IWH Research Alert January 26, 2018

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*Nolet PS, Kristman VL, Cote P, Carroll LJ, and Cassidy JD. The association between a lifetime history of low back injury in a motor vehicle collision and future low back pain: a population-based cohort study. European Spine Journal. 2018; 27(1):136-144.

http://dx.doi.org/10.1007/s00586-017-5090-y

Abstract: PURPOSE: This population-based cohort study investigated the association between a lifetime history of a low back injury in a motor vehicle collision (MVC) and future troublesome low back pain. Participants with a history of a low back injury in a motor vehicle collision who had recovered (no or mild low back pain) were compared to those without a history of injury. Current evidence from two cross-sectional and one prospective study suggests that individuals with a history of a low back injury in a MVC are more likely to experience future LBP. There is a need to test this association prospectively in population-based cohorts with adequate control of known confounders. METHODS: We formed a cohort of 789 randomly sampled Saskatchewan adults with no or mild LBP. At baseline, participants were asked if they had ever injured their low back in a MVC. Six and 12 months later, participants were asked about the presence of troublesome LBP (grade II-IV) on the Chronic Pain Grade Questionnaire. Multivariable Cox proportional hazards regression analysis was used to estimate the association while controlling for known confounders. RESULTS: The follow-up rate was 74.8% (590/789) at 6 months and 64.5% (509/789) at 12 months. There was a positive crude association between a history of low back injury in a MVC and the development of troublesome LBP over a 12-month period (HRR = 2.76; 95% CI 1.42-5.39). Controlling for arthritis reduced this association (HRR = 2.25; 95% CI 1.11-4.56). Adding confounders that may be on the casual pathway (baseline LBP, depression and HRQoL) to

the multivariable model further reduced the association (HRR = 2.20; 95% CI 1.04-4.68). CONCLUSION: Our analysis suggests that a history of low back injury in a MVC is a risk factor for developing future troublesome LBP. The consequences of a low back injury in a MVC can predispose individuals to experience recurrent episodes of low back pain

Bumble JL, Carter EW, McMillan ED, and Manikas AS. Using community conversations to expand employment opportunities of people with disabilities in rural and urban communities. Journal of Vocational Rehabilitation. 2017; 47(1):65-78.

http://dx.doi.org/10.3233/JVR-170883

Butterworth J, Christensen J, and Flippo K. Partnerships in Employment: building strong coalitions to facilitate systems change for youth and young adults. Journal of Vocational Rehabilitation. 2017; 47(3):265-276. http://dx.doi.org/10.3233/JVR-170901

Chao TK, Sun C, and Beach JR. Developing a tool for identifying high-risk employers for inspection. Occupational Medicine. 2017; 67(8):609-614. http://dx.doi.org/10.1093/occmed/kgx136

Abstract: Background: Workers' Compensation Board (WCB) data and other information are sometimes used to calculate an 'Occupational Health and Safety (OHS) index' as a way of identifying businesses considered 'high risk' to be inspected as part of enforcement work. However, no evidence on the validity of this index exists. Aims: To evaluate the performance of the Alberta OHS index, a 'score' based largely on WCB claims data, and to see if an index calculated using different information could perform better. Methods: Data from the Alberta Compliance Management Information System database, 2011-2015, and WCB claim database, 2007-2014, were retrieved. Issuing 'stop work' or 'stop use' orders in inspections was defined as a proxy of high-risk outcome. The performance of the current and a modified OHS index were assessed using receiver operating characteristics (ROC) and regression analyses. Results: In large employers, neither the current nor the modified OHS index was particularly effective in identifying 'high risk' employers with the area under the ROC curve (AROC) of 0.55 (95% confidence interval [CI] 0.52-0.57; P < 0.001) and 0.59 (95% CI 0.57-0.62; P < 0.001), respectively. In small employers, neither index seemed very effective with an AROC of 0.54 (95% CI 0.53-0.56; P < 0.001) and 0.55 (95% CI 0.53-0.56; P < 0.001), respectively. These results were consistent in subgroup analyses of assignments without specific initiatives, both in large and small employers. Conclusions: Neither the current nor a modified OHS index seemed to effectively identify high-risk employers. Heterogeneous results in large and small employers suggest that approaches to different-sized employers are appropriate

Cichy KE, Leslie M, Rumrill PD, and Koch LC. Population aging and disability: implications for vocational rehabilitation practice. Journal of



Vocational Rehabilitation. 2017; 47(2):185-196. http://dx.doi.org/10.3233/JVR-170894

Cooper C, Booth A, Britten N, and Garside R. A comparison of results of empirical studies of supplementary search techniques and recommendations in review methodology handbooks: a methodological review. Systematic Reviews. 2017; 6(1):234.

http://dx.doi.org/10.1186/s13643-017-0625-1 [open access] Abstract: BACKGROUND: The purpose and contribution of supplementary search methods in systematic reviews is increasingly acknowledged. Numerous studies have demonstrated their potential in identifying studies or study data that would have been missed by bibliographic database searching alone. What is less certain is how supplementary search methods actually work, how they are applied, and the consequent advantages, disadvantages and resource implications of each search method. The aim of this study is to compare current practice in using supplementary search methods with methodological guidance. METHODS: Four methodological handbooks in informing systematic review practice in the UK were read and audited to establish current methodological guidance. Studies evaluating the use of supplementary search methods were identified by searching five bibliographic databases. Studies were included if they (1) reported practical application of a supplementary search method (descriptive) or (2) examined the utility of a supplementary search method (analytical) or (3) identified/explored factors that impact on the utility of a supplementary method, when applied in practice. RESULTS: Thirty-five studies were included in this review in addition to the four methodological handbooks. Studies were published between 1989 and 2016, and dates of publication of the handbooks ranged from 1994 to 2014. Five supplementary search methods were reviewed: contacting study authors, citation chasing, handsearching, searching trial registers and web searching. CONCLUSIONS: There is reasonable consistency between recommended best practice (handbooks) and current practice (methodological studies) as it relates to the application of supplementary search methods. The methodological studies provide useful information on the effectiveness of the supplementary search methods, often seeking to evaluate aspects of the method to improve effectiveness or efficiency. In this way, the studies advance the understanding of the supplementary search methods. Further research is required, however, so that a rational choice can be made about which supplementary search strategies should be used, and when

Fevre R. Why work is so problematic for people with disabilities and long-term health problems. Occupational Medicine. 2017; 67(8):593-595. http://dx.doi.org/10.1093/occmed/kgx072

Fimland MS, Vie G, Holtermann A, Krokstad S, and Nilsen TIL. Occupational and leisure-time physical activity and risk of disability pension: prospective data from the HUNT Study, Norway. Occupational & Environmental Medicine. 2018; 75(1):23-28.

http://dx.doi.org/10.1136/oemed-2017-104320 [open access]

Abstract: OBJECTIVES: To prospectively investigate the association between occupational physical activity (OPA) and disability pension due to musculoskeletal cause, mental cause or any cause. We also examined the combined association of OPA and leisure-time physical activity (LTPA) with disability pension. METHODS: A population-based cohort study in Norway on 32 362 persons aged 20-65 years with questionnaire data on OPA and LTPA that were followed up for incident disability pension through the National Insurance Database. We used Cox regression to estimate adjusted HRs with 95% Cls. RESULTS: During a follow-up of 9.3 years, 3837 (12%) received disability pension. Compared with people with mostly sedentary work, those who performed much walking, much walking and lifting, and heavy physical work had HRs of 1.26 (95% CI 1.16 to 1.38), 1.44 (95% CI 1.32 to 1.58) and 1.48 (95% CI 1.33 to 1.70), respectively. These associations were stronger for disability pension due to musculoskeletal disorders, whereas there was no clear association between OPA and risk of disability pension due to mental disorders. People with high OPA and low LTPA had a HR of 1.77 (95% CI 1.58 to 1.98) for overall disability pension and HR of 2.56 (95% CI 2.10 to 3.11) for disability pension due to musculoskeletal disorders, versus low OPA and high LTPA. CONCLUSIONS: We observed a positive association between OPA and risk of disability pension due to all causes and musculoskeletal disorders, but not for mental disorders. Physical activity during leisure time reduced some, but not all of the unfavourable effect of physically demanding work on risk of disability pension

Gregorius S, Dean L, Cole DC, and Bates I. The peer review process for awarding funds to international science research consortia: a qualitative developmental evaluation [version 2]. F1000Research. 2017; 6:1808. http://dx.doi.org/10.12688/f1000research.12496.2

Abstract: Background: Evaluating applications for multi-national, multidisciplinary, dual-purpose research consortia is highly complex. There has been little research on the peer review process for evaluating grant applications and almost none on how applications for multi-national consortia are reviewed. Overseas development investments are increasingly being channelled into international science consortia to generate high-quality research while simultaneously strengthening multi-disciplinary research capacity. We need a better understanding of how such decisions are made and their effectiveness. Methods: An award-making institution planned to fund 10 UK-Africa research consortia. Over two annual rounds, 34 out of 78 eligible applications were shortlisted and reviewed by at least five external reviewers before final selections were made by a face-to-face panel. We used an innovative approach involving structured, overt observations of award-making panel meetings and semistructured interviews with panel members to explore how assessment criteria concerning research quality and capacity strengthening were applied during the peer review process. Data were coded and analysed using pre-designed

matrices which incorporated categories relating to the assessment criteria. Results: In general the process was rigorous and well-managed. However, lack of clarity about differential weighting of criteria and variations in the panel's understanding of research capacity strengthening resulted in some inconsistencies in use of the assessment criteria. Using the same panel for both rounds had advantages, in that during the second round consensus was achieved more quickly and the panel had increased focus on development aspects. Conclusion: Grant assessment panels for such complex research applications need to have topic- and context-specific expertise. They must also understand research capacity issues and have a flexible but equitable and transparent approach. This study has developed and tested an approach for evaluating the operation of such panels and has generated lessons that can promote coherence and transparency among grant-makers and ultimately make the award-making process more effective

Hall AL, Franche RL, and Koehoorn M. Examining exposure assessment in shift work research: a study on depression among nurses. Annals of Work Exposures and Health. 2018; [Epub ahead of print]. http://dx.doi.org/10.1093/annweh/wxx103

Abstract: Introduction: Coarse exposure assessment and assignment is a common issue facing epidemiological studies of shift work. Such measures ignore a number of exposure characteristics that may impact on health, increasing the likelihood of biased effect estimates and masked exposureresponse relationships. To demonstrate the impacts of exposure assessment precision in shift work research, this study investigated relationships between work schedule and depression in a large survey of Canadian nurses. Methods: The Canadian 2005 National Survey of the Work and Health of Nurses provided the analytic sample (n = 11450). Relationships between work schedule and depression were assessed using logistic regression models with high, moderate. and low-precision exposure groupings. The high-precision grouping described shift timing and rotation frequency, the moderate-precision grouping described shift timing, and the low-precision grouping described the presence/absence of shift work. Final model estimates were adjusted for the potential confounding effects of demographic and work variables, and bootstrap weights were used to generate sampling variances that accounted for the survey sample design. Results: The high-precision exposure grouping model showed the strongest relationships between work schedule and depression, with increased odds ratios [ORs] for rapidly rotating (OR = 1.51, 95% confidence interval [CI] = 0.91-2.51) and undefined rotating (OR = 1.67, 95% CI = 0.92-3.02) shift workers, and a decreased OR for depression in slow rotating (OR = 0.79, 95% CI = 0.57-1.08) shift workers. For the low- and moderate-precision exposure grouping models, weak relationships were observed for all work schedule categories (OR range 0.95 to 0.99). Conclusions: Findings from this study support the need to consider and collect the data required for precise and conceptually driven exposure assessment and assignment in future studies of shift work and health. Further

research into the effects of shift rotation frequency on depression is also recommended

Hartfiel N, Clarke G, Havenhand J, Phillips C, and Edwards RT. Cost-effectiveness of yoga for managing musculoskeletal conditions in the workplace. Occupational Medicine. 2017; 67(9):687-695. http://dx.doi.org/10.1093/occmed/kgx161

Abstract: Background: Back pain and musculoskeletal conditions negatively affect the health-related quality of life (HRQL) of employees and generate substantial costs to employers. Aims: To assess the cost-effectiveness of yoga for managing musculoskeletal conditions. Methods: A randomized controlled trial evaluated an 8-week yoga programme, with a 6-month follow-up, for National Health Service (NHS) employees. Effectiveness in managing musculoskeletal conditions was assessed using repeated-measures generalized linear modelling for the Roland-Morris Disability Questionnaire (RDQ) and the Keele STarT Back Screening Tool. Cost-effectiveness was determined using area-under-the-curve linear regression for assessing HRQL from healthcare and societal perspectives. The incremental cost per quality-adjusted life year (QALY) was also calculated. Sickness absence was measured using electronic staff records at 6 months. Results: There were 151 participants. At 6 months, mean differences between groups favouring voga were observed for RDQ [-0.63 (95% CI, -1.78, 0.48)]. Keele STarT [-0.28 (95% CI, -0.97, 0.07)] and HRQL (0.016 QALY gain). From a healthcare perspective, yoga yielded an incremental cost-effectiveness ratio of pound2103 per QALY. Given a willingness to pay for an additional QALY of pound20 000, the probability of yoga being cost-effective was 95%. From a societal perspective, yoga was the dominant treatment compared with usual care. At 6 months, electronic staff records showed that yoga participants missed a total of 2 working days due to musculoskeletal conditions compared with 43 days for usual care participants. Conclusions: Yoga for NHS employees may enhance HRQL, reduce disability associated with back pain, lower sickness absence due to musculoskeletal conditions and is likely to be cost-effective

loannidis J. Next-generation systematic reviews: prospective metaanalysis, individual-level data, networks and umbrella reviews. British Journal of Sports Medicine. 2017; 51(20):1456-1458. http://dx.doi.org/10.1136/bjsports-2017-097621

Kaldo V, Lundin A, Hallgren M, Kraepelien M, Strid C, Ekblom O, Lavebratt C, Lindefors N, Ojehagen A, and Forsell Y. Effects of internet-based cognitive behavioural therapy and physical exercise on sick leave and employment in primary care patients with depression: two subgroup analyses. Occupational & Environmental Medicine. 2018; 75(1):52-58. http://dx.doi.org/10.1136/oemed-2017-104326 [open access]

Abstract: OBJECTIVES: Depression can negatively impact work capacity, but treatment effects on sick leave and employment are unclear. This study evaluates if internet-based cognitive behavioural therapy (ICBT) or physical

exercise (PE), with already reported positive effects on clinical outcome and short-term work ability, has better effects on employment, sick leave and longterm work ability compared with treatment as usual (TAU) for depressed primary care patients (German clinical trials: DRKS00008745). METHODS: After randomisation and exclusion of patients not relevant for work-related analysis. patients were divided into two subgroups: initially unemployed (total n=118) evaluated on employment, and employed (total n=703) evaluated on long-term sick leave. Secondary outcomes were self-rated work ability and average number of sick days per month evaluated for both subgroups. Assessments (self-reports) were made at baseline and follow-up at 3 and 12 months. RESULTS: For the initially unemployed subgroup, 52.6% were employed after 1 year (response rate 82%). Both PE (risk ratio (RR)=0.44; 95% CI 0.23 to 0.87) and ICBT (RR=0.37; 95% CI 0.16 to 0.84) showed lower rates compared with TAU after 3 months, but no difference was found after 1 year (PE: RR=0.97; 95% CI 0.69 to 1.57; ICBT: RR=1.23; 95% CI 0.72 to 2.13). For those with initial employment, long-term sick leave (response rate 75%) decreased from 7.8% to 6.5%, but neither PE (RR=1.4; 95% CI 0.52 to 3.74) nor ICBT (RR=0.99; 95% CI 0.39 to 2.46) decreased more than TAU, although a temporary positive effect for PE was found. All groups increased self-rated work ability with no differences found. CONCLUSIONS: No long-term effects were found for the initially unemployed on employment status or for the initially employed on sick leave. New types of interventions need to be explored

Laukkala T, Heikinheimo S, Vuokko A, Junttila IS, and Tuisku K. Subjective and objective measures of function and return to work: an observational study with a clinical psychiatric cohort. Social Psychiatry and Psychiatric Epidemiology. 2017; [Epub ahead of print].

http://dx.doi.org/10.1007/s00127-017-1479-5

Abstract: PURPOSE: To evaluate the association between two measurement tools (Social and Occupational Functioning Assessment Scale, SOFAS and Sheehan Disability Scale, SDS), returning to work (RTW) and their intercorrelation. METHODS: 132 psychiatric patients referred to assessment of work ability participated. The association between SOFAS and SDS Work to RTW were assessed by logistic regression. Inter-correlations between SOFAS and SDS were assessed with the Spearman's rho correlation coefficient. RESULTS: SOFAS and SDS Work scores were associated with a 1-year RTW and SOFAS and SDS were inter-correlated. CONCLUSIONS: When assigning the ability to work, both subjective and objective measures of function predict RTW

Louwerse I, Huysmans MA, van Rijssen HJ, van der Beek AJ, and Anema JR. Characteristics of individuals receiving disability benefits in the Netherlands and predictors of leaving the disability benefit scheme: a retrospective cohort study with five-year follow-up. BMC Public Health. 2018; 18(1):157.

http://dx.doi.org/10.1186/s12889-018-5068-7 [open access]



Abstract: BACKGROUND: Today, work disability is one of the greatest social and labour market challenges for policy makers in most OECD countries, where on average, about 6% of the working-age population relies on disability benefits. Understanding of factors associated with long-term work disability may be helpful to identify groups of individuals at risk for disability benefit entitlement or continuing eligibility, and to develop effective interventions for these groups. The purpose of this study is to provide insight into the main diagnoses of workers who qualify for disability benefits and how these diagnoses differ in age, gender and education. Using a five-year follow-up, we examined the duration of disability benefits and how durations differ among individuals with various characteristics. METHODS: We performed a cohort study of 31,733 individuals receiving disability benefits from the Dutch Social Security Institute (SSI) with a five-year follow-up. Data were collected from SSI databases. Information about disorders was assessed by an insurance physician upon benefit application. These data were used to test for significant relationships among socio-demographics, main diagnoses and comorbidity, and disability benefit entitlement and continuing eligibility. RESULTS: Mental disorders were the most frequent diagnosis for individuals claiming work disability. Diagnoses differed among age groups and education categories. Mental disorders were the main diagnosis for work disability for younger and more highly educated individuals, and physical disorders (generally musculoskeletal, cardiovascular and cancer) were the main diagnosis for older and less educated individuals. In 82% of the claims, the duration of disability benefit was five years or more after approval. Outflow was lowest for individuals with (multiple) mental disorders and those with comorbidity of mental and physical disorders, and highest for individuals with (multiple) physical disorders. CONCLUSIONS: The main diagnosis for persons entitled to disability benefits was mental health problems, especially for young women. In a five-year follow-up, claim duration for disability benefits was long lasting for most claimants

Morissette R. Barriers to labour mobility in Canada: survey-based evidence. Economic Insights. 2017; (76):1-6. [Statistics Canada, Catalogue no. 11-626-X - No. 076]

http://www.statcan.gc.ca/pub/11-626-x/11-626-x2017076-eng.pdf

Morissette R. The effect of labour demand on regional demographics. Economic Insights. 2018; (79):1-8. [Statistics Canada, Catalogue no. 11-626-X - No. 079]

http://www.statcan.gc.ca/pub/11-626-x/11-626-x2018079-eng.pdf

Nigatu YT and Wang J. The combined effects of job demand and control, effort-reward imbalance and work-family conflicts on the risk of major depressive episode: a 4-year longitudinal study. Occupational & Environmental Medicine. 2018; 75(1):6-11.

http://dx.doi.org/10.1136/oemed-2016-104114

Abstract: PURPOSE: Work-related psychosocial factors may precipitate the



onset of depression. In occupational mental health research, there are three widely used theoretical models, namely, job demand and control (JD-C), effortreward imbalance (ERI) and work-family conflicts (WFC). However, the interaction between these models and their combined effect on the risk of major depression in the workplace is largely unknown. The aim of this study is to examine the longitudinal combined effects of JD-C, ERI and WFC on the risk of major depression in the working population. METHODS: Longitudinal data (2008-2013) were collected on randomly selected participants (n=4200) from the working population of the province of Alberta, Canada, at baseline and 1-, 2-, 3and 4-year follow-up. Data about JD-C, ERI, WFC and major depression were collected by trained interviewers using a computer-assisted telephone interviewing method. Generalised estimating equations for longitudinal modelling were used. RESULTS: There was an independent association between high ERI and high WFC at tx and major depression at tx+1 (OR 1.56, 95% CI 1.25 to 1.96; OR 1.33, 95% CI 1.16 to 1.52), respectively. The combined effects of JD-C and ERI, ERI and WFC, and WFC and JD-C on the risk of major depression were as follows: OR 1.71, 95% CI 1.22 to 2.42, OR 2.47, 95% CI 1.99 to 3.49 and OR 2.21, 95% CI 1.48 to 3.30, respectively. The relative excess risks attributable to the interactions were statistically non-significant. CONCLUSIONS: Work-related psychosocial factors are associated with increased risk of major depression over time, but their combined effect is not synergistic. The effects of the factors depicted in the three occupational health models on the risk of major depression appear to be additive

Papakonstantinou D and Papadopoulos K. The impact of information on employers' attitudes towards employees with visual impairments. Journal of Vocational Rehabilitation. 2017; 47(1):99-107. http://dx.doi.org/10.3233/JVR-170886

Reed KS, Meade M, Jarnecke M, Rumrill P, and Krause JS. Disclosing disability in the employment setting: perspectives from workers with multiple sclerosis. Journal of Vocational Rehabilitation. 2017; 47(2):175-184.

http://dx.doi.org/10.3233/JVR-170893

Schaap R, de Wind A, Coenen P, Proper K, and Boot C. The effects of exit from work on health across different socioeconomic groups: a systematic literature review. Social Science & Medicine. 2017; 198:36-45. http://dx.doi.org/10.1016/j.socscimed.2017.12.015

Abstract: Exit from work leads to different effects on health, partially depending on the socioeconomic status (SES) of people in the work exit. Several studies on the effects of exit from work on health across socioeconomic groups have been performed, but results are conflicting. The aim of this review is to systematically review the available evidence regarding the effects of exit from work on health in high and low socioeconomic groups. A systematic literature search was conducted using Pubmed, Embase, Web of Science, CINAHL and PsycINFO.



Search terms related to exit from work, health, SES and design (prospective or retrospective). Articles were included if they focused on: exit from work (early/statutory retirement, unemployment or disability pension); health (general, physical or mental health and/or health behaviour); SES (educational, occupational and/or income level); and inclusion of stratified or interaction analyses to determine differences across socioeconomic groups. This search strategy resulted in 22 studies. For general, physical or mental health and health behaviour, 13 studies found more positive effects of exit from work on health among employees with a higher SES compared to employees with a lower SES. These effects were mainly found after early/statutory retirement. In conclusion, the effects of exit from work, or more specific the effects of early/statutory retirement on health are different across socioeconomic groups. However, the findings of this review should be interpreted with caution as the studies used heterogeneous health outcomes and on each health outcome a limited number of studies was included. Yet, the positive effects of exit from work on health are mainly present in higher socioeconomic groups. Therefore, public health policies should focus on improving health of employees with a lower SES, in particular after exit from work to decrease health inequalities

Sundstrup E, Hansen AM, Mortensen EL, Poulsen OM, Clausen T, Rugulies R, Moller A, and Andersen LL. Retrospectively assessed psychosocial working conditions as predictors of prospectively assessed sickness absence and disability pension among older workers. BMC Public Health. 2018; 18(1):149.

http://dx.doi.org/10.1186/s12889-018-5047-z [open access]

Abstract: BACKGROUND: The aim was to explore the association between retrospectively assessed psychosocial working conditions during working life and prospectively assessed risk of sickness absence and disability pension among older workers. METHODS: The prospective risk of register-based long-term sickness absence (LTSA) and disability pension was estimated from exposure to 12 different psychosocial work characteristics during working life among 5076 older workers from the CAMB cohort (Copenhagen Aging and Midlife Biobank). Analyses were censored for competing events and adjusted for age, gender, physical work environment, lifestyle, education, and prior LTSA. RESULTS: LTSA was predicted by high levels of cognitive demands (HR 1.31 (95% CI 1.10-1.56)), high levels of emotional demands (HR 1.26 (95% CI 1.07-1.48)), low levels of influence at work (HR 1.30 (95% CI 1.03-1.64)), and high levels of role conflicts (HR 1.34 (95% CI 1.09-1.65)). Disability pension was predicted by low levels of influence at work (HR 2.73 (95% CI 1.49-5.00)) and low levels of recognition from management (HR 2.04 (95% CI 1.14-3.67)). CONCLUSIONS: This exploratory study found that retrospectively assessed high cognitive demands, high and medium emotional demands, low influence at work, low recognition from management, medium role clarity, and high role conflicts predicted LTSA and/or disability pension

Tucker K, Feng H, Gruman C, and Crossen L. Improving competitive integrated employment for youth and young adults with disabilities: findings from an evaluation of eight Partnerships in Employment Systems Change Projects. Journal of Vocational Rehabilitation. 2017; 47(3):277-294. http://dx.doi.org/10.3233/JVR-170902

Wang S, Sanderson K, Venn A, Dwyer T, and Gall S. Association between childhood health, socioeconomic and school-related factors and effort-reward imbalance at work: a 25-year follow-up study. Occupational & Environmental Medicine. 2018; 75(1):37-45.

http://dx.doi.org/10.1136/oemed-2017-104308

Abstract: OBJECTIVES: Stress pathways can have origins in childhood, but few early predictors have been explored in relation to adult job stress. This study examined whether childhood school, health or socioeconomic factors were associated with adult job stress. METHODS: Data came from the Childhood Determinants of Adult Health study that began in 1985 with children aged 7-15 years who reported effortreward imbalance (ERI) scales at ages 31-41 years. Linear regression assessed the association between childhood factors and adult ERI adjusted for age and socioeconomic position (SEP) in childhood and adulthood. RESULTS: There were between 999 and 1390 participants in each analysis. Lower adulthood ERI, indicating less job stress, was predicted by several school-related factors in men. For example, each higher category of learner self-concept was associated with a 19% (95% CI - 32% to 6%) reduction in adult ERI, and each unit increase in academic attainment was associated with a 15% (95% CI -28% to 3%) reduction in adult ERI. Childhood health was associated with adult ERI. For example, in women, overweight children had 14% (95% CI 5% to 22%) higher adult ERI scores compared with healthy weight children, and each unit of negative affect was associated with 2% (95% CI 1% to 4%) increase in adult ERI. Adult SEP had no effect on these associations for men but explained some of the effect in women. Childhood SEP had inconsistent associations with adult ERI. CONCLUSION: Our findings suggest that a range of childhood socioeconomic, school- and health-related factors might contribute to the development of job stress in adulthood

Wienert J, Spanier K, Radoschewski FM, and Bethge M. Work ability, effortreward imbalance and disability pension claims. Occupational Medicine. 2017; 67(9):696-702.

http://dx.doi.org/10.1093/occmed/kgx164

Abstract: Background: Effort-reward imbalance (ERI) and self-rated work ability are known independent correlates and predictors of intended disability pension claims. However, little research has focused on the interrelationship between the three and whether self-rated work ability mediates the relationship between ERI and intended disability pension claims. Aims: To investigate whether self-rated work ability mediates the association between ERI and intended disability pension claims. Methods: Baseline data from participants of the Third German

Sociomedical Panel of Employees, a 5-year cohort study that investigates determinants of work ability, rehabilitation utilization and disability pensions in employees who have previously received sickness benefits, were analysed. We tested direct associations between ERI with intended disability pension claims (Model 1) and self-rated work ability (Model 2). Additionally, we tested whether work ability mediates the association between ERI and intended disability pension claims (Model 3). Results: There were 2585 participants. Model 1 indicated a significant association between ERI and intended disability pension claims. Model 2 showed a significant association between ERI and self-rated work ability. The mediation in Model 3 revealed a significant indirect association between ERI and intended disability pension claims via self-rated work ability. There was no significant direct association between ERI and intended disability pension claims. Conclusions: Our results support the adverse health-related impact of ERI on self-rated work ability and intended disability pension claims

IWH authored publication.