



Finnish Institute of  
Occupational Health



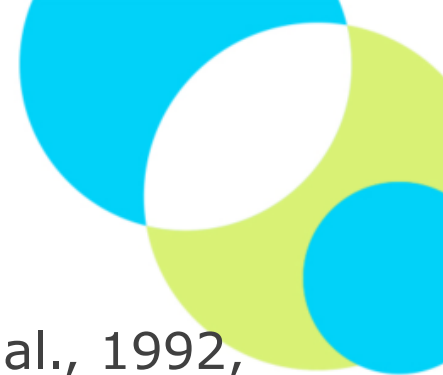
## LATE CAREER TRANSITIONS: RETIREMENT AND WELL-BEING

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# Theoretical perspectives to retirement transition



*Role theory:* retirement is a role transition (Moen et al., 1992, Riley & Riley, 1994)

- Transition from employment to retirement includes work role loss but strengthening of the family member role and the community member role
- Anxiety and depression may increase if the work-related roles had been particularly important in maintaining one's identity and positive self-image
- If the job has been stressful, transition to retirement could be a positive experience

*Continuity theory:* retirement is an opportunity to maintain social relationship and lifestyle patterns (Atchley, 1989)

- Suggests no significant decrease in well-being in transition from work to retirement if people can maintain their general patterns; familiar strategies in familiar arenas of life

Wang, 2007

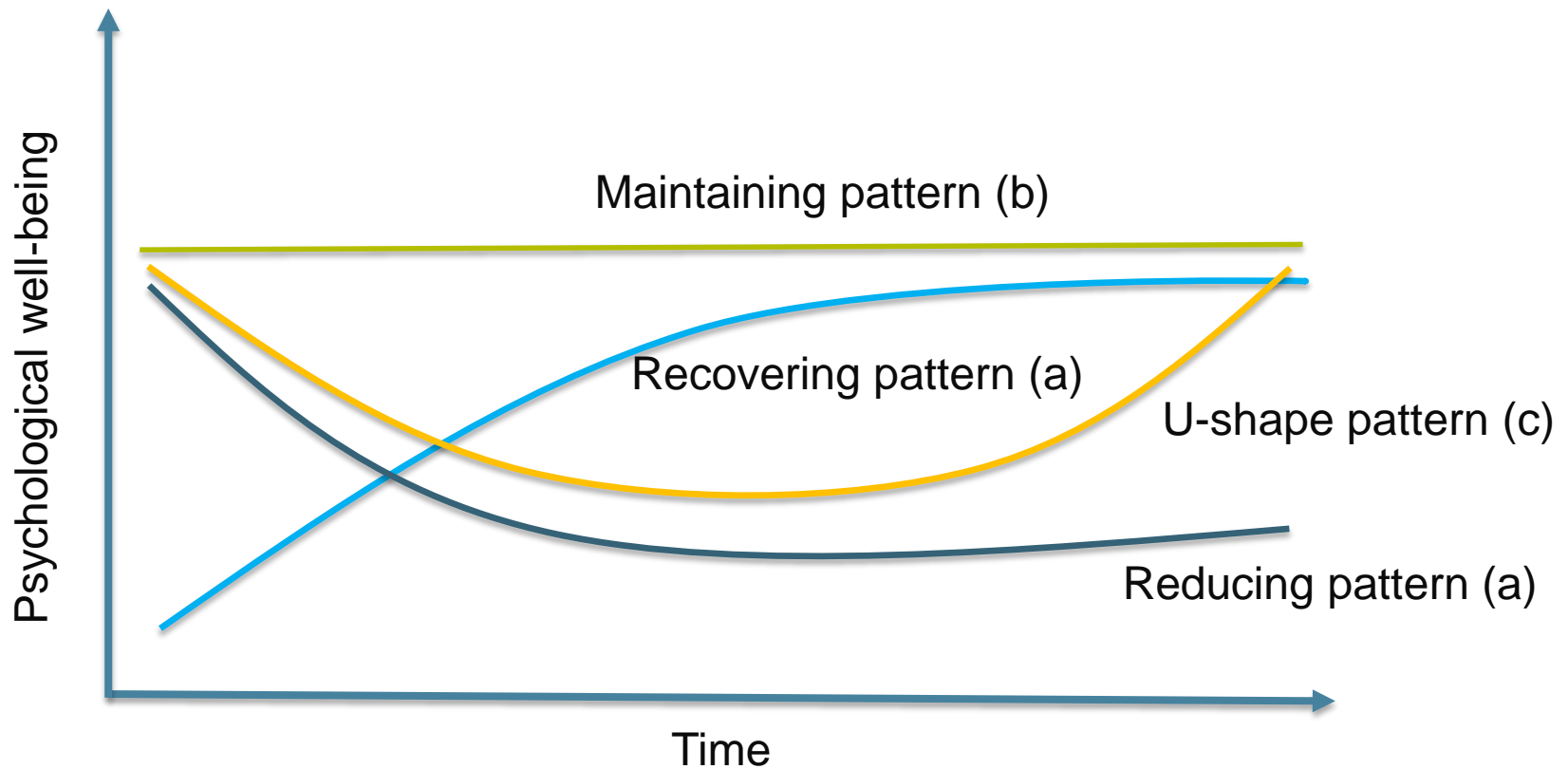


- *Life course perspective:* There are crucial concepts to be understood in post-retirement well-being (Elder, 1995)
  1. Transitions and trajectories; retirement is a process that incorporates both the retirement transition and post-retirement trajectory -> They can be interdependent
  2. Contextual embeddedness; the experience of life transitions and developmental trajectories is contingent on the specific circumstances under which the transition occurs
  3. Interdependence of life spheres; the experience in one life sphere influence and is influenced by experiences in other life spheres
  4. Timing of transitions; whether the transition timing is "normative" or not

# Psychological well-being change patterns during the retirement transitions



(a) Role theory (b) Continuity theory (c) Life course perspective



# Outline

Question: Do work-related and non-work related psychosocial factors predict timing of transition from work to retirement and health and well-being after the transition?

- Part I presents results on predictors of continuing employment beyond the pensionable age among elderly employees
- Part II presents results from a 21-year follow-up study on the association of midlife predictors of post-retirement depression
- Part III presents findings on the health effects of transition from work to retirement

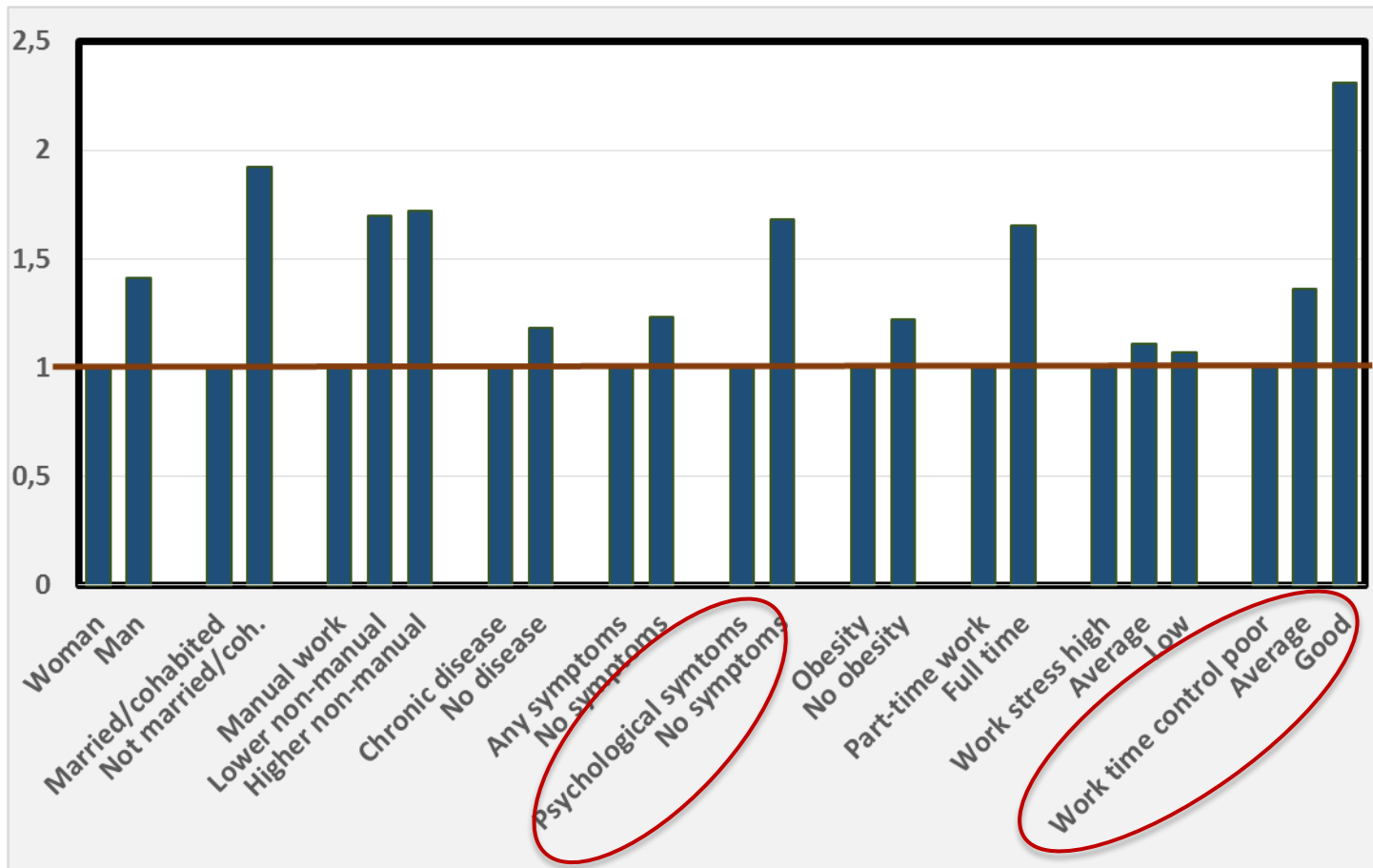
# Extending Employment beyond the Pensionable Age: A Cohort Study of the Influence of Chronic Diseases, Health Risk Factors, and Working Conditions

Marianna Virtanen<sup>1\*</sup>, Tuula Oksanen<sup>1</sup>, G. David Batty<sup>2,3,4</sup>, Leena Ala-Mursula<sup>5</sup>, Paula Salo<sup>1,6</sup>, Marko Elovainio<sup>7</sup>, Jaana Pentti<sup>1</sup>, Katinka Lybäck<sup>8</sup>, Jussi Vahtera<sup>1,9</sup>, Mika Kivimäki<sup>1,2,10</sup>

Plos One 2014;9(2):e88695

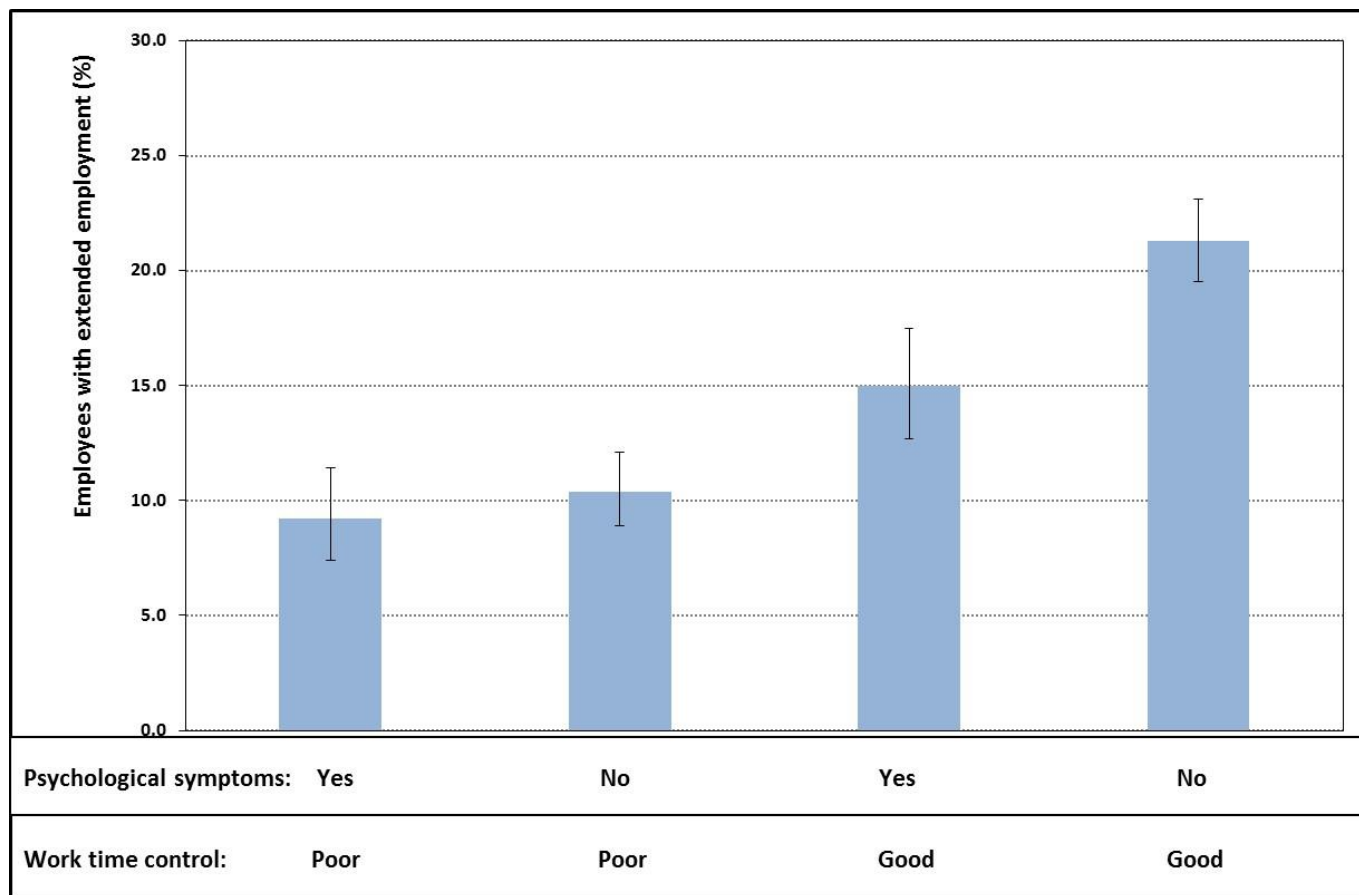
- In the *Finnish Public Sector Study*, employees who reached statutory pensionable age between 2005-11 (N=4677, mean age 59.8 in 2005) were selected.
- Outcome was voluntary extension of employment >6 months after the individual pensionable date; data based on the records of the Municipal Pension Institute (Keva).
- Those with work disability pension were excluded
- Socio-demographic, health and work-related factors approximately 3.7 years before the statutory pensionable age were collected from surveys and registers
- Multivariable adjusted binary logistic regression models were used to examine predictors of extended employment

# Voluntary extension of employment in the Finnish Public Sector Study



**-> The strongest predictor was opportunity to control work time**

# Good work time control enhanced longer employment among employees with psychological symptoms





# Socioeconomic and Psychosocial Adversity in Midlife and Depressive Symptoms Post Retirement: A 21-year Follow-up of the Whitehall II Study

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Marko Elovainio, Ph.D., Markus Jokela, Ph.D., Jussi Vahtera, M.D., Ph.D.,  
Archana Singh-Manoux, Ph.D., Mika Kivimäki, Ph.D.*

Am J Geriatr Psychiatry 2014

- 3 941 Whitehall II Study participants from UK (2 790 men, 1 151 women)
- All participants were retired at follow-up (mean age 67.6 years at follow-up)
- Midlife socioeconomic and psychosocial adversity was assessed by survey questionnaires 21 years earlier (at the study baseline) when the participants were still employed: Low occupational position, poor standard of living, high job strain, few close relationships

# Methods

- Occupational position: 3 grades (low – intermediate – high); in the Whitehall study it is a comprehensive marker of socioeconomic position and is related to salary, social status and level of responsibility at work
- Standard of living was assessed with a question: "All things considered, how satisfied or dissatisfied are you with your standard of living?" (1= very dissatisfied to 7=very satisfied) -> A 3-category variable was formulated to indicate poor (1-2), moderate (3-5), and good (6-7)
- Job strain; a combination of job demands and job control (low strain – active – passive – high strain) job
- Number of close people was requested by asking the participant to report the number of people they feel very close to (including people who have died and people they have not seen recently); 3 categories: 0-2, 3-6, and 7 or more close people

# Methods

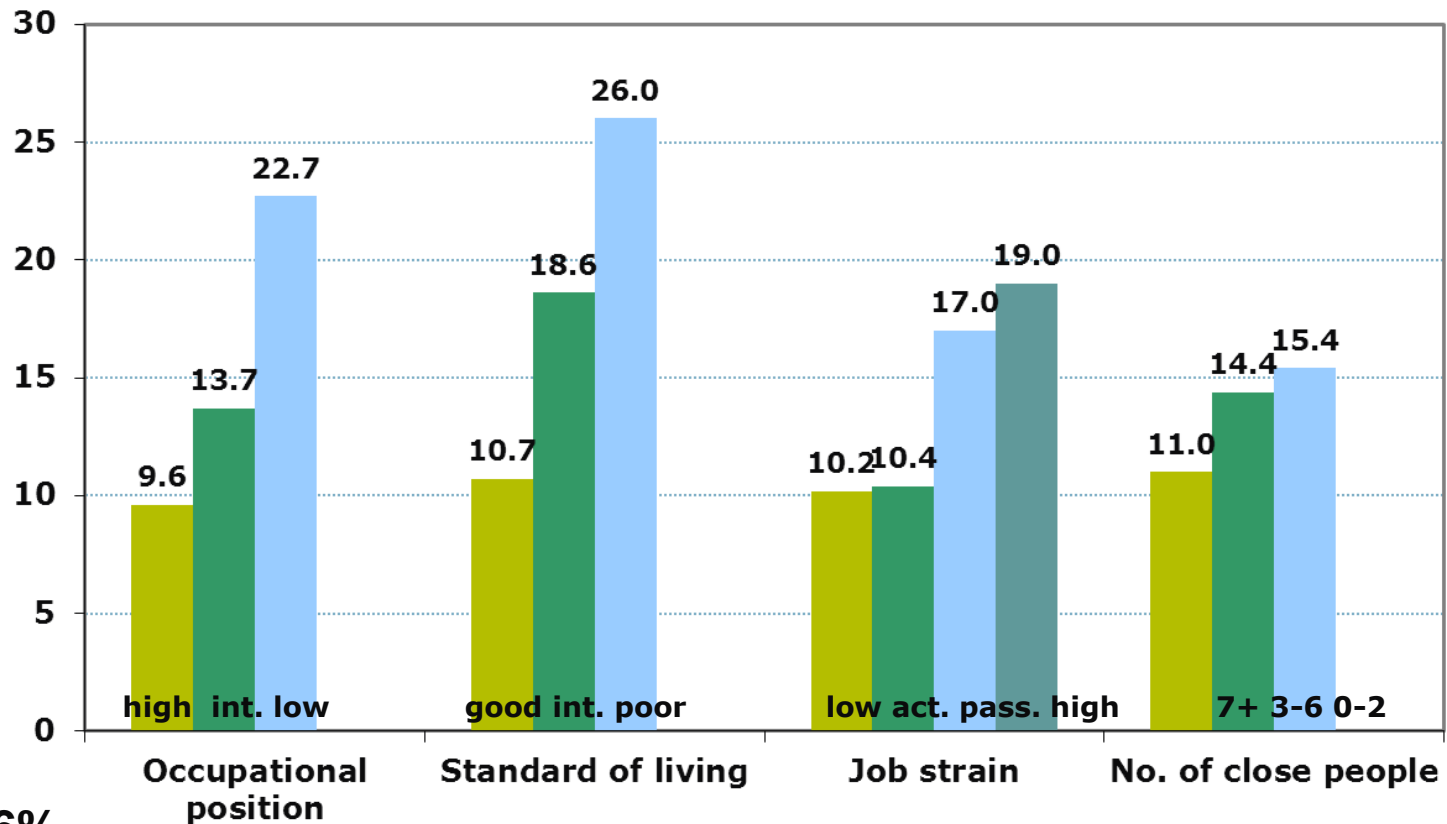
- Depression: the 20-item CES-D scale was at 16 years (2002-4) and 21 years (2007-9) after the assessment of the baseline exposures
- Psychological symptoms at baseline and during follow-up surveys were assessed by the GHQ-30
- Covariates: sex, length of follow-up (years), and from the 2002-4/2007-9 examinations; age, marital status, income, self-reported longstanding illness, clinically verified coronary heart disease, smoking, alcohol use and physical functioning (SF-36 physical function score)

# Proportion of participants with post-retirement depression by midlife adversities



Onset (%)

Onset of post-retirement depression



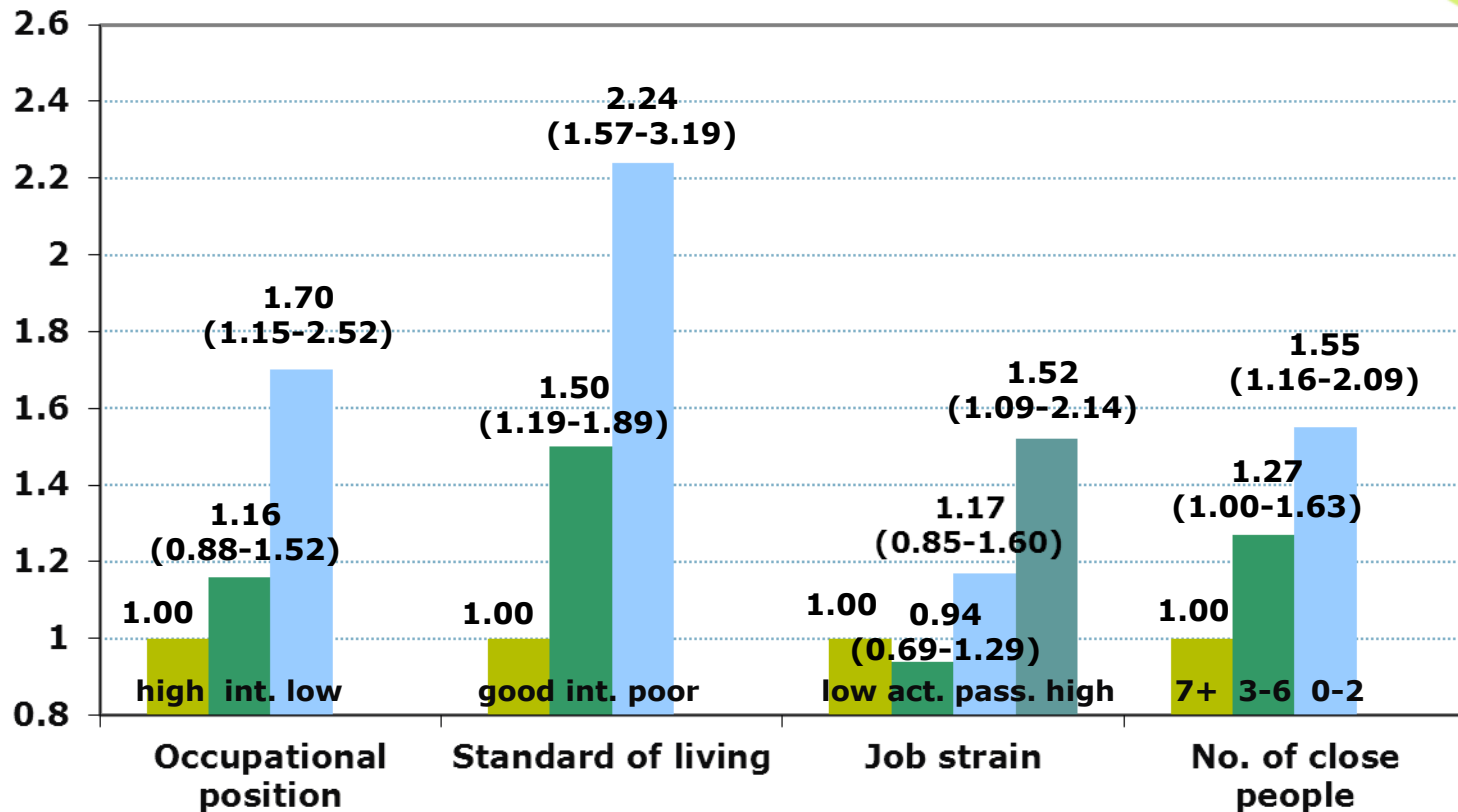
Overall  
onset 13.6%

Midlife adversities

# Likelihood of post-retirement depression by midlife adversities

Adjusted risk\*

OR of post-retirement depression



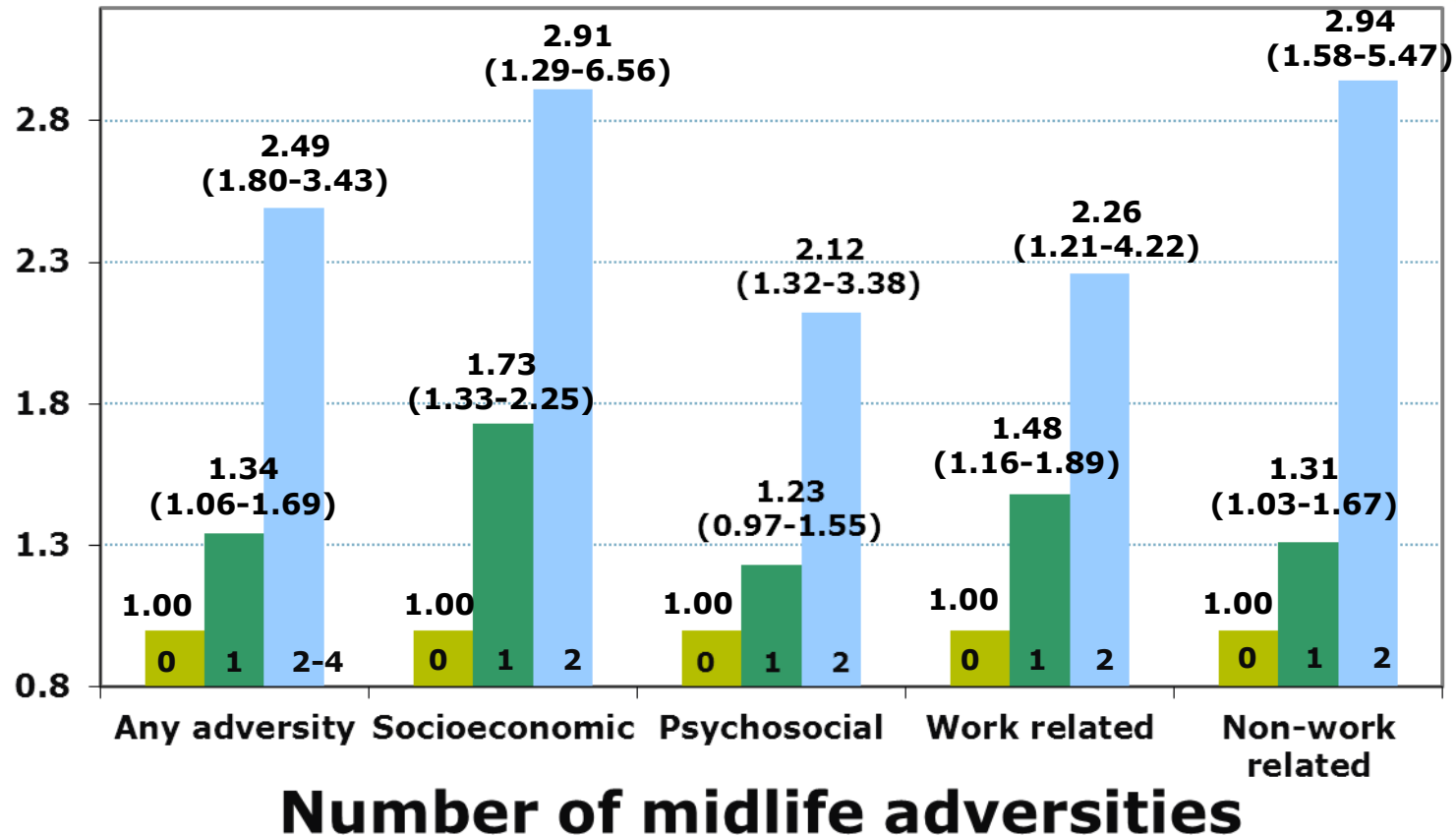
## Midlife adversities

\*Adjusted for age, sex, length of follow-up time, occupational position, psychological distress at baseline and during follow-up; follow-up marital status, long-standing illness, coronary heart disease, smoking, alcohol use, physical function and income.

# Likelihood of post-retirement depression by the number of midlife adversities

Adjusted risk\*

OR of post-retirement depression



\*Adjusted for age, sex, length of follow-up time, occupational position, psychological distress at baseline and during follow-up; follow-up marital status, long-standing illness, coronary heart disease, smoking, alcohol use, physical function and income; socioeconomic and psychosocial adversities adjusted for each other and work related and non-work related adversities adjusted for each other

# Continuity of psychological symptoms in midlife and post-retirement

**SUPPLEMENTARY TABLE 1. Odds Ratios (OR) and 95% Confidence Intervals (CI) Comparing Risk for Post-Retirement Depressive Symptoms by Psychological Distress at Baseline and During the Follow-up Years**

Psychological Distress at Baseline and During the Follow-up Years	Post-Retirement Depression										
	N	N of cases	%	OR <sup>a</sup>	95% CI <sup>a</sup>	Wald $\chi^2$ (df)	p	OR <sup>b</sup>	95% CI <sup>b</sup>	Wald $\chi^2$ (df)	p
At baseline											
No	2,875	298	10.4	1.00				1.00			
Yes	1,064	236	22.2	2.62	2.14–3.21	86.74 (1)	<0.0001	2.46	2.00–3.03	71.92 (1)	<0.0001
At baseline and during follow-up											
No – No (healthy)	1,620	83	5.1	1.00				1.00			
No – Yes (onset)	1,255	215	17.1	4.03	3.04–5.36	92.87 (1)	<0.0001	3.49	2.62–4.66	72.09 (1)	<0.0001
Yes – No (improved)	272	24	8.8	1.87	1.14–3.07	6.05 (1)	0.014	1.83	1.11–3.03	5.53 (1)	0.019
Yes – Yes (repeated)	792	212	26.8	7.65	5.71–10.25	185.62 (1)	<0.0001	6.51	4.83–8.77	151.44 (1)	<0.0001

Notes: All analyses are based on multivariable logistic regression analysis. df: degrees of freedom.

<sup>a</sup>Adjusted for sex, occupational position (baseline), length of follow-up; age, and marital status at follow-up.

<sup>b</sup>Additionally adjusted for longstanding illness, coronary heart disease, physical function, smoking, alcohol use, and income level at follow-up.

# Is Retirement Beneficial for Mental Health?

## *Antidepressant Use Before and After Retirement*

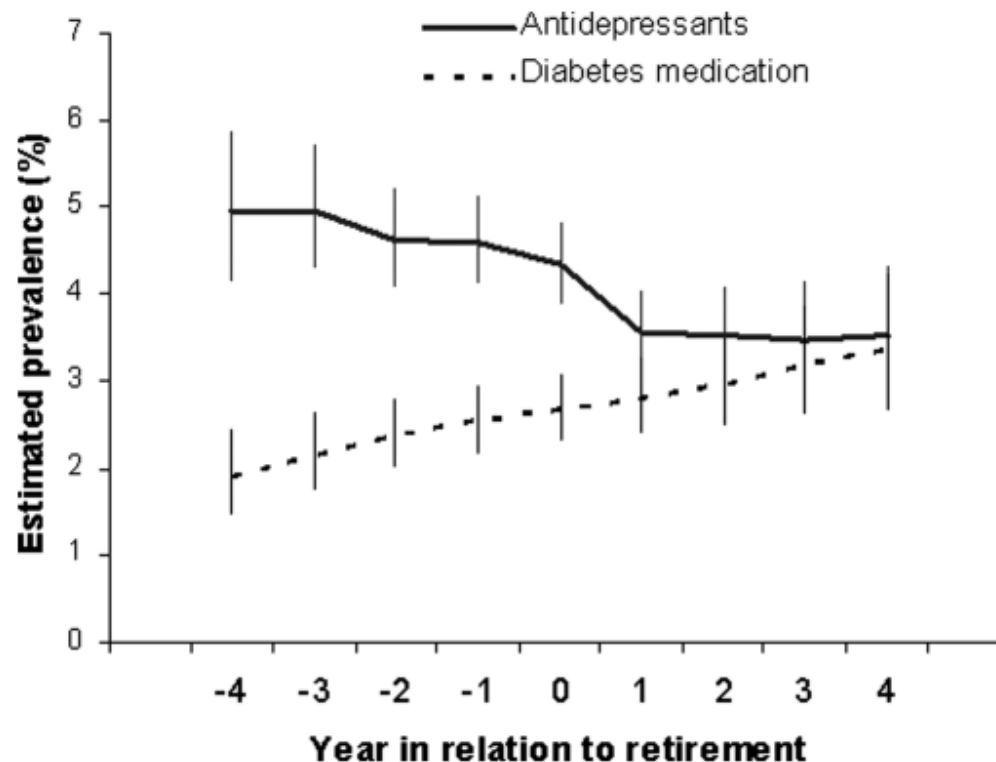
*Tuula Oksanen,<sup>a,b</sup> Jussi Vahtera,<sup>a,c</sup> Hugo Westerlund,<sup>d</sup> Jaana Pentti,<sup>a</sup> Noora Sjösten,<sup>a</sup>  
Marianna Virtanen,<sup>a</sup> Ichiro Kawachi,<sup>b</sup> and Mika Kivimäki<sup>a,e,f</sup>*

*(Epidemiology 2011;22: 553–559)*

- 7138 employees (76% women) from the Finnish Public Sector Study who retired at statutory retirement age between 1995 and 2004
- Date of retirement was obtained from the Finnish Centre of Pensions
- Data on purchases of antidepressants ( $\geq 30$  days dose) 4 years before and 4 years after retirement were obtained from the Social Insurance Institution



# Trajectories of antidepressant and diabetes medication use in relation to retirement



## Effect of retirement on major chronic conditions and fatigue: French GAZEL occupational cohort study

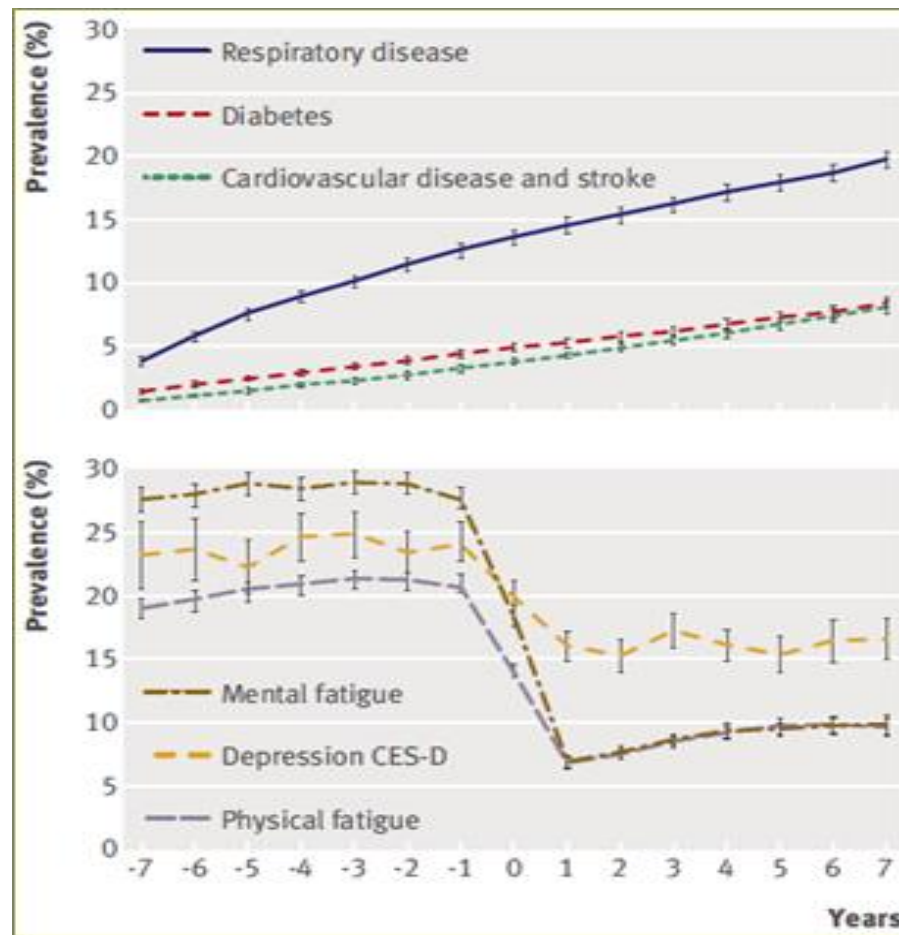
Hugo Westerlund, associate professor of psychology,<sup>1,2</sup> Jussi Vahtera, professor of public health,<sup>3,4</sup> Jane E Ferrie, senior research fellow,<sup>2</sup> Archana Singh-Manoux, research director,<sup>2,5</sup> Jaana Pentti, statistician,<sup>3</sup> Maria Melchior, senior researcher,<sup>5</sup> Constanze Leineweber, researcher,<sup>1</sup> Markus Jokela, senior research fellow,<sup>2</sup> Johannes Siegrist, professor of medical sociology,<sup>6</sup> Marcel Goldberg, professor of epidemiology,<sup>5</sup> Marie Zins, senior researcher,<sup>5</sup> Mika Kivimäki, professor of social epidemiology<sup>2,3</sup>

BMJ 2010;341:c6149

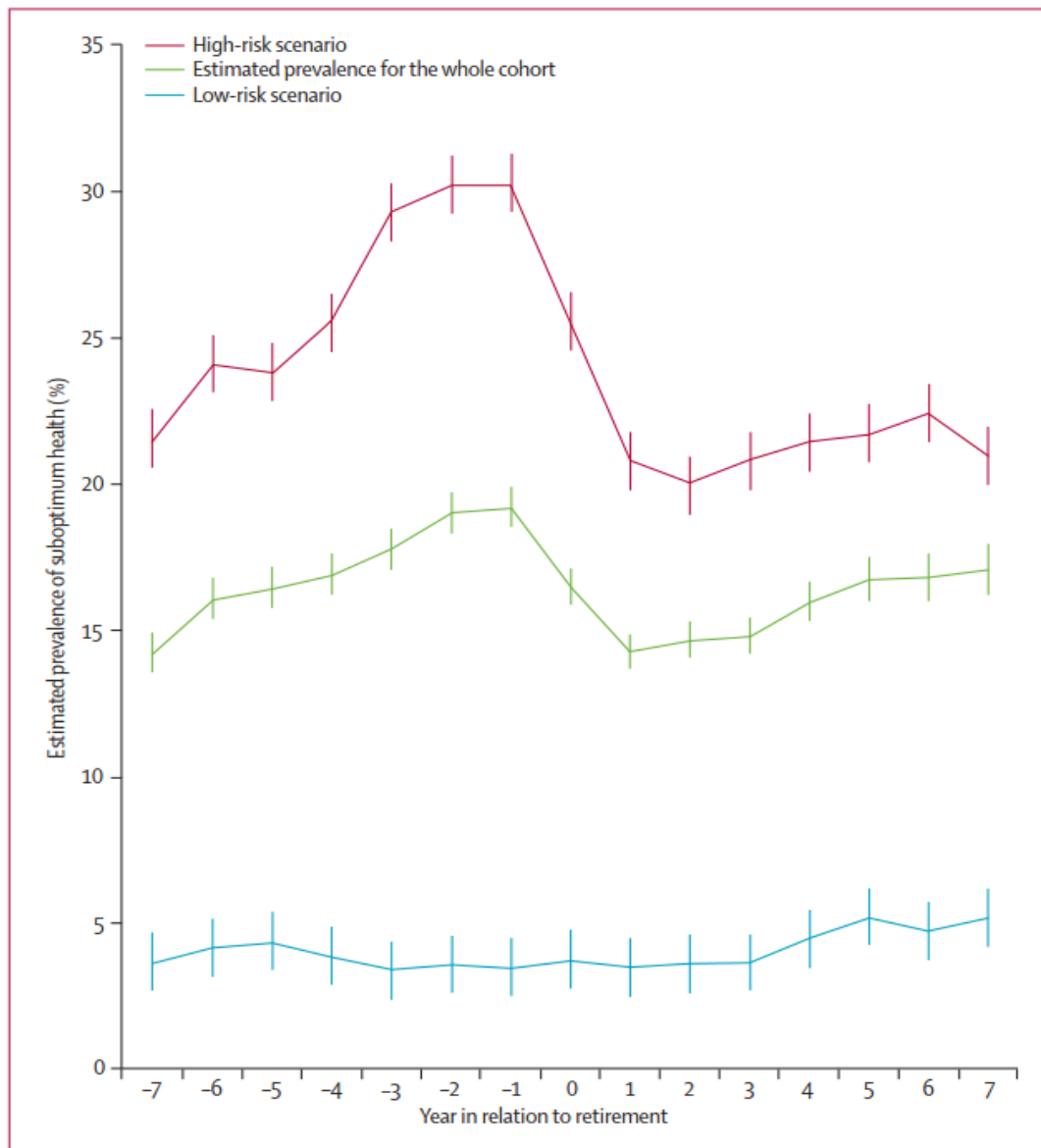
- 14 104 participants (80% men) in the French GAZEL cohort
- Yearly measures of psychosocial factors, health and well-being 7 years before and 7 years after retirement
- Trajectories of respiratory disease, diabetes, cardiovascular diseases, mental fatigue, physical fatigue and depression were examined in relation to retirement



# Trajectories of health in relation to retirement



Westerlund et al., 2010



Effect of transition in employees with high-risk and low-risk profiles

**Figure 3: Prevalence of suboptimum self-rated health in relation to year of retirement for a high-risk and low-risk scenario involving men who retired at the statutory age of 55 years and before the year 2000**  
Low-risk profile=high occupational grade, low physical and psychological demands, and high job satisfaction.  
High-risk profile=low grade, high demands, and low satisfaction. Error bars indicate 95% CIs.

# Conclusions

- Psychosocial working conditions have an effect on several aspects of the transition process from work to retirement
  - Voluntarily postponing the timing of retirement -> leading to longer work careers
  - Health and well-being after transition
- The presented studies give support to recovering pattern and maintaining pattern in transition in relation well-being after retirement
- Those with recovering pattern seem to have higher level of symptoms despite the recovery than those with maintaining pattern
- Psychosocial and socioeconomic adversity in midlife may have predictive value to depression post-retirement





# Thank You!