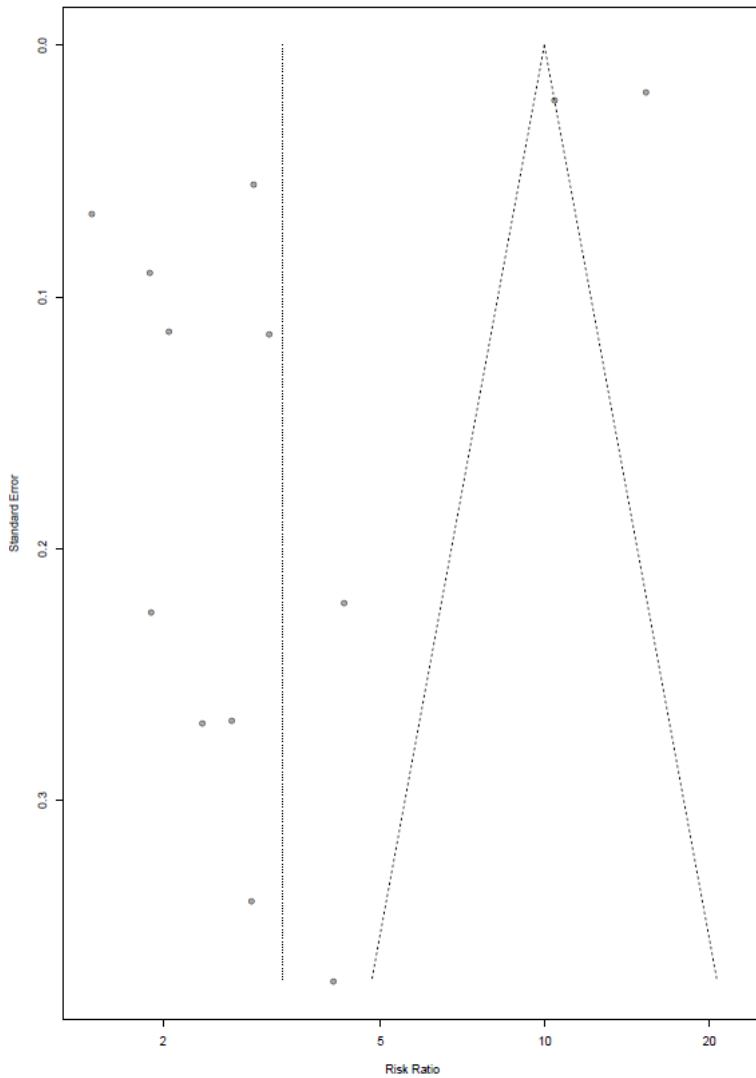
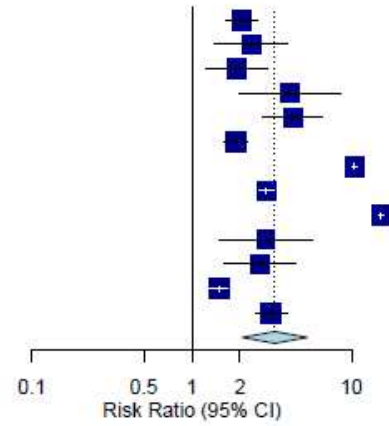


Affektive lidelser (affective disorders)

Source

Source	RR (95% CI)
Overland (2008), Depression	2.05 (1.64– 2.56)
Ostby (2014), Affective, Mood disorder	2.36 (1.39– 4.00)
Lassemo (2016), Current depression, Women	1.90 (1.22– 2.95)
Lassemo (2016), Current depression, Men	4.10 (1.98– 8.50)
Lamberg (2010), Depresiveness	4.29 (2.78– 6.63)
Karpansalo (2005), Depression score, Men	1.89 (1.58– 2.26)
Helgesson (2017), Affective disorders	10.42 (9.98–10.88)
Ervasti (2016) b, Depression	2.93 (2.63– 3.27)
Dorner (2015), Depressive episode (DE)	15.32 (14.78–15.88)
Bultmann (2008), Severe depressive symptoms	2.90 (1.49– 5.65)
Ahola (2011), Depression only (major depressive disorder or dysthymic disorder)	2.67 (1.58– 4.52)
Wedegaertner (2013), Depression, outpatient	1.48 (1.30– 1.69)
Wedegaertner (2013), Depression, inpatient	3.13 (2.50– 3.92)
Total	3.30 (2.06– 5.28)

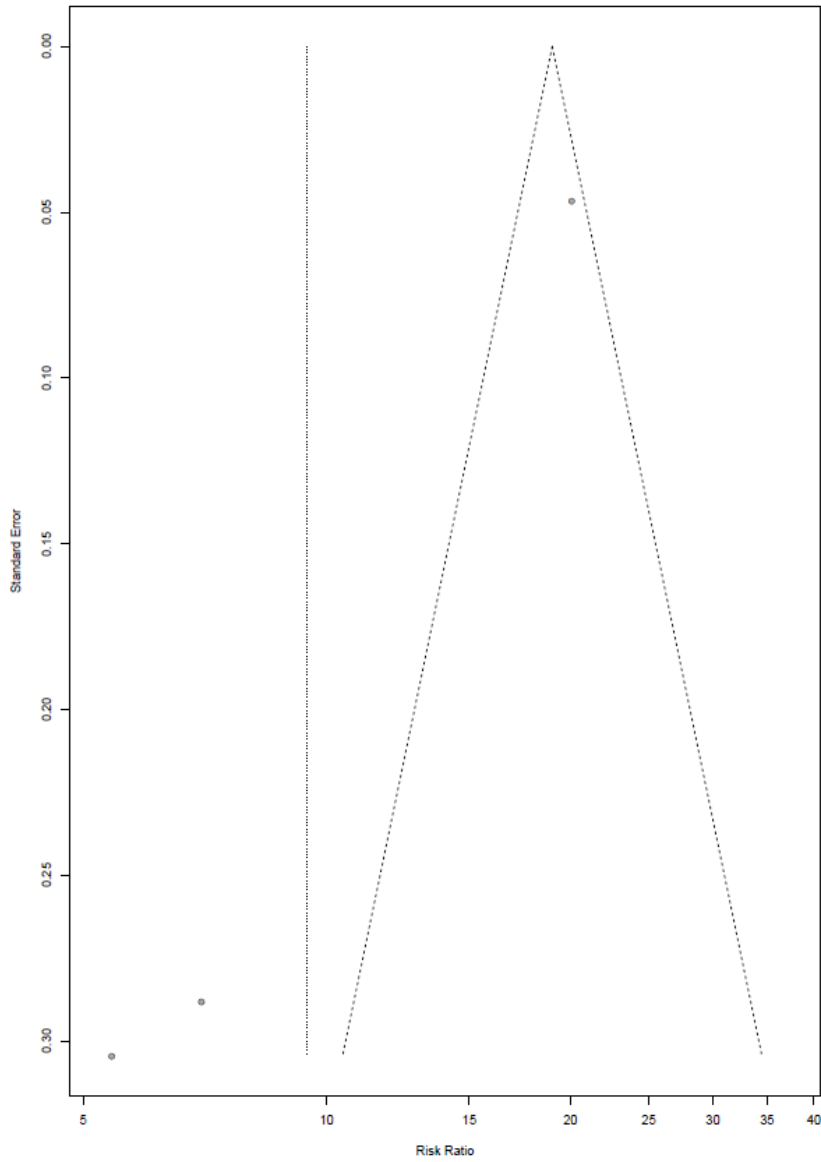
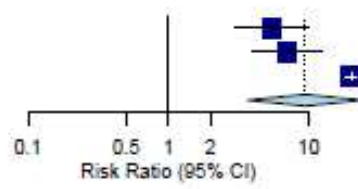
Heterogeneity: $\chi^2_{12} = 2618.97$ ($P = 0$), $I^2 = 100\%$



Personlighetsforstyrrelser (personality disorders)

Source	RR (95% CI)
Brenner (2014), Personality	5.42 (2.98–9.84)
Ostby (2014), Personality	7.00 (3.98–12.31)
Helgesson (2017), Personality	20.08 (18.32–22.00)
Total	9.45 (3.66–24.37)

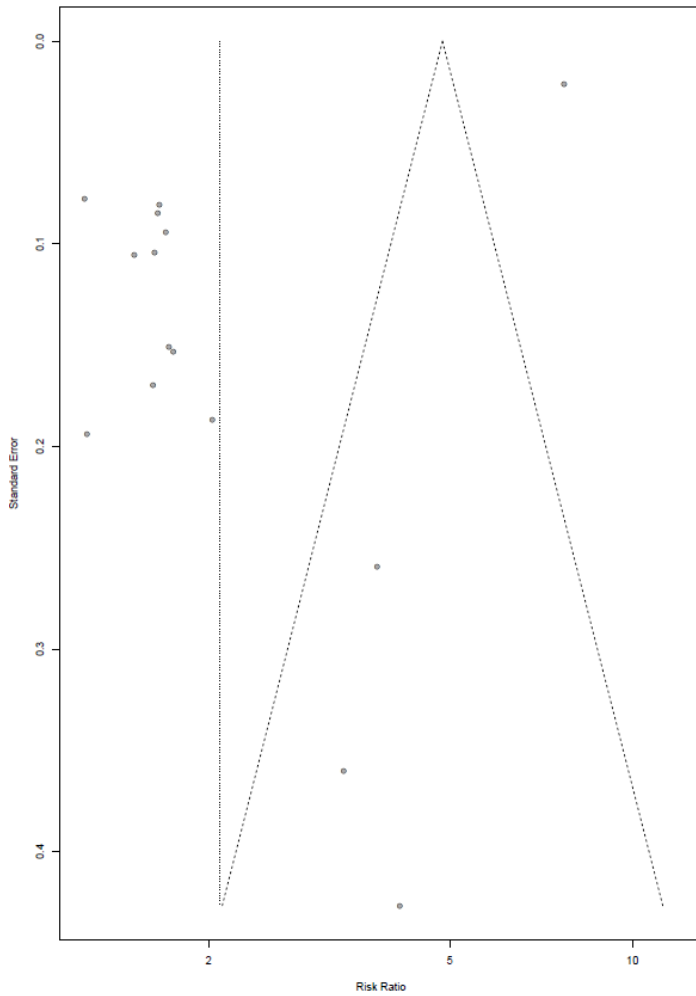
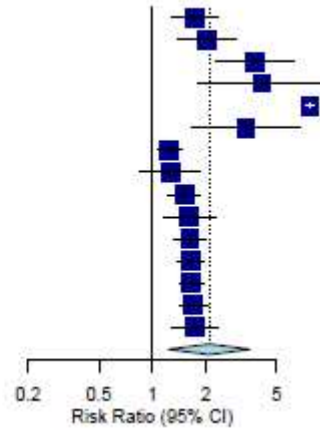
Heterogeneity: $\chi^2 = 30.39$ ($P < .01$), $I^2 = 93\%$



Neurologiske, stressrelaterede og somatoforme lidelser (neurotic, stress-related and somatoform disorders)

Source	RR (95% CI)
Brenner (2014), Neurotic, somatoform	1.72 (1.28-2.31)
Brenner (2014), Stress-related	2.03 (1.41-2.93)
Ostby (2014), Stress, Anxiety disorder	3.79 (2.28-6.30)
Lassemo (2018), PTSD exposed, Women	4.13 (1.79-9.53)
Helgesson (2017), Neurotic/stress-related/somatoform disorders	7.71 (7.40-8.03)
Ahola (2011), Mental disorder	3.34 (1.65-6.77)
Wedegaertner (2013), Anxiety, outpatient	1.25 (1.07-1.46)
Wedegaertner (2013), Anxiety, inpatient	1.26 (0.86-1.84)
Torske (2015), Stress, Farmers	1.51 (1.23-1.86)
Torske (2015), Stress, Higher grade professionals	1.62 (1.16-2.26)
Torske (2015), Stress, Skilled manual workers	1.63 (1.33-2.00)
Torske (2015), Stress, Unskilled manual workers	1.65 (1.40-1.95)
Torske (2015), Stress, Non manual workers	1.66 (1.42-1.95)
Torske (2015), Stress, Lower grade professionals	1.70 (1.41-2.04)
Torske (2015), Stress, Self-employed	1.75 (1.30-2.36)
Total	2.09 (1.23-3.54)

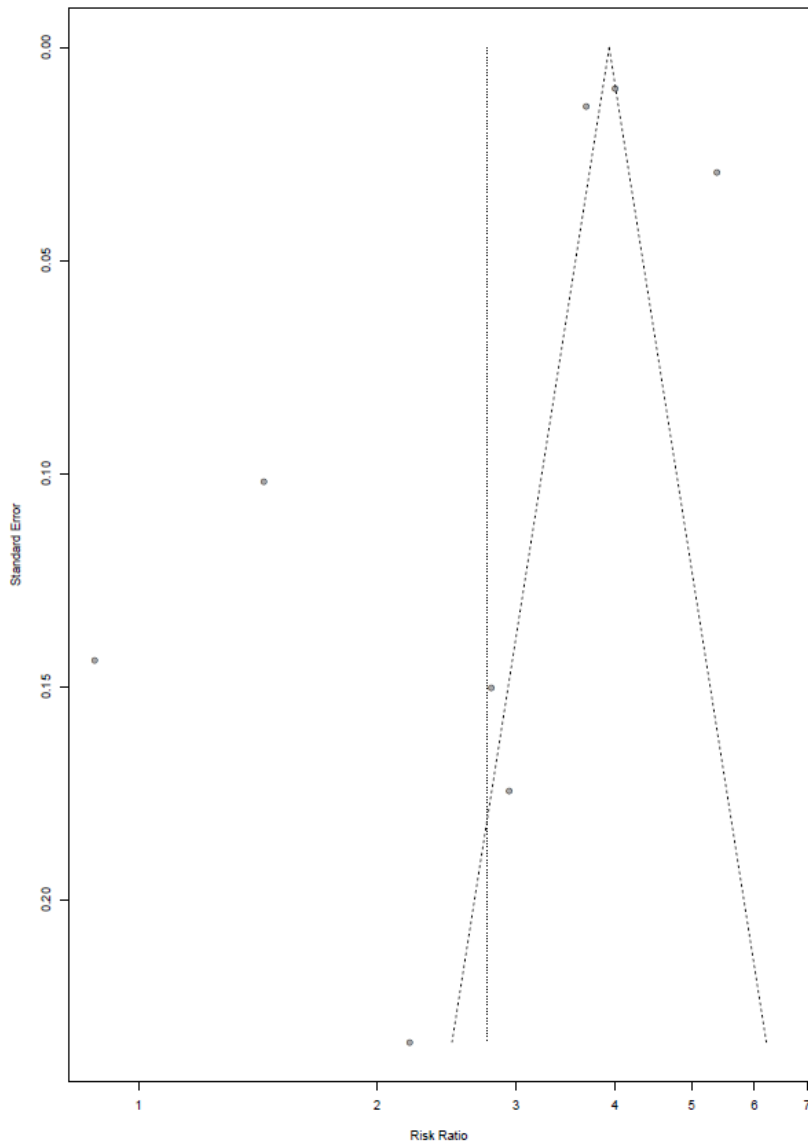
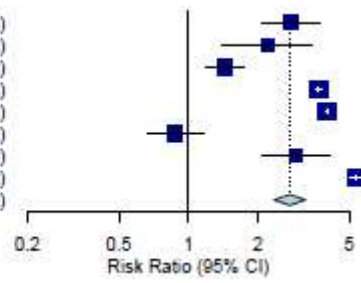
Heterogeneity: $\chi^2_{14} = 1700.09$ ($P = 0$), $I^2 = 99\%$



Misbrug (substance abuse)

Source	RR (95% CI)
Skogen (2012), Problem drinking	2.79 (2.08-3.75)
Brenner (2014), Substance abuse	2.20 (1.39-3.48)
Salonsalmi (2012), Problem drinking (CAGE)	1.44 (1.18-1.76)
Kendler (2017), AUD (alcohol use disorder), Women	3.68 (3.58-3.78)
Kendler (2017), AUD (alcohol use disorder), Men	4.00 (3.93-4.08)
Kang(2015), problem drinking	0.88 (0.66-1.17)
Kaila-Kangas (2015), Alcohol use	2.94 (2.09-4.14)
Helgesson (2017), Substance abuse disorders	5.38 (5.08-5.70)
Total	2.76 (2.36-3.23)

Heterogeneity: $\chi^2 = 359.41$ ($P < .01$), $I^2 = 98\%$

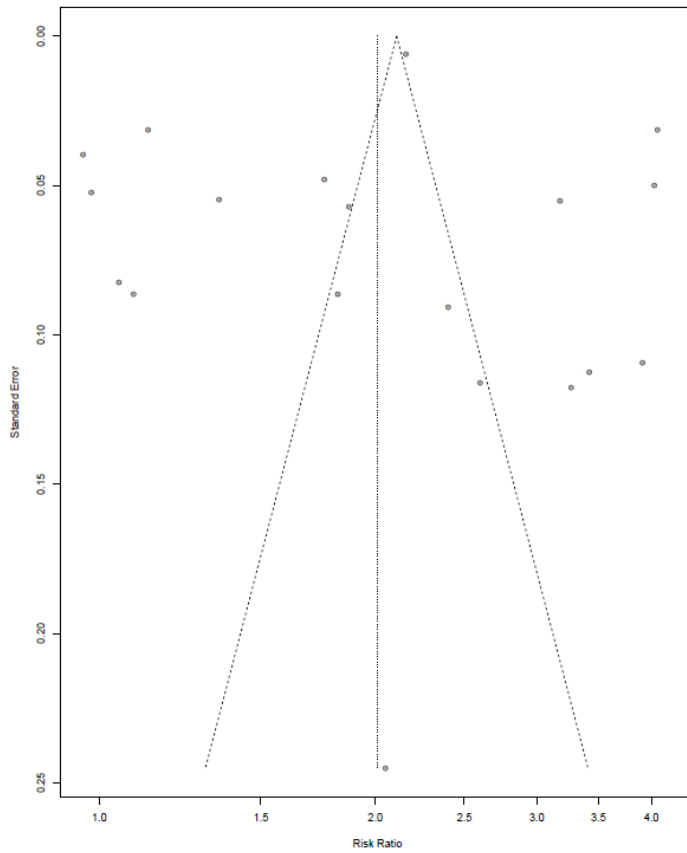
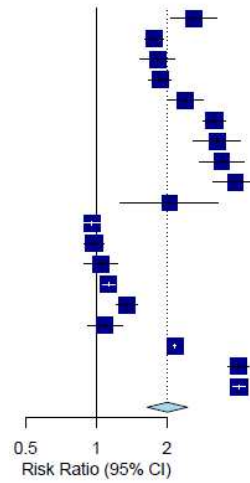


Appendiks 17. Forest- og funnelplots for somatiske helbredsproblemer (høj kvalitetsstudier)

Kardiovaskulære sygdomme (cardiovascular diseases)

Source	RR (95% CI)
Siebert (2001), Hypertension, Men	2.60 (2.07–3.26)
Pietilainen (2018), Cardiovascular disease, CVD in Routine non-manual workers	1.76 (1.60–1.93)
Pietilainen (2018), Cardiovascular disease, CVD in Semi-professionals	1.82 (1.54–2.16)
Pietilainen (2018), Cardiovascular disease, CVD in Manual workers	1.87 (1.67–2.09)
Pietilainen (2018), Cardiovascular disease, CVD in Professionals	2.40 (2.01–2.87)
Pietilainen (2018), Cardiovascular disease, CVD in Manual workers	3.18 (2.85–3.54)
Pietilainen (2018), Cardiovascular disease, CVD in Semi-professionals	3.27 (2.60–4.12)
Pietilainen (2018), Cardiovascular disease, CVD in Professionals	3.42 (2.74–4.26)
Pietilainen (2018), Cardiovascular disease, CVD in Routine non-manual workers	3.91 (3.16–4.84)
Virtanen (2017) b, CVD (cardiovascular disease)	2.05 (1.27–3.31)
Zetterstrom (2015), Acute coronary, CABG, Men	0.96 (0.89–1.04)
Zetterstrom (2015), Acute coronary, PCI, Women	0.98 (0.88–1.09)
Zetterstrom (2015), Acute coronary, CABG, Women	1.05 (0.89–1.23)
Zetterstrom (2015), Acute coronary, PCI, Men	1.13 (1.06–1.20)
Ervasti (2016) b, CVD	1.35 (1.21–1.50)
Tinghog (2014), Cardiovascular disorders, MS patients	1.09 (0.92–1.29)
Tinghog (2014), Cardiovascular disorders, General population	2.16 (2.14–2.19)
Mittendorfer-Rutz (2018), IHD, Women	4.03 (3.65–4.44)
Mittendorfer-Rutz (2018), IHD, Men	4.06 (3.82–4.32)
Total	2.01 (1.65–2.45)

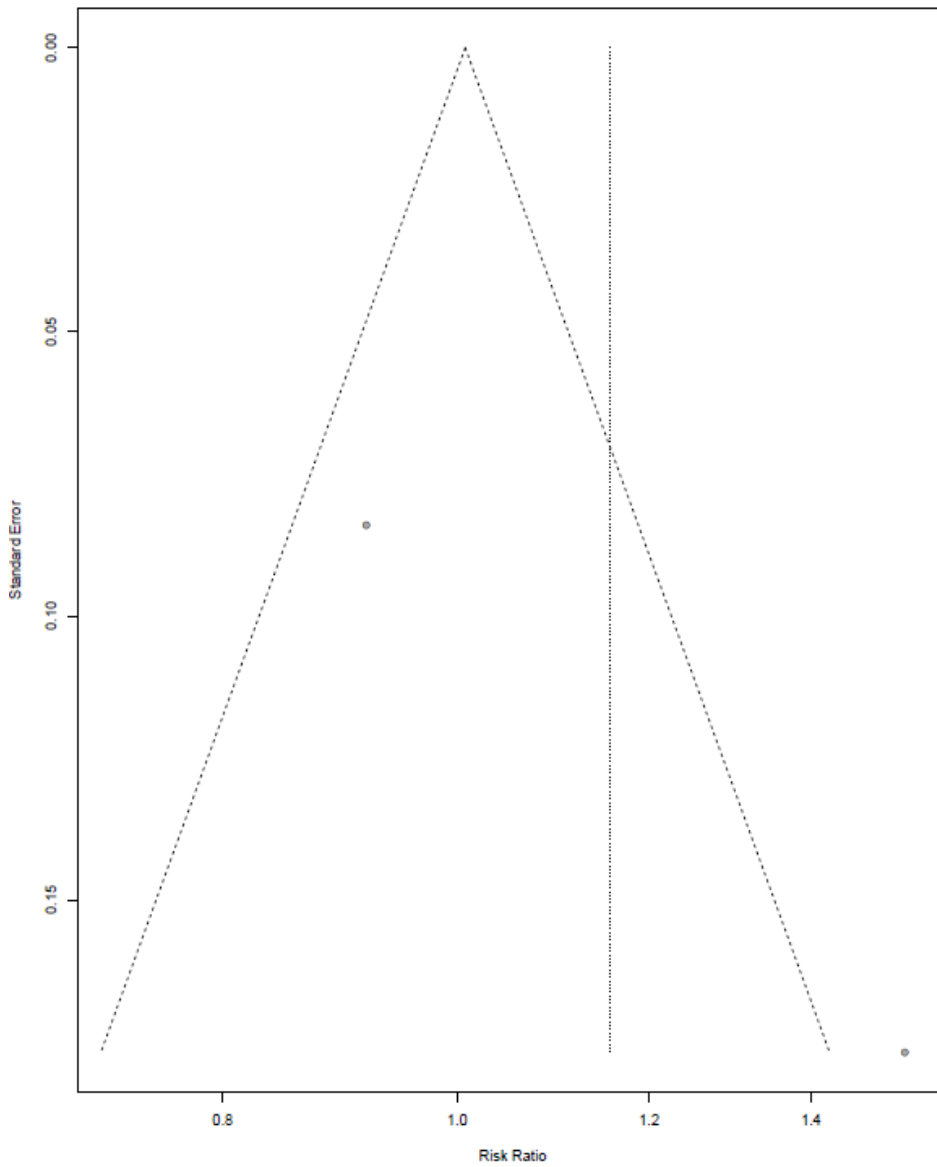
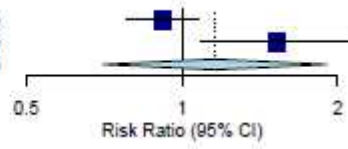
Heterogeneity: $\chi^2_{18} = 1966.97$ ($P = 0$), $I^2 = 99\%$



Cancer

Source	RR (95% CI)
Roy (2018), Cancer	0.92 (0.78-1.08)
Hauglann (2014), Colorectal cancer (CRC)	1.53 (1.08-2.16)
Total	1.16 (0.70-1.91)

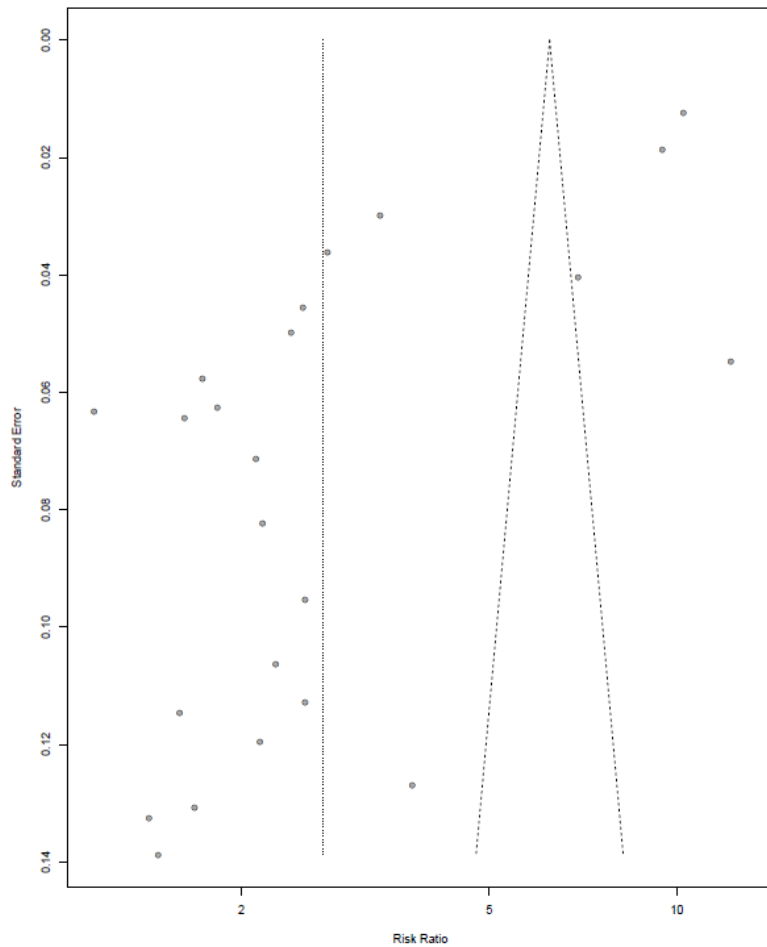
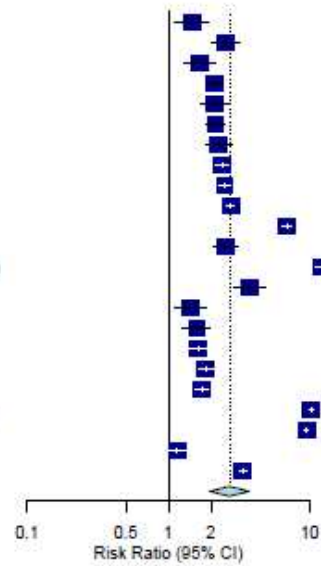
Heterogeneity: $\chi^2 = 6.84$ ($P < .01$), $I^2 = 85\%$



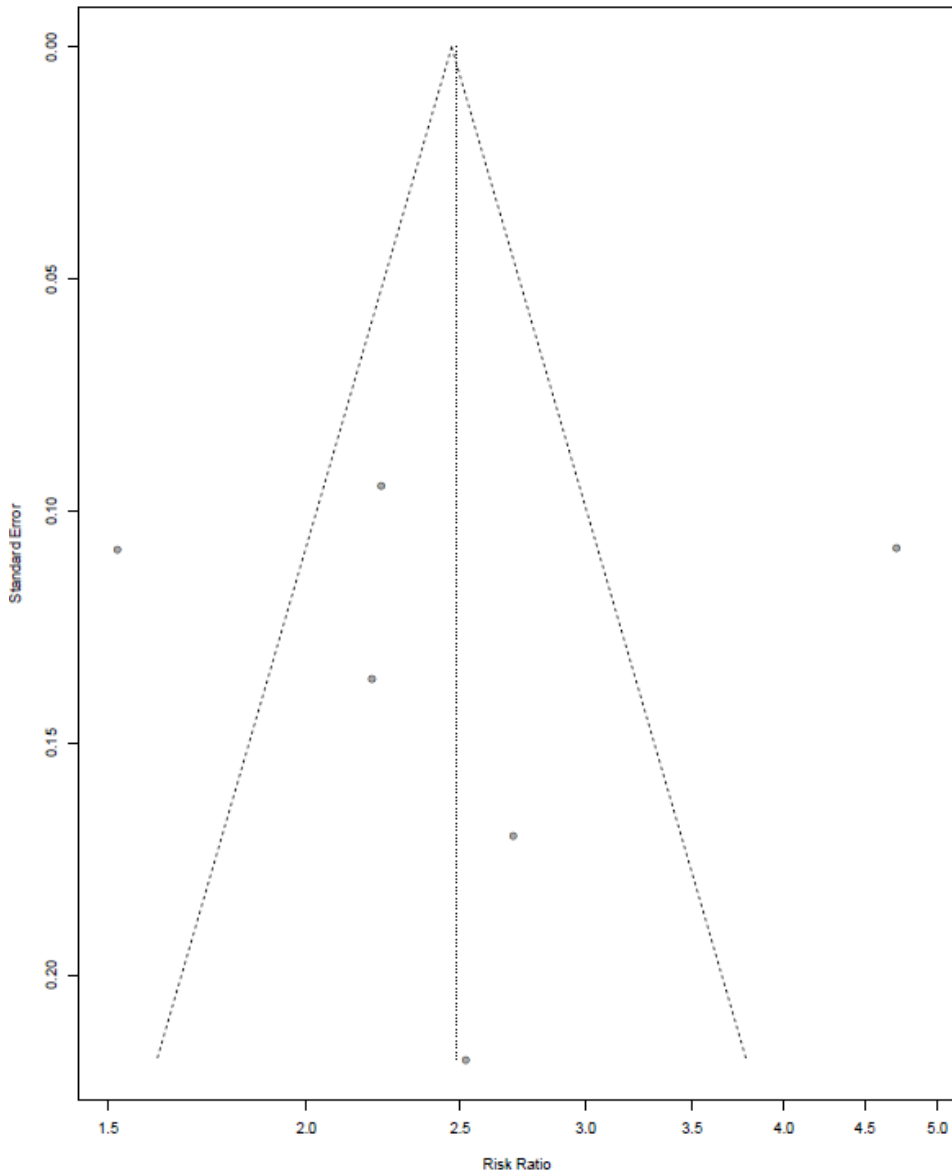
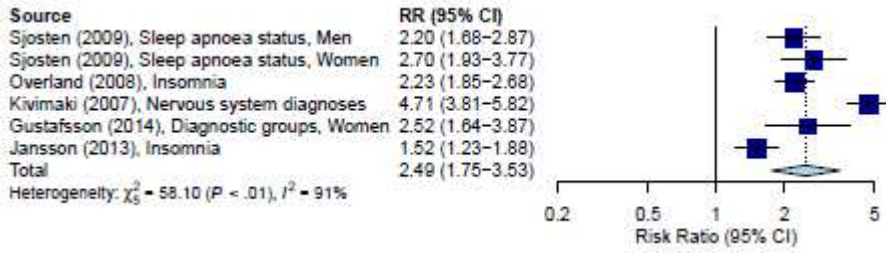
Muskel- og skeletbesvær (musculoskeletal disorders)

Source	RR (95% CI)
Siebert (2001), Gout, Men	1.47 (1.12- 1.83)
Siebert (2001), Disorders of the back and spine, Men	2.53 (2.03- 3.16)
Pietilainen (2018), Musculoskeletal disorder, MSD in Professionals	1.68 (1.30- 2.17)
Pietilainen (2018), Musculoskeletal disorder, MSD in Semi-professionals	2.11 (1.83- 2.43)
Pietilainen (2018), Musculoskeletal disorder, MSD in Semi-professionals	2.14 (1.69- 2.70)
Pietilainen (2018), Musculoskeletal disorder, MSD in Professionals	2.16 (1.84- 2.54)
Pietilainen (2018), Musculoskeletal disorder, MSD in Routine non-manual workers	2.27 (1.84- 2.80)
Pietilainen (2018), Musculoskeletal disorder, MSD in Manual workers	2.40 (2.18- 2.65)
Pietilainen (2018), Musculoskeletal disorder, MSD in Manual workers	2.51 (2.30- 2.74)
Pietilainen (2018), Musculoskeletal disorder, MSD in Routine non-manual workers	2.75 (2.56- 2.95)
Kivimäki (2007), Musculoskeletal disorder	6.94 (6.41- 7.51)
Kaila-Kangas(2014), Musculoskeletal disorder (MSD)	2.53 (2.10- 3.05)
Hansen (2017), Rheumatoid arthritis	12.20 (10.96-13.58)
Gustafsson (2014), Diagnostic groups, Women	3.76 (2.93- 4.82)
Zetterstrom (2015), Musculoskeletal disorder, CABG, Women	1.42 (1.09- 1.84)
Zetterstrom (2015), Musculoskeletal disorder, PCI, Women	1.59 (1.27- 1.99)
Zetterstrom (2015), Musculoskeletal disorder, CABG, Men	1.62 (1.43- 1.84)
Zetterstrom (2015), Musculoskeletal disorder, PCI, Men	1.83 (1.62- 2.07)
Ervasti (2016) b, Musculoskeletal	1.73 (1.55- 1.94)
Dorner (2015), Musculoskeletal excluding BP	10.24 (9.99-10.49)
Dorner (2015), Back pain (BP)	9.48 (9.14- 9.83)
Tinghog (2014), Musculoskeletal disorders, MS patients	1.16 (1.02- 1.31)
Tinghog (2014), Musculoskeletal disorders, General population	3.34 (3.15- 3.54)
Total	2.70 (1.96- 3.74)

Heterogeneity: $\chi^2 = 7205.55$ ($P = 0$), $I^2 = 100\%$



Neurologiske sygdomme (nervous disorder)



Appendiks 18. Oversigt over spørgeskemaspørgsmål opdelt efter domæne

Domæner	Skala
1) Domæne: Fysiske krav i arbejdet	
<u>Fysiske krav</u> Hvor fysisk hårdt opfatter du normalt dit nuværende arbejde?	Skala fra 0-10, 0 er "ikke hårdt" og 10 er "maksimalt hårdt"
<u>Ergonomiske krav</u> Hvor stor en del af din arbejdstid Sidder du? Går eller står du? Arbejder du med ryggen vredet eller foroverbøjet uden at støtte med hænder og arme? Har du armene løftet i eller over skulderhøjde? Gør du de samme armbevægelser mange gange i minuttet (fx pakkearbejde, montering, maskinføring, udskæring)? Sidder du på hug eller ligger på knæ når du arbejder? Skubber eller trækker du? Bærer eller løfter du?	Næsten hele tiden ca. ¾ af tiden ca. ½ af tiden ca. ¼ af tiden sjældent aldrig
2) Domæne: Psykosocialt arbejdsmiljø	
<u>Kvantitative krav</u> Hvor ofte Oplever du, at du har tid nok til dine arbejdsopgaver? Er det nødvendigt at holde et højt arbejdstempo? Har du tidsfrister, som er svære at holde? Får du uventede arbejdsopgaver, der sætter dig under tidspres? Står du til rådighed uden for normal arbejdstid? Er det nødvendigt at arbejde over?	Altid Ofte Sommetider Sjældent Aldrig
<u>Emotionelle krav</u> Hvor ofte Bliver du følelsesmæssigt påvirket af dit arbejde? Har du i dit arbejde kontakt med personer, der befinder sig i vanskelige situationer (personer, der fx er ramt af alvorlig sygdom, ulykke, sorg, krise eller sociale problemer)?	Altid Ofte Sommetider Sjældent Aldrig
<u>Indflydelse</u> Hvor ofte Har du indflydelse på, hvordan du løser dine arbejdsopgaver? Har du indflydelse på, hvornår du løser dine arbejdsopgaver?	Altid Ofte Sommetider Sjældent Aldrig
<u>Jobusikkerhed</u> I hvilken grad er du bekymret for at du bliver arbejdsløs?	I meget høj grad I høj grad I nogen grad I ringe grad I meget ringe grad
<u>Rollekonflikt</u> Hvor ofte Får du den information, du behøver for at udføre dig arbejde?	Altid Ofte Sommetider

Får du den vejledning og instruktion, du behøver for at udføre dit arbejde? Ved du helt klart, hvad der er dine arbejdsopgaver? Bliver der stillet modsatrettede krav til dig i dit arbejde?	Sjældent Aldrig
<u>Ledelseskvalitet</u> Hvor ofte Forklarer din nærmeste leder dig virksomhedens mål, så du forstår, hvad de betyder for dig? Har du tilstrækkelige beføjelser i forhold til det ansvar, du har i dit arbejde? Tager din nærmeste leder sig tid til at engagere sig i din faglige udvikling? Involverer din nærmeste leder sig i tilrettelæggelsen af dit arbejde? Giver den nærmeste leder dig den nødvendige feedback (ris og ros) for dit arbejde? Bliver dit arbejde anerkendt og påskønnet af ledelsen? Får du den hjælp og støtte, du har brug for fra din nærmeste leder? Kan man stole på de udmeldinger, der kommer fra ledelsen?	Altid Ofte Sommetider Sjældent Aldrig Har ingen leder
<u>Organisatorisk retfærdighed</u> Hvor ofte Bliver alle medarbejdere, der påvirkes betydeligt af en given beslutning, hørt? Bliver alle medarbejdere behandlet retfærdigt på arbejdspladsen?	Altid Ofte Sommetider Sjældent Aldrig
<u>Natarbejde</u> På hvilket tidspunkt af døgnet arbejder du sædvanligvis i din hovedbeskæftigelse?	Fast dagarbejde (overvejende mellem kl 06 og 18) Fast aftenarbejde (overvejende mellem kl 15 og 24) Fast natarbejde (overvejende mellem kl 24 og 05) Skiftende arbejdstider med natarbejde Skiftende arbejdstider uden natarbejde
3) Domæne: Helbredsadfærd	
<u>Højde</u> Hvor høj er du?	Antal cm
<u>Vægt</u> Hvor meget vejer du?	Antal kg
<u>Rygning</u> Ryger du?	Ja, dagligt Ja, af og til Har røget, men ryger ikke mere Nej, har aldrig røget
<u>Alkoholindtag</u> Hvor mange genstande alkohol drikker du pr. dag i gennemsnit På hverdage (mandag til torsdag)? I weekenden (fredag, lørdag og søndag)?	0, 1, 2, 3-4, 5 eller derover
<u>Fysisk aktivitet uden for arbejdstid</u> Hvor meget tid har du i gennemsnit brugt på hver af de følgende fritidsaktiviteter i det sidste år? (medregn også løb, cykling eller gang til og fra arbejde) Gang, cykling eller anden lettere motion hvor du ikke bliver forpustet eller sveder (fx søndagsture, lettere havearbejde) Motionsidræt, tungt havearbejde eller hurtig gang/cykling, hvor du sveder og bliver forpustet?	Over 4 timer pr. uge 2-4 timer pr. uge Under 2 timer pr. uge Dyrker ikke denne aktivitet

Hård træning eller konkurrenceidræt?	
4) Domæne: Mentale helbredsproblemer	
<u>Depressive symptomer</u> Hvor stor en del af tiden i de sidste 2 uger Har du følt dig trist til mode, ked af det? Har du manglet interesse for dine daglige gøremål? Har du følt, at du manglede energi og kræfter? Har du haft mindre selvtillid? Har du haft dårlig samvittighed eller skyldfølelse? Har du følt, at livet ikke var værd at leve? Har du haft besvær med at koncentrere dig, fx om at læse avis eller følge med i fjernsyn? Har du følt dig rastløs? Har du følt dig stille eller fåmælt? Har du haft besvær med at sove om natten? Har du haft nedsat appetit? Har du haft øget appetit?	Hele tiden Det meste af tiden En hel del af tiden Noget af tiden Lidt af tiden På intet tidspunkt
<u>Behandling for depression</u> Er du, eller har du, inden for det sidste år været i behandling for en eller flere af følgende sygdomme? Depression	Ja Nej
5) Domæne: Somatiske helbredsproblemer	
<u>Selv vurderet helbred</u> Hvordan synes du, at dit helbred er alt i alt?	Fremragende Vældig godt Godt Mindre godt Dårligt
<u>Somatisk helbred</u> Er du, eller har du, inden for det sidste år været i behandling for en eller flere af følgende sygdomme? Diabetes (alle typer sukkersyge) Åreforkalkning eller blodprop i hjertet Blodprop i hjernen (hjerneblødning) Kræft Rygsygdom	Ja Nej
<u>Smerter i muskler</u> Hvor ofte har du haft smerter inden for de sidste 3 måneder?	Dagligt En eller flere gange om ugen Et par gange om måneden Enkelte gange Slet ikke
<u>Grad af smerter</u> Angiv graden af den værste smerte, du har haft i nakke eller skuldre inden for de sidste 3 måneder? Angiv graden af den værste smerte, du har haft i lænden inden for de sidste 3 måneder?	Skala fra 0 til 10, Hvor 0 er "slet ingen smerter" og 10 er "værest mulige smerte"

Appendiks 19. Model 5: Yderlige analyser med justeringer på tværs af domæner (supplerende analyser)

Domæner	HR	95% CI
Fysiske krav i arbejdet¹		
Oplevede fysiske krav	0,99	(0,96;1,03)
Ergonomiske krav	1,01	(0,99;1,02)
Det psykosociale arbejdsmiljø²		
Kvantitative krav	0,69	(0,63;0,76)
Indflydelse	1,12	(1,02;1,23)
Jobusikkerhed	1,15	(1,05;1,25)
Uklare rammer og rollekonflikt	0,98	(0,89;1,07)
Ledelseskvalitet	1,19	(1,06;1,34)
Retfærdighed	1,25	(1,13;1,37)
Ingen natarbejde	1	ref.
Natarbejde	0,89	(0,6;1,33)
Emotionelle krav*	0,98	(0,83;1,17)
Sundhedsadfærd³		
BMI 0-18.5	1,48	(0,69;3,17)
BMI 18.5-25	1	ref.
BMI 25-30	0,97	(0,77;1,22)
BMI >30	1,11	(0,85;1,44)
Ikke-ryger	1	ref.
Tidligere ryger	1,07	(0,84;1,36)
Ryger	1,60	(1,26;2,03)
Intet alkoholindtag	1,48	(1,17;1,87)
Lavrisiko alkoholindtag	1	ref.
Mellem risiko alkoholindtag	0,73	(0,54;0,99)
Højrisiko alkoholindtag	0,78	(0,56;1,07)
Aktivitet uden for arbejdstid	1	ref.
Inaktivitet uden for arbejdstid	1,35	(1,05;1,73)
Mentale helbredsproblemer⁴		
MDI<21	1	ref.
MDI≥21	1,90	(1,45;2,47)

Somatiske helbredsproblemer⁵

Ingen kronisk sygdom	1 ref.
Kronisk sygdom	2,80 (2,28;3,45)
Godt selv vurderet helbred	1 ref.
Dårligt selv vurderet helbred	5,13 (4,09;6,44)
Mindre end ugentlige smerter	1 ref.
Daglig eller ugentlige smerter	2,68 (2,16;3,33)
Grad af smerter i nakke og skulder (blandt dem med smerter)*	1,12 (1,08;1,17)
Grad af smerter i lænd (blandt dem med smerter)*	1,13 (1,09;1,17)

¹ justeret for køn, alder, uddannelse, domænet psykosocialt arbejdsmiljø, sundhedsadfærd og domænerne mentale og somatiske helbredsproblemer

² justeret for køn, alder, uddannelse, domænet fysisk krav i arbejdet, sundhedsadfærd og domænerne mentale og somatiske helbredsproblemer

³ justeret for køn, alder, uddannelse, domænet fysisk krav i arbejdet, domænet psykosocialt arbejdsmiljø og domænerne mentale og somatiske helbredsproblemer

⁴ justeret for køn, alder, uddannelse, domænet fysisk krav i arbejdet, domænet psykosocialt arbejdsmiljø, sundhedsadfærd og domænet somatiske helbredsproblemer

⁵ justeret for køn, alder, uddannelse, domænet fysisk krav i arbejdet, domænet psykosocialt arbejdsmiljø, sundhedsadfærd og domænet mentale helbredsproblemer

*Modellerne for emotionelle krav er kørt med subpopulation af respondenter fra AH 2014 og AH 2016 (n=34.103)

