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February 23, 2018

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Aasdahl L, Pape K, Jensen C, Vasseljen O, Braathen T, Johnsen R, and Fimland MS. Associations between the readiness for return to work scale and return to work: a prospective study. *Journal of Occupational Rehabilitation*. 2018; 28(1):97-106.

<http://dx.doi.org/10.1007/s10926-017-9705-2>

Abstract: Purpose To explore the usefulness of the Readiness for return to work scale in individuals participating in occupational rehabilitation, by assessing the association between the scale and return to work (RTW), and comparing the scale to a question assessing individuals' expectations about length of sick leave. Method Prospective cohort study with 9 months follow-up. Participants took part in one of two randomized clinical trials. Associations between the Readiness for RTW scale and RTW was analyzed using linear and logistic regression, with adjustment for age, gender and education. The Readiness for RTW scale was compared to a self-reported question assessing participants' expectations about length of sick leave using adjusted/pseudo R². Results For participants not working (n = 96), high scores on two dimensions (Prepared for action-self-evaluative and Prepared for action-behavioral) were associated with a higher probability of sustainable RTW and more working days. For those working (n = 121), high scores on the Uncertain maintenance dimension was associated with a lower probability of sustainable RTW and less working days. Generally, models including the Readiness for RTW dimensions were not as good at explaining work outcomes as models including a single expectation question. Stage allocation, allocating participants to the dimension with the highest score, was problematic due to several tied scores between (not necessarily adjacent) dimensions. Conclusions Three of the Readiness for RTW dimensions were

associated with RTW. However, several weaknesses with the Readiness for RTW scale were established and we particularly do not recommend the stage allocation approach for clinical use in its current form

Adams J, Kawchuk G, Breen A, De Carvalho D, Eklund A, Fernandez M, Funabashi M, Holmes MM, Johansson MS, de Luca K, Moore C, Page I, Pohlman KA, Swain MS, Wong AYL, and Hartvigsen J. Leadership and capacity building in international chiropractic research: introducing the chiropractic academy for research leadership (CARL). *Chiropractic & Manual Therapies*. 2018; 26:5.

<http://dx.doi.org/10.1186/s12998-018-0173-3> [open access]

Abstract: In an evidence-based health care environment, healthcare professions require a sustainable research culture to remain relevant. At present however, there is not a mature research culture across the chiropractic profession largely due to deficiencies in research capacity and leadership, which may be caused by a lack of chiropractic teaching programs in major universities. As a response to this challenge the Chiropractic Academy for Research Leadership, CARL, was created with the aim of develop a global network of successful early-career chiropractic researchers under the mentorship of three successful senior academics from Australia, Canada, and Denmark. The program centres upon an annual week-long program residential that rotates continental locations over the first three-year cycle and between residentials the CARL fellows work on self-initiated research and leadership initiatives. Through a competitive application process, the first cohort was selected and consists of 13 early career researchers from five professions in seven countries who represent diverse areas of interests of high relevance for chiropractic. The first residential was held in Odense, Denmark, with the second being planned in April 2018 in Edmonton, Canada, and the final residential to be held in Sydney, Australia in 2019

Asih S, Neblett R, Mayer TG, and Gatchel RJ. Does the length of disability between injury and functional restoration program entry affect treatment outcomes for patients with chronic disabling occupational musculoskeletal disorders? *Journal of Occupational Rehabilitation*. 2018; 28(1):57-67.

<http://dx.doi.org/10.1007/s10926-016-9691-9>

Abstract: Purpose Functional restoration programs (FRPs), for patients with chronic disabling occupational musculoskeletal disorders (CDOMDs), have consistently demonstrated positive socioeconomic treatment outcomes, including decreased psychosocial distress and increased work return. The pre-treatment length of disability (LOD), or time between injury and treatment admission, has been shown to influence FRP work outcomes. Some studies have found that shorter LOD is associated with better work outcomes. However, few studies have actually examined cohorts with LOD duration longer than 18 months. This present study evaluated the effects of extended LOD (beyond 18 months) on important treatment outcomes. Methods A total cohort of 1413 CDOMD patients entered an FRP. Of those, 312 did not complete the program, so they were

eliminated from outcome analyses. The 1101 patients who completed the FRP were classified based on LOD: Late Rehabilitation (LR, 3-6 months, n = 190); Chronic Disability (CD, 7-17 months, n = 494); and Late Chronic Disability (LCD). The LCD, in turn, consisted of four separate subgroups: 18-23 months (LCD-18, n = 110); 24-35 months (LCD-24, n = 123); 36-71 months (LCD-36, n = 74); and 72+ months (LCD-72, n = 110). Patients were evaluated upon admission and were reassessed at discharge. Those patients who chose to pursue work goals post-treatment (n = 912) were assessed 1-year later. Results Longer LOD was associated with less likelihood of completing the FRP ($p < .001$). Compared to the other LOD groups, a relatively large percentage of patients (47%) in the longest- disability group were receiving social security disability benefits. Associations were found between longer LOD and more severe patient-reported pain, disability, and depressive symptoms at treatment admission. At discharge, symptom severity decreased for these patient-reported variables in all LOD groups ($p < .001$). Using binary logistic regressions, it was found that LOD significantly predicted work-return (Wald = 11.672, $p = .04$) and work-retention (Wald = 11.811, $p = .04$) after controlling for covariates. Based on the LOD groups, the percentage of patients returning to, and retaining work, ranged from 75.6 to 94.1%, and from 66.7 to 86.3%, respectively. The odds of LCD-24 and LCD-72 patients returning to work were 2.9, and 7.4, respectfully, less likely, compared to LR patients. Furthermore, the odds of LCD-24 and LCD-72 patients retaining work were 3.3 and 3.8 times, respectively, less likely, compared to LR patients. Conclusions Long LOD was a risk factor for FRP non-completion, and was associated with more severe patient-reported variables, including pain intensity and perceived disability. Furthermore, long LOD was a significant predictor for work outcomes at 1 year following FRP discharge. Nevertheless, a large percentage of longer LOD (>24 months) patients had returned to work within the year after discharge (above 85%), and had retained at least part-time work 1-year later (above 66%). These results support the effectiveness of the FRP in mitigating the effects of extended LOD in a large percentage of long-term LOD patients

Bainbridge HTJ and Fujimoto Y. Job seekers with musculoskeletal or sensory disabilities: barriers and facilitators of job search. *British Journal of Management*. 2018; 29(1):82-98.

<http://dx.doi.org/10.1111/1467-8551.12266>

Burgess-Limerick R. Participatory ergonomics: evidence and implementation lessons. *Applied Ergonomics*. 2018; 68:289-293.

<http://dx.doi.org/10.1016/j.apergo.2017.12.009> [open access]

Abstract: Participatory ergonomics programs have been proposed as the most effective means of eliminating, or redesigning, manual tasks with the aim of reducing the incidence of occupational musculoskeletal disorders. This review assesses the evidentiary basis for this claim; describes the range of approaches which have been taken under the banner of participatory ergonomics in diverse

industries; and collates the lessons learned about the implementation of such programs

Cieza A, Sabariego C, Bickenbach J, and Chatterji S. Rethinking disability. BMC Medicine. 2018; 16(1):14.

<http://dx.doi.org/10.1186/s12916-017-1002-6> [open access]

Abstract: Disability as a health outcome deserves more attention than it has so far received. With people living longer and the epidemiological transition from infectious to noncommunicable diseases as the major cause of health burden, we need to focus attention on disability - the non-fatal impact of health conditions - over and above our concern for causes of mortality. With the first Global Burden of Disease study, WHO provided a metric that enabled the comparison of the impact of diseases, drawing on a model of disability that focused on decrements of health. This model has since been elaborated in the International Classification of Functioning, Disability and Health as being either a feature of the individual or arising out of the interaction between the individual's health condition and contextual factors. The basis of WHO's ongoing work is a set of principles: that disability is a universal human experience; that disability is not determined solely by the underlying health condition or predicated merely on the presence of specific health conditions; and finally, that disability lies on a continuum from no to complete disability. To determine whether interventions at individual or population levels are effective, an approach to disability measurement that allows for an appropriate and fair comparison across health conditions is needed. WHO has designed the Model Disability Survey (MDS) to collect information relevant to understand the lived experience of disability, including the person's capacity to perform tasks actions in daily life, their actual performance, the barriers and facilitators in the environment they experience, and their health conditions. As disability gains prominence within the development agenda in the United Nations Sustainable Development Goals, and the implementation of the United Nations Convention on the Rights of Persons with Disabilities, the MDS will provide the data to monitor the progress of countries on meeting their obligations. The lesson learned from WHO's activities is that disability is a universal human experience, in the sense that everyone can be placed on a continuum of functioning and either currently experiences or is vulnerable to experiencing disability over the course of their lives. This understanding of disability is the key to mainstreaming disability within the public discourse

Glinka M, Metzger S, Viggiani D, and Callaghan J. The effect of task type and perceived demands on postural movements during standing work. Applied Ergonomics. 2018; 69:146-152.

<http://dx.doi.org/10.1016/j.apergo.2018.01.015>

Hansen MC, Aagaard T, Christensen HW, and Hartvigsen J. Work-related acute physical injuries, chronic overuse complaints, and the psychosocial work environment in Danish primary care chiropractic practice: a cross-sectional study. Chiropractic & Manual Therapies. 2018; 26:4.

<http://dx.doi.org/10.1186/s12998-018-0174-2> [open access]

Abstract: Background: Little is known about the physical and psychosocial work environment of chiropractors and their work-related health complaints, and this has never been described for Danish chiropractors. The aim of this study was, therefore, to describe work-related acute physical injuries, overuse complaints, and psychosocial stress in Danish chiropractic work settings. Methods: We developed a questionnaire specifically for this study and distributed it electronically in August 2016 using SurveyXact to all 575 members of the Danish Chiropractors' Association working in primary care clinics. Chiropractors were asked about their work-related acute physical injuries and overuse complaints as well as any psychosocial stress they experienced at work during the previous year. We described our sample and variables using means, medians, ranges, and confidence intervals where appropriate. Statistically significant differences between genders, types of complaints and injuries, and between clinic owners and associates were examined using Chi-square and Fischer's exact tests, where appropriate, or by examining confidence intervals for non-overlap. Results: 355 (65.2%) chiropractors answered the survey. Of these, 216 (61%, 95% CI 56-66) had experienced a work-related acute physical injury and/or overuse complaint during the previous year. Work-related overuse complaints were most commonly reported in the low back, wrist, thumb, and shoulder, and were more common among women (63%, 95% CI 56-70) than men (51%, 95% CI 43-59). Chiropractors with more than five years in practice (59%, 95% CI 52-64) reported significantly fewer work-related acute injuries and overuse complaints during the previous year compared with chiropractors with less than five years in practice (83%, 95% CI 73-91). In general, these practicing Danish chiropractors reported having a good psychosocial work environment, and 90% of chiropractors "always" or "often" felt that they were motivated and committed to their work. Conclusion: This sample of Danish practicing chiropractors commonly reported work-related acute physical injuries or overuse complaints. Overuse complaints were most commonly reported in the low back, wrist, thumb, and shoulder and were more common among women than men. Newly educated chiropractors reported more overuse complaints than experienced chiropractors. Collectively, this sample of Danish chiropractors reported that they had a good psychosocial work environment

Lardon A, Dubois JD, Cantin V, Piche M, and Descarreaux M. Predictors of disability and absenteeism in workers with non-specific low back pain: a longitudinal 15-month study. *Applied Ergonomics*. 2018; 68:176-185.

<http://dx.doi.org/10.1016/j.apergo.2017.11.011>

Abstract: OBJECTIVES: The objective of this study was to identify baseline predictors of disability and absenteeism in workers with a history of non-specific low back pain (LBP). METHODS: One hundred workers with a history of non-specific LBP participated in three evaluations (baseline, 7 and 15 months follow-up). Current and past history of LBP, clinical pain intensity, disability, absenteeism, fear-avoidance beliefs, pain catastrophizing, pain hypervigilance,

work satisfaction and patient stratification based on "risk of poor clinical outcome assessment" (RPCO) were evaluated using questionnaires and interviews. In addition, cutaneous heat pain thresholds, cutaneous heat pain tolerance thresholds, conditioned pain modulation (CPM), trunk kinematics and muscle activity were measured during each evaluation. Logistic regression models were used to determine predictors of LBP disability and absenteeism at 15-months. RESULTS: Sixty-eight workers returned for the 15-month follow-up and among this sample, 49% reported disability and 16% reported absenteeism at follow-up. Baseline clinical pain intensity predicted disability (OR = 1.08, 95%CI: 1.03-1.13) at 15-month while work satisfaction (OR = 0.93, 95%CI: 0.87-0.99) and RPCO (OR = 1.51, 95%CI: 1.05-2.16) predicted absenteeism. These results remained significant after adjustments for age, gender as well as type of work and intervention. CONCLUSION: This study highlights the importance of clinical pain and psychological factors in the prediction and potentially the prevention of future disability. Screening tools assessing these risk factors can be useful to evaluate workers with past history of low back pain

Lohela-Karlsson M, Nybergh L, and Jensen I. Perceived health and work-environment related problems and associated subjective production loss in an academic population. BMC Public Health. 2018; 18(1):257.

<http://dx.doi.org/10.1186/s12889-018-5154-x> [open access]

Abstract: BACKGROUND: The aim was to investigate the prevalence of health problems and work environment problems and how these are associated with subjective production loss among women and men at an academic workplace. An additional aim was to investigate whether there were differences between women and men according to age group, years at current workplace, academic rank or managerial position. METHODS: A questionnaire was sent in 2011 to all employees at a Swedish university (n = 5144). Only researchers and teachers were included in the study (n = 3207). Spearman correlations were performed to investigate differences in health and work environment problems. Employees who reported having experienced work environment or health problems in the previous seven days (n = 1475) were included in the analyses in order to investigate differences in subjective production loss. This was done using Student's t-test, One-way Anova and generalized linear models. RESULTS: The response rate was 63% (n = 2022). A total of 819 academic staff (40% of the population) reported experiencing either health problems, work environment problems or both during the previous seven days. The prevalence of health problems only or a combination of work environment and health problems was higher among women than men (p-value <0.05). This was especially the case for younger women, those in lower academic positions and those who had worked for fewer years at their current workplace. No difference was found for work environment problems. The majority of the employees who reported problems said that these problems affected their ability to perform at work (84-99%). The average production loss varied between 31 and 42% depending on the type of problem. Production loss due to health-related and work-environment related

problems was highest among junior researchers and managers. No significant difference between men and women was found in the level of production loss. CONCLUSION: Subjective production loss in academia can be associated with health and work- environment problems. These losses appear similar for women and men even though younger female academics, women in lower academic ranks and those with fewer years of employment in their current workplace report a higher prevalence of health problems and combined work-environment and health problems than men

McLinton S, McLinton SS, and van der Linden M. Psychosocial factors impacting workplace injury rehabilitation: evaluation of a concise screening tool. *Journal of Occupational Rehabilitation*. 2018; 28(1):121-129. <http://dx.doi.org/10.1007/s10926-017-9701-6>

Abstract: Purpose To determine whether the delayed recovery often observed in simple musculoskeletal injuries occurring at work is related to poor workplace and home social support. Method A four question psychosocial screening tool called the "How are you coping gauge?" (HCG) was developed. This tool was implemented as part of the initial assessment for all new musculoskeletal workplace injuries. Participants were excluded if they did not meet the strict criteria used to classify a musculoskeletal injury as simple. The HCG score was then compared to the participant's number of days until return to full capacity (DTFC). It was hypothesised that those workers indicating a poorer level of workplace and home support would take longer time to return to full capacity. Results A sample of 254 participants (316 excluded) were included in analysis. Significant correlation ($p < 0.001$) was observed between HCG scores for self-reported work and home support and DTFC thereby confirming the hypothesis. Path analysis found workplace support to be a significant moderate-to-strong predictor of DTFC (-0.46). Conclusion A correlation was observed between delayed workplace injury recovery and poor perceived workplace social support. The HCG may be an effective tool for identifying these factors in musculoskeletal workplace injuries of a minor pathophysiological nature. There may be merit in tailoring injury rehabilitation towards addressing psychosocial factors early in the injury recovery process to assist with a more expedient return to full work capacity following simple acute musculoskeletal injury

Morag I and Luria G. A group-level approach to analyzing participative ergonomics (PE) effectiveness: the relationship between PE dimensions and employee exposure to injuries. *Applied Ergonomics*. 2018; 68:319-327. <http://dx.doi.org/10.1016/j.apergo.2017.12.014>

Abstract: Most studies concerned with participative ergonomic (PE) interventions, focus on organizational rather than group level analysis. By implementing an intervention at a manufacturing plant, the current study, utilizing advanced information systems, measured the effect of line-supervisor leadership on employee exposure to risks. The study evaluated which PE dimensions (i.e., extent of workforce involvement, diversity of reporter role types and scope of

analysis) are related to such exposure at the group level. The data for the study was extracted from two separate computerized systems (workforce medical records of 791 employees and an intranet reporting system) during a two-year period. While the results did not confirm the effect of line-supervisor leadership on subordinates' exposure to risks, they did demonstrate relationships between PE dimensions and the employees' exposure to risks. The results support the suggested level of analysis and demonstrate that group-based analysis facilitates the assimilation of preventive interventions

Page MJ, Shamseer L, and Tricco AC. Registration of systematic reviews in PROSPERO: 30,000 records and counting. *Systematic Reviews*. 2018; 7(1):32.

<http://dx.doi.org/10.1186/s13643-018-0699-4> [open access]

Abstract: BACKGROUND: The International Prospective Register of Systematic Reviews (PROSPERO) was launched in February 2011 to increase transparency of systematic reviews (SRs). There have been few investigations of the content and use of the database. We aimed to investigate the number of PROSPERO registrations from inception to 2017, and website usage in the last year. We also aimed to explore the epidemiological characteristics of and completeness of primary outcome pre-specification in a sample of PROSPERO records from 2017. METHODS: The PROSPERO database managers provided us with data on the annual and cumulative number of SR registrations up to October 10, 2017, and the number of visits to the PROSPERO website over the year preceding October 10, 2017. One author collected data on the focus of the SR (e.g. therapeutic, diagnostic), health area addressed, funding source and completeness of outcome pre-specification in a random sample of 150 records of SRs registered in PROSPERO between April 1, 2017 and September 30, 2017. RESULTS: As of October 10, 2017, there were 26,535 SRs registered in PROSPERO; guided by current monthly submission rates, we anticipate this figure will reach over 30,000 by the end of 2017. There has been a 10-fold increase in registrations, from 63 SRs per month in 2012 to 800 per month in 2017. In the year preceding October 10, 2017, the PROSPERO website received more than 1.75 million page views. In the random sample of 150 registered SRs, the majority were focused on a therapeutic question (78/150 [52%]), while only a few focused on a diagnostic/prognostic question (11/150 [7%]). The 150 registered SRs addressed 18 different health areas. Any information about the primary outcome other than the domain (e.g. timing, effect measures) was not pre-specified in 44/150 records (29%). CONCLUSIONS: Registration of SRs in PROSPERO increased rapidly between 2011 and 2017, thus benefiting users of health evidence who want to know about ongoing SRs. Further work is needed to explore how closely published SRs adhere to the planned methods, whether greater pre-specification of outcomes prevents selective inclusion and reporting of study results, and whether registered SRs address necessary questions

Prem R, Paskvan M, Kubicek B, and Korunka C. Exploring the ambivalence of time pressure in daily working life. International Journal of Stress Management. 2018; 25(1):35-43.

<http://dx.doi.org/10.1037/str0000044>

Rise MB, Skagseth M, Klevanger NE, Aasdahl L, Borchgrevink P, Jensen C, Tenggren H, Halsteinli V, Jacobsen TN, Loland SB, Johnsen R, and Fimland MS. Design of a study evaluating the effects, health economics, and stakeholder perspectives of a multi-component occupational rehabilitation program with an added workplace intervention: a study protocol. BMC Public Health. 2018; 18(1):219.

<http://dx.doi.org/10.1186/s12889-018-5130-5> [open access]

Abstract: BACKGROUND: Recent research has suggested that interventions at the workplace might be the most potent ingredient in return to work interventions, but few studies have investigated the different effects of workplace interventions as part of occupational rehabilitation programs. The comprehensive design described in this article includes effect (on return to work and health outcomes), and health economic evaluations of a workplace intervention added to a multicomponent rehabilitation program. Qualitative and mixed method studies will investigate sick-listed persons', rehabilitation therapists' and employers' perspectives on the usability and outcomes of the rehabilitation program and the workplace intervention. The program and intervention are provided to patients with musculoskeletal, psychological or general and unspecified diagnoses. The program is multi-component and includes Acceptance and Commitment Therapy, physical exercise, patient education and creating a plan for increased work participation. METHODS: Persons who are employed, aged from 18 to 60 years, with a current sick leave status of 50% or more and a diagnosis within the musculoskeletal, psychological or general and unspecified chapters of International Classification of Primary Care-2 (ICPC-2) will be recruited to a researcher-blinded parallel-group randomized controlled trial. All participants take part in an in-patient occupational rehabilitation program, while the intervention group also takes part in an intervention at the workplace. The effect and economic evaluation will investigate the effect of the added workplace intervention. The primary outcome measures will be time until full sustainable return to work and total number of sickness absence days in the 12 months after inclusion. Health economic evaluations will investigate the cost-effectiveness and cost-utility. Qualitative studies will investigate rehabilitation therapists' experiences with working towards return to work within an ACT-approach and stakeholders' experiences with the workplace intervention. A mixed methods study will combine quantitative and qualitative findings on the participants' expectations and motivation for return to work. DISCUSSION: The outline of this comprehensive study could represent an important addition to the standard designs of return to work evaluation. The mixed methods design, with qualitative approaches as well as a rigorous randomized controlled trial, might prove useful

to shed light on contextual factors. TRIAL REGISTRATION: ClinicalTrials.gov : NCT02541890 . September 4, 2015

Rotermann M and Macdonald R. Analysis of trends in the prevalence of cannabis use in Canada, 1985 to 2015. Health Reports. 2018; 29(2):10-20. <http://www.statcan.gc.ca/pub/82-003-x/2018002/article/54908-eng.pdf>

Song S, Awolusi I, and Marks E. Impact of discretionary safety funding on construction safety. Journal of Safety, Health & Environmental Research. 2017; 13(2):378-384. [\[doi unavailable as of Feb 23, 2018\]](#)

Tricco AC, Zarin W, Rios P, Nincic V, Khan PA, Ghassemi M, Diaz S, Pham B, Straus SE, and Langlois EV. Engaging policy-makers, health system managers, and policy analysts in the knowledge synthesis process: a scoping review. Implementation Science. 2018; 13(1):31. <http://dx.doi.org/10.1186/s13012-018-0717-x> [open access]

Abstract: BACKGROUND: It is unclear how to engage a wide range of knowledge users in research. We aimed to map the evidence on engaging knowledge users with an emphasis on policy-makers, health system managers, and policy analysts in the knowledge synthesis process through a scoping review. METHODS: We used the Joanna Briggs Institute guidance for scoping reviews. Nine electronic databases (e.g., MEDLINE), two grey literature sources (e.g., OpenSIGLE), and reference lists of relevant systematic reviews were searched from 1996 to August 2016. We included any type of study describing strategies, barriers and facilitators, or assessing the impact of engaging policy-makers, health system managers, and policy analysts in the knowledge synthesis process. Screening and data abstraction were conducted by two reviewers independently with a third reviewer resolving discrepancies. Frequency and thematic analyses were conducted. RESULTS: After screening 8395 titles and abstracts followed by 394 full-texts, 84 unique documents and 7 companion reports fulfilled our eligibility criteria. All 84 documents were published in the last 10 years, and half were prepared in North America. The most common type of knowledge synthesis with knowledge user engagement was a systematic review (36%). The knowledge synthesis most commonly addressed an issue at the level of national healthcare system (48%) and focused on health services delivery (17%) in high-income countries (86%). Policy-makers were the most common (64%) knowledge users, followed by healthcare professionals (49%) and government agencies as well as patients and caregivers (34%). Knowledge users were engaged in conceptualization and design (49%), literature search and data collection (52%), data synthesis and interpretation (71%), and knowledge dissemination and application (44%). Knowledge users were most commonly engaged as key informants through meetings and workshops as well as surveys, focus groups, and interviews either in-person or by telephone and emails. Knowledge user content expertise/awareness was a common facilitator (18%), while lack of time or opportunity to participate was a common barrier (12%).

CONCLUSIONS: Knowledge users were most commonly engaged during the data synthesis and interpretation phases of the knowledge synthesis conduct. Researchers should document and evaluate knowledge user engagement in knowledge synthesis. REGISTRATION DETAILS: Open Science Framework (<https://osf.io/4dy53/>)

Waongenngarm P, Areerak K, and Janwantanakul P. The effects of breaks on low back pain, discomfort, and work productivity in office workers: a systematic review of randomized and non-randomized controlled trials. *Applied Ergonomics*. 2018; 68:230-239.

<http://dx.doi.org/10.1016/j.apergo.2017.12.003>

Abstract: The purpose of this study was to evaluate the effectiveness of breaks on low back pain, discomfort, and work productivity in office workers. Publications were systematically searched in several databases from 1980 to December 2016. Relevant randomized and non-randomized controlled trials were retrieved and assessed for methodological quality by two independent reviewers. Quality of evidence was assessed and rated according to GRADE guidelines. Eight randomized controlled trials and three non-randomized controlled trials were included in this review, of which 10 were rated as high-quality studies. The break programs were highly heterogeneous with work duration ranging from 5 min to 2 h and break duration ranging from 20 s to 30 min. The results showed low-quality evidence for the conflicting effect of breaks on pain and low-quality evidence for the positive effect of breaks on discomfort. When stratified by type of breaks, moderate-quality evidence was found for the positive effect of active breaks with postural change for pain and discomfort. Moderate-quality evidence indicated that the use of breaks had no detrimental effect on work productivity. More high-quality studies are needed before recommendations can be given. Within a number of methodological limitations that are present in the published studies, active breaks with postural change may be effective in reducing pain in workers with acute low back pain and to prevent discomfort in healthy subjects

de Wind A, Scharn M, Geuskens GA, van der Beek AJ, and Boot CRL. Predictors of working beyond retirement in older workers with and without a chronic disease: results from data linkage of Dutch questionnaire and registry data. *BMC Public Health*. 2018; 18(1):265.

<http://dx.doi.org/10.1186/s12889-018-5151-0> [open access]

Abstract: BACKGROUND: An increasing number of retirees continue to work beyond retirement despite being eligible to retire. As the prevalence of chronic disease increases with age, working beyond retirement may go along with having a chronic disease. Working beyond retirement may be different for retirees with and without chronic disease. We aim to investigate whether demographic, socioeconomic and work characteristics, health and social factors predict working beyond retirement, in workers with and without a chronic disease. METHODS: Employees aged 56-64 years were selected from the Study on Transitions in

Employment, Ability and Motivation (N = 1125). Questionnaire data on demographic and work characteristics, health, social factors, and working beyond retirement were linked to registry data from Statistics Netherlands on socioeconomic characteristics. Separate prediction models were built for retirees with and without chronic disease using multivariate logistic regression analyses. **RESULTS:** Workers without chronic disease were more likely to work beyond retirement compared to workers with chronic disease (27% vs 23%). In retirees with chronic disease, work and health factors predicted working beyond retirement, while in retirees without a chronic disease, work, health and social factors predicted working beyond retirement. In the final model for workers with chronic disease, healthcare work, better physical health, higher body height, lower physical load and no permanent contract were positively predictive of working beyond retirement. In the final model for workers without chronic disease, feeling full of life and being intensively physically active for ≥ 2 days per week were positively predictive of working beyond retirement; while manual labor, better recovery, and a partner who did not support working until the statutory retirement age, were negatively predictive of working beyond retirement. **CONCLUSIONS:** Work and health factors independently predicted working beyond retirement in workers with and without chronic disease, whereas social factors only did so among workers without chronic disease. Demographic and socioeconomic characteristics did not independently contribute to prediction of working beyond retirement in any group. As prediction of working beyond retirement was more difficult among workers with a chronic disease, future research is needed in this group