

# A study of multidimensional wellbeing inequalities over the life course

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# Motivation

- In the context of rapidly ageing societies, the development of health and wellbeing with age has become more and more relevant (Lopez Ulloa et al. 2013)
- the relationship between age and wellbeing and health is subject to investigation by numerous studies in different disciplines, but
- the way in which **wellbeing and health vary with age** and the **heterogeneity across indicators and socio-demographic groups** remains a subject of theoretical and empirical debate.

# Age and wellbeing link

- Most theories predict wellbeing to remain **stable** “despite ageing”
  - Easterlin paradox and the aspiration level theory argue that **individuals adapt their expectations for the future to their current situation** (Easterlin 1974; Frey and Stutzer 2002)
  - the set point theory predicts that there exists a **predisposition** to a given level of wellbeing for each individual (Lykken and Tellegen 1996; De Neve et al 2010)
  - Gerontology research points to **socio-emotional selectivity mechanism, life course de-regulation** and more realistic expectations to explain the stability of subjective wellbeing at older ages despite deterioration of health conditions (Walker 2005)

# Age and wellbeing link

- However, most studies show a **U-shaped form** of SWB over the life cycle with a minimum between mid-30s and early 50s (midlife crisis)  
(van Landeghem 2012; Blanchflower and Oswald 2008)
- **young adults have higher expectations that are not met** when they get older but older individuals tend to **adapt**, and ***happier individuals live longer*** (Lopez Ulloa et al. 2013)
- Mental health is the lowest and depression-anxiety peaks in mid-life (Blanchflower and Oswald 2008)

# Age and wellbeing link

- In most **longitudinal studies**, however, the U-shaped association of wellbeing with age is greatly moderated or disappears (Frijters and Beaton 2012; Kassenboehmer and Haisken-DeNew 2012; Gwozdz and Sousa-Poza 2010, Wunder et al 2013)
  - Cohort effects
  - Reversed causality between age and SWB due to mid-life life events (family formation, employment) that are correlated with age but also with SWB
- Very recent studies show that a **wave-shape** (cubic-type functional form) of age on life satisfaction better fits the data (Biermann et al. 2019)

# Multidimensional wellbeing and health

- Life course development of **specific domains of wellbeing and health**  
(Easterlin 2006; Easterlin and Sawangfa 2007)
  - increasing *financial* wellbeing after the age of 50 but flatter development of satisfaction with *health* and upturn after 60 (Wunder et al. 2013)
  - the decline between late teens and mid-age is more pronounced for satisfaction with *social contacts and friends*, and satisfaction with *leisure* activities, hobbies and interests (Otterbach, Sousa-Poza and Moller 2019)
  - U-shaped form in the *positive affective* component of wellbeing (optimism) but not on the *negative affective (stress)* component (Stone et al. 2010)
- No comprehensive study

# The social stratification of wellbeing

- Well-being is unequally distributed across social groups
- Women are on average (slightly) happier but report lower health than men, while higher education is associated to greater happiness

(Blanchflower and Oswald 2004; Easterlin 2001)

# The social stratification of wellbeing

- The development of wellbeing over the life course across groups is related **to group differentials in the exposure to life events** that are also strongly correlated with age (marriage and childbearing, health, labor market) (Yang 2008)
- The **cumulative (dis)advantage theory** (McDonough et al. 2015) predicts that educational disparities in well-being increase with age because early disadvantages from low education cumulate with age
  - evidence tends to be mixed (Mirowsky and Ross 2008, Yang 2008)



# Data and method

- Swiss Household Panel (SHP) 1999-2017
- Individuals who personally participated (not proxies) in the survey
  - SWB 'sample': 2097 ids (938 M, 1159 F), N=29370, waves 2001-2017
  - HEALTH 'sample': 2449 ids (1079 M, 1370 F), N= 32075, waves 2004-2017
- Age range 25-74
- Dependent variables:
  - **SWB** (Life satisfaction, Sat. with: personal relationship, health, financial situation, work conditions, leisure activities, living together in the household and housework division);
  - **HEALTH** (Health status, Feeling of optimism, Feeling of depression, Headaches, Weakness weariness and sleep disorders)

# Data and method

- Age in 5-year categories (25-29;30-34;35-39;40-44;45-49 ... 70-74)
- Moderating variables:
  - gender and education (Primary or lower secondary, Upper secondary, Tertiary)
- Controls:
  - marital status (single, married, separated, divorced or widow), employment status (employed, inactive, unemployed); number of children, Swiss nationality, birth cohort, disposable household income.

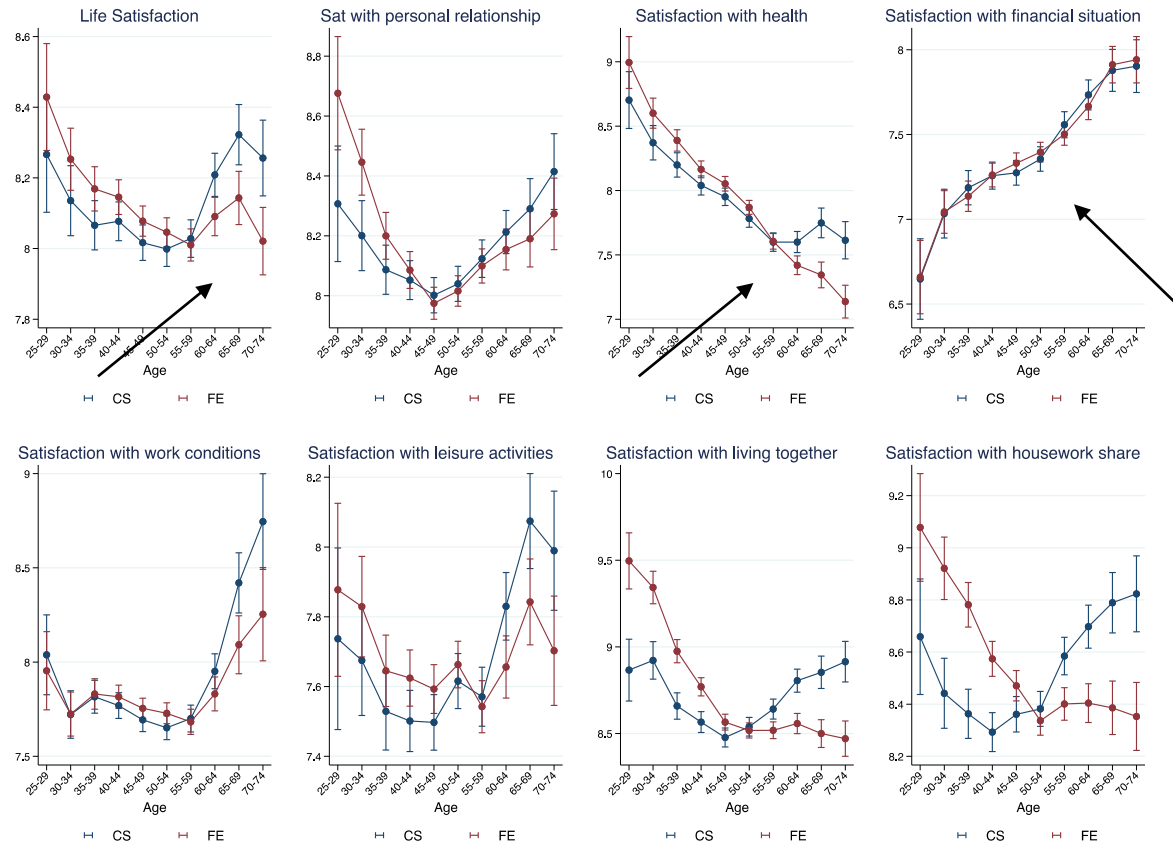
# Data and method

- Method
  - Fixed Effect vs Cross-sectional estimates for the association between age and SWB and Physical and Mental health
  - Fixed Effect models by gender and education
- Robustness check
  - Hybrid Correlated Random Effect (CRE) model to estimate within and between age effects simultaneously
  - Age continuous, cubic functional form (Biermann et al 2019)
  - CRE models by gender and education

# Results

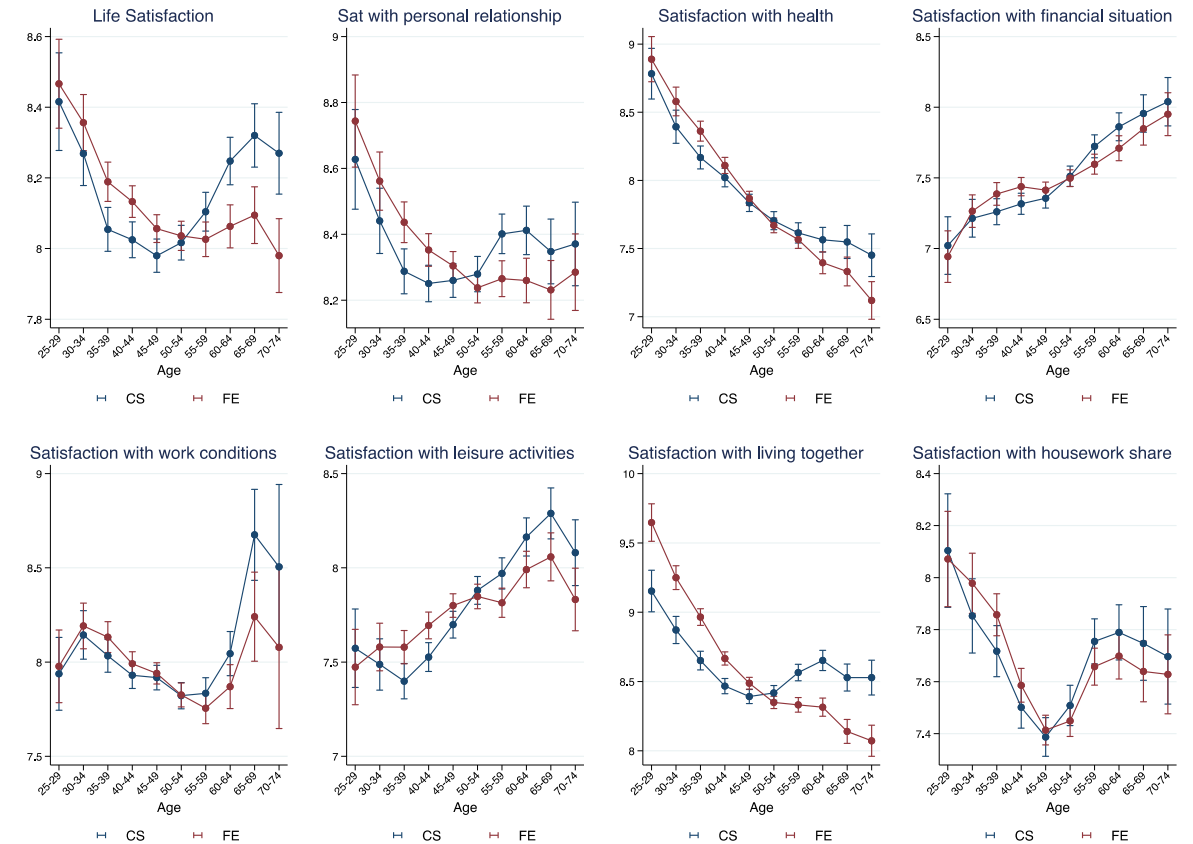
SWB across age within individual, CS vs FE

Men



SWB across age within individual, CS vs FE

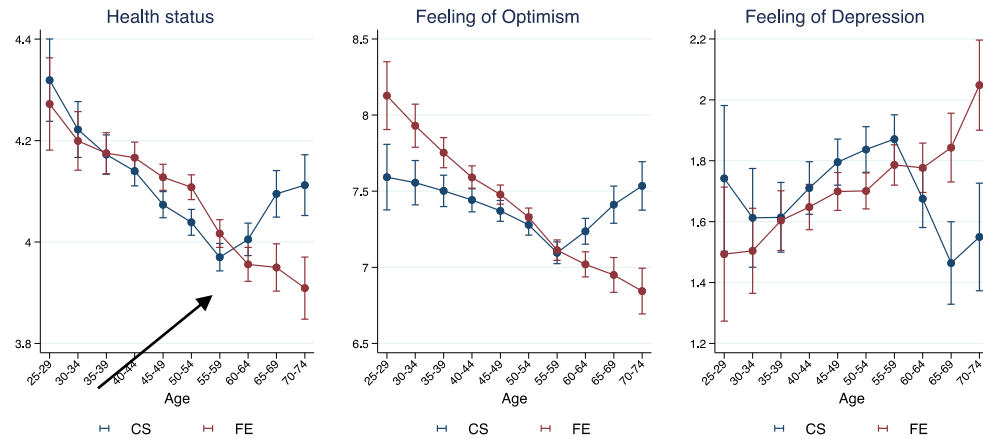
Women



# Results

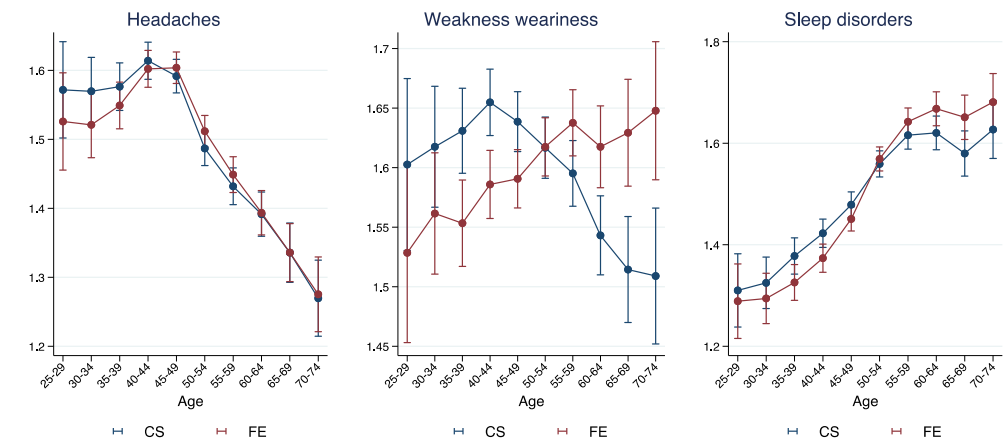
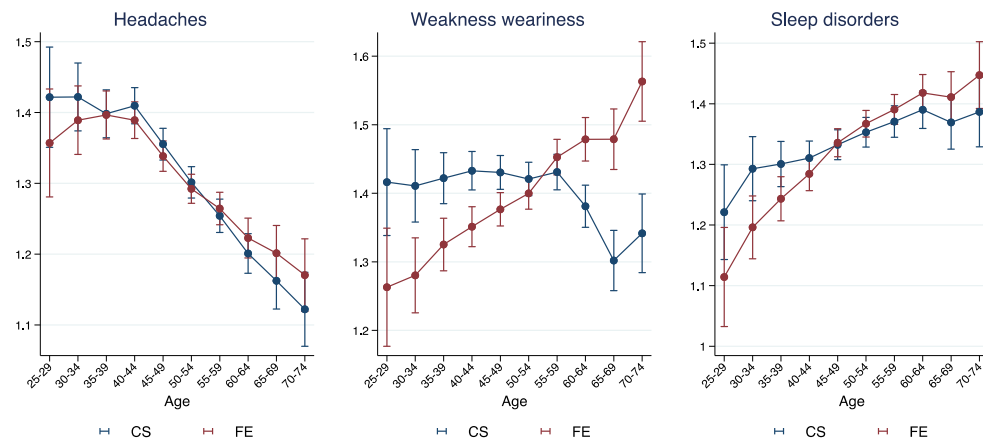
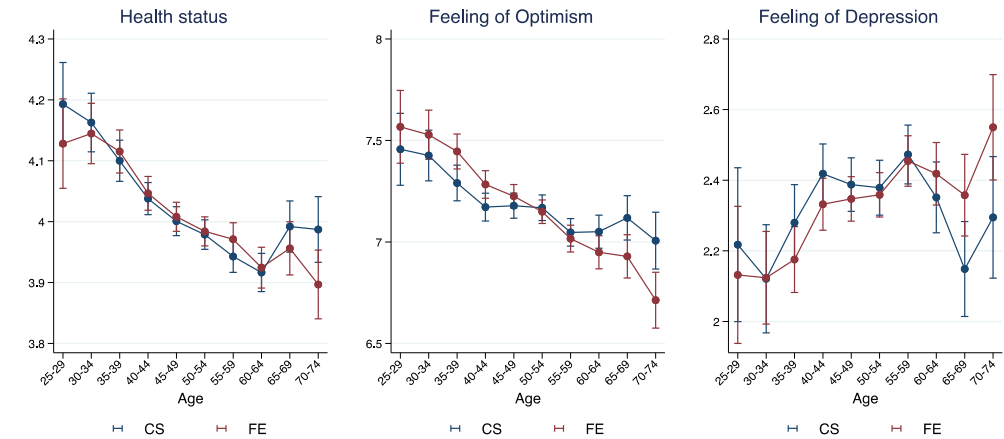
Health across age within individual, CS vs FE

Men



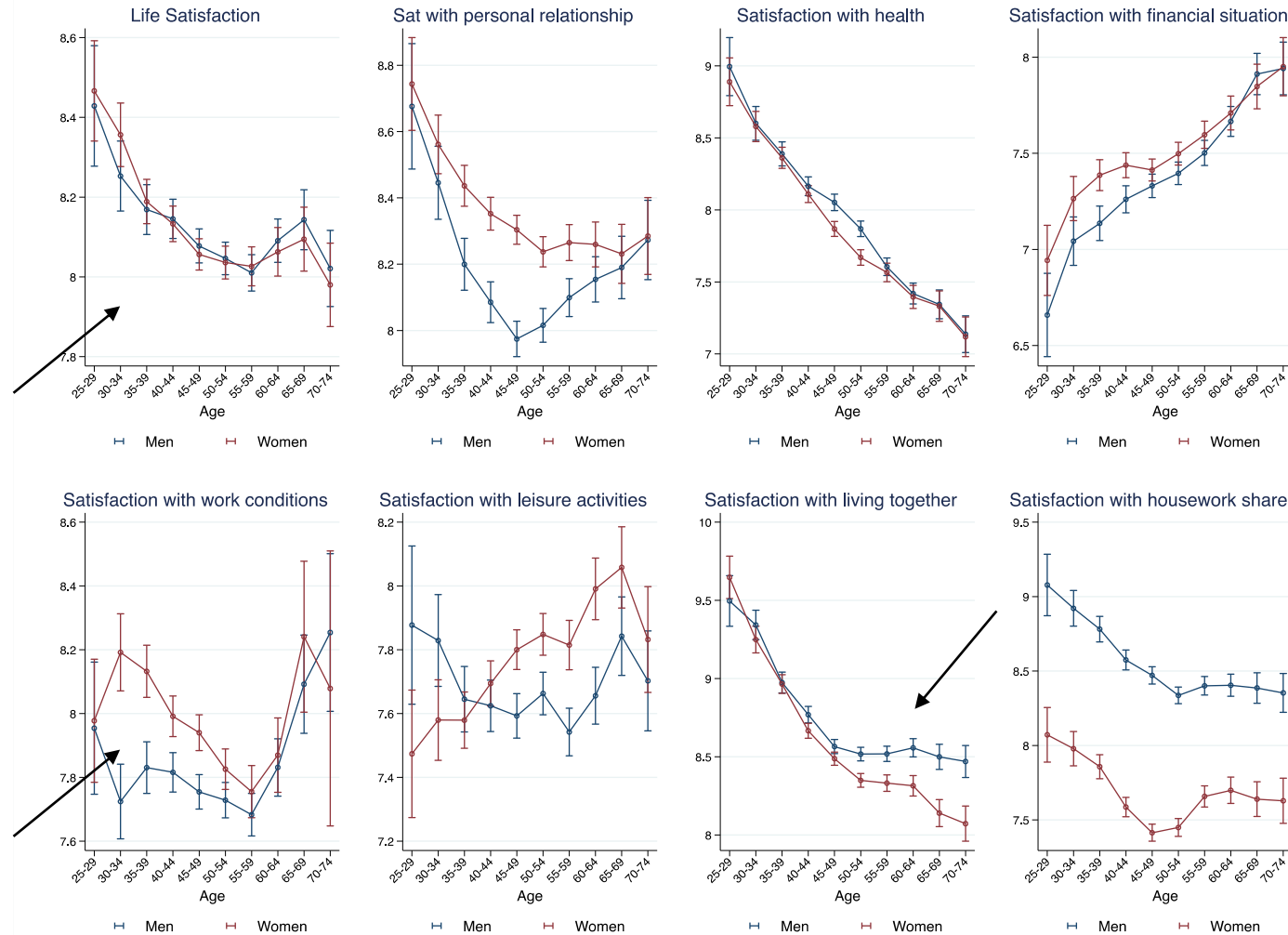
Health across age within individual, CS vs FE

Women



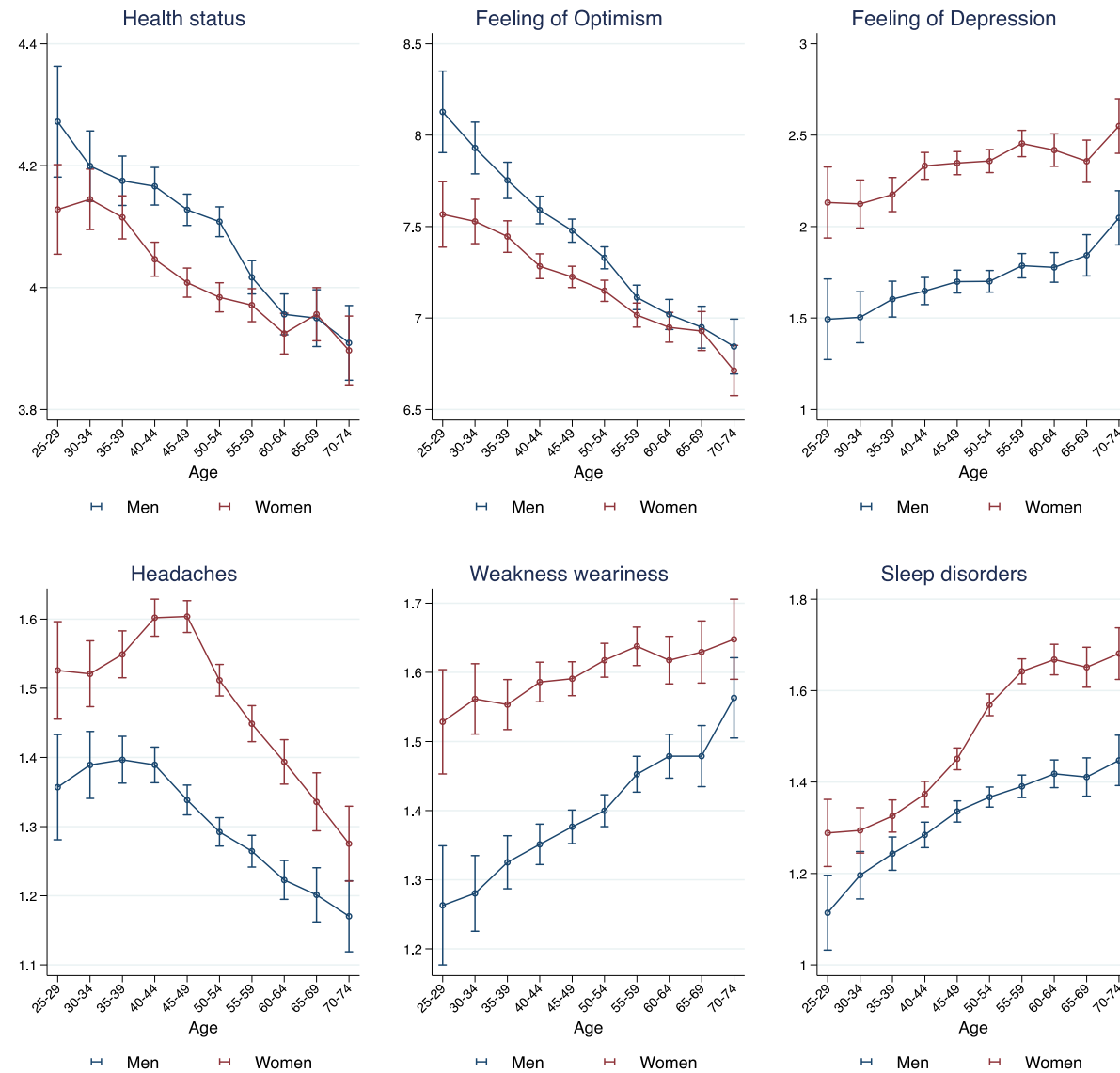
# Results

SWB across life course by gender



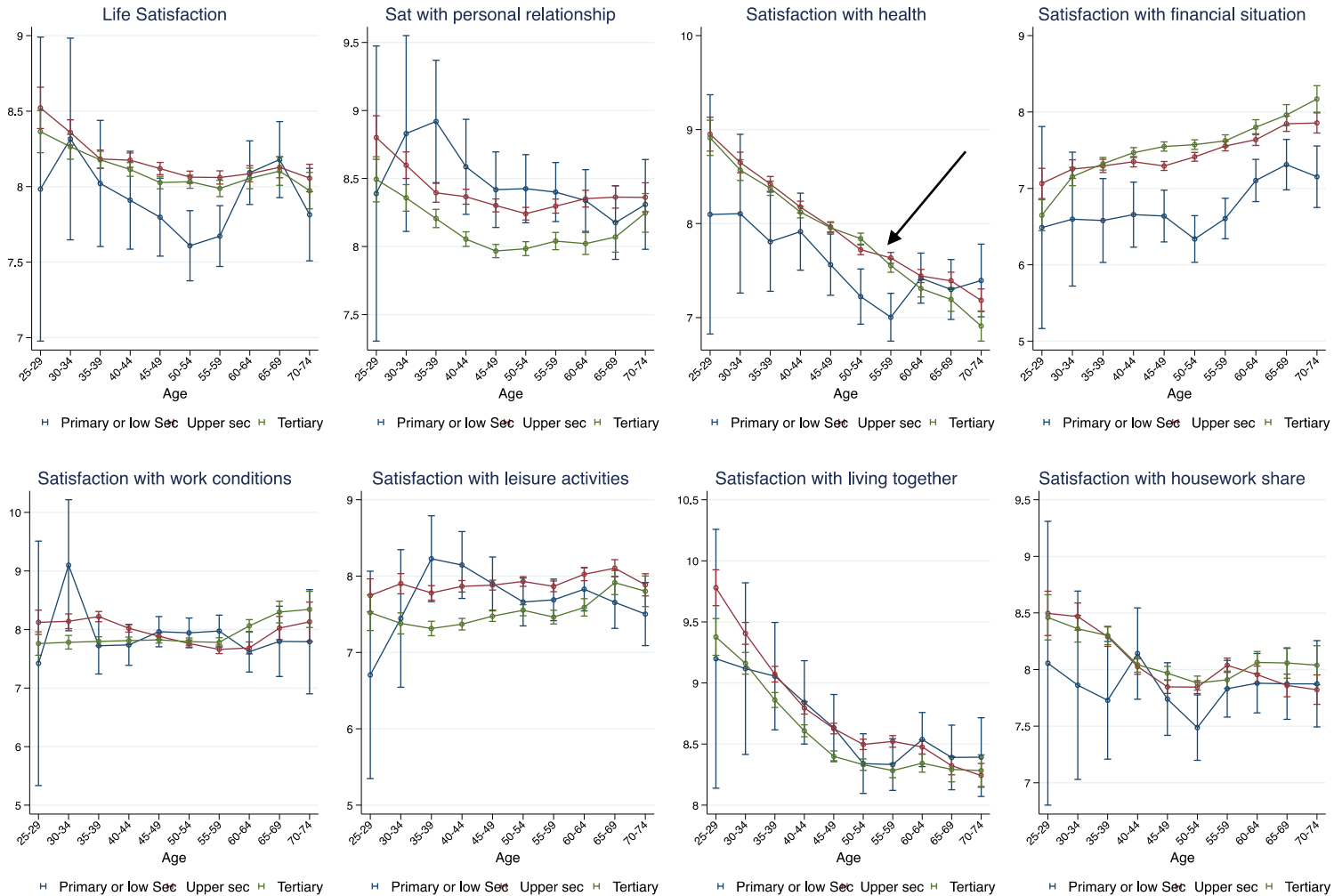
# Results

Health indicators across life course by gender



# Results

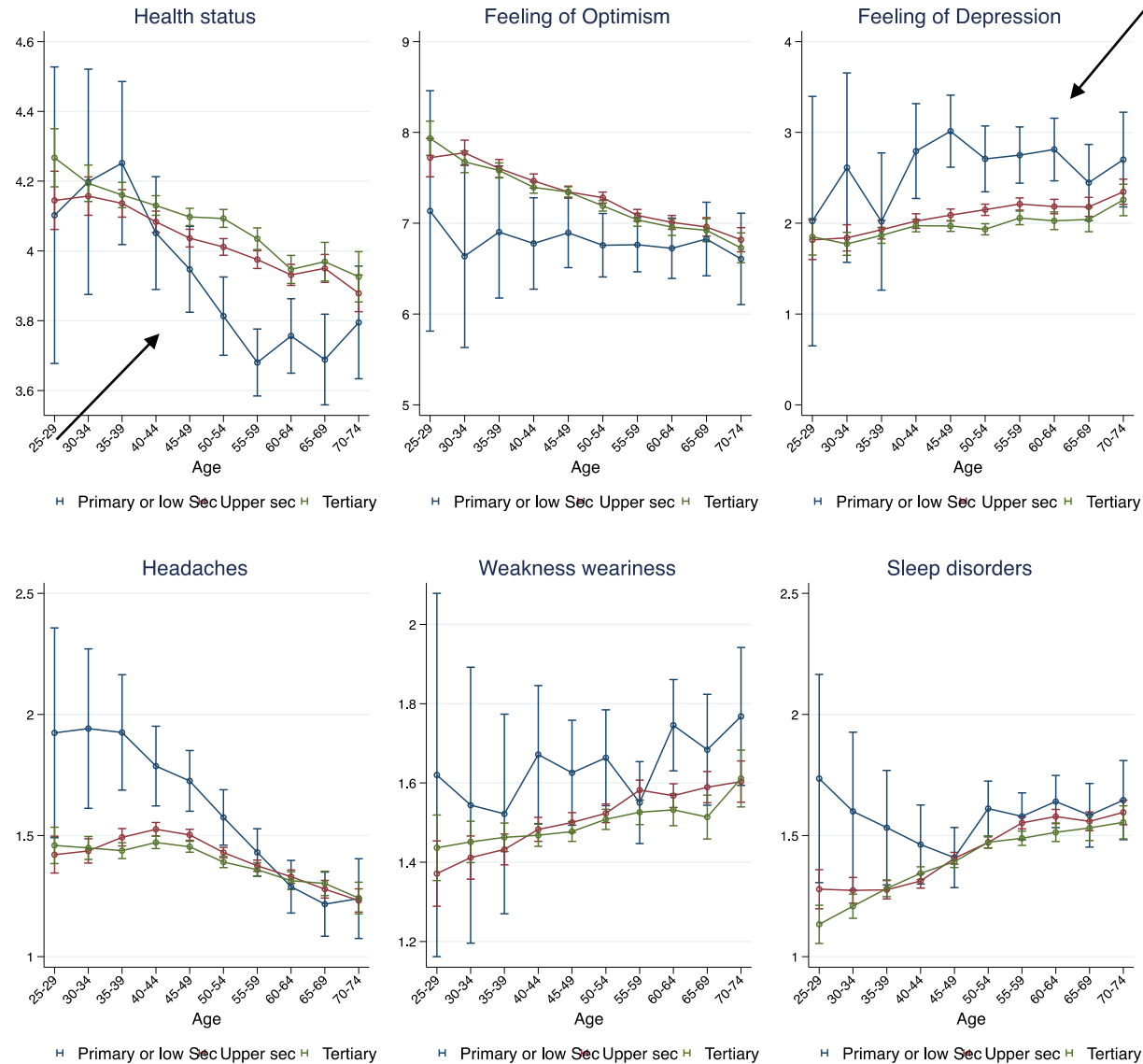
SWB across life course by education





# Results

## Health indicators across life course by education



# Conclusions

- **Less pronounced U-shape relation within than between individuals but still present for some SWB indicators especially for men, not for the perception of health**
- **Gender inequalities decline over the life course for some domains** (relational wellbeing, work satisfaction and general perception of health status) **but not in others** (sat. with living together and household work division, depression and sleep disorders)
- **Educational inequalities** greater in the age period 30s-40s but remain constant for financial wellbeing and **increase over the life course regarding the perception of health status**

# Thanks!

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More information on WELLWAYS project at:

<https://www.unil.ch/lines/en/home/menuinst/recherche/projets-en-cours.html>

# Limitations

- Age and period effects not distinguished
- Health not controlled for in SWB models
- Potential concerns relates to panel data
  - (i) non-random response
  - (ii) attrition
  - (iii) panel conditioning

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## SWB

### General life satisfaction

In general, how satisfied are you with your life if 0 means "not at all satisfied" and 10 means "completely satisfied"?

On a scale from 0 "not at all satisfied" to 10 "completely satisfied" can you indicate your degree of satisfaction for each of the following points?

### Domain-specific satisfaction

- Your working conditions
- leisure time activities
- Living together

### Housework share

To what extent are you satisfied with the way the housework is shared out (washing, cooking, cleaning) within your household, if 0 means "not at all satisfied" and 10 "completely satisfied"? Not counting care of the children.

### Satisfaction with personal relationships

How satisfied are you with your personal relationships, if 0 means "not at all satisfied" and 10 "completely satisfied"?

### Satisfaction with financial situation

2001-2017 : Overall how satisfied are you with your financial situation, if 0 means "not at all satisfied" and 10 "completely satisfied"?

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## HEALTH

### Health status

How do you feel right now? 1 "not well at all" – 5 "very well"

### Weakness, weariness

2004-17 : During the last 4 weeks, have you suffered from any of the following disorders or health problems? 1 "not at all", 2 "somewhat", 3 "very much" ?

### Sleep disorders

### Headaches

- General weakness, weariness, or lack of energy
- Difficulty in sleeping, or insomnia
- Headaches or facial pains

### Positive: Feeling of optimism

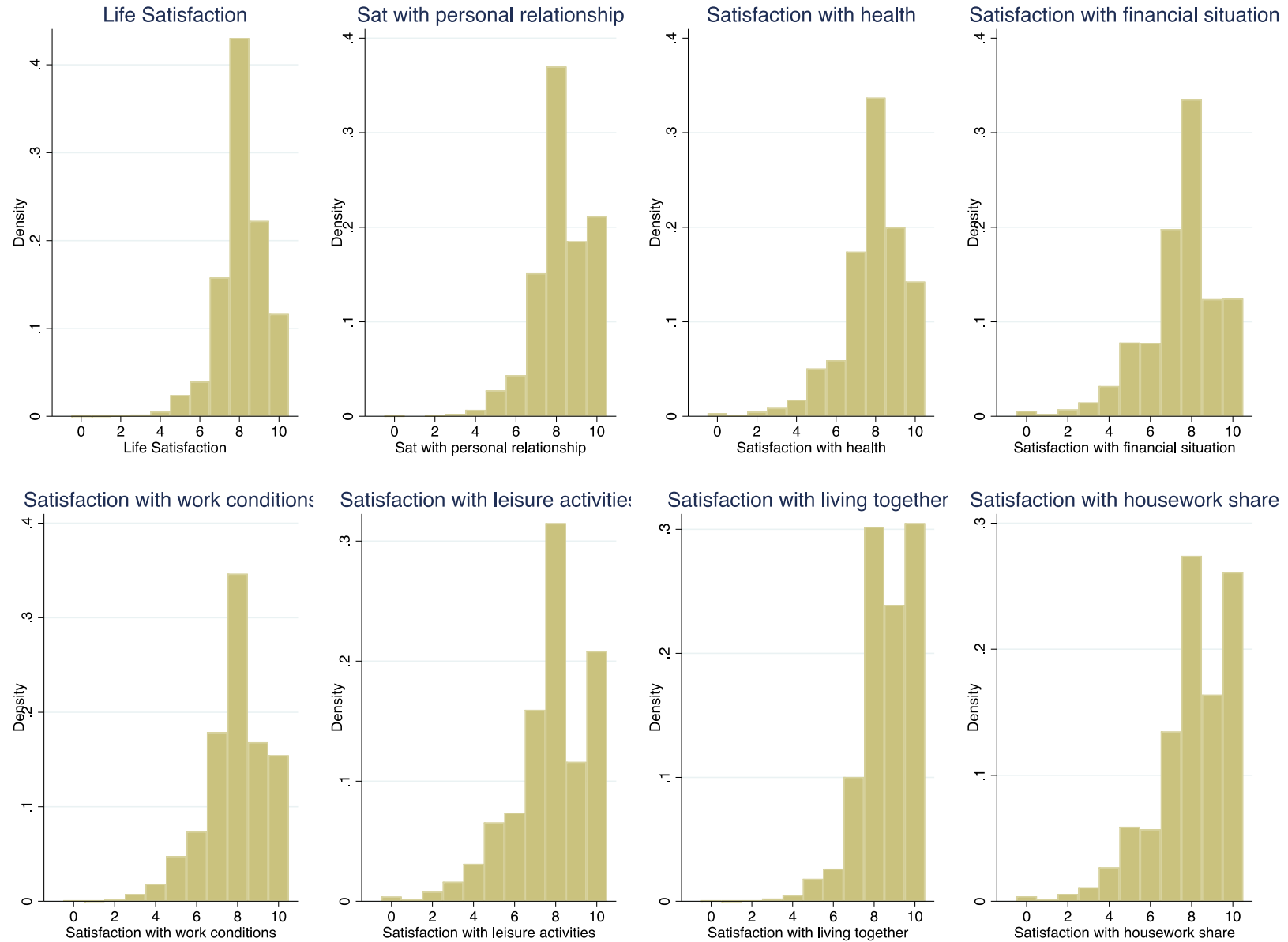
Are you often plenty of strength, energy and optimism, if 0 means "never" and 10 "always"?

### Negative: feeling of depression

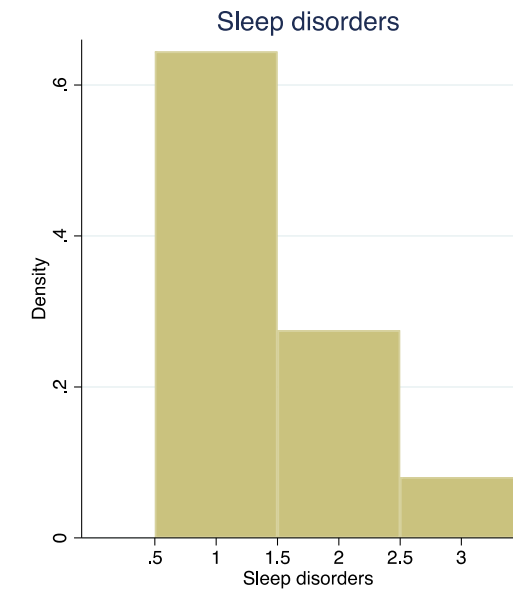
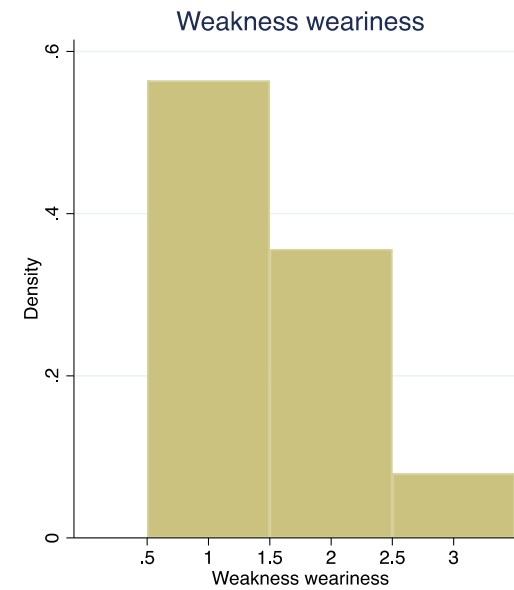
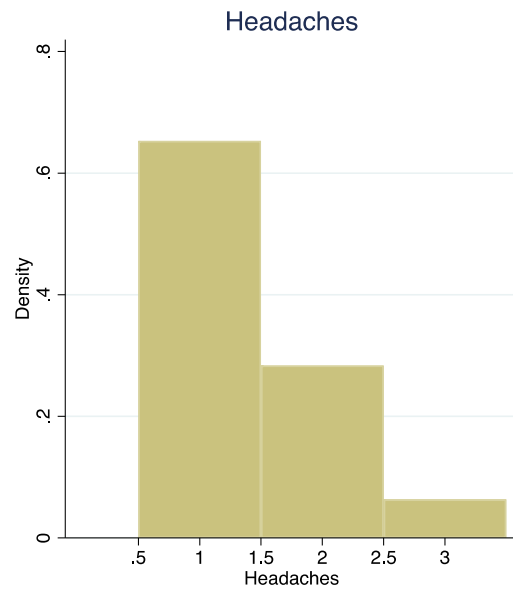
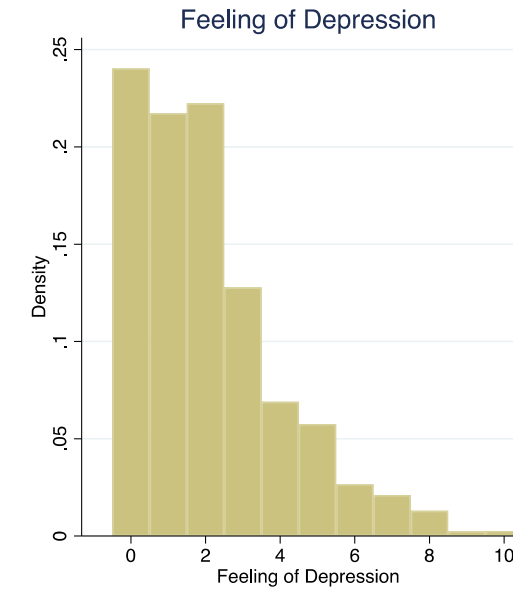
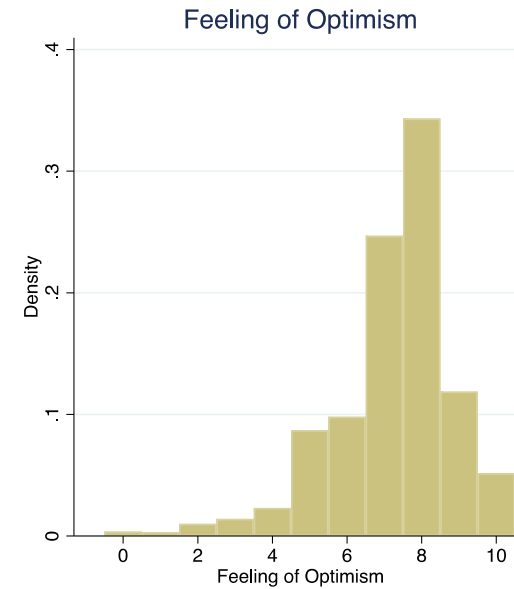
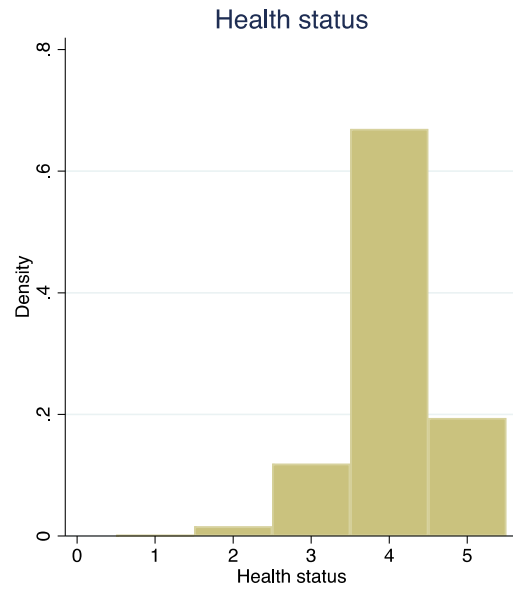
Do you often have negative feelings such as having the blues, being desperate, suffering from anxiety or depression, if 0 means "never" and 10 "always"?

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## SWB, Histogram

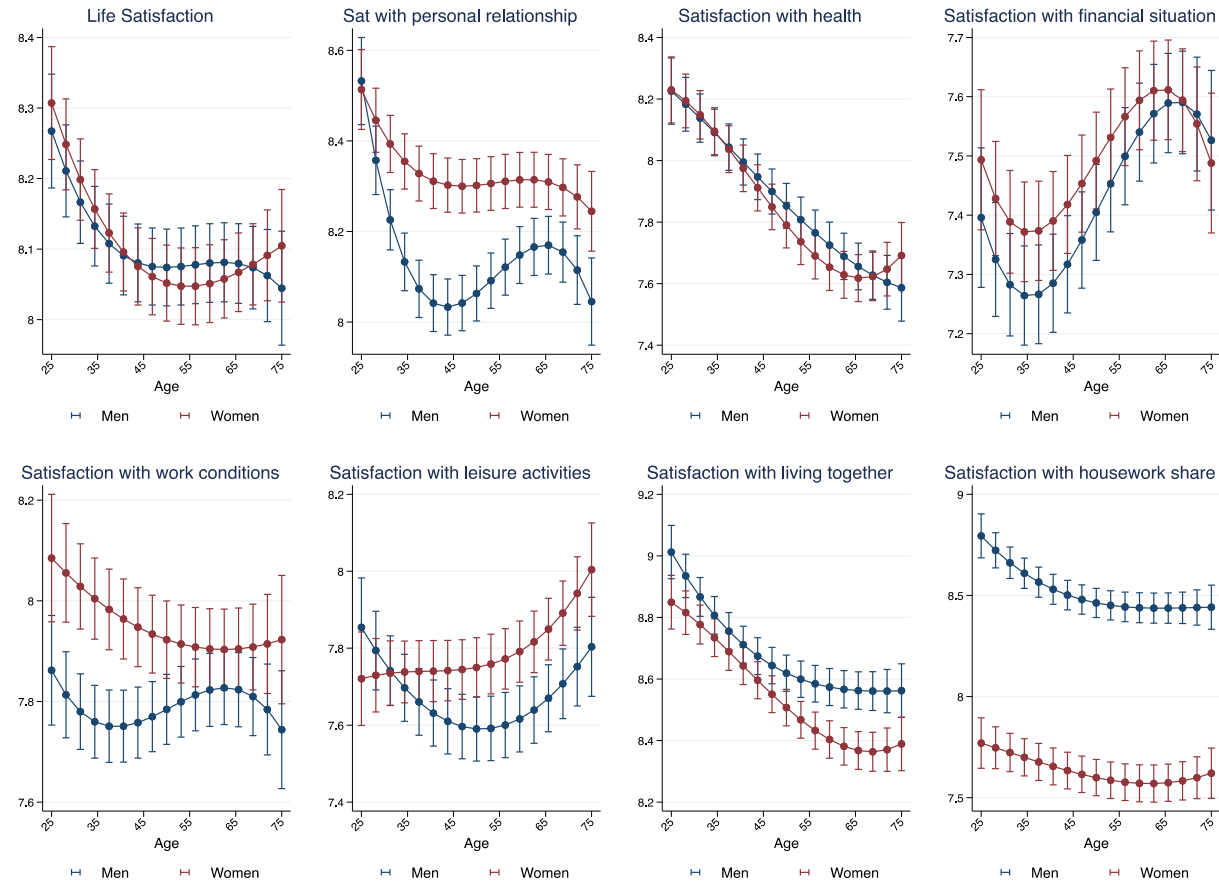


## HEALTH, Histogram



# CRE

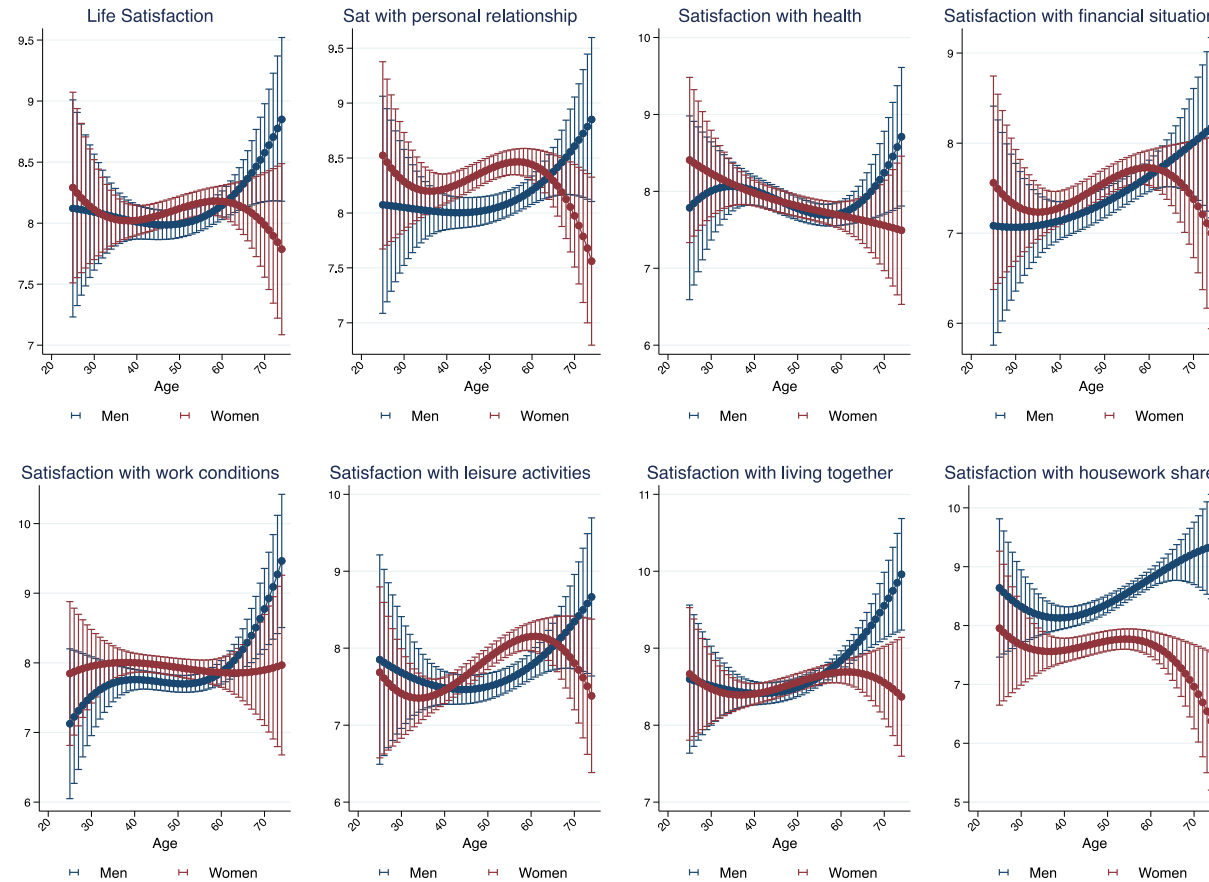
SWB across life course by gender  
Within effect model





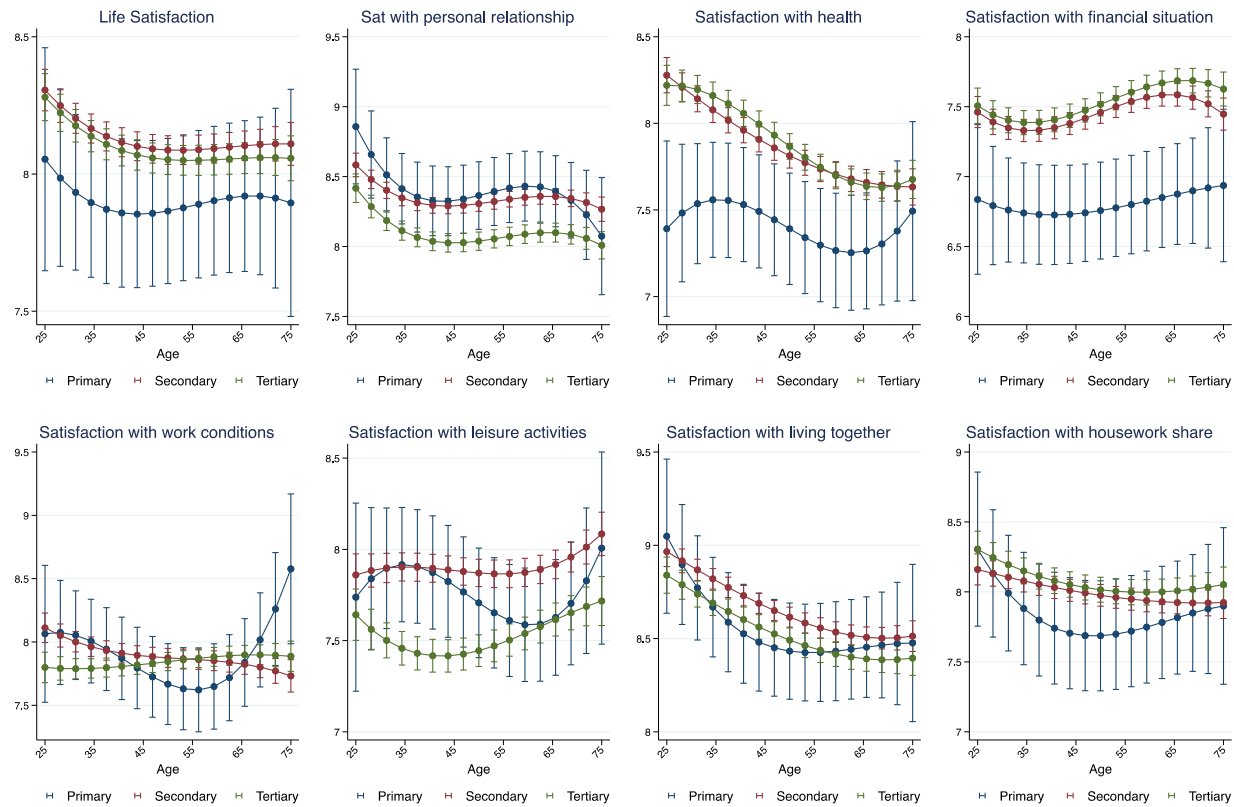
# CRE

SWB across life course by gender  
Between effect model



# CRE

SWB across life course by education  
Within effect model



# CRE

SWB across life course by education  
Between effect model

