# Old-age trajectories of life satisfaction. Are singlehood and childlessness a greater disadvantage at more advanced old age?

Małgorzata Mikucka

Centre for Demographic Research, UCLouvain (Belgium) & MZES, Mannheim University (Germany)

#### 1 Introduction

European populations are ageing. During coming 50 years, due to increasing life expectancy, low fertility, and low immigration, population of people aged 65 or older in Europe is expected to increase by almost one third, whereas the working-age population would decline in absolute (forecast for the EU countries, for years 2016-2070, see: European Union, 2018). This demographic change puts forward subjective well-being of the older population as one of the most important societal challenges.

At the same time, family patterns are changing too. Childlessness reached levels of about 20% in some European regions, and continues to grow in others (Kreyenfeld and Konietzka, 2017; Miettinen et al., 2015). With marriages rates decreasing and divorce rates growing, lifelong marriage becomes a story of the past. As a consequence, the share of older adults without close kin (e.g. childless and/or single) will likely increase in the future. The limited kin networks may reduce social support available to the elderly, with potentially negative consequences for their subjective well-being.

Past research studied well-being differences between married and single elderly, and between parents and childless people (e.g., Albertini and Mencarini, 2014; Berg et al., 2006; Dykstra and Hagestad, 2007, 2016). We know that old-age singlehood is typically associated with lower subjective well-being and that childlessness creates disadvantage in some groups, mainly among the previously married (Dykstra, 2009). However, the question whether the disadvantage of elderly without close kin worsens as they are getting older has not been tackled by past studies.

This paper contributes to fill this gap by studying the dynamics of life satisfaction among people in their sixties, seventies and eighties in Switzerland. I test not only whether single and childless elderly have lower life satisfaction than married ones and parents, but I also check whether the gap between more satisfied and less satisfied groups becomes wider as they grow older.

Theoretically, two mechanism may shape these shifts (Ferraro and Wilkinson, 2013). According to *cumulative (dis)advantage* hypothesis, mid-life differences widen at more advanced age. This may result from longer accumulation of positive (or negative) influences of one's networks and living environment, but may also reflect a growing with age dependence on social support. Alternatively, according to *age-as-leveller* hypothesis, the mid-life differences narrow down at advanced old age, because social and other resources lose their importance when biological frailty and health problems come to the first plan. Current article is the first one to test whether life satisfaction differences associated with family status widen or narrow down as people transition into more advanced old age.

Having a spouse or children may protect life satisfaction through various channels; among them access to social support is plausibly an important one (Walen and Lachman, 2000). We currently know relatively little about the types of social support available to elderly people without close kin, and how family resources and social support jointly shape life satisfaction of the elderly. This paper attempts to partly fill in this gap by exploring the role played by family and non-family support networks. To this aim, I explore whether availability of family and nonfamily support, and its changes associated with ageing, explain differences and individual trajectories of subjective well being of elderly in various family statuses.

#### 2 Background and past research

#### 2.1 Family status and life satisfaction

Married people are more satisfied with their lives than the unmarried. This reflects the beneficial effect of an intimate relationship with a spouse (Zimmermann and Easterlin, 2006) but also selection into and out of marriage: happier singles are more likely to marry than the unhappy ones, and people who eventually divorce tend to be less happy already before getting married (Stutzer and Frey, 2006). Despite selection, marital dissolution is consistently found detrimental for subjective well-being, as widowhood and divorce are among the events most negatively affecting life satisfaction (Clark et al., 2008; Frijters et al., 2011). These patterns hold also in the old age. Widowed and divorced elderly tend to suffer from more depressive symptoms than the married (Bures et al., 2009; Koropeckyj-Cox, 1998), and the transition to widowhood correlates with a decline in life satisfaction (Chipperfield and Havens, 2001). However, the positive effect of marriage is less clear-cut compared to the never married. Elderly who did not form a family of their own, i.e. those who never married and remained childless, declare similar levels of depression as their married counterparts (Koropeckyj-Cox, 1998).

Roles of men and women within marriage are different, especially in older cohorts. It is therefore not surprising that marital status and its changes affect men and women differently (Chipperfield and Havens, 2001). First, women who did not form a family of their own are typically a privileged group. They stand out with higher education, better financial situation, and higher social activity (e.g. doing more volunteer work) than similar wives and mothers (Cwikel et al., 2006; Dykstra and Hagestad, 2016). Second, men's life satisfaction decreases more than women's upon losing a spouse, and it increases more in case of re-marriage (Berg et al., 2006; Chipperfield and Havens, 2001), suggesting that men depend on having a spouse to a greater extent than women do.

Economic models of parenthood postulate that adult children are a source of pragmatic support for elderly people. Embodying the same idea, legal systems formulate maintenance obligations between adults and their parents (Dykstra and Hagestad, 2016). However, in Western welfare states, the elderly satisfy their everyday needs with the help of their pensions, health care system, and social services rather than with the help of their adult children. The intergenerational exchange is dominated by downward (i.e. from parents to children) transfers of both financial resources and care (Bernard et al., 2001). Although the downward flow decreases as parents get older, even those aged 70 or more remain net givers (Albertini et al., 2007). This suggests that parenthood does not make the experience of getting old easier, and there are few pragmatic reasons to expect a positive correlation between parenthood and old-age life satisfaction. Adult children may be a source of meaning and emotional benefits, but also in these areas childless (especially the voluntarily childless) people experience few deficits (Allen and Wiles, 2013; Band-Winterstein and Manchik-Rimon, 2014; Dykstra and Hagestad, 2007; Koropeckyj-Cox, 2002).

# 2.2 Age-related dynamics

Dynamics of life satisfaction in the old age is a disputed topic. Part of research demonstrated an U-shaped trajectory, with life satisfaction reaching the lifetime minimum between the ages of 35 and 50, and increasing afterwards (Blanchflower and Oswald, 2008). Other studies showed a pattern of increasing life satisfaction at the entry to old age (around the age of 60, see Frijters and Beatton, 2012) followed by a decline at more advanced age (after the age of 75 according to Frijters and Beatton, 2012; after the age of 65 according to Chen, 2001 and Gwozdz and Sousa-Poza, 2010). Still other studies documented stability of life satisfaction during old age (Gwozdz and Sousa-Poza, 2010; Kunzmann et al., 2000; McAdams et al., 2012; Von Dem Knesebeck et al., 2007), a decline limited to women (Burton-Jeangros and Zimmermann-Sloutskis, 2016; Chipperfield and Havens, 2001), or a decline limited to a few years preceding respondent's own death (Gerstorf et al., 2008).

It is an open question whether the relative advantage or disadvantage related to marital and parenthood status remains stable, increases, or declines as people advance into old age. Inequality literature proposed two alternative hypotheses: *cumulative (dis)advantage hypothesis*, which postulates that inequalities intensify in advanced old age, and *age-asleveler hypothesis*, according to which inequalities among groups reduce with age (Ferraro and Wilkinson, 2013). Below, I discuss them in more detail.

The *cumulative* (*dis*)*advantage hypothesis* postulates that the positive influence of (economic, social, or other) resources on subjective well-being accumulates from an early age throughout the life course. As a result of longer accumulation period, the differences among groups tend to be greater during old age than during young age. This idea has been originally proposed by Merton (1968) as so called 'Matthew effect' to explain the increasing inequalities in academic success among scholars, but it has been used since then to explore various topics, such as income inequality and employment (e.g., Pavlova and Silbereisen, 2012). Note that not only accumulation, but also change of needs associated with ageing may increase the old-age differences between elderly with and without family.

If old age is a period of increased dependence on others, childlessness or singlehood may have a more detrimental effect for life satisfaction in the old age than during mid-life. However, cumulative (dis)advantage hypothesis was empirically supported by only a few studies. Research showed that health differences across educational and income groups intensify with age (Kim and Durden, 2007), and that life satisfaction differences between employed and unemployed are greater at older ages than at younger ages (Pavlova and Silbereisen, 2012). Moreover, quality of life has greater variance in the old age than at younger one (Motel-Klingebiel et al., 2004).

In contrast to that, the *age-as-leveler hypothesis* conceptualizes old age as a period of biological frailty, when everybody faces similar challenges related mainly to loss of health and perspective of own death. For this reason, at more advanced old age, any resources (social, economic, or others) lose their importance as predictors of life satisfaction (Kim and Durden, 2007). Supporting this idea, research on so called 'happiness equation' showed that own health becomes an increasingly important predictor of life satisfaction as people get older (Motel-Klingebiel et al., 2004). This suggests that differences among people in various family statuses should decline with age. The age-as-leveler hypothesis found considerable support in research on educational differences in health (Dupre, 2007), but it has not yet been verified for differences related to family status.

Faced with two competing theories, current analysis formulates two alternative hypotheses. First, consistently with the cumulative (dis)advantage mechanism, the differences between elderly with and without family should increase at more advanced age. In other words, the groups disadvantaged in terms of life satisfaction, such as, plausibly, the previously married childless people, should experience more negative ageing trajectories of life satisfaction than other groups. Alternatively, consistently with age-as-leveler hypothesis, life satisfaction differences between elderly with and without family should reduce at more advanced age. This implies that groups disadvantaged in terms of life satisfaction should stand out with more positive ageing trajectories of life satisfaction, leading to (at least partial) catching up.

## 2.3 Social support and life satisfaction

Family resources, such as having a spouse or children, may improve life satisfaction through various channels. However, social support and satisfactory relationships with family members

are among the most frequently postulated mechanisms. Social resources, including social contacts and social support consistently and positively correlate with individual's life satisfaction (Merz and Huxhold, 2010; Powdthavee, 2008), also among the elderly (Gow et al., 2007). Social contacts and support seem to improve life satisfaction of the elderly mainly through reduction of loneliness (Gow et al., 2007). However, indirect effects are also likely. According to the 'buffering hypothesis' (Cohen, 1985; Thoits, 1982) support received from social networks may affect life satisfaction by reducing the negative consequences of difficult life events. Examples of such events include divorce and widowhood, but also ageing itself may be considered a challenging path that may be made easier thanks to availability of social support. To contribute to better understanding the complex relationship between family status, availability of social support, and life satisfaction, I explore whether availability social support from relatives and from friends and neighbours, as well as changes of support explain differences and individual trajectories of subjective well being of elderly people in various family statuses.

#### 2.4 Context of Switzerland

Switzerland is an example of an ageing society, where high life expectancy and low birth rates put a pressure on the welfare system (Gabriel et al., 2015). Nonetheless, Switzerland not only enjoys one of the highest life satisfaction among OECD countries (OECD, 2019) but also has been designated as the best place in the world to grow old (2015 Global AgeWatch Index, see Barry et al., 2015). Good economic conditions definitely contribute to that. Poverty rates among Swiss elderly are low (10%-20% according to Gabriel et al., 2015), in part thanks to the generous pension system (Gabriel et al., 2015).

The statutory retirement age in Switzerland is 64 years for women and 65 years for men, but earlier and later retirement is possible. In the Swiss Household Panel data, among women aged 63 only 30% are retired, 53% at the age of 64, and 68% at the age of 65. Respective percentages are similar among men (34% at the age of 64, 60% at the age of 65, 73% at the age of 66). Almost all (i.e. over 95%) women are retired at the age of 73, and almost all men at the age of 77 years old. Transition to retirement is not a definitive end of working life, as 30% of all early retires continue working after retirement (Dorn and Sousa-Poza, 2005).

Patterns of family life in Switzerland may be considered traditional as far as births out of wedlock are concerned (Le Goff and Ryser, 2010). However, the rate of childlessness in Switzerland is among the highest in the world, reaching the value of about 20% women in the youngest cohorts (Sobotka, 2017). In current study sample, 13% of men and 14-16% of women declared not having any children. Acceptance of childlessness in Switzerland is relatively high, and old-age dependence on children's help is an exception rather than the rule. Frail elderly people in Switzerland are rarely cared for by their adult children, and the share of "autonomous family type", comprising families where parents and adult children tend to live far away, have relatively little contact, and exchange relatively little support, is among the highest in Europe (42% of parents aged 50 or older, see: Dykstra and Fokkema, 2011).

## **3** Data and methods

#### **3.1** Data and sample

The analysis used data from the Swiss Household Panel (SHP), a panel study initiated in 1999, which monitors social change in the population of Switzerland. The survey started with a stratified random sample of private households whose members represent the noninstitutional resident population in Switzerland (Voorpostel et al., 2018). To compensate for attrition of the initial sample, refreshment samples were added in 2004 and 2013. SHP follows the respondents and their children, and (since 2007) also respondents' cohabiting partners who have left the

original household, until death or institutionalisation (Voorpostel et al., 2018). Data are collected via telephone interviews, but since 2010 also face-to-face and web modes have been offered to reluctant respondents.

Currently, 18 waves of SHP are available (1999-2016). However, data on life satisfaction have not been recorded in 1999, which limits the analysis to maximum 17 waves of observations; similarly, data on availability of support from friends and neighbours were collected in waves 1999-2010, 2013, and 2016 only, and data on support from non-resident relatives were collected in 1999-2010 and 2016 only, leaving us with the maximum of 14 and 13 waves of observations, respectively.

In order to account for dynamics of life satisfaction both at younger and older old age, I estimate models for two separate subsamples of men and women: those aged 60-74 and those aged 75-89. The first subsample (called subsequently "younger cohort") comprises people who have been observed at least once at the age of 60-64, and remained in the panel for at least 5 waves. The second subsample ("older cohort") comprises people who were observed at least once at the age of 75-79 years, and stayed in the panel for at least

5 waves. In the analytical sample, the younger cohort comprises 723 men and 919 women (6,083 and 7,921 observations, respectively) and the older cohort comprises 255 men and 386 women (2,021 and 3,043 observations, respectively).

As challenges and potential gains related to family roles are typically different for men and women, I estimate separate models for men and women. Additional estimates, shown in Appendix A, test the statistical significance of gender differences.

## 3.2 Analytical approach

This analysis focuses on the dynamics of life satisfaction during old age. This calls for a withinsubject setup, such as fixed effects models. However, to understand the meaning of the changes

9

occurring over time, the analysis should also account for the differences among groups at the beginning of the observation period. For this reason, current analysis relies on two types of models to study the relationship between family status and dynamics of life satisfaction.

First, I use regular OLS regression to describe differences among groups defined by their marital and parenthood status. I run this analysis on a sample containing only the initial observation for each respondent whom I subsequently included in the fixed effects analysis, i.e. on a sample of 60-64 year olds in case of younger cohort and on a sample of 75-79 years olds in case of older cohort.

Second, I use regression with individual fixed intercepts in order to study how life satisfaction changes as people get older, and whether this dynamics depends on marital and parenthood status. Fixed effects regression controls for all observed and unobserved time-invariant differences among people, including personality traits, genetic factors, etc. (Allison, 2009), and models only the within-subject changes of dependent variable.

#### 3.3 Variables

The dependent variable is self-reported general satisfaction with life, measured on a scale from 0 to 10. In the SHP life satisfaction was assessed with the question *"In general, how satisfied are you with your life if 0 means 'not at all satisfied' and 10 means 'completely satisfied'?"*. The variable approximates a normal distribution, is negatively skewed, and peaks at the value of 8, which is both its overall mean and the median.

The OLS regression analysis aims to describe the differences between people in various family statuses at the beginning of early and more advanced old age. Accordingly, the main predictors are variables coding marital and parenthood status at the moment of first observation. As parenthood and marital histories ale closely interwoven (e.g. marriage is a strong predictor of parenthood), and the effects of marital and partnership status are likely not additive, I

consider the effects of parenthood and marital status jointly, by including interaction terms. The control variables in the OLS model include education (primary vs. secondary of higher) and retirement status.<sup>1</sup>

The fixed effects analysis focus on age-related dynamics of life satisfaction among people in various family statuses. Therefore, the main predictor is age, together with the interactions between age and the initial family status (initial, i.e. recorded during the first interview for given respondent at the age of 60-64 or 75-79). I also control for the transition to retirement, as well as changes of marital status experienced during the observation period. All variables used in the analysis for life satisfaction are summarized in Table 1.

<< Table 1 around here >>

#### 4 Results

#### 4.1 Life satisfaction

I begin by inspecting old-age differences in life satisfaction according to marital and parenthood status, and how these differences change as people get older. Table 2 contributes to answering the first of these questions: it shows the results of OLS regression of life satisfaction at the beginning of the observation period. In general, life satisfaction differs according to marital status. Divorced and widowed parents in the younger cohort, as well as never married mothers declare lower life satisfaction than married parents (see the main effects of marital status). The life satisfaction gap between married and widowed people is greater among men, but the negative effect of being divorced or never married is greater among women (the difference

<sup>&</sup>lt;sup>1</sup> In Switzerland it is possible to combine retirement with employment, therefore as the transition to retirement I consider the first transition declared by a respondent.

between never married mothers and fathers is statistically significant, see Appendix A). This pattern is consistent with the idea that singlehood is detrimental for well-being; however, in a cross-sectional set-up these results cannot be interpreted as causal.

<< Table 2 around here >>

Childlessness, on the other hand, only in few instances correlates (statistically significantly) with life satisfaction. Childless people do not differ in their life satisfaction from parents neither among the married (see the main effect of childlessness) nor among divorced people (see the interaction term 'divorced  $\times$  childlessness'). Interestingly, in younger cohorts childlessness correlates with *higher* life satisfaction among never married women and among widowed men. For women this pattern is consistent with self-selection of higher educated and better earning women to family-free life. However, the results for widowed men do not fit previously formulated theories. Overall, the observed pattern suggests that marital status is of greater importance for life satisfaction than parenthood.

To inspect the patterns of shifts associated with ageing, Table 3 shows the results of fixed effects regressions which model changes of life satisfaction which occur during old age. The age coefficients inform how much life satisfaction changes as people are growing older. All the age coefficients are negative (although the effects are statistically significant only among men), which suggests that life satisfaction may decline somewhat during old age. The predicted tempo of decline is rather small: about 0.02 points on a scale from 0 to 10 yearly (at this rate it would take 50 years to reduce life satisfaction by 1 point). Because the model controls for marital and parenthood status variables, this baseline trend refers to married parents.

<< Table 3 around here >>

The interaction terms between marital status and age test whether the tempo of life satisfaction decline differs according to marital and partnership status. First, two groups stand out with a more positive trend than among married parents: divorced mothers in younger cohort and divorced childless men in older cohort. This suggests that for divorced people old age may be a period of improving life satisfaction. In the OLS analysis divorced mothers stood out with low life satisfaction at the beginning of observation period, therefore the observed pattern seems consistent with age-as-leveller hypothesis.

Second, never married mothers in older cohort experience a faster decline of life satisfaction than married mothers. In contrast, women who did not form a family of their own experience similar changes of life satisfaction as married mothers. Never married fathers in younger cohort also stand out with faster tempo of decline of life satisfaction, although the trend among never married fathers is not statistically significant. These results suggest that, during old age, never married mothers are the most disadvantaged group in terms of life satisfaction: first, their initial life satisfaction (see the OLS analysis) is over 2 points lower than among married mothers; second, this already-low life satisfaction declines at a faster rate than among married mothers. This pattern is consistent with the mechanism of cumulative (dis)advantage. Moreover, it suggests that never married mothers are a disadvantaged group among the elderly, who however did not receive much attention of past research.

Coefficients for marital transitions occurring within the observation period allow us to investigate the protective role of having children. First, the negative effect of transition to widowhood is stronger among childless men than among fathers. (The gender difference is statistically significant, see Appendix A.) This result fits well with the previous evidence showing that widowed men strongly depend on their adult children, and suggests that parenthood has a protective (buffering) effect during the transition to widowhood, but this protection is limited to men. However, for two other transitions, parenthood has an opposite effect: divorce among women and marriage of previously divorced men correlates more strongly with an increase of life satisfaction among the childless than among parents. This suggests that the protective effect of parenthood may be limited to men's transition to widowhood rather than being a general pattern.

#### 5 Support availability and life satisfaction

Let us now turn to the second issue, i.e. the link between life satisfaction and the support from family and non-family networks. Table 4 shows the results of an OLS analysis of life satisfaction, which includes among the predictors also availability of support from relatives and from friends and neighbours. People with better access to support from relatives and from non-family networks are more satisfied with their lives, but the effects are statistically significant mainly in younger cohorts of men and women. The results of this model differ only sightly from the results not accounting for support availability. This suggests that support availability does not generate differences in life satisfaction among parents and childless people and among marrieds and singles.

<< Table 4 around here >>

Table 5 focuses on shifts over time of life satisfaction, controlling for changes in support availability. A change in availability of support from relatives does not correlate with changes of life satisfaction, but an increase in availability of support from friends and neighbours correlates with an increase in life satisfaction among men (among women the results are not statistically significant). Comparison of these results with the models that did not control for support availability (Table 3) allow us to understand whether support from relatives and from non-family networks mediates the relationship between ageing and life satisfaction. The differences between the two groups of results are small, suggesting that the dynamics of support availability is not the main driver of life satisfaction shifts during old age. For instance, after controlling for changes in support availability, life satisfaction declines with age, just as it did in models presented before, suggesting that the decline is not driven by the decreasing availability of support.

<< Table 5 around here >>

Nonetheless, controlling for support availability affects some of the results. First, if we control for changing support availability, life satisfaction of never married parents and never married childless people increases with age. This suggests that the negative trends shown in previous models (Table 3) are driven by declining support availability. In other words, declining support availability may be one of the challenges faced by elderly single fathers.

Second, changing support availability plays a role also for another group: childless men who become widowers. After controlling for changes in support availability, the transition to widowhood does not reduce life satisfaction of this groups as strongly as before (see Table 3). This suggests that changes of support explain the life satisfaction disadvantage of childless men transitioning to widowhood.

#### 6 Discussion

This paper analysed life satisfaction in population of elderly people in Switzerland in order to better understand the role of family status and availability of social support during old age. I defined family status by respondent's marital and parenthood status. The analysis focused on two main questions. First, I studied whether single and childless people were less satisfied with their lives than married people and parents, and whether the differences intensified or attenuated with age. The results showed that in the cohort of people aged 60-64 years old, married persons were indeed more satisfied with their lives than singles, including never married, divorced, and widowed people. However, the differences at more advanced old age (75-79 years old) were statistically not significant. This result is consistent with previous literature, which documented life satisfaction advantage of married people over the unmarried.

In contrast to marital status, childlessness did not correlate with life satisfaction: childless people did not differ systematically in life satisfaction from parents. Nonetheless, parenthood status made a difference for some groups. In particular, elderly men who became widowers experienced a greater loss of life satisfaction if they were also childless.

This suggests a protective (buffering) effect of parenthood during a difficult life event. However, such protection was limited to men and to the case of widowhood: the results did not show similar protection neither among women, nor in case of divorce. Note however that in the analysed society support and contact between parents and adult children are among the lowest in Europe. Finding a protective effect of parenthood during men's transition to widowhood suggests that adult children support their widowed fathers even in a society where support is in general low.

To understand whether the differences related to family status intensify or reduce at more advanced old age, I analysed within-individual changes of life satisfaction. Theoretical mechanism of *cumulative (dis)advantage* predicts that the differences become greater at more advanced old age. In contrast to that, *age-as-leveler* mechanism predicts that differences reduce when people face the same old-age challenges. The intra-individual shifts of life satisfaction were partly consistent with each of the mechanism, but did not provide a clear support to any of the two. On one hand, never married mothers, who already stood out with low life satisfaction, experienced a faster decline than other groups, a pattern which resembles cumulative (dis)advantage mechanism. On the other hand, divorced people experienced an improvement of life satisfaction with age, thus partly catching up with more privileged group of married persons – a pattern consistent with age-as-leveler mechanism. These results suggest that life satisfaction changes during old age are shaped by a complex set of mechanisms, and some relatively disadvantaged groups may improve their situation, whereas other disadvantaged groups may experience a further decline. Moreover, these results point to the never married parents as the group for whom old age is particularly challenging, and whose subjective well-being is particularly at risk.

The second goal of the paper was to discuss the role of support availability for differences and dynamics of life satisfaction. In principle, social support is a plausible mechanism of how family status, defined as being married and having children, protects life satisfaction during old age. The results showed that availability of social support, both from relatives and from friends and neighbours, predicted life satisfaction; moreover, increasing support from friends and neighbours correlated with an increase in life satisfaction among men. In other words, nonfamily support proved not less but more important for life satisfaction during old age than availability of support from relatives. Nonetheless, the differences in support availability did not explain the differences in life satisfaction among people in various family statuses. Similarly, the shifts of support availability did not explain the changes of life satisfaction. These results lead to the conclusion that availability of social support, either from family or nonfamily sources, is not a main factor shaping old-age life satisfaction and its changes.

In theoretical terms, the conclusion from current study is that neither cumulative (dis)advantage hypothesis, nor age-as-leveler mechanism accurately describe how differences of life satisfaction and support availability related to family status change as people move from younger old age towards more advanced old age. In the analysis of life satisfaction, each of

these patterns showed up for some groups of respondents, and none of the mechanisms received full empirical support.

In practical terms, this analysis points to a particularly disadvantaged group of elderly, which has remained largely unnoticed by well-being studies: namely never married parents. Elderly never married mothers have low life satisfaction, and this disadvantage becomes larger as they move towards a more advanced old age. Further exploring specificity of this groups may be an interesting avenue for further research.

### References

- Albertini, M., Kohli, M., and Vogel, C. (2007). Intergenerational transfers of time and money in European families: common patterns – different regimes? *Journal of European social policy*, 17(4):319–334.
- Albertini, M. and Mencarini, L. (2014). Childlessness and Support Networks in Later Life. Journal of Family Issues, 35(3):331–357.
- Allen, R. E. S. and Wiles, J. L. (2013). How older people position their late-life childlessness: A qualitative study. *Journal of Marriage and Family*, 75(1):206–220.
- Allison, P. D. (2009). Fixed effects regression models, volume 160. SAGE publications.
- Band-Winterstein, T. and Manchik-Rimon, C. (2014). The Experience of Being an Old Never-Married Single: A Life Course Perspective. *The International Journal of Aging and Human Development*, 78(4):379–401.
- Barry, A., McGwire, S., and Porter, K., editors (2015). *Global Age Watch Index 2015 Insight report*. Help Age International,.
- Berg, A. I., Hassing, L. B., McClearn, G. E., and Johansson, B. (2006). What matters for life satisfaction in the oldest-old? *Aging and Mental Health*, 10(3):257–264.

- Bernard, M., Phillipson, C., Phillips, J., and Ogg, J. (2001). Continuity and change in the family and community life of older people. *Journal of applied gerontology*, 20(3):259–278.
- Blanchflower, D. G. and Oswald, A. J. (2008). Is well-being U-shaped over the life cycle? *Social Science & Medicine*, 66(8):1733–1749.
- Bures, R. M., Koropeckyj-Cox, T., and Loree, M. (2009). Childlessness, parenthood, and depressive symptoms among middle-aged and older adults. *Journal of Family Issues*, 30(5):670–687.
- Burton-Jeangros, C. and Zimmermann-Sloutskis, D. (2016). Life satisfaction trajectories of elderly women living in Switzerland: an age-period-cohort analysis. *Ageing & Society*, 36(1):106–132.
- Chen, C. (2001). Aging and life satisfaction. Social Indicators Research, 54(1):57–79.
- Chipperfield, J. G. and Havens, B. (2001). Gender differences in the relationship between marital status transitions and life satisfaction in later life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(3):P176–P186.
- Clark, A. E., Diener, E., Georgellis, Y., and Lucas, R. E. (2008). Lags and leads in life satisfaction: A test of the baseline hypothesis. *The Economic Journal*, 118(529):F222–F243.
- Cohen, S. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2):310–357.
- Cwikel, J., Gramotnev, H., and Lee, C. (2006). Never-married childless women in Australia: Health and social circumstances in older age. *Social Science & Medicine*, 62(8):1991–2001.
- Dorn, D. and Sousa-Poza, A. (2005). The determinants of early retirement in Switzerland. *Swiss Journal of Economics and Statistics*, 141(2):247–283.
- Dupre, M. E. (2007). Educational differences in age-related patterns of disease: Reconsidering the cumulative disadvantage and age-as-leveler hypotheses. *Journal of Health and Social Behavior*, 48(1):1–15. PMID: 17476920.

- Dykstra, P. A. (2009). Childless old age. In *International Handbook of Population Aging*, pages 671–690. Springer.
- Dykstra, P. A. and Fokkema, T. (2011). Relationships between parents and their adult children: A West European typology of late-life families. *Ageing & Society*, 31(4):545–569.
- Dykstra, P. A. and Hagestad, G. O. (2007). Childlessness and Parenthood in Two Centuries. *Journal of Family Issues*, 28(11):1518–1532.
- Dykstra, P. A. and Hagestad, G. O. (2016). Roads Less Taken. *Journal of Family Issues*, 28(10):1275–1310.
- European Union (2018). The 2018 Ageing Report. Economic & budgetary projections for the28 EU Member States (2016-2070). European Economy Institutional Papers InstitutionalPaper 079, Publications Office of the European Union, Luxembourg.
- Ferraro, K. F. and Wilkinson, L. R. (2013). Age, aging, and mental health. In Aneshensel,C. S., Phelan, J. C., and Bierman, A., editors, *Handbook of the Sociology of Mental Health*.Springer, second edition edition.
- Frijters, P. and Beatton, T. (2012). The mystery of the U-shaped relationship between happiness and age. *Journal of Economic Behavior & Organization*, 82(2-3):525–542.
- Frijters, P., Johnston, D. W., and Shields, M. A. (2011). Life satisfaction dynamics with quarterly life event data. *Scandinavian Journal of Economics*, 113(1):190–211.
- Gabriel, R., Oris, M., Studer, M., and Baeriswyl, M. (2015). The persistence of social stratification? A life course perspective on poverty in old-age in Switzerland. *Revue Suisse de Sociologie*, 41(3):465–487.
- Gerstorf, D., Ram, N., Ro<sup>--</sup>cke, C., Lindenberger, U., and Smith, J. (2008). Decline in life satisfaction in old age: Longitudinal evidence for links to distance-to-death. *Psychology and Aging*, 23(1):154–168.

- Gow, A. J., Pattie, A., Whiteman, M. C., Whalley, L. J., and Deary, I. J. (2007). Social support and successful aging: Investigating the relationships between lifetime cognitive change and life satisfaction. *Journal of Individual Differences*, 28(3):103–115.
- Gwozdz, W. and Sousa-Poza, A. (2010). Ageing, health and life satisfaction of the oldest old: An analysis for Germany. *Social Indicators Research*, 97(3):397–417.
- Kim, J. and Durden, E. (2007). Socioeconomic status and age trajectories of health. Social Science & Medicine, 65(12):2489–2502.
- Koropeckyj-Cox, T. (1998). Loneliness and depression in middle and old age: Are the childless more vulnerable? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 53(6):S303–S312.
- Koropeckyj-Cox, T. (2002). Beyond parental status: Psychological well-being in middle and old age. *Journal of Marriage and Family*, 64(4):957–971.
- Kreyenfeld, M. and Konietzka, D. (2017). *Childlessness in Europe: Contexts, causes, and consequences*. Springer.
- Kunzmann, U., Little, T. D., and Smith, J. (2000). Is age-related stability of subjective wellbeing a paradox? cross-sectional and longitudinal evidence from the Berlin Aging Study. *Psychology and Aging*, 15(3):511.
- Le Goff, J.-M. and Ryser, V.-A. (2010). Meaning of marriage for men during their transition to fatherhood: The Swiss context. *Marriage & Family Review*, 46(1-2):107–125.
- McAdams, K. K., Lucas, R. E., and Donnellan, M. B. (2012). The role of domain satisfaction in explaining the paradoxical association between life satisfaction and age. *Social Indicators Research*, 109(2):295–303.
- Merton, R. K. (1968). The Matthew effect in science: The reward and communication systems of science are considered. *Science*, 159(3810):56–63.

- Merz, E.-M. and Huxhold, O. (2010). Wellbeing depends on social relationship characteristics:
  Comparing different types and providers of support to older adults. *Ageing & Society*, 30(5):843–857.
- Miettinen, A., Rotkirch, A., Szalma, I., Donno, A., and Tanturri, M.-L. (2015). Increasing childlessness in Europe: Time trends and country differences. *Families and Societies*. *Working Paper Series*, 3.
- Motel-Klingebiel, A., von Kondratowitz, H.-J., and Tesch-R<sup>•</sup>omer, C. (2004). Social inequality in the later life: cross-national comparison of quality of life. *European Journal of Ageing*, 1(1):6–14.
- OECD (2019). Better Life index. Electronic database, OECD. Accessed on June 14, 2019.
- Pavlova, M. K. and Silbereisen, R. K. (2012). Age, cumulative (dis) advantage, and subjective well-being in employed and unemployed Germans: A moderated mediation model. *Journal* of Occupational Health Psychology, 17(1):93.
- Powdthavee, N. (2008). Putting a price tag on friends, relatives, and neighbours: Using surveys of life satisfaction to value social relationships. *The Journal of SocioEconomics*, 37(4):1459–1480.
- Sobotka, T. (2017). Childlessness in Europe: Reconstructing long-term trends among women born in 1900–1972. In *Childlessness in Europe: Contexts, causes, and consequences*, pages 17–53. Springer, Cham.
- Stutzer, A. and Frey, B. S. (2006). Does marriage make people happy, or do happy people get married? *The Journal of Socio-Economics*, 35(2):326–347.
- Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior*, 23(2):145–159.

- Von Dem Knesebeck, O., Wahrendorf, M., Hyde, M., and Siegrist, J. (2007). Socioeconomic position and quality of life among older people in 10 European countries: results of the SHARE study. *Ageing & Society*, 27(2):269–284.
- Voorpostel, M., Tillmann, R., Lebert, F., Kuhn, U., Lipps, O., Ryser, V.-A., Schmid, F.,Antal, E., Monsch, G.-A., Dasoki, N., and Wernli, B. (2018). Swiss Household Panel UserGuide (1999 2017). Wave 19. Technical report.
- Walen, H. R. and Lachman, M. E. (2000). Social support and strain from partner, family, and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*, 17(1):5–30.
- Zimmermann, A. C. and Easterlin, R. A. (2006). Happily ever after? Cohabitation, marriage, divorce, and happiness in Germany. *Population and Development Review*, 32(3):511–528.

			Men:				V	Vomen	:	
	Mean	SD	Min	Max	Ν	Mean	SD	Min	Max	Ν
				You	nger old	: aged 60	)-74:			
		Tin	ne-vary	ing vari	ables (N	: number	r of obs	ervatior	ns):	
life satisfaction	8.21	1.35	0	10	6083	8.13	1.50	0	10	7921
support from friends or neighbors	6.49	2.33	0	10	4020	7.18	2.30	0	10	5343
support from relatives	6.45	2.42	0	10	3490	6.96	2.49	0	10	4653
age in the year of interview	65.35	3.69	60	74	6083	65.45	3.73	60	74	7921
retired	0.56	0.50	0	1	6083	0.57	0.50	0	1	7921
married -> widowed	0.01	0.10	0	1	6083	0.03	0.17	0	1	7921
married -> divorced	0.01	0.07	0	1	6083	0.01	0.10	0	1	7921
divorced -> married	0.01	0.07	0	1	6083	0.00	0.05	0	1	7921
widowed -> married	0.01	0.07	0	1	6083	0.00	0.05	0	1	7921
never married -> married	0.00	0.04	0	1	6083	0.00	0.03	0	1	7921
		Tir	ne-cons	stant va	riables (l	N: numb	er of inc	lividual	s):	
married at 60/64	0.82	0.38	0	1	723	0.68	0.46	0	1	919
divorced or separated at 60/64	0.11	0.32	0	1	723	0.17	0.38	0	1	919
widowed at 60/64	0.02	0.14	0	1	723	0.08	0.27	0	1	919
never married at 60/64	0.04	0.21	0	1	723	0.07	0.25	0	1	919
childless	0.13	0.34	0	1	723	0.14	0.35	0	1	919
lower education	0.51	0.50	0	1	723	0.73	0.45	0	1	919
				Ole	der old:	ages 75-8	89:			
		Tin	ne-varyi	ing vari	ables (N	: number	r of obs	ervatior	ns):	
life satisfaction	8.30	1.43	0	10	2021	8.11	1.63	0	10	3043
support from friends or neighbors	5.96	2.82	0	10	1340	6.07	3.07	0	10	2039

# Table 1: Descriptive statistics of variables included in the analysis of life satisfaction.

life satisfaction	8.30	1.43	0	10	2021	8.11	1.63	0	10	3043
support from friends or neighbors	5.96	2.82	0	10	1340	6.07	3.07	0	10	2039
support from relatives	6.44	2.92	0	10	1180	6.69	2.87	0	10	1764
age in the year of interview	79.54	3.21	75	89	2021	79.71	3.35	75	89	3043
retired	0.98	0.12	0	1	2021	0.98	0.14	0	1	3043

2042
5043
3043
3043
3043
386
386
386
386
386
386

	M	en:	Wor	men:
	Age 60/64	Age 75/79	Age 60/64	Age 75/79
divorced (ref: married)	-0.49**	-0.57	-0.89***	-0.34
	(0.18)	(0.31)	(0.15)	(0.34)
widowed (ref: married)	-1.38***	-0.02	-0.67***	-0.20
	(0.38)	(0.34)	(0.20)	(0.21)
never married (ref: married)	0.28	0.49	-2.12***	-0.36
	(1.00)	(1.37)	(0.52)	(1.75)
childless	0.19	0.40	0.01	0.08
	(0.21)	(0.35)	(0.22)	(0.60)
divorced X childless	0.50	-0.34	0.33	0.77
	(0.45)	(1.44)	(0.44)	(1.10)
widowed X childless	$3.08^{*}$	-0.04	-0.73	-0.55
	(1.48)	(0.77)	(0.66)	(0.76)
never married X childless	-1.08	-1.12	$1.29^{*}$	0.21
	(1.06)	(1.48)	(0.61)	(1.87)
retired	$0.30^{*}$	-0.20	0.39**	0.30
	(0.14)	(0.62)	(0.14)	(0.49)
lower education	-0.23*	-0.07	0.05	-0.16
	(0.11)	(0.18)	(0.12)	(0.21)
intercept	8.34***	$8.72^{***}$	8.39***	$8.07^{***}$
	(0.08)	(0.61)	(0.11)	(0.51)
N	723	255	919	386

Table 2: Life satisfaction at the beginning of observation period as a function of family status. OLS models.

	Me	en:	Woi	men:
	Age 60-74	Age 75-89	Age 60-74	Age 75-89
age	-0.02*	-0.03	-0.01	-0.01
C	(0.01)	(0.01)	(0.01)	(0.02)
divorced X age	0.03	-0.00	$0.05^{**}$	0.01
-	(0.02)	(0.04)	(0.02)	(0.03)
widowed X age	0.02	0.02	-0.00	0.02
	(0.04)	(0.03)	(0.02)	(0.02)
never married X age	-0.08	-0.03	0.15	-0.57***
	(0.05)	(0.01)	(0.08)	(0.02)
childless X age	0.00	-0.04	-0.01	-0.04
	(0.02)	(0.04)	(0.02)	(0.04)
divorced X childless X age	0.06	$0.38^{***}$	-0.02	-0.13
	(0.05)	(0.06)	(0.04)	(0.12)
widowed X childless X age	-0.02	-0.00	0.17	-0.02
	(0.05)	(0.07)	(0.10)	(0.06)
never married X childless X age	$0.14^{*}$	-0.01	-0.12	$0.61^{***}$
	(0.06)	(0.06)	(0.09)	(0.05)
married -> widowed	-0.06	-0.26	-0.40	0.00
	(0.34)	(0.28)	(0.21)	(0.15)
married -> widowed X childless	$-2.22^{***}$	-1.07**	0.93	-0.15
	(0.37)	(0.36)	(0.55)	(0.35)
married -> divorced	0.00	-1.33***	-0.23	$0.70^{***}$
	(0.56)	(0.09)	(0.24)	(0.04)
married -> divorced X childless	0.01		2.43***	
	(0.56)		(0.26)	
divorced -> married	-0.12		-0.28	
	(0.28)		(0.34)	
divorced -> married X childless	1.36***		-0.53	
	(0.31)		(0.36)	
never married -> married	-0.12	0.69***	0.28	
	(0.12)	(0.00)	(0.15)	
transition into retirement	$0.10^{*}$	0.10	-0.01	-0.08
	(0.05)	(0.40)	(0.05)	(0.34)
lower education X age	-0.01	0.00	-0.01	-0.01
	(0.01)	(0.02)	(0.01)	(0.02)
intercept	8.23***	8.34***	8.20***	8.21***
	(0.03)	(0.40)	(0.03)	(0.33)
N	6083	2021	7921	3043
Nr of individuals	723	255	919	386

Table 3: Changes of life satisfaction during old age. Fixed effects models

	M	en:	Wor	men:
	Age 60/64	Age 75/79	Age 60/64	Age 75/79
support from friends or neighbors	$0.08^{**}$	0.12***	$0.06^{*}$	0.04
	(0.03)	(0.04)	(0.02)	(0.03)
support from relatives	$0.05^{*}$	0.03	$0.07^{**}$	0.05
	(0.02)	(0.03)	(0.02)	(0.04)
divorced (ref: married)	-0.55**	-0.29	-0.93***	-0.17
	(0.21)	(0.34)	(0.16)	(0.40)
widowed (ref: married)	-1.39***	-0.22	-0.69**	-0.09
	(0.38)	(0.35)	(0.21)	(0.23)
never married (ref: married)	0.29	0.74	-2.27***	-0.51
	(1.00)	(1.37)	(0.56)	(1.78)
childless	0.24	0.41	0.03	0.31
	(0.23)	(0.42)	(0.24)	(0.65)
divorced X childless	0.45		0.49	0.82
	(0.49)		(0.48)	(1.26)
widowed X childless	$3.17^{*}$	0.10	-1.15	-0.74
	(1.49)	(0.81)	(0.72)	(0.80)
never married X childless	-1.04	-1.24	$1.32^{*}$	0.31
	(1.06)	(1.50)	(0.65)	(1.92)
retired	0.26	-0.63	$0.47^{**}$	-0.01
	(0.15)	(0.71)	(0.14)	(0.52)
lower education	-0.23*	0.02	0.09	-0.18
	(0.12)	(0.20)	(0.13)	(0.24)
intercept	$7.50^{***}$	$8.25^{***}$	$7.42^{***}$	7.67***
	(0.21)	(0.73)	(0.24)	(0.60)
N	608	215	799	321

Table 4: Life satisfaction at the beginning of observation period as a function of family status. OLS models accounting for support availability.

Age 60-74         Age 75-89         Age 60-74         Age 75-89           age         -0.01         -0.03*         -0.01         -0.02           (0.01)         (0.02)         (0.01)         (0.03)           divorced X age         0.01         -0.04         0.03         0.00           (0.02)         (0.05)         (0.02)         (0.04)           widowed X age         0.06         -0.02         0.02         0.01           never married X age         -0.08         0.06**         0.24**         -0.30***
age $-0.01$ $-0.03^*$ $-0.01$ $-0.02$ (0.01)(0.02)(0.01)(0.03)divorced X age0.01 $-0.04$ 0.030.00(0.02)(0.05)(0.02)(0.04)widowed X age0.06 $-0.02$ 0.020.01(0.04)(0.05)(0.03)(0.03)never married X age $-0.08$ $0.06^{**}$ $0.24^{**}$ $-0.30^{***}$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
widowed X age         0.06         -0.02         0.02         0.01           (0.04)         (0.05)         (0.03)         (0.03)           never married X age         -0.08         0.06**         0.24**         -0.30***
$(0.04)$ $(0.05)$ $(0.03)$ $(0.03)$ never married X age $-0.08$ $0.06^{**}$ $0.24^{**}$ $-0.30^{***}$
never married X age -0.08 0.06** 0.24** -0.30***
(0.06) $(0.02)$ $(0.09)$ $(0.03)$
childless X age -0.01 -0.11 -0.02 -0.10
$(0.02) \qquad (0.08) \qquad (0.02) \qquad (0.05)$
divorced X childless X age 0.11 0.38*** -0.00 0.10
(0.06)  (0.11)  (0.04)  (0.21)
widowed X childless X age -0.03 0.07 0.18 0.12
$(0.05) \qquad (0.11) \qquad (0.12) \qquad (0.07)$
never married X childless X age $0.13^*$ -0.04 -0.18 $0.39^{***}$
(0.07)  (0.10)  (0.09)  (0.08)
support from friends or neighbors $0.04^*$ $0.05^{**}$ $0.02$ $0.00$
$(0.01) \qquad (0.02) \qquad (0.01) \qquad (0.02)$
support from relatives -0.01 0.01 0.02 0.03
(0.01)  (0.02)  (0.01)  (0.01)
married -> widowed 0.01 0.06 -0.46 -0.00
(0.60)  (0.45)  (0.28)  (0.21)
married -> divorced -0.02 -1.05*** -0.20
(0.85) $(0.15)$ $(0.22)$
married -> divorced X childless $0.29$ $4.15^{***}$
(0.85) (0.28)
divorced -> married $0.06$ $0.28$
(0.41) (0.15)
divorced -> married X childless $-0.40^*$
(0.16)
never married -> married $-0.21$ $0.28^{***}$ $0.29$
(0.11) $(0.04)$ $(0.16)$
married -> widowed X childless $-0.94$ $2.10^{**}$ $0.25$
(0.59) $(0.64)$ $(1.11)$
transition into retirement $0.04 -0.95^{***} -0.02 0.52$
(0.07)  (0.09)  (0.06)  (0.44)
lower education X age -0.00 -0.00 -0.01 0.01
(0.01)  (0.03)  (0.02)  (0.03)
intercept 8.09*** 9.06*** 7.98*** 7.46***
(0.11)  (0.12)  (0.12)  (0.45)
N 3475 1171 4643 1760
Nr of individuals         711         252         907         382

Table 5: Changes of life satisfaction during old age. Fixed effects models accounting for support availability

# Appendix A: Statistical significance of gender differences

Table 6: Life satisfaction at the beginning of observation period as a function of family status. OLS models with gender interaction terms.

	Age 60/64	Age 75/79
woman	0.05	-0.65

	(0.14)	(0.86)
divorced at 60-64yo/75-79yo (ref: married)	-0.49*	-0.57
	(0.20)	(0.37)
divorced at 60-64yo/75-79yo X woman	-0.39	0.23
	(0.24)	(0.48)
widowed at 60-64yo/75-79yo (ref: married)	-1.38***	-0.02
	(0.41)	(0.40)
widowed at 60-64yo/75-79yo X woman	0.70	-0.17
	(0.45)	(0.44)
never married at 60-64yo/75-79yo (ref: married)	0.28	0.49
	(1.06)	(1.61)
never married at 60-64yo/75-79yo X woman	$-2.40^{*}$	-0.85
	(1.18)	(2.28)
childless	0.19	0.40
	(0.22)	(0.41)
childless X woman	-0.18	-0.33
	(0.31)	(0.68)
divorced at 60-64yo/75-79yo X childless	0.50	-0.34
	(0.47)	(1.70)
divorced at 60-64yo/75-79yo X childless X woman	-0.17	1.12
	(0.64)	(1.98)
widowed at 60-64yo/75-79yo X childless	$3.08^{*}$	-0.04
	(1.57)	(0.91)
widowed at 60-64yo/75-79yo X childless X woman	-3.81*	-0.52
	(1.69)	(1.14)
never married at 60-64yo/75-79yo X childless	-1.08	-1.12
	(1.12)	(1.74)
never married at 60-64yo/75-79yo X childless X woman	2.37	1.33
	(1.26)	(2.45)
retired	$0.30^{*}$	-0.20
	(0.15)	(0.74)
retired X woman	0.10	0.50
	(0.20)	(0.86)
lower education	-0.23*	-0.07
	(0.11)	(0.21)
lower education X woman	0.28	-0.09
	(0.16)	(0.28)
intercept	8.34***	$8.72^{***}$
	(0.09)	(0.72)
N	1642	641

	Age 60-74	Age 75-89
age	-0.02*	-0.03
	(0.01)	(0.01)
age X woman	0.00	0.02
	(0.01)	(0.02)
divorced at 60-64yo/75-79yo X age	0.03	-0.00
1'	(0.02)	(0.04)
divorced at 60-64y0/75-79yo X age X woman	(0.02)	(0.02)
widewed at 60 64ve/75 70ve V age	(0.03)	(0.05)
widowed at 00-04y0/75-79y0 X age	(0.02)	(0.02)
widowed at 60-64vo/75-79vo X age X woman	-0.02	0.01
whowed at 00 0+y0/15 19y0 A age A wonnah	(0.02)	(0.04)
never married at 60-64vo/75-79vo X age	-0.08	-0.03
	(0.05)	(0.01)
never married at 60-64yo/75-79yo X age X woman	$0.23^{*}$	-0.54***
	(0.10)	(0.02)
childless X age	0.00	-0.04
	(0.02)	(0.04)
childless X age X woman	-0.01	0.01
	(0.03)	(0.06)
divorced at 60-64yo/75-79yo X childless X age	0.06	$0.38^{***}$
	(0.05)	(0.06)
divorced at 60-64yo/75-79yo X childless X age X woman	-0.08	-0.50***
	(0.07)	(0.13)
wildowed at 60-64yo/75-79yo X childless X age	-0.02	-0.00
widowed at 60 64we/75 70we V shildless V age V women	(0.05)	(0.07)
widowed at 60-64y0/75-79y0 A childless A age A woman	(0.19)	-0.02
never married at 60-64vo/75-79vo X childless X age	(0.11) 0.14*	-0.01
never married at 00 0+y0/75 79y0 A emidless A age	(0.06)	(0.01)
never married at 60-64vo/75-79vo X childless X age X woman	-0.25*	0.61***
	(0.10)	(0.08)
retired	0.10*	0.10
	(0.05)	(0.40)
retired X woman	-0.11	-0.18
	(0.07)	(0.53)
married -> widowed	-0.06	-0.26
	(0.34)	(0.28)
married -> widowed X childless	-2.22	-1.07**
	(0.36)	(0.36)
married -> widowed X woman	-0.35	0.26
married > widewed V shildless V women	(0.40) 2 15***	(0.32)
married -> widowed X emidless X woman	(0.66)	(0.51)
married -> divorced	0.00	-1 33***
	(0.56)	(0.09)
married -> divorced X childless	0.01	(0.07)
	(0.56)	
married -> divorced X woman	-0.24	$2.02^{***}$
	(0.61)	(0.10)
married -> divorced X childless X woman	$2.42^{***}$	
	(0.62)	
divorced -> married	-0.12	
	(0.28)	
divorced -> married X childless	1.36***	
dimensional Normalish V	(0.31)	
aivorcea -> married x woman	-0.16	

 Table 7: Changes of life satisfaction during old age. Fixed effects models with gender interaction terms

 Age 60-74
 Age 75-89

 0.02\*

	(0.44)	
divorced -> married X childless X woman	-1.89***	
	(0.47)	
never married -> married	-0.12	$0.69^{***}$
	(0.12)	(0.00)
never married -> married X woman	$0.39^{*}$	
	(0.19)	
lower education X age	-0.01	0.00
	(0.01)	(0.02)
lower education X age X woman	-0.00	-0.01
	(0.02)	(0.03)
intercept	$8.21^{***}$	$8.27^{***}$
	(0.02)	(0.26)
Ν	14004	5064
Nr of individuals	1642	641