

Review. Scand J Work Environ Health – online first.

The contribution of work and lifestyle factors to socioeconomic inequalities in self-rated health – a systematic review ¹

by Amy CM Dieker, MSc, Wilhelmina IJzelenberg, PhD, Karin I Proper, PhD, Alex Burdorf, PhD, Johannes CF Ket, MSc, Allard J van der Beek, PhD, Gerben Hulsege, PhD ²

1. Supplemental table

2. Correspondence to: Gerben Hulsege, Van der Boechorststraat 7, 1081 BT, Amsterdam, The Netherlands. [E-mail: g.hulsege@vumc.nl].

Supplemental table S1. Study characteristics of included studies. [To avoid relative estimates of contributions that are unreasonably high due to small absolute odds ratio levels, we only calculated the contribution of work and lifestyle factors in studies with an odds ratio of ≥ 1.10 for the relation between SEP and self-rated health.]

Study; risk of bias (RoB) score in %	Study and participant characteristics	Type of work and lifestyle factors	Measuremen t self-rated health	Measurement of SEP	Statistical analyses	Results	Percentage change in OR after additional adjustment for work and/or lifestyle factors
Aittomaki 2006	Cross-sectional design; n=3,736	Work factors: Physical workload (strenuous muscular work; repetitive movements; difficult working postures; and carrying and lifting)	5 point-Likert scale. Dichotomized into less-than- good (poor) health and good health.	Occupational class (4 categories) according to Erikson et al. scheme (Erikson et al., 1979) (1=managers and professionals; 4=manual workers)	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + physical demands	Occupational class men Model 1: OR: 2.98 (95%CI: 1.94-4.58) Model 2: OR: 2.53 (95%CI: 1.58-4.06) Occupational class women Model 1: OR: 2.58 (95%CI: 1.91-3.50) Model 2: OR: 1.88 (95%CI: 1.36-2.60)	Model 1→2: 23% Model 1→2: 44%
Aittomaki 2010	Cross-sectional design; n=6,509	Work factors: Physical workload and psychosocial combined (overall work demands and job decision latitude; physical work demands)	5 point-Likert scale. Dichotomized into less-than- good (poor) health and good health.	Income (after taxes and public income transfers)	Piecewise logistic regression analysis OR of poor self-rated health above and below 2 nd tertile point of income (i.e. €2001)* Model 1: adjusted for age, gender, employment status and household wealth Model 2: model 1+ work factors	Income, effect below 2nd tertile point Model 1: OR: 1.12 (95%CI: 1.03-1.23) Model 2: OR: 1.05 (95%CI: 1.03-1.15) Model 3: OR: 1.05 (95%CI: 0.96-1.16) Income, effect above 2nd tertile point Model 1: OR: 1.06 (95%CI: 0.97-1.15) Model 2: OR: 1.04 (95%CI: 0.95-1.14) Model 3: OR: 1.05 (95%CI: 0.96-1.15)	Model 1→2: 58% Model 2→3: 0% Model 1→2: NA Model 2→3: NA

		Lifestyle factors: Alcohol consumed weekly; number of cigarettes smoked daily; leisure-time physical activity			Model 3: model 2 + lifestyle factors *OR can be interpreted as the difference per 599 euros decrease in monthly income	
Aldabe 2011	Cross-sectional design; n=12,421	Work factors: Physical workload and work environment (dangerous working conditions); Psychosocial (job insecurity; decision latitude; reward)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (5 categories), according to ISCO-08 (1=managers and professionals, 5=manual workers)	Logistic regression analysis Model 1: adjusted for age Model 2: Model 1 + dangerous working conditions Model 3: Model 1, + job insecurity Model 4: Model 1 + decision latitude Model 5: Model 1 + reward Model 6: Model 1 + all work factors together	Occupational class men Model 1: OR: 1.89 (95%CI: 1.46-2.46) Model 2: OR: 1.71* Model 3: OR: 1.86* Model 4: OR: 1.84* Model 5: OR: 1.66* Model 6: OR: 1.43 (95%CI: 1.05-1.95) Occupational class women Model 1: OR: 2.18 (95%CI: 1.71-2.77) Model 2: OR: 2.01* Model 3: OR: 2.08* Model 4: OR: 2.00* Model 5: OR: 2.00* Model 6: OR: 1.77 (95%CI: 1.33-2.36)
RoB 82%	49% men; aged 18-50+; employees across 28 countries	Lifestyle factors: N/A				Model 1→2: 20% Model 1→3: 3% Model 1→4: 6% Model 1→5: 26% Model 1→6: 52% Model 1→2: 14% Model 1→3: 8% Model 1→4: 15% Model 1→5: 15% Model 1→6: 35%
Bauer 2009	Cross-sectional design; n=10,101	Work factors: Physical workload and work environment (physical strain; exposure to physical disturbances) Psychosocial (monotonous work; handling simultaneous and new tasks; job insecurity)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (5 categories) according to Erikson, et al. scheme(Erikson et al., 1979) (1=higher-grade professionals, 5=semi- and unskilled manual workers and agricultural workers)	Logistic regression analysis Model 1: adjusted for age, gender and employment Model 2: model 1 + physical workload + work environment Model 3: model 1 + psychosocial work factors Model 4: model 1 + physical and psychosocial work factors together	Occupational class Model 1: OR: 2.68 (95%CI:1.92-3.75) Model 2: OR: 1.60 (95%CI: 1.08-2.38) Model 3: OR: 1.99 (95%CI: 1.35-2.93) Model 4: OR: 1.50 (95% CI: 0.99-2.27)
RoB 94%	50% men; aged 20-64 years; Swiss employees	Lifestyle factors: N/A				Model 1→2: 64% Model 1→3: 41% Model 1→4: 70%
Borg and Kristensen 2000	Longitudinal design; 5 years follow-up, n=4,751	Work factors: Physical workload, physical work environment and psychosocial combined (psychological job demands; decision authority; social support; skill discretion; conflicts at work; job insecurity; repetitive work; ergonomic; chemical; climatic; physical exposures)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class job title and education level (5 categories) (1=executives and/or academics, 5=semi- or unskilled blue collar workers)	Logistic regression analysis Model 1: adjusted for age, gender, and disease Model 2: Model 1 + lifestyle factors Model 3: Model 1 + work factors Model 4: Model 1 + lifestyle and work factors together	Occupational class Model 1: OR: 3.39 (95%CI: 2.25-5.12) Model 2: OR: 2.99 (95%CI: 1.99-4.52) Model 3: OR: 2.20 (95%CI: 1.39-3.50) Model 4: OR: 1.97 (95%CI: 1.24-3.13)
RoB 80%	Men and women (no information on gender); aged 18-59 years; Danish employees.	Lifestyle factors: smoking; weight				Model 1→2: 17% Model 1→3: 50% Model 1→4: 59%

Borrell 2004	Cross-sectional design; n=4,219	Work factors: Physical workload, physical work environment and psychosocial combined (work arrangement; Physical work environment; Psychosocial work environment) Lifestyle factors: N/A	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (9 categories) according to the EO wright classification (1=managers and supervisor experts; 9=workers unskilled)	Logistic regression analysis Model 1: adjusted for age and marital status Model 2: model 1 + work factors	Occupational class men Model 1: OR: 7.69 (95%CI: 3.01-19.64) Model 2: OR: 4.54 (95%CI: 1.74-11.85) Occupational class women Model 1: OR: 3.25 (95%CI:1.37-7.74) Model 2: OR: 2.54 (95%CI: 1.05-6.16)	Model 1→2: 47% Model 1→2: 32%
Brand 2007	Cross-sectional design; n= 2,320	Work factors: Physical workload, physical work environment and psychosocial combined (physical job characteristics; cognitive job characteristics; job control)	5 point-Likert scale (1=very poor, 5=excellent)	Educational level in number of years of education (from 0 = no school completed, to 21 = post-doctorate education)	Sibling resemblance models OR of overall health (1=poor, 5=excellent) by education Model 1: education (continuous variable) Model 2: model 1 + lifestyle factors Model 3: model 2 + physical, cognitive job characteristics and job control	Educational level men Model 1: OR:0.79* Model 2: OR:0.84* Model 3: OR: 0.90* Educational level women Model 1: OR: 0.88* Model 2: OR: 0.90* Model 3: OR: 0.92*	Model 1→ 2: 24% Model 2→ 3:38% Model 1→2:17% Model 2→3:20%
Dragano 2016	Cross-sectional design; n=34,529	Lifestyle factors: Physical activity; body mass index (BMI); smoking Work factors: Physical workload, physical work environment and psychosocial combined (ergonomic or physical workload; environmental impact; work-time related burdens; psychological workload; control options; social relations; performance related loads) Lifestyle factors: N/A	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (5 categories) according to the Erikson et al. scheme (Erikson et al., 1979) (1=higher-grade professionals, 5=semi- and unskilled manual workers and agricultural workers)	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + high total work load	Occupational class men Model 1: OR: 2.22 (95%CI: 2.01-2.46) Model 2: OR: 1.75 (95%CI: 1.58-1.95) Occupational class women Model 1: OR: 2.35 (95%CI: 2.13-2.58) Model 2: OR: 1.86 (95%CI: 1.68-2.05)	Model 1→2: 39% Model 1→2: 36%
Ferrie 2003	Longitudinal design; n=4,665	Work factors: Psychosocial (job insecurity) Lifestyle factors: N/A	5 point-Likert scale. Dichotomized into less-than-good (poor)	Occupational class (6 categories) by Civil Service grade title	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + job insecurity	Occupational class men Model 1: OR: 2.24 (95%CI: 1.5-3.3) Model 2: OR: 2.14 (95%CI: 1.5-3.2) Occupational class women Model 1: OR: 4.35 (95%CI: 2.4-8.0)	Model 1→2: 8%

	London-based office staff of Civil Service departments		health and good health.			Model 2: OR: 4.08 (95%CI: 2.2-7.5)	Model 1→2: 8%
Hammig and Bauer 2013	Cross-sectional design; n=1,846	Work factors: Physical workload (physical demands; strains; ergonomic exposures) Psychosocial (psychosocial demands; limited resources/unavailable rewards)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Educational level and occupational class combined 5 categories)(1=production + no or only compulsory education; 5=management + higher vocational education / supervisory position + university degree / management + university degree)	Logistic regression analysis Model 1: adjusted for age and gender Model 2: model 1 + physical work load, low job autonomy, poor promotion prospects, inflexible working hours Model 3: model 1 + other psychosocial work factors (i.e. time pressure, interruptions, growing workload, high responsibility, work-life compatibility, status inconsistency, overtime, working time changes, job insecurity, low social support) Model 4: model 1 + all work factors	Social class Model 1: OR: 2.33* Model 2: OR: 1.28 Model 3: OR: 3.85*** Model 4: OR: 2.22	Model 1→2: 79% Model 1→3: -100% Model 1→4: 8%
RoB 60%	82% men; aged 20-64 years; Swiss employees in industry sector	Lifestyle factors: N/A					
Hammig 2014	Cross-sectional design; n=6,950	Work factors: Physical workload and physical work environment (lifting/carrying heavy loads; poor posture; uniform arm/hand movements; computer work; physical exposures) Psychosocial (long work days; monotonous work; night/weekend/ shift work; people work; job insecurity; no/low influence; no/low social support)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (3 categories) (1=production; 3=management) Educational level (3 categories) (1=basic vocational education; 3=university degree)	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + for lifestyle factors Model 3: model 1 + Physical workload and physical work environment Model 4: model 1 + psychosocial work factors Model 5: model 1 + lifestyle factors, physical and psychosocial work factors	Educational level men Model 1: OR: 2.70*** Model 2: OR: 2.17 ** Model 3: OR: 2.22 ** Model 4: OR: 2.33 ** Model 5: OR: 1.69 Educational level women Model 1: OR: 1.18 Model 2: OR: 1.10 Model 3: OR: 1.04 Model 4: OR: 1.09 Model 5: OR: 0.97 Occupational class men Model 1: OR: 1.45 Model 2: OR: 1.39 Model 3: OR: 1.23 Model 4: OR: 0.93 Model 5: OR: 0.83 Occupational class women Model 1: OR: 2.00 Model 2: OR: 2.04 Model 3: OR: 1.79 Model 4: OR: 1.61 Model 5: OR: 1.52	Model 1→2: 32% Model 1→3: 28% Model 1→4: 22% Model 2→5: 41% Model 1→2: 44% Model 1→3: 78% Model 1→4: 50% Model 2→5: 100% Model 1→2: 13% Model 1→3: 49% Model 1→4: 100% Model 2→5: 100% Model 1→2: -4% Model 1→3: 21% Model 1→4: 39% Model 2→5: 50%
RoB 70%	48% men; aged 18-64 years; Swiss employees	Lifestyle factors: frequent drinking; smoking; poor diet; physical inactivity; body mass index (BMI)					

Hemstrom 2005	Cross-sectional design; n=5,982	Work factors: Physical workload and physical work environment (ergonomic/ physical work) Psychosocial (decision authority; skill discretion; psychological demands; employment contract; work hour regulation)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Income, applied as quintiles (SEP 1= lowest income, SEP 5 = highest income)	Logistic regression analysis Model 1: Adjusted for age, family status, country of birth, education level, smoking and full-time work Model 2: Model 1 + physical work factors Model 3: Model 1+ Decision authority Model 4: Model 1 + skill discretion Model 5: Model 1 + psychological job demands Model 6: Model 1 + physical and psychosocial work factors together	Income men Model 1: OR: 2.39* Model 2: OR: 2.26* Model 3: OR: 2.09* Model 4: OR: 2.13* Model 5: OR: 2.72* Model 6: OR: 2.24* Income women Model 1: OR: 4.32* Model 2: OR: 3.69* Model 3: OR: 3.45* Model 4: OR: 3.72* Model 5: OR: 4.50* Model 6: OR: 3.09*	Model 1→2: 9% Model 1→3: 22% Model 1→4: 19% Model 1→5: -24% Model 1→6: 11% Model 1→2: 19% Model 1→3: 26% Model 1→4: 18% Model 1→5: -5% Model 1→6: 37%
Kaikkonen 2009	Cross-sectional design; n=8,923	Work factors: Physical workload and physical work environment Psychosocial (working overtime; shift work; job control; job demands; job strain)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class, (6 categories) (1=managers; 6=skilled and unskilled manual workers)	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + physical workload Model 3: model 1 + for work environment Model 4: model 1 + physical workload and work environment Model 5: model 1 + working overtime and shift work Model 6: model 1 + job control Model 7: model 1 + for job demands Model 8: model 1 + job strain Model 9: model 1 + physical and psychosocial work factors together	Occupational class men Model 1: OR: 1.78 (95%CI: 1.40-2.25) Model 2: OR: 1.51 (95%CI: 1.19-1.92) Model 3: OR: 1.31 (95%CI: 1.01-1.70) Model 4: OR: 1.26 (95%CI: 0.98-1.63) Model 5: OR: 1.76 (95%CI: 1.36-2.26) Model 6: OR: 1.55 (95%CI: 1.78-2.04) Model 7: OR: 1.93 (95%CI: 1.52-2.44) Model 8: OR: 1.70 (95%CI: 1.29-2.24) Model 9: OR: 1.48 (95%CI: 1.10-2.01) Occupational class women Model 1: OR: 1.89 (95%CI: 1.54-2.32) Model 2: OR: 1.39 (95%CI: 1.13-1.71) Model 3: OR: 1.63 (95%CI: 1.32-2.01) Model 4: OR: 1.31 (95%CI: 1.06-1.61) Model 5: OR: 1.86 (95%CI: 1.51-2.30) Model 6: OR: 1.47 (95%CI: 1.20-1.82) Model 7: OR: 2.05 (95%CI: 1.70-2.52) Model 8: OR: 1.62 (95%CI: 1.31-2.00) Model 9: OR: 1.29 (95%CI: 1.08-1.54)	Model 1→2: 35% Model 1→3: 60% Model 1→4: 67% Model 1→5: 3% Model 1→6: 29% Model 1→7: -19% Model 1→8: 10% Model 1→9: 38% Model 1→2: 56% Model 1→3: 29% Model 1→4: 65% Model 1→5: 3% Model 1→6: 47% Model 1→7: -18% Model 1→8: 30% Model 1→9: 67%
Karmakar and Breslin 2008	Cross-sectional design; n=10,215	Work factors: psychosocial (job status; shift work; work stress characteristics)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Educational level (5 categories) (1=less than high school; 5=Bachelor's degree or higher)	Logistic regression analysis Model 1: adjusted for age, gender, geographic area, race, marital status and school status Model 2: Model 1 + lifestyle factors Model 3: Model 2 + job status, shift work and work stress characteristics	Educational level Model 1: OR: 5.56 (95%CI: 3.23-10.00) Model 2: OR: 3.33 (95%CI: 1.85-6.25) Model 3: OR: 2.86 (95%CI: 1.54-5.26)	Model 1→2: 49% Model 2→3: 20%
RoB 60%	51% men; aged 20-64 years; Swedish employees	Lifestyle factors: N/A					
RoB 80%	20% men; aged 40-60 years; employees of the city of Helsinki, Finland	Lifestyle factors: N/A					
RoB 90%	Canadian employees	Lifestyle factors: alcohol consumption; smoking status; body mass index; physical activity					

Lahelma 2005	Cross-sectional design; n=6,243	Work factors: Physical workload ('how heavy the respondent considered his/her work') Psychosocial ('corresponding question'). No more information.	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class, (5 categories) (1=managers; 5=manual workers)	Logistic regression analysis OR of poor self-rated health (the average change in OR of each step down the occupational hierarchy) Model 1: adjusted for age Model 2: model 1 + physical workload Model 3: model 1 + psychosocial workload Model 4: model 1 + physical and psychosocial workload	Occupational class men Model 1: OR: 1.29 (95%CI: 1.18-1.41] Model 2: OR: 1.25 (95%CI: 1.13-1.37) Model 3: OR: 1.32 (95%CI: 1.20-1.44) Model 4: OR: 1.28 (95%CI: 1.16-1.41) Occupational class women Model 1: OR: 1.25 (95%CI: 1.17-1.32) Model 2: OR: 1.14 (95%CI: 1.07-1.22) Model 3: OR: 1.31 (95%CI: 1.23-1.40) Model 4: OR: 1.21 (95%CI: 1.13-1.30)	Model 1→2: 14% Model 1→3: -10% Model 1→4: 3% Model 1→2: 44% Model 1→3: -24% Model 1→4: 16%
Murcia 2013	Cross-sectional design; n=6,056	Work factors: Physical workload and physical work environment (biomechanical, physical and chemical exposures) Psychosocial (job demands; decision latitude; social support; effort/reward; physical violence; over commitment; bullying; ethical conflict; job insecurity; work hours; shift work)	10 point-Likert scale. The variable was dichotomized into good and poor (score <7) health.	Occupational class (4 categories) according to ISCO-08 (1=managers/professionals; 4= manual workers)	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + exposure to loud noise Model 3: model 1 + exposure to extreme temperatures Model 4: model 1 + outdoor work Model 5: model 1+ exposure to dust or fume Model 6: model 1 + chemical exposure Model 7: model 1 + manual materials handling Model 8: model 1 + other biomechanical exposures Model 9: model 1 + physical workload and physical work environment Model 10: model 1 + psychosocial work factors Model 11: model 1 + all work factors together	Occupational class men: Model 1: OR: 1.81 (95%CI: 1.41-2.34) Model 2: OR: 1.70 (95%CI: -0.93-32.21) Model 3: OR: N/A Model 4: OR: N/A Model 5: OR: N/A Model 6: OR: N/A Model 7: OR: 1.60 (95%CI: 8.51-49.67) Model 8: OR: 1.29 (95%CI: 41.97-103.43) Model 9: OR: 1.27 (95%CI: 0.95-1.69) Model 10: OR: 1.46 (95%CI: 1.12-1.90) Model 11: OR: 1.03 (95%CI: 0.77-1.39) Occupational class women: Model 1: OR: 2.42 (95%CI: 1.66-3.53) Model 2: OR: 2.23 (95%CI: -3.12-31.65) Model 3: OR: 2.16 (95%CI: 3.70-34.93) Model 4: OR: 2.38 (95%CI: -1.25-7.54) Model 5: OR: 2.21 (95%CI: -1.60-32.56) Model 6: OR: N/A Model 7: OR: 2.19 (95%CI: 3.40-33.01) Model 8: OR: 1.84 (95%CI: 23.91-66.71) Model 9: OR: 1.76 (95%CI: 1.17-2.62) Model 10: OR: 1.63 (95%CI: 1.06-2.51) Model 11: OR: 1.35 (95%CI: 0.86-2.12)	Model 1→2: 14% Model 1→3: N/A Model 1→4: N/A Model 1→5: N/A Model 1→6: N/A Model 1→7: 26% Model 1→8: 64% Model 1→9: 67% Model 1→10: 43% Model 1→11: 96% Model 1→2: 13% Model 1→3: 18% Model 1→4: 3% Model 1→5: 15% Model 1→6: N/A Model 1→7: 16% Model 1→8: 41% Model 1→9: 46% Model 1→10: 56% Model 1→11: 75%

Mustard 2003 RoB 94%	Longitudinal design; 4 years follow-up, n=5,691 56% men; aged 18-64 years; Canadian employees	Work factors: Psychosocial (psychological demands; job control; job strain) Lifestyle factors: alcohol consumption; smoking; physical activity	5 point-Likert scale. A decline in self-rated health status was defined as a drop of one point or more from baseline to follow-up	Occupational class (4 categories) (1=self-employed professionals, high-level management, technicians, middle management; 4=unskilled clerical, unskilled manual, farm laborers)	Logistic regression analysis Model 1: Adjusted for age Model 2: Model 1 + lifestyle factors Model 3: model 1 + work demand/control Model 4: model 1+ work job strain Model 5: fully adjusted	Occupational class total population Model 1: OR: 1.58 (95%CI: 1.20-2.08) Model 2: OR: 1.41 (95%CI: 1.05-2.06) Model 3: OR: 1.55 (95%CI: 1.13-2.14) Model 4: OR: 1.53 (95%CI: 1.11-2.09) Model 5: OR: 1.40 (95%CI: 1.01-1.93) Occupational class men Model 1: OR: 1.80 (95%CI: 1.24-2.63) Model 2: OR: 1.54 (95%CI: 1.03-2.31) Model 3: OR: 1.60 (95%CI: 1.06-2.41) Model 4: OR: 1.64 (95%CI: 1.08-2.50) Model 5: OR: 1.48 (95%CI: 0.96-2.28) Occupational class women Model 1: OR: 1.41 (95%CI: 0.94-2.11) Model 2: OR: 1.26 (95%CI: 0.83-1.91) Model 3: OR: 1.52 (95%CI: 0.93-2.48) Model 4: OR: 1.41 (95%CI: 0.89-2.23) Model 5: OR: 1.25 (95%CI: 0.78-1.99)	Model 1→2: 29% Model 1→3: 5% Model 1→4: 9% Model 1→5: 31% Model 1→2: 33% Model 1→3: 25% Model 1→4: 20% Model 1→5: 40% Model 1→2: 37% Model 1→3: -27% Model 1→4: 0% Model 1→5: 39%
Niedhammer 2008 RoB 70%	Cross-sectional design; n=24,486 58% men; aged 16+; French employees	Work factors: Physical workload and physical work environment (physical/ ergonomic /biological/ chemical exposure) Psychosocial (decision latitude; social support; workplace bullying; violence) Lifestyle factors: N/A	10 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (4 categories) according to ISCO-08 (1=professionals/managers; 4=blue collar workers)	Logistic regression analysis Model 1: adjusted for age and work hour regulation Model 2: model 1 + physical exposure, i.e. exposure to noise, thermic constraints Model 3: model 1 + ergonomic exposure Model 4: model 1 + biological exposure Model 5: model 1 + chemical exposure Model 6: model 1 + physical workload and physical work environment Model 7: model 2 + latitude + support + workplace bullying + aggression from public	Occupational class men Model 1: OR: 2.48* Model 2: OR: 2.34* Model 3: OR: 2.29* Model 4: OR: 2.44* Model 5: OR: 2.34* Model 6: OR: 2.21* Model 7: OR: 1.74* Occupational class women Model 1: OR: 2.02* Model 2: OR: 1.86* Model 3: OR: 1.83* Model 4: OR: 1.96* Model 5: OR: 1.86* Model 6: OR: 1.69* Model 7: OR: 1.60*	Model 1→2: 9% Model 1→3: 13% Model 1→4: 3% Model 1→5: 9% Model 1→6: 18% Model 6→7: 39% Model 2→7: 45% Model 1→2: 16% Model 1→3: 19% Model 1→4: 6% Model 1→5: 16% Model 1→6: 32% Model 6→7: 13% Model 2→7: 30%
Parker 2013 RoB 69%	Longitudinal design; 23 years follow-up; n=1,131 50 % men; aged 15-75 years; Swedish employees	Work factors: Physical workload and physical work environment ('are you exposed to gas, dust, smoke, noise, and/or heavy lifting') Psychosocial ('Is your work mentally taxing, stressful, repetitious,	3 point-Likert scale, coded as 0 (good), 1 (in-between) and 2 (poor)	Educational level, (2 categories) (1=higher education; 2=lower education) Occupational class (2 categories) (1=non-manual workers; 2=manual workers)	Ordered logistic regression analysis Model 1: adjusted for age and gender Model 2: model 1 + physical workload and physical work environment Model 3: model 1 + psychosocial work factors	Educational level Model 1: OR: 1.54*** Model 2: OR: 1.51** Model 3: OR: 1.58*** Occupational class Model 1: OR: 1.51*** Model 2: OR: 1.48*** Model 3: OR: 1.58***	Model 1→2: 6% Model 1→3: -7% Model 1→2: 6% Model 1→3: -14%

		monotonous, or mentally exhausting?")					
		Lifestyle factors: N/A					
Qiu 2012	Cross-sectional design; n=2,467	Work factors: Psychosocial (work demands (overtime work, job overload, work-family conflict); work resources (autonomy, challenge, schedule flexibility, job security))	4 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Educational level (4 categories) (1=less than high school, high school graduate or equivalent; 4=postgraduate or advanced degree)	Logistic regression analysis Model 1: adjusted for race, age, marital status, parental status, caregiver status and family income Model 2: model 1 + psychosocial work demands Model 3: model 1+ psychosocial work resources Model 4: model 1+ psychosocial work demands + psychosocial work resources	Educational level men Model 1: OR: 2.46** Model 2: OR: 2.48** Model 3: OR: 2.18* Model 4: OR: 2.34** Educational level women Model 1: OR: 1.88* Model 2: OR: 2.20** Model 3: OR: 1.73 Model 4: OR: 1.99*	Model 1→2: -1% Model 1→3: 19% Model 1→4: 8% Model 1→2: -36% Model 1→3: 17% Model 1→4: -13%
RoB 70%	Men and women (no information on gender); aged 24-64 years; American (USA) employees	Lifestyle factors: N/A					
Rahkonen 2005	Cross-sectional design; n=8,970	Work factors: Psychosocial (job control; job demands)	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (4 categories) (1=managers and professionals; 4= manual workers)	Logistic regression analysis Model 1: adjusted for age Model 2: model 1 + job control Model 3: model 1 + job demands Model 4: model 1+ job control + job demands	Occupational class men Model 1: OR: 2.42 (95%CI: 1.86-3.15) Model 2: OR: 1.69 (95%CI: 1.24-2.30) Model 3: OR: 3.03 (95%CI: 2.29-4.00) Model 4: OR: 2.06 (95%CI: 1.50-2.83) Occupational class women Model 1: OR: 2.23 (95%CI: 1.85-2.69) Model 2: OR: 1.54 (95%CI: 1.26-1.89) Model 3: OR: 2.63 (95%CI: 2.17-3.19) Model 4: OR: 1.82 (95%CI: 1.48-2.23)	Model 1→2: 51% Model 1→3: -43% Model 1→4: 25% Model 1→2: 56% Model 1→3: -33% Model 1→4: 33%
RoB 60%	20% men; aged 40-60 years; employees of the City of Helsinki, Finland	Lifestyle factors: N/A					
Sacker 2001	Cross-sectional design; n=5, 391	Work factors: Psychosocial (job strain)	5 point-Likert scale.	Occupational class, (6 categories) according to the Erikson et al. scheme(Erikson et al., 1979) (1=higher professional, , 6=non-skilled manual)	Path analyses using structural equation modelling including age, job strain, diet, sport activity, social support, drinking and smoking as potential mediators. (Reference group= higher professional)	The relation of SEP and self-rated health was mediated by job strain, diet and drinking: Path SEP→ health: β 0.04 Path SEP→job strain: β 0.18 Path job strain→ health: β 0.03 Path SEP→diet: β 0.08 Path diet→ health: β 0.04 Path SEP→drinking: β 0.07 Path drinking→ health: β -0.04	Percentage change could not be calculated due to type of analysis but paper concluded that the relation of SEP and self-rated health was mediated by job strain, diet and drinking
RoB 80%	100% women; aged 20-59 years; employees in England	Lifestyle factors: diet; drinking; smoking; sport					
Schmitz 2016	Longitudinal design; 2 years follow-up, n=7,394	Work factors <u>measured with job exposure matrix</u> : Physical workload and physical work environment (physical demands such as climbing,	5 point-Likert scale. Dichotomized into less-than-good (poor)	Educational level (3 categories) (1= no degree, 3= associate or bachelor's degree)	Dynamic panel correlated random effects linear probability model (DPCRE LPM) Model 1: lagged self-reported health status (SRHS) (t-2), baseline SRHS, age, occupational class, lifestyle	Educational level: no degree Model 1: -0.0973** Model 2: -0.0975** Model 3: -0.0783** Model 4: -0.0794**	Percentage change could not be calculated due to the type of analysis but paper concluded that psychosocial
RoB 63%							

	100% men; aged 50-65 years; employees in the USA	lifting, balancing, walking, and handling materials; hazards such as exposure noise, contaminants, and cramped spaces) Psychosocial (supportive management; frequency and impact of decisions; degree of control and influence) Lifestyle factors: N/A	health and good health.	Average log income (continuous variable)	education, income, childhood health and SEP Model 2: model 1+ physical workload and physical work environment Model 3: model 1 + psychosocial work factors Model 4: model 1 + physical and psychosocial factors	Educational level: High school degree/GED Model 1: -0.0809** Model 2: -0.0815 ** Model 3: -0.0684** Model 4: -0.0794** Educational level: associate or bachelor's degree Model 1: -0.0440** Model 2: -0.0448* Model 3: -0.0372 Model 4: -0.0380 Income Model 1: 0.0110 Model 2: 0.0107 Model 3: 0.0101 Model 4: 0.00986	work factors and not physical workload and physical work environment contribute to social inequalities in self-rated health
Schrijvers 1998	Cross-sectional design; n=6,932	Work factors: Physical workload and physical work environment (noise, dirty work, physically demanding work, long periods in same posture, smell/fume, dangerous work) Psychosocial (job control; job demands; social support at work) Lifestyle factors: N/A	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class, (7 categories) according to the Erikson et al. scheme (Erikson et al., 1979) (1=higher grade professionals; 7=unskilled manual workers).	Logistic regression analysis Model 1: adjusted for age, marital status, religious affiliation, degree of urbanization Model 2: model 1 + physical working conditions Model 3: model 1 + job demands Model 4: model 1 + job control Model 5: model 1 + social support Model 6: model 1 + physical working conditions + job control	Occupational class men Model 1: OR: 2.92 (95%CI: 2.11-4.04) Model 2: OR: 2.02 (95%CI: 1.44-2.85) Model 3: OR: 3.26 (95%CI: 2.34-4.55) Model 4: OR: 1.93 (95%CI: 1.37-2.72) Model 5: OR: 2.74 (95%CI: 1.97-3.80) Model 6: OR: 1.50 (95%CI: 1.05-2.14) Occupational class women Model 1: OR: 3.28 (95%CI: 1.37-7.86) Model 2: OR: 2.72 (95%CI: 1.13-6.55) Model 3: OR: 3.83 (95%CI: 1.58-9.25) Model 4: OR: 2.77 (95%CI: 1.15-6.69) Model 5: OR: 3.25 (95%CI: 1.35-7.79) Model 6: OR: 2.42 (95%CI: 1.00-5.88)	Model 1→2: 47% Model 1→3: -18% Model 1→4: 52% Model 1→5: 9% Model 1→6: 74% Model 1→2: 25% Model 1→3: -24% Model 1→4: 22% Model 1→5: 1% Model 1→6: 38%
Toch 2014	Cross-sectional design; n=21,083	Work factors: Physical workload (machinery; tiring or painful positions; lifting or moving people; carrying or moving heavy loads; repetitive hand or arm movement) Psychosocial (job demands; job control) Lifestyle factors: N/A	5 point-Likert scale. Dichotomized into less-than-good (poor) health and good health.	Occupational class (6 categories) according to the Erikson et al. scheme (Erikson et al., 1979) (1=higher controllers; 6=semi-and unskilled manual workers)	Logistic regression analysis Model 1: Adjusted for age, gender, education, public or private sector, NACE (statistical classification of economic activities in the European community), years at current workplace, weekly working hours, employment contract, and company size Model 2: model 1+ physical working conditions Model 3: model 1 + job demands Model 4: model 1 + job control Model 5: model 1 + physical working conditions + job demand + job control	Occupational class total population Model 1: OR: 1.87 (95%CI: 1.62-2.16) Model 2: OR: 1.40 (95%CI: 1.23-1.65) Model 3: OR: 1.86 (95%CI: 1.61-2.15) Model 4: OR: 1.64 (95%CI: 1.42-1.90) Model 5: OR: 1.31 (95%CI: 1.13-1.53) Occupational class men Model 1: OR: 1.79 (95%CI: 1.46-2.19) Model 2: OR: 1.40 (95%CI: 1.14-1.73) Model 3: OR: 1.79 (95%CI: 1.46-2.20) Model 4: OR: 1.60 (95%CI: 1.30-1.98) Model 5: OR: 1.31 (95%CI: 1.06-1.62) Occupational class women Model 1: OR: 2.04 (95%CI: 1.66-2.51) Model 2: OR: 1.52 (95%CI: 1.23-1.87) Model 3: OR: 2.03 (95%CI: 1.65-2.50)	Model 1→2: 54% Model 1→3: 1% Model 1→4: 26% Model 1→5: 64% Model 1→2: 49% Model 1→3: 0% Model 1→4: 24% Model 1→5: 61% Model 1→2: 50% Model 1→3: 1%

						Model 4: OR: 1.77 (95%CI: 1.44-2.18) Model 5: OR: 1.39 (95%CI: 1.12-1.72)	Model 1→4: 26% Model 1→5: 63%
Warren 2004	Cross-sectional design; n=4,422	Work factors: Physical workload, physical work environment and psychosocial combined (physical effort; repetitive work, manual work; exposure to dangerous conditions; job control; working under pressure of time; intense concentration required; supervision)	5 point-Likert scale.	Educational level (2 categories) (1=less than four years of college; 2=four or more years of college),	Ordered logistic regression analysis Model 1: adjusted for family socioeconomic background and health-risk factors Model 2: Model 1 + physical and psychosocial job characteristics	Educational level total population Model 1: OR:1.27* Model 2: OR:1.22* Educational level men Model 1: OR:1.15 Model 2: OR:1.12 Educational level women Model 1: OR:1.54* Model 2: OR:1.51* Income total population Model 1: OR: 1.11* Model 2: OR:1.09* Income men Model 1: OR: 1.15* Model 2: OR:1.14* Income women Model 1: OR:1.12* Model 2: OR:1.09* Occupational education total population Model 1: OR:1.12* Model 2: OR:1.05 Occupational education men Model 1: OR:1.14* Model 2: OR:1.07 Occupational education women Model 1: OR:1.05 Model 2: OR:0.99	Model 1→2: 19% N/A Model 1→2: 6% Model 1→2: 18% Model 1→2: 7% Model 1→2: 25% Model 1→2: 58% Model 1→2: 50% N/A
RoB 80%	47% men; aged 54-64 years; graduates from Wisconsin, USA	Lifestyle factors: exercise; obesity; smoking		Income (continuous) Occupational education scores (continuous)			
Warren 2008	Longitudinal design; 11 years follow-up, n=4,495	Work factors: Physical workload, physical work environment and psychosocial combined (physical job characteristics; ergonomic job characteristics; job control; job pressures)	5 point-Likert scale. Dichotomized into excellent health and all other	Educational level (2 categories) (1=less than four years of college; 2=four or more years of college),	Logistic regression analysis Model 1: childhood health and health risk factors Model 2: model 1 + work factors	Educational level men Model 1: OR:1.97** Model 2: OR:1.77** Educational level women Model 1: OR:1.32 Model 2: OR:1.37 Income men Model 1: OR:1.06 Model 2: OR:1.05 Income women Model 1: OR:1.02 Model 2: OR:1.04 Occupational education men Model 1: OR: 1.00 Model 2: OR: 0.99	Model 1→2: 21% Model 1→2: -16% N/A N/A N/A
RoB 63%	47% men; aged 54-64 years; graduates from Wisconsin, USA	Lifestyle factors: N/A		Income (continuous) Occupational education scores (continuous)			

Occupational education women

Model 1: OR:1.01

Model 2: OR:1.00

N/A

Supplementary Information

Search strategy for PubMed (31 March 2017)

[Mesh] = Medical subject headings (MeSH)

[Publication Type] = MeSH for publication type

[tiab] = words in title or abstract

Search	Query	Items found
#54	(#53 NOT ("Review" [Publication Type] OR "Case Reports" [Publication Type] OR "Clinical Trial" [Publication Type]))	2,274
#55	(#48 NOT #54)	1,513
#48	(#47 NOT ("Review" [Publication Type] OR "Case Reports" [Publication Type] OR "Clinical Trial" [Publication Type]))	3,787
#53	(#52 NOT (("Adolescent"[Mesh] OR "Child"[Mesh] OR "Infant"[Mesh] OR adolescen*[tiab] OR child*[tiab] OR schoolchild*[tiab] OR infant*[tiab] OR girl*[tiab] OR boy*[tiab] OR teen[tiab] OR teens[tiab] OR teenager*[tiab] OR youth*[tiab] OR pediater*[tiab] OR paediatr*[tiab] OR puber*[tiab]) NOT ("Adult"[Mesh] OR adult*[tiab] OR man[tiab] OR men[tiab] OR woman[tiab] OR women[tiab])))	2,875
#52	(#50 OR #51)	3,033
#51	(#43 AND #44 AND #40 AND #49)	1,023
#50	(#39 AND #40 AND #49)	2,171
#49	("Quality of Life"[Mesh] OR life qualit*[tiab] OR "quality of life"[tiab] OR qol[tiab] OR hrql[tiab] OR hrqol[tiab] OR "self rated health"[tiab] OR srh[tiab] OR "subjective health"[tiab] OR "self assessed health"[tiab] OR "self reported health"[tiab] OR "perceived health"[tiab] OR perception of health[tiab] OR eq5d[tiab] OR euroqol*[tiab] OR sf36[tiab] OR "sf 36"[tiab])	266,136
#47	(#46 NOT (("Adolescent"[Mesh] OR "Child"[Mesh] OR "Infant"[Mesh] OR adolescen*[tiab] OR child*[tiab] OR schoolchild*[tiab] OR infant*[tiab] OR girl*[tiab] OR boy*[tiab] OR teen[tiab] OR teens[tiab] OR teenager*[tiab] OR youth*[tiab] OR pediater*[tiab] OR paediatr*[tiab] OR puber*[tiab]) NOT ("Adult"[Mesh] OR adult*[tiab] OR man[tiab] OR men[tiab] OR woman[tiab] OR women[tiab])))	4,587
#46	(#42 OR #45)	4,875
#45	(#43 AND #44 AND #40 AND #41)	1,713
#44	("Occupational Groups"[Mesh] OR employee*[tiab] OR worker*[tiab] OR personnel[tiab] OR laborer*[tiab] OR labourer*[tiab] OR civil servant*[tiab] OR nurse[tiab] OR nurses[tiab] OR working population*[tiab] OR working group*[tiab] OR globe[tiab])	858,387
#43	("Sports"[Mesh] OR "Life Style"[Mesh] OR "Diet"[Mesh] OR "Exercise"[Mesh] OR "Tobacco Use"[Mesh] OR "Drinking Behavior"[Mesh:NoExp] OR "Body Mass Index"[Mesh] OR "Overweight"[Mesh] OR lifestyle*[tiab] OR life-style*[tiab] OR health behavio*[tiab] OR health related behavio*[tiab] OR physical inactiv*[tiab] OR sport*[tiab] OR tobacco*[tiab] OR physical activ*[tiab] OR smoking*[tiab] OR smoke[tiab] OR bmi[tiab] OR body mass index*[tiab] OR diet[tiab] OR diets[tiab] OR dietary[tiab] OR exercis*[tiab] OR walking[tiab] OR (alcohol[tiab] AND drinking[tiab]) OR overweight*[tiab] OR obesity[tiab] OR obese[tiab] OR "Sedentary Lifestyle"[Mesh] OR sedent*[tiab] OR "sitting time"[tiab] OR "prolonged sitting"[tiab] OR "TV time"[tiab] OR "TV viewing"[tiab] OR "watching TV"[tiab] OR "computer time"[tiab] OR "computer use"[tiab] OR "screen time"[tiab] OR "screen-time"[tiab] OR "television"[tiab] OR "gaming" [tiab] OR "occupational sitting"[tiab] OR "sitting at work"[tiab] OR body weight*[tiab] OR normal weight*[tiab])	1,679,901
#42	(#39 AND #40 AND #41)	3,454
#41	("Quality of Life"[Mesh] OR life qualit*[tiab] OR "quality of life"[tiab] OR qol[tiab] OR hrql[tiab] OR hrqol[tiab] OR "self rated health"[tiab] OR srh[tiab] OR "subjective health"[tiab] OR "self assessed health"[tiab] OR "self reported health"[tiab] OR "perceived health"[tiab] OR perception of health[tiab] OR eq5d[tiab] OR euroqol*[tiab] OR sf36[tiab] OR "sf 36"[tiab] OR "Health Status"[Mesh:NoExp] OR "health status"[tiab] OR "level of health"[tiab] OR health level*[tiab])	338,102
#40	("Social Class"[Mesh] OR "Socioeconomic Factors"[Mesh:NoExp] OR "Educational Status"[Mesh:NoExp] OR "Income"[Mesh] OR socioeconomic*[tiab] OR inequalit*[tiab] OR disparit*[tiab] OR education*[tiab] OR social class*[tiab] OR income*[tiab] OR social gradien*[tiab] OR social variation*[tiab])	740,218
#39	("Job Satisfaction"[Mesh] OR "Work"[Mesh] OR "Occupational Injuries"[Mesh] OR "Noise"[Mesh] OR flexible contract*[tiab] OR inflexible contract*[tiab] OR freelanc*[tiab] OR free lanc*[tiab] OR entrepreneur*[tiab] OR career opportunit*[tiab] OR supervisor support*[tiab] OR supervisor social*[tiab] OR coworker support*[tiab] OR coworker social*[tiab] OR co worker support*[tiab] OR co worker social*[tiab] OR decision latitud*[tiab] OR decision authorit*[tiab] OR effort reward imbalanc*[tiab] OR effort reward balanc*[tiab] OR organisational justic*[tiab] OR organizational justic*[tiab] OR leadership*[tiab] OR overtime*[tiab] OR over time*[tiab] OR physical	402,674

	exposur*[tiab] OR toxic exposure*[tiab] OR ergonomic exposur*[tiab] OR occupational safet*[tiab] OR workplace accident*[tiab] OR workload*[tiab] OR lifting*[tiab] OR pulling*[tiab] OR psychosocial working*[tiab] OR organizational culture*[tiab] OR organisational culture*[tiab] OR time pressure*[tiab] OR demand control model*[tiab] OR demand control support*[tiab] OR noise[tiab] OR work related factor*[tiab] OR work factors*[tiab] OR work condition*[tiab] OR working condition*[tiab] OR work environment*[tiab] OR working environment*[tiab] OR work organisation*[tiab] OR work organization*[tiab] OR work contract*[tiab] OR terms of employment*[tiab] OR job insecur*[tiab] OR insecurity at work*[tiab] OR flexible work*[tiab] OR inflexible work*[tiab] OR self employe*[tiab] OR job control*[tiab] OR work engagement*[tiab] OR challenging work*[tiab] OR influence at work*[tiab] OR work conflict*[tiab] OR job demands*[tiab] OR shift work*[tiab] OR night work*[tiab] OR working hour*[tiab] OR working tim*[tiab] OR work postur*[tiab] OR physical work environment*[tiab] OR physical work demand*[tiab] OR heavy work*[tiab] OR physiological job demand*[tiab] OR physiological work demand*[tiab] OR physical work strain*[tiab] OR psychosocial work*[tiab] OR work pressure*[tiab] OR job strain*[tiab] OR work stress*[tiab] OR job stress*[tiab] OR emotional work demand*[tiab] OR perceived work demand*[tiab])	
--	---	--

Search strategy for Ebsco/PsycInfo (31 March 2017)

DE = descriptors, keywords

TI = words in title

AB = words in abstract

ZG = age group

Search	Query	Limiters / Expanders	Results
S12	S11 NOT TI (("Heart failure" OR Asthma OR "Eating disorder" OR Parkinson OR Spondylitis OR patient* OR Fibromyalgia OR Migraine OR Transplantation* OR Incontinence OR "Spinal cord injur*" OR "Dental health" OR "Dental disease*" OR Periodontal OR Rheuma* OR Surgery OR "Obstructive Pulmonary disease*" OR Schizophren* OR Dementia OR Respiratory OR Arthritis OR Osteoarthritis OR Fibromyalgia OR Hemodialysis OR Myeloma OR Bypass OR amputees OR ulcer* OR Burnout OR Implantation OR Psychiatric OR cancer OR survivor* OR disease* OR Hepatitis OR HIV OR Psoriasis OR Myocard OR Diabet*))		1,330
S11	S10 NOT ((((ZG "childhood (birth-12 yrs)" or (ZG "infancy (2-23 mo)" or (ZG "neonatal (birth-1 mo)" or (ZG "preschool age (2-5 yrs)" or (ZG "school age (6-12 yrs)") NOT ((ZG "adulthood (18 yrs & older)" or (ZG "aged (65 yrs & older)" or (ZG "middle age (40-64 yrs)" or (ZG "thirties (30-39 yrs)" or (ZG "very old (85 yrs & older)" or (ZG "young adulthood (18-29 yrs)"))))		1,655
S10	S8 NOT S9		1,707
S9		Limiters - Methodology: CLINICAL TRIAL, LITERATURE REVIEW, - Systematic Review	144,008
S8	S4 OR S7		1,778
S7	S2 AND S3 AND S5 AND S6		412
S6	(DE "Blue Collar Workers" OR DE "Industrial Foremen" OR DE "Skilled Industrial Workers" OR DE "Unskilled Industrial Workers" OR DE "Service Personnel" OR DE "Domestic Service Personnel" OR DE "Technical Service Personnel" OR DE "Technical Personnel" OR DE "Technical Service Personnel" OR DE "White Collar Workers" OR DE "Accountants" OR DE "Clerical Personnel" OR DE "Management Personnel" OR DE "Sales Personnel" OR DE "Secretarial Personnel" OR DE "Government Personnel" OR DE "Agricultural Extension Workers" OR DE "Law Enforcement Personnel" OR DE "Military Personnel" OR DE "Police Personnel" OR DE "Public Health Service Nurses" OR DE "Professional Personnel" OR DE "Aerospace Personnel" OR DE "Anthropologists" OR DE "Clinicians" OR DE "Counselors" OR DE		443,053

"Educational Personnel" OR DE "Engineers" OR DE "Health Personnel" OR DE "Information Specialists" OR DE "Journalists" OR DE "Legal Personnel" OR DE "Mathematicians" OR DE "Physicists" OR DE "Professional Role" OR DE "Psychologists" OR DE "Scientists" OR DE "Sociologists" OR DE "Therapists" OR DE "Personnel" OR DE "Artists" OR DE "Business OR Industrial Personnel" OR DE "Disabled Personnel" OR DE "Government Personnel" OR DE "Hypnotists" OR DE "Nonprofessional Personnel" OR DE "Paraprofessional Personnel" OR DE "Professional Personnel" OR DE "Religious Personnel" OR DE "Social Workers" OR DE "Aerospace Personnel" OR DE "Aircraft Pilots" OR DE "Astronauts" OR DE "Counselors" OR DE "Rehabilitation Counselors" OR DE "School Counselors" OR DE "Vocational Counselors" OR DE "Educational Personnel" OR DE "School Administrators" OR DE "School Counselors" OR DE "School Nurses" OR DE "Teacher Aides" OR DE "Teachers" OR DE "Health Personnel" OR DE "Allied Health Personnel" OR DE "Medical Personnel" OR DE "Mental Health Personnel" OR DE "Information Specialists" OR DE "Librarians" OR DE "Legal Personnel" OR DE "Attorneys" OR DE "Judges" OR DE "Law Enforcement Personnel" OR DE "Professional Role" OR DE "Counselor Role" OR DE "Therapist Role" OR DE "Psychologists" OR DE "Clinical Psychologists" OR DE "Counseling Psychologists" OR DE "Educational Psychologists" OR DE "Experimental Psychologists" OR DE "Industrial Psychologists" OR DE "Military Psychologists" OR DE "Social Psychologists" OR DE "Therapists" OR DE "Occupational Therapists" OR DE "Physical Therapists" OR DE "Psychotherapists" OR DE "Speech Therapists" OR DE "Business OR Industrial Personnel" OR DE "Architects" OR DE "Blue Collar Workers" OR DE "Industrial Psychologists" OR DE "Sales Personnel" OR DE "Secretarial Personnel" OR DE "Service Personnel" OR DE "Skilled Industrial Workers" OR DE "Technical Personnel" OR DE "White Collar Workers" OR DE "Librarians" OR DE "Working Women" OR DE "Nurses" OR DE "Psychiatric Nurses" OR DE "Public Health Service Nurses" OR DE "School Nurses" OR DE "Physicians" OR DE "Family Physicians" OR DE "General Practitioners" OR DE "Gynecologists" OR DE "Internists" OR DE "Neurologists" OR DE "Obstetricians" OR DE "Pathologists" OR DE "Pediatricians" OR DE "Psychiatrists" OR DE "Surgeons" OR DE "Psychiatric Hospital Staff" OR DE "Psychiatric Aides" OR DE "Psychotherapists" OR DE "Hypnotherapists" OR DE "Psychoanalysts" OR DE "Allied Health Personnel" OR DE "Occupational Therapists" OR DE "Physical Therapists" OR DE "Psychiatric Aides" OR DE "Speech Therapists" OR DE "Medical Personnel" OR DE "Dentists" OR DE "Military Medical Personnel" OR DE "Nurses" OR DE "Optometrists" OR DE "Pharmacists" OR DE "Physical Therapists" OR DE "Physicians" OR DE "Psychiatric Hospital Staff" OR DE "Mental Health Personnel" OR DE "Clinical Psychologists" OR DE "Psychiatric Hospital Staff" OR DE "Psychiatric Nurses" OR DE "Psychiatric Social Workers" OR DE "Psychiatrists" OR DE "Psychotherapists" OR DE "School Psychologists" OR DE "Home Care Personnel" OR DE "Rescue Workers" OR DE "Allied Health Personnel" OR DE "Fire Fighters" OR DE "Police Personnel" OR DE "Social Workers" OR DE "Psychiatric Social Workers" OR DE "Professional Personnel" OR DE "Aerospace Personnel" OR DE "Anthropologists" OR DE "Clinicians" OR DE "Counselors" OR DE "Educational Personnel" OR DE "Engineers" OR DE "Health Personnel" OR DE "Information Specialists" OR DE "Journalists" OR DE "Legal Personnel" OR DE "Mathematicians" OR DE "Physicists" OR DE "Professional Role" OR DE "Psychologists" OR DE "Scientists" OR DE "Sociologists" OR DE "Therapists" OR DE "Aerospace Personnel" OR DE "Aircraft Pilots" OR DE "Astronauts" OR DE "Clinicians" OR DE "Counselors" OR DE "Rehabilitation Counselors" OR DE "School Counselors" OR DE "Vocational Counselors" OR DE "Educational Personnel" OR DE "School Administrators" OR DE "School Counselors" OR DE "School Nurses" OR DE "Teacher Aides" OR DE "Teachers" OR DE "Health Personnel" OR DE "Allied Health Personnel" OR DE "Medical Personnel" OR DE "Mental Health Personnel" OR DE "Information Specialists" OR DE "Librarians" OR DE "Legal Personnel" OR DE "Attorneys" OR DE "Judges" OR DE "Law Enforcement		
---	--	--

	Personnel" OR DE "Professional Role" OR DE "Counselor Role" OR DE "Therapist Role" OR DE "Psychologists" OR DE "Clinical Psychologists" OR DE "Counseling Psychologists" OR DE "Educational Psychologists" OR DE "Experimental Psychologists" OR DE "Industrial Psychologists" OR DE "Military Psychologists" OR DE "Social Psychologists" OR DE "Therapists" OR DE "Occupational Therapists" OR DE "Physical Therapists" OR DE "Psychotherapists" OR DE "Speech Therapists") OR TI (employee* OR worker* OR personnel OR laborer* OR labourer* OR civil servant* OR nurse OR nurses OR "working population*" OR "working group*" OR globe) OR AB (employee* OR worker* OR personnel OR laborer* OR labourer* OR civil servant* OR nurse OR nurses OR "working population*" OR "working group*" OR globe)		
S5	(DE "Recreation" OR DE "Athletic Participation" OR DE "Dance" OR DE "Football" OR DE "Judo" OR DE "Martial Arts" OR DE "Soccer" OR DE "Swimming" OR DE "Television Viewing" OR DE "Tennis" OR DE "Weightlifting" OR DE "Sports" OR DE "Baseball" OR DE "Basketball" OR DE "Extreme Sports" OR DE "Health Behavior" OR DE "Lifestyle" OR DE "Lifestyle Changes" OR DE "Diets" OR DE "Drinking Behavior" OR DE "Alcohol Drinking Patterns" OR DE "Eating Behavior" OR DE "Binge Eating" OR DE "Dietary Restraint" OR DE "Fast Food" OR DE "Obesity" OR DE "Tobacco Smoking" OR DE "Body Mass Index" OR DE "Body Weight" OR DE "Overweight" OR DE "Sedentary Behavior" OR DE "Screen Time" OR DE "Aerobic Exercise" OR DE "Physical Activity" OR DE "Exercise" OR DE "Active Living" OR DE "Activity Level") OR TI (lifestyle* OR "life style*" OR "health behavior*" OR "health related behavior*" OR "physical inactiv*" OR sport* OR tobacco* OR "physical activ*" OR smoking* OR smoke OR bmi OR "body mass index*" OR diet OR diets OR dietary OR exercis* OR walking OR (alcohol N3 drinking) OR overweight* OR obesity OR obese OR sedent* OR "sitting time" OR "prolonged sitting" OR "TV time" OR "TV viewing" OR "watching TV" OR "computer time" OR "computer use" OR "screen time" OR "screen time" OR "television" OR "gaming" OR "occupational sitting" OR "sitting at work" OR "body weight*" OR "normal weight*") OR AB (lifestyle* OR "life style*" OR "health behavior*" OR "health related behavior*" OR "physical inactiv*" OR sport* OR tobacco* OR "physical activ*" OR smoking* OR smoke OR bmi OR "body mass index*" OR diet OR diets OR dietary OR exercis* OR walking OR (alcohol N3 drinking) OR overweight* OR obesity OR obese OR sedent* OR "sitting time" OR "prolonged sitting" OR "TV time" OR "TV viewing" OR "watching TV" OR "computer time" OR "computer use" OR "screen time" OR "screen time" OR "television" OR "gaming" OR "occupational sitting" OR "sitting at work" OR "body weight*" OR "normal weight*")		332,846
S4	S1 AND S2 AND S3		1,463
S3	(DE "Quality of Life" OR DE "Quality of Work Life") OR TI ("life qualit*" OR "quality of life" OR qol OR hrql OR hrqol OR "self rated health" OR srh OR "subjective health" OR "self assessed health" OR "self reported health" OR "perceived health" OR "perception of health" OR eq5d OR euroqol* OR sf36 OR "sf 36" OR "health status" OR "level of health" OR "health level*") OR AB ("life qualit*" OR "quality of life" OR qol OR hrql OR hrqol OR "self rated health" OR srh OR "subjective health" OR "self assessed health" OR "self reported health" OR "perceived health" OR "perception of health" OR eq5d OR euroqol* OR sf36 OR "sf 36" OR "health status" OR "level of health" OR "health level*")		85,937
S2	(DE "Socioeconomic Status" OR DE "Income Level" OR DE "Lower Income Level" OR DE "Middle Income Level" OR DE "Upper Income Level" OR DE "Social Class" OR DE "Lower Class" OR DE "Middle Class" OR DE "Upper Class" OR DE "Income (Economic)") OR TI (socioeconomic* OR inequalit* OR disparit* OR education* OR "social class*" OR income* OR "social gradien*" OR "social variation*") OR AB (socioeconomic* OR inequalit* OR disparit* OR education* OR "social class*" OR income* OR "social gradien*" OR "social variation*")		471,943
S1	(DE "Job Satisfaction" OR DE "Employee Engagement" OR DE "Employee Motivation" OR DE "Job Involvement" OR DE "Organizational Commitment" OR DE "Work (Attitudes Toward)" OR		

	DE "Employee Characteristics" OR DE "Employee Attitudes" OR DE "Employee Efficiency" OR DE "Employee Motivation" OR DE "Employee Productivity" OR DE "Employee Skills" OR DE "Job Experience Level" OR DE "Job Knowledge" OR DE "Work Scheduling" OR DE "Work Load" OR DE "Work-Life Balance" OR DE "Work Rest Cycles" OR DE "Quality of Work Life" OR DE "Noise Levels (Work Areas)" OR DE "Working Conditions" OR DE "Job Enrichment" OR DE "Noise Levels (Work Areas)" OR DE "Occupational Safety" OR DE "Work Rest Cycles" OR DE "Work Week Length" OR DE "Workday Shifts" OR DE "Working Space" OR DE "Occupational Status" OR DE "Occupational Stress" OR DE "Occupational Safety" OR DE "Occupational Health" OR DE "Occupational Exposure" OR DE "Occupational Attitudes" OR DE "Work Related Illnesses" OR DE "Working Conditions" OR DE "Career Development" OR DE "Career Commitment" OR DE "Occupational Aspirations" OR DE "Organizational Climate" OR DE "Diversity in the Workplace" OR DE "Organizational Behavior" OR DE "Employee Interaction" OR DE "Job Security") OR TI ("flexible contract*" OR "inflexible contract*" OR freelanc* OR "free lanc*" OR entrepreneur* OR "career opportunit*" OR "supervisor support*" OR "supervisor social*" OR "coworker support*" OR "coworker social*" OR "co worker support*" OR "co worker social*" OR "decision latitud*" OR "decision authorit*" OR "effort reward imbalanc*" OR "effort reward balanc*" OR "organisational justic*" OR "organizational justic*" OR leadership* OR overtime* OR "over time*" OR "physical exposur*" OR "toxic exposure*" OR "ergonomic exposur*" OR "occupational safet*" OR "workplace accident*" OR workload* OR lifting* OR pulling* OR "psychosocial working*" OR "organizational culture*" OR "organisational culture*" OR "time pressure*" OR "demand control model*" OR "demand control support*" OR noise OR "work related factor*" OR "work factors*" OR "work condition*" OR "working condition*" OR "work environment*" OR "working environment*" OR "work organisation*" OR "work organization*" OR "work contract*" OR "terms of employment*" OR "job insecur*" OR "insecurity at work*" OR "flexible work*" OR "inflexible work*" OR "self employe*" OR "job control*" OR "work engagement*" OR "challenging work*" OR "influence at work*" OR "work conflict*" OR "job demand*" OR "shift work*" OR "night work*" OR "working hour*" OR "working tim*" OR "work postur*" OR "physical work environment*" OR "physical work demand*" OR "heavy work*" OR "physiological job demand*" OR "physiological work demand*" OR "physical work strain*" OR "psychosocial work*" OR "work pressure*" OR "job strain*" OR "work stress*" OR "job stress*" OR "emotional work demand*" OR "perceived work demand*") OR AB ("flexible contract*" OR "inflexible contract*" OR freelanc* OR "free lanc*" OR entrepreneur* OR "career opportunit*" OR "supervisor support*" OR "supervisor social*" OR "coworker support*" OR "coworker social*" OR "co worker support*" OR "co worker social*" OR "decision latitud*" OR "decision authorit*" OR "effort reward imbalanc*" OR "effort reward balanc*" OR "organisational justic*" OR "organizational justic*" OR leadership* OR overtime* OR "over time*" OR "physical exposur*" OR "toxic exposure*" OR "ergonomic exposur*" OR "occupational safet*" OR "workplace accident*" OR workload* OR lifting* OR pulling* OR "psychosocial working*" OR "organizational culture*" OR "organisational culture*" OR "time pressure*" OR "demand control model*" OR "demand control support*" OR noise OR "work related factor*" OR "work factors*" OR "work condition*" OR "working condition*" OR "work environment*" OR "working environment*" OR "work organisation*" OR "work organization*" OR "work contract*" OR "terms of employment*" OR "job insecur*" OR "insecurity at work*" OR "flexible work*" OR "inflexible work*" OR "self employe*" OR "job control*" OR "work engagement*" OR "challenging work*" OR "influence at work*" OR "work conflict*" OR "job demand*" OR "shift work*" OR "night work*" OR "working hour*" OR "working tim*" OR "work postur*" OR "physical work environment*" OR "physical work demand*" OR "heavy work*" OR "physiological job demand*" OR "physiological work demand*" OR "physical work strain*" OR "psychosocial work*" OR		
--	---	--	--

	“work pressure*” OR “job strain*” OR “work stress*” OR “job stress*” OR “emotional work demand*” OR “perceived work demand*)		
--	---	--	--

Search strategy for Thomson Reuters/Web of Science (31 March 2017)

TOPIC = words in title, abstract or keywords

TITLE = words in title

Indexes=SCI-EXPANDED, SSCI, A&HCI, ESCI; Timespan=All years

Search	Query	Items found
#12	#10 NOT #11	2,208
#11	TITLE: (“Heart failure” OR Asthma OR “Eating disorder” OR Parkinson OR Spondylitis OR patient* OR Fibromyalgia OR Migraine OR Transplantation* OR Incontinence OR “Spinal cord injur*” OR “Dental health” OR “Dental disease*” OR Periodontal OR Rheuma* OR Surgery OR “Obstructive Pulmonary disease*” OR Schizophren* OR Dementia OR Respiratory OR Arthritis OR Osteoarthritis OR Fibromyalgia OR Hemodialysis OR Myeloma OR Bypass OR amputees OR ulcer* OR Burnout OR Implantation OR Psychiatric OR cancer OR survivor* OR disease* OR Hepatitis OR HIV OR Psoriasis OR Myocard OR Diabet*))	5,081,227
#10	#8 NOT #9	3,214
#9	TITLE: (review*)	436,882
#8	#7 OR #4	3,327
#7	#6 AND #5 AND #3 AND #2	1,144
#6	TOPIC: (employee* OR worker* OR personnel OR laborer* OR labourer* OR civil servant* OR nurse OR nurses OR “working population*” OR “working group*” OR globe)	565,871
#5	TOPIC: (lifestyle* OR “life style*” OR “health behavio*” OR “health related behavio*” OR “physical inactiv*” OR sport* OR tobacco* OR “physical activ*” OR smoking* OR smoke OR bmi OR “body mass index*” OR diet OR diets OR dietary OR exercis* OR walking OR (alcohol N3 drinking) OR overweight* OR obesity OR obese OR sedent* OR "sitting time" OR "prolonged sitting" OR "TV time" OR "TV viewing" OR "watching TV" OR "computer time" OR "computer use" OR "screen time" OR "screen time" OR "television" OR "gaming" OR "occupational sitting" OR "sitting at work" OR “body weight*” OR “normal weight*”)	1,835,481
#4	#3 AND #2 AND #1	2,366
#3	TOPIC: (“life qualit*” OR "quality of life" OR qol OR hrql OR hrqol OR “self rated health” OR srh OR “subjective health” OR “self assessed health” OR “self reported health” OR “perceived health” OR “perception of health” OR eq5d OR euroqol* OR sf36 OR “sf 36” OR "health status" OR "level of health" OR “health level*”)	315,578
#2	TOPIC: (socioeconomic* OR inequalit* OR disparit* OR education* OR “social class*” OR income* OR “social gradien*” OR “social variation*”)	1,039,716
#1	TOPIC: (“flexible contract*” OR “inflexible contract*” OR freelanc* OR “free lanc*” OR entrepreneur* OR “career opportunit*” OR “supervisor support*” OR “supervisor social*” OR “coworker support*” OR “coworker social*” OR “co worker support*” OR “co worker social*” OR “decision latitud*” OR “decision authorit*” OR “effort reward imbalanc*” OR “effort reward balanc*” OR “organisational justic*” OR “organizational justic*” OR leadership* OR overtime* OR “over time*” OR “physical exposur*” OR “toxic exposure*” OR “ergonomic exposur*” OR “occupational safet*” OR “workplace accident*” OR workload* OR lifting* OR pulling* OR “psychosocial working*” OR “organizational culture*” OR “organisational culture*” OR “time pressure*” OR “demand control model*” OR “demand control support*” OR noise OR “work related factor*” OR “work factors*” OR “work condition*” OR “working condition*” OR “work environment*” OR “working environment*” OR “work organisation*” OR “work organization*” OR “work contract*” OR “terms of employment*” OR “job insecur*” OR “insecurity at work*” OR “flexible work*” OR “inflexible work*” OR “self employe*” OR “job control*” OR “work engagement*” OR “challenging work*” OR “influence at work*” OR “work conflict*” OR “job demand*” OR “shift work*” OR “night work*” OR “working hour*” OR “working tim*” OR “work postur*” OR “physical work environment*” OR “physical work demand*” OR “heavy work*” OR “physiological job demand*” OR “physiological work demand*” OR “physical work strain*” OR “psychosocial work*” OR “work pressure*” OR “job strain*” OR “work stress*” OR “job stress*” OR “emotional work demand*” OR “perceived work demand*”)	771,722