

# Social, psychological and health-related determinants of retirement: Findings from a general population sample of Australians

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## Why study determinants of retirement?

- Response to ageing workforce includes encouraging continued work and delayed retirement
  - Need to understand reasons for & barriers to participation for this to be appropriate
  - Enable intervention/accommodation around barriers
- Individual benefits to staying at work
  - e.g., social connectedness, financial, activity

## Factors thought to influence retirement decisions (Beehr & colleagues)

- Personal: health, financial wellbeing, family/marital status
- Work-related: job satisfaction and job conditions, support at work, retirement incentives
- “pull” factors: caring for others, leisure activities

- Previous studies: mainly cross-sectional associations between these factors and people's retirement intentions
- Support for poorer physical / general health and earlier planned retirement age
- Mixed support for other factors – due to different samples & methods

- Limited longitudinal analysis
- Social characteristics
- *Mental health*
  - Affects significant proportion of population
  - Closely related to physical health
  - Related to workforce participation and performance
  - Influenced by job conditions – may be involved in the influence of job conditions on retirement?

- Does mental health influence retirement behaviour?
- Does this vary with age at retirement?
- Is the influence of mental health affected by poor workplace conditions or vice versa?
  - e.g., job stress may exacerbate the influence of mental health or poor mental health may exacerbate job stress
- Relative influence of mental health and social factors to known determinants of physical health, financial, and workplace factors

- Representative sample
  - Generalisable
  - Range of ages
  - Longitudinal
  - Info on retirement determinants and employment status
  
- Household, Income and Labour Dynamics in Australia (HILDA) Survey
  - 5 annual waves
  - Employment status collected at every wave

- 45 to 75 years
- Age cohorts: 45-54, 55-59, 60-64, 65-75 yrs
  - Does age at retirement matter?
- Excluded people already retired
- Using annual employment status, identified timing of retirement events
  - E.g., Wave 1 = employed → Wave 2 = retired



- Time-varying measures
  - Mental health: Mental Health subscale of the SF-36 (MHI-5)
  - Physical health functioning: Physical Functioning subscale (PF-10)
  - Household income and financial hardship
  - Job conditions: control, security, stress, skill utilisation
  - Job satisfaction: security, flexibility, hours, work itself, pay, overall
  - Social support and social contact with friends & family
  - Alcohol consumption, smoking

- Discrete-time survival analysis
  - Based on complimentary log-log regression model
- Time-varying data at each wave ( $\tau$ ) predicts the probability that individuals are retired (or not) at following wave ( $\tau + 1$ )
- Reported as hazard (rate) ratios (HR)
- Men and women separately

## Univariate associations

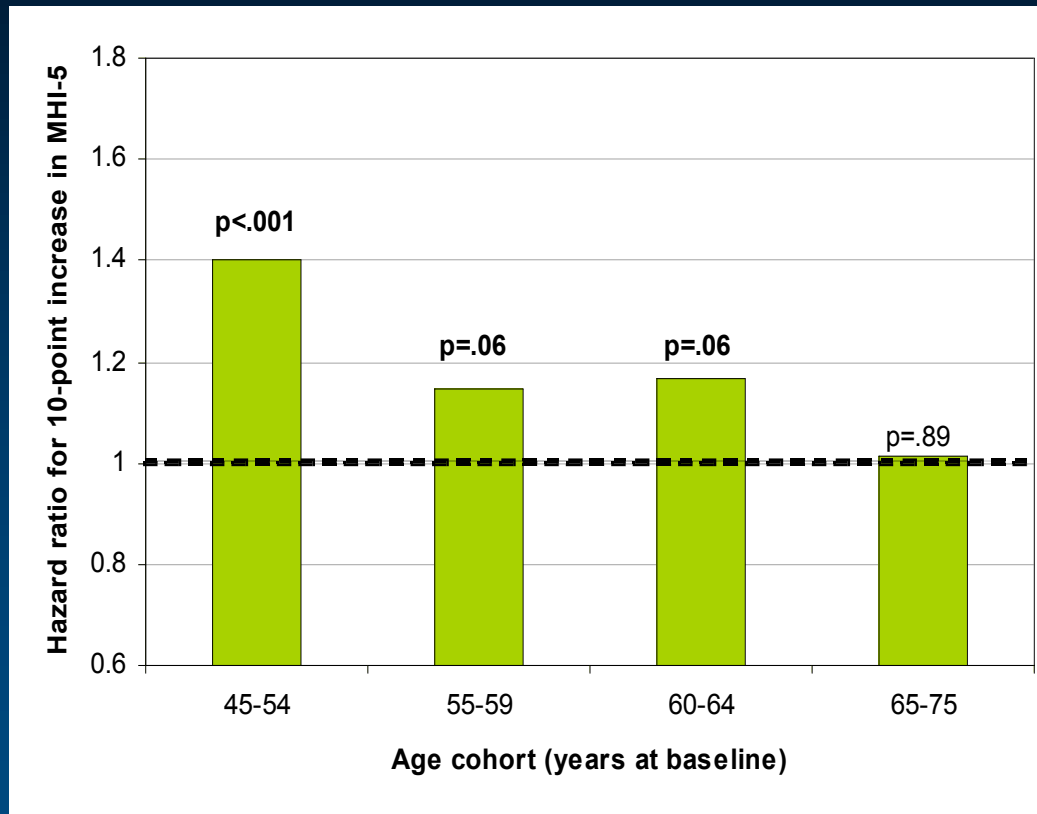
	Men	Women
mental health	*	
physical health functioning	*	*
alcohol consumption		
smoker	*	
household income	*	*
financial hardship	*	
social support		p<.20
social contact	p<.20	p<.20
partner status		*
job stress	*	
job security		
skill utilisation		
job control	*	
satisfaction with pay	m	
satisfaction with security		p<.20
satisfaction with work itself	*	m
satisfaction with hours	m	
satisfaction with flexibility		
overall satisfaction	*	p<.20

Notes: Adjusted for age cohort

\* p<.05

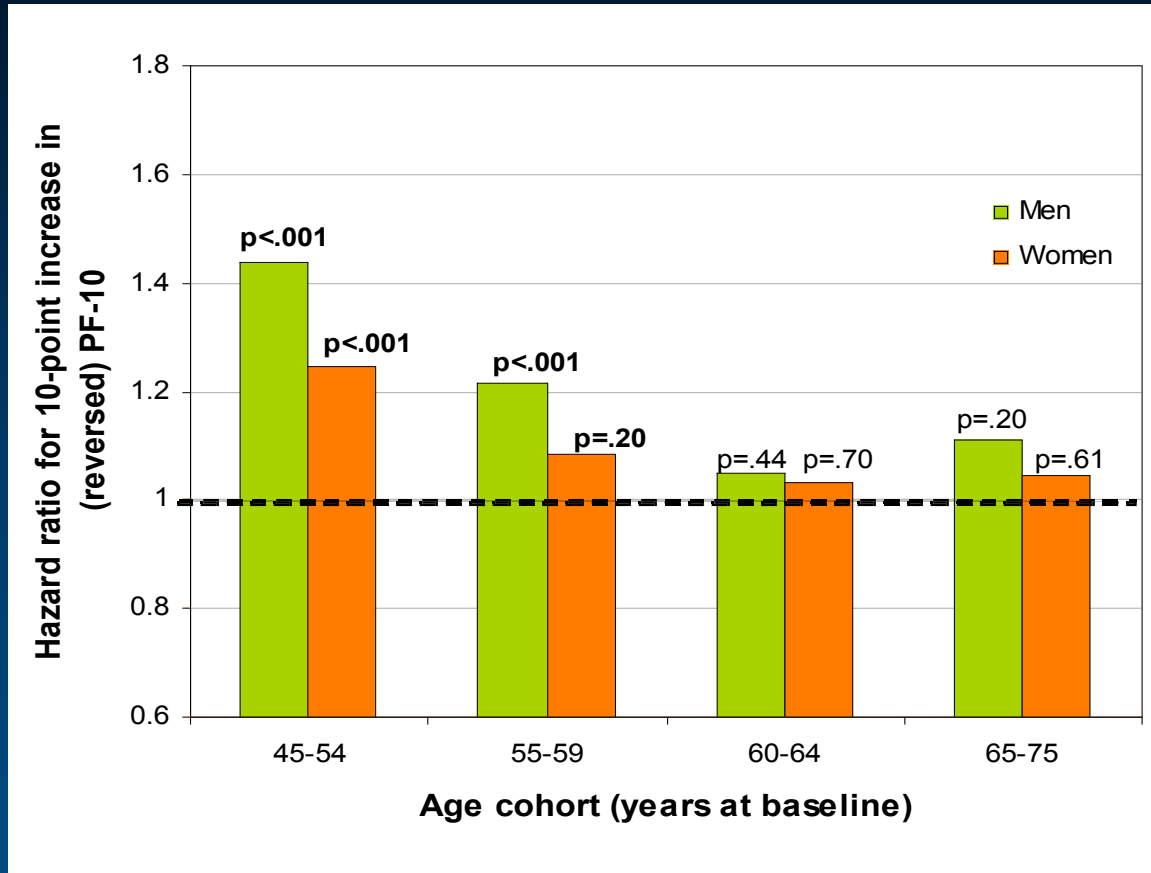
m = Became significant in  
multivariate model

## Interaction 1: Age variable influence of mental health



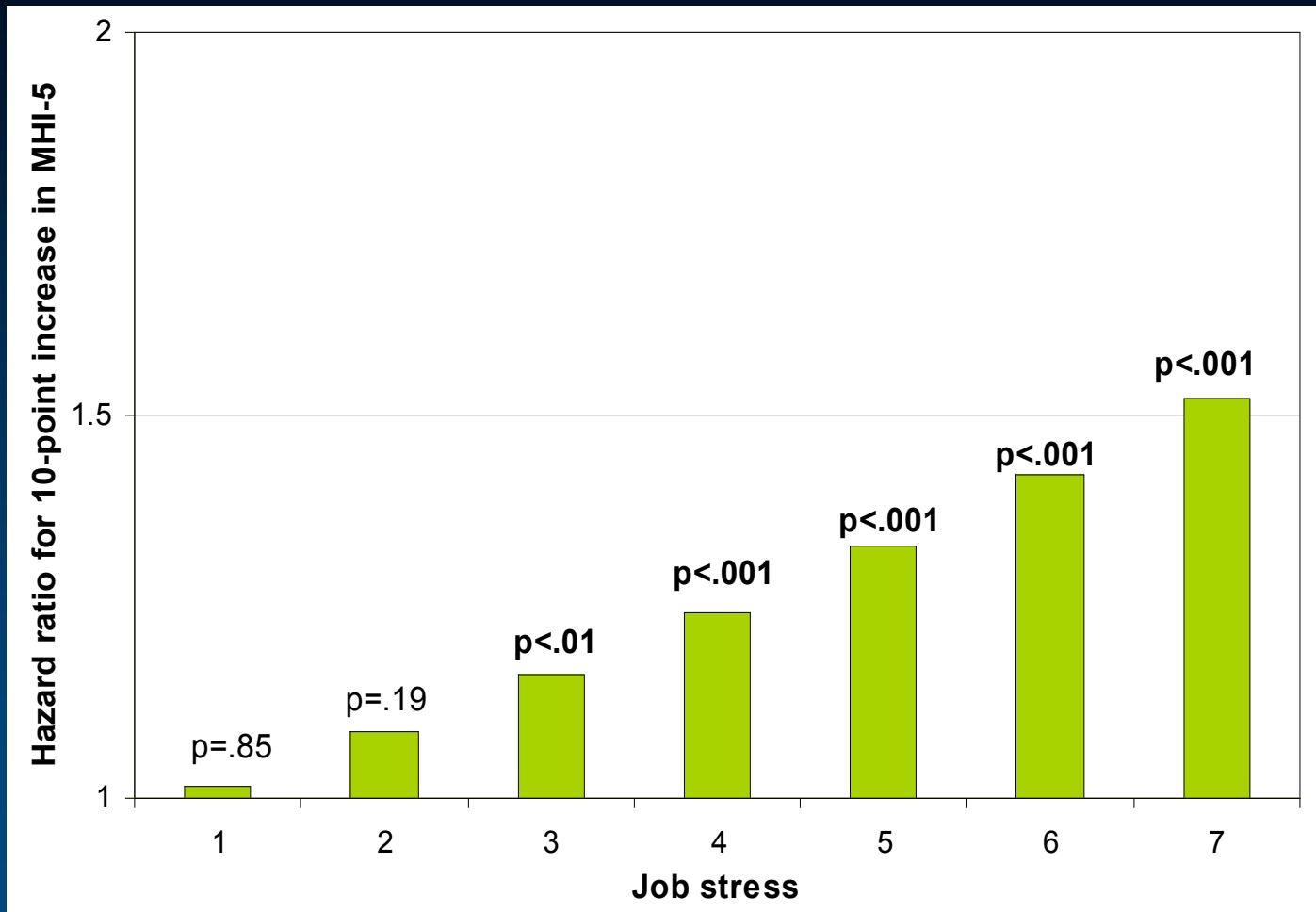
- Poorer mental health associated with higher rate of retirement for men < 65 yrs
- Strongest effect for youngest retirees

## Interaction 2: Age variable effect of physical functioning



- Poorer functioning associated with increased rate of retirement for men <60 yrs, women <55 yrs
- Strongest effect for youngest retirees

- Mental health x job stress for men
  - The association between mental health and retirement was stronger when job stress was moderate to high →



- Mental health x job stress for men
  - The association between mental health and retirement was stronger when job stress was also high
- *Poor mental health associated with retirement if due to / exacerbated by job stress?*
- *Concurrent pressures: those most likely to retire have poor mental health as well as job stress*
- Physical health functioning x job security



# Relative importance of predictors of retirement

		Men	Women
age cohort	45-54 yrs	1	1
	55-59 yrs	7.97***	3.80***
	60-64 yrs	17.16***	9.18***
	65-75 yrs	18.79**	13.71***
mental health		1.03**	-
age x mental health	45-54 yrs	1	-
	55-59 yrs	0.99	-
	60-64 yrs	1.01	-
	65-75 yrs	1	-
physical health functioning		1.06**	1.02***
age x physical functioning	45-54 yrs	1	1
	55-59 yrs	0.99†	0.99†
	60-64 yrs	0.97*	0.98*
	65-75 yrs	0.98	0.98*
partner status	partnered	-	1
	not partnered	-	0.48**
household income	< sample mean	1	1
	>= sample mean	0.70*	0.60***
social contact		0.90*	0.65**
job stress		1.03	-
job stress x mental health		1.00†	-
job security		1.16*	-
job security x physical functioning		0.99**	-
job control		0.90**	-
satisfaction with pay		0.75*	-
(quadratic) satisfaction with pay		1.02*	-
satisfaction with work itself		1.57*	0.83*
(quadratic) satisfaction with work itself		0.96**	-
satisfaction with job hours	low to moderate	1	-
	higher satisfaction	1.80**	-

Strongest for men

Strongest for women  
Less social contact,  
stay at work

Interactions between  
health and  
workplace conditions

\*\*\*p<.001 \*\*p<.01 \*p<.05 †p<.10

- Poorer mental health is a risk factor for workforce exit in men who retire before the traditional age, &
- the predictive effect of mental health is strongest amongst men who also report high levels of job stress
  
- Both mental health and job stress are suitable candidates for intervention with the goal of preventing barriers to continued workforce participation
  - Supports health promotion at work in this population
  - Recognition / accommodation of associated difficulties (e.g., greater flexibility)
  - Strategies to reduce work stress or develop coping strategies to deal with work-related stress

## Other factors amenable to intervention

- Physical functioning: Higher rates of early retirement amongst men and women with poorer functioning
- Dissatisfaction with work itself
- Control at work: Men who experienced greater control retired at lower rates
  
- Accommodate functional limitations
- Enhance (perceptions of) autonomy at work
- Avenues for feedback / consultation
- Collaboration in decision-making re tasks and methods of completion

- Mental & physical health associated with *early* retirement
- Not everyone with health problems leaves work –
  - stronger links for people who also experience poor work conditions
- Moderated role of health in retirement enables more targeted interventions to facilitate continued participation
- Societal and individual benefits

Thank you

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- First to contrast the longitudinal relationship between mental health and workforce exit across early and traditional ages of retirement
- Role of workplace conditions in this relationship
- Relative to financial and social wellbeing
- Demonstrates importance of retirement definition
  
- Anticipatory effects?
- Other potential determinants (e.g., spouses health, pension avail.)

- Reporting bias:
  - people better tolerate ill-health or disability as they age, and thus older people are less likely to report poor health in the presence of illness relative to younger people
  - Justification for early exit
- There must be drivers to workforce exit amongst (younger) people who would typically stay at work, but retirement is normative at older ages regardless of health status
- Those still working at older ages are healthier
  - 'Unhealthy' have already left at younger ages

## Why gender differences?

- Mental health & workforce factors not apparent for women
- Other factors more important? (e.g., family commitments)
- Definition of workforce departure?
  - Mental health significant for youngest women when definition widened