Caring and Working Life Expectancy at 50: A Comparative Analysis of Gender Differences in Europe

PAA 2019 Extended Abstract

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Background

One major concern around population aging is the sustainability of social security systems; fewer people are available to provide financial resources and informal care, but more people depend on these resources (Bongaarts 2004). Consequently, demographers have been conceptualizing paid work as a life expectancy measure to estimate the average number of years people are expected to be economically active (Dudel and Myrskylä 2017; Loichinger and Weber 2016). This measure is valuable for planning and anticipating future economic needs and resources at the national level. However, demographers have overlooked unpaid care work even though informal caregiving is significant for understanding the economic and social implications of population aging. Moreover, this oversight underestimates economic and non-economic contributions made by women that are crucial for women's old-age benefits and policy planning in aging societies. Care Life Expectancy (CareLE) is a recent development[1] which estimates the average number of years women and men are expected to be in a caregiving role for family members. However, it has yet been systematically compared with Working Life Expectancy (WLE). In this paper, I simultaneously and jointly compare working and care life expectancy to understand the overlap and trade-off between paid and unpaid work over women's and men's life course. Incorporating both types of work to estimate older individuals' life expectancies in both domains will enhance our understanding of the gendered implications of population aging for older individuals, enrich our conceptualization of work over the life course, and inform our discussion of dependency in increasingly aging societies.

Working Life Expectancy (WLE) is an essential demographic measure for understanding people's paid work life duration in a given time and place. By estimating the average number of years that older individuals are expected to be economically active, governments can plan for future changes in contributions to and needs from existing social security systems. WLE is particularly vital in countries where old-age entitlements are based on individuals' contributions over the life course. Hence, recent studies have focused on trends over time in WLE at age 50 in Europe, and the U.S. Loichinger and Weber (2016) find that WLE at age 50 has increased since the mid-1980s in most European countries with a substantial increase for women. However, despite the large increases in women's labor force participation and increasing life expectancy, at age 50, women are expected to spend fewer years in paid work than men. In 2009, European men were expected to have between 7 and 17 more years of economic activity, which represent about a third of their remaining life, while European women were expected to have between 6 and 14

[1] Ophir, A., and Polos, J. (2018). "Lifelong Caring: Care-giving Across the Life Course in the Context of Population Aging." Presented at the Annual Meetings of the Population Association of America, Denver, CO.

years of paid work, which represents less than a third of their remaining life. These gender differences vary by education level (in Europe and the US) and by race and ethnicity (in the US) (Dudel and Myrskylä 2017; Loichinger and Weber 2016). One potential debate that the gender gap in WLE raises is whether older women should be encouraged to stay in paid work several more years, especially since they live longer than men (Glaser et al. 2013). However, this debate ignores the unpaid work that women provide for their families.

Informal care work is another form of work that is a critical resource amid population aging. In addition to the economic strain posed by population aging, there is a concern about the added burden of care work that will be carried by family members, mainly women. Recently, Ophir and Polos (2018) have conceptualized unpaid care work as a life expectancy measure to demonstrate the significant amount of unpaid care work women provide over the life course. They show that at age 18, women are expected to spend between 22 and 30 years in a caregiving role; over half of these years are spent in intense daily caregiving. Their findings show that many of the unpaid years occur during years of active paid work, i.e., some years of CareLE overlap with WLE.

However, there is also a trade-off between paid and unpaid work particularly among women who are close to retirement age. Research shows that women are more likely to retire earlier as they take on care responsibilities for family members and that the timing of retirement varies by country and circumstances (Crespo and Mira 2010; Dentinger and Clarkberg 2002; Lumsdaine and Vermeer 2015). WLE does not capture this trade-off, nor does CareLE, when measured separately. This oversight underestimates the non-economic contributions made by women which and has implications for women's old-age entitlements but also carries significant implications for our understanding of the full span of resources and needs in aging societies.

Thus, in this paper, I simultaneously and jointly compare working and care life expectancy to understand the overlap and trade-off between paid and unpaid work over women's and men's life course. I will draw on the Survey of Health and Retirement in Europe (SHARE) data and use the Sullivan method to estimate the number of years that European women and men at age 50 are expected to spend in employment and/or caregiving to family members.

Data and measures

The Survey of Health, Ageing and Retirement in Europe (SHARE) is a cross-national longitudinal panel survey that collects information on family and social networks, socioeconomic status, and health among individuals age 50 and older. I will use recent data from wave six which was collected in 2015, spans 18 countries[2], and includes over 68,000 individuals.

SHARE data has several advantages. First, using SHARE allows me to focus on the stage in the life course when people make retirement decisions and when caregiving responsibilities are expecting to peak again. Second, the SHARE survey offers the most recent data on a large number of countries for comparative analysis. This will update previous work in Europe that presented estimates before the Great Recession and for a limited number of countries. Third, SHARE includes measures of Instrumental activities of daily living (IADLs) which is practical help such as preparing meals and helping with household chores that are often provided to

[2] Austria, Germany, Sweden, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium, Israel, Czech Republic, Poland, Luxemburg, Portugal, Slovenia, Estonia, and Croatia.

elderly parents and partners. Including IADL will help me measure caregiving to family members more holistically. Moreover, the frequency of care behaviors is harmonized across types of care which will enable me to differentiate among various levels of intensities.

Care measures. Respondents are asked whether and how frequently they provide personal care or practical household help to non-resident family members and whether they provide personal care to resident family members. Also, respondents who have grandchildren are asked whether and how frequently they look after their grandchildren. As a first step, I use a liberal definition of care and classify respondents as caregivers if they provide *any* type of care at *any* intensity level. This will allow a broad definition of caregiving and a maximal estimation of CareLE at 50. As a second step, I will create a scale to distinguish among low-, med-, and high-intensity caregiving across the full sample using the frequency question in the survey. It is also important to note that respondents are asked to whom they provided care, which allows me to restrict care to family members and exclude non-family members such as friends, neighbors, and "others."

Employment measures. The SHARE survey collects detailed information about respondents' labor force activity status, e.g., employed, unemployed, and retired. Respondents who are employed are asked how many hours they work per week. As a first step, I use a liberal definition of employment and classify respondents who work for any amount of hours per week for pay as employed. As a second step, I will distinguish between full-time and part-time employment.

Analytical strategy

I will use the Sullivan method to estimate WLE and CareLE for each available year. First, I will estimate the sex- age- and country-specific probabilities of employment and caregiving from the cross-sectional survey and use these probabilities jointly with formal life tables that are available through the Eurostat website to calculate the person-years lived in each state at every age. For example, CareLE is estimated as follows:

$$e^{care} = \frac{T^{care}}{l_x} = \frac{\sum_{a=x}^{\infty} L_a^{care}}{l_x}$$

Similarly, I will estimate WLE and a joint LE of care and work. I will then use this formula to generate LE measures by level of intensity of employment and care.

Preliminary Results

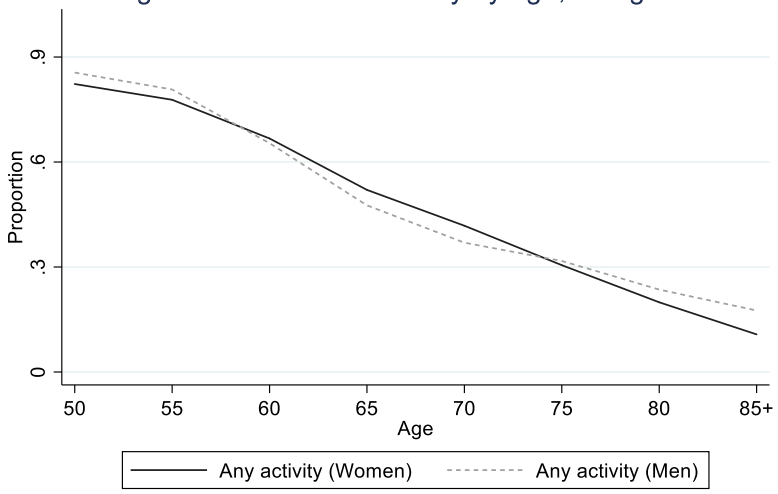
Figure 1 shows the proportion of women and men who are either employed or providing care at any capacity by age, pooling together all 18 countries. The figure suggests there are no significant differences in the age-specific proportions of women and men who are active in paid or unpaid work. Men seem to be slightly more involved than women in any activity in the early 50s, because women tend to retire earlier, and then again after age 75. This reversal during the elderly years is probably due to mortality selection. Women are more involved in any type of work between age 55 and 75, which represent the "sandwich generation" period that is characterized by providing care to elderly parents and grandchildren.

Figure 2 shows the age-specific proportions of women and men who provide any care and the age-specific proportions of women and men who are employed in any capacity. Figure 2

demonstrates the gendered life trajectory of paid and unpaid work in older years. The pattern of care later in the life course shows that women and men provide care to family members well into their elderly years. However, women's involvement in care is higher than men's and stable until age 70 at about 50% followed by a decrease. Men are less involved in care work and show a similar pattern of decline, but at age 75 there is a gender cross-over and men are slightly more likely to be involved in care. As for employment, men are more likely to be employed until age 70 when both women and men are already retired. A massive decrease in employment takes place between age 55 and 65 as people retire.

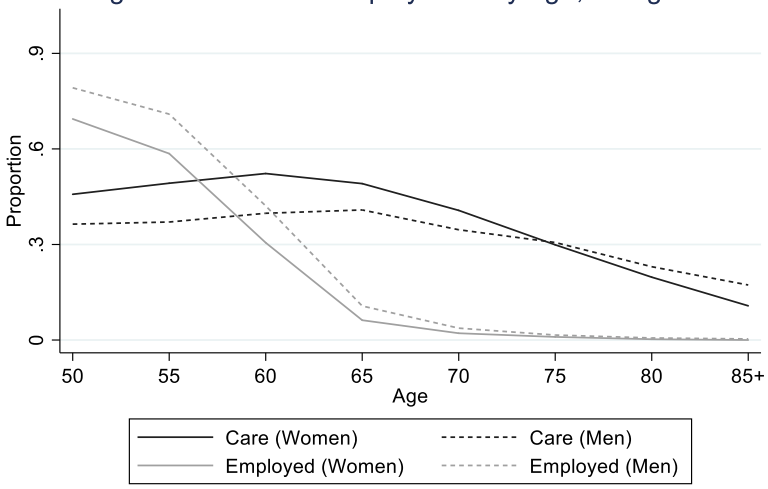
Care and employment are not mutually exclusive categories in Figure 2. The next step will be to create mutually exclusive categories, e.g., "only employed," "employed and caretaker," and to distinguish between different levels of care intensities. These proportions will then be used to estimate WLE and CareLE for women and men across countries.

Figure 1: Care/Work activity by age, and gender



Source: SHARE W6(2015) R6.1.1; authors' calculations; unweighted

Figure 2: Care and employment by age, and gender



Source: SHARE W6(2015) R6.1.1; authors' calculations; unweighted

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