The Age U-shape in Europe: The Protective Role of the Family

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SWB scores are often correlated with observable characteristics in ways that make sense, as e.g.

- Being in employment
- Having good health
- Having higher income (than others)
- Etc.

Other correlations are systematic but more difficult to explain, and most notably:

- Age U-shape/Mid-life crisis: being young; or being old

We here concentrate on the last of these.
EXISTING EVIDENCE

Fig. 2. Traditional Cross-sectional Evidence: A U Shape in Life Satisfaction with Age (a) BHPS Data for Great Britain (b) SOEP Data for Germany (c) HILDA Data for Australia (d) MABEL Data for Australia

Notes. Each dot measures the mean life-satisfaction of individuals of that particular age. The solid curve shows what happens if a quadratic is fitted to the data.
Life Satisfaction in Eurobarometer data (36 nations; 32,000 observations). Year 2016. Blanchflower-Oswald estimates
Stone, Deaton et al. (2010). Cantril score (‘overall well-being’) in Gallup Healthways data

Fig. 1. Global WB: ladder. Mean (unadjusted and adjusted) plotted by 4-year age groups, where the connected line represents unadjusted data and dashed lines represent data adjusted for four covariates.
Fig. 1: Evidence of Inverted U-Shaped Suicide and Age in the English-Speaking Nations

Fig. 1A: Raw data: Both genders, Females, and Males

Fig. 1B: Adjusted for Cohort and Time Effects: Both genders, Females, and Males
A midlife sleep low (pooling 9 nations)
UK hospital admissions for sleep disorders, 2013
Migraine in BHPS data: Raw data and within-person fixed effects
OUR CONTRIBUTION

Those with partners don’t seem to go through a midlife well-being crisis!

We consider cross-section data from the 2013 EU-SILC survey providing harmonized information on over 350,000 individuals in 32 different countries.

Dependent variable: overall life satisfaction, coded from 0 (Not at all satisfied) to 10 (Completely satisfied)
The usual suspects with respect to happy countries
Overall life satisfaction by age and sex

32 European countries (weighted average)
Overall life satisfaction by age and sex
Partnered against non partnered

32 European countries (weighted average)
In regressions, the 50-59 age group are the least satisfied.

<table>
<thead>
<tr>
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<th>(1)</th>
<th>(2)</th>
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<tbody>
<tr>
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<td>lifesat</td>
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<td>16.agecat</td>
<td>0 (. )</td>
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<tr>
<td>20.agecat</td>
<td>-0.520*** (-22.45)</td>
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<td>2.sex</td>
<td>0.0493*** (7.57)</td>
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<tr>
<td>0.partner</td>
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<tr>
<td>1.partner</td>
<td>0.670*** (92.52)</td>
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Controlling for partnership deepens the U-shape: might partnership be key here then? (Reg. with country-fe)
Check by running the analysis separately for partnered (1 and 2) and non-partnered (3 and 4)

<table>
<thead>
<tr>
<th></th>
<th>(1) lifesat</th>
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<th>(3) lifesat</th>
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<td>-0.547*** (-23.37)</td>
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<td>30.agecat</td>
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<td>0.00886 (0.05)</td>
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<td>-1.233*** (-47.10)</td>
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<td>40.agecat</td>
<td>-0.237 (-1.18)</td>
<td>-0.245 (-1.33)</td>
<td>-1.615*** (-59.21)</td>
<td>-1.628*** (-62.73)</td>
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<tr>
<td>50.agecat</td>
<td>-0.506* (-2.52)</td>
<td>-0.478** (-2.61)</td>
<td>-1.761*** (-65.98)</td>
<td>-1.778*** (-69.88)</td>
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<tr>
<td>60.agecat</td>
<td>-0.359 (-1.79)</td>
<td>-0.346 (-1.88)</td>
<td>-1.484*** (-56.06)</td>
<td>-1.470*** (-58.10)</td>
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<tr>
<td>70.agecat</td>
<td>-0.490* (-2.44)</td>
<td>-0.441* (-2.40)</td>
<td>-1.579*** (-64.87)</td>
<td>-1.474*** (-62.85)</td>
</tr>
<tr>
<td>1.sex</td>
<td>0 (. )</td>
<td>0 (. )</td>
<td>0 (. )</td>
<td>0 (. )</td>
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<tr>
<td>2.sex</td>
<td>0.0554*** (7.01)</td>
<td>0.0486*** (4.15)</td>
<td>0.0554*** (7.01)</td>
<td>0.0486*** (4.15)</td>
</tr>
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No significant differences any more between most age groups for partnered!
Illustration of margins from regs. (2) and (4):
EU-SILC is panel, but life satisfaction only appears in the 2013 wave, so we can only analyze it as *cross-section* data.

If partnership protects, we should find that the age profile of the partnered in panel data (i.e. within the same person) is different from that of the non-partnered.

We look at this in data from three of the longest-running panel datasets, BHPS, SOEP and HILDA.
BHPS
Hilda
No protection against the U-shape from partnership in panel data.

What’s going on?

1) Different countries?

But the EU-SILC results for the UK and Germany are the same as those shown for all of the 32 countries above.
2) Are BHPS, SOEP and HILDA are weird?

The cross-section results in these two datasets are completely standard.

There is a U-shape in age for everyone, for the partnered and for the non-partnered.

3) A Marriage mortality premium?

Yes but this would go in the opposite direction: the non-partnered are more selected, so that their life satisfaction scores are “too high”.
One way of squaring the (flat) cross-section and (U-shaped) panel results is by showing that:

Those **selecting into marriage** in their 30s and 40s are **happier types** than those selecting in their 20s or 60s…

Those selecting **out of marriage** are **unhappier types** in their 30s or 40s.
CONCLUSION

• The Age U-shape is both ubiquitous and unexplained.
• Cross-section data provide good news regarding the protective role of partnerships.
• But there are some evidence of selection of happy/unhappy “types” in and out of partnerships at different ages.