A study of multidimensional wellbeing inequalities over the life course

Chiara Ludovica Comolli, University of Lausanne
Laura Bernardi, University of Lausanne
Marieke Voorpostel, University of Lausanne

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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 Beatton 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

- Life Satisfaction
- Sat with personal relationship
- Satisfaction with health
- Satisfaction with financial situation
- Satisfaction with work conditions
- Satisfaction with leisure activities
- Satisfaction with living together
- Satisfaction with housework share

Women

- Life Satisfaction
- Sat with personal relationship
- Satisfaction with health
- Satisfaction with financial situation
- Satisfaction with work conditions
- Satisfaction with leisure activities
- Satisfaction with living together
- Satisfaction with housework share

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Results

Health across age within individual, CS vs FE

Men

- Health status
- Feeling of Optimism
- Feeling of Depression

Women

- Health status
- Feeling of Optimism
- Feeling of Depression

Headaches
- CS
- FE

Weakness weariness
- CS
- FE

Sleep disorders
- CS
- FE
Results

SWB across life course by gender

- Life Satisfaction
- Satisfaction with personal relationship
- Satisfaction with health
- Satisfaction with financial situation
- Satisfaction with work conditions
- Satisfaction with leisure activities
- Satisfaction with living together
- Satisfaction with housework share

[Graphs showing trends over age for different categories: Men and Women]
Results

Health indicators across life course by gender

- Health status
- Feeling of Optimism
- Feeling of Depression
- Headaches
- Weakness weariness
- Sleep disorders

Charts show data trends for men and women across different age groups.
Results

SWB across life course by education

- Life Satisfaction
- Satisfaction with personal relationship
- Satisfaction with health
- Satisfaction with financial situation
- Satisfaction with work conditions
- Satisfaction with leisure activities
- Satisfaction with living together
- Satisfaction with housework share

Age

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary

Primary or low Set
Upper sec
Tertiary
Results

Health indicators across life course by education

Health status

Feeling of Optimism

Feeling of Depression

Headaches

Weakness weariness

Sleep disorders
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!

chiara.comolli@unil.ch

More information on WELLWAYS project at:


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Contact: chiara.comolli@unil.ch
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
### 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?

<table>
<thead>
<tr>
<th>Domain-specific satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Your working conditions</td>
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<tr>
<td>• leisure time activities</td>
</tr>
<tr>
<td>• Living together</td>
</tr>
</tbody>
</table>

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.

**Housework share**

**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"?

### HEALTH

**Health status**

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

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"?

- **Weakness, weariness**
- **Sleep disorders**
- **Headaches**

**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"?