Det Nationale Forskningscenter for Arbejdsmiljø

Barriers and opportunities for prolonging working life

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National Research Centre for the Working Environment

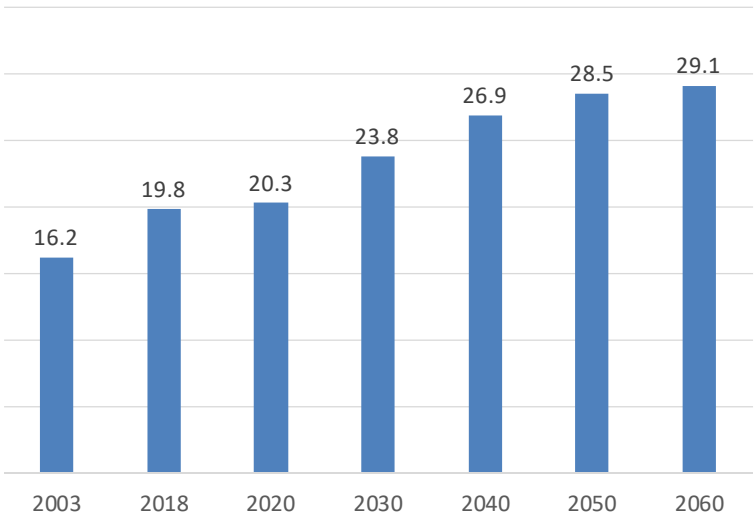
Copenhagen, Denmark

Keynote 1: Prolonging Working Life conference, May 25th, 2020

We live longer

Therefore we have to work longer

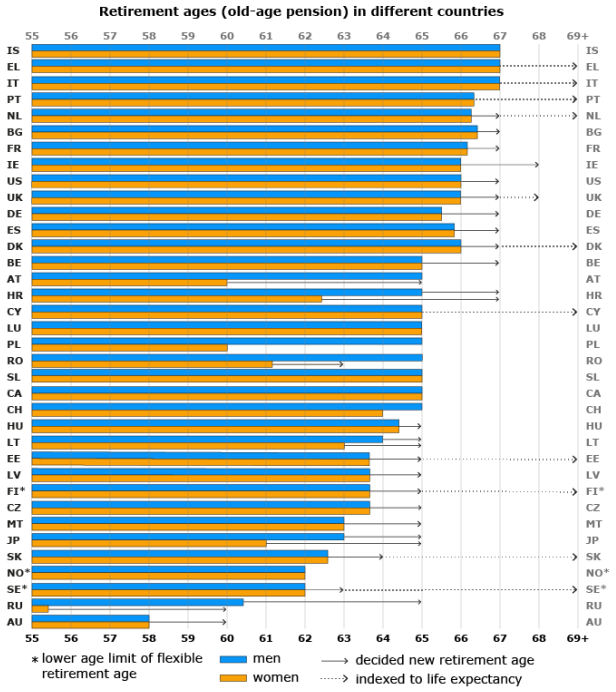
Percentage of population ≥65 years in EU-28



Eurostat, 2019

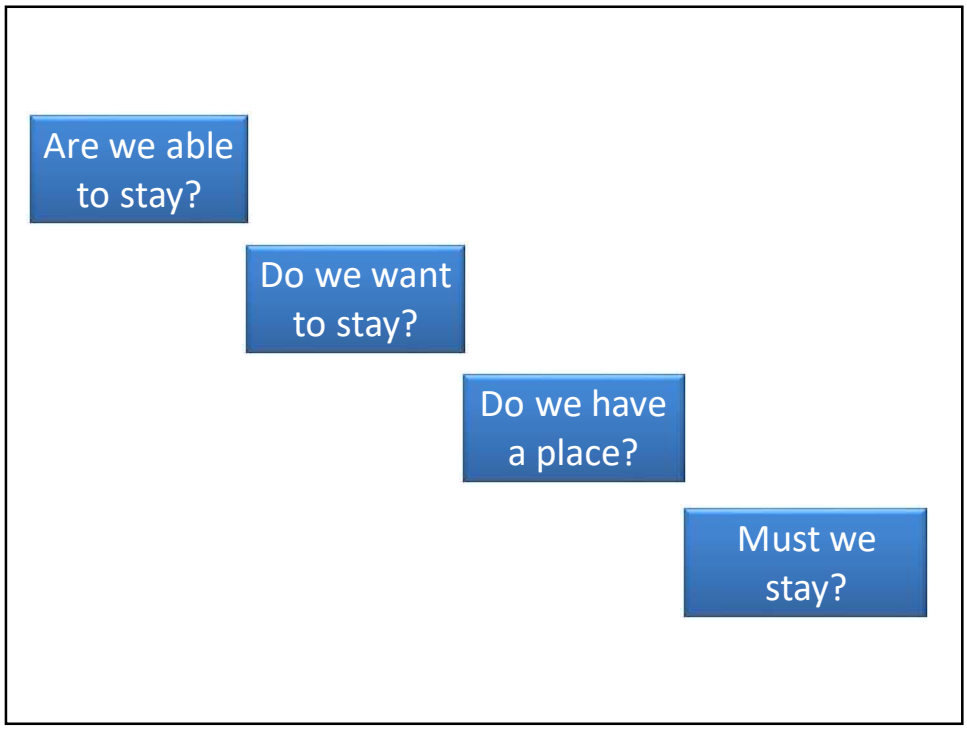
Official retirement age in Denmark

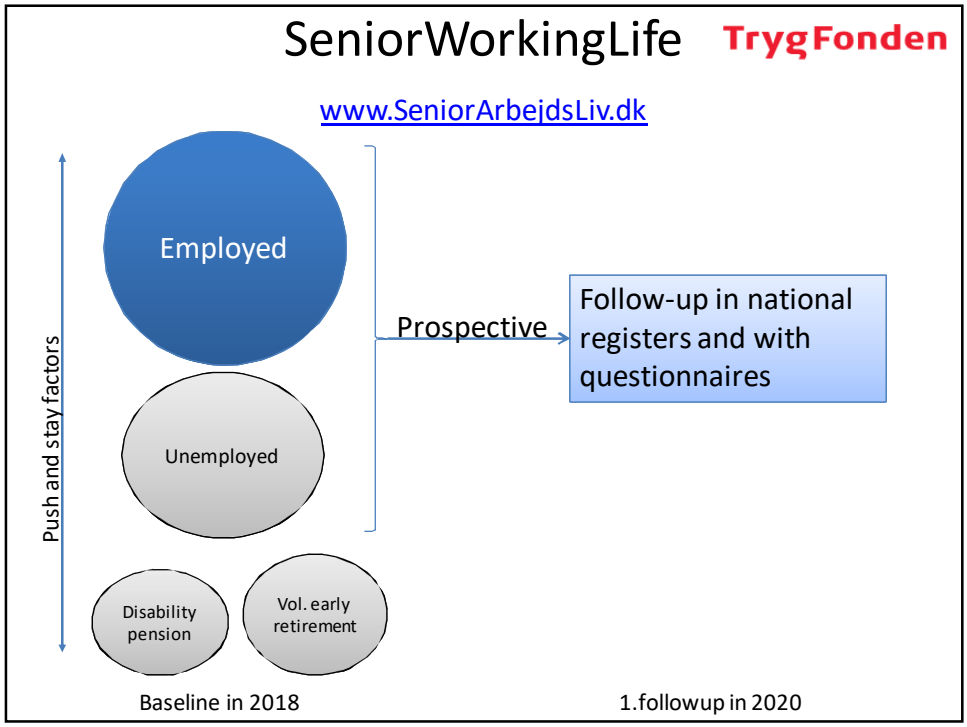
STAR 2019

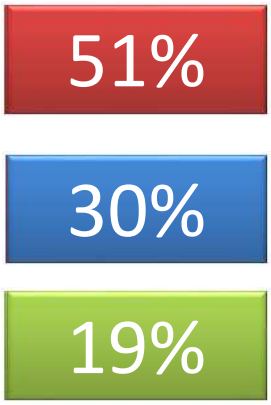


FCP, 2020

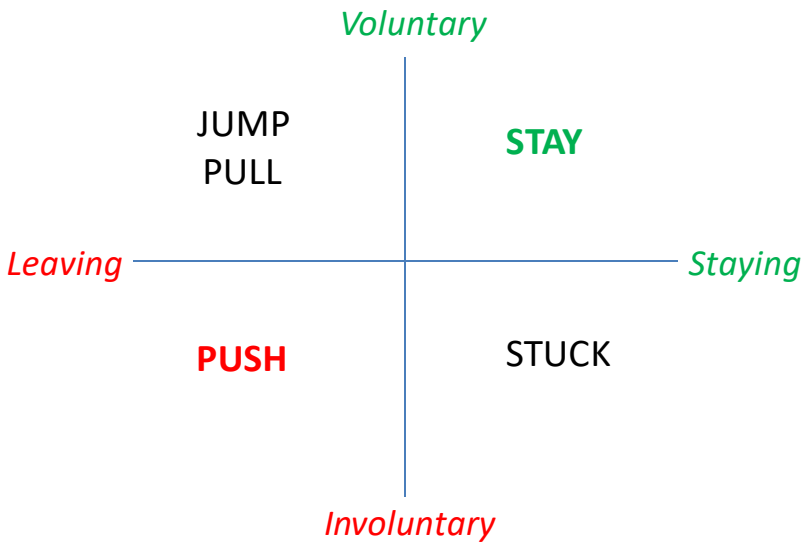
How many of these will be able to work until +69?


Are we able to stay?
Do we want to stay?
Do we have a place?
Must we stay?


SeniorWorkingLife
TrygFonden
www.SeniorArbejdsLiv.dk
Employed
Unemployed
Disability pension
Vol. early retirement
Push and stay factors
Prospective
Follow-up in national registers and with questionnaires
Baseline in 2018
1.followup in 2020



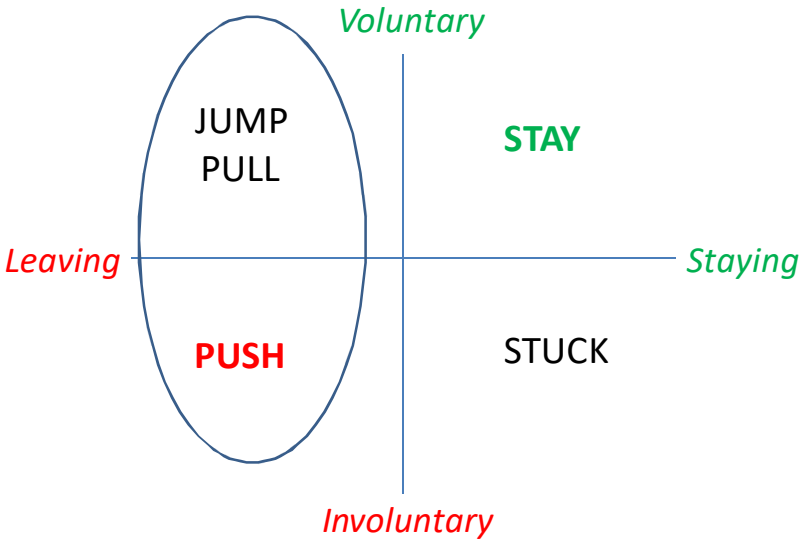
Andersen LL, SeniorWorkingLife study, 2019



Andersen LL 2020, Eur J Publ Health

Reasons for leaving the labour market

SeniorWorkingLife



Andersen LL 2020, Eur J Publ Health

	Reasons for leaving… (expected)	1. Seated work	2. Standing and walking	3. Standing and walking + lifting	4. Heavy physical and strenous
	Leisure				
JUMP	That you want do determine yourself what you want to do	56	49	36	24
	To have more time for hobbies	51	42	32	23
	Economy and retirement considerations				
PULL	Possibility of receiving pension	29	27	24	22
	Economic considerations	24	19	15	9
	Possibility of receiving voluntary early retirement pension	16	22	26	22
	Health, work demands and wellbeing				
PUSH	That you will not be capable of doing your job	18	24	36	46
	Poor physical health	13	16	28	33

Andersen LL 2020, Eur J Publ Health

JUMP
PULL

Voluntary

STAY

Leaving — *Staying*

PUSH

STUCK

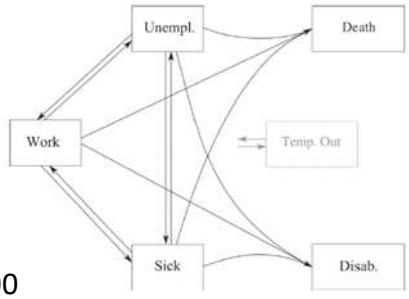
Involuntary

Andersen LL 2020, Eur J Publ Health

ORIGINAL RESEARCH

High physical work demands and working life expectancy in Denmark

Jacob Pedersen [1], Bastian Bygvraa Schultz,[1] Ida E H Madsen [1], Svetlana Solovieva,[2] Lars L Andersen [1]



- N = 1,600,000
- Job exposure matrix (JEM) of physical work demands
- 4-year follow-up in national register of labour market status

Pedersen J 2020, Occ Env Med

High vs low physical work demands

Working Life Expectancy

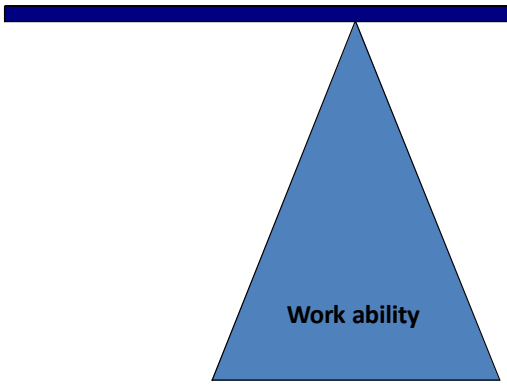
	50-yr	
	Woman	Man
Work	-1.22	-1.02
Unemployed	0.54	0.31
Sickness absence	0.43	0.59

High physical work demands is a strong PUSH factor

Pedersen J 2020, Occ Env Med

Work demands

Capacity and health



Journal of Occupational Rehabilitation
https://doi.org/10.1007/s10926-020-09879-x

REVIEW

A Systematic Review of Workplace Interventions to Rehabilitate Musculoskeletal Disorders Among Employees with Physical Demanding Work

Emil Sundstrup[1] · Karina Glies Vincents Seeberg[1] · Elizabeth Bengtsen[1] · Lars Louis Andersen[1,2]

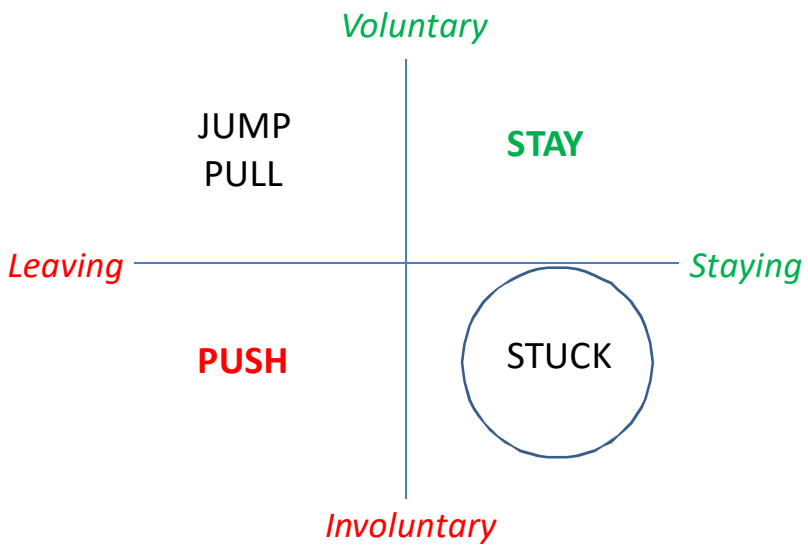
Abstract

Purpose This systematic review investigates the effectiveness of workplace interventions to rehabilitate musculoskeletal disorders (MSDs) among employees with physically demanding work. *Methods* A systematic search was conducted in bibliographic databases including PubMed and Web of Science Core Collection for English articles published from 1998 to 2018. The PICO strategy guided the assessment of study relevance and the bibliographical search for randomized controlled trials (RCTs) and non-RCTs in which (1) participants were adult workers with physically demanding work and MSD (including specific and non-specific MSD and musculoskeletal pain, symptoms, and discomfort), (2) interventions were initiated and/or carried out at the workplace, (3) a comparison group was included, and (4) a measure of MSD was reported (including musculoskeletal pain, symptoms, prevalence or discomfort). The quality assessment and evidence synthesis adhered to the guidelines developed by the Institute for Work & Health (Toronto, Canada) focusing on developing practical recommendations for stakeholders. Relevant stakeholders were engaged in the review process. *Results* Level of evidence from 54 high and medium quality studies showed moderate evidence of a positive effect of physical exercise. Within this domain, there was strong evidence of a positive effect of workplace strength training. There was limited evidence for ergonomics and strong evidence for no benefit of participatory ergonomics, multifaceted interventions, and stress management. No intervention domains were associated with "negative effects". *Conclusions* The evidence synthesis recommends that implementing strength training at the workplace can reduce MSD among workers with physically demanding work. In regard to workplace ergonomics, there was not enough evidence from the scientific literature to guide current practices. Based on the scientific literature, participatory ergonomics and multifaceted workplace interventions seem to have no beneficial effect on reducing MSD among this group of workers. As these interventional domains were very heterogeneous, it should also be recognized that general conclusions about their effectiveness should be done with care.
Systematic review registration PROSPERO CRD42018116752(https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=116752).

Keywords Occupational health · Pain · Physical demands · Physical exercise · Strength training · Participatory ergonomics · Ergonomics · Stress management

Capacity and health

Sundstrup E 2020, J Occ Rehab

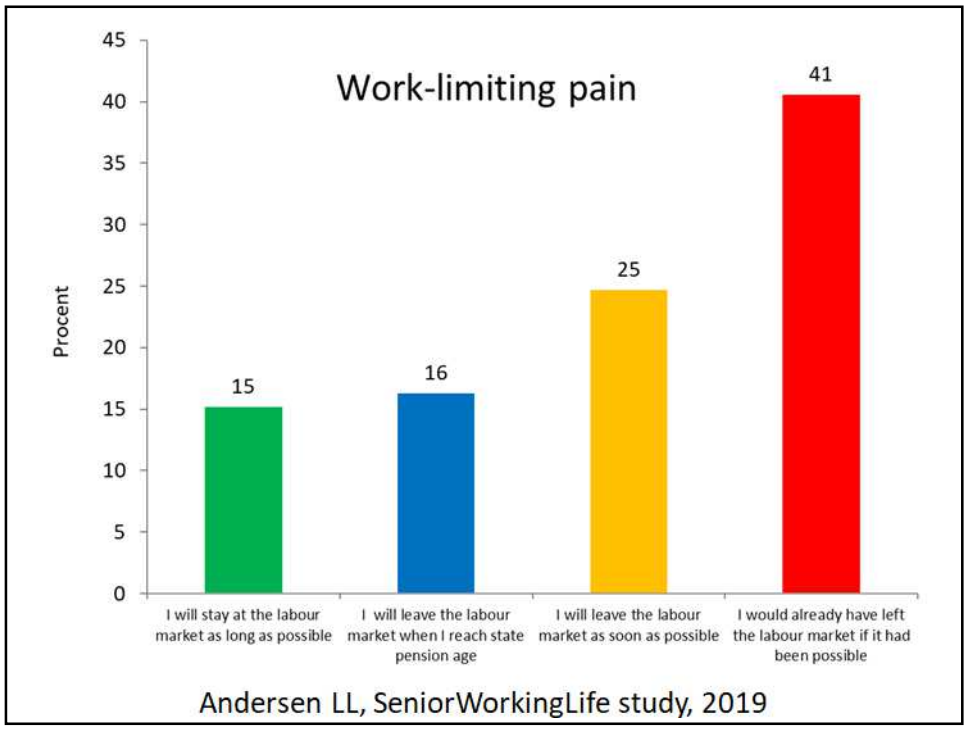


Andersen LL 2020, Eur J Publ Health

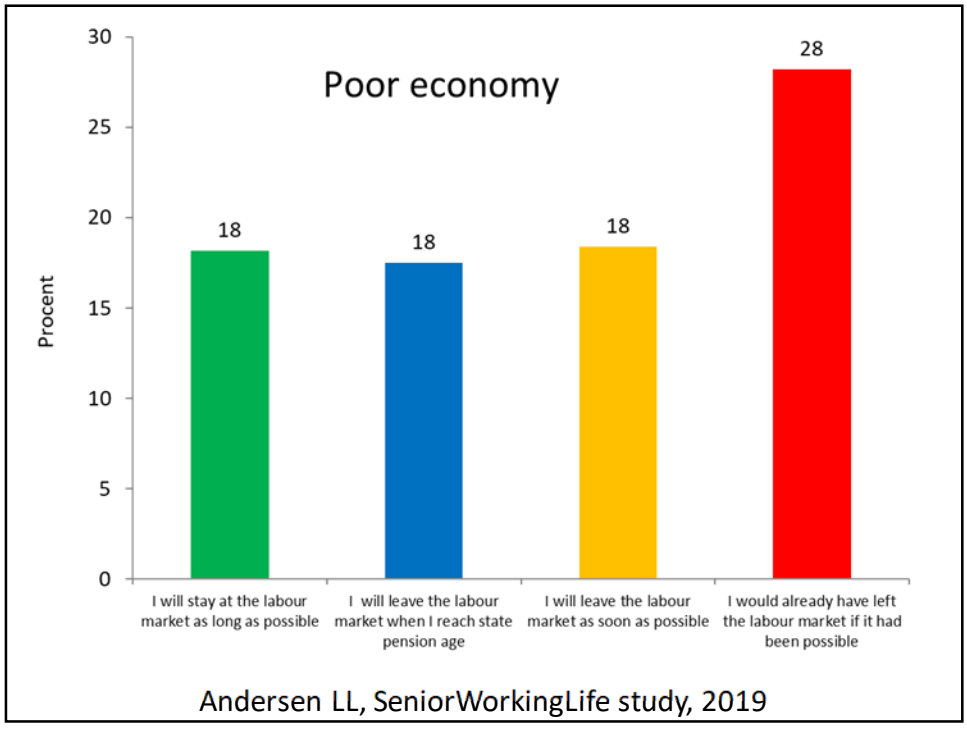
Retirement intentions

	Percentage
I will stay at the labour market as long as possible	29
I will leave the labour market when I reach state pension age	26
I will leave the labour market as soon as possible	29
I would already have left the labour market if it had been possible	7

Andersen LL, SeniorWorkingLife study, 2019



Andersen LL, SeniorWorkingLife study, 2019



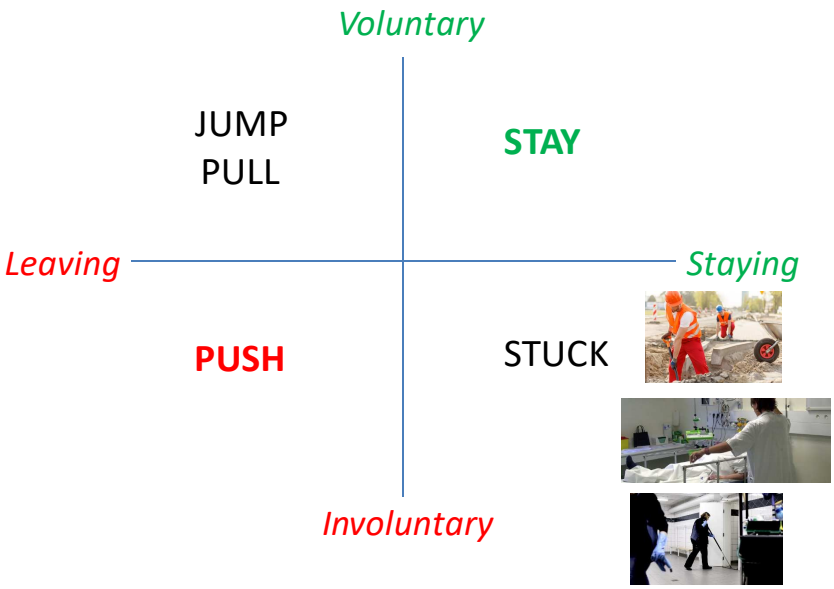
Andersen LL, SeniorWorkingLife study, 2019

Stuck at the labour market

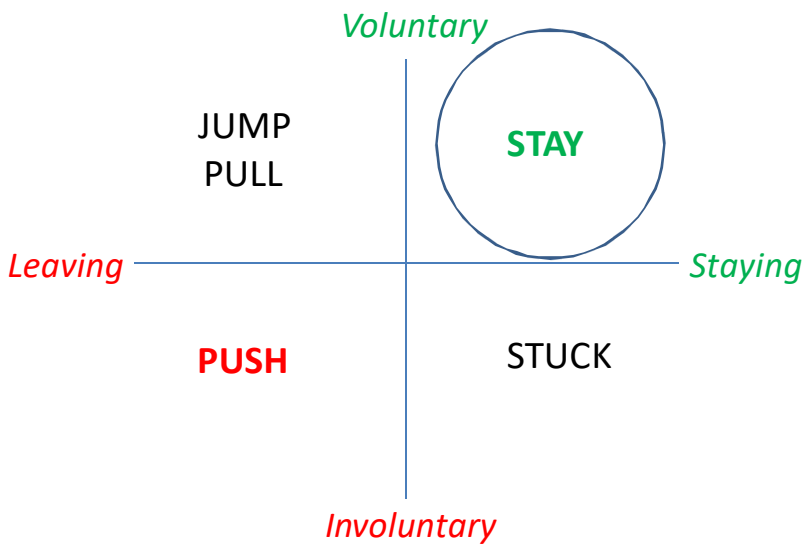
- Combination of 1) wanting to leave and 2) poor economy:
  - Cleaners 19%
  - Health & social care assistents 16%
  - Child care workers 16%
  - Teachers 13%
  - Production workers 13%
  - Construction workers 10%



Andersen LL, SeniorWorkingLife study, 2019



Andersen LL 2020, Eur J Publ Health



Andersen LL 2020, Eur J Publ Health

Possible reasons for staying longer at the labour market

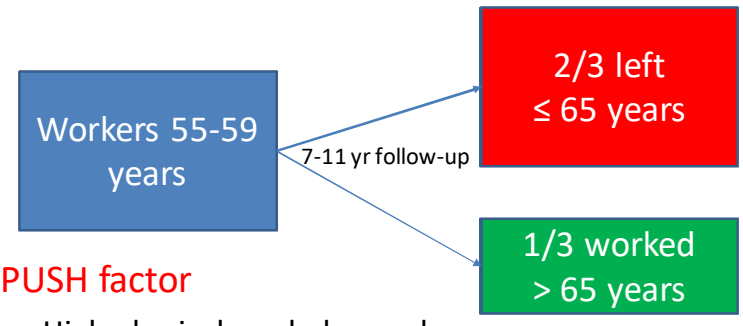
SeniorWorkingLife

Possible reasons for staying longer. If...	1. Seated work	2. Standing and walking	3. Standing and walking + lifting	4. Heavy physical and strenous
Leisure				
... there were more senior days	45	42	34	27
... there were a possibility for longer vacations	37	24	19	12
Flexibility				
... the working time were better organized according to your r	39	33	26	24
Economy				
... it would pay better off economically	31	27	26	21
Physical and mental work demands and health				
... your health had been better	10	13	23	33
... the work were less physically strenuous	3	12	38	51
... the work were less mentally strenuous	15	17	11	16
Recognition and influence at work				
... the management wanted you to stay longer	20	13	7	6
... your work were appreciated to a higher extent	11	12	12	15
... you got more influence on planning the work	12	13	9	10
None of the above	19	21	21	15

Andersen LL 2020, Eur J Publ Health

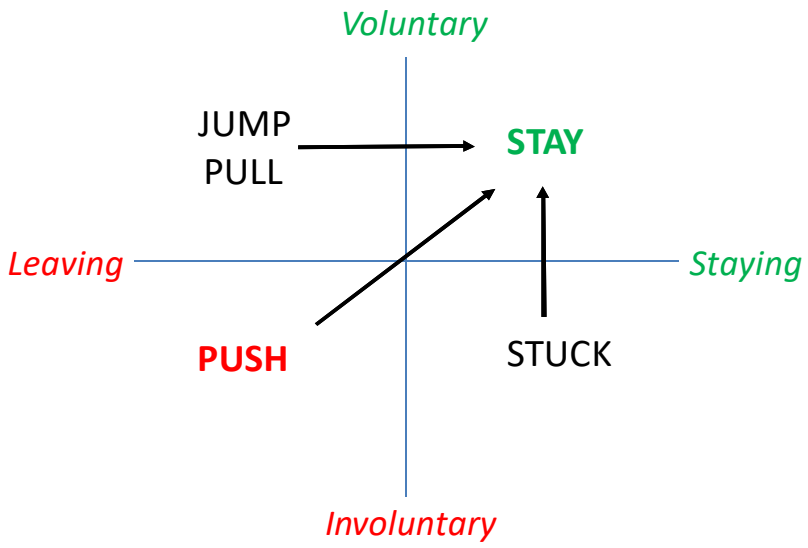
Importance of work environment

Prospective cohort study



- PUSH factor
  - High physical work demands
- STAY factors
  - A good psychosocial work environment
    - Recognition, influence, information, possibilities

Andersen LL 2020, SJWEH (accepted for publication)



Andersen LL, SeniorWorkingLife study, 2019

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TrygFonden

Arbejdsmiljøforskningsfonden

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