



universität  
wien



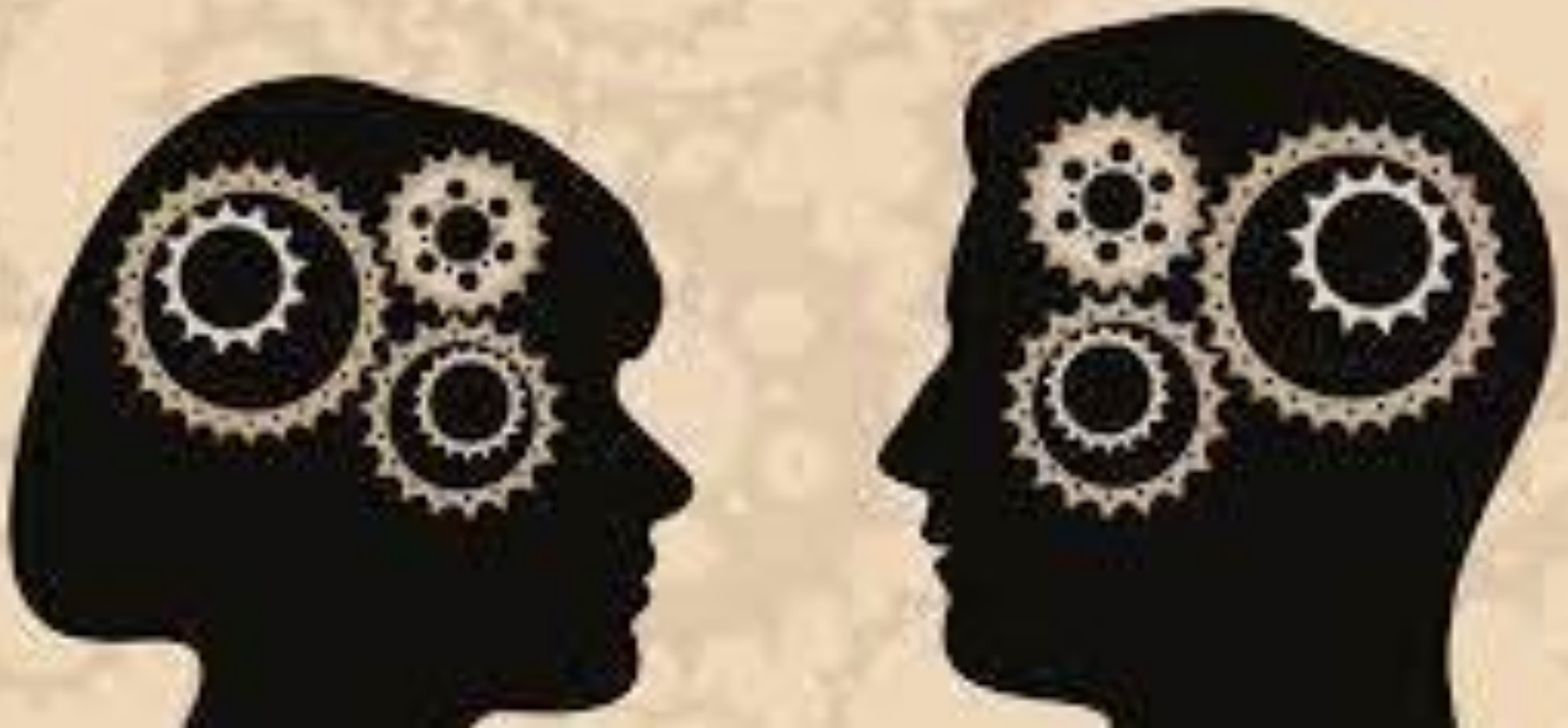
International Institute for  
Applied Systems Analysis

W|W|T|F

Vienna Science  
and Technology Fund

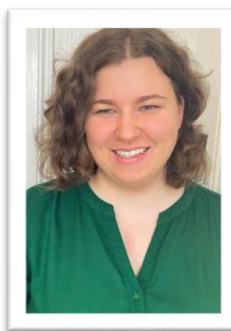
# Gender differences in episodic memory and gender role attitudes in Europe

Valeria Bordone, Daniela Weber

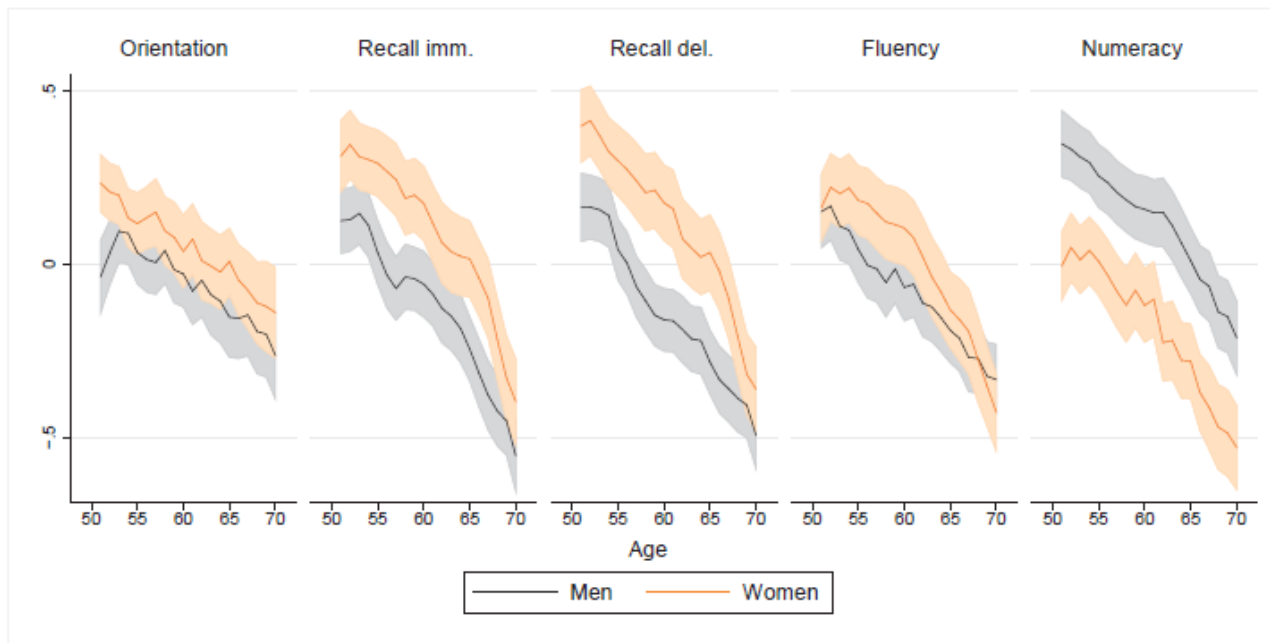


# Cognitive Health in Aging Society

- **Context-related inequalities** in the association of labour market participation with cognition
- **Time-related heterogeneities** in the association of labour market participation with cognition
- Role of cognitive **health promoting policies**



# Cognitive ageing by gender



Source: Mazzonna & Peracchi (2009)

## Social-cognitive theory of gender development

- Integrates psychological and socio-structural determinants
- Gender conceptions and roles are the product of a broad network of social influences operating interdependently in a variety of societal subsystems
- Human differentiation on the basis of gender is a fundamental phenomenon that affects virtually every aspect of people's daily

(Bussey & Bandura 1999)

➔ Cognitive ageing needs to be studied **with** contextual factors

### Do gender role attitudes affect old-age cognition?

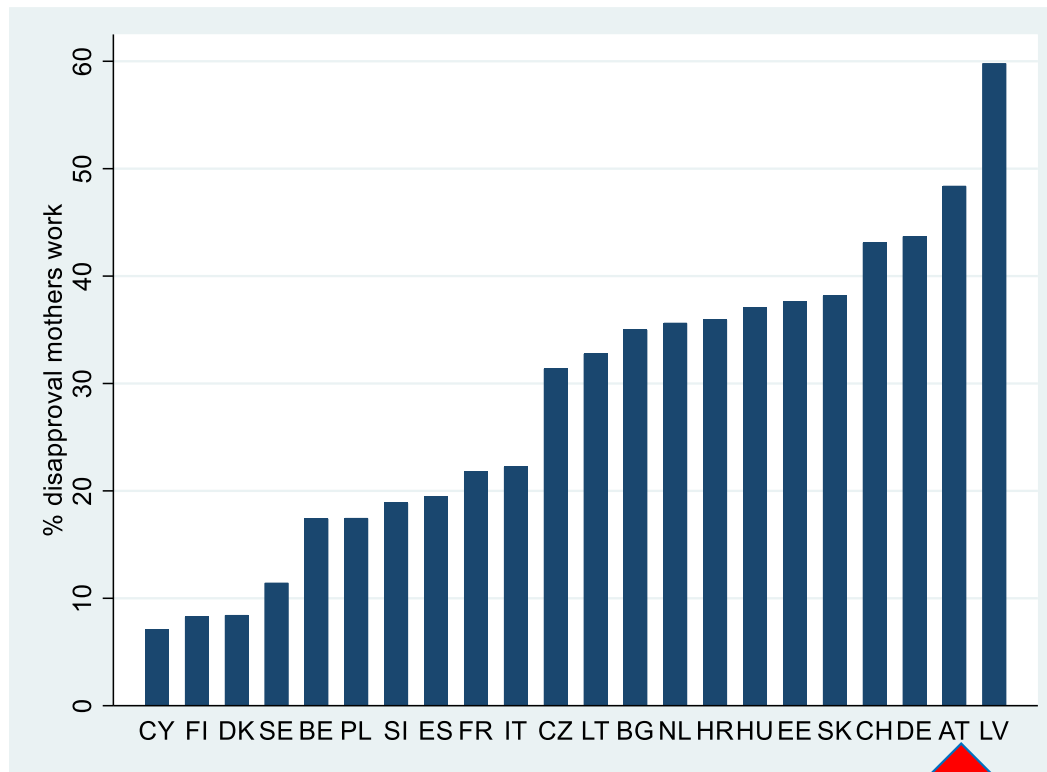
# Gendered cognitive ageing as a function of gender equality?

- Less gender-restricted educational opportunities are associated with increased gender differences
  - Favouring women in some cognitive functions and decreasing/eliminating gender differences in other cognitive abilities (Weber et al. 2014)
- Older women perform relatively better in countries characterised by more equal gender-role attitudes (Bonsang et al. 2017)
  - Robust to cohort differences and reverse causality
  - Effect partially mediated by education and labour-force participation

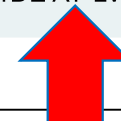
## Data & method

- European Social Survey (ESS) round 9, 2018-2020
  - Disapproval of full-time employment if child <3yrs (separate for men and women)
- European Value Survey (EVS), 2017-2022
  - Agreement to “if jobs are scarce, priority to men”
- Survey of Health, Ageing and Retirement in Europe (SHARE) wave 8, 2019-2020
  - 46,733 participants aged 50+ in 22 European countries
  - Immediate and delayed recall (memory)
  - Fluency
- Multilevel linear models with random intercept

# Results: % (Strong) disapproval of mothers working full-time when child <3



Source: own calculations on ESS round 9



## Results: Memory, women

	1 (attitudes 50+)	2 (attitudes 50+)	1 (attitudes all)	2 (attitudes all)
Intercept	8.88 (0.22) ***	8.93 (0.22) ***	8.89 (0.22) ***	8.93 (0.22) ***
Age	-0.07 (0) ***	-0.07 (0) ***	-0.07 (0) ***	-0.07 (0) ***
Education (primary)				
secondary	0.74 (0.03) ***	0.74 (0.03) ***	0.74 (0.03) ***	0.74 (0.03) ***
tertiary	1.42 (0.03) ***	1.42 (0.03) ***	1.42 (0.03) ***	1.42 (0.03) ***
Female	0.34 (0.02) ***	0.26 (0.04) ***	0.34 (0.02) ***	0.27 (0.04) ***
Disapproval	0.45 (0.59)	0.3 (0.59)	0.47 (0.64)	0.33 (0.65)
Disapproval # Female		0.26 (0.12) *		0.24 (0.13) +

Source: own calculations on ESS 9 and SHARE wave 8; N = 38,336; Significance: + p < 0.1; \*p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001



## Results: Memory, women

	<b>1 (attitudes 50+)</b>	<b>2 (attitudes 50+)</b>	<b>1 (attitudes all)</b>	<b>2 (attitudes all)</b>
Intercept	9.51 (0.16) ***	9.42 (0.16) ***	9.49 (0.15) ***	9.40 (0.15) ***
Age	-0.07 (0) ***	-0.07 (0) ***	-0.07 (0) ***	-0.07 (0) ***
Education (primary)				
secondary	0.67 (0.02) ***	0.66 (0.02) ***	0.67 (0.02) ***	0.66 (0.02) ***
tertiary	1.32 (0.03) ***	1.31 (0.03) ***	1.32 (0.03) ***	1.31(0.03) ***
Female	0.30 (0.02) ***	0.53 (0.03) ***	0.30 (0.02) ***	0.51 (0.03) ***
MenPriority	-1.68 (0.53) **	-1.04 (0.54)	-1.87 (0.60) **	-1.13 (0.61)
MenPriority # Female		-1.15 (0.11) ***		-1.30 (0.13) ***

Source: own calculations on EVS and SHARE wave 8; N = 40,596; Significance: + p < 0.1; \*p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001

## (Preliminary) conclusion / Next steps

- No or opposite-to-expected effects of gender roles on cognition
  - Similar results for immediate recall, delayed recall, and fluency
  - Similar results constructing the gender roles indicator differently
- Different results when using ESS item vs EVS item(s)
  - Replication on „when jobs are scarce, men should have priority“
  - Robustness check on „a pre-school child suffers if mother works“
- Role of (differences in) policies
  - Child care provision
  - Urban/rural

Thank you