


Project no. 028571

MAGGIE

Major ageing and gender issues in Europe

Instrument: STREP

Priority 7. Citizens and governance in a knowledge-based society

# Publishable final activity report

Start date of project: 01/09/2006 Duration: 42 months

Project coordinator name: Joëlle GAYMU
Project coordinator organisation name: INED

## Table of contents

## Project objectives

The project identifies and analyses indicators of quality of life among the population aged 65+ to reveal gender gaps and their factors.
It focuses on changes due to renewal of cohorts. Consideration is taken of cohorts now old and of those who will reach old age in the next 25 years, for a prognosis of trends and an evaluation of actions likely to reduce gender gaps.
Quality of life is measured along health conditions, economic resources, family situation and social integration. On each, objective indicators of living conditions are confronted with perceptions by the persons of their own situation.
The main factors of gender gaps in well being are to be found in the life course of individuals - in particular in the way they conciliated their professional career with their family life - and in the way they have experienced some more recent key events like retirement, widowhood, health deterioration or entry into old-age institutions. Statistical analysis of individual-level data, based on event-history methods, is to show the impact of these factors.
Gender gaps in quality of life are also shaped by the socio cultural context. National and EU policies play here a major role. Cross-national analysis is to evidence these influences.
Use is made of existing data, in particular comparative surveys recently conducted in Europe. Contextual information is collected for cross-country analysis.

The project includes three stages:

1. ***Sex differentials in later life***, now and in the coming decades, will be assessed. In the FELICIE project, we built a comparative database devoted to the elderly people and their living conditions, entirely approached by cohort methods and including projections up to 2030. Nine countries are covered on a variety of dimensions (mortality and disability, family situation and child-parent relationships, educational and economic resources, living arrangements and needs for care). The database is being revisited in a gender perspective and complemented by other international databases (eg SHARE, GGS) in order to enlarge the geographical and topical coverage.

2. ***More in-depth studies*** are bieng conducted to evidence the gender dimension of sex differentials in the main fields of quality of life (health conditions, family and social integration, economic resources) at older age. They are based on a combination of objective and subjective indicators of the quality of life at older ages. They rely on a life course methodology, based on individual-level data, most often collected in sample surveys. A specific study is devoted to entry into institution and its determinants, based on administrative records (population registers) when these are rich and reliable enough.

3. ***A prospective view on gender gaps and their cross-national diversity.*** Typical questions addressed are: do indicators of actual living conditions evidence the same cross-country contrasts as more subjective indicators? can countries be ranked according to gender equity? what role for national and EU policies in European diversity (or homogeneity)? etc.

Combined with the concept of cohort, the life course approach makes a direct link between the present and the future. Typical questions addressed are: do trends point to a reduction in gender gaps and what are the factors that reduce (or resist to reduction in) them? do trends point to international convergence in gender differentials and what are the factors that favour or make obstacle to it? etc.

Future trends so assessed could be modified if national or European public policies were adopted in order to enhance factors of reduction or convergence (or to lower the obstacles to reduction or convergence). Suggestions in this direction will be made as a conclusion.

## Contractors involved

The project is run by a consortium of ten teams:

| *N°* | ***Participant organisation name*** | ***Org. short name*** |
|---|---|---|
| *1* | *Institut National d'Etudes Démographiques (France)* | *INED* |
| *2* | *Groupe d'Etude de Démographie Appliquée*<br>*Université de Louvain-la-Neuve (Belgium)* | *UCL-GEDAP* |
| *3* | *London School of Hygiene and Tropical Medicine (UK)* | *LSHTM* |
| *4* | *Nederlands Interdisciplinair Demografisch Instituut*<br>*Koninklijke Nederlandse Akademie van Wetenschappen (Netherlands)* | *NIDI/KNAW* |
| *5* | *Rostocker Zentrum zur Erforschung der Ursachen und Konsequenzen des Demografischen Wandels (Germany)* | *Rostocker Zentrum* |
| *6* | *Dipartimento di Statistica "Giuseppe Parenti"*<br>*University of Florence (Italy)* | *Unifi* |
| *7* | *Helsingin yliopisto (Finland)* | *UHDS* |
| *8* | *Faculdade de Ciências Sociais e Humanas*<br>*Universidade Nova de Lisboa (Portugal)* | *FCSH-UNL* |
| *9* | *Fondation Nationale de Gérontologie (France)* | *FNG* |
| *10* | *Demographic Research Institute (Hungary)* | *DRI* |

Coordination is at INED by **Joëlle Gaymu**, with **Christelle Brochet** and **Catherine Daurèle** as coordinating assistants.
Address: INED, 133 boulevard Davout, 75020 Paris (France)
Tel: +33 1 56 06 20 00
Fax: +33 1 56 06 22 19
Mail: maggie@ined.fr

They have contributed to the final report:

Carole **Bonnet** (Institut National d'Etudes Démographiques, INED),

Christiane **Delbès** (Fondation Nationale de Gérontologie, FNG)

G. **De Santis** (Università degli Studi di Firenze, Department of Statistics)

Gabriele **Doblhammer** (Institute for Sociology and Demographic Research, University of Rostock / Rostock Center for the Study of Demographic Change)

Pearl A. **Dykstra** (Netherlands Interdisciplinary Demographic Institute (NIDI)),

Elina K. **Einiö** (Population Research Unit, Department of Sociology, University of Helsinki),

Ana **Fernandes** (Universidade Nova de Lisboa)

Tineke **Fokkema** (Netherlands Interdisciplinary Demographic Institute, NIDI),

Joëlle **Gaymu** (Institut National d'Etudes Démographiques, INED),

Inês **Gomes** (Universidade Nova de Lisboa)

Emily Grundy (Centre for Population Studies, Department of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, University of London),

Christine **Guilbault** (Groupe d'Etude de Démographie Appliquée, Département des Sciences de la Population et du Développement, Catholic University of Louvain-la-Neuve)

Rasmus **Hoffmann** (Department of Public Health, Erasmus University Rotterdam),

Jenny **de Jong Gierveld** (Netherlands Interdisciplinary Demographic Institute, NIDI),

Katalin **Kovacs** (Hungarian Central Statistical Office),

Marc **Luy** (Vienna Institute of Demography)

Pekka **Martikainen** (Population Research Unit, Department of Sociology, University of Helsinki),

Elena **Muth** (Rostock Center for the Study of Demographic Change),

George B. **Ploubidis** (Centre for Population Studies, Department of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, University of London)

Michel **Poulain** (Groupe d'Etude de Démographie Appliquée, Département des Sciences de la Population et du Développement, Catholic University of Louvain-la-Neuve),

Sanna **Read** (London School of Hygiene and Tropical Medicine (LSHTM))

Giambattista **Salinari** (Università degli Studi di Firenze, Department of Statistics)

Sabine **Springer** (Fondation Nationale de Gérontologie, FNG / Institut National d'Etudes Démographiques, INED),

Maria Letizia **Tanturri** (Università degli Studi di Pavia, Department of Applied Statistics and Economics)

Cecilia **Tomassini** (London School of Hygiene and Tropical Medicine, LSHTM)

Daniele **Vignoli** (Università degli Studi di Firenze, Department of Statistics),

Christian **Wegener** (Vienna Institute of Demography),

Christina **Westphal** (Rostock Center for the Study of Demographic Change),

Uta **Ziegler** (Rostock Center for the Study of Demographic Change)

# MAIN RESULTS

# Physical and Mental Health in the Life-Course

Gabriele Doblhammer, Marc Luy, Emily Grundy, Elena Muth, Christian Wegener, George B. Ploubidis, Uta Ziegler, Rasmus Hoffmann, Katalin Kovacs, Christina Westphal

Health is a central dimension of the quality of life for older people. Considerable differences exist in the health status of males and females, between countries and over time, however, causal factors are still largely unknown. We explore trends and patterns in health as well as the underlying factors from a life course perspective. We focus on Germany, a country predestined by the "natural experiment" of the reunification to explore the long-term effects of different socioeconomic and political environment on the health of the elderly. We also compare Eastern Germany and Hungary, two former communist countries with different developments in health after German reunification and finally, take a comparative European perspective on depression and mental health.

The **individual health trajectories** are analyzed with the German Socio-Economic Panel (SOEP). For the comparison between Germany and Hungary, the Hungarian Household Panel is used as well. In order to analyze the effect **of life course events on health transitions later in life**, the German Life Expectancy Survey and the SOEP are used. For looking at the **later-life mental health** in Europe SHARE was analyzed.

## 1 Individual Health Trajectories

Health is a dynamic process, and individuals differ in their pathways, experiencing deterioration, but also recovery. Behind the well-known trend of deterioration with age, which is an average, subgroups of the population may have fundamentally different, often non-linear developments of their health. Changes in health status over time may not only affect the level of health and disability, but can also alter individual pathways, or the frequency of certain pathways.

Three questions are central. First, can we find differences in health trajectories by gender and does the relationship between a certain trajectory and subsequent mortality depend on the sex of the respondent? Second, is there a change in the type and the frequency of trajectories over time and is this change sex-specific? Third, can we learn more about country-differences in health by exploring individual health trajectories rather than prevalences or incidences reflecting population averages?

### Gender Differences in Individual Health Trajectories:

Once health deteriorates, the mortality risk increases more rapidly among males than among females. This is surprising. We would have expected that deteriorating health makes men and women equal and their further trajectories parallel. One explanation could be that women tend to suffer from different chronic diseases than men, which may be the basic difference between the two sexes (Gold et al. 2002; Nusselder and Looman 2004; Case and Paxson 2005). Further approaches, next to those suggesting biological differences (Oksuzyan et al. 2008) and differences in the assessment of their bodies (Delbès and Gaymu 2002; Spiers et al. 2003), explain the gender differences with a selection process: higher male mortality is the main underlying difference and it makes men more selected and therefore healthier. It makes women survive longer, even if they have the same disease as men (Crimmins et al. 2002). Consequently, this leads to more comorbidity and more severe illnesses among women (Oksuzyan et al. 2008).

It is plausible that both mechanisms are at work. Women probably suffer from different kinds of diseases, which start earlier in life, and are more likely to lead to health limitations, but we

lack data on diseases to prove it. Furthermore, the age pattern of differences in the trajectories between men and women supports the hypothesized effect of mortality selection.

**Time Trends in Individual Trajectories of Health Limitations**

Population health has become more stable over time. Trajectories include fewer spells of many limitations, but if these spells occur, they may become more severe than in the past, as reflected in the lower chance of recovery among those starting with many limitations. The increase in the "some limitations, stable" trajectory is consistent with the reported increases in the prevalence of chronic disease, conditions, and risk factors (Christensen et al. 2009). Negative trends in two major lifestyle factors, obesity and smoking, have been reported for West Germany. Obesity is generally discussed as a threat to improvements in health (Christensen et al. 2009), even though the adverse effects of obesity on mortality seem to lessen at older ages (Doblhammer et al. 2009). In Germany, the body-mass index is increasing, with the exception of men aged 50-59, among whom a reverse U-shape trend may be observed. The proportion of current smokers decreases among men, with a shift towards never smokers. Women still smoke less than men, but the proportion of current smokers and former smokers increases, particularly among 50-59-year-olds (Bergmann and Mensink 1999, Hoffmeister, Mensink, Stolzenberg 1994, Junge and Nagel 1999; Thamm 1999).

The reduction of trajectories starting with many limitations (both stable and improving) is consistent with the reported decrease in the prevalence of severe disability and functional limitations. The reasons for these shifts are multifactorial. First, significant contributions may have come from the promotion of good health habits, which have an extremely large effect on subsequent limitations and disability (Hubert, Bloch, Oehlert, Fries 1998; Vita, Terry, Hubert, Fries 2002). Health habits have generally improved over time, with the exception of obesity and smoking among females. Second, medical advances have not only increased awareness of disease and conditions, they also have had positive effects on limitations resulting from disease. Better treatments, total joint replacements; medical preventive measures may also have contributed (Cutler 2001) to reducing disability and functional limitations. Third, survival after the incidence of cardiovascular disease has improved and disability has declined through the use of appropriate therapies, including pharmaceuticals and invasive procedures (Cutler, Landrum and Stewart 2006). Fourth, because education influences lifestyle choices and raises awareness (Bandura 2000), better education is a driving factor behind improvements in disability (Schoeni, Freedman, and Martin 2008). Fifth, some of the improvement may be due to enhancements in the built environment, which help elderly people to function independently even when their physical capacity has not changed (Spillman 2004).

**A Comparison of Individual Health Trajectories in Germany and Hungary**

Sex differences follow the expected distribution in Germany: more females experience health trajectories that involve decline but also recovery. Females are advantaged in terms of the most negative health trajectories and at the same time have a higher likelihood to experience a moderate decreasing rather than a stable trajectory. In contrast, there are no sex differences in the slopes of the health trajectories in Hungary (i.e. there are no differences in the level of the health trajectories, indeed women reveal a lower level also in Hungary). A possible explanation is that female life expectancy in Hungary is still not high enough to reveal the typical sex-specific pattern of worse health developments combined with lower mortality. It remains for future studies to test whether countries with comparatively low life expectancy generally do not reveal sex-specific trends in the slopes of health trajectories or whether this is specific to Hungary.

## 2 Effect of Life Course Events on Health Transitions Later in Life

Three main conclusions can be drawn:

(i) Our first conclusion is of technical nature. Health status transitions for East and West German women and men in longitudinal data have basically the same risk factors as those found in cross-sectional studies. Especially, the influence of socioeconomic differences on morbidity is consistent with recent cross-sectional analysis for Germany (Mielck 1994; Helmert et al. 1997; Lüschen et al. 1997; Mielck et al. 2000; Von dem Knesebeck et al. 2003). This is important when it comes to identifying typical risk factors for other populations.

(ii) In West Germany, an increased risk of dying is associated with behavioral determinants among males and with socioeconomic factors among females. The transition to a bad general health status and the onset of specific diseases reveal the reverse picture. Among men, socioeconomic factors are the main drivers for a higher likelihood of the onset of diseases and for worsening general health. In contrast, among women, the risk of onset of diseases is mainly associated with behavioral factors. In East Germans there are no reverse effects of socioeconomic factors on health, as might be expected from the higher female employment rates among the studied cohorts. However, in eastern European societies psychological well-being quantified by life satisfaction might play a more important role for mortality and morbidity at later old age than other factors, especially for females.

(iii) There is a very strong and overall positive effect of physical activity. For both sexes and in both parts of Germany, physical activity reduced the risk of dying significantly. Physical fitness is a guaranty for a longer and healthier life.

Moreover, early life events and life events at young adult life influence primarily later transitions to disability, but have little effect on the transition to mortality. Current life events, on the contrary, influence disability as well as mortality. Differences between East and West Germany are negligible. Nevertheless, results must be interpreted with caution: due to small sample size numbers, most results are not statistically significant.

## 3 Later-life Mental Health in Europe: A Country Level Comparison

We confirm one of the most robust findings in psychiatric epidemiology, with levels of depression being higher in women than men (Minicuci et al. 2002). The female excess in depression is more prominent in Southern European countries, a finding in accordance with the EURODEP report (Copeland et al. 1999a) and other studies (Zunzunegui et al. 2007), but it is also evident in Austria. Gender differences in depression may reflect genetic influences (Kendler et al. 2001), the heritability of depression being greater in women than in men. They have been also attributed to environmental influences, such as socio-economic conditions (Jeon et al. 2007) (Zunzunegui et al. 2007), through the differential vulnerability hypothesis and the differential exposure hypothesis. According to the former, the higher prevalence of depression in women reflects the stronger impact of socioeconomic position, social relations, and chronic stressors on the physical and mental health of women compared to men (Rieker and Bird 2005). The differential exposure hypothesis states that women experience more depression-related adverse circumstances, such as social and economic disadvantage and lifetime stressors (Zunzunegui et al. 2007). The relative contribution of the two processes cannot be inferred now; further research especially using life course data is needed.

The role of environmental factors in between-country heterogeneity in late life mental health suggests policies and population based interventions to alleviate depression and enhance well-being in the older population. Any success in these areas would potentially have a large public health impact, especially as the children, grandchildren and other relatives of older people might also benefit from improvements in the mental health of their relatives.

## 4 Future Trends in Health in Germany

Several factors will have an impact on future trends in health and on the difference in health by gender. Of major importance are life-style factors. Recent adjustment of health behaviors can be observed among women and men, and we can expect that this process will continue in Germany in the near future. The percentage of deaths attributable to smoking stagnates among males since the 1970s but increases continuously among females (Peto 2006). Therefore, we can expect that the mortality and morbidity schedules of females will be affected negatively by their increasing smoking hazards and will close the gender gap towards men.

The proportion of males and females physically active increases (Becker et al., 2006). Physical activity is less among East Germans, but they exhibit a higher rate of increase than their West German counterparts (see Luy 2005). It is likely that the future elderly will profit from an increased physical activity. This holds for both parts of Germany and for both sexes.

The relatively high share of smokers and overweight or obese children is of particular importance for the health of the future elderly population, since life styles acquired at younger ages will often be maintained throughout adult life and in old age (Hurrelmann et al. 2003). Furthermore, East-West differences in the risk factor profile of young people might sustain until older ages. Males in West Germany have a 25% lower risk of smoking in comparison to East German males. West German females, on the contrary, have a 20% higher smoking risk than females in East Germany. There are also sex differences in smoking patterns. Whereas the smoking risk for females decreases beyond age 30 – probably because of pregnancy – males smoke up until higher ages and possibly quit because of health problems. However, cohort effects for Germany as a whole show the highest risk of smoking in the oldest cohorts, for males. For younger cohorts, the trend is stagnating, thus it can be expected that smoking prevalence in the future will be lower than today's.

The risk of being overweight or obese is lower in West Germany than in East Germany (13% lower for men, 28% for women. The risk is higher in today's elderly populations compared to younger cohorts. Thus, for future older population it can be expected that the health status, at least regarding the risk factors smoking and obesity is improving, but East-West differences might prevail.

Differences in the educational level of elderly women and men will decrease in the future. Higher education is not only linked to health by improvements in life-style but also by changes in the life-course and a postponement of major events of the life-course. Indicators of early life circumstances used in this study, such as age of the mother at birth of the child, age at first marriage, age at first occupation depend on educational attainment. These ages will generally increase, which may lead to a higher risk of disability among females.

The employment rate of females also increased, which leads to an independent and additional income and pension later in life. However, among the cohorts included in this study there is no relationship between occupational stress and/or dual burden and later health outcomes among females.

# Health and well-being at older ages:

# The interlinkage with family life histories, gender, and national contexts

Pearl A. Dykstra, Emily Grundy, Tineke Fokkema, Jenny de Jong Gierveld,
George B. Ploubidis, Sanna Read & Cecilia Tomassini

Over the past decades, Europe has witnessed major changes in the family-related behaviour of its population. The implications of these changes for health and well-being[1] of older adults are often considered negatively, in public debates but also in a number of scholarly scenarios (e.g. Popenoe, 1988, 1993; Waite & Gallagher, 2000; Wolfe, 1989). Though intuitively appealing, the arguments are often misleading and inaccurate, and lack a sound of empirical basis (Dykstra & Komter, 2006; Harper, 2005; Rosenthal, 2000; Uhlenberg, 1993).

We provide more insight into people's health and well-being at older ages. We do so by investigating the effect of family life histories (i.e., marital and fertility history) on later life health and well-being, its difference among men and women, and its variation between and within European countries. In addition, we examine the association between family solidarity and late-life health, and the role of norms of filial obligations in conjunction with the quality of the parent-child relationship in the event of increasing parental needs. Moreover, we consider different dimensions of health and well-being, in unison or simultaneously.

We often focus on differences and similarities among western European countries, on the basis of the Netherlands Kinship Panel Study (NKPS), the British Household Panel Study (BHPS), the Office for National Statistics Longitudinal Study (ONS LS) and the Italian 2003 Indagine Multiscopo (IMF). But eastern European countries have witnessed more rapid and more dramatic demographic changes, are undergoing different socio-economic and political developments, and have different welfare systems from those in the rest of Europe (Fokkema & Esveldt, 2006). It is fortunate that SHARE and the Generation and Gender Surveys (GGS) make it possible to expand our analyses eastwards.

## 1. Effect of family life histories on late-life health and well-being

### 1.1. Gender differences in the relationship between marital history and late-life health

In later life not just current circumstances, but also life history, exerts an influence on health and well-being and both vary by gender in current cohorts in England & Wales. Marriage and socio-economic status have a greater co-variance for women than men (consistent with the idea that many benefits of marriage come from this association). The effect of absence or loss of marriage is greater on men than women (consistent with the idea that men are more dependent than women on the social support and social control elements of marriage).

### 1.2. Gender differences in mental health among older married couples

Mental health is correlated between husbands and wives and is poorer among wives compared to their husbands. Mental health differences between husbands and wives show similar patterns to those found in samples of unrelated men and women. Some family contexts, such as experiencing early parenthood and co-residence with a child, decrease gender differences between spouses. Even though wives express more mental distress, husbands are more prone to poorer mental health related to family characteristics. Family events, though potentially

[1] 'Health' and 'well-being' are both an umbrella term, covering a variety of measures (Ter Bekke et al., 2007). In our research, we considered three health indicators: mortality, physical and mental health. With regard to 'well-being' we narrowed our focus to quality of life (i.e., control, autonomy, pleasure, and self-realisation), loneliness, and intergenerational solidarity (including coresidence, geographic distance, frequency of contact, norms of family obligation, and support exchanges between older parents and their children).

stressful for both partners, may have more positive meanings for wives than husbands or wives may have more effective coping mechanisms for dealing with them than their husbands. On the other hand, traditional gender attitudes are related to poorer mental health in wives but not in husbands. However some factors often regarded as more important for women's than men's well-being, such as emotional support and hours spent in household work, are equally important for the mental health of both husbands and wives.

### 1.3. Implications of fertility history for later life quality

Having children *per se* does not add quality of life in old age: childlessness does not necessarily lead to a poorer or better quality of life. The consequences of parity depend on gender, health and social networks, socio-economic factors, and the dimension of quality of life investigated. Fertility history is only one factor among the others that influence later life quality. Several socio-economic, social support and health related factors often mediate the relationship between fertility history and quality of life.

Fertility histories have mostly been studied among women, based on the assumption that childbearing and parenthood has more effects on women's than men's health and well-being. Congruent to some previous findings (Buber & Engelhart, 2008; Helbig et al., 2006; Plaisier et al., 2008; Zhang & Hayward, 2001), the present study shows that men are affected too, and in some cases even more than women. The most striking gender differences are the consequences of nulliparity and high parity for women and men. The mediating factors are also in some cases different for men and women. Women may use different coping strategies or they have different expectations related to quality of life than men. The gender differences can result from the differences of female and male life trajectories in these generations.

### 1.4. Indicators of fertility quantum and tempo and their association with intergenerational transfers in later life: a cross-national comparison

Fertility *quantum* (number of children born) has weaker associations with measures of intergenerational exchange in "familistic" cultures (in this study represented by Italy) compared to a more "individualistic" context here represented by the Netherlands, with the UK being in a intermediate position. In addition, fertility *tempo* (age at childbirth) does not influence intergenerational exchanges in later life, but it should be remembered that future cohorts of older people will experience delayed fertility more frequently than the cohorts considered here and therefore timing may be an issue in the future. The effects of fertility quantum and tempo on intergenerational exchanges are quite similar between the two sexes.

## 2. Differences in intergenerational family solidarity across Europe: A western European typology of late-life families

Based on four dimensions of intergenerational family solidarity – geographic proximity, frequency of contact, norms of family obligation, and support exchange – we identify four types of late-life families:

(a) *descending familialism*, characterized by high probabilities of having a child nearby, being in frequent contact with at least one of the children, having strong norms of family obligation, and exchanging help in kind from parents to children (35%);
(b) *ascending familialism*, characterized by high probabilities of having a child nearby, being in frequent contact with at least one of the children, having strong norms of family obligation, and exchanging help in kind from children to parents (25%);
(c) *supportive at distance*, characterized by a low probability of having a child nearby, a high probability of being in frequent contact with at least one of the children, refutation of family obligation norms, and primarily financial transfers from parents to adult children (7%);

(d) *autonomous*, characterized by high probabilities of not living nearby, having little contact, refutation of family obligation norms, and few support exchanges (33%).

The distribution of these types across countries clearly deviates from the north-south divide that is commonly suggested. The four family types are prevalent in each European country, which were found to be invariant across northern, central and southern European regions. Moreover, socio-demographic differentials in family type follow predictable patterns, underscoring the validity of the developed typology. Scholars should move beyond the idea that a particular country is best characterized by a single dominant type of late-life family.

## 3. Implications of solidarity for late-life health and well-being

### 3.1. Intergenerational family solidarity and later-life parental health

The four late-life family types can be ordered with respect to depression, life satisfaction, and somatic health the three health outcomes as follows: a) Descending familialism; b) Supportive at distance; c) Autonomous; and d) Ascending familialism. Descending familialism is type associated with best overall mental and physical health; Ascending familiasm is associated with the highest depression, lowest well-being and lowest somatic health scores.

Our results extend findings from previous studies (Mutran & Reitzes, 1984; Markides & Krause, 1985) in suggesting that older parents who receive help from children are in poorer health than those who provide help to children or are less engaged in help exchanges. One reason for this may be that children respond to deteriorating parental health by providing help, in short the direction of the association is from parental health status to type of expressed solidarity rather than the reverse. However there may also be mechanisms whereby type of exchange influences health, particularly mental health. Reliance on children, for example, may result in reduced self-esteem associated with the loss of autonomy and physical and/or economic dependence in societies which place an emphasis on adult autonomy and independence.

The Supportive at distance group is the only family type where the association between late-life family solidarity differs for mental and somatic health, with this group exhibiting optimal somatic health, but sub optimal mental health, especially in the 75+ age group. Possibly lower levels of contact with children have a negative effect on their mental health, if so this would suggest the direction of the association is from solidarity type to health. The Autonomous group shows moderate somatic health and sub optimal mental health. Possibly too this indicates a negative consequence for mental health of lower intergenerational family solidarity. Finally, the optimal health status of the Descending familiasm group with respect to both somatic and mental health may reflect the previous health status of the members of this group, as well as the beneficial effects, in the form of social support, of offspring proximity and frequency of contact on mental health.

### 3.2. Intergenerational family solidarity and late-life loneliness

Intergenerational co-residence and frequent face to face contact with adult offspring help to protect older adults from feeling lonely. As Buber and Engelhardt (2008) have stated, frequent interactions with children are a sign of social connectedness, whereas infrequent contact is viewed as a sign of disinterest and lack of concern for one's older parents.

Policies aimed at improving the life conditions of older persons tend to focus on finances, housing, and health. However personal relationships have an impact on older adults' physical and mental well-being independently of factors such as socio-economic status, health-risk behaviours, use of health services, and personality (Uchino 2004).

Older adults in former communist countries are lonelier than in western European countries. As yet, it is unclear how to explain the cross-national differences. Determinants of loneliness such as singlehood, living alone, limited contact with offspring, poor health, and financial difficulties, are strikingly similar in both West and East European countries. Explanations need to be sought in other factors. Walker (2005) has suggested that greater attention should be given to older adults' expectations, standards and norms in cross-national comparative research on quality of life.

**4. Normative beliefs and responsiveness to increasing parental needs**

Notwithstanding processes of individualization, secularization and emancipation in the Netherlands, upward intergenerational support is guided by norms of commitment to ageing parents. Adult children who more strongly endorse norms of filial obligation provide higher levels of support to their fathers and mothers. This is in line with the normative solidarity hypothesis. Evidence in favour of the individualization hypothesis is visible only with regard to fathers. Relationship quality is a predictor of support to fathers but not to mothers.

Responsiveness to norms of filial obligation is less manifest in the event of a decline in mothers' health, and insensitive to a decline in fathers' health. Apparently, adult children respond to a generalized socially-shared expectation that mothers should be cared for in times of need. Single mothers receive more support than partnered mothers; among fathers, partner status makes no difference. Taken together, the findings suggest a socially structured perception of mothers as more vulnerable than fathers. Apart from norms of filial obligation, relationship quality matters for the provision of support to fathers. We conclude that supporting older fathers is more strongly individualized than supporting older mothers.

Gender differences are not only visible in the parent generation. Daughters generally provide higher levels of support to their parents than sons. Daughters are less responsive than sons to norms of filial obligation with regard to supporting their mothers but not with regard to supporting their fathers. Norms of filial obligation have a stronger motivational component for sons than daughters. Sons provide support to their mothers because they feel such behavior is expected of them. Daughters are less sensitive to social prescriptions, perhaps because they take support provision for granted, are more likely to have organized their daily schedules to incorporate support giving tasks, or are intrinsically motivated. An appeal to social duties and responsibilities works for sons.

**A brief overview**

Striking gender differences exist, some of them contrary to common belief. For instance, men's (not only women's) late-life health and well-being are often affected by their marital and fertility histories, and in some cases even more than women. Absence or loss of marriage has a greater negative effect on men's mortality. Husbands are more prone to poorer mental health related to family events, and early child birth is only related to a lower sense of control among men. In a similar vein, single men are more prone to loneliness than single women. Further research, however, is needed on the mechanisms behind the gender differences, and whether they are related to individual characteristics, cohort factors or larger macro environments (see Evenson & Simon, 2005; Hansen et al., 2009).

# Gender gaps and their factors in economic resources

Carole Bonnet, Gustavo De Santis, Giambattista Salinari,
Maria-Letizia Tanturri, Daniele Vignoli

## 1. What is already known about economic resources in old age

Economic resources in old age derive mainly from public pensions, especially in Europe. In EU countries, spending to social protection is about 25-26% of GPD, some 70% of which goes to the aged, and in some countries (e.g. Italy) considerably more than this. Signals of alarm are present already now: for instance, the amount of the general government debt. Reducing it requires that governments either collect more in taxes, pension contributions and other revenues, or that they spend less. If it is expenses that must be cut: where and how? Since spending for the old is the most important cause of outlays, it is also the first candidate for reduction.

The "window of opportunities" opened by the high and rising proportion of adults in the population has now closed. Since structural indexes will not evolve favorably, governments must consider the possibility of reducing spending in favor of the old by scaling down individual benefits. The simplest is to reduce pension benefits, which is what most European countries have done in the past few years and intend to do in the near future: all the recent reforms in the pension domain (both those that have been implemented and those under discussion) act in this sense. This will depress pension income relative to labor income.

One limitation is that this will very obviously reduce the standard of living of the aged, who constitute already a relatively vulnerable segment of the population. Although their economic conditions have improved in the past decades, the oldest, especially if women, remain more exposed than others to the risk of poverty, especially if they are divorced or separated.

Relative monetary poverty is more frequent among the old (65+), about 20% more than in the general population. Females are hit by poverty more than men, and poverty is much more frequent among one-person households, especially if made up by women. Indeed, when they live together, two elderly persons are better off than the average population.

One way to reduce the demand on the welfare state is to make people work more before retirement. This is also consistent with two major changes that are currently underway. One is to link more closely pension benefits to past contributions; the other is to put the emphasis on individual, direct rights and to reduce derived rights. In short, survivors' pensions will probably become less important in the future, and they will be replaced by direct, own pension rights.

This relates in particular to the modified role of women in society and to the vanishing role of the traditional family. The picture has now changed completely, and will likely change even more in the future. The general expectation now is that women *should* work, make their own career, and that even the traditional breaks from work, due to childbearing, should be reduced: In part because fertility is low, in part because these periods should be shared with the partner, and in part because collective childcare systems should develop (especially where they are most lacking, that is in southern and eastern Europe).

The increased participation of women in the labor market is consistent with the idea that they should form their own pension rights, instead of relying on those of their husbands. But one of the problems is linked to the rapidity of the change. How quickly will European societies pass from the traditional to the new pension arrangements? Several generations of women run the

risk of being caught in between the two systems, and to access pensions with low own contributions (because of irregular and short working careers) but limited rights to survivors' pension benefits (more about this in the next section).

Life expectancy has increased and health conditions have improved. Living longer does not mean living in poorer health conditions, on average, and may even be associated with an improvement in this respect. This suggests that people could retire later than they do today. Demographers generally agree that age at retirement should be linked to life expectancy, and that it should increase smoothly with it. There is also the related problem of whether age at retirement should be the same for everyone, or if it should vary, according to some criterion: for instance, lower for those social categories whose life expectancy is lower (e.g. manual workers). If this idea prevails, then there is also the issue of how to treat men and women, since women live considerably more than men. It is also fair to consider that women's health conditions are generally worse than men's.

## 2. What our research has added

### 2.1 The evolution of income

Gibrat's model is a very general theory on the process of income evolution. It fits reality well and it provides an explanation about the origin and nature of income inequality and poverty. Basically, incomes evolve at random from one year to the next, and there is a sort of drift by which, even if they were all equal at the start, individual incomes would differ more and more over time, and would eventually be distributed as a log normal curve.

Gibrat's model suggests that labor incomes tend to be more and more dispersed as individuals age: it is only later, when they retire, that the dispersion of incomes starts to reduce. Hence, linking pension benefits to past contributions, and therefore to past labor earnings, may lead to a situation where the process of greater and greater dispersion of incomes observed among those of working age spills over to the retired, who have thus far been (in large part) protected by the strong redistribution policies implicit in former and (less so) current pension arrangements.

### 2.2 Individual and contextual correlates of economic difficulties in old age in Europe

With data drawn from SHARE, we show that the risk of being (relatively) poor varies considerably among the aged. The "classical" covariates act in the expected direction: e.g. men are better off than women; the well educated better off than those who stopped their studies earlier; home owners better off than tenants; etc. But the risk of being poor is also strongly influenced by contextual variables, which are at least as important as individual variables. National-level data tend to mask relevant sub-national variations in economic poverty among the elderly, probably depending on the past economic performance of the area itself.

### 2.3 The importance of home ownership

Home ownership is a key indicator of quality of life of the elderly both from a monetary and an emotional perspective. Home is the most important asset among older people in Europe. Poor people are generally also more likely to be excluded from home ownership, especially in the case of women living in enlarged families (SHARE)

The old are reluctant to sell their own home and to transform this asset into income. In Italy, they are also reluctant to move to a smaller house when their adult children eventually leave the nest and, later on, when one of the spouses dies.

In France, the picture is different. The death of a partner induces a decrease in income which may lead to downsizing one's home. Widowhood also increases residential mobility, especially at older ages and for those who have children. Mobile widows tend to move closer to their relatives, but they do not generally choose to co-reside with a child. New widows move to smaller dwellings, more often apartments and in the rental sector, and on average in larger municipalities where services are more easily accessible (French Housing Surveys).

### 2.4 The use of time and the gendered division of labor

There are large discrepancies in the gender division of labour in all countries at all stages of the life course. These differences are usually smaller at the two extremes of the age distribution, and they become larger with parenthood. Towards the end of their life, women may benefit from their longer experience in housework: widows spend then less time on housework than widowers, and this is the only phase of the life-course when gender roles are reversed. (Latest national surveys on time use in France, Italy, Sweden and United States)

### 2.5 The role of (adult) children

In general, having had children does not protect from poverty at older ages. When the effect is positive, it is significant only for single children. Having adult children who still live in the parental home is invariably associated with a low equivalent income and with higher risks of poverty. In these cases, the old, with their pension benefits, are normally the main earners, adult children have not (yet) found their own way and still need their parents' resources to carry on.

Indeed, independent living is preferred by both generations (old parents and adult children), but proximity is highly valued, especially in Southern Europe and notably in Italy. This permits relatives to have very close and frequent contacts, and grants them mutual help. On average, however, the older generation gives more than it receives (e.g. in terms of hours of work), especially when there are grandchildren involved.

Children are not an important asset in one's old age: the old live essentially out of their own resources (pensions benefits, essentially) and cases when they economically support the younger generations (e.g. by helping them set up a new home) are more frequent than the reverse.

### 2.6 Union formation and dissolution

With or without a formal marriage, couples break up much more frequently today than they did in the past. This opens up a whole series of new problems, which impact on the standard of living of the population, both in the short and in the long run, i.e. in one's old age.

The greatest protection of individual economic conditions derives from the fact of living in a multi-person household. This is especially true for those who are traditionally less protected from the hardships of the market: the young, the old, and women. As the protection that derives from the family weakens, it is doubtful that forces acting in the opposite direction (for instance, the greater labor market participation of the women) will prove strong enough to fully compensate this effect.

### 2.7 More general societal transformations

The population of the developed countries of Europe is getting older, because of low fertility and longer life expectancy. Immigration is important, from the point of view of both demography and economy. Indeed, immigrants contribute greatly to the labor market and especially to those personal services that benefit the old.

## 2.8 Pension gender gap and survivors' pensions

Despite women's increased education and increased participation in the labor market, the gender pension gap in France (and, presumably, in several other developed countries as well) will likely remain significant. The gap would have narrowed much more in the future if the 1993 and 2003 pension reforms in France had not been introduced. Since these reforms follow the general trend of linking pension benefits to past contributions, the conclusions that emerge for France hold in a more general sense: the current trend of pension reforms is not gender neutral, and will damage women in particular. (Microsimulation model Destinie)

Since a growing number of women (separated, divorced or never married) will live alone after retirement, their incomes will depend more closely on their own earned pension entitlements.

In France, after the death of a spouse, half of the widows have enough of their own resources and survivor's pension to maintain their adjusted income. For some of them (especially widowers), survivor's pension could be considered even too generous. But for 60% of the women, survivor's pensions do not prove sufficient to maintain the same standard of living. The decrease is more than 10% for about one quarter of them. (Fiscal data matched with Labour Force survey).

The survivor's pension represents more than 20% of French women's pension aged 60 and over in 2004 and 40% of women aged 85 and over. But how much do people really know of this scheme? For instance, one might wonder whether at least part of the decrease in living standard following the spouse's death depends on inadequate savings behaviour, related to a misperception of the survivor's pension rules.

One third of people aged 40 and over living in a couple have inadequate information or perception about what they would receive, should their spouse prematurely die. About 16% of the respondents overestimate their rights, and this is the sub-population potentially more vulnerable, because they might tend to save too little.

In a comparative perspective, imagine two typical women, with the same career profile, one retiring now and one in 2035, in Germany, France and Italy. Family entitlements boost women's pensions the most in France, but similar mechanisms have recently developed also in Germany, and to a lesser extent, in Italy. In the current climate of rule tightening, the French and Italian systems tend to benefit women who have experienced periods out of the labour force, whereas in Germany women who have worked part-time will likely be better off in the future than they are today. Disrupted careers will still be penalised in France, but less than before, since the discount rate was reduced by the 2003 Pension Reform Act. In Germany and Italy, penalties for disrupted careers and criteria for guaranteed minimum pensions will be harsher.

# Factors of gender gaps in institutionalisation
# A comparison between Belgium and Finland

Elina K. Einiö, Pekka Martikainen,
Michel Poulain, Christine Guilbault

## 1. Gender differences in nursing home use in older Finns and Belgians

Women are more likely than men to reside in nursing homes and other care institutions at older ages. Previous longitudinal studies analysing the determinants of admission to institutional care in old age provide partly inconsistent evidence on gender: the results obtained from multivariate models indicate that the female excess in admissions sometimes persists but is sometimes reversed after various demographic, socio-economic and health characteristics are controlled for. Previous studies are, however, seldom focused especially on gender (Martikainen et al. 2009) and the magnitude and reasons behind the female excess in entering institutional care are thus seldom systematically investigated. In addition, comparisons between countries are rare (Himes et al. 2000).

Our study aimed to clarify the role of gender in residing and entering institutional care at older ages in two countries, Finland and Belgium. This study used register-based administrative data from Finland and Belgium. For Finland, institutional care was defined as long-term care in a nursing home or a place similar to it (e.g., service home with 24-hour care) lasting for over 90 days or confirmed by a long-term care decision. In Belgium, institutional care was defined as residence in a nursing home with 24-hour care, as well as residence in a home with less intense care. For both countries, institutional care in hospitals and health centres was excluded.

The nationally representative data used in this study provided a continuous follow-up for first entry to institutional care over a 4-year period for both countries. The several empirical and practical advantages of the data that linked different administrative registers meant that missing information and loss due to follow-up were minimal. This feature is a unique advantage of the data sources, because longitudinal studies on institutional care based on questionnaire surveys may suffer from incomplete follow-up owing to attrition related to severe disability or to long periods between the surveys. In the case of incomplete follow-up owing to long periods between the surveys, it would be easy to overestimate the female excess in entering institutional care as women tend to stay on average longer in institutions (Martikainen et al. 2009).

**Being female is associated with a higher probability of residing and entering institutional care at older ages in both countries**, although the differences between men and women are somewhat larger in Belgium. Older women over 75 years of age are 82% more likely to enter institutional care than older men in Belgium, whereas the corresponding figure in Finland is 35%. Differences between men and women in entering institutions are, however, largely related to gender differences in age and marital status distribution but also to gender differences in health and socio-economic characteristics. Older women are especially disadvantaged in having a higher likelihood of being widowed that reduces their chances of receiving informal care from their spouse in both countries. In a more theoretical study of gender and later life, Arber and Ginn (1991) argued that there were three key resources for preventing dependency at older ages: material, health and caring resources. These different types of resources may also prevent or postpone older people from moving to institutional care. Arber and Ginn (1991) examined the ways in which women were on average disadvantaged in relation to these resources, and underlined the importance of informal care

provided by a spouse to their married partner. This coincides with numerous empirical studies, which consistently demonstrate that living alone or without a spouse increases the risk of entering institutional care, once various other socio-demographic and health characteristics are controlled (Branch and Jette 1982; Foley et al. 1992; Steinbach 1992; Wolinsky et al. 1992; Nihtilä and Martikainen 2008). Our finding that the female excess in entering institutional care is largely related to older women being more often widowed, less healthy and in a lower socio-economic position than men coincides with the study of Arber and Ginn (1991) underlying the importance of different types of resources for preventing dependency at older ages (Arber and Ginn 1991).

Overall, our findings imply that future gender differences in institutional care will depend heavily on the development of marital status distribution, but also on gender inequalities in health and socio-economic resources.

**2. Other determinants of entry in institution**

In both countries, the differences in the risk of entry in institution for all socio-economic characteristics and type of house are usually reduced among both sexes after simultaneous adjustment. The associations with almost all socio-economic and housing factors with the risk of institutionalisation are still stronger for both Belgian men and women than the ones observed in Finland.

The comparison of the role of the determinants of entry in institution between Belgium and Finland shows that in both countries the protective effect of living with a spouse is very strong. In Belgium, living with others is also associated with lower risk for men than living alone or with an unmarried partner. Furthermore, in Belgium, having children is associated with another protection effect against institutionalisation.

After adjustment, education is associated with entry in nursing home for Finnish men and Belgian women only. The role of education could not be considered as conclusive in both countries: when controlled with all other socio-economic factors and housing conditions, education has no systematic independent effects. Nevertheless, education is a determinant which is prior to the socio-economic and housing conditions. Therefore, even if the variable education is not statistically significant in the models, it does not mean that it is not related, to the risk of institutionalisation.

The impact of occupation-based social class is also different between countries. In Finland, this factor is no longer associated with entry for men, and this is almost true for women also. On the Belgium side, men and women which belong to the category entrepreneur have still lower risk of institutionalisation than those who have worked as blue collar or public blue and white collar.

Alike the situation in Finland, living in a detached house and possessing a car is associated with a decreased probability of entering in institutional care in Belgium, though in a stronger way in the Belgian case. In addition, being a renter increases the probability of institutionalisation in both countries. While in Finland, the effect of poor housing conditions becomes apparent after other factors were controlled this effect was already present in the age-adjusted Belgian model and is still very strong. Indeed, living in a poorly or very poorly equipped dwelling increases the probability of institutional care for both men and women in the two countries.

Finally, the association between urban living and an increased probability persists after control only among Finnish women which is the same in Belgium when compared with

elderly living in rural area. For Belgian men and women, living in semi-urban area is still associated with higher risk than living in urban area.

**3. Future prospects.**

Projections of the institutionalised population in Belgium offer an overview of some factors that may be decisive for the future.

From 2006 to 2031, the number of institutionalised men would increase by 50%, that of women by 20%, if no change were to occur neither in mortality at older ages nor in access to institutions. It may be considered as a pure cohort effect. Men and women will belong to more numerous cohorts borne during the baby boom. These cohorts will also have benefited from progress in survival till 2006, which impact men more than women since they were lagging behind and have reduced the gap.

The increases would be much more important for men (+110% instead of 50) as well as women (+60% instead of 20), if we allowed for mortality decline at older ages, by considering that it will increase the number of persons “at risk”, but ignoring the attached impact on marital status, i.e. the general postponement of widowhood.

If we considered this latter effect, the increase in the number of institutionalised men would be “only” 75%, that of women 30%. The widowhood effect will counterbalance in a large proportion the simple mortality effect.

Such a mechanism has a high probability to be effective in the next decades. It should result in a reduction of gender imbalance in the institutionalised population. Another factor could also be at play: health improvement at older ages. There is much less consensus on its likeliness and still less on any gender differential in this domain. We have not considered its possible impact so far.

# Contexts and policies as factors of gender gaps at older ages in Europe

Ana Fernandes and Inês Gomes
Christiane Delbès

Old age crystallizes inequalities accumulated along the life course: Elderly men and women have different living conditions because they held at adult ages distinct roles that were strongly moulded by their socio-cultural context.

**Diversity of context throughout Europe**

Socio-cultural context has been analyzed as a set of norms and values, as well as in terms of political and juridical equality or insertion on the labour market. Typologies of female patterns elaborated against socio-cultural contexts at younger ages (Hakim, 1996 ; Sümer, 2009 ; Eaping-Andersen, 2009) revealed a hierarchy from Scandinavian to Mediterranean countries, male and females roles being much more egalitarian in the former group. Such cross-country differentials were far more accentuated in cohorts of people now in their older ages, who pioneered changes in the distribution of male and female roles.

When young, elderly women in Nordic countries experienced an egalitarian political and juridical context (voting right gained between 1906 and 1921; right to have a professional activity, without husband's control, between 1889 and 1921; equal share of parental rights between 1922 and 1951). Later on, they could accommodate more easily than elsewhere family life (in 1970, half of Finnish and Danish women used a modern contraceptive method) and professional life (in the 1946-1950 birth cohorts, duration of professional activity was only 2.5 to 4 years longer for men than women). Conciliation was made easier by egalitarian values concerning role distribution between genders: e.g. in 1981, as many as 45% of Danish men considered that "*Sharing household's chores is very important for successful marriage*". Conversely in 1990, only 8% of the Swedish population agreed with the statement "*When jobs are scarce, men should have more right to a job than women*".

A similar "march to equality" was initiated much later in favour of Mediterranean women. For instance, they gained voting rights only between 1945 and 1970 and equal share of parental rights only by the end of the 1970s. In the early 1980s, only one third of them had access to modern contraception. In these cohorts, role distribution remained still very traditional and gender gap on duration of professional activity was wider than in any other region (men worked 20 years more than women in Spain, 17 years in Italy in the 1946-4950 birth cohorts). Men were least favourable to their contribution to domestic tasks (only one fourth of Spanish men) and public opinion agreed most easily to prioritize men on labour market (43% in Italy). Consequently, women at home wished to work more than elsewhere.

Women in central Europe occupy an intermediate position – France and Germany being the clearest examples. German women were granted voting rights much earlier than French women (1918 versus 1945), but they gained equality in family rights later (in the 1980s versus the 1970s) and they had more difficulties in combining family life and professional life: in the 1946-1950 birth cohorts, German women worked 10 years less than men (7 years in France). German men are also very reluctant to share domestic tasks (in 1981, only 19% considered that "*Sharing household's chores is very important for successful marriage*", against 34% of French men). In the two countries, about one third of the population considered in 1990 that "*When jobs are scarce, men should have more right to a job than women*".

**Changes through time and possible developments.**

Nowadays, everywhere in Europe, gender equality in political and juridical rights is a fact. Nevertheless, elderly women tomorrow (those who are now in their 40s or their 50s) will still have a less favourable position than men in many domains.

***Political responsibilities.***

*De jure* gender equality conceals large differences in actual access to political responsibilities according to countries. In Northern countries, where women were granted the right to vote and to be elected earlier than elsewhere, they are best represented in Parliament: In 2005, with rates of 47 and 42 % Sweden and Finland approach parity. In every country, women's participation in parliament has progressed between 1995 and 2005. Now Belgium, Spain, the Netherlands and Germany come close to the most advanced countries: more than one third of members of Parliament are women. But female representation remains particularly low in United Kingdom, France, Hungary, Greece and Italy (between 10 and 20%).

***On the labour market.***

From one cohort to another, usually, men's number of years working declines slowly, while female duration of activity clearly rises. The increase is greatest in countries where female participation was weak. This development has narrowed cross-country differences. Nevertheless, this homogenisation is not sufficient to question the hierarchy: The Scandinavian countries remain at the head and the Mediterranean countries lag behind (except for Portugal). But, even if the gap between male and female activity rates shrinks (Scandinavian countries are even close to a par), one should not conclude that there are no longer quantitative and qualitative discrepancies between male and female situations. Everywhere in Europe women are more often part-time than men and, except in the Scandinavian countries and UK, more often unemployed. A study (Afsa & Buffeteau, 2006) shows that if the recent development of precarious employment continues, French women from the 1970 birth cohort should on average experience careers not better than those women born in the mid-1950s. Moreover women have less qualified jobs and have lower wages for similar work. Despite progress in educational attainment – towards higher levels than men – women now in their 40s and 50s remain everywhere in Europe at a lower scale in professional hierarchy.

This set of factors playing against women presently active will result after retirement in lower pension rates for them than for men.

***Norms and values.***

Everywhere in Europe, egalitarian values are in progress but large disparities remain between countries. In 1990, on average, 64% of respondents (from 32% in Denmark to 84% in Portugal and Germany) stated that "*a pre-school child is likely to suffer if his or her mother's work*"; nine years later, the percentage had dropped down to 45% (from 19% in Denmark to 81% in Italy). Similarly, in the same interval, the proportion of respondents who agreed that "*when jobs are scarce, men should have more right to a job than women*" had moved from 31% (from 8% in Sweden to 50% in Austria) to only 17% (from 2% in Sweden to 30% in Portugal).

*

Because of population renewal, gender gap at older ages should be reduced in the future. But uncertainty remains on political will to support the movement. Confronted to budgetary deficits and necessity to make choices, women risk to be the first victims of social policy reorientations. For instance, reforms of pension schemes ongoing throughout Europe generally claim for longer durations of activity, which will put more penalties on women, who

have shorter careers. Similarly, given the cost of physical and mental dependency, there is a risk of decline in collective solidarity. If it were so, more pressure would be put on families, hence mostly on women, who already play a major role to support the most fragile elderly parents.

# Objective and subjective indicators of quality of life. A gender and cross-country analysis

Joëlle Gaymu, Sabine Springer, Katalin Kovacs,

Good health, an advantageous financial situation and familial integration all have a positive influence on the subjective well-being of older people (Bowling and Windsor 2001; Brown, Bowling and Flynn 2004; Doyle 1984; Easterlin 2001; Fageström *et al.* 2007; Ferring *et al.* 2004; Gabriel and Bowling 2004; George 2006; Holden and Hatcher 2006; Noll 2007; Von dem Knesebeck *et al.* 2005, 2007). Some studies have emphasised the impact of socio-cultural context (Diener *et al.* 2000; Fageström *et al.* 2007; Ferring 2004; Von dem Knesebeck *et al.* 2005; Noll 2007), but research combining gender and cross-national comparative perspectives remains rare (Inglehart 2002; Tesch-Römer, Motel-Klingebiel and Tomasik 2008).

***Living alone or in a couple: gender gaps in health, family and socio economic situations?***

Women living alone are almost everywhere *less* favoured than men in terms of health and socio economic situation (they have more often a low educational attainment and a low income). But women living alone are *more* favoured than men in terms of family relationships: if they have children they live more often within close range and more often have daily contact. They are also more likely to receive help from their children, friends or neighbours.

When men and women live together their living conditions are far more similar[2]. Compared to living alone, women in a couple have better economic living conditions and a better health[3] (this latter observation is also true for men, but to a lesser extent). People in a couple receive less help from outside, due to their better health and to the vital supporting role played by the spouse. As to men, living in a couple mainly improves their family situation (half of them have daily contact with an offspring).

Differences between countries are captured by the coefficient of variation (Table 1). By and large, heterogeneity is sharper on economic aspects for people living alone, and sharper on family aspects for couples. Among people living alone, barring a few exceptions, heterogeneity is less for women than for men, but it is almost similar for people in a couple.

On closer examination, we identify three groups of countries.

- German-speaking countries (Austrian and Germany). Older men and women are better off than in other countries on socio-economic conditions (education and income), but the gender gap against women is wider than anywhere else ;
- N & W Europe (France, Belgium, the Netherlands, Denmark, Sweden). Elderly people differ from the rest of Europe on one point : they are most socially oriented (more support and leisure among women) and least family oriented (fewer contacts with children, longer distance to them, less support received);
  - North (NL/SE/DK). Maximum inequality against men on both dimensions;
  - West (BE/FR). Similar to North, but less inequality against men. Men and women similar on socio-economic conditions;
- S Europe (Greece, Italy, Spain). Elderly people declare better health than elsewhere and they are more family centered. Greeks differ from Italians and Spaniards on two points:

[2] This can in part be explained by the fact that in SHARE one respondent provided information on income, children and help received for the entire household or couple.

[3] Selection/protection effect.

they get more family support and are more socially oriented. While women are usually considered as the pillars of family solidarity, there is no gender gap on this point.

**Table 1: Objective living conditions of older Europeans, by living arrangement and sex (%)**

| | Living alone | | | | | | Living in a couple | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Men | | | Women | | | Men | | | Women | | |
| Characteristics (%) | Mean (%) | SD | CV | Mean (%) | SD | CV | Mean (%) | SD | CV | Mean (%) | SD | CV |
| 70 years old and more | 61 | 7,12 | 0,12 | 73,6* | 4,9 | 0,07 | 50,8 | 6,7 | 0,13 | 45* | 4,7 | 0,1 |
| Never married | 25,8 | 8,2 | 0,32 | 12,2* | 4,0 | 0,32 | - | - | - | - | - | - |
| Divorced | 23,2 | 9,9 | 0,43 | 13,5* | 7,0 | 0,52 | - | - | - | - | - | - |
| Widowed | 51,0 | 5,7 | 0,11 | 74,3* | 5,9 | 0,08 | - | - | - | - | - | - |
| Limitations in daily activities | 17,2 | 9,0 | 0,52 | 22,35* | 7,5 | 0,34 | 14,0 | 3,8 | 0,27 | 13,4 | 4,6 | 0,34 |
| Receives help | 33,7 | 5,3 | 0,16 | 46,82* | 6,4 | 0,14 | 18,5 | 4,8 | 0,26 | 20,4* | 4,7 | 0,23 |
| Low income | 29,7 | 14,0 | 0,47 | 41,7* | 14,5 | 0,35 | 27,0 | 5,1 | 0,19 | 26,3 | 5,9 | 0,22 |
| Low education | 55,7 | 26,8 | 0,48 | 67,8* | 17,9 | 0,26 | 50,6 | 28,7 | 0,57 | 64,3* | 21,4 | 0,33 |
| House owner | 53,5 | 19,2 | 0,36 | 50,9 | 22,8 | 0,45 | 76,9 | 13,4 | 0,17 | 75,9 | 13,7 | 0,18 |
| Sufficient infrastructure | 72,6 | 8,5 | 0,12 | 70,9 | 5,1 | 0,07 | 71,8 | 7,1 | 0,10 | 71,1 | 6,9 | 0,10 |
| Not childless | 33,6 | 8,8 | 0,26 | 21,0* | 4,0 | 0,19 | 7,6 | 2,3 | 0,30 | 8,1 | 2,3 | 0,29 |
| Daily contact | 23,9 | 7,8 | 0,33 | 38,9* | 10,7 | 0,28 | 43,6 | 16,1 | 0,37 | 43,3 | 16,4 | 0,38 |
| Lives less than 1 km from child | 30,8 | 12,4 | 0,40 | 37,9* | 15,4 | 0,40 | 36,3 | 14,4 | 0,40 | 36,3 | 14,4 | 0,40 |
| Provides help | 24,9 | 10,6 | 0,42 | 20,9* | 7,5 | 0,36 | 28,6 | 11,5 | 0,40 | 26,8 | 8,5 | 0,32 |
| Leisure activities | 32,8 | 11,8 | 0,36 | 34,8 | 11,7 | 0,34 | 37,5 | 11,0 | 0,29 | 36,2 | 13,3 | 0,37 |

* Significance level for difference between men and women: p<0.01; SD=standard deviation; CV = coefficient of variation.

***At first sight, women look less satisfied with their life than men. Living in a couple increases life satisfaction***.

In the case of those living alone, 28% of women and 31% of men are very satisfied with life. For people living in a couple, the percentages are 39% and 42% respectively. The gender gap is small, but living in a couple has a substantial positive effect on well-being. The latter effect remains after control for income and health conditions (e.g. women with severe disabilities are 19% very satisfied with life when living alone, 28% in a couple; the percentages are 37 and 46 respectively with no disabilities), whatever the country, or nearly so.

Multivariate analysis tempers this first view: the gender gap in life satisfaction is not of the same kind depending on living arrangements.

***In couples, after control for all the objective determinants, women are less satisfied than men with their life. But the objective determinants are similar for both sexes.***

When a man and woman live together, they very largely share the same world and refined results resemble crude ones: women are less satisfied with their life than their male counterparts. Apart from the oft-reported fact that women genuinely experience greater malaise, they may also express negative feelings more easily than men. We may also have failed to take into account factors that contribute to their well-being more strongly than men's.

The determinants of life satisfaction are largely comparable for men and women: having no limitations in daily activities, having a high level of education and income and owning one's home have a positive effect, receiving help a negative effect (receiving outside help may give an image of lost independence, which is hard to accept for people in a couple since spouses generally manage to cope by helping each other). A few factors are significant only for one

sex: children for men[4] and infrastructure (shops and transport) and leisure activities for women. In these generations, the traditional division of labour more often leads to women managing daily life and therefore being more directly confronted with the quality of their immediate surroundings. Moreover, since fewer women than men have private means of transport, they are more dependent on a good infrastructure in their neighbourhood (Von dem Knesebeck *et al*. 2007). Lastly, the effect of leisure activities for women and of children for men should probably be seen as a desire to make up for lost time: women, who have been the pillars of family solidarity all along their lives, may turn to other centres of interest after retirement, while men make the opposite compensation.

By contrast with couples, ***men and women living alone are equally satisfied with their lives, all else being equal, but the factors of their well-being differ.***
The gender gap against women on health and socio-economic situation partly explains why they are less satisfied with life. More generally, all else being equal, the degree of life satisfaction is similar for men and women living alone[5]. In separate models for men and women, having no limitations in daily activities, a high level of education, engaging in leisure activities and being older are the only factors that increase life satisfaction for both sexes. This apparent effect of older age may conceal a cohort effect: older cohorts may differ from younger ones on their demands or expectations. The existence of a child impacts positively men's satisfaction, while home ownership (or income level) and quality of infrastructure do so for women.

Finally, ***the determinants of women's life satisfaction are similar, whether they live alone or in a couple: the economic aspects and local environment take first place.***
In couples, traditionally, women manage material aspects. For them, retirement and widowhood (or divorce) have little effect on long-standing family ties (Delbès and Gaymu 2003) but major financial consequences, since personal (independently-earned) pensions are lower for them than for men (Zick and Smith 1988). With advancing age, economic aspects may therefore acquire greater importance for their well-being. The impact of having nearby shops or transport on their life satisfaction also illustrates how important the practical aspects are to them.
The determinants of life satisfaction for men living alone differ from those for women and those for men living in a couple. Having children makes a strong contribution. If they are not (or are no longer) in a couple, older men venture into the family sphere, traditionally reserved for women. Their children become the most important source of well-being, second only to health. Since never having been married – which generally means having no children – also has a positive impact on men's life satisfaction, it may be that two male subpopulations coexist: those who are alone and independent, and those with family, each with different ideas of what defines quality of life.

***More generally, all else being equal, life satisfaction of older women is shaped much more by their socio-cultural context than is the case for their male counterparts***.
Whatever their living arrangement, there is a north-south gradient, often observed in the past (Delhey 2004; Fageström *et al.* 2007). Overall, people in northern Europe more often declare themselves satisfied with life than people in the south; the interpretation of this finding has been the subject of much research. For some, this contrast reflects a reality (Bolle and Kemp 2009), while others see it as a different interpretations of a subjective question, or differences

[4] Variable but of low significance.

[5] Only a slight gender gap has been identified in the model for the total European population living alone, which disappears after controlling for countries specificities.

in reporting style (Angelini 2009). From SHARE data, among older people living alone, the gradient is only clear for women. For men, only Danes and Dutch stand out with their stronger tendency to report that they are very satisfied with their lives. Less heterogeneity for men may be the result of the uniform male model of professional socialisation, in birth cohorts where female models – having a career and family life and position in society – differ markedly by country. In fact, women's sources of life satisfaction differ widely, from north to south. Other studies also have shown, for the population of older people as a whole, that subjective well-being factors are not the same throughout Europe (Fageström 2007; Von dem Knesebeck *et al.* 2005; Noll 2007).

For all the European countries included in this study, women living alone or in a couple were alike in only one aspect: good health is essential for life satisfaction. For women living in a couple in central and southern Europe, life satisfaction depends on material security (high income, owning one's home), but for those in northern countries, leisure and quality of immediate environment count most. Does this mean that in northern Europe the economic situation of older women in a couple differs little from the rest of population? Their male counterparts living alone are worse off; for them, unlike elsewhere in Europe, economic aspects contribute to subjective well-being. As well as to material independence, they are much attached to physical independence (health has much higher impact than in other regions) and the quality of the immediate environment (living in a small town or in the country, having sufficient local shops and transport). Daily contact with children has a negative impact on life satisfaction, which might be linked to the desire for independence from family. But this effect is only slightly significant.

In the centre of Europe, life satisfaction of women living alone is more influenced by their relationships with others (frequency of contact with children and leisure activities) and by their educational level. A distinguishing feature of women living in the south is that they are less satisfied with life when they have less than daily contact with their children. In southern countries, where multigenerational cohabitation is more frequent than elsewhere, only those women most independent financially, psychologically, etc. will choose to live alone. On one hand, women without children are not less satisfied with their lives than those who have daily contact with their offspring, probably because they have built a social network that is not centred on family. On the other hand, those who have children but are in less than daily contact with them are less satisfied with their lives. In these countries, where family ties are traditionally strong (Pitaud and Vercauteren 1995; Reher 1998), it is worth asking whether this reflects a feeling of discrepancy between the expectations forged by the value placed upon family and the reality of relationships that are less intense than the norm.

In brief, certain determinants of life satisfaction are common to all older people, while others are gender-specific or vary by region. The hierarchy of factors with the greatest influence on life satisfaction is not the same for men and women, or for all European countries.

***Certain subpopulations are at high risk of dissatisfaction with their live. They ought to be given special attention by public authorities.***

- People in poor health, an essential determinant of life satisfaction for both men and women in all countries, whether they live in a couple or alone.
- Childless men and women in the centre region, women in precarious financial situations in the north, and women with less frequent family contact in the south.
- Participation in leisure activities should be encouraged everywhere in Europe. It is nearly always positively correlated with life satisfaction, irrespective of gender.

- Pension reforms under way throughout Europe could have major consequences for the future well-being of those living in a couple[6], for whom material security is the primary factor.

To conclude, certain methodological limitations of the study must be mentioned. The small size of certain samples, particularly men living alone in south European countries, may be behind the non-significance of certain variables. Also, the data are cross sectional and our results cannot be transposed to other birth cohorts. Older men and women who will live alone in the future may have demands and priorities that differ from those of today. In this respect, SHARE follow-ups will certainly provide a wealth of information.

***Possible future trends***

In the future, the elderly population could benefit from an improvement in health due to structural changes (higher education, less hardness in professional activity) or behavioural changes (more prevention, better diet and hygiene). For men as well as women, good health is a major factor of subjective well being throughout Europe. But the future of gender gap in health is highly uncertain.

Clearer trends towards a reduction of gender gaps against women can be envisaged for mental health and life satisfaction. Depression is strongly associated with female widowhood and so is life dissatisfaction with living alone rather than in a couple. Female widowhood is to markedly regress in the future due to mortality decline and reduction of male over mortality. These trends will also impact institutionalisation, since widowhood explains a large part of higher prevalence of women in institutions compared to men.

Differences between elderly men and women in the determinants of life satisfaction, as well as differences among elderly women across European countries, turn around the family-economy duet. Material security plays a major role in subjective well being at older ages. We can imagine that male and female models will converge in the future, since elderly women will have been more active on the labour market and will consequently face widowhood less negatively. But uncertainty on future pensions remains a major question.

[6] whose numbers are expected to increase sharply in the future (Murphy, Felicie)

# DISSEMINATION

www.maggie-project.org


A website has been dedicated to Maggie since the initiation of the project. During the time of the project, it offered to the public a global presentation of Maggie objectives and a description of who does what in the consortium. Behind this façade, an intranet was available for exchanges among the consortium teams, with useful documents to be shared.

Since the end of the project, the whole site is opened to public. It includes:

1. A presentation of the initial objectives of Maggie, its key concepts and tools.
2. A list of participants in the different teams.
3. A macro-level European database, relevant to gender issues at older ages
4. A set of presentations by participants of their results, as they were debated during Maggie meetings.
5. The full set of scientific reports (deliverables) issued during the project (including the Publishable final activity report
6. A full list of publications issued during the project and since its end, with internet access to full text or abstract

## Maggie symposium in Marrakech (Morocco)

Monday 28 September 2009


The International Union for the Scientific Study of Population (IUSSP) promotes scientific studies of demography and population-related issues. Its main goal is to foster relations between persons engaged in the study of demography, and stimulate interest in demographic matters among governments, national and international organisations, scientific bodies and the general public.

At the invitation of the Moroccan Government, the XXVI IUSSP International Population Conference was held at the Palais des Congrès in Marrakech, Morocco. The Conference opened on Sunday, 27 September 2009, and concluded on Friday, 2 October 2009. It included 219 regular scientific sessions, 5 poster sessions, 3 training sessions, as well as 4 plenary sessions, 41 side meetings and 46 exhibitions. The Conference attracted more than 2000 participants.

Maggie organised a symposium during the conference, opened to all participants. It was chaired by Jacques Légaré (Université de Montréal). The programme was the following:

**Gender, family life and history and health at older ages**

*E. Grundy. S. Read, G. Ploubidis and C. Tomassini (Centre for Population Studies, London School of Hygiene & Tropical Medicine, London).*

Aspects of family life, including fertility history, are hypothesised to be very important for health and well-being in later life both because of associations between life course factors and health in later life and because children are an important source of practical and emotional support. However, there may be considerable differences by gender in the relative importance of these factors for health and quality of life at older ages. In this presentation we first present new findings on associations between parenting histories and health and quality of life at older ages using data from Britain and then explore similar differences in other European countries. The latter comparative approach builds on earlier methodological work on European differences in measurement and reporting of health.

**Gendered social integration in late life: Objective and subjective indicators**

*P. A. Dykstra and T. Fokkema (Netherlands Interdisciplinary Demographic Institute, LaHaye)*

A brief overview is given of gender differences in social integration in late life. Both objective indicators, such as intergenerational exchanges in families, and subjective indicators, such as loneliness, are considered. Findings reveal that gender differences are strongly linked to partner status. Men's social engagements are more strongly contingent on the exclusive bond with a partner than are women's. Data from as many European countries as possible are considered. We challenge the view that solidarity patterns are divided along the lines of an individualistic north and a familialistic south, and address variability in expressions of solidarity within and across countries.

**The Determinants of Home-Ownership among Older Europeans: an Insight into Gender Difference**

*M. L. Tanturri and D. Vignoli (Unitersity of Florence)*

Home ownership is particularly important for well-being in old age, as it provides a source of income (imputed rent), acts as an income buffer in case of need and can be transferred to descendants. This paper is aimed at studying the main determinants of home ownership among the older population in Europe *(Austria, Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Spain, and Sweden)* according to a gender and a comparative approach. Using a logistic multi-level regression model, we delineate the profile of owners, keeping into account a plurality of covariates related to personal background, familial characteristics, and the context. The probability of being home owner is markedly influenced by gender, but the effect disappears or even reverses once we consider the interaction with living arrangements. Married men are more likely to own their home, but men in different situations (cohabiting or living alone) are more disadvantaged than their female counterpart. The risk of being home owner is also markedly influenced by the context: the second level variability (at regional level) is significant and
represents a not negligible proportion of the total variability, prompting an in-depth analysis on contextual factors.

**Gender differences in institutional care at older ages in Finland and Belgium**

*EK Einiö, P Martikainen (University of Helsinki), C Guilbault, M Poulain (Université Catholique de Louvain, Belgique)*

Due to ageing populations, studying determinants of institutional care are of particular interest. Despite differences in the provision of institutional care across countries, the gender gap in using institutional care was partly similar in Finland and Belgium. Being female was associated with a higher probability of residing and entering institutional care at older ages in both countries. These gender differences were, however, largely related to women being older and less often married than men. The relative gender difference in entering institutional care was higher in Belgium and it remained significant after socio-demographic confounders and health characteristics were controlled, while for Finland, the female excess disappeared in multivariate models. However, the results for Finland showed that a recent death of a spouse was strongly associated with entering institutional care in both genders. Overall, these results imply that the gender differences in institutional care are largely related to the age and marital status distribution, as the married are more likely to get informal care from a spouse that reduces their need for institutional care at older ages.

**Gender differences in the determinants of life satisfaction for older persons in Europe**

*S. Springer (FNG/INED, Paris), J. Gaymu (INED, Paris), K. Kovács (Demographic Research Institute, Budapest)*

The influence of objective living conditions (in terms of health, family, income and socio-demographic characteristics) on the life satisfaction of European people aged 60 years and more has rarely been studied from a gender and cross-national comparative perspective. Once controlled for differences in living conditions, being a woman is rather strongly associated with lower life satisfaction when living in a couple, while there are only slight differences when living alone. In function of the living arrangements, different models of life satisfaction for men and for women and across countries have been identified. While good health is always the most important determinant for high life satisfaction, income and contacts with children are the main factors distinguishing the male and female models, especially for those living alone.

**Ageing and gender: contextual factors at European level to support policies**

*A. Fernandes, I. Gomes (University of Lisboa), C. Delbès (FNG, Paris)*

Gender differentials in quality of life at older ages are decisively influenced by the societal and the political context. The main objective of this research is to develop a national-level

contextual database (including in particular an analysis of gender-oriented policy measures and unravelling the linkages between welfare regimes, labour markets, changes in the economy and changes in cultural systems) likely to explain cross-country diversity in individual behaviours and situations and, in particular, to measure the role of public policies in combating or not gender inequities in quality of life at older ages. An analysis is conducted on the capacity that the actual international databases have to inform the ageing process from a gender perspective. Missing areas of information and other relevant methodological issues are discussed

## A special issue of *Population*
## Vieillesses masculine et féminine en Europe

Results from Maggie are submitted to Population for publication in a special issue devoted to ageing and gender issues in Europe. The 11 papers will be peer reviewed before acceptance. Part of the papers will reproduce results presented I at the Maggie symposium in Marrakech.

Population is a peer-reviewed quarterly scientific journal published in English and in French. It presents original studies in the fields of demography and related disciplines.

**Gender, family life and history and health at older ages**
*E. Grundy. S. Read, G. Ploubidis and C. Tomassini (Centre for Population Studies, London School of Hygiene & Tropical Medicine, London).*

See Maggie symposium

**Personal support norms: being prepared to give and receive**
*P. A. Dykstra and T. Fokkema (Netherlands Interdisciplinary Demographic Institute, LaHaye)*

In this paper we first look at developments in personal support norms – preferences regarding the division of care between informal and formal sources of help as well as feelings of family obligations – in the Netherlands over the last two decades. Next, we examine the relationship between a sense of obligation towards parents and someone's socio-structural and cultural circumstances, using the first wave of the combined main and migrant sample of the Netherlands Kinship Panel Study. Special attention is given to age and gender differences. Our findings show that, despite the generous State provision of services in the Netherlands, the willingness among the Dutch population to support their families is considerable. Contrary to expectations, however, women are found to have a weaker sense of duty towards their parents than men. Moreover, older age groups are less willing to *receive* informal care than the younger age groups are to *give* care. Consequently, future elderly care may depend more strongly on the support preferences of those who need care than the willingness of family members to provide care

**Determinants of the onset of cardiovascular diseases among women and men: analysis of a follow-up study in eastern and western Germany**
*By Christian Wegner and Marc Luy, Vienna Institute of Demography*

Cardiovascular diseases are the leading causes of death for both sexes in all European countries. The aim of our study is to find the main determinants of long-term changes in the prevalence of cardiovascular diseases among the elderly populations of eastern and western Germany. Therefore, we use the two-wave panel of the German Life Expectancy Survey and analyse the impact of specific life conditions at baseline on changes in the self-reported prevalence of cardiovascular diseases among 3,944 individuals from western and 805 individuals from eastern Germany aged 60+ at the beginning of the study. The follow-up period covers 13 years for the western and 7 years for the eastern German sample. The western German sample additionally allows to control for life

course experiences including unemployment, smoking behaviour and reproduction history. By applying multinomial logistic regression modelling separated for women and men we analyse mortality and attrition as competing outcome risks at follow-up in order to control for possible selection effects. The results confirm the expected strong impact of socioeconomic status and provide insights into the significant influence of specific health lifestyles, in particular sportive activity and smoking history. Further predictors of the onset of cardiovascular diseases are the earlier presence of hypertension and diseases of digestive. Differences between women and men in the onset of cardiovascular diseases are partly explained by the higher mortality of males and the higher number of non-respondents among females causing selection effects among the respondents of the follow-up survey. Nevertheless, the study extends the knowledge about risk factors for cardiovascular diseases among women and men with eastern and western European socialization and points to the relevance of earlier life stage intervention

**Cohort Effects of Smoking, Obesity and Sickness in East and West Germany: How are they modulated by education?**

*By Christina Westphal, Gabriele Doblhammer*

Germany, a country characterized by the "natural experiment" of the reunification is predestined to explore the long-term effects of different socioeconomic and political environments on the health of the elderly. Therefore, this paper examines differences in the risk factors 'smoking' and 'obesity' and the health variable 'accident or sickness within the last four weeks' between East and West Germany and analyzes differences in risks by birth cohorts. The focus is on cohorts born before and after World War II. These cohorts have not only experienced the division of the country after the Second World War, but also its reunification. Thus, for these cohorts we can observe how different social and political environments shaped their lifestyles and health behaviours. Further it is investigated how these differences are modulated by educational status. The analysis is based on the German Microcensus for the years 1995, 1999, 2003 and 2005 and we distinguish between cohort and age effects. This is possible due to the large number of observations and the study design of repeated cross-sections (about 220.000 per wave, age group 10+).

Results show strong cohort effects and large differences between similar cohorts in East and West Germany especially for smoking and obesity. Concerning smoking, most improvements result from a continuous decrease of prevalences from the 1915 birth cohorts to the 1946-55 birth cohort. There is little change among the cohorts born after 1955 except for East German females in the low educational group, who show increasing prevalences over the succeeding birth cohorts. For obesity, reductions are highest in East Germany for cohorts born after WWII. For both risk factors, the downward trend is particularly strong in the highest educational group. For the health variable accident or sickness there is a strong decrease in prevalences for the cohorts born before 1915 up to the post WWII cohort (1946-55), particularly in the highest educational group in East Germany. There is no particular cohort pattern up to the reunification cohort (1981-1985). From these cohorts onwards, a strong increase of prevalences can be observed for all educational groups in both parts of Germany, i.e. younger cohorts show an increase in poor health.

If trends continue, we can expect that future older generations will in general be healthier than the elderly today, since their risk factor profile has improved. However, East - West differences might persist, especially for smoking. This holds especially true for East German females in the low educational group. For obesity we can observe a convergence of trends up to the reunification cohort. For the health variable, no differences in trends between the two parts of the country are expected.

**Gender differences in living conditions and physical and psychological well-being of younger elderly: a six country comparison**

by Katalin Kovacs (Demographic Research Institute, Budapest)

This study aims to examine connections between living conditions a term used in a broad sense and several indicators of physical and psychological well-being among younger old people in six European countries. The countries considered here represent a broad range of European contexts regarding living conditions as well as physical and psychological well-being. The major aim of the investigation is to explore the importance of the living conditions regarding their role in well-being of the younger elderly. To do so, living conditions of elderly in industrialized but not necessarily

wealthy countries would be connected to the health related dimensions of well-being, to see if the connections are the same of nature across countries and cultures In this study we would be able to compare well-being of men and women in countries with more and less traditional family roles, with high and low income, and with high and low middle aged-male mortality. The aim of the exercise is to reveal, which factors are more important considering well-being of men, and which are more important for women, and if this factors have the same importance at least in the contexts of European societies. We also consider gender differences in well-being, and factors, which might explain these differences, but in this respect we concentrate on those areas in which women are in a clearly disadvantages situation compared to men.

**How should pension systems adapt for changes in family patterns? A comparison of five European countries** *by Carole Bonnet (INED)*

It has always been more difficult for women than men to accrue individual pension rights. Women's lower rate of participation in the workforce, linked partly to their still dominant role in domestic tasks and child-rearing, means they accrue lower pension entitlements than men. However, until recently, because wives shared resources with their husbands during marriage and received a survivor's pension if they were widowed, women's average standard of living was quite close to that of men, although they were at greater risk of poverty. The effectiveness of this system is being challenged by increasing trends in divorce and non-marital unions marriage. A growing number of women (separated, divorced or never married) will live alone after retirement and their incomes will depend more closely on their own earned pension entitlements, in a context where the increasing participation of women in the labor force would not be sufficient to guarantee them equal pensions to men. We compare the avenues explored by five European countries – Germany, Italy, the UK, Sweden and France – to insure adequate pension rights for women in the future by developing new tools or adapting the existing ones.

**Gender differences in institutional care at older ages in Finland and Belgium**
*EK Einiö, P Martikainen (University of Helsinki), C Guilbault, M Poulain (Université Catholique de Louvain, Belgique)*

See Maggie symposium

**The role of the demographic variables in the rise of income inequality in Italy (1980-2008)** *by Giambattista Salinari & Gustavo De Santis (Dept. of Statistics - Firenze)*

**The Determinants of Home-Ownership among Older Europeans: an Insight into Gender Difference**
*M. L. Tanturri and D. Vignoli (Unitersity of Florence)*

See Maggie symposium

**Gender differences in the determinants of life satisfaction for older persons in Europe**
*S. Springer (FNG/INED, Paris), J. Gaymu (INED, Paris)*

See Maggie symposium

**Ageing and gender: contextual factors at European level to support policies**
*A. Fernandes, I. Gomes (University of Lisboa), C. Delbès (FNG, Paris)*

See Maggie symposium

## To wider audiences

VII European Congress
HEALTHY AND ACTIVE AGEING FOR ALL EUROPEANS - II
Bologna (Italy) April 14-17, 2011

Maggie will organise a symposium on

**Gender gaps in quality of life at older ages**

at the VII European International Congress of the International Association of Gerontology and Geriatrics, European Region: Healthy and Active Ageing for all Europeans "II", Bologna, April 14-17, 2011

This Congress will provide a good opportunity for scientific interdisciplinary dialogue among researchers, practitioners and professionals working with older persons in a vast array of sciences: biological, biomedical, chemical, clinical, engineering, nursing, psychology, social sciences, public health and policy.

The mission of the International Association of Gerontology and Geriatrics is to promote a high level of achievement in gerontological research and training worldwide, and to interact with other international, inter-governmental and non-governmental organizations in the promotion of gerontological interests globally and on behalf of its member associations. The Association pursues these activities with a view of enhancing quality of life and well being of all people as they experience ageing at individual and societal levels.

POPULATION & SOCIETIES

An issue of Population et Sociétés (Population and Societies) will be devoted to Maggie results in the second half of 2010, under the title:

**La satisfaction de la vie des hommes et des femmes âgées. Quelles disparités en Europe?**

Population and Societies is four-page popular science journal published in French and English. Every month it covers a different population question relating to France or other parts of the world. Its articles are written in clear and simple language intended for a wide audience. The French version is available in both printed and electronic formats, and the English version is available online.