Alma Mater Studiorum – Università di Bologna

DOTTORATO DI RICERCA IN

SCIENZE POLITICHE E SOCIALI

Ciclo 33

Settore Concorsuale: 14/D1 - SOCIOLOGIA DEI PROCESSI ECONOMICI, DEL LAVORO, DELL'AMBIENTE E DEL TERRITORIO

Settore Scientifico Disciplinare: SPS/09 - SOCIOLOGIA DEI PROCESSI ECONOMICI E DEL LAVORO

Gender, work, and retirement: the impact of working and family trajectories on women's later life outcomes

Presentata da: Elisa Tambellini

Coordinatore Dottorato

Daniela Giannetti

Supervisore

Marco Albertini

Co-supervisore

Daniela Giannetti

Esame finale anno 2021

ABSTARCT

Retirement could be considered a process rather than an event or a state that a person experiences at a given point in time. Previous retirement research has mainly focused on the male's experience, looking at a continuous performance of paid work and a linear working path. This definition of retirement has excluded from the analysis many women who have worked intermittently, who have spent time for care responsibilities or who have worked part-time. A broader study on the topic is needed, investigating how the multiple roles that women occupy interact and affect retirement.

The aim of this thesis is to explore different aspects of the female retirement process. Adopting a life-course perspective, this study investigates the development of women's life course to understand the influence of previous life experience on different dimensions of the retirement process itself. More specifically, the thesis consists of three contributions; the first one aims to analyse the influence that the career trajectories have on female retirement timing, in three different European countries (Italy, Germany and Denmark); the second contribution aims to understand the effects of the retirement transition on female life satisfaction, depending on the working pathways. Finally, the third contribution focuses on the influence of work-family life trajectories on life satisfaction in retirement.

Empirically, I analyse longitudinal data from the Survey of Health, Ageing and Retirement in Europe (SHARE). In the first contribution, I observed a negative and significant probability of retirement for the discontinuous and part-time working trajectories compared to the full-time one, in Italy. In Germany and particularly in Denmark, no substantial differences were found between the working pathways in terms of retirement timing. In the second contribution, I found that some of the working trajectories constituted by discontinuity or part-time periods, showed a continuous increase in life satisfaction, passing from employment (or unemployment) to retirement. For other working trajectories, such as the full-time one, retirement seems to not have implications for subjective wellbeing. In the third contribution, the results

show that all the life course trajectories characterized by part-time work show a higher general level of life satisfaction compared to the other pathways (discontinuous or full-time ones). Moreover, a part-time trajectory was associated with higher life satisfaction in retirement when combined with a stable marriage and two children, than when it was coupled with one child or three or more children.

Keywords: women; retirement timing; life-course perspective; work-family trajectories, subjective wellbeing.

TABLE OF CONTENTS

INTRODUCTION

The transition to retirement is often considered one of the most significant steps in people's life course. Nevertheless, the concept of retirement refers to several phenomena. According to Szinovacz (2003), it can be seen as an institution, a process and an experience. As an institution, it concerns social structures that regulate the withdrawal of older people from the labour market and provide them with an insurance; as a process, retirement concerns decisions and patterns of exit from the workforce; and as experience, retirement refers to the multitude of life changes caused by that withdrawal (Szinovacz 2003, 6). Clearly these three aspects of retirement are interlinked and closely tied to other social structures and aspects of individuals' lives (Duberley, Carmichael, Szmigin 2014). Retirement research has just begun to resolve these complex ties. For example, literature has mainly focused, at the macro level, on the economic consequences of early retirement trends and the ageing of the baby boom generation, while information on the implications for families or other institutions in society remain insufficient (Adams, Beehr 2003). Likewise, at the micro level, we have information about the influence of finances, health and marital employment on retirement decisions, but relatively little is known about the impact of career and family trajectories on retirement processes (Adams, Beehr 2003).

I. Research topic

Retirement is a process rather than an event or a state that a person experiences at a given point in time. Just like the ageing process itself, it can change over time and even after the start of its experience (Adams, Beehr 2003).

Previous studies are mainly based on male's experience of retirement, and the classic definitions of withdrawal from the labour market, linked to the continuous performance of paid work and the perception of an insurance, have often not been adequate for the understanding of women's retirement. Indeed, retirement has traditionally been defined economically, and has been identified

with the moment when a person stops working and starts receiving old-age benefits. Research has often failed to consider the multidimensional nature of retirement. In fact, a linear working path is often assumed, and no other roles are considered. The traditional definition of retirement has not taken into account unpaid work, excluding from the analysis many women who have worked intermittently, who have spent time for care responsibilities or who have worked part-time. Perhaps, a broader study on the topic is needed to recognize the multiple roles that women occupy and to consider how these roles interact and affect retirement consequences (Richardson 1999).

Women's labour force participation is shaped by many factors such as motherhood, care responsibilities, the sexual division of labour, and welfare-related factors, such as, the availability of service, etc. These factors have ensured that women and men experience both paid and unpaid work in quantitatively and qualitatively different ways (Weatherill 1994). While the construction of retirement has been centred around the male experience of full-time, continuous, paid work, women's experiences of work have been excluded in most of the retirement studies (Weatherill 1994; Erdner, Guy 1990; McPherson 1990). For this reason, it’s worth analysing the female retirement experience, recognizing the exchanges between family and work roles, between the public and private sphere. Therefore, scholars such as Price (2000) argue that rather than viewing retirement as an event, it could be seen as one of the many discontinuities women face in their lives and that it should be considered as a transition that takes place “in the context of multiple family responsibilities and past professional changes” (Price 2000, 96).

The existing studies on the topic have shown that women consider their family situations more often than men when they have to make decisions about retirement (e.g., Szinovacz, Ekerdt 1995; Weaver 1994), and that, despite trends towards mutual decision-making, married men more frequently than married women push their spouses to retire according to their wishes (Arber, Ginn 1995). Richardson (1999) lists several other factors that influence female retirement: generally, women’s jobs pay less than men’s job, women have lower earnings throughout their lives and lower retirement benefits; women

tend to work at jobs with poor pension coverage, and often retirement policies exacerbate these gender inequities through systematic biases.

The aim of this thesis is to investigate different aspects of the female retirement process, accounting for the importance of life-course trajectories in shaping it. Adopting a life-course perspective led me to using longitudinal data to highlight the variation and similarities in women's experience of work and family trajectories and the impact they have in later life. In support of this point, this study aims to investigate the development of women's life course to use this experience as a factor through which to view the retirement process. In particular, I will try to investigate the importance of career and family trajectories in influencing retirement decisions and adaptation.

The thesis consists of three contributions; the first one aims to analyse the influece that the career's trajectories have on female retirement timing, in three different European countries (Italy, Germany and Denmark); the second one aims to understand the effects of the retirement transition on female life satisfaction, depending on the working pathways. Finally, the third part focuses on the influence of work-family life trajectories on life satisfaction in retirement. Further on, the content of the papers will be explained in more detail.

Empirically, longitudinal data will be used. I perform longitudinal analyses using a representative sample of European women from the Survey of Health, Ageing and Retirement in Europe (SHARE), from 2004 to 2017. This kind of data is particularly useful when looking at changes in development over time because it takes place over years. Hence, the three contribution are divided into two parts: a descriptive one and a part of multivariate analysis. For the descriptive part, I apply Sequence Analysis (paper I and II) and Multichannel Sequence analysis (paper III). For the multivariate analysis, I use event history analysis technique, fixed effect regression model and linear regression model (respectively paper I, II and III).

II. Relevance of the study

In the last decades, western societies have been affected by the question of the increase and permanence of women in the paid labour market[1] that, combined with the phenomenon of ageing population, is challenging the welfare system of many of the Western countries. Moreover, demographers and sociologists highlight how the problem of the increase of the retired population brings new challenges also on an individual level. This dynamic is particularly true for women, for whom retirement has become a mass phenomenon for a few decades. How do women face retirement decisions? How are their choices influences by the welfare system? How are they affected by the transition towards retirement? And how do they perceive life in retirement? Traditionally, economic and sociological theories have focused on "typical" aspects that guided and characterized male retirement process.

Nevertheless, to the best of my knowledge there are few studies which take into consideration the impact of the work and family trajectories on women's retirement process. Combining a life course approach with other sociological theories about outcomes in later-life, the aim is to improve the understanding of the effect of working, family pathways and their intersection, on the retirement transition, in terms of timing and impact on women's subjective wellbeing. This perspective might contribute to the sociological research about female labour market and pension studies.

In sum, the objective of this thesis is twofold. First, it aims to achieve a better understanding of female retirement as a transition process that is the result of previous life experience, events and trajectories. Second, it examines how this process is shaped by life-course biographies, focusing on two aspects of the life course that are important for retirement: working and family trajectories. Why do these topics deserve attention? First, the analysis of retirement as a process over time can improve our comprehension of the link between the life-course and retirement transition processes. Second, it allows for an understanding of how family and working biographies influence

[1] In the present thesis, labour market will be often used to mean paid labour market, and work to mean paid work.

retirement processes, in particular for women who have more unstable and intermittent life-courses compared to men. In sum, this study aims to contribute to the literature about female later-life outcomes, trying to shed light on different aspects of the retirement process.

III. Thesis organization

The thesis is organized as it follows: Chapter 1 has been dedicated to an introduction about the characteristics of the female labour market participation in the last decades and on female retirement process in general. The other chapters answer three research questions:

1. How is female retirement timing influenced by the structure of the working careers in three different institutional contexts?

2. How does the retirement transition affect women's life satisfaction according to different working careers?

3. How does the interplay of work and family trajectories affect the level of life satisfaction in retirement?

The **first** contribution (chapter 2) is aimed at understanding the timing of exit from the labour market, according to different working trajectories. Participation in the workforce in old age is shaped and determined by the way in which the career has developed and is intertwined with family responsibilities. All the elements, belonging to the life trajectory of individuals, "accumulate" in later-life, when individuals ultimately face the transition to retirement. Previous studies have linked women's working career and reproductive history with retirement timing and two main perspectives emerge: the so-called "attachment hypothesis" and the opportunity costs theory. The first theory explains that decisions made at the beginning of life (for example, the decision to be full-time carers around motherhood) are reproduced later in life, due to the stability of preferences and behavior patterns during adult life (e.g., Finch 2014; Hank 2004; Hank, Korbmacher 2013; Pienta 1999; Svensson et al. 2015). The second perspective foresees that the intertwining of paid and unpaid work throughout life poses cumulative advantages and disadvantages in terms of eligibility criteria for pension in later-life (Finch 2014). These

perspectives have been used in the study of the female transition to retirement, but to date research misses an understanding of how the differences in women's retirement timing are connected to the characteristics of the whole working trajectory, in a comparative perspective. The paper deals with the understanding of how the female retirement timing is influenced by the structure of working trajectories (from 20 to 50 years of age). Since the structure of careers and the final exit from the labour market are strictly related to the mechanism promoted by the welfare and pension system, the analysis will be performed in three different countries, characterized by three different institutional contexts: Italy, Germany and Denmark. The results show a negative and significant probability of retirement for the discontinuous and part-time trajectories compared to the full-time one, in Italy. In Germany and particularly in Denmark, no substantial differences were found between the pathways in terms of retirement timing.

The **second** contribution (chapter 3) explores the relationship between retirement adaptation and working trajectories of women. The idea is that the transition to retirement might impact on women's subjective wellbeing differently depending on the working pathways they had. The most relevant theoretical frameworks that have been applied to study this heterogeneity in retirement adjustment include role theory and continuity theory (Wang et al. 2011). Both theories reflect upon the function that social roles play in defining the identity of the individual and address the kind of consequences related to losing a role for a person's adaptation and well-being. These theories have often been integrated with a life-course approach, which allows us to study retirement as a transition placed inside a lifelong process and not as a result of an isolated time-point. In this study, all these perspectives are seen as complementary rather than contradictory because they focus on different aspects of the retirement adaptation process (Van Solinge 2015). Hence, in the paper, I analyze the change in life satisfaction some years before and after the retirement transition, using longitudinal data and drawing the analysis on different sub-samples which represent different clusters of women with different career trajectories. Again, I reconstruct the working pathways from 20

to 50 years of age looking at full-time, part-time and inactivity periods. I found that some of the trajectories constituted by discontinuity or part-time periods, showed a continuous increase in life satisfaction, passing from employment (or unemployment) to retirement. For other trajectories, such as the full-time one, retirement seems to not have implications for subjective wellbeing.

The **third** paper (chapter 4) examines the subjective wellbeing of retired women, looking at the level of self-reported life satisfaction. In this case, the attention is focused on the effect that the interplay of family and working life-courses have on wellbeing in later-life. The life-course perspective studies individuals' biographies over a long period of time, such as decades. Two of the fundamental principles of this theory concern the concepts of linked lives and interdependence of life spheres (Elder et al. 1996). The first principle refers to the close relationship between individuals in various networks, such as family and work. The second principle refers to the mutual influence that a domain of life (e.g,. family) can have on the choices made in another domain (e.g., work), and how these spheres, in turn, can affect other life aspects (e.g., health). I perform an analysis based on trajectories in various life spheres, to contribute to a better understanding of the relationship between work, family and subjective well-being (Johansson, Huang, Lindfors 2007). Indeed, women with different work-family trajectories could perceive their life satisfaction differently. In order to interweave the pathways in two different life domains, Multichannel Sequence analysis, constructing family and working trajectories from the age of 20 to the age of 50 have been used. Once found the work-family clusters, they have been related to the level of life satisfaction in retirement. The results show that all the life course trajectories characterized by part-time work show a higher general level of life satisfaction compared to the other pathways (the discontinuous or full-time ones). Moreover, a part-time trajectory was associated with higher life satisfaction in retirement when combined with a stable marriage and two children, than when it was coupled with one child or three or more children.

CHAPTER 1

1. WOMEN' S LABOUR MARKET PARTICIPATION, RETIREMENT, AND THE LIFE-COURSE

The paid and unpaid work of women in Europe has changed over the course of history and between countries: they have worked in schools, offices, factories, home service, hospitals etc. Work patterns have changed in relation to cultural, demographic, economic and family changes. In the next section, I will firstly summarize the development of the female labour market participation in Western countries, focusing particularly on the last decades of the twentieth century. Secondly, I will make a brief excursus on previous research on female retirement, and finally, I will discuss the most recent development on female retirement studies from a life course perspective.

1.1. Women's labour market participation

The twentieth century has been marked by important changes in many social areas including politics, economy, but also family and work. A plurality of approaches characterized the 1900s as regards to women's rights and their place in society. Two important trends have occurred in this century: an increase in the number of women in the labour force and a transition from the sphere of domestic work, agriculture and industry to the tertiary sector.

After the Second World War, Europe was faced with two images: the shock caused by the war, and the need for large-scale reconstruction that led to policies of full occupation. In all the countries of Western Europe, more women were registered as part of the labour force. After 1939, women represented more than 40% in Austria, Denmark, Finland, Norway, Sweden and the United Kingdom. Furthermore, the female contribution to the labour force was higher in the north than in the south of Europe, although Italy, Greece and Spain saw a rapid increase (Simonton 1998). The most important change in women's working experience has been a change in the structure of

work. The move away from full-time domestic work was gradual, and was influenced by the collapse of the textile and clothing sector combined with increased mechanisation. Thus, in these years, women, expelled from the traditional manufacturing sector, were reabsorbed in sectors where the automation of production processes allowed the replacement of skilled male labour. Production required flexible and unskilled personnel, characteristics that belonged to the female workforce.

In the mid-1960s, with the start of the productive changes, women were expelled from the labour market. In this case, women's non-domestic work was considered as a residual and ancillary activity to that of men's. Women were considered as "spare labour" useful to fill the jobs abandoned by men.

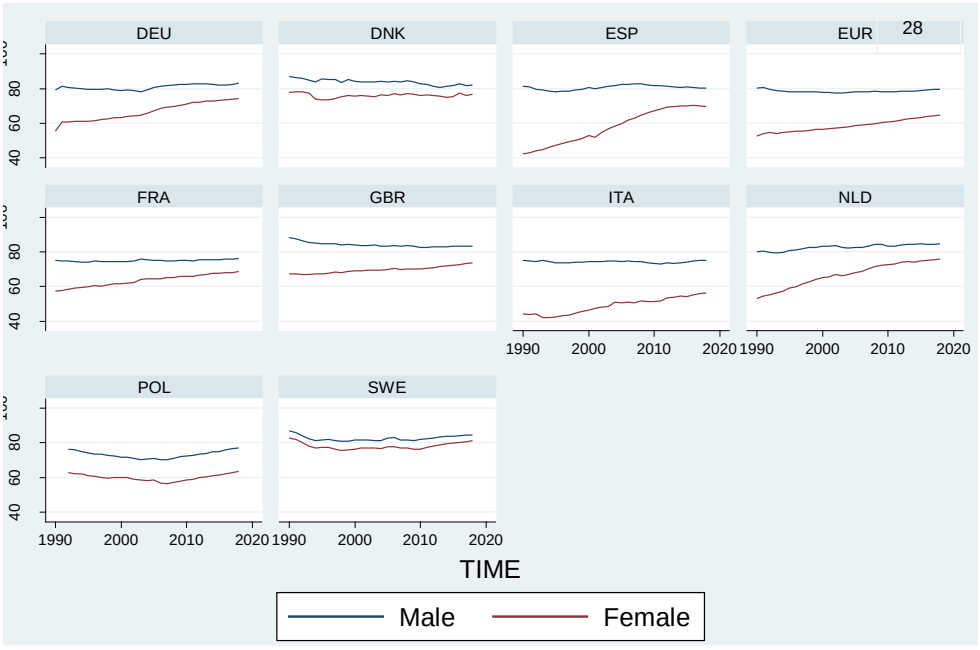
The growth in female activity rates only took off again in the 1970s. This dynamic, albeit with numerical differences, took place in almost all European countries. The 1970s saw a great revolution that overwhelmed the labour market and affected women's behaviour. The oil shocks of 1974 and 1979, associated with rising labour costs and greater rigidity in production systems, led to the partial collapse of a system based on large-scale industrial production in favour of a system oriented towards the service sector. Therefore, it was with the passage from the phase of industrialization to that of tertiarization that the sexual division of labour increased and the differences between the sexes were translated into a specialization of diversified activities in both productive and reproductive work. This phase saw an increase in women's employment but also a return to unemployment because, due to the closure of large factories, the professional qualifications of former workers were poorly adapted to the new roles required (Reyneri 2009). The tertiary sector had an enormous development and represented the main source of female employment because the new professional profiles adapted to female inclinations and were presumably compatible with family commitments. The care and assistance of the sick and the elderly, or the education of children represented the outsourcing and professionalisation of activities carried out in the family unit.

The new model of female participation could be defined as a “bell-shaped” curve (Reyneri 2005) and describes a trend in female activity rates that is quite

similar to that of men, although with lower absolute values. In this model, women enter the labour market and remain almost continuously in the paid labour force, without abandon it due to marriage or motherhood. Southern European countries will show this pattern only from the 1990s onwards, while central-northern European countries already showed this pattern in the late 1970s.

Therefore, since the 1990s, female participation in the workforce has stabilized in all western countries and has continued to increase in the following decades. In fact, on average, the female employment participation rate in Europe increased from around 53% in the early 1990s to over 64% in 2018 (Figure 1). This constant improvement in the position of women in the labour market has led to a significant drop in the gender employment gap which has almost halved since 1990, from over 25% to almost 15% in 2018. The observed aggregate increase in participation and employment hides substantial differences both between different groups of women and between countries (Cipollone, Patacchini and Vallanti, 2012).

Fig. 1. Employment rate (%) by gender, 1990-2018. EU-28 and selected countries.



Source: Personal data processing based on Oecd.stat

1.1.1. The increasing female participation in the work force

Existing literature has identified a number of factors that may have contributed to global changes in women's labour market behaviour: changes in cultural attitudes towards work, demographic factors, changes in the characteristics of the female population (e.g., decisions on fertility both in terms of the number of children and the age in which to have the first child) and educational choices (Cipollone, Patacchini, Vallanti 2012).

Concerning this last point, women have increasingly invested in education, bridging the gender gap and even reversing it. This process was in part a consequence of the general educational improvement that characterized post-war cohorts. Increased investment in education has also increased the cost of not working or retiring from the workforce during the family's formation (Blossfeld, Shavit 1996; Blossfeld 1995).

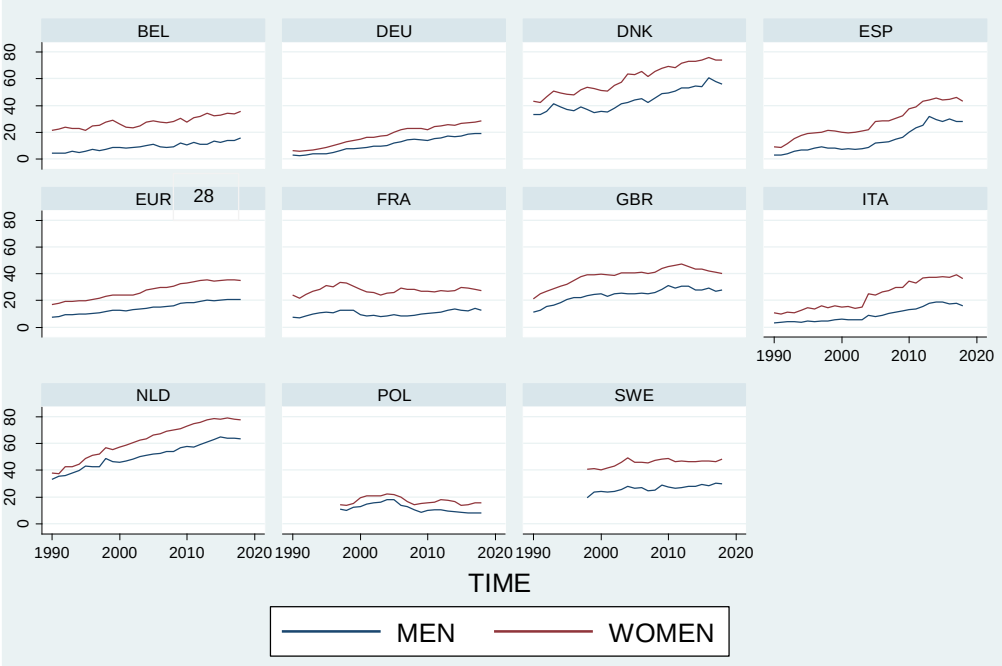
Other relevant factors include welfare state reforms and changes in labour market policies specifically aimed to reach groups with less attachment to the labour market. Changes in the labour market behaviour of women with specific characteristics may reflect changes in preferences (cultural attitudes towards work), but also changes in restrictions that prevented women from participating in the workforce in the past (Cipollone, Patacchini, Vallanti 2012).

At the same time, on the demand side, the growth in employment in the services sector - discussed above - has widened the participation of women in the labour market. It actually created "jobs for women", with sometimes (for example in the public sector) characteristics suitable for families, though also producing gender segregation (Gornick, Jacobs 1998; Mandel, Semyonov 2006). Furthermore, on the institutional side, the extension of maternity and parental leave programs and childcare services have greatly influenced the possibilities of combining work and family responsibilities (Gustafsson 1995; Esping-Andersen 1999; Boje, Leira 2000; Uunk et al. 2005).

The growth of part-time and temporary jobs has also played an important role in stimulating the growth of female participation (OECD 1999, and Booth, Dolado; Frank 2002). On the one hand, part-time work represents an opportunity for flexible working hours and to combine paid work with family

commitments. However, in some cases, part-time work could also be considered a form of underemployment, in which lower wages are tied to low job security and weak professional attachment (OECD 1999). Similarly, temporary contracts can represent steppingstones to a permanent job. However, they have often been used as a cheaper option to adjust employment, especially in countries where the regular worker is hyper-protected. The incidence of part-time jobs and, to a lesser extent, temporary jobs is traditionally higher among women than men, and, on average, more women work part-time in central and northern Europe compared to southern countries (see Figure 2) (Cipollone, Patacchini, Vallanti 2012).

Fig. 2. Share of part-time jobs by gender, 1990-2018. EU-28 and selected countries.



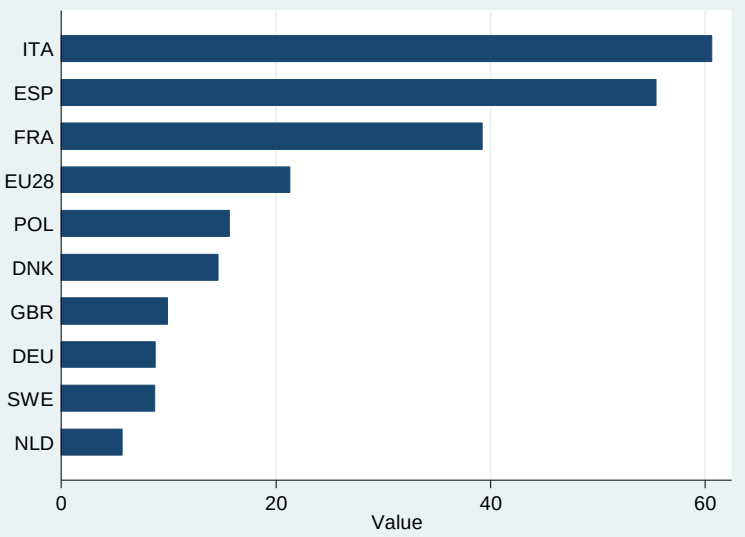
Source: Personal data processing based on Oecd.stat

Although both men and women have experienced an increase in part-time and temporary work over the past 20 years, this increment is not gender neutral. As a matter of fact, women are more frequently involved in temporary and part-time jobs during their working life. As a consequence, on the one hand, the growing availability of "atypical" jobs and more flexible forms of

work may have helped women to integrate better into the labour market and reduced the employment gap with men. On the other hand, this integration process may have occurred at the expense of increased segregation, to the extent that the differences between the sexes in the "quality" of employment are not fully explained by the different preferences or levels of productivity of men and women (Cipollone, Patacchini, Vallanti 2012).

Furthermore, the "dark side" of the part-time jobs is also their involuntary nature; in fact, there is an important gap between those who choose to work part-time and those who instead are “forced” to accept this type of contract without having the opportunity to work more hours. In countries with low diffusion of part-time employment, the percentage of involuntary part-time contracts is much higher (Petrongolo 2004), (see fig. 3).

Fig. 3. Share of involuntary part-timers as % of part-time employment. Eu-28 and selected countries, 2018



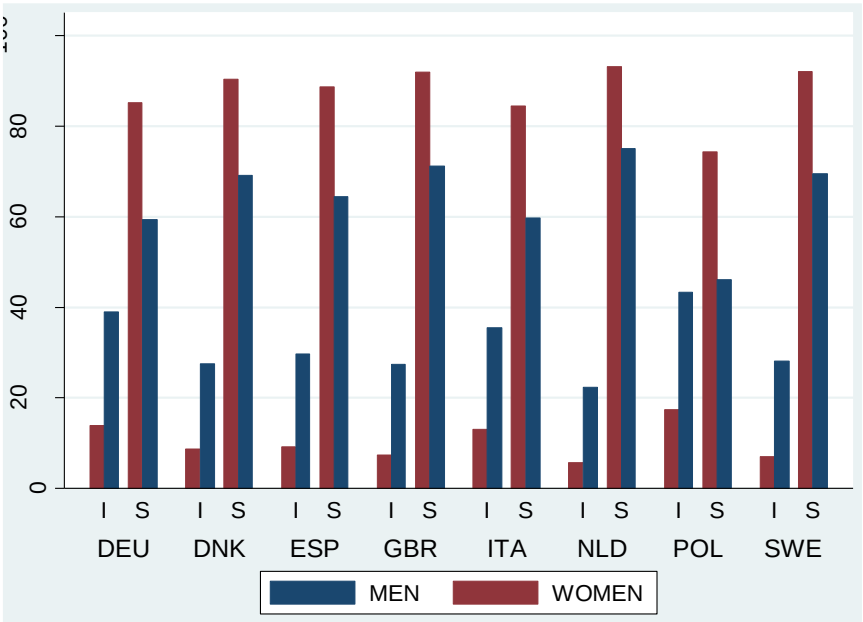
Source: Personal data processing based on Oecd.stat

1.1.2. Segregation and “double presence”

As anticipated, if the feminization of professions favoured the entry of women into the labour market, it also accentuated their segregation (e.g., Bullock 1994). With horizonal segregation we mean the concentration of women in some sectors of the labour market and their exclusion from others,

which are "reserved" to men. The literature has shown that the countries where horizontal segregation has great relevance are the countries where female employment is highest (Van Doorne-Huiskes, Van Hoof, Roelofs 1995). In any case, this type of segregation is a constant in the labour markets of European countries, because it depends on the strong female presence in the tertiary sector (see fig. 4). Furthermore, several studies (e.g., Dolado, Felgueroso, Jimeno 2002) have revealed a positive relationship between the spread of part-time jobs and the increase in segregation: most of the part-time jobs have been created precisely to employ women. This dynamic explains why in the northern countries, where part-time work is widespread, segregation is very high.

Fig. 4. Share of employed people working in industry (I) and service (S), by sex and gender and selected countries, 2018.



Source: Personal data processing based on Oecd.stat

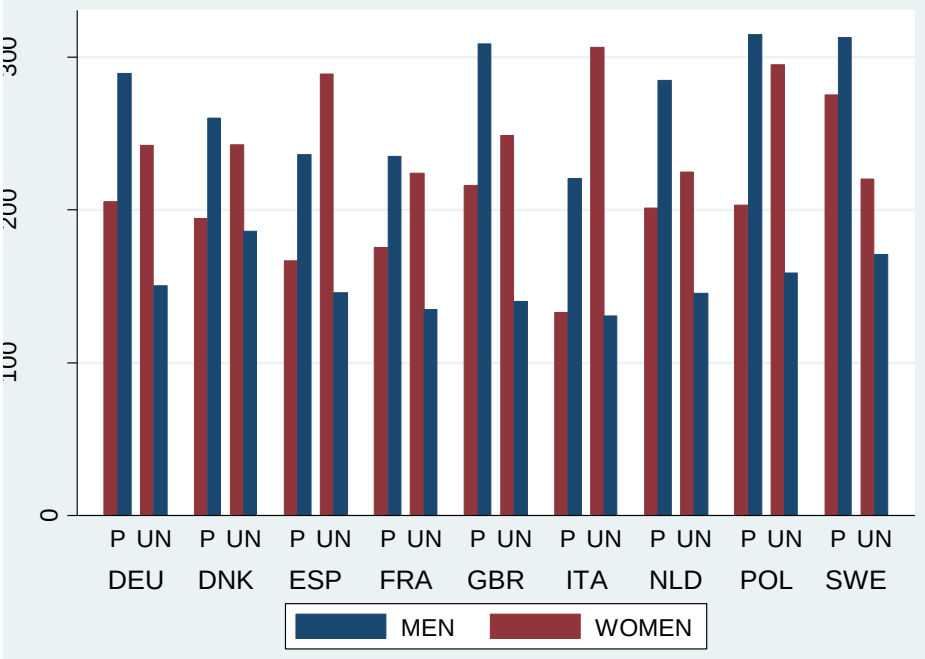
Another type of segregation in the vertical one, for which, in all European countries the share of women in managerial positions is lower (on average in 2018, in OECD countries, among workers in managerial positions, only 32% were women), and career progress for women is lower than for men. This dynamic may be due to the lower seniority of women; however, the literature

has shown the presence of disadvantages in women's careers (Bullock 1994), hence the plausibility of the existence of the "ceiling glass" effect (Barbieri, Scherer 2011; Busch, Holst 2011; Cotter et al. 2001; Bullock 1994) and the actual difficulty in making career progress for women.

Another issue that is worth addressing to understand how the female labour market works concerns the intersection between work and family responsabilities. In this regard, the concept of "double presence" or "double exposure" (e.g., Hall 1992; Krantz, Ostergren 2001) indicates the dual role of women: public and private, reproductive in the family and productive as a worker in society. Previous literature has focused on the consequences of the dual shift (i.e., work in both the labor market and at home) faced by employed women (e.g., Hochschild 1989; Milkie et al. 2009; Ruppanner and Pixley 2012), examining the determinants of women's time allocation to employment, unpaid work and leisure. Several studies focused attention on childcare, distinguishing between primary and secondary care, active or passive care, as well as measuring the time dedicated to childcare. Other studies also focused on home production time, making distinctions between primary and secondary activities (Folbre et al. 2005; Kalenkoski et al. 2005; DeGraff, Centanni 2017). In general, family work is still unequally divided between sexes, and women spend more time in family-related activities. Various studies (e.g., Aliaga 2006; Bird 1999; Boye 2008) have revealed the persistent asymmetry in the use of time between men and women, in particular as regards to the time dedicated respectively to paid work and “home” work (see figure 5). Women, even employed women, and even if they are employed in a full time job, spend less time than men on paid work and much more time on family work (Rosina, Saraceno 2008). The increased family workload for women and the gender disparities in the division of domestic work reduce the time women can devote to leisure and paid work, and also the range of occupations they can take into account (in terms of distance, hours, etc.). Moreover, women are more likely to be caregivers for younger and older family members, and they often adapt their work behaviour to satisfy this responsibility (Hatch and Thompson 1992; O'Rand, Henretta, Krecker 1992; Pienta 1999). As a consequence, women

work (for pay) fewer hours a week compared to men and frequently have shorter or interrupted/unstable work histories (Han, Moen 1999; Henretta, O'Rand 1980). They very often work part-time or experience inactivity periods because of care tasks (Hakim 1996; Schils 2005; Quick, Moen 1998). These discontinuities in women's labour force participation lead to some negative consequences such as having fewer opportunities to develop skills, to increase knowledge, or to move up the organizational hierarchy. As a result, women may be less likely to receive promotions, to accumulate pension credits, or to be in jobs with the most remunerative pension plans (Quick, Moen 1998). Furthermore, this exposes them to the risk of being seen by employers as unreliable and / or more expensive workers (Sareceno 2003).

Fig. 5. Time spent (minutes per day) in paid and unpaid work by gender and selected countries, 2020.



Source: Personal data processing based on Oecd.stat

1.2. Retirement process

Retirement as an institution is a fairly new phenomenon, dating back to the mid-20th century, and it characterizes most industrialized nations (Adams,

Beehr 2003). The institutionalization of retirement in developed countries is reflected on the widespread exit from the workforce over a relatively short period of time and often before the loss of individuals' abilities to remain profitably employed. Depending on the prevailing social security and old age security regulations in different countries, most people leave the workforce permanently between 55 and 65 (Adams, Beehr 2003).

In periods of high unemployment, in most Western countries older workers were frequently pushed into early retirement to enable younger workers to enter the labour market (Buchholz et *al*. 2011; Ebbinghaus 2006) and to keep the workforce competitive and adaptable to economic transformation (Buchholz et *al*. 2011). However, a reverse trend can be observed since the beginning of 2000 (Konig 2017; Ebbinghaus and Hofäcker 2013). That is, in recent years, many countries have had the goal of keeping older workers in the workforce by reforming pension and social security systems (Riekhoff 2016). In most Western countries early exit has been made less attractive or not possible, and statutory retirement ages are being raised. Moreover, "active ageing" policies have been introduced, in order to prolong people's working lives (Walker and Maltby 2012; Riekhoff, 2016). As a consequence, even during the economic crisis of recent years, employment levels of the older workers have continued to increase or remained stable (OECD 2013). Part of this rising labour market participation is also due to cohort effects: older workers increasingly have a better health status, a higher life expectancy and are better educated. Due to the higher life expectancy and the drop in the birth rate, the percentage of pensioners is constantly increasing (Fouquereau et al. 2005). Retirement has become not only one of the most important issues that are facing European countries but also a stage of life experienced by most Europeans and longer than ever.

Classically defined as the final exit from work, retirement actually covers a variety of scenarios. On an individual level, the process from work to retirement is an important transition. In fact, like any other transition experience, leaving the workforce constitutes a great change in life that has lasting effects, takes place over a period of time that can vary in length, and

thus causes a series of reorganizations in people's life (Fouquereau et al. 2005). Indeed, retiring people often acquire new roles and lifestyles, and develop new identities (Kim and Moen 2001).

1.2.1. Women's retirement

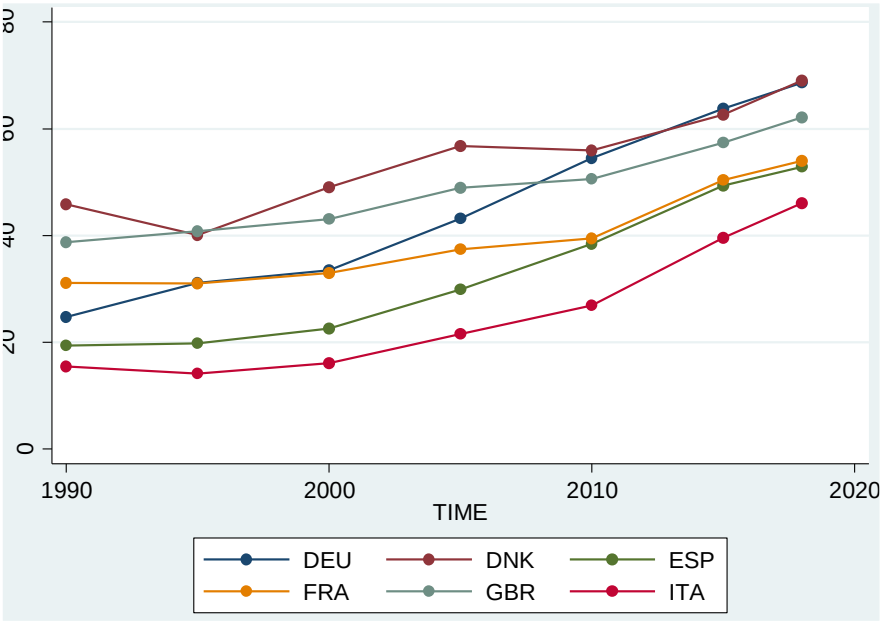
Retirement is a concept derived from the participation to the workforce and therefore does not capture activities outside the paid work. Historically, women have been essentially invisible workers and thus invisible retirees because they did not work or worked too few years to be eligible for a pension. During industrialization, work and pensions have been closely linked to the public sphere for men, while women's pensions were bound within family boundaries. Women's work included the private sphere of the reproduction and education of children and men's work concerned the public sphere of the economic life. Therefore, women's retirement was originally anchored in the family and the well-being of older women depended on the pension of the householder. Before the 1990s, women's retirement experiences could be considered almost a non-issue, and the retirement research routinely excluded women (Slevin et al. 1995; Zimmerman et al. 2000; Byles et al. 2013).

Therefore, it is not surprising that the study of female retirement had a secondary place compared to the male one. Attempts to remedy this lack of attention have led to include women in models and theories derived from men's experiences (Moen et al. 2001; Byles et al. 2013). Hence, women were usually included in retirement research in relation to the husbands' retirement. For example, women were considered retired if their spouse retired and the retirement decision usually involved an assessment of the current and future generosity of the husband's pension (Stone 2006). Moreover, research investigating the retirement transition has traditionally been conducted on male samples. However, the growing number of female retirees, and the fact that women constitute the majority of the older adult population, causes that the retirement transition can no longer be identified as a male-only phenomenon (Price 2000). The growing participation of women in the workforce has contributed to shifting the research attention to the characteristics of retired

women. In particular, the impact of family and spouse's decision on female retirement was taken into account and the differences between retired women and housewives were investigated because retired women were viewed as an anomaly.

In the mid-1990s, the impressive participation rates of baby boomers in the workforce, even in the higher age groups (see fig. 6), their continuous attachment to the workforce and their retirement, stimulated a growing attention to the study of female retirement as a stand-alone phenomenon, however directly applying a model that was developed for men (Onyx, Benton 2008; Stone 2006).

Fig. 6. Female employment rate (%) over time (1990-2018), age group 55-64, in selected countries.



Source: Personal data processing based on Oecd.stat

Researchers started studying sub-samples of women with a focus on the employment history, the type of job, wages, etc. However, by using the male retirement model, based on continuous paid workforce participation, the particular context in which women worked and retired was ignored. Indeed, the male retirement model based on a continuous and full-time work history made

no sense to women because it was lopsided (Stone 2006). The model ignored gender differences in the work sphere and the fact that most men and women live or have had different work and background experiences, including types of job, pay, career advancement and longevity, which will likely be relevant in decision making and retirement life (Glass, Kilpatrick 1998b; Rosenman, Scott 2009).

Being a multidimensional process, retirment is often highly individualized, subjective, and dependent on a variety of social, cultural, and economic factors (August 2011; Quick, Moen 1998; Richardson 1999; Slevin, Wingrove 1995). It has been suggested that models of retirement adopt a broader definition of retirement that considers intersecting life roles and diverse backgrounds (Richardson 1999), which would facilitate the exploration of women's retirement experiences (Borrero, Kruger 2015). Furthermore, the literature has recognized that a life-course perspective is required to understand the retirement process. The use of a new model that included gender and family, and that captured the interdependence between the lives of men and women and their families over time, was needed.

Today, many researchers agree that retirement is a complex transition that reflects related lives, historical and political events throughout life, and that women's retirement has always been different from that of men and will continue to be different in the near future. The transition of women to retirement, the material and non-material conditions that follow it are the direct result of the gender relationships that take place at work and in the family throughout life (Stone 2006). In this context, the life course perspective (Elder 1995) conceptualizes retirement as a transition that takes place along a trajectory that is influenced by events throughout the life course. Retirement is not necessarily the result of a single event (the transition itself), but rather, it is a decision-making and behavioural process that takes place over time (Kim, Moen 2001; Szinovacz 2003; Wang, Shultz 2010).

1.2.2. Retirement from a life course perspective

Life course theory refers to a multidisciplinary paradigm for the study of people's lives, structural contexts and social change (Elder 1985). In particular, it focuses the attention on the connection between individual lives and the historical and socio-economic context in which these lives take place (Elder 1985). According to this theory, individual life paths are shaped by the context and are often structured by social institutions.

Researchers increasingly claim that the life course perspective is a useful research perspective in order to understand the decisions and characteristics of older people (Hoven et al. 2018; Madero-Cabib 2015; Worts et al. 2016). First, the life-course perspective draws attention to specific life course mechanisms, that shape individual lives (Elder, Johnson, Crosnoe 2003; Sackmann, Wingens 2003). One important principle is that life-courses studies need to adopt a holistic perspective, not focusing only on individual "transitions" (e.g., retiring from paid work), but also on whole “trajectories” (Aisenbrey, Fasang 2010; Sackmann, Wingens 2003). Transitions are always incorporated into trajectories that give them distinctive forms and meanings, and trajectories are shaped by past and future transitions. A trajectory is a line of development that takes place during one’s life, such as parenting, working life or retirement. Trajectories refer to long-term behaviour patterns and are marked by a sequence of transitions. Transitions are marked by life events, such as getting a first job, having a first child or the transition to retirement, and are embedded into trajectories (Elder 1994). For example, in the case of the retirement process, this refers to the necessity of a comprehensive study of complete working histories (Hoven et al. 2018).

Another fundamental point of this perspective holds that people's lives are shaped by the timing and sequence of life events and that there is an interdependence among different trajectories and spheres of life. In this regard, a key component is that individual lives are linked both intra-generationally and intergenerationally (Alwin, McCammon 2003). This phenomenon is described through the concept of "linked lives", which underlines the fact that lives are lived in an interdependent way, within and between generations

(Alwin, Felmlee, Kreager 2018). For example, an individual's work trajectory is intertwined with his other life trajectories (education, marital relationship, motherhood, etc.) and with the trajectories of the people with whom he/she interacts (Elder 1995; Mayer 2009). Another point of the life course theory assumes that early and mid-life events and exposures contribute significantly to later life outcomes and that events and transitions that occur throughout an individual's lifetime often influence the transitions of other people as well (Alwin, Felmlee, Kreager 2018).

Life-course and retirement

The principles of life-course, timing, linked lives, located in historical times, are the mechanisms that influence the course and substance of lives. In this sense, they can be useful theoretical tools enriching the study on the female retirement process. Indeed, approaching retirement from a life-course perspective means bringing together the different spheres of an individual's life (e.g., the intertwining of their work and family trajectories) with short-term transitions (e.g., transition to retirement) which in turn can lead to the opening up of opportunities for change. All these elements influence by historical forces and social institutions (e.g., the institutional context of a country).

Timing of lives*:* this principle emphasizes the idea that events and experiences have different meanings and consequences depending on when they occur in an individual's life. For example, a woman who gets married at the age of 30 has already completed her studies, probabily earned a degree, and spent many years in paid work before getting married. He will most likely have a continuing career and will be able to be eligible for retirement. By contrast, have being married at age 18 may mean that a woman is low educated, has many children, interrupted her career for a long time and likely has difficult to reach pension requirements.

These examples illustrate that the timing of life transitions reflects a wide range of biological, social and political forces. Moreover, social norms provide guidelines for the culturally appropriate moment to make transitions (Alwin,

Felmlee, Kreager 2018). They prescribe the ways in which age determines when, how and for what purpose social roles and transitions between roles are experienced (George 1993). Each society seems to use age as an important variable and many social institutions are organized, in part, around age - the age for starting school, the legal age of adulthood, the retirement age and so on (Kohli 2007). Thus, the life course paradigm reveals the importance of both personal and historical time. Life-course scholars are interested in the age at which specific life events and transitions occur, to which they refer as timings of life. Entrances and exits from certain states and roles can be classified as "off-time" or "on-time", based on social norms or shared expectations regarding the timing of such transitions (Hutchison 2011).

Principle of life-course development*:* This principle suggests that human development and aging are lifelong processes and should be studied as such. Therefore, researchers must try to comprehend the changes that occur at all points in human life in terms of biological, psychological and social aspects (Gettings, Anderson 2018). The life-course is often represented as a sequence of life-stages, from childhood to old age, and must be understood from a lifelong perspective, as later-life adaptation patterns are linked to the early years of life course development: the central life course results are modelled by experiences and resources previously acquired in the individual's biography. From this perspective, the transition and adaptation to retirement are seen as long-term processes, which require consideration of factors both near and more distant over time. Retirement is part of a stage in life in which past experiences matter. For example, previous family roles can limit work (Elder 1994; Szinovacz, DeViney, Davey 2001) and thus also influence retirement decisions. For example, individuals may retire due to caregiving purposes (Hayward et al. 1998) at a later age or delay retirement due to care responsibilities during the working period which resulted in long periods of inactivity.

Interplay of human lives and historical time*:* People born in different years face different historical contexts, with different options and constraints, especially in rapidly changing societies. As a result, historical time can produce cohort effects, which occur when distinctive experiences are shared at the same point in life and have a lasting impact on a birth cohort. Social and institutional changes affect the trajectories of the courses of family and individual life. The individual life course is incorporated and shaped by the time and place in which it occurs. This principle highlights the existence of an interaction between social change and people's lives (e.g., change in socio-economic conditions, workplaces, historical contexts, etc). Life decisions and trajectories are influenced by macroeconomic and political factors. The structures and processes of social relations are also shaped by sociocultural norms and historical contexts (Alwin, Felmlee, Kreager 2018). For example, when and if to get married and have children (Manning et al. 2014); the social acceptability of divorce, cohabitation, etc. (Baunach 2012; Thornton and Young-Demarco 2001); the division of domestic work between spouses (Cunningham 2007) change from time to time and from place to place.

Also, the transition to retirement is seen as part of the life cycle and it depends on the context in which it occurs (Mortimer, Shanahan 2007). This context includes previous work experiences, job characteristics, health etc., as well as social and institutional environments (Appold 2004; Orel, Ford, Brock 2004). According to Wang (2012), the social context plays a significant role in the pension transition as different generational cohorts or social groups are likely to experience different trajectories in their transitions to retirement. A key social consideration is to be reserved for gender, as the retirement process of women may differ from men due to overall work histories and life experiences (Kim, Moen 2002).

Linked or Interdependent Lives: The life-course perspective highlights the interdependence of human lives and the ways in which relationships influence an individual's behavior (Hutchison 2011). For example, social support is an element of interdependent lives. But relationships also control behavior

through expectations or sanction. In this sense, the family is seen as the primary source of support and control. Life course scholars have paid particular attention to how the lives of family members (and not only) are connected to each other and between generations, showing that an individual's life influences and is influenced by the lives of those around him (relatives, friends, neighbors, etc.). The principle of linked lives specifies the ways in which one's life is inserted into a vast network of social relationships - with parents, children, siblings, friends, colleagues, partners, etc. (Alwin, Felmlee, Kreager 2018). Life course sociologists also recognize that the different domains of life are linked: for a single individual, work and family choices influence each other; working full-time can prevent one from being a stay-at-home parent, or intense parenting demands can prevent a woman from working as many hours as she would like (Bianchi, Milkie 2010). Additionally, life course influences can occur both between people and between domains (Alwin, Felmlee, Kreager 2018). For example, the spouse's job strain can affect the psychological health of the other partner (Hammer et al. 1997). Being work and family closely intertwined (Elder, Johnson 2003; Settersten 2003), retirement decisions evolve not only from professional and work experience, but also from the family sphere. For this reason, female and male life courses are different and generate gender-related work and retirement patterns (Elder 1994; Moen 1996; 2016).

To conclude, life course theory holds that the outcomes that characterize adulthood (such as retirement decisions) are not based only on the current characteristics of individuals, but are also influenced by the work and family situation and social relationships within the family throughout their life course (Elder 1998). Like other transitions throughout life, the transition from active life to retirement is seen as a complex process that takes place over a long period of time (Shanahan 2000) and which involves reflections on retirement itself (Solem et al. 2014). The later-life events must be examined in the context of the previous life course to gain a true understanding of how subsequent results will be. The life-course approach emphasizes the “path-dependent” dynamics of individual biographies, arguing that events in the early stages of

life exert an influence on future life events (Mayer 2009). This dynamic view of the processes contrasts with most studies, which generally focus on the current situation of retired workers. Retirement decision-making processes evolve from a variety of contextual influences and permanent experiences in diverging life domains. The resulting pathways to retirement are therefore highly individualized and this diversity is reflected on the retirement experience itself (Adams, Beehr 2003).

In this context, the present thesis investigates women's working and family life-course and their influence on retirement outcomes. Indeed, women traditionally have the responsibility for unpaid and care work and motherhood often leads to withdrawal from the labour market or reduced working hours. The way in which the working career and the family sphere have been structured by women during the course of life has long-term consequences on retirement timing, because it places restrictions or opportunities in old age, and potentially also on subjective and psychological well-being in later-life.

CHAPTER 2

2. WHO RETIRES FIRST? WORKING TRAJECTORIES AND RETIREMENT TIMING OF WOMEN IN ITALY, GERMANY, AND DENMARK

2.1. Introduction

As we have seen in chapter I, Labour force participation of older women has increased considerably during the last decades in almost all OECD countries: on average, in 1970 it was about 48%, and in 2018 it was about 65% (OECD 2018). Moreover, a new female employment model has emerged (Rubery et al. 2003). This trend has been characterized by the rising labour participation rates in successive birth cohorts of women, who increasingly have chosen either to remain in the labour market when having children or to return to the labour market after a period of caring for the children (Damman, Henkens, Kalmijn 2015) As a consequence, female employment rates have started to approach male ones during the entire life-course.

Due to this dynamic, widely documented in previous literature (Jaumotte 2003; 2004), nowadays women represent a significant portion of the retired population. At the same time, they have continued to take the primary responsibility for family care and other unpaid family work, also in dual-earner couples (Presser 1994). As a result, it has become increasingly relevant to recognize the need to investigate the intersection of paid and unpaid work, and the way in which it affects the retirement experience.

If until the 1970s retirement research paid very little attention to women (Slevin, Wingrove 1995), with the exception of some sporadic investigation on women's retirement in relation to partners' retirement (Wright, Soutter 2015), in recent years scholars have started to examine the role of earlier life experiences in explaining women’s retirement transition. Some qualitative studies have paid attention to the role of family histories (e.g., Augus, Quintero 2001; Everingham et al. 2007), while quantitative studies have generally

focused on either early life family experiences (Hank 2004; Hank, Korbmacher 2013; Pienta 1999) or the late-career family context (Brown, Warner 2008; Choi 2002; Szinovacz et al. 2001) to explain women's late-career labour market behaviours. Other research has focused on the influence of family responsibilities (such as the birth of children) on retirement (Szinovacz et al. 2001; Szinovacz, Ekerdt 1996; Svensson et al. 2015), on the impact of retirement on the marital relationship and on the influence of care work share on retirement (Szinovacz, Schaffer 2000; Ettner 1995; Ekerdt, Vinick 1991).

Nevertheless, as some studies suggest (Skirboll, Silverman 1992; Armstrong-Stassen, Cameron 2005; Price 2002), little attention has been paid to the relationship between female employment trajectories and retirement timing. It is also necessary to underline the persistent existence of gender disparities in the division of domestic work that exercises an influence on the participation of women in the workforce. Women work (for pay) fewer hours a week compared to men and frequently have shorter or interrupted/unstable work histories (Han, Moen 1999; Henretta, O'Rand 1980). They very often work part-time or experience inactivity periods because of care tasks (Hakim 1996; Schils 2005; Quick, Moen 1998). It is, therefore, worth to analyse how these dynamics could influence retirement choices.

In sum, previous studies have largely overlooked the role of the entire paid-working career of women in shaping their retirement decisions and timing. In the present contribution, therefore, the goal is that of start filling this gap by investigating the relation between the structure of women's careers and the timing of the exit from work, using longitudinal data. Moreover, a comparative perspective will be adopted, examining three European countries: Italy, Denmark and Germany. These countries belong to different welfare regimes and differ with respect to the security and pension systems (Esping-Andersen 1990; Bonoli 2003), the structure of the labour market, and the female labour market participation. Such differences are expected to create distinct outcomes of retirement timing (Ebbinghaus 2006). Accordingly, I am interested in understanding how female career structures shape retirement timing and if exist differences between diverse istitutional contexts. At

methodological level, sequence analysis techniques and event history analysis techniques will be implemented.

2.2. Theoretical framework

A significant amount of literature has been published on the determinants of retirement from the labour market of older workers. These studies include a wide range of factors, such as financial incentives, institutional characteristics and working conditions and health (e.g., Hofäcker 2010; Engelhardt 2012; Van Solinge, Henkens 2014).

Most of these studies focus on transitions to retirement, reducing the complexity of labour market participation to a single outcome (retirement timing) without studying entire trajectories or patterns of employment careers (Hoven et al. 2018). How retirement behaviour is incorporated into larger histories is not considered (Sackmann, Wingens 2003). For example, not only the age of retirement is important to describe working decisions in old age, but also the situation from which people retire (Hoven et al. 2018). More specifically, it is important whether the person was employed or self-employed prior to retirement, or whether he/she worked full-time or part-time (McNair et al 2004; Parker, Rougier 2007). Indeed, according to the life-course approach (Elder, Giele 2009; Mayer, 2009), retirement can be seen as a transition in the course of life conditioned by the characteristics of the subject (*e.g.* gender, level of education marital status, ecc.), individual history (*e.g.* work history), the interdependence of various spheres of life (family, work, *etc*.), and the constraints/opportunities posed by the institutional context (Trentini 2021; Wang, Shi 2014; Fisher et al. 2016). This means that labour market participation or retirement decisions are better understood when considering the specific principles that shape individual life courses (Wahrendorf et al. 2017; Sackmann, Wingens 2003). One of these refers to the aforementioned idea that life-course research should not only examine the timing of specific "transitions" (e.g., from paid work to retirement) but should also take a more holistic perspective describing whole life-course "trajectories" (Aisenbrey &

Fasang, 2010; Sackmann & Wingens, 2003; Worts et al., 2016; Wahrendorf et al., 2017).

Moreover, as far as women's decisions are concerned, scientific research is relatively scarce, and results of empirical analyses are often mixed. Also, in this case, existing studies focus mainly on individual characteristics, on family responsibilities, and the characteristics of the partner (Szinovacz et al. 2001; Szinovacz, Ekerdt 1996; Svensson et al. 2015) and look at a precise point in time, without reconstructing the occupational dynamics from a longitudinal perspective. There is limited knowledge about the relationship between women's retirement patterns and their working histories. For example, the discontinuity of working careers due to family demands has an impact on the ability to accumulate income and pensions (Davidson 1982); but it is not clear how this discontinuity influences women's attitude toward retirement decisions (Feuerbach, Erdwins 1994). About this, some studies have focused on the influence that the attachment to the labour market and work orientation could have on retirement behaviours. Other studies, however, have paid attention to economic conditions and social status.

Furthermore, most of previous empirical studies have analysed the relation between women's career and retirement focusing on single countries. The lack of comparative studies is particularly concerning because – as it has been shown for the study of men's retirement - research investigating retirement behaviour needs to systematically consider both the role of individuals and institutional (i.e., welfare state) contexts. Indeed, it is by now widely acknowledged that there is a structural gender bias in all welfare states which shapes women's behaviour differently as compared to men (Frericks et al. 2009). Moreover, women's decisions regarding work and retirement are closely affected by country and culture-based attitudes about gender roles in the home, at work, and in society (Fortin 2005). For example, discrimination against women and country-based beliefs about gender roles had an impact on women's labor market participation across developed countries (Fortin 2005). Nevertheless, macro-level gender inequalities in the labour market may be eliminated by direct as well as by indirect welfare state interventions

(Damman, Henkens, Kalmijn 2015), and therefore the consequences on pension choices can be addressed according to the policies adopted in the country. These characteristics should be considered in the study of women retirement timing to achieve a better understanding of the differences existing between countries.

2.2.1. Work orientations, the status maintenance hypothesis and the theory of attachment

Part of the literature concerning women's decisions in the labour market refers to Hakim's theory (Hakim 1991, 1998). The author emphasises the role of women's agency and preferences, highlighting that gender differences in the labour market are often due to women's orientation and not (only) to the characteristics of the labour market structure itself. The author distinguishes between "work-oriented", "adaptive" and "family-oriented" women. The former, tend to pursue more continuous careers, avoiding long periods of inactivity in critical moments (such as the birth of children), and identify themselves with their work. The second try to balance the family commitments with work, modelling their behaviour in the labour market according to domestic needs, but without abandoning it. The "adaptive" women prefer to work, but they are not completely engaged in their careers. The third type is, by choice, more devoted to family life, and will tend to experience long periods of inactivity or, where possible, to opt for a part-time job. From an institutional point of view, it is to be expected that the "adaptive" should be the most influenced by the welfare state dispositions since they shape their participation in the workforce based on the possibilities and constraints that the institutional context provides them.

According to this theoretical approach, the disadvantaged position of women in the labour market reflects the result of their different work orientations. The career breaks or part-time work are not forced choices, and they do not depend on the burden of domestic responsibilities or the inadequate provision of childcare services. Hakim argues that women, like men, are agents in their own lives, so that "self-classification as a primary earner or secondary

earner is determined by chosen identities, rather than imposed by external circumstance or particular jobs" (Hakim 2000). More precisely, Hakim states that part-time work is voluntarily chosen by women, the so-called "grateful slaves", mainly dedicated to family life. These women demonstrate more traditional attitudes towards family and prefer less demanding jobs. On the contrary, "the self-made women" (mainly career-oriented) prefer very demanding jobs and pursue full-time continuous employment (Hakim 1991).

Preference theory can also be extended to end-career choices: due to the stability of preferences, it can be assumed that work-oriented women will retain their attachment to work even at an older age, avoiding early retirement options. The opposite could be expected from family-oriented women: they will try to get out of the labour market as soon as possible. In this sense, we could insert other theories in the wake of Hakim's ideas, such as those which try to explain female retirement decisions through what is called "the labour market attachment" hypothesis and the ''status maintenance'' argument (Hardy 1991). Long and continuous work history would lead to an extended working period and consequently to a higher retirement age, thanks to high work orientation and rewarding careers (Finch 2014). Women with continuous careers or work-oriented patterns are more likely than women with work-family patterns to show attachment to the labour force at the end of the working life cycle. Work-attachment theory highlights that the degree to which individuals are engaged in their work-role influences their wish to remain a member of the workforce (Carter, Cook 1995).

This branch of theories has been partially corroborated by previous research which documented that continuous and full-time careers lead to a delayed exit (Soidre 2005; Pienta 1999; Pienta et al. 1994; Finch 2014; Konig 2017). These studies use two different indicators to investigate women's work orientation: the number of years of employment and the number of career breaks and work hours (full-time or part-time work). There is evidence that women with fewer interruptions due to caring tasks (Pienta et al. 1994), and that remained in the labour market in their fertile age (Henretta et al. 1993; Pienta 1999; Pienta et al. 1994) are more likely to work at an older age too. In

light of these findings and the argument of the theory of labour market attachment, I formulate the following hypothesis:

H1: women with continuous and full-time careers will retire later than women with discontinuous/part-time careers.

2.2.2. Cumulative advantages/disadvantages theory, the compensation hypothesis and the opportunity costs theory

Besides the theoretical approaches mentioned above, theories developed within the framework of stratification studies – and in particular the theory of cumulative disadvantage (CAD) – may prove useful in the analysis of the link between (women's) working career and retirement timing. The literature on retirement has focused on several individual factors such as health, family, partners and preferences. Fewer studies have explicitly investigated the transition to retirement from a social stratification perspective. In this sense, Blossfeld et al. (Blossfeld, Buchholz, Hofacker 2006; Blossfeld, Buchholz, Kurz 2011) have shown that members of the service class and self-employed workers retire later than people in the working class. Radl (2013) has followed the trail of this work, analysing the association between social stratification and retirement behaviour in Western Europe for both men and women. In these studies, the impact of class effects on retirement behaviour proved to be strong: the groups of workers who retire latest are found at the upper and lower end of the occupational scale.

It should be added that, until now, the social stratification research on retirement has focused primarily on the influence of education and social class. Instead, little attention is addressed to work trajectories in general and to the development of careers during the life course (e.g., Han, Moen 1999; Visser et al. 2016), and even less so in regard to women. In this study, I will mostly focus the attention on this aspect rather than on the role of occupation or educational level. Hence, while not adopting in this study a pure stratification perspective, the theory of cumulative disadvantages can be however considered a valid tool for the understanding of the effects that the structure of working

careers has on retirement decisions. Indeed, previous working paths are systematically linked to outcomes in old age (Elder, Crosnoe 2004; Elder 1985; Warren et al. 2010), which can cause rising inequalities when the disadvantages accumulate during the life course (DiPrete, Eirich 2006). The idea is that the later-life outcomes are not assigned exogenously but are the product of experiences cumulated across the life course (Elder, Pavalko 1993; Han, Moen 1999; Hayward, Friedman, Chen 1998; O'Rand 1996), and that inequalities in old age are the result of long-term social processes (DiPrete, Eirich 2006). Consequently, for those who have a favourable starting position, the accumulation of benefits will be easier, and people with initial disadvantages may not be able to recover those disadvantages. These processes of cumulative advantages (and disadvantages) accentuate the impact of both prior dis/advantages and unforeseen life events (e.g., loss of work, divorce) by placing people on different trajectories that influence economic well-being and, consequently, later-life decisions (DiPrete, Eirich 2006; Hardy 1991). The life-course framework further emphasizes path dependencies across individual life courses that systematically link trajectories earlier in life to outcomes later in life. During their life course, people occupy particular roles or states, e.g., as workers, spouses or parents, and the sequences of these roles are called trajectories (Elder, Crosnoe 2004; Elder 1985). The trajectories can follow relatively stable paths or can be more unstable due to specific events (for example, the sudden loss of a job, the birth of a child). A central principle of CAD theory is that trajectories are conceptually and empirically useful for understanding the heterogeneity in later life, beyond the sum of their constituent parts. This principle suggests that life trajectories should be significantly associated with later-life decisions. This perspective opens a large window to the study of late-life histories, in particular, because claims that retirement decisions are part of larger histories of advantages/disadvantages (Hoven et al.; 2018).

The process of "cumulative stratification" (O'Rand 1996; O'Rand, Henretta 1999) may be particularly important for women approaching the

retirement process with heterogeneous working histories (Han, Moen 1999; Moen, Roehling 2005; Raymo et al. 2010). Indeed, CAD has often been used to explain the negative effects of unemployment and atypical work throughout the life-course. Unemployment could lead to income mobility, stigmatisation (Blau, Petrucci, McClendon 2013) or social exclusion. Further, the negative effects of unemployment are documented for accumulating pension (Dewilde 2012) and wealth. As regards the labour market inactivity, it might lead to poor income and to problems to enter the labour market later. As for the part-time work is concerned, in terms of wages and career possibilities, several negative effects have been found (Fouarge, Muffels 2009). Part-time employment reduces an individual's chances to enter full-time employment, increases the probability to enter unemployment (Blázquez Cuesta, Moral Carced, 2014), and reduces wage levels.

In line with CAD theory, we also find in literature the "compensation hypothesis" and the "opportunity costs" theories, which must be kept into account in order to understand the timing of the retirement transition. These theories stress that trajectories that involve career interruptions, part-time job and atypical employment can be linked to low earnings and low pension income and to the increase of inequalities in old age (Pienta 1999; Lanninger, Sundström 2014; Hinrichs 2012). These elements are more common in female careers and could lead women to the impossibility of leaving the labour market whenever it is preferred. Scholars studied this dynamic, showing that the "compensation hypothesis" that lead workers to remain in the labour market in old age can be considered more relevant in women studies because they try to compensate for the accumulated "opportunity costs" (Pienta et al. 1994) during the working life course. These costs include: a reduction in accumulated skills and experiences, low earnings and savings over the life course, and minimal or no pension coverage, which may be a result of individual choice and/or market discrimination. (Pienta et al. 1994). In a way, for some elderly people to keep on working is the only way to keep out of poverty (Hardy 1991). For example, stopping labor market participation to care for children can affect the amount of income received in retirement. Academic research defines Motherhood

Penalty the fact that mothers often have low incomes relative to the general population. Causes of the Motherhood Penalty may include less investment in mothers' training and development by employers, or mothers taking on flexible work that is considered more beneficial for family life. This can impact their opportunities to save for retirement. In order to mitigate the reduced retirement income resulting from maternity, it may be possible for some people to work beyond retirement age. In fact, working longer provides income from earnings, and offers better terms on retirement benefits. On the other hand, women who worked continuously might have more resources and their benefits accumulation could allow them to exit the labour market early.

The studies that adopted these kinds of theories have actually shown that periods of discontinuity or part-time work lead to a later retirement age compared to stable working history (Raymo et al. 2010; Bardasi, Jenkins 2002; Pienta 1999; Lanninger, Sundström 2014; Hinrichs 2012; O'Rand, Henretta 1999; Radl 2013; Konig 2017), meaning that women with a continuous and stable participation in the labour market retire first (O'Rand, Henretta 1982; O'Rand, Henretta, Krecker 1992). For instance, a study from Britain found that women with a higher number of children were more likely to work after age 60 (Finch, 2014). In that case, the explanation could be that women need to compensate for their lower pension contributions, and consequently, work longer in later life (Wahrendorf et al., 2017).

In conclusion, there is some evidence that life course conditions, and in particular childbearing responsibilities and labour market participation, are linked with later life decisions. However, findings also show that the country context matters (Hank, Korbmacher 2013; Worts et al., 2016; Wahrendorf et al., 2017). Indeed, the dynamic explained above should be more present in countries with a welfare system that does not help to reconcile work and family needs (mainly in high-familial countries) or that does not "compensate" the career breaks with adequate pension policies. Following the “compensation hypothesis”, it is expected that:

H2: women with discontinuous careers or long part-time periods will tend to stay longer in the labour market compared to women with stable careers.

2.2.3. *Institutional context*

Institution and social structures could be considered as a filter for the end-of-career processes since they act as variables that influence individual responses at the micro-level (Mills, Blossfeld 2003). Indeed, the financial incentives embedded within Social Security, pension plans, and the macroeconomy, also influence when and how individuals retire (Cahill, Giandrea, Quinn 2013).

An appropriate approach for the study of female retirement timing must consider different part of the welfare state: the pension system or more generally the welfare dispositions that regulates the labour market exit, and the structure of the labour market itself (Buchholz, Hofacker, Blossfeld 2006). Indeed, the welfare state has a crucial role in the integration of women in the workforce and in shaping their transition to retirement. Furthermore, life courses differ between countries because they are influenced by country-specific cultures, histories and institutions. Mayer (2004) has suggested that differences in life courses between countries and also differences in gender roles align with welfare regimes.

The social-democratic regime is common among the countries of Northern Europe, such as Denmark, which is included in this study. This regime is characterized by a strong welfare state that facilitates equality among its citizens. Its well-developed social services allow women to combine work and childcare more easily than other regimes, thus leading to high female workforce participation rates (Komp-Leukkunen 2019). The conservative regime is prevalent in central Europe and Germany is an example. This regime divides the responsibility for citizens' welfare between the state and families, leaving women a considerable number of caring tasks. As a result, women participate in the workforce only to a limited extent, often with part-time jobs or discontinuous careers (Komp-Leukkunen, 2019). The Mediterranean regime is typical of southern European countries such as Italy. It emphasizes the role of families even more than the conservative regime does while providing fewer public services. As a result, women in this regime adhere to more traditional gender roles and spend a lot of time looking after the family (Komp-

Leukkunen, 2019). Given the differences between the different welfare regimes, I decided to select three countries belonging to different contexts. I want to investigate what is the influence of the context in shaping retirement timing and how the results change between countries. Hence, in this part, I will describe the institutional context of the countries selected for the analysis.

Italy. Italy is considered the archetype of a Mediterranean welfare regime characterized by a dualistic labour market, a strongly polarized social protection and a considerable gender gap. Another peculiarity of this welfare system is the family model, characterized by close solidarity relations between the components and utilized as an ultimate lifeboat for risks and needs. Furthermore, even considering the characteristics of the pension system, Italy presents the features of the Mediterranean welfare regime. In fact, it is characterized by a high level of protection for some categories of workers, high replacement rates of pension benefits and a great variety of eligibility rules for early retirement (Esping-Andersen 1996; Ferrera 1996).

Starting from the 1980s, legislation on early retirement has been implemented as a policy capable of preventing the risk of unemployment for older people. It was directed to those workers who had become "obsolete" after the introduction of new technologies and the crisis in the manufacturing industry (Zaccaria, Struffolino 2016). For this reason, Buchholz and colleagues (2006) define Italy as a typical example of an “employment exit regime”.

In more recent years, with the reforms implemented in the 90s and 2000s, the earning-base pension scheme has been transformed in a contribution-based one and, at the same time, the minimum retirement age has gradually increased. Even if the retirement age of men and women has gradually been aligned (before the 2000s women had a lower legal retirement age than men), the change in the pension benefit calculation has led the Italian pension system to become even more gendered. On the one hand, the small disparity in actual retirement age between men and women is due to male workers’ use of the opportunity for early retirement (Zaccaria, Struffolino 2016) which women often cannot use (due to the lack of requirements). On the other hand, the

contribution-based system strongly links the characteristics of the entire working career to the retirement benefits. Female cohorts that retired during the observation period of the study are mostly subject to a mixed pension scheme (they enter the labour market around the and 60s, 70s and 80s, and retire from the early 2000s until 2017) for a part contribution-based and for the other earning-based (see Dini reform 1995).

In general, the Italian pension scheme presents a substantial gender pay gap with high differences in replacement rates (Casarico, Profeta 2009; Zanier, Crespi 2015). These inequalities are mainly the result of gender differences in the labour market. In general, women's careers are more frequently interrupted/instable, due to informal or atypical work spells, to scarce career prospects because of the "glass ceiling" effect, and to the consequent disadvantaged pre-retirement conditions (Barbieri, Scherer 2011). Additionally, some of them had to exit the labour market for maternity reasons and face difficulties in returning after childbirth. All these elements push them to stay longer in the labour market to reach the required age limit or accumulate sufficient contributions to benefit from the pension system. Moreover, unlike most European countries, in Italy the number of part-time workers among women is very low. This is particularly relevant, because most caregiving in Italy still relies on women, and older workers, in particular, have to deal with the double responsibility of being at the same time grandmothers and daughters of aged parents in need of care. This causes a lot of tension for older female workers who see the retirement transition as a way to manage the burden of care that relatives require, to the detriment of their wishes or need to remain in the labour market.

Germany. Germany used to represent the prototype of a conservative corporatist welfare regime with an active state securing a relatively high degree of decommodification thanks to strong labour market regulation, generous welfare and pension provision and strong boundaries between the different occupational levels (Ebbinghaus 2006; Esping-Andersen 1990; Blossfeld et al. 2006).

The pension system is characterized by generous pay-as-you-go (PAYG) funded state pensions (Schulze, Jochem 2007; Ebbinghaus 2006). Occupational pensions, although widespread, are a less important source of retirement income. Another 10% of pension income comes from private pensions (Fasang 2010). Until 2012 the statutory retirement age was set at 65 with at least 5 years of contributions (Börsch-Supan, Schnabel 1998) and the average pension replacement rate was about 70% of the last salary.

Since the 1980s, early retirement policies have been promoted to avoid unemployment for older workers. Financial incentives to encourage early retirement were introduced and were used in particular by less qualified workers, who were pulled from work to retirement. To facilitate this transition, several opportunities for early retirement have been established, which have allowed women and employees suffering from chronic illness or disability to retire early. Apart from this, men and women had the opportunity to retire at age 63, after 35 years of contributions (Knuth, Kalina 2002). In the 1990s, however, the growing financial burden on public pension insurance led to a shift towards an active ageing policy. During this period, various reforms were implemented including the raising of the statutory retirement age to 67 and the closure of the early retirement opportunities. This has led to an increasing rate of labour market participation of older workers (Hess 2016).

Looking at the gender dimension within the German male breadwinner model, female careers are often characterized by discontinuity and instability. These gender differences are particularly important in pension behaviour in Germany with its "conservative-corporatist" social status. The ability to equally divide income between spouses before taxation (the so-called *Ehegattensplitting*) and poor coverage of primary childcare facilities provide incentives for women and married mothers to temporarily interrupt their work careers (Hess 2016). Combined with a rigorous labour market division between insiders and outsiders, this often leads to fragmented work histories (Fasang et al. 2013), fewer individual pension claims and a dependence on the husband's old-age income. Furthermore, women's participation in the labour market is linked to the importance of part-time employment. It is crucial to notice that

part-time work is still mainly performed by women. In fact, the percentage of female part-time work is considerably higher than the male one. Since the state social security scheme does not have a flat rate element but is entirely related to earnings, it is doubtful that a person who has worked part-time for a long time can earn a pension above the level at which public assistance is available (Schmähl 1989). Overall, the German pension system makes it difficult for women to obtain an adequate pension because it is strongly oriented towards a continuous full-time high-paid job (Ginn, Arber 1992). In general, the paths to retirement are linked to previous participation in the workforce and offer more generous benefits with the increase in quality and quantity of employment. As women generally work less and occupy low-quality jobs more frequently than men, they often have access to less generous benefits.

Denmark. Denmark is usually included in the group of countries with a social-democratic welfare regime whose main objectives are decommodification and a high standard of well-being through full occupation (Esping-Andersen 1990). Indeed, Denmark is one of the countries with the highest female employment rates in Europe (Eurostat 2018). The downside of this high participation in the labour market, however, is the strong segregation, with around half of all women working in the public sector (König, Schilling 2016).

The Danish pension system consists of three pillars. The first pillar offers all people who reach the statutory retirement age, and who have lived in Denmark for at least 40 years, a complete old public pension, regardless of previous income and employment status. The payment consists of a basic flat-rate benefit plus a pension supplement and it is annually indexed in line with the overall earnings growth (König, Schilling 2016). The flat-rate basic amount is means tested against income from work (other pensions are not taken into account), whereas the pension supplement is tested against all sources of personal income (including occupational pensions). Furthermore, the supplementary labour market pension (ATP) covers all employees with at least nine hours of work per week (König and Schilling, 2016). In times of

unemployment such as parental leave, the ATP contribution is guaranteed with the financial support of public authorities or unemployment funds (König, Schilling 2016).

In addition to the public schemes, the occupational pension plan is the second pillar of the pension system and it plays an increasingly important role for Danish pensioners. In most cases, it included an early retirement option starting at age 60 and it closely linked to earnings. Finally, the third pillar includes voluntary and supplementary private pension schemes administered by banks or insurance companies (König, Schilling 2016).

Regarding the gender dimension, women are disadvantaged in different ways compared to men. First, they are underrepresented in private pensions (Andersen 2011). Furthermore, occupational pension funds differ according to the professional sector. As women are over-represented in some sectors, the pension system strengthens gender disparity from the labour market as well as unequal wages. However, women with low earnings are well compensated thanks to the first pillar with high minimums, and indeed are the main beneficiaries (Andersen 2011). In this sense, there is evidence that shows that women's part-time work and parental leave do not imply smaller pensions (Lanninger, Sundström, 2014). This outcome stems from the fact that the basic pension is not earnings-related but compensates for lower lifetime earnings. Moreover, as mentioned, the state pays premiums with the supplementary pension system during parental leaves. Only the occupational pension is affected by part-time work and inactivity, but that pension represents a small part of the overall women's pensions (Lanninger, Sundström 2014).

Pension systems, employment patterns and retirement timing. The three countries investigated show a few signs of differentiation regarding the characteristics of the pension system and how it can shape retirement transitions. Very important are the social policies that facilitate the continuous employment of women along their life course, such as public childcare. Denmark has a relatively universalistic pension system, along with a childcare infrastructure that allows women to achieve an employment profile favourable

to continuous pension contributions and the acquisition of pension rights. Although a high percentage of women work part-time, low earnings do not affect the social pension. Therefore, it can be expected that the female Danish pensions are not particularly reduced in the case of part-time or intermittent careers. On the contrary, Germany and Italy have lower female employment rates and possess a pension system which strongly links the contribution history to pension benefits. As a result, it could easily discriminate against women with domestic responsibilities or instable working history, leading them to remain longer in the labour market to achieve an adequate pension. Ginn and Arber (1992), argue that

"those who are for any reason disadvantaged in the workplace, particularly women with domestic responsibilities, are more likely to receive an adequate pension in countries where the pension system is similar to the "basic security model" (like Denmark) rather than the "income security model" (Germany) or "residual" one (United Kingdom)" (1992, 268).

Therefore, countries with universal pension schemes would be better compensated for atypical careers. For these reasons, it is expected that, in a Social-democratic welfare regime, such as the Danish one, female employment rates will be relatively high during the entire life-course, thanks to work-life balance policies, public childcare services, and many part-time job opportunities. At the same time, the universalistic pension system tries to amortize the "costs" accumulated during the life course (in terms of pension benefits or savings) by women with discontinuous or part-time careers thanks to the basic pension scheme. For this reason, it is expected that the timing of retirement will be not particularly influenced by working trajectory's characteristics: having worked continuously full-time rather than with some periods of part-time or inactivity should not affect the timing of withdrawal from the labour market, precisely because of the universalist welfare regime's balance effect. On the contrary, it is expected that in Italy, where there are neither strong work-life balance policies, nor strong "balancing" effects of the

pension system, unstable working careers will have an influence on retirement decisions, leading women with this type of career to a higher retirement age than women with continuous and full-time careers. As for Germany, where female participation in part-time work is higher than in Italy, women could have more continuous (even if atypical) careers. Despite this, the pension system does not seem to balance the disparities experienced during working life. Therefore, even in this case, differences with Denmark are likely. To conclude, it is expected that:

H3: The "compensation hypothesis" will be less relevant in Denmark compared to Germany and Italy.

2.3. Data and methods

2.3.1. Data

The empirical analyses use data from the Survey of Health, Aging, and Retirement in Europe (SHARE). SHARE is a longitudinal survey investigating the lives of the older European population at age 50+ (see Börsch-Supan, Jürges, 2005). Since 2004, seven waves of investigation were conducted, and included more than 140,000 individuals and their partners in 27 European countries. SHARELIFE are the third (2008/ 09) and the seventh (2017) waves and deviate from the regular modules since they are retrospective studies of the respondents' life history. Brugiavini et al. (2013); Antonova et al. (2014) and Brugiavini et al. (2019) transformed the employment history variables into a long data format, the Job Episodes Panel (JEP), based on information of SHARELIFE. It comes in the form of a retrospective long panel and contains the labour market status of each respondent throughout her/his life. I use the JEP specifically to reconstruct the working sequences[2]. For the discrete-time

[2] Although the employment history is surveyed after the dependent variable, the chronology of events is in the right order. Since SHARELIFE waves do not provide current information and only retrospective events, the sample is constructed by

event history analysis I will be using the other five waves of the panel (1, 2, 4, 5, 6) and the panel part of wave 7. Indeed, the Wave 7 questionnaire contains the retrospective questionnaire for all respondents who did not participate in Wave 3, as well as a regular panel questionnaire for all respondents who already answered a SHARELIFE interview.

2.3.2. Methods

Analytical strategy. The data analysis section will be divided into two parts. In the first part, sequence analysis and cluster analysis (Abbott 1995; Abbott, Tsay 2000) will be used in order to reconstruct the female working careers and to identify the most frequent career clusters. This part will be performed across a pooled country sample to first examine, how are distributed the proportions of German, Italian and Danish women in each working cluster.

In the second part of the analysis, I will relate the working careers to retirement timing through survival analysis techniques. In this part, the hypotheses (1 and 2) will be tested through a discrete-time logistic regression in which the main independent variable (in addition to age) will be the career trajectory. In this case, to test also the third hypothesis, I explored the extent to which working patterns led to significantly different retirement outcomes in different institutional context by performing regression analysis for each country separately. Finally, for robustness checks I also conducted the regression on a pulled country sample, adding interaction effects between career trajectories and country (see Appendix 1).

Sample selection. As the literature has shown, there is no exclusive definition of retirement (e.g., Ekerdt, DeViney 1990). This study defines retirement as definite exit from lifetime employment after age 50. Work-exit events are observed for persons who self-classify as “retired”.

Sequence analysis and regression models have been applied to the same sample of individuals, which I selected as population of interest. The initial

identifying first the population of interest in waves 1, 2, 4, 5, 6 and 7. Then information about employment history is added to this sample.

sample included 136.402 individuals (45%men and 55% women). I selected person that could be at "risk" of experiencing the transition to retirement during the periods of observation (from wave 1 to wave 7). Since SHARELIFE does not provide current information and only retrospective events, the sample is constructed by identifying first the population of interest in the regular panel waves.

In order to be part of the population of interest, individuals must have worked for pay at some point after turning 50. Thus, I excluded people that were in pension (number of dropped cases=67.854) or permanently sick or disabled (number of dropped cases=4.558) during the first wave of appearance. Subsequently, I excluded people that did not participate in the labour market in any of the regular panel waves (number of dropped cases=11.676) and men (number of dropped cases= 24.832). Moreover, I selected women from the three countries of interest (number of dropped cases=16.184). Then, information about employment history (SHARELIFE) is added to this sample. At this point, when matching the regular panel waves with the retrospective information (SHARELIFE) 1.297 respondents could not be matched. Moreover, I did not include respondents with less than five lifetime years of work from age 20 to age 50 (number of dropped cases=335), since people who were inactive during most of their life are often excluded from the population of interest because the notion of retirement presupposes prior work (Radl 2014). Including only persons with non-missing information in the multivariate analyses, I arrive at the sample of 2,669 women form 3 European countries: Italy, Denmark and Germany.

Sequence Analysis. Most of the classical methodological tools for the studying of longitudinal data focus on a single event, instead of patterns or trajectories (Scherer 2001). In contrast, sequence analysis takes into account the whole career path, and makes it possible to treat data in a holistic way. Moreover, sequence analysis is a useful tool for the study of longitudinal trajectories because it allows a reduction of complexity and a creation of order from a large variety of individual sequences (Hansen, Lorentzen 2018). Indeed,

the main purpose of this technique is to detect the order, or patterns, in a sequence of events or states that are observed for a given set of actors (Cornwell 2015).

Sequence Analysis normally proceeds in different steps: first, the data are coded using an alphabet of states that is useful to construct the sequences; then, a cost matrix is defined, and an algorithm is applied, resulting in a matrix of distances between all pairs of sequences. This matrix is then analysed with a data reduction method like cluster analysis (Abbot, Tsay 2000).

The difference between a given pair of sequences is determined by quantifying the effort needed to transform one sequence into the other. This requires a series of transformations. There are several approaches aiming at successfully performing this calculation. Some of them consider the order of the events to be more important than the timing, while others consider timing to be more important than order (Lesnard 2010). I chose the Hamming distance algorithm[3]. Hamming (1950) proposed measuring the dissimilarity between two sequences by the number of positions with non-matching states. Since the Hamming distance proceeds by a position-wise comparison, it applies only to pairs of sequences of the same length and is very sensitive to timing mismatches (Struffolino, Zaccaria 2016).

It is then possible to perform a cluster analysis on the resulting distance matrix, which allows homogeneous groups of sequences to be created, which, taken together, represent types of trajectories. For this purpose, I used ward cluster analysis (Ward 1963). To determine the most appropriate number of clusters, I considered several cluster cut-off criteria, including the Average Silhouette Width (ASW)[4] and Point Biserial Correlation (PBC) (Hennig, Liao

[3] Results were robust when using Optimal Matching. Because the clustering yielded slightly better cut-off criteria I retain the Hamming Distance for the final specification.
[4] The silhouette is a graphical display for evaluating the quality of different cluster solutions. ‘‘Each cluster is represented by a so-called silhouette, which is based on the comparison of its tightness and separation. This silhouette shows which objects lie well within their cluster, and which ones are merely somewhere in between clusters. The entire clustering is displayed by combining the silhouettes into a single plot, allowing an appreciation of the relative quality of the clusters and an overview of the data configuration. The average silhouette width provides an evaluation of clustering

2013; Studer 2013) that identify the most discriminant number of groups. The ASW ranges between 0 and 1. Higher values indicate a more discriminant grouping. Values >0.25 support that there is a meaningful structure in the data that is captured in the respective grouping (Studer 2013)[5].

The respondents enter the analysis in their 20th year of age and they are followed until their 50th year of age. For the current analysis, five distinct and mutually exclusive work status were defined every year, for a total of 31 years. The variables used to define the status alphabet collect the information about the yearly work status and hours worked (part-time or full time). Therefore, the status alphabet is coded into these categories: undergoing education, part-time worker, full-time worker, unemployed/inactive and retired.

Discrete-time event history analysis. Event history analysis allows the longitudinal study of the occurrence of events in the life course of an individual (Allison 1984). It is a method designed to investigate the probability, or the risk, of experiencing (or surviving to) certain events over the life course, taking into account the impact of different covariates (Mills 2011). It examines how long it takes until the event of interest occurs (Mills 2011). Events are defined as qualitative or sufficiently quantitative changes over time (Blossfeld, Rohwer 2002). Both change and timing are considered and included in the regression (Singer, Willett 2003). The technique is primarily oriented towards the way the hazard of this change is related to timing (given certain characteristics). A positive effect found for an independent variable indicates that this variable increases the hazard of experiencing the event (Denaeghel, Mortelmans, Borghgraef 2011).

Since the time scale in SHARE is by year, discrete time models (Yamaguchi 1991) are preferred here to continuous time models. In particular,

validity, and might be used to select an 'appropriate' number of clusters.'' (Rousseeuw 1987, 1).

[5] All calculations for this part of the analysis were conducted using the R statistical software (R Core Team 2012) along with the libraries TraMineR for the sequence analysis (Gabadinho et. Al 2011) and WeightedCluster for the cluster analysis (Studer 2013).

the discrete variable of this study corresponds to the conditional risk of experiencing (or not experiencing) a withdrawal from the labour market during the period of observation. Different from conventional logistic regression analysis, discrete-time models use multiple observations for each individual in the sample. In this way, each time unit during which an individual is observed contributes to a separate and independent observation of the input data (e.g., Jenkins 1995). Moreover, these models are capable of dealing with censored observation (Yamaguchi 1991). So, the dependent variable in a discrete-time model is the odds that an "event occurs conditional on survival and covariates to some time t" (Mills 2011, 182). In this study, the respondents enter the risk set at the age of 50 (De Preter, Van Looy, Mortelmans 2013; Radl 2014). From that moment on, we consider them 'at risk' of experiencing a transition into retirement. They exit from the analysis at their retirement/censored age. Duration dependency is assessed using age groups variables in the model.

Covariates. The key covariates are the types of employment trajectories across the life course, measured as longitudinal sequences in yearly intervals from age 20 to 50. In addition to the trajectories, I will include data such as age, education, marital status, birth cohorts, type of occupation/last occupation, to have or not grandchildren and self-perceived health status. Age is inserted in a model with 6 classes: until 59, 60, 61-62, 63-64, 65 and 66 or more years of age. The choice of the age brackets follows conceptual considerations regarding the most common age boundaries in pension systems (Radl 2014). Education is measured according to the International Standard Classification of Education of 1997 or ISCED-97 codes and it is coded in 3 categories (ISCED 0 & 1 & 2; ISCED 3 & 4; ISCED 5 & 6). Marital status is a dummy variable that accounts for married and cohabiting couples and it is coded "with partner" or "without partner" (if the respondent is celibate, separated, widow). Birth cohorts are classified into 2 categories: to be born before or after 1950. Presence of grandchildren has been codified in 2 categories: not have grandchildren, to have one or more grandchildren. The occupational status is coded in four categories: legislator, professional and technician; clerk or

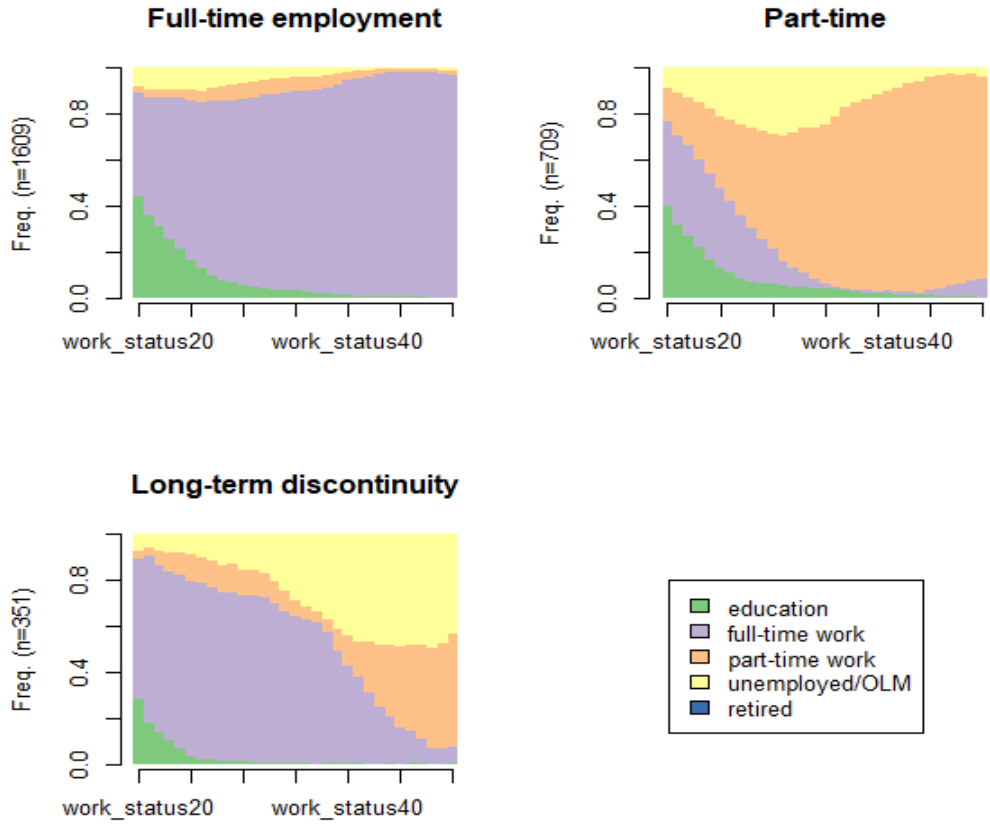
service worker; skilled worker; unskilled worker. Lastly, studies across different countries have linked various measures of health to employment patterns and retirement process (for a review see e.g.: van Rijn et al., 2014), including self-perceived health (Mein et *al*. 2000), poor mental health (Virtanen et al. 2014), health functioning (McPhedran 2012) and chronic disease (Majeed, Forder, Byles 2014). I categorized health status as a dummy variable: excellent or very good/less than very good. Age, marital status, number of grandchildren, occupation, and self-perceived health status are time-varying covariates.

2.4. Results

2.4.1. Working Trajectories

Hamming distance and clustering presented us with 3 distinct clusters, as showed in the figure. The transversal state distribution plots highlight the aggregate state distribution at any point in time and it is a valuable tool to present and visualize the characteristics of each cluster. Unlike sequence index plots, where the sequences of each individual are stringed chronologically, state distribution plots reduce individual information to general proportions, thus facilitating interpretation (Ponomarenko 2016).

Fig. 1. Working trajectories (20-50 years of age). State distribution plots, 3-cluster solution.



Cluster 1 – *Continuous full-time employment* – It is characterized by long and stable work sequences. In this cluster, women enter early into the labour market with a full-time job and remain in this position during their entire life-course. This cluster accounts for 60% of women.

Cluster 2 – *Mainly part-time* – It is characterised by some periods of full-time work at the beginning of the sequences, followed by part-time work. We are able to notice that women in their 30s spend some years out of the labour market and then re-enter it with a part-time job. Approximately 26% of women followed this trajectory.

Cluster 3– *Long-term discontinuity* – It is characterized by long periods outside of the labour market starting more or less at around 30/35 years of age. Those periods can be followed by some years of full-time or part-time work at

the end of the working period. Almost 13% of the sample followed this trajectory.

Across clusters, there are quite large differences both in the proportion of levels of education, and in the proportion of Italian, Danish and German respondents (Table 1) which indicates different female working life courses in my study sample across three countries.

Tab. 1 *Descriptive information of three groups of working trajectories.*

	Full-time	**Part-time**	**Long-term disc.**	**Total**
%	60.3	26.6	13.1	100
N	1.609	709	351	2,669
Country				
Germany	44.6	38.6	16.8	100
Italy	71.9	15.0	13.2	100
Denmark	69.2	21.4	9.4	100
Education				
Isced 0/1/2	58.5	23.7	17.8	100
Isced 3 & 4	54.4	29.6	29.6	100
Isced 5 & 6	68.0	24.4	7.6	100
Employment state, mean duration in years				
Education	2.5	2.3	0.9	0.4
Full-time	25.7	4.1	15.9	25.1
Part-time	1.3	19.7	5.3	2.4
Unemployed/Olm	1.5	4.9	8.9	3.0

Clearly, the "full-time trajectory" is the most followed career pathway in each country, especially in Italy, which has the lowest percentage of participants in the part-timer group. On the contrary, in Germany and Denmark the part-time group is strongly represented. The “long-term discontinuity” cluster is evenly distributed between Germany and Italy, with a lower share in Denmark.

2.4.2. Discrete-time logistic regression

In this part, I intend to present the results for the logistic regression. Firstly, I will present some descriptive results; subsequently I will perform different regression models for each country cluster, presenting the Average

Marginal effects (Mood 2010)[6]. The distribution of the dependent and independent variables (last individual observation for the time-varying ones) is displayed on Table 2. As can be observed in the table, around the 18% of the sample made the transition to retirement during the observation period. Furthermore, the majority of the women in the sample have a medium educational level, work in the tertiary sector and have a partner.

Tab. 2. *Distribution of the independent and dependent variables (last year of observation).*

	%–mean, (*s.e.*)
Education	
ISCED 0/1/2	18.3
ISCED 3 & 4	43.4
ISCED 5 & 6	37.8
Birth cohort	
Born after 1950	75.5
Current marital status	
Partnered	73.0
Single, divorced, widow	27.0
Have grandchildren	
Yes	50,5
Current occupation/Last occupation	
Legislator, Professional, Technician	20.3
Clerk or service worker	65.7
Skilled worker	5.7
Unskilled worker	8.3
Self-perceived health	
Less than very good	57.9
Country	
Denmark	38.1
Germany	38.7
Italy	23.1
Age	58.4
	(*0.1*)
Retirement transition	
Yes	18.5
N	2,669

[6] The gender-specific analysis show that the work clusters are more heterogeneous for women than men and that particularly matter for women's retirement timing (see Appendix 2).

A synthesis of the average retirement age -by career trajectory- is provided in Tab. 3., for each country. The average retirement age is higher in Denmark then in the other two countries, with a difference of about 2.5 and 0.3 years compared to Italy and Germany, respectively. As far as work trajectories are concerned, in Italy women with a "Long-term discontinuity" pathway have a considerable higher retirement age than women with other working pathways (+1,5 compared to FT and +1 compared to PT). Otherwise, in Denmark, women with a full-time trajectory have a higher retirement age than women in one of the other pathways, even if with a very little difference. In Germany, the discontinuous pathway presents the highest retirement age, but the difference with the other clusters is less marked than in Italy.

Tab. 3. *Mean retirement age (standard error) by country*

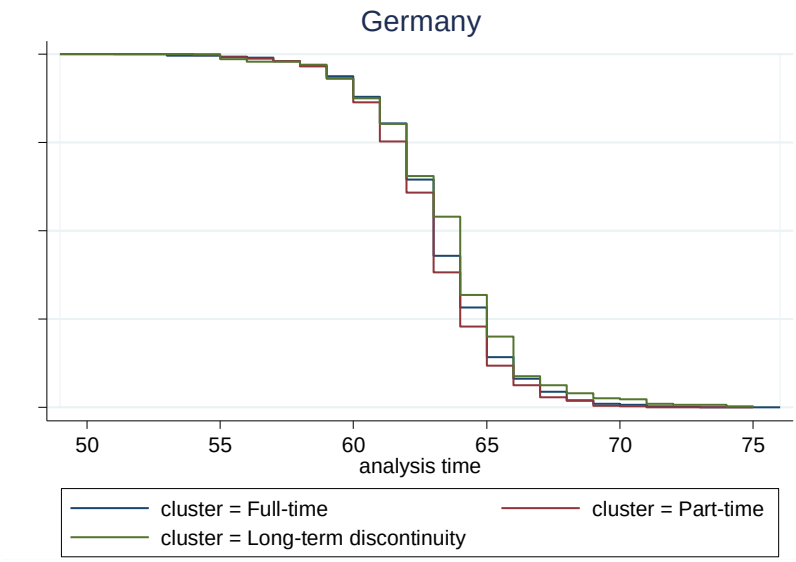
	Germany	**Italy**	**Denmark**
Full-time employment	63.7 (0.1)	62.3 (0.2)	64.1 (0.1)
Mainly part-time	63.3 (0.1)	62.8 (0.3)	63.9 (0.1)
Long-term discontinuity	64.5 (0.2)	63.8 (0.5)	63.8 (0.3)
Total	63.7 (0.1)	62.5 (0.2)	64.0 (0.1)

The next graphs (1; 2 & 3) show the Kaplan Mayer survival curves by employment trajectories, for each country separately. A survival curve is a statistical picture of the survival experience of some individuals with respect to an event, showing the percentage surviving versus time. The vertical (or Y) axis expresses the proportion of surviving people. The value is a fraction which runs from 1 at the top to zero at the bottom, representing 100% survival to 0 percent survival at the bottom. The horizontal (or X) axis indicates the time after the start of the observation or experiment.

The following graphs picture survival estimates for women who experience the transition to retirement between the age of 50 and 75 years. The first picture (fig. 2) shows the results for Germany. The three pathways have (more or less) the same survival curve: the different clusters seem to have the same proportion of surviving people over time. This outcome means that

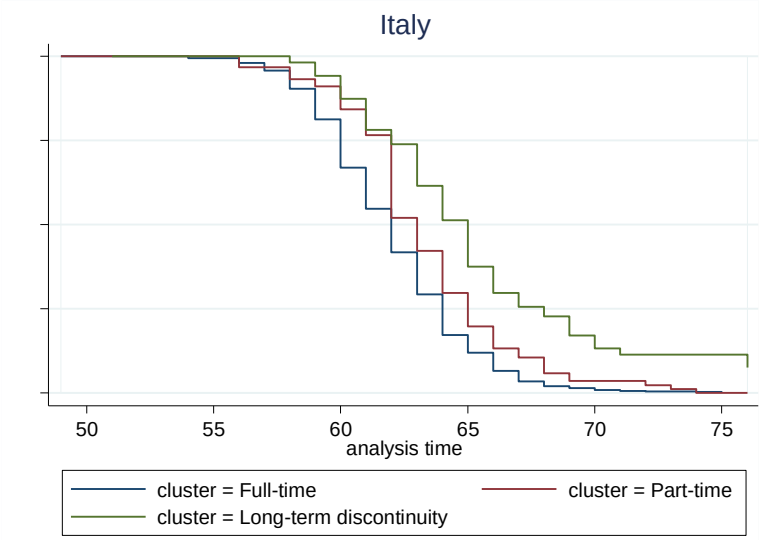
women in the three groups retire at the same ages, and that, at a first analysis, there are not significant differences between pathways.

Fig. 2. *Survivor Curve of Retirement Transition by employment trajectories, Germany*



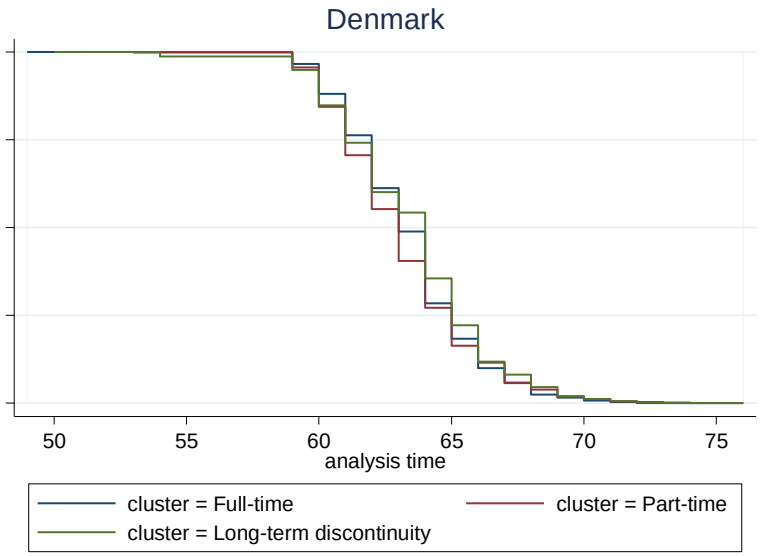
In Italy (fig. 3), the pattern is quite distinct: the full-time group presents the fastest curve. The part-time trajectory descends slower than the full-time one, in particular before age 62. After this point, it approaches the full-time curve. As for the discontinuous pathway, it presents the biggest gap - which increases with time passing- with the full-time group. For example, if we examine the curves at 65 years of age, we notice that around 80% and 75% of women retire in the full-time and part-time pathways respectively, while only 50% of those in the discontinuous cluster exit the labour market at the same point.

Fig. 3. *Survivor Curve of Retirement Transition by employment trajectories, Italy.*



Finally, in Denmark (fig. 4), the curves are quite close together. The trend is similar to that of Germany.

Fig. 4. *Survivor Curve of Retirement Transition by employment trajectories, Denmark.*

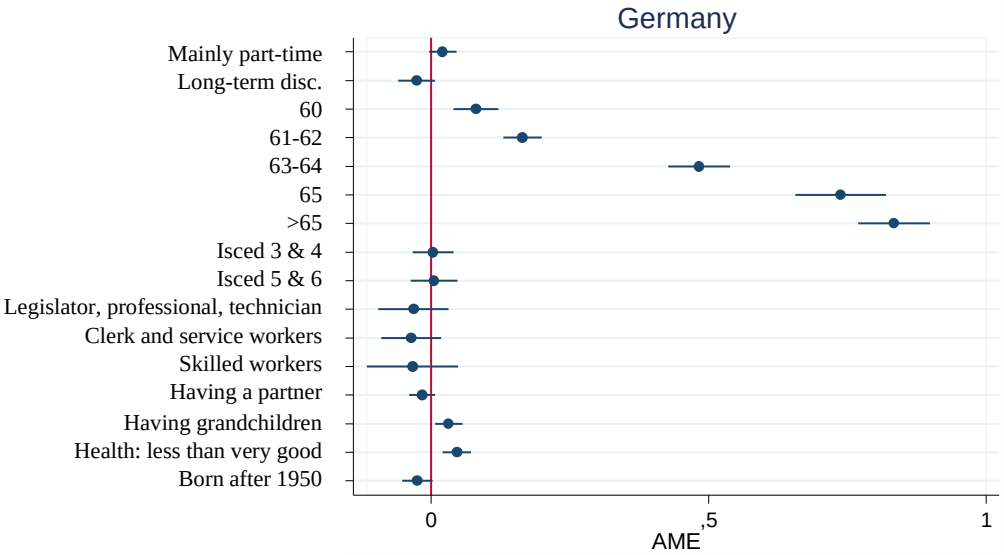


Figures 5, 6 and 7 show the results of the discrete-time logistic regression models on the probability to retire after age 50, for each country. I

added the main independent variables (career trajectories) to the model, and controlled for the individual characteristics (marital status, education, current/last occupation, age groups, to have grandchildren and birth cohort).

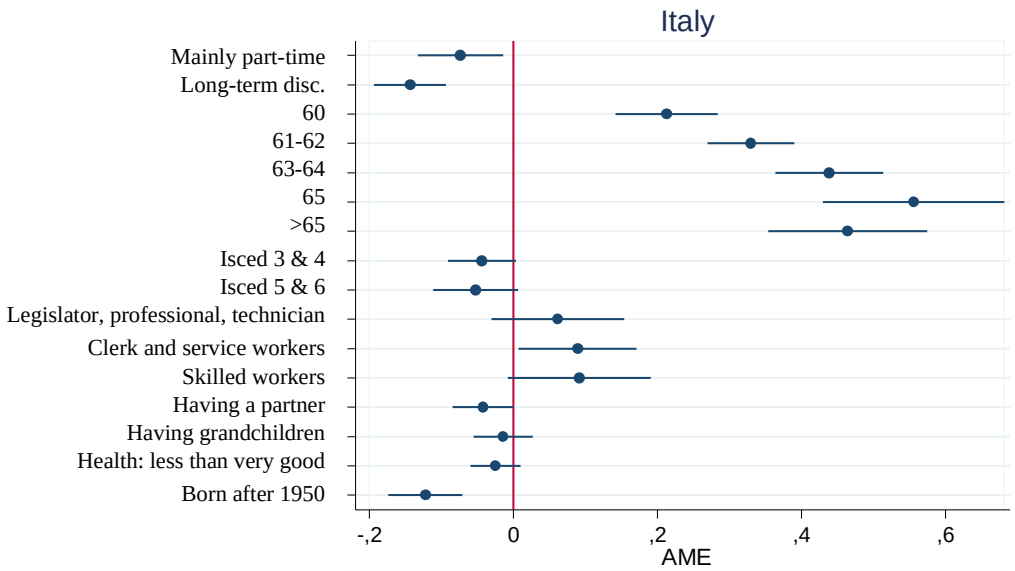
In Germany, having had a career trajectory characterized by long-term discontinuity is negatively but not significantly associated with a lower probability of exit from the labor forces compared to the full-time pathway. The part-time group shows a higher, although not significantly so, probability of retirement (p-values are 0.097 and 0.130 respectively for the part-time and the discontinuous pathways). Furthermore, results on the probability of retirement driven by marital status are not significant but suggest a slightly lower likelihood for not partnered women. Education levels are not significant as well as the occupation carried out and, being born after 1950 lead to a lower probability of retirement. To have one or more grandchildren is associated with a higher likelihood of retirement, as well as to have a bad health status. Lastly, the more the age increase, the more the retirement probability significantly increases.

Fig. 5. *Discrete time logistic regression model estimating the probability of being retired for Germany. Average marginal effects, confidence intervals 95%.*



In Italy, the "long-term discontinuity" pathway and the "part-time" cluster are negatively and significantly associated with the probability of exit from the labour force (evidence for H2). The highest coefficient belongs to the former. Again, education is not statistically significant, as well as marital status and to have grandchildren. However, having a high educational level suggest a negative effect on the retirement probability. In this case, occupation seems to matter. Higher occupational status suggests a higher probability of retirement compared to the reference categories (unskilled workers), but only the clerk and service workers show a significant effect. Finally, being born after 1950 is significantly and negatively associated with the probability of experiencing retirement transition. Again, higer ages correspond to higher retirement probability.

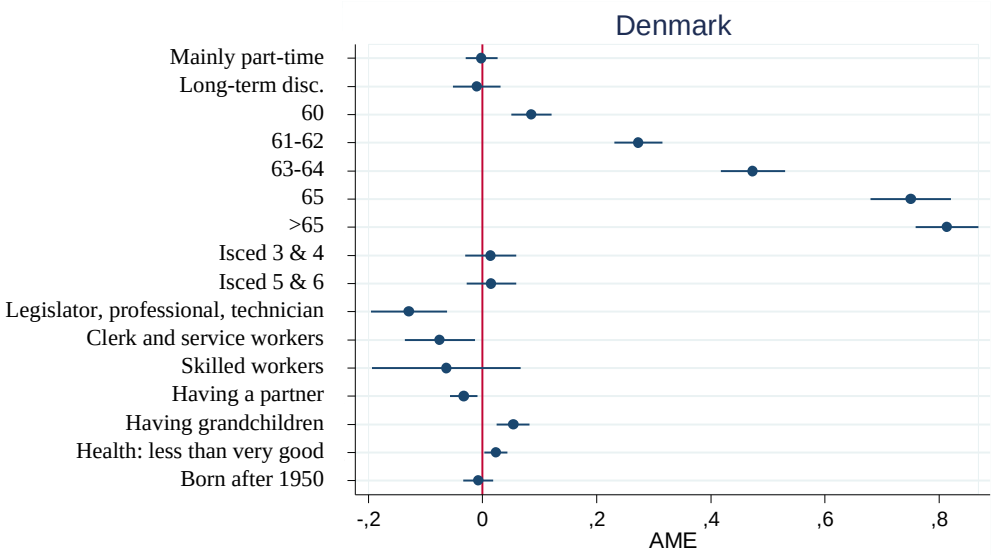
Fig. 6. *Discrete time logistic regression model estimating the probability of being retired for Italy. Average marginal effects, confidence intervals 95%.*



As for the Danish case study, having had a career trajectory different from the "full-time employment" seems to have neither a large nor a significant effect on the probability of exit from the labor forces (evidence for H3). Results on the probability of retirement driven by marital status are negative

and significant for unpartnered women (single, divorced, widow), and being born after 1950 leads to a lower, but not significantly so, probability of retirement. Moreover, once again the educational level does not show significant effects. Regarding the occupational status, the higher it is, the lower is the retirement probability (not significant effect for the skilled workers). Finally, to have grandchildren increase the likelihood of exit from the labour market, as well as a bad health status.

Fig. 7. Discrete time logistic regression model estimating the probability of being retired for Denmark. Average marginal effects, confidence intervals 95%.



2.5. Discussion and conclusion

Traditional family structures and gender roles, the structural division of paid employment and access to social security influence the way women respond to retirement. This research shows that retirement is a heterogeneous concept and that women implement retirement in various ways. Since women's careers are complex, they often include paid work, housework, volunteering, community work, and caring for spouses and other family members (O'Neil et

al. 2008; Pringle, McCulloch Dixon 2003), perhaps it should be no surprise that their retirement experiences are influenced by their career. Indeed, this research is consistent with several studies (Han, Moen 1999; Radl 2013; Raymo et al. 2010; Bardasi, Jenkins 2002; Pienta 1999, Lanninger, Sundström 2014; Hinrichs 2012, O'Rand, Henretta 1999; Konig 2017) which claim that the fragmented nature of many women's career patterns or part-time work may mean a later career end.

The occupational trajectories identified in this sample seem to produce different career modalities, always in relation to other determining factors. In line with the life course perspective, health, relationships, education, etc., all play a role in shaping the course of life and also results in later life.

Through the clusters found, it seems possible to identify three different characterizations of career trajectories. The first group are women who have a continuous and full-time career, which is not interrupted for care tasks or other needs. The second group is made up of women who remain in the labour market almost continuously (except for a few years), but with a part-time job. Finally, there are the women who leave the labour market for long periods, probably at the birth of children or marriage. These groups are differently distributed across country and have a different relationship with the retirement timing depending on the country in which they are located. Indeed, looking at the separate models by country, I found evidence for hypothesis H2 (“compensation hypothesis”) in Italy where the results suggest a negative and significant probability of retirement for the discontinuous and part-time clusters compared to the full-time employment trajectory. Regarding Germany, the results are different: the coefficients for the part-time pathways is lightly positive but not statistically significant, whereas the discontinuous pathway shows a little negative and not significant coefficient. In Denmark, the coefficients for both the atypical pathways are not significant and really close to zero.

This result could have diverse explications: looking at the welfare context, the “compensation hypothesis” might be less relevant (H3) in Denmark, and to some extent in Germany. In these countries, the structure and the rules of the

welfare state and the pension system might be very significant. In particular, in Denmark, the equalizing effects of the welfare system concern two aspects: on the one hand, they work through work-life balance policies that allow for a balance between work and family commitment and consequent stable participation of women in the labour force during the entire life-course. On the other hand, they operate through a "women-friendly" pension system that makes it possible to balance the costs accumulated during career breaks or atypical employment, thanks to the public scheme. These characteristics limit the significance of the “compensation hypothesis” here. In Germany, the results suggest that the differences between pathways are again less marked than in Italy: women in the discontinuous pathways have to some extent a lower probability to retire compared to those in the full-time cluster, but there is no statistical significance. Instead, the part-time pathway suggests a positive (but not significant) effect on the retirement probability.

Therefore, I can conclude that, at an individual level, the career trajectories matter for the retirement timing, particularly in Italy where women with a discontinuous or part-time career are likely to have more difficulty in accumulating pension benefits or savings during their career. For this reason, they may be "forced" to stay in the labour market longer.

Although this research has offered insights into the different nature of retirement and how career pathways affect retirement timing, further research is desirable. The magnitude of the differences between career paths supports the demands of an intersectional perspective which argues that gender alone does not explain the nature of women's careers (Korpi et al. 2013; Duberley, Carmichael 2016). Indeed, it has been recognized (Evetts 2000) that women respond to cultural and structural forces in different ways, depending on their capital resources. Therefore, although other factors such as poor health and divorce influenced retirement, perhaps not surprisingly, women who have followed traditionally male, professional career paths seems to have more choice about how they intended retirement (Duberley, Carmichael 2016), at least in Italy. This demonstrates the importance of the cumulative

advantage/disadvantage life course theory in explaining women's experiences and retirement expectations.

The life course approach adopted in this study provides a valuable means of tracing the impact of events throughout life on subsequent life experiences. Future research could usefully extend the sample and explore the differences between the retirement experiences and timing of women from other institutional contexts or the differences between men's and women's retirement timing. Indeed, given the higher levels of flexibility and fragmentation of work for both male and female workers (Rubery 2015), we could expect to see greater diversity in careers for both groups which will potentially create increasingly individualized retirement experiences (Duberley, Carmichael 2016). Furthermore, given the relational nature of women's careers, future research should take into account the family context of retirement and the interconnected pathways of couples across the domains of work and family (Hank, Korbmacher 2013; Loretto, Vickerstaff 2013).

Appendix 1

Table A1. *Discrete-time Event History Model with interaction terms, Retirement Transition.*

	Coef.	P>z	C.I. min	C.I. min
Career trajectory (ref. Full-time)				
Mainly part-time	-1,21	0,010	-2,12	-0,29
Long-term discontinuity	-2,40	0,000	-3,30	-1,49
*Interaction Effects Country*Cluster*				
Germany*Full-time (ref.)				
Germany*Pt	1,40	0,005	0,43	2,36
Germany*Disc.	2,07	0,000	1,08	3,06
Denmark*Full-time (ref.)				
Denmark*Pt	1,27	0,011	0,29	2,25
Denmark*Disc.	2,33	0,000	1,29	3,38
Country (ref. Italy)				
Germany	-0,40	0,050	-0,80	0,00
Denmark	-0,38	0,051	-0,77	0,00
Age class (ref. Until 59)				
60	2,44	0,000	2,08	2,80
61-62	3,34	0,000	3,05	3,64
63-64	4,45	0,000	4,14	4,75
65	5,55	0,000	5,16	5,93
>65	5,79	0,000	5,41	6,16
Education (ref. Isced 0/1/2)				
Isced 3 & 4	-0,16	0,368	-0,51	0,19
Isced 5 & 6	-0,17	0,368	-0,53	0,20
Job or last job (ref. Legislator, professional, technician)				
Clerk and service worker	0,44	0,005	0,13	0,75
Skilled worker	0,60	0,073	-0,05	1,25
Unskilled worker	0,58	0,053	-0,01	1,17
Marital status (ref. Partnered)				
Not partnered	-0,38	0,001	-0,60	-0,16
Grandchildren (ref. No)				
1	0,25	0,128	-0,07	0,57
2+	0,38	0,001	0,14	0,61
Birth cohort (ref. Before 1950)				
After 1950	-0,39	0,001	-0,62	-0,17

Appendix 2

Fig. A2. Working trajectories (20-50 years of age). State distribution plots, 3-cluster solution, men.

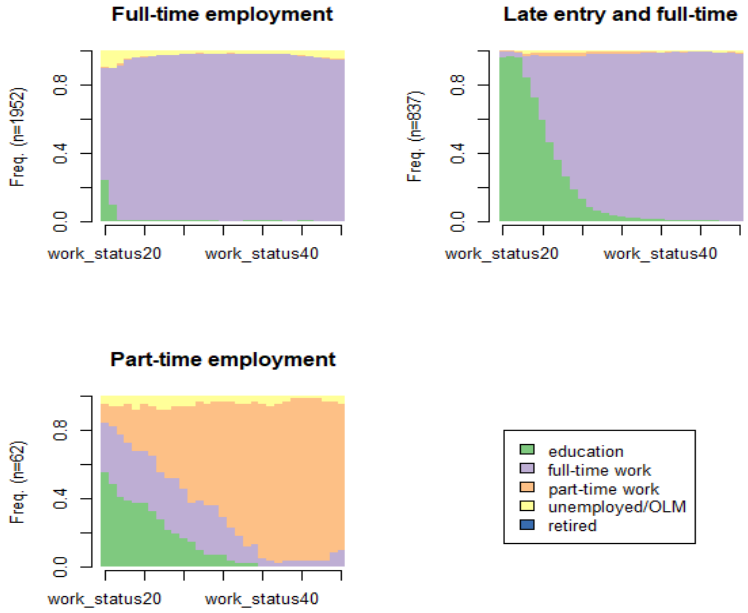
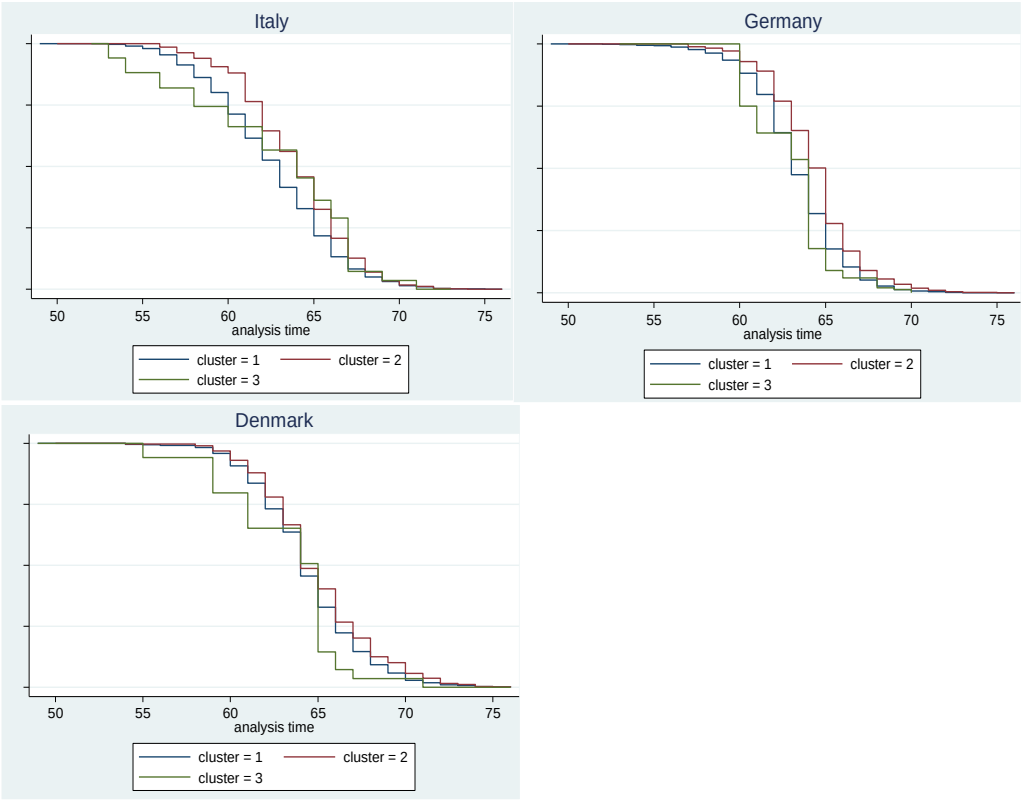


Fig. A2.2 Survivor Curves of Retirement Transition for men, by employment trajectories.



Tab. A2. Discrete time logistic regression model estimating the probability of being retired for men over countries. Average marginal effects, confidence intervals 95%.

	Italy	Denmark	Germany
Career trajectory (ref. Full-time)			
Late entry and full-time	-,03	-,02	-,04*
Part-time	-,05	,01	,03
Age class (ref. Until 59)			
60	,14***	,07***	,05**
61-62	,24***	,16***	,16***
63-64	,32***	,31***	,46***
65	,41***	,60***	,72***
>65	,74***	,71***	,89***
Education (ref. Isced 0/1/2)			
Isced 3 & 4	,02	-,00	,04
Isced 5 & 6	,01	,03	,02
Job or last job (ref. Legislator, professional, technician)			
Clerk and service worker	,03	-,12***	-,00
Skilled worker	,02	-,06*	-,05
Unskilled worker	,06	-,05*	-,06*
Marital status (ref. Partnered)			
Not partnered	,03	-,01	-,01
Having grandchildren (ref. No)			
Yes	,03	,01	,02
Self-perceived health (ref. excellent/very good)			
Less than very good	,03	,03*	,04***
Birth cohort (ref. Before 1950)			
After 1950	-,03	-,00	,04**

CHAPTER 3

3. EXPLORING THE RELATIONSHIP BETWEEN WORKING HISTORY, RETIREMENT TRANSITION AND WOMEN'S LIFE SATISFACTION

3.1. Introduction

As anticipated, the transition from work to retirement is an important event in later life. The way individuals adapt to retirement has been focus of interest for researchers in various scientific disciplines, such as epidemiology, psychology and sociology. The nature of retirement has changed enormously over the past few decades. Until 1960, retirement was generally considered a "crisis" event, creating a challenge to personal well-being (Van Solinge, Henkens 2008). Nowadays, retirement is commonly seen as a new phase of life which offers opportunities for the development of new identities, roles and lifestyles (Mein et al. 2003; Wang 2007). It is no longer associated with a conclusion (limited social roles, declining health, etc.), but can be described as the beginning of a third age of adulthood (Freedman 1999). This change in the nature of retirement, also due to the continuous increase in in life expectancy, the better health status of the elderly and their willingness to remain active in families and communities roles, have increased the academic interest in the nature of retirement transition and how people live in retirement (Price, Nesteruk 2010). However, the investigations that focused on this topic arrived at mixed results, and few studies specifically focused on women. Current knowledge about the issue is primarily focused on men or gender comparison (Price, Joo 2005). Nevertheless, it could be important to study the female retirement adaptation as a stand-alone phenomenon since the whole process of retirement could be a different experience for women and men, in part because of the differences in their attachment and participation to the labour force. When men leave their jobs, they are exiting from a role that has typically dominated their adult years. Women, however, commonly experience greater discontinuity, moving in and out of the labor force, in and out of part-time jobs,

in tandem with family responsibilities (Clausen, Gilens 1990; Moen 2001; Sorensen 1983).

A further limitation of previous analyses in studying the relationship between the transition to retirement, subjective well-being and the characteristics of the work history, is that the information on work or employment has often been limited to a specific time-point, such as the last work before retirement, without taking into account the influence of the entire working life course. This strategy conflicts with one of the key principles of the life-course perspective, which suggests the incorporation of individual events into the different life trajectories and the consideration of their length and development (Elder, Johnson, Crosnoe 2003).

The main goal of this chapter is to investigate the change in subjective well-being of European women before and after the retirement transition, using SHARE data. I am interested in understanding the change in quality of life, and how different pre-retirement working trajectories are associated with it. Women's work status (full-time, part-time, inactivity and unemployment) will be observed during their entire life course; and then the career's structure will be related to the variation in well-being associated with the withdrawal from the paid labour market. At the methodological level, sequence analysis and panel analysis techniques will be implemented.

3.2. Theoretical framework

Retirement is an important event that represent the start of a new life stage in which work is no longer dominant and new opportunities, positive and negative changes can happen. Individuals have to adjust to this life changes and pursue to achieve psychological well-being in retirement (Van Solinge 2015). Furthermore, the retirement process itself is changing and it is transforming. In periods of high unemployment, in most Western countries older workers were frequently pushed into early retirement to enable younger workers to enter the labour market (Buchholz et *al*. 2011; Ebbinghaus 2006) and to keep the workforce competitive and adaptable to economic transformation (Buchholz et *al*. 2011). However, due to population ageing and

the increasing financial burden of pensions, a reverse trend can be observed since the beginning of 2000 (Konig 2017; Ebbinghaus and Hofäcker 2013). That is, in recent years, many countries have had the goal of keeping older workers in the workforce by closing paths to early retirement (Konig 2017). On the other hand, the increase in longevity means that retirement is becoming more a midlife transition rather than a transition to old age; and retiring people often acquire new roles, continue to take on other roles (e.g., friend or spouse) and develop new identities (Kim and Moen 2001).

Research on the effects of retirement on wellbeing showed very mixed and inconclusive conclusions (Pirani, De Santis, Zanasi 2021). Some studies indicate that retirement is basically good for individual physical and psychological health (Latif 2011; Reitzes, Mutran, Fernandez 1996; Isaksson, Johansson 2000), whereas the opposite effect has also been empirically supported (Kim, Moen 2002; Richardson, Kilty 1991). Yet again, there are studies suggesting that retirement has virtually no implications at all for post-retirement wellbeing (Crowley 1985; Warr et al. 2004; Luhmann, et al. 2012) or that the relationship is not significant (e.g., Van Der Heide et al. 2013). Several explanations may lie behind these conflicting results. At the theoretical level, conflicting mechanisms may be involved (Pirani, De Santis, & Zanasi, 2021). On the one hand, retirement can lead to a rupture with support networks, colleagues and friends and can be perceived as a shock by the individual (Pirani, De Santis, & Zanasi, 2021). By exiting the labour market, people can lose the sense of belonging and utility they felt when they were employed, with negative consequences on cognitive functions (Lee et al. 2019; Mazzonna, Peracchi 2012), perceived health and well-being. On the other hand, retirement could be a relief from work-related stress involved (Pirani, De Santis, & Zanasi, 2021) and work-family balance conflicts and can encourage healthy behaviours (Eibich 2015; Insler 2014). This can ameliorate physical and mental health (Syse et al. 2017) and life satisfaction (Horner 2014).

Another reason could be found at the methodological level. Indeed, many studies on retirement adjustment rely on cross-sectional designs, comparing differences in quality of life between workers and retirees (e.g., Drentea 2002;

Herzog, House, Morgan 1991; Midanik et al. 1995). However, this kind of data do not allow to observe the intraindividual well-being changes during the retirement transition (Wang 2007). For this reason, it is necessary to adopt a longitudinal desing in studying individuals' variation in wellbeing. Indeed, dynamic, longitudinal analyses can capture the process of moving from a job to retirement and can clarify the evolving consequences of this transition (Kim, Moen 2001).

The major theoretical perspectives that have been applied as frameworks to study this heterogeneity in retirement adjustment include role theory and continuity theory (Wang et al. 2011). Both theories reason about the function that social roles - both working and extra-working roles- play in defining the identity of the individual. Coming to different conclusions, both theories address the consequences that losing a role can have for a person's adaptation and well-being. These theories have often been integrated with a life-course approach, which allows us to study retirement as a transition inserted in a lifelong process and not as a result of an isolated time-point. All these perspectives could be seen as complementary rather than contradictory because they focus on different aspects of the retirement adaptation process (Van Solinge 2015).

3.2.1. Role theory

Role theory has been often used as a framework in order to understand retirement adjustment and in particular the post-retirement psychological well-being. This theory suggests that some socially and personally relevant roles are important to build the self-identity (Moen, Erickson, Dempster-McClain 2000; Petters, Asuquo 2008). They can emerge through the relationship with neighbours, from work activities, family etc. Therefore, society is structured around various roles, which prescribe norms and expectations for both behaviours and attitudes (Richardson, Kilty 1991). Individual differences in adaptation to roles change can be understood by examining variations in different life transitions.

Since leaving the workforce requires a change of roles and activities, this approach can be applied to the retirement process as well. Therefore, retirement is seen as a transition that involves an expansion, redefinition and change of roles. Hence, differences in post-retirement well-being can be attributed to individual ability to react to those changes.

The influence that the loss of role has on individual psychological well-being depends on the importance of that role during the life course and the availability to find other satisfactory replacement roles (Carter, Cook 1995). In fact, in so far as a person is strongly committed to a particular role, feelings of self-esteem tend to be associated with the ability to perform that role effectively (Ashforth 2001). Role theorists argue that the "rolelessness" -or a bad adaptation to the new role of pensioner- can cause people to feel unhappy, anxious, or depressed. This dynamic can lead to low levels of well-being in the post-retirement period (Riley, Riley 1994), and life after retirement could be perceived as less satisfying than life before that transition. Indeed, researchers have found evidence that role loss is associated with decreased life satisfaction (Fry 1992) and it is linked to poorer adjustment (van Solinge, Henkens 2008) as well as elevated levels of stress, depression, and anxiety (Adams et al. 2002; Moen, Dempster-McClain, Williams 1992). In general, work and employment relationships are considered an important source of identity, and their loss could have negative consequences on the well-being of the individual, also in accordance with the level of development of the other life spheres (Jæger, Holm 2004).

3.2.2. Continuity theory

The continuity theory, proposed by Atchley (1971), supports the idea that work is not as crucial for our self-concept and identity as role theory implies. We tend to form our identity out of multiple sources and roles. Even though job-related roles and activities are lost, other sources to build one's identity remain, such as family and non-work-related social networks. Then, the coherence of life patterns over time is emphasised: There is a continuity of the self-identity in the retirement transition, and this continuity contributes to the

adaptation of the individual to retirement (Atchley 1999). Rather than focusing on retirement as a process of loss of role, continuity theorists describe it as an opportunity to maintain social relationships and life patterns. Therefore, this theory argues that there should be no significant decline in psychological well-being when people move from work to retirement unless they have difficulties in maintaining their general life patterns (Wang et al. 2011). The theoretical assumption of continuity theory is that individuals are regularly guided by existing internal mental frameworks, which make them prone to maintain similar patterns of behaviours across time (Atchley 1999). Individuals tend to preserve their social roles, lifestyles and values even when they retire (Atchley 1976; 1993). In other words, the most common pattern of adjustment in retirement is to maintain the same lifestyle patterns developed prior to retirement (Wang 2007). Dealing with change, aging adults select alternatives that are coherent with their prior social identities and activities, sustaining the sense of self.

It should be noted that this theory does not exclude the existence of psychological stress caused by role exit and role transitions. Instead, it underlines that maintaining continuity is essential for retirees to preserve their psychological well-being. Therefore, individuals who maintain their lifestyle or activities through retirement or who view retirement as a realization of a prior goal should not experience significant decline of psychological well-being during the retirement transition (Wang 2007). Moreover, retirement may offer the opportunity to spend more time in the roles of friend and family member (Reitzes, Mutran, Fernandez 1994), which offer psychological continuity to retirees. These family and community roles may provide social relationships that enable social integration and increases well-being among adults (Reitzes, Mutran 2004). The continuity theory further argues that retirement may offer relief from job pressure and performance expectations. This dynamic may improve psychological well-being. In short, continuity is so important in this perspective, since pre-retirement priorities and activities have more impact on later life than retirement itself.

3.2.3. The life course theory

As we have seen in chapter I, the life-course perspective (Elder, 1995; Elder. Johnson 2003) focalizes on important points for the comprehension of post-retirement well-being: transitions and trajectories; contextual embeddedness; interdependence of spheres of life and timing of transitions (Szinovacz 2003). Transitions refer to change of state over time (e.g., from employment to retirement) and trajectories refer to the development of life in relatively stable states (e.g., employment history). The concept of contextual embeddedness implies that the experience of life transitions and developmental trajectories depends on the specific circumstances in which the transition occurs (e.g., health, career trajectories, social network, etc.), and the principle of interdependence of life spheres emphasizes that experiences in one sphere of life (e.g., retirement life) influence and are influenced by experiences in other spheres of life (e.g., marital or working life) (Wang 2007). A life course perspective emphasizes that retirement is a transition in the context of a lifetime of employment (Quick, Moen 1998), and stresses how individuals construct their life roles, including their careers, framed within the environment and other life domains. In general, the importance of earlier life experiences for explaining behaviour later in life is pointed out (Settersten 2003).

In previous literature, the influence of the working history on retirement adjustment has often been investigated through variables related to employment observed in a precise time-point (for instance, the job from which the individual retired) (e.g., Atchley 1982; Newman, Sherman, Higgins 1982), providing only a snapshot of the work history itself (Quick, Moen 1998). Only a few studies have focused on the cumulative process over the life course by examining life course determinants of late-life outcomes (Ponomarenko 2016). However, they did not specifically focus on women's well-being after retirement. This gap in the literature is remarkable given that work experiences accumulated over the life course could be crucial to shape the consequences of later-life transitions (Bennett, Möhring 2015; Damman, Henkens, Kalmijn 2011). Indeed, the life course principle of agency within the structure (Settersten 2003) postulates that older adults make choices and take actions

within the opportunities and restrictions of their broader social worlds, being influenced by various life domains and personal histories.

Previous labour market experiences vary to a great extent, for instance, concerning the number of years spent in employment, achieved occupational status, and experience of discontinuity in career paths (e.g., Wahrendorf et al. 2017). The accumulation of specific labour market experiences creates opportunities and limitations that drive older adults in their decisions and adaptation after retirement (Dingemans, Möhring 2019). Therefore, the career development is seen as a lifelong process, in which other life roles are taken into account, allowing retirement decisions to be considered in the context of other relevant identities (spouse, grandparent, etc.) Hence, retirement is also seen as a life transition in an ongoing trajectory and the retirement experience as influenced by previous life events such as job-related variables and family-related variables (Wang et al. 2008; Von Bonsdorff et al. 2009).

2.2.2. The importance of women's employment history

The increase in women's labour force participation has contributed to the changing nature of retirement, as there was (and there is) an increase in women experiencing this later life transition (Slevin, Wingrove 1995). Several researchers have displayed that the retirement transition can no longer be perceived as a "male-only" event (Price, Nesteruk 2010), and have highlighted a need to recognize the unique context in which women retire (Price 1998; Calasanti 1993; Richardson 1999; Price, Nesteruk 2010). It has been also argued that traditional retirement models are unsuitable for women, who are more likely to have an uneven working live than are men (Richardson 1999; Simmons, Betschild 2001; Byles et al. 2013). Indeed, there are several reasons for examining women's retirement separate from men's retirement (Price, Nesteruk 2010). They include the difference in how women experience retirement, the different way in which they combine work and family responsibilities, the financial instability of female retirees, and the longer longevity that extends their retirement period compared to men (Price 1998;

Quick, Moen 1998; Price, Nesteruk 2010). Moreover, men and women have different access to resources and face very different occupational trajectories (O'Rand and Henretta 1982). Nevertheless, while many scholars have conceptualized a link between occupation and retirement, it has rarely been investigated whether and how the different occupational trajectories influence the retirement process in different ways. In particular, discontinuous/atypical trajectories or professional segregation might differently influence an individual's orientation and consequent satisfaction with life during retirement (Calasanti 1996).

The literature about males retirement adjustment process highlights the importance of work for men's psychological well-being (Cinamon and Rich 2002), suggesting that men with long periods of non-employment have more depressive symptoms later on compared to men with continuous employment (Wahrendorf et al. 2013). It thus may be assumed that continuous employment promotes opportunities of meeting psycho-social and economic needs, while precarious and unstable careers may be accompanied by the recurrent experience of psycho-social stress, with adverse consequences for health and wellbeing (Chandola, Brunner, Marmot 2006; Wahrendorf et al. 2013).

As for women, they are more likely to be caregivers for younger and older family members, and they often adapt their work behaviour to satisfy this responsibility (O'Rand, Henretta and Krecker 1992; Pienta 1999). These discontinuities in women's labour force participation lead to some negative consequences, such as having fewer opportunities to develop skills, increase knowledge, or move up the organizational hierarchy. As a result, women may be less likely to receive promotions, accumulate pension credits, or be in jobs with the most remunerated pension plans (Quick and Moen 1998). Several of these consequences could have an impact on retirement adjustment.

Two main arguments can be found in the literature regarding the role of gender in the retirement adjustment process (Damman et al. 2015). On the one hand, women might have fewer difficulties adjusting to the loss of the social dimensions of work than men, as that they have more experience in terms of role transitions and career breaks, and may be more prone to perceive the

family role as their main role (Damman et al. 2015). Women are more likely to decrease their engagement in the labour market or even leave it when they have children. Consequently, having already taken advantage of alternative roles, the transition to retirement may be easier because they are often less attached to the labour market. Alternative roles should moderate the negative influence of retirement on the subjective well-being dimension (Ryser, Wernli 2017). On the other hand, it can be assumed that women face financial difficulties when they leave the job role, as they may be economically vulnerable due to their interrupted working careers or low paid occupations (Damman et al. 2015). In this regard, there is evidence that females have more negative attitudes towards retirement than males do, and that retirement is ì more likely to be linked with greater loneliness and depression for females than for males (Van Solinge, Henkens 2005; Fadila, Alam 2016).

Much of the debate in recent times concerning women's career choices have focused on the work of Catherine Hakim (2000; 2003; 2007). Hakim tried to explain female career development with her "preference theory" (Hakim 2000; 2002). She posits that in modern societies, virtually all women have a choice between paid and unpaid work. Further, women make their choice based on their preference for a particular lifestyle. These choices fall into three main groups: women with a high attachment to work, who prioritise their careers and espouse achievement values (the "work-oriented" women with continuous and full-time careers), those poorly devoted to work and more family-oriented (the "grateful slaves"), and those seeking to combine work and family responsibilities, often undertaking a part-time career, without giving absolute priority to either work or family (the "adaptive" lifestyle).

Hakim has been criticized for her over-voluntaristic approach (Broadbridge 2010; Tomlinson 2006; Walters 2005), her lack of concern for the structural constraints women face in implementing their careers and the role of social values in influencing women's perceptions of the choices available (Duberley, Carmichael, Szmigin 2014). Furthermore, Hakim does to pay attention to the complex, cognitive process of preference formation and, in particular, to the phenomenon of adaptive preferences. In fact, the author has

also been criticized for failing to recognize that preferences change over time (Leahy, Doughney 2006). Furthermore, she developed her theory in an attempt to understand divergent patterns of male and female employment, but, for example, she does not link gendered employment patterns to the to the social provision of care (Leahy, Doughney 2006).

However, Hakim's work provides a useful starting point to critically consider the level of attachment to work women have and how it is related to their experience of retirement. If we try to extend Hakim's theory to retirement adaptation, we can generalize that, the discontinuity of career could mean a low attachment to work and, consequently, to the role that women have as workers. In fact, women's labour force attachment during the working life course is frequently at risk of interruption (Pienta et al. 1994), with consequences for the engagement in their work. Since working careers, developed and combined with family histories, have important consequences for women's later-life characteristics (Pienta et al. 1994), the entire employment history could be considered as an important factor in explaining the effect of the retirement transition on subjective well-being. More specifically, working history is interconnected with family responsibilities and, as such, it becomes a fundamental factor influencing women's labour market attachment. Expanding Hakim's theory, it could be assumed that women with stable and continuous working pathways will have a strong attachment to the workforce and will perceive the role of "worker" as a fundamental role in their life. This characteristic could lead them to live the retirement transition negatively because it represents the loss of an important role. This dynamic might be less pronounced for women whit unstable or part-time career, for whom labour market attachment could be less strong.

To conclude: since working careers, developed and combined with family histories, have important consequences for women's later-life characteristics (e.g., Pienta et al. 1994), the entire employment history could be considered to be an important factor in explaining the effect of the retirement transition on subjective well-being. More specifically, working history is interconnected

with family responsibilities and, as such, it becomes a fundamental factor influencing the attachment to the labour market and to the role of "worker".

3.3. Research questions

Despite the wealth of research investigating the relationship between life events and subjective well-being, there remains a limited understanding regarding the consequences of retirement on subjective well-being (Horner 2014) and its relationship with working life courses. Previous studies have often relied on repeated cross-sectional data that cover only a time-point in women's lives, even though work and caregiving roles vary over time (Moen and Chermack 2005). Moreover, relatively little research has focused specifically on the relationship between women's working history and their subjective well-being – especially in the context of retirement transition.

Both cross-sectional and longitudinal studies show very mixed results regarding this theme. In fact, on the one hand, we have evidence that supports an increase in well-being after retirement (e.g., Latif 2011; Reitzes, Mutran and Fernandez 1996; Isaksson and Johansson 2000; Ponomarenko, Leist, Chauvel 2019; Wetzel, Huxhold, Tesch-Römer 2016). Several previous studies have shown that retirement may lead to a positive overall experience by offering opportunities for role enrichment (Wang 2007), leisure (Pinquart, Schindler 2009), and civic engagement (Kaskie et al. 2008). These are all factors that have been shown to be positively linked to levels of well-being (Hershey, Henkens 2014). On the other hand, some results go in the opposite direction, pointing to negative effects of the retirement transition (e.g., Richardson and Kilty 1991). For new retirees, the experience of encountering substantial life changes could lead to a decreased sense of self-esteem (Ashforth 2001), anxiety, depression, and to a lower general level of subjective wellbeing (Hershey and Henkens 2014). There are also studies that find no effects (or continuity) of retirement transition on well-being (e.g., Crowley 1985; Warr et al. 2004; Luhmann et al. 2012; Kim and Moen 2002; Mayring 2000; Szinovacz, Davey 2006) and studies that find beneficial effects of retirement in

the short-term, followed by a long-term decline in wellbeing (Horner 2014), and that also point to differences relating to education and social status (Wetzel et al. 2016). Finally, there are studies that link the characteristics of working life-course with the retirement effects on wellbeing that have found that persons who have been involuntarily unemployed experience a significant increase in wellbeing after retirement (e.g., Ponomarenko, Leist and Chauvel 2019, Hetschko, Knabe, Schöb 2014), whereas economically inactive persons do not show the same increase (Ponomarenko, Leist and Chauvel 2019).

Due to the inconsistency of the results obtained by the existing literature and the lack of a solid theoretical framework regarding the association between women's working history and changes in psychological well-being through retirement, I find it very difficult to formulate verifiable hypotheses. Therefore, this research has an explorative intention and seeks to integrate the two main theories on retirement adaptation – role and continuity theory – with a life course approach. I consider the entire working life course of European women (from 20 to 50 years of age) and examine (i) whether the transition to retirement affects female subjective well-being and whether (ii) a possible change in subjective well-being differs according to the structure of the working career.

3.4. Data and methods

3.4.1. Data

I use data from the Survey of Health, Aging, and Retirement in Europe (SHARE). Specifically, for the SA, I use the third and seventh wave, SHARELIFE, which were collected in 2008/2009 and in 2017. SHARELIFE provides detailed retrospective information about individual work-family trajectories starting from early adulthood until retirement. For the regression analysis and the sample selection I used the regular waves of the survey (1, 2, 4, 5, 6) and the regular part of wave 7. Indeed, Wave 7 contains the retrospective questionnaire for all respondents who did not participate in Wave 3 (first SHARELIFE questionnaire), as well as a panel questionnaire for all

respondents who already answered the first SHARELIFE interview and for the new respondents entering the survey. Brugiavini et al. (2019) transformed the employment history variables (combining Wave 3 and 7) into a long data format, the Job Episodes Panel (JEP), which includes all relevant information on employment history.

3.4.2. Sample selection

Sequence analysis and regression models have been applied to the same sample of individuals. The initial sample was of 94.501 individuals (49% men and 51% women). First, I selected individuals who were working or were unemployed the first time they were observed in the panel (excluding inactive, retired and permanently disabled people) and make the transition to retirement during the observation period (number of dropped cases N=46.119) and women (number of dropped cases N=24.110). When constructing the sample, the observations reporting more than one retirement transition or that return to the labour market after retirement were censored (right-censoring) (number of dropped cases N=149). Indeed, the aim of the paper is to focus on the first retirement transition. Moreover, I excluded respondents with missing information on the dependent and independent variables (number of dropped cases N=9.531). Once identifying the population of interest in the regular panel waves, information about employment and family history is added to this sample. At this point, when matching the regular panel waves with the retrospective information (SHARELIFE) 4.716 respondents could not be matched. Finally, I selected respondents from countries of interest (number of dropped cases N=2.315) and with same-length sequences and I excluded respondents with less than five recorded years into the labour market (number of dropped cases N=395). In fact, persons who were inactive during most of their life are often excluded from the population of interest because the notion of retirement presupposes prior work (Radl 2014). Sequence Analyses consist of 24,939 observations taken from a sample of 7,123 individuals from 16 European countries. About the 42% of the sample retired during the observation period. Hence, the fixed effects regression models will utilize the

3,012 respondents (with no missing information on all the variables used) who make the transition from work to retirement.

3.4.3. Methods

The empirical analyses are developed in two steps: in the first part, I performed sequence analysis to construct the individual working sequences and to explore the existence of similar patterns of career. In the second part, I related the career clusters with the variation in well-being before and after the retirement transition, running different fixed effects regression models on the different subsamples defined by each specific career cluster.

Sequence analysis. Sequence analysis is earning growing attention to study life-course and has been largely recognised as a valuable toolbox to investigate life trajectories (Abbott, Hrycak 1990; Abbott, Tsay 2000; Billari, Piccarreta 2005). Even if this method is mostly explorative, it allows to trace life courses entirely, investigating dynamic processes which are difficult to understand with other methods in life-course research (like event history analysis). For further information on how sequence analysis works, see chapter 2 (data and methods paragraph).

In this study, in order to create the distance matrix, I choose an Optimal Matching approach. Optimal Matching Analysis is a procedure that counts for the "costs" needed to transform sequence A in sequence B and vice versa by counting the minimum number of transformations needed. Two types of operation are possible: substitution and insertions/deletions. The dissimilarities are calculated by comparing each sequence with each other (Cornwell, 2015). To explore the robustness of the findings, I tried several cost specifications and chose the above mentioned because it generated the most distinct cluster specification indicated by several cluster cut-off criteria [7].

[7] The three other cost specifications we tested were (1) optimal matching with substitution costs derived from transition rates between the states, (2) the dynamic Hamming distance (Lesnard 2010), and (3) the simple Hamming Distance. Because the clustering yielded slightly better cut-off criteria I retain the Optimal Matching for the final specification.

It is then possible to perform a cluster analysis on the resulting distance matrix, which allows homogeneous groups of sequences to be created, which, taken together, represent types of trajectories (Gauthier et al. 2010). For this purpose, I use Ward cluster analysis (Ward 1963). To determine the most appropriate number of clusters, I considered several cluster cut-off criteria, including the Average Silhouette Width (ASW) and Point Biserial Correlation (PBC) (Hennig, Liao 2013; Studer 2013) that identify the most discriminant number of groups (see Appendix 1), (For further information see paragraph *2.3.2*).

For the construction of the sequences, the respondents enter in the analysis at their 20th years of age and they are followed until their 50th years of age (I chose these age cut-off criteria to start observing people once they leave the education system and finish observing them when the transition to retirement becomes possible). For the current analysis, five distinct and mutually exclusive work status were defined every year, for a total of 31 years. The variables used to define the status alphabet collect the information about the yearly work status and hours worked (part-time or full time). Therefore, the status alphabet is coded into these categories: in education, part-time work, full-time work, unemployed/inactive and retired.

Panel regression analysis. The panel nature of the SHARE is extremely valuable for a study on the effects of retirement transition characteristics on well-being. Most studies of well-being in old age use cross-sectional designs, which can raise some concerns about the direction of causation (Calvo, Sarkisian 2011). Fixed effect regression model is the most common technique to analyze panel data. This model allows to eliminate the effect of potential unobserved factors that remain constant over time. The logic behind is to express the change in the outcome variable as a function of the changes recorded in the variables that vary over time. The factors that remain constant are eliminated. Hence, I used fixed effects linear regression models to examine the extent to which retirement transition is associated with changes in psychological well-being.

This study takes advantage of the longitudinal nature of the SHARE to calculate the change in well-being between the first respondent observation and some later time points. Indeed, I have information on several measures/dimensions of respondents' well-being: (1) before the retirement transition (from 5 years to 1 year before retirement, depending on when the individual makes the transition to retirement), (2) the year of the retirement transition, and (3) some years after retirement, until the respondent last observation. The sample is unbalanced, some individuals are observed only until retirement, others until 1 year after retirement, others until 2, 3 or 4 years after the transition. In this paper, models were estimated on the different subsamples defined by each specific career cluster.

Dependent variable: Life satisfaction. Many different empirical applications of the concept of "well-being" have been utilized in the literature, deriving from different aspects of the general notion of well-being (e.g., Ryff 1989; Ryff, Keyes 1995). On the one hand, the hedonic view on well-being assumes that through maximizing pleasant experiences and minimizing suffering, the highest levels of well-being can be reached. The hedonic approaches conceptualize well-being focusing on pleasure and happiness (Ryan, Deci 2001). The most notorious hedonic model is known as subjective well-being, a tripartite model based on satisfaction with life, the absence of negative affect, and the presence of positive affect (Diener et al.1985). Although this approach tends to conceptualize well-being in terms of all three of these concepts, many researchers focus on life satisfaction alone when evaluating well-being from this perspective (Cooke, Melchert, Connor 2016). The cognitive component of hedonic well-being is a judgemental process in which individuals asses the quality of their life based on their own set of criteria (Pavot, Diener 1993). Hedonic or subjective wellbeing (Diener, Emmons 1984) distinguishes moods from cognitive evaluations of one's life. The cognitive and evaluative aspects of well-being are subject to processes of adaptation and changing goals: expectations and subjective appreciations of quality of life change over age, and people can adapt to unpleasant situations

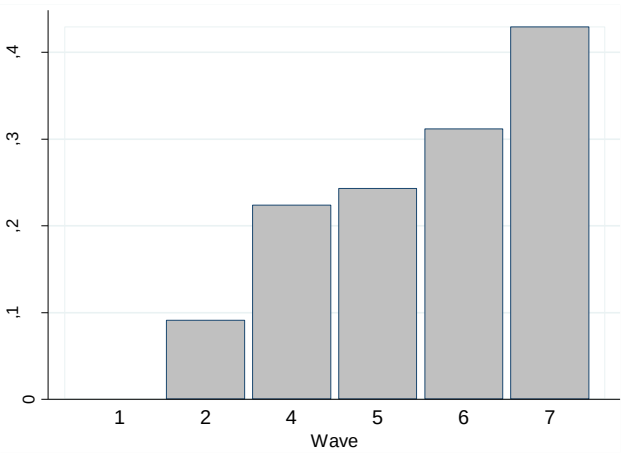
by stopping perceiving them as such. On the other hand, the eudemonic view stresses as a good life is not just about pleasure and happiness but involves self-development and self-realization (Ryff, Keyes 1995). The eudemonic approaches to conceptualizing well-being suggest that psychological health is reached by fulfilling one's potential, functioning at an optimal level (Cooke, Melchert, Connor 2016). This approach uses an external criterion for wellbeing: the degree of self-actualisation, autonomy and control, etc., measured subjectively (Ryff, Keyes 1995). A third category of approaches to conceptualizing well-being focuses on quality of life (QoL). The term QoL is often used interchangeably with wellbeing and life satisfaction in the literature (Cooke, Melchert, Connor 2016). However, those studying QoL generally conceptualize well-being more broadly than either the hedonic or eudaimonic models and include physical, psychological, and social aspects of functioning (Cooke, Melchert, Connor 2016).

In this analysis, subjective well-being is the dependent variable and is measured by life satisfaction on a 0–10 scale; 10 being the most positive satisfaction with life. Life satisfaction refers to a cognitive, judgmental process. Shin and Johnson (1978) define life satisfaction as a global evaluation of a person's quality of life based on his/her criteria. It is important to underline that these criteria are set by the individual for himself/herself; it is not imposed externally. For example, although health, income, social network and so on may be desirable, individuals may give them a different level of importance. For this reason, life satisfaction scale in general asks the person for the overall evaluation of his/her life, rather than summing up his satisfaction with specific sectors (Diener et al. 1985). It is a measure of subjective well-being that evaluates the life as whole rather than the current feelings and, therefore, integrates long-term developments (Diener 2009). This aspect makes it extremely suitable to study long-term consequences of life trajectories (Poromanenko 2016).

Main Independent variable: retirement transition. Respondents are asked to best describe their current employment situation from a list of retired,

employed, self-employed and unemployed. Respondents are classed as being retired if they report that they are retired in answer to this question. The percentage of people who are retired increases steadily across each wave of data between 2004–05 (wave 1, in which I selected only employed or unemployed people) and 2017 (wave 7).

Figure 1. Percentage of retired respondents at each wave, 2006–07 to 2017



A variable has been constructed in order to measure retirement transition – i.e., considering time before and past the year of retirement[8]. It is a "time variable," constructed from the 6 waves of SHARE as illustrated in Figure 2. This time variable represents the period before retirement (coded -5 to -1), the transition to retirement (coded 0 for the year of retirement), and the period after retirement (coded 1–4) for all respondents included in the sample. Since the sample is not balance, not all the respondents are present form time -5 to time 4.

[8] The construction of this variable was inspired by the work of Heybroek, Haynes, Baxter (2015) that created it to study changes life satisfaction across retirement transition.

Figure 2. Specification of time variables.

Reired	0	0	0	0	0	1	1	1	1	1
Time	-5	-4	-3	-2	-1	0	1	2	3	4
Retired in w2					W1	W2	W4	W5	W6	W7
Retired in w4				W1	W2	W4	W5	W6	W7	W7
Retired in w5			W1	W2	W4	W5	W6	W7		
Retired in w6		W1	W2	W4	W5	W6	W7			
Retired in w7	W1	W2	W4	W5	W6	W7				

Covariates. The literature on well-being has found a large variety of demographic, economic, familial, and social-network-related variables to be significant in predicting levels of well-being and their variation (Herzog, Rodgers 1981; Kim, Moen 2001). In this analysis, I include a number of these factors –of course excluding time invariant ones - as control variables when analysing the effects of retirement on well-being.

First of all, bad health has been found to have significant negative effect on mental wellbeing among the elderly (Midanik et al. 1995; Dwyer, Mitchell 1999). People in good health are more likely to make successful retirement adjustments than those in poor health (Bender, Jivan 2005; de Vaus, Wells 2004). Healthy people may engage in a greater range of activities and opportunities for access to social support than those who are less healthy, thereby helping to increase quality of life in retirement (Heybroek et al. 2015). Therefore, I included in the analysis the number of limitations with instrumental activities of daily living as a continuous variable [0, 10], and also the self-perceived health variable (excellent, very good, good, fair, poor). Family transitions, in later life too, have also been found to be associated with varying retirement experiences (Szinovacz and Ekerdt 1995) and with changes in subjective well-being. First, marital status has been shown to be related to well-being among old people (Barer 1994; Hilbourne 1999; Kim and Moen 2001), as well as in the general population (Haring-Hidore et al. 1985; Kurdek 1991). Family relationships can provide social and psychological benefits, suggesting that people who are in a relationship may report higher level of life satisfaction in retirement than those who are divorced, separated, widowed, or single (Reitzes, Mutran, and Fernandez 1996; Szinovacz 2003). People living

without a partner are less likely to have strong networks of support in retirement and may be at risk of loneliness (Wolcott 1998; Heybroek et al. 2015). Hence, in this analysis, I controlled for the effect of change in civil status, looking at cohabitation, and coding it into three categories: (1) if the respondent is living with a partner/spouse, (2) if the respondent is not living with a partner/spouse, (3) if the respondent becomes a widow. These categories include women that are (were) in a cohabiting relationship without distinction between married and unmarried. I controlled also for the effect of becoming a grandparent (Not having grandchildren/Having grandchildren). Furthermore, former studies suggest that also changes in the economic situation are important in explaining adaptation and well-being (George 1992; Holden, Kuo 1996), and also other socio-economic factors such as social class and level of education are significant predictors of well-being among elderly people (Dahl, Birkelund 1997). In order to account for the economic situation, I controlled for a measure that asks the respondent whether his or her household has the ability to make ends meet. This variable ranges from 1 ('with great difficulty') to 4 ('easily'). As a consequence of using FE, I do not need to specify time-invariant variables such as gender, country of residence or education level[9]. Tab. 1 shows the descriptive information about the variables using for the analysis.

[9] See Appendix 3 for country groups-specific analysis.

Tab.1. Descriptive Statistics (final sample, last year of observation).

Variables	%, mean *(std)*
Age	65.9
	(0.1)
Educational level	
Isced 0 & 1	12.0
Isced 2	15.4
Isced 3 & 4	38.7
Isced 5 & 6	33.9
Have a partner	
Yes	67.6
Number of children	
No child	9.1
One	19.2
Two or more	71.8
To have grandchildren	
Yes	74.3
Number of iadl limitations	0.13
	(0.01)
Self-perceived health	
Excellent	9.0
Very good	23.6
Good	42.1
Fair	20.6
Poor	4.6
Is household able to make ends meet	
With great difficulty	5.2
With some difficulty	21.2
Fairly easily	29.5
Easily	44.1
Total	100
N	3,012

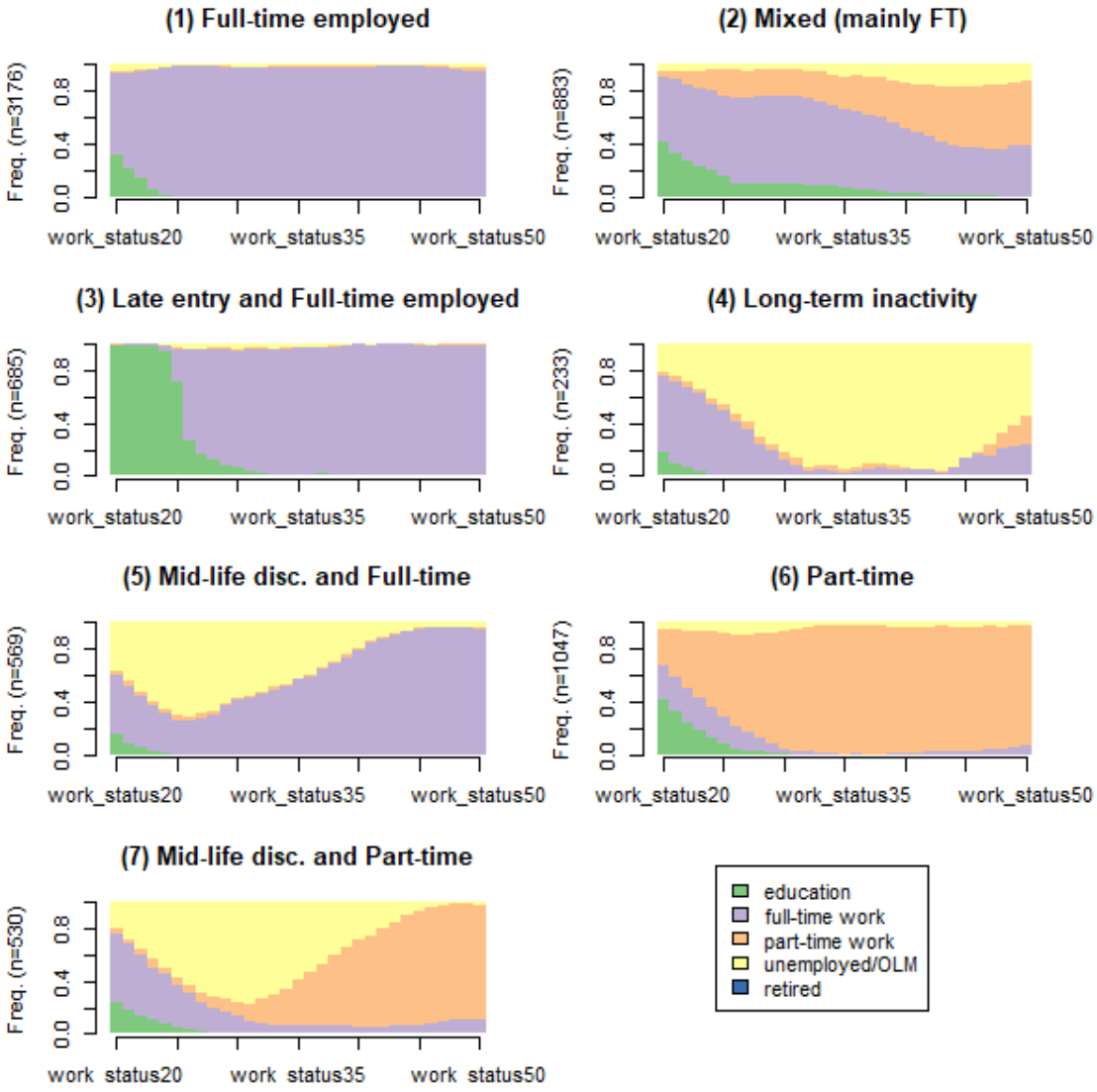
As we can see from the table, most of the women in the sample possess a medium or high educational qualification, have a partner and have two or more children. The state of health they report is mainly good, as is the economic status.

3.5. Results

3.5.1. Sequence Analysis and working history

The cluster cut-off criteria suggest seven clusters as the best grouping (see Appendix 1). Fig. 3 illustrates the groups of working trajectories as state distribution plots from 20 to 50 years of age (Gabadinho et al. 2011). State distribution plots show, at each age, the distribution of employment statuses.

Fig.3. 7-cluster solution. Employment history (20-50 years of age)



The first cluster, named “Full-time employed”, is the largest group and accounts for the 46 percent of the final sample. This group represents the standard model of continuous full-time employment. The second cluster “Mixed” accounts for the 11 percent of sample. Here, women have had mainly a full-time working life course, mixed with some years of part-time work and inactivity, particularly at the end of the observational period. The third cluster is called “Late entry and full-time employed” and accounts for the 7 per cent of the sample. Women in this group enter the labour market around 25/28 years of age – because stay longer in education– with a full-time job, and then they have a continuous career. The fourth group is the “Long-term inactivity” accounts for the 4 per cent of the sample. Women in this group enter the labour market with a full-time job and exit around 25/30 years of age. Around 45 years of age, some of them re-enter in the workforce again with a part-time or full-time job. The fifth cluster is called “Mid-life discontinuity and full-time”. It is followed by the 8 per cent of the women in the sample and it is characterized by a full-time trajectory interrupted by periods of inactivity from 25 to 35 years of age. The sixth group accounts for the 15 per cent of the sample and it is the “Part-time employed” cluster. Here women follow a continuous and part-time trajectory. The last cluster is called “Mid-life discontinuity and part-time” and it is followed by the 8 per cent of the sample. Like in the fifth cluster, women in this group have a career interruption around 25 years of age, but the re-enter the labour market (c.a. 10 years later) with a part-time job instead of a full-time one.

Tab. 2 reports the main socio-demographic characteristics of each of the subsamples defined by the work trajectory, i.e., clusters. Across cluster there are large differences in the distribution of the educational level and the number of children. In particular, the higher educated women (Isced 5 & 6) are prevalent in clusters 1, 2, 3 and 6, and the lower educated (isced 0 & 1) in clusters 4, 5 and 7. Regarding the number of children, the percentage of women with 2 or more children is higher in groups with an atypical or discontinuous trajectory compared to the continuous and full-time pathways (cluster 1 and 3).

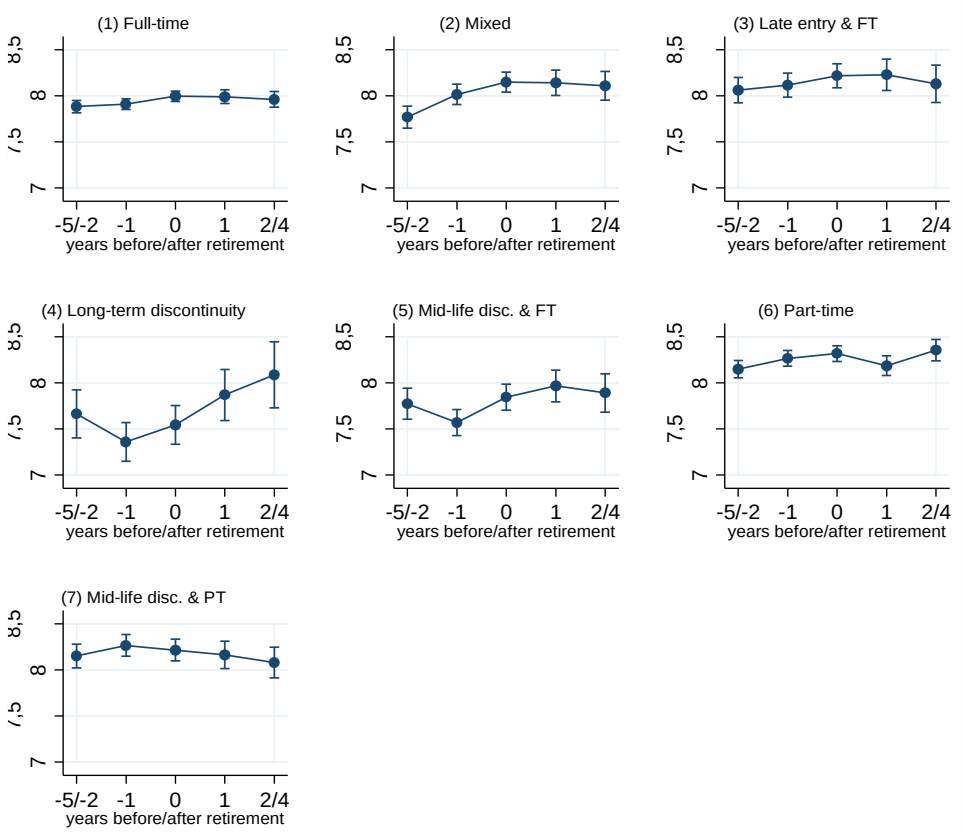
Tab. 2. Descriptive information of seven groups of working trajectories (final sample, last year of observation).

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	
	FT	Mixed	Late entry & FT	Long-term disc.	Mid-life disc. & FT	PT	Mid-life disc. & PT	Tot
%	46.4	11.2	7.7	3.6	8.5	14.8	7.8	100
% ISCED								
ISCED 0 & 1	11.1	12.8	1.7	22.2	21.4	9.2	16.5	12.0
ISCED 2	15.5	15.4	2.6	27.8	21.0	12.6	20.8	15.4
ISCED 3 & 4	43.7	40.4	11.2	39.8	42.0	36.1	34.3	38.7
ISCED 5 & 6	29.7	31.4	84.5	10.2	15.6	42.2	28.4	33.9
% N° of children								
Zero	11.5	7,7	15.9	0,9	7.0	6,5	1.3	9,1
One	23.3	19.3	18.5	8.3	10.9	17.5	11.0	19.0
Two or more	65.2	73.0	65.5	90.7	82.1	76.0	87.7	71.8
Tot	100	100	100	100	100	100	100	100
Duration employment state								
Education	0.8	2.8	6.5	0.4	0.4	1.6	0.9	1.9
FT	29.3	16.4	23.6	6.5	18.9	2.4	4.98	26.3
PT	0.3	8.8	0.2	1.4	0.6	25.6	12.7	2.1
OLM	0.6	2.9	0.6	22.7	11.1	1.5	12.4	0.7
N	1,397	337	232	108	257	446	236	3,012

3.5.2. Fixed effects regression models

Overall, 42.3 % of individuals in the sample retired during the observation period. In a first step, I estimated a fixed effect regression model including only the main independent variable (which accounts for the years before and after retirement) to assess how the associations between retirement transition and life satisfaction varies across the different clusters/subsamples, as defined by their working trajectories. I aggregate the independent variable in five categories (two or more year before retirement; one year before; retirement year; one year retired; two or more year retired) and the analysis is divided by career trajectory[10].

Fig. 4. Predictive margins of retirement transition on life satisfaction by career trajectory, FE without covariates (95% Cis).



[10] See appendix 2 for coefficients and for a model with a detailed dependent variable (time).

As we can see from the figure, on a general level, we see an increase in life satisfaction, starting the year before the transition to retirement. This trend is generally followed by a slight decline in life satisfaction one or two years after the final exit from the labour market. Looking at the different working trajectories we notice that the pathways “(6) part-time employed” and “(7) mid-life discontinuity and part-time” have a higher general level of well-being comparing to the other trajectories. The sixth cluster shows an increase in life satisfaction that begins 5/2 years before retirement and culminates in the year of the transition (year zero). In this year it begins to decline, until one year after retirement, when it increases again. The seventh group shows an increasing trend in life satisfaction up to the year prior to retirement when it then gradually begins to decrease.

The greatest change in the level of well-being is shown by groups 2, 4 and 5, which manifest an increasing trend in life satisfaction starting one or two years before the transition to retirement. As regards the second and fifth clusters, one year after retirement the level of life satisfaction begins to decrease (with a more marked decrement for the fifth cluster). In the case of group “(4) long-term discontinuity”, the increase continues, and it is very marked (albeit with large ICs) even in the years following retirement. As for the other clusters (1 and 3), the change in subjective well-being before and after retirement seems to be very minimal. In particular, this dynamic is clear for the group "(1) full-time employed" for which the displayed curve is almost flat.

In a second step, I introduced in the model the relevant covariates. Tab. 3 shows the results of the fixed effects regression models, again divided by career trajectory. For the “(1) full-time employed” cluster, each category compared with reference one -which is two or more years before retirement- show a positive effect on life satisfaction. Thus, the coefficients suggest a higher level of life satisfaction one year before retirement (0.04 point) than two or more years before, but also the retirement year, one year and two or more years after retirement (0.10; 0.10; 0.08 point respectively). This trend would seem to indicate an improvement in wellbeing during the transition to

retirement. Nevertheless, it is observable a slight decline in wellbeing two years after the retirement transition compared to one year after. However, the coefficients are not statistically significant.

The "(2) Mixed" group shows positive and significant coefficients for all the categories compared to the reference one: There is an increase in life satisfaction as we move closer to the retirement transition and once retired also. These results suggest a continuous increment in the level of life satisfaction. The effects of retirement transition for the third cluster (Late entry and full-time employed), indicate the same dynamic showed by the second cluster. However, in this case, the coefficients are not statistically significant. The "(4) Long-term discontinuity" cluster manifests a positive increment in life satisfaction starting the year of retirement. The coefficients are significant only for the last two categories (one year retired and two or more years retired). The fifth pathway manifests a trend in life satisfaction that decreases one year before retirement and then seems to increase a bit. The coefficients, following the "one year before retirement" category, are negative with respect to the reference category (two or more years before retirement) but show a slight increase in life satisfaction over time (-0.37; -0.21; -0.13). The last category (two or more years after retirement) represents the exception: here, life satisfaction decreases again compared to the previous year (-0.26). Anyway, the only result that has statistical significance is the first one (one year before retirement). The cluster "(6) part-time employed" show positive and significant coefficients: the level of life satisfaction increases during the retirement process. Lastly, the seventh group shows an increasing trend in life satisfaction level until the retirement year, when it starts to decrease. However, the coefficients are not statistically significant[11].

Regarding the other covariates: a worsening of health conditions leads to a decrease in the level of life satisfaction for all clusters. Furthermore, the results indicate that, in general, the economic situation plays a role in determining the

[11] The gender-specific analysis support that work clusters are more heterogeneous for women than men and that discontinous or part-time pathways particularly matter for women's wellbeing in retirement but less for men's one (see Appendix 4).

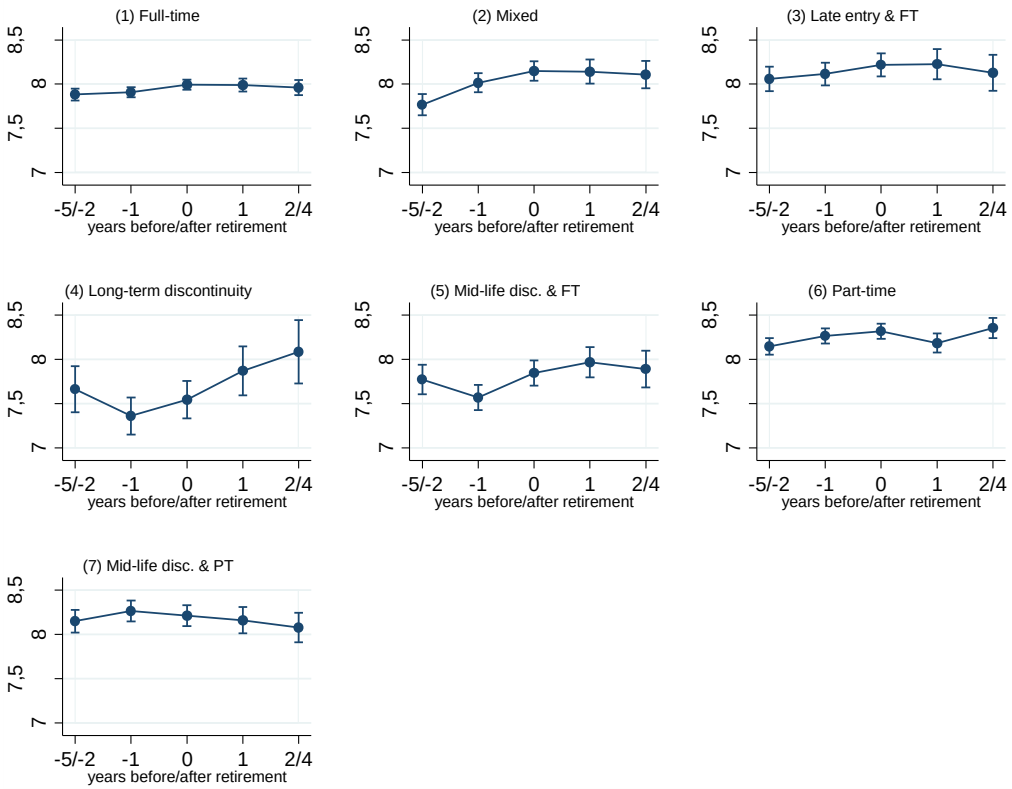
level of wellbeing: unsurprisingly, the shift to a difficult economic situation reduces the quality of life. The effect of the presence of family networks is different across the clusters considered. I find that become grandparents seems to have an effect close to zero for some clusters and to increase well-being for others, however, the coefficient is statistically significant and positive only for the seventh group. Moreover, the transition from having a partner to not having it decreases the level of life satisfaction for the majority of the clusters (significant only for third and seventh groups).

Tab. 3. Fixed effect regression model on life satisfaction scale divided by career trajectory.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
	FT	Mixed	Late entry & FT	Long-term disc.	Mid-life disc. & FT	PT	Mid-life disc. & PT
Employment status: 2+ before retirement (ref.)							
1 year before retirement	.04	.24*	.03	-.13	-.37**	.17*	.13
Retirement year	.10	.42**	.17	.31	-.21	.30*	.10
1 year retired	.10	.46*	.27	.84*	-.13	.26	.04
2+ year retired	.08	.52*	.26	1.14*	-.26	.56**	-.01
Age2	.00	-.00	-.00	.00	.00	-.00*	.00
Age	-.07	.11	.30	-.12	.01	.18	-.14
Family							
Have a partner: yes (ref.)							
No	.01	-.36	-.86**	.56	-.17	-.14	-.52*
Existence of grandchildren: No (ref.)							
Yes	-.02	-.06	-.01	.04	.12	.00	.35*
Health							
Number of daily limitations	-.24***	-.10	-.02	-.18	-.25**	.02	-.13
Self-Perceived Health: excellent (ref)							
Very good	-.04	-.13	-.18	-.35	-.08	-.17*	-.21
Good	-.19**	-.46***	-.27*	-.32	-.23	-.27**	-.25
Fair	-.42***	-.67***	-.41*	-.46	-.27	-.41**	-.25
Poor	-.98***	-.92***	-1.53***	-.89*	-1.73***	-.61**	-.37
Income							
Ability to make ends meet: fairly easily (ref)							
With great difficulty	-.67***	-.33	-.46	-1.16**	-.27	-.16	-.07
With some difficulty	-.17**	-.24*	.01	-.33	-.36*	-.11	-.43**
Easily	.14**	.05	.06	.03	.19	.05	.05
N	1,397	337	232	108	257	446	236

Figure 5 shows linear predictions from the previous FE models. Although, in some cases, the standard errors are large, these figures graphically confirm that being retired is associated with an increment in the level of life satisfaction for the second, third, fourth and sixth groups. Women in the other clusters, perceive a very small increase in well-being with retirement, followed by a subsequent slight decline of it.

Fig. 5. Predictive margins of retirement transition on life satisfaction by career trajectory (95% Cis).



3.6. Discussion and conclusion

With rising numbers of female retirement across many Western societies, questions arise regarding the characteristics of retirement itself. While previous research has mainly focused on predictors proximal to the retirement transition and on men, this part investigates the consequences of retirement from paid

work for the overall well-being of women aged 50 and above and, most importantly, as these consequences vary across women who have experiences very different paid work careers/trajectories. Overall well-being is expressed by the life satisfaction indicator.

In this contribution, I attempt to contribute to the life course and female retirement literature in two ways. First, I took into account working life courses as determining factors of changes in subjective well-being before and after retirement. Results show that the retirement transition affect the level of life satisfaction differently, depending on the longitudinal working trajectories. Therefore, through the application of a recent methodological approach to handling life-course information, I can broadly enlarge the perspective on the work models typically followed by women and the outcomes they have in old age. In fact, sequence analysis allows the management of all the information on the working trajectory, rather than just single events or single time points. This is of substantial importance if we think of life transitions as processes that evolve over time.

In line with life course theory, our results show that work histories are important to account for in explaining well-being after retirement in addition to other well-known factors, such health and economic situation. In particular, some of the trajectories constituted of discontinuity or part-time periods (clusters 2, 4 and 6), showed a continuous increase in life satisfaction, passing from employment (or unemployment) to retirement. For other trajectories, such as the full-time one, retirement seems to not have implications for subjective wellbeing. How do these findings fit into the existing literature? At the descriptive level of working histories, the findings -showing seven career pathways- are in line with previous results that indicated a great complexity of working pathways in the case of women (Macmillan 2005; Widmer, Ritschard 2009). However, in contrast to previous findings, the present results are not based on single-point measures or on specific characteristics of work history (e.g. involuntary job losses, frequent job changes or periods of unemployment) (Bambra, Eikemo 2009; Wahrendorf et al. 2013). Rather, the focus was on entire working histories where five different work statuses were considered. With

regard to the investigated associations between work histories and life satisfaction, the results supplement the previous findings, which argued that women who decreased their engagement in the labour market in some periods (such as those with part-time or discontinued careers) and have taken advantage of alternative roles experience an easy transition to retirement. Indeed, alternative roles should moderate the influence of retirement on the subjective well-being dimension (Ryser, Wernli 2017). Again, other studies (e.g., Wahrendor 2015) suggested that the best quality of life was found among women with mixed histories (domestic work and employment) whilst women with regular histories (continued employment) had a lower quality of life (Wahrendor 2015). In my case, women with mixed or part-time histories benefit from the retirement transition in terms of subjective well-being. Moreover, the results partially support the Continuity theory, according to which retirement may offer the opportunity to spend more time in the roles of friend and family member (Reitzes, Mutran and Fernandez 1994), offering psychological continuity to retirees. In general, no substantial worsening in subjective well-being was found for any career path: women seem to adapt well to the retirement transition. The family and community roles may provide social relationships that enable social integration and increases well-being among adults women (Reitzes and Mutran 2004).

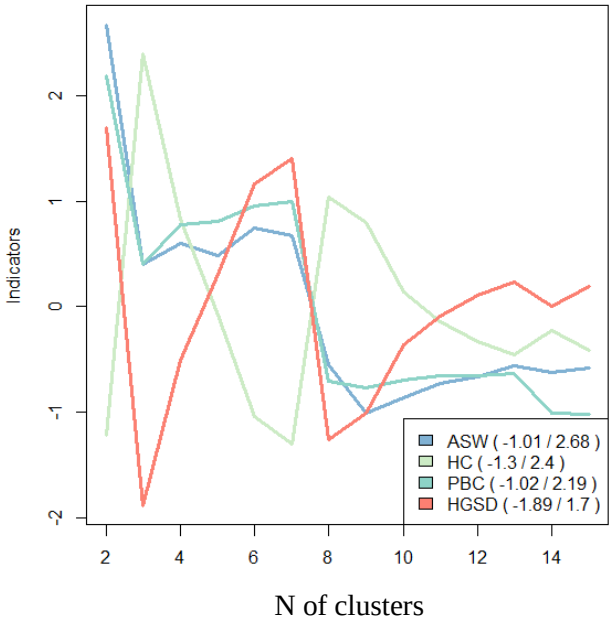
The paper has some limitations. First, the limited statistical power of the sample and the estimation technique that is the fixed effects approach did not permit to include institutional variables that could capture differences in the pension systems. This restricts the possibility to make specific policy implications based on this paper and to make comparison between different istitutional contexts. A second limitation is that I use a self-reported measure to distinguish between being employed/unemployed or retired and exclude those respondents who report themselves differently (for example as being homemaker). I recognize that the self-reported measure of the work status can differ from administrative data. It is possible that I exclude respondents from the sample that consider themselves not retired but receive pension benefits. Finally, it would also be interesting to use other indicators to measure the level of well-

being or to investigate the effect of other life domains (such as the family trajectory) in influencing female life satisfaction.

Despite these limitations, this study has many strengths. It offers advances in term of new research questions and methods. First, I considered patterns of employment throughout the entire life, from youth to middle age. Using sequence analysis, I was able to observe the differences in women's work trajectories over 30 years. This technique allows us to differentiate careers characterized by full-time employment, part-time work and a combination of paid work and long or short breaks. The clustering provides a parsimonious model that allows studying the association between life events and later life outcomes (Zella, Harper 2020). Second, due to the richness of the SHARE data, I was able to take into account the changes in life satisfaction taking into account important covariates. Results show that the retirement transition affects the level of life satisfaction differently, depending on the longitudinal working trajectories. Therefore, through the application of a recent methodological approach to handling life-course information, I can broadly enlarge the perspective on the work models typically followed by women and on the outcomes they have in old age. From a life-course perspective, the question of how different types of work patterns can influence future outcomes (e.g., life satisfaction) can now be addressed in a new and very promising way. Sequence analysis provides a rigorous methodology for visualizing and interpreting work (and other) trajectories as process outcomes, and fixed effect regression models make it possible to observe the intra-individual changes. My results focus attention on the relevant question of how women can combine work and family and how this combination can influence the structure of their working career and, consequently, their wellbeing in later life. Moreover, it would be extremely important to think about how social policies could advance wellbeing, considering how they could play a role in shaping individual and context-specific trajectories.

Appendix 1

Fig. A1. Cluster cut-off criteria for working clusters derived with OM sequen ce analysis.

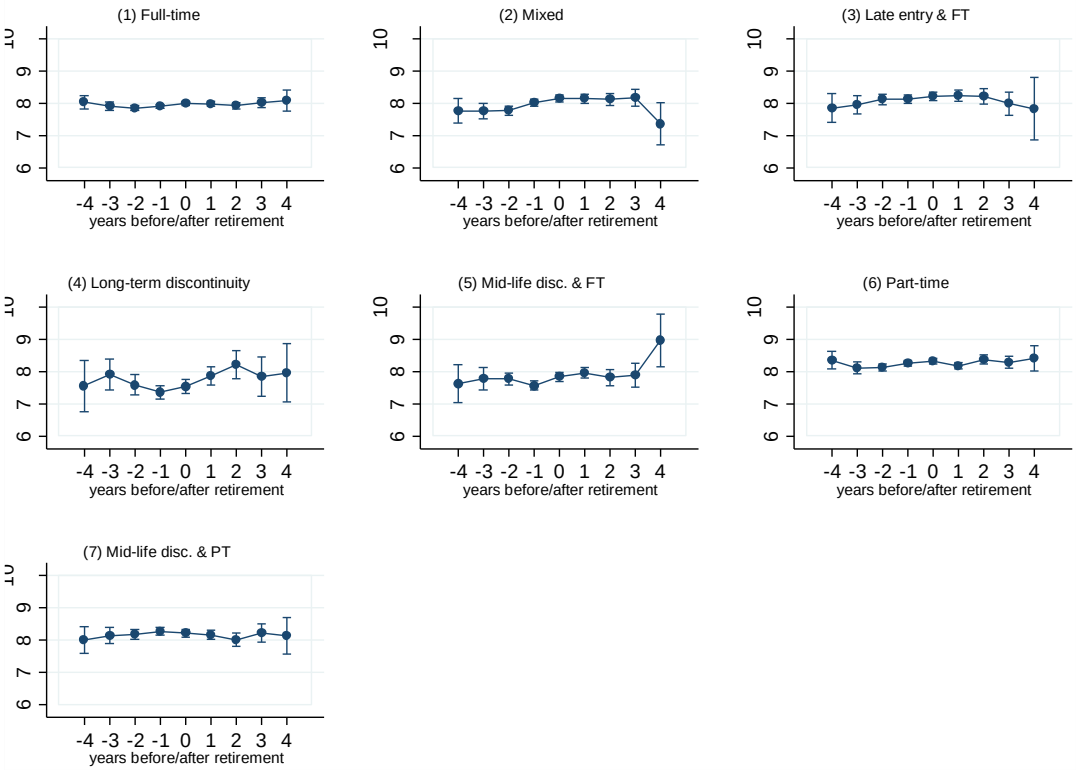


Appendix 2

Tab. A2. Fixed effect regression model on life satisfaction divided by career trajectory, without covariates.

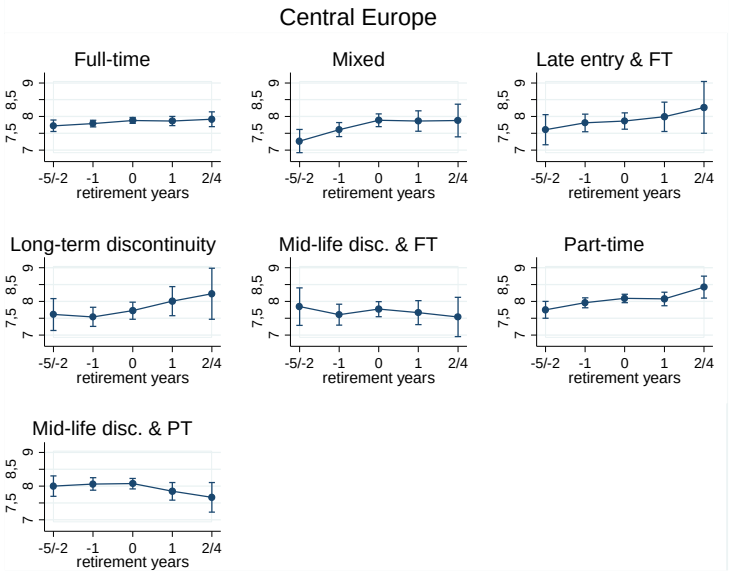
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
	FT	Mixed	Late entry & FT	Long-term disc.	Mid-life disc. & FT	PT	Mid-life disc. & PT
Employment status							
2+ before ret. (ref.)							
1 year before ret.	,03	,25**	,05	-,30	-,20	,12	,11
Ret. year	,11*	,38***	,16	-,12	,07	,17**	,06
1 year retired	,11*	,37***	,17	,21	,19	,04	,01
2+ year retired	,08	,34**	,07	,42	,12	,21*	-,07
_cons	7,88***	7,77***	8,06***	7,66***	7,77***	8,15***	8,15***

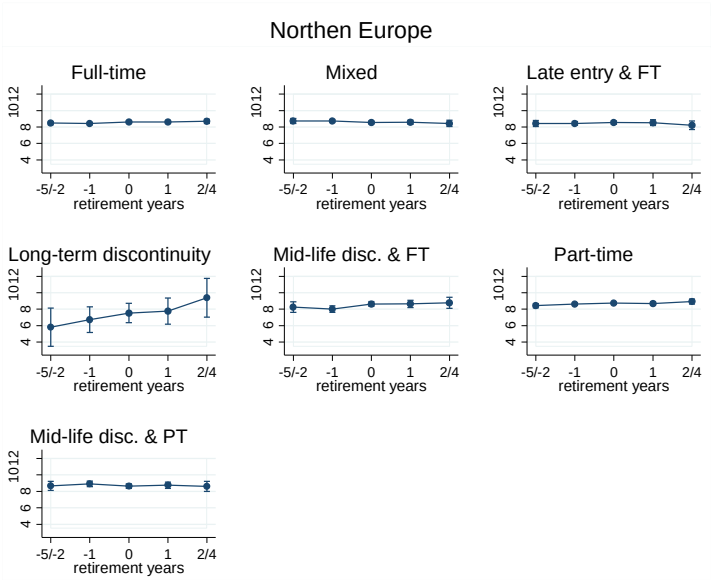
Fig. A2. Predictive margins of retirement transition on life satisfaction by career trajectory, FE without covariates (95% Cis). Dependent variable: time before and after retirement without aggregation.

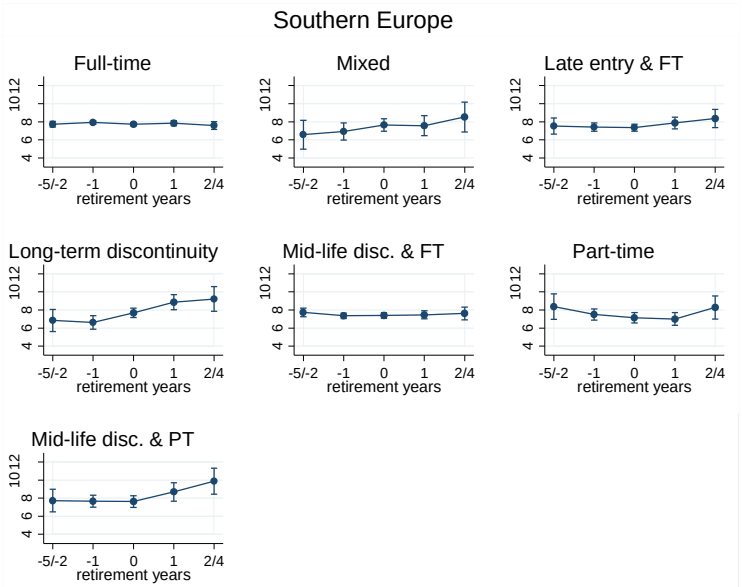


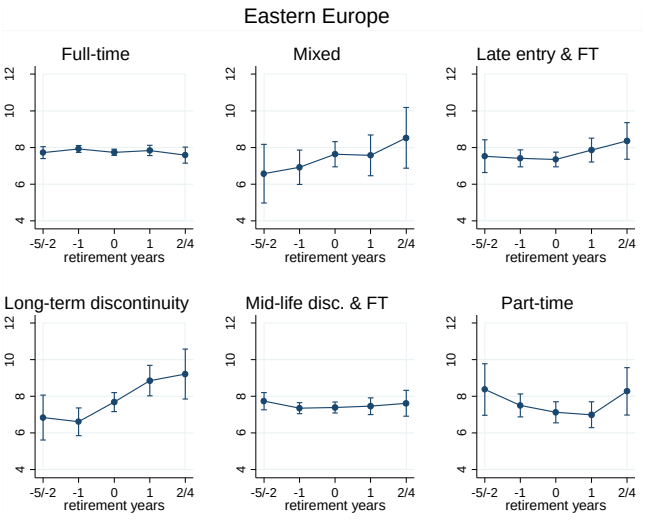
Appendix 3

Fig. A3. Predictive margins of retirement transition on life satisfaction by career trajectory and county group, FE without covariates (95% Cis).




Northen Europe
Full-time
Mixed
Late entry & FT
Long-term discontinuity
Mid-life disc. & FT
Part-time
Mid-life disc. & PT
4 6 8 10 12
-5/-2 -1 0 1 2/4
retirement years


Southern Europe
Full-time
Mixed
Late entry & FT
Long-term discontinuity
Mid-life disc. & FT
Part-time
Mid-life disc. & PT
4 6 8 10 12
-5/-2 -1 0 1 2/4
retirement years


Eastern Europe
Full-time
Mixed
Late entry & FT
Long-term discontinuity
Mid-life disc. & FT
Part-time
4 6 8 10 12
-5/-2 -1 0 1 2/4
retirement years

Appendix 4

Fig. A4. 7-cluster solution for men. Employment history (20-50 years of age)

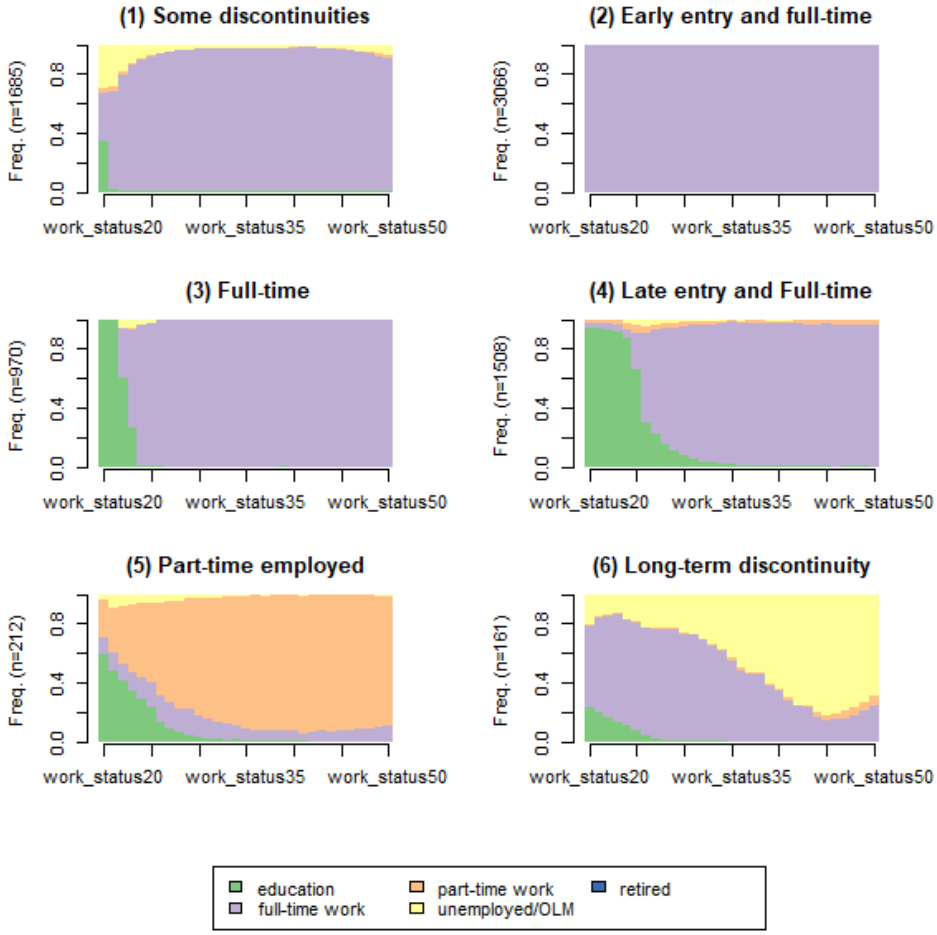
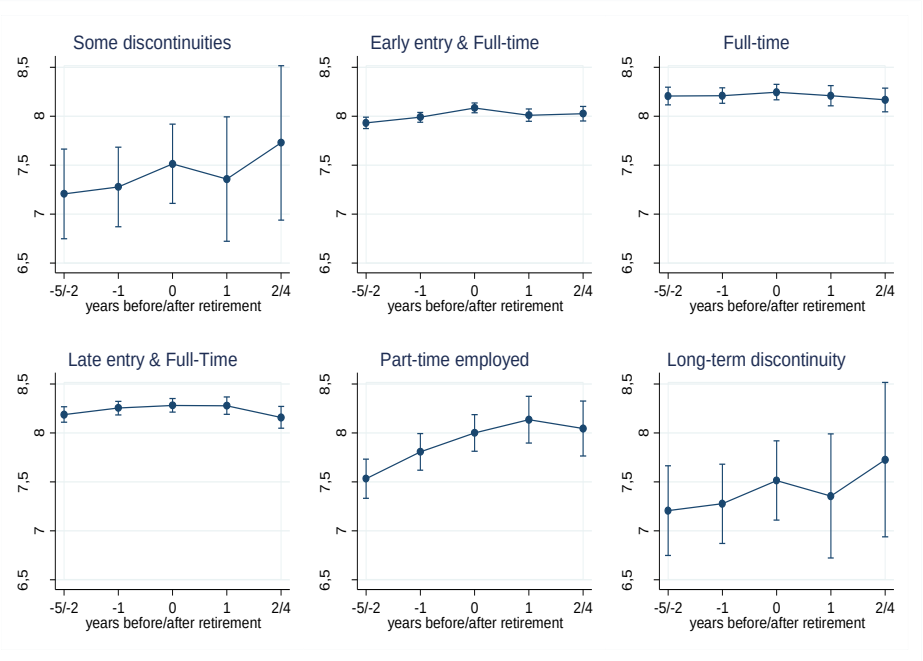


Fig. A4.2. Predictive margins of retirement transition on life satisfaction by career trajectory for men, FE without covariates (95% Cis).



Tab. A4. Fixed effect regression model on life satisfaction scale divided by career trajectory from men.

	Some Disc.	Early entry & FT	FT	Late entry & FT	PT	Long-term discontinuity
Employment status: 2+ year before retirement (ref.)						
1 year before retirement	,04	,10*	,02	,07	,05	,03
Retirement year	,15	,24**	,12	,14	-,11	,15
1 year retired	,12	,21*	,16	,13	-,20	,04
2+ year retired	,15	,26*	,24	,02	-,65	,44
Age^2	,00	-,00	-,00**	,00	,00	-,00
Age	,00	,03	,21**	,00	-,21	,14
Have a partner: yes (ref.)						
No	-,33	-,67***	-,29	-,18	-,27	-3,15**
Have Grandchildren: no(ref.)						
Yes	-,07	,01	,09	-,05	,50*	-,13
Number of daily limitations	-,49***	-,16***	-,14**	-,11**	-,02	-,45
Self-perc. health: excellent (ref.)						
Very good	-,05	-,00	-,11	-,06	,09	,90
Good	-,13	-,19**	-,18*	-,12	-,27	,53
Fair	-,30**	-,33***	-,39***	-,38***	-,30	,17
Poor	-,52**	-,61***	-1,36***	-1,11***	-,79	2,20*
Ability to make ends meet: fairly easily (ref.)						
With great difficulty	-,45**	-,64***	-,20	-,33*	-,09	-,79
With some difficulty	-,17*	-,17**	-,15	-,09	-,16	-,78
Easily	,03	,09*	,15*	,08	,07	-,39
N	757	1644	451	630	83	55

CHAPTER 4

4. THE INFLUENCE OF WORK-FAMILY TRAJECTORIES ON LIFE SATISFACTION OF RETIRED WOMEN

4.1. Introduction

As described in the previous chapters, the massive increase of women in the labour market in the last few decades has also resulted in a growing number of female retirees. This aspect has shifted the research attention to the characteristics of retired women and to implications that combining paid work and family responsibilities have for health and subjective wellbeing (SWB) in retirement. However, despite the wealth of research investigating this topic, the understanding of how work and family careers affect health remains limited (Lacey et al. 2016).

Previous studies have often relied on repeated cross-sectional data, covering only a time-point of women's lives (Moen, Chermack 2005; Pavalko, Woodbury 2000). Moreover, relatively little research has specifically focused on the relationships between work, family and subjective wellbeing among women, although motherhood and care responsibilities often disrupt women's workforce participation, with consequences on life-satisfaction (Frech, Damaske 2012). Therefore, this study investigates whether and how SWB in later life, measured as life satisfaction, is associated with the way women have combined work and family trajectories during their life course. For this purpose, data on European women will be analysed from a longitudinal perspective using the SHARE dataset. Multichannel sequence analysis technique (MCSA) will be applied. It allows studying the combination of working and family spheres over a long period. Subsequently, the trajectories found through MCSA will be associated with the level of satisfaction in later-life through linear regression techniques.

A life-course approach will be adopted, using, in particular, the concepts of linked lives and interdependence of life spheres (Elder et al. 1996) (see Chapter 1). The first concept refers to the close relationship between individuals in

various networks, such as family and work. Social support and social networks are a central point in the study of well-being and mental health from a life-course research perspective (George 1999). The interdependence between life spheres refers to the mutual influence that a domain of life (e.g., family) can have on the choices made in another domain (e.g., work), and how these spheres, in turn, can affect others life aspects (ex: health).

In the present study I contribute to the comparative life course and retirement literature taking into account longitudinal information on the entire adult life course, and not only a snapshot of information on single events. Moreover, I recognize the importance of family and employment processes by conceptualizing adult life courses as interlocked work-family trajectories (Madero-Cabib, Fasang 2016) and by analyzing their association with a later-life outcome. Indeed, I argue that an analysis based on trajectories in various life spheres, could contribute to a better understanding of the relationship between work, family and subjective well-being (Johansson, Huang, Lindfors 2007).

4.2. Theoretical background

With the growing participation of women in the labour market, the balance between paid work and family responsibilities has become of particular interest in academic studies. Although a part of previous literature has shown that career and family patterns may influence well-being (e.g., Kinnunen, Kaprio, Pulkkinen 2005; O'Neil, Bilimoria, Saatcioglu 2004), the number of studies in the area is limited and the results are mixed (Huang, Sverke 2007). Indeed, on the one hand, it is found, that stable careers (e.g., Smart, Peterson 1997), and upward mobility (e.g., Lynch, Davey Smith 2005; Huang, Sverke 2007) are associated with more beneficial consequences for the individual, as compared to less stable and downward careers. On the other hand, there are also studies that point in other directions (e.g., Jepsen, Choudhuri 2001).

Moreover, it has been pointed out that theories based on male career characteristics are not suitable for analysing female careers (e.g., Burke, McKeen 1993; Gutek, Larwood 1987). In fact, women and men occupy

positions in different occupations and their careers are characterized by different trends (although with differences by country): women are often over-represented in the public and service sectors and (e.g., Krantz, Berntsson, Lundberg 2005) their working trajectories are often affected by family events that often involve maternal leave or part-time periods (e.g., Jepsen, Choudhuri 2001; Schober 2013). On the contrary, men are more represented in the private sector, often with continuous and full-time careers (Johansson, Huang, Lindfors 2007). Furthermore, research shows that the wellbeing-related effects of life-course histories differ between men and women (Messing et al. 2003). Some studies show that the effects of the working trajectories are particularly great for men (Stansfeld et al. 1999; Wahrendorf et. al 2013) suggesting a higher significance of the work role for men compared to women, or the availability of alternative roles (e.g., family) among women (Wahrendorf; 2015).

Another shortcoming of current knowledge refers to the measurement of work and family-related factors (Wahrendorf; 2015). In most studies, information about work and family is restricted to one single time-point, which is then linked with later outcomes (e.g., Kivimaki et al. 2012). This conflicts with an important idea of the life-course perspective (Wahrendorf 2015), which claims to embed single events in broader life trajectories (Elder, Johnson, Crosnoe 2003; Sackmann, Wingens 2003). It is thus important to consider employment and family histories as a whole (Wahrendorf, 2015)

4.2.1. Working pathway and subjective well-being

Regarding the link between working pathways and life satisfaction, it has been argued that a strong attachment to the labour market, indicated by a continuous and full-time career, is associated with greater well-being and with less psychological stress (Clark et al. 2001; Dolan et al. 2008; McKee-Ryan et al. 2005). Indeed, work provides opportunities to improve well-being through an increase in social networks and material resources (Waddell, Burton 2006). Moreover, joblessness has been found to have negative consequences on individuals' wellbeing, physical and mental health (Mckeen-Ryan et al. 2005; Jefferis et al. 2001; Kasl, Jones 2000). Research on women has shown that the

positive relationship between paid work and health persists across marital status and life course stages (Frech, Damaske 2012). Full-time workers, and especially skilled ones, report higher levels of self-esteem and control, greater economic security and better health compared to the non-employed (e.g., Ross, Mirowsky 1995). As anticipated, women spend less periods of their lives in paid work, partly because of childcare responsibilities, and partly because of care responsibilities towards parents, grandchildren and other family members (Schober 2013). This dynamic could be associated with lower well-being in later-life (Dolan et al. 2008; Marks et al. 2002).

A theory that attempts to explain the effect of work trajectories on later-life outcomes is the theory of cumulative advantages/disadvantages (CAD). It suggests that inequalities in old age are the result of long-term social processes (Dannefer 1987; DiPrete, Eirich 2006). People with favourable starting positions will find it less difficult to accumulate benefits, unlike those who had disadvantages in the initial phase of their life. Hence, the disadvantages and advantages are not necessarily the result of merits. The idea is that disadvantageous starting positions prevent access to resources in the future, creating inequalities between individuals (Ponomarenko 2016). CAD supports the view that the benefits associated with a person's starting position (during his/her youth) increase over time, widening the differences between individuals or groups later in life (O'Rand 2006). The notion that the benefits at a given point depend on previous benefits is an essential aspect of this approach (DiPrete, Eirich 2006; McDonough et al. 2015).

The concept of cumulative disadvantages has been widely used to explain the effects of unemployment on several outcome in later-life (Ponomarenko 2016). For example, unemployment is negatively associated with financial outcomes; and it is also related to bad health (Alavinia, Burdorf 2008; Eggs 2013), and depression (Berchick et al. 2012; Riumallo-Herl et al. 2014). Part of the literature has shown that job loss is harmful to the subjective well-being of individuals, (Clark et al. 2008; Whelan, McGinnity 2000), and that unemployment influences individual’s feeling of security, self-confidence, sense of failure (Clark 2003; Gallo et al. 2000; McKee-Ryan et al. 2005; Young 2012)

with also long-term effects (Strandh et al. 2014). Regarding the gender dimension, the traditional idea is that unemployment affects women to a lesser extent than men (Ervasti, Venetoklis 2010), for example, because women have a lower job attachment (Hakim 1991).

By contrast, the possible negative effects of labor market inactivity and discontinuity have rarely been analysed (Ponomarenko 2016), and the results are mixed. Labour market inactivity is not equal to unemployment in general, because inactivity could be voluntary. Nevertheless, having a job is a major source of identity formation, social status, participation in the society and access to material resources and, therefore, important for subjective well-being (van der Noordt et al. 2014). However, only few studies investigate the negative effects of labour market inactivity on subjective well-being (Ponomarenko, 2016). On the one hand, they document a negative impact of inactivity on mental health (Frech, Damaske 2012), showing that women who do not participate in paid work report lower levels of physical and mental health (Ross, Mirowsky 1995; OECD 2008). Moreover, it has been shown that economic inactivity had a negative impact on the mental health of workers in 5 countries (OECD, 2008), and that economically inactive men and women, as well as female homemakers, reported lower well-being levels compared with employed men and women (Stam et al. 2016). Moreover, the burden of family work -faced by housewives- was found to be negatively associated with health (Pavalko, Woodbury 2000). Again, other findings suggest that being employed, retired, or in full-time education is associated with higher well-being (Di Tella et al., 2001; Andersson, 2008), while being involved in household duties is associated with reduced well-being (Stutzer, 2004). On the other hand, we find also studies that shown opposite results. In fact, a part of previous literature examining (mostly female) homemakers and their life satisfaction, showed higher levels of subjective well-being for this category compared to employed women (Treas et al., 2011; Stam et al. 2016).

Part-time employment is mostly considered as non-standard employment because it deviates from the full-time one. Similar to labour market inactivity, it has received little attention in the literature and the results are mixed. Previous

research focused mainly on aspects of income and wages (Fouarge & Muffels, 2008, 2009), finding several negative effects of part-time employment. In facts, it reduces an individual's opportunities to enter full-time employment, and wage levels stay lower even upon entry to full-time employment, because of lack of seniority or because workers are placed in lower paid jobs. In addition, part-time employed women have a higher probability to enter nonemployment compared to full-time counterparts (Blázquez Cuesta, Moral, Carcedo 2014). The long-term negative consequences of part-time for subjective well-being have been less often investigated. On the one hand, the results shown that women engaged in part-time work may experience greater job strain due to the nonstandard work hours, which may lead to lower self-related health (Broom et al. 2006; Kim et al. 2008). Anyway, part-time work is not necessarily negative, and could be a desired choice (Fouarge and Muffels 2008; 2009). Indeed, it has been also found that part-time employment offers an opportunity to balance work and family responsibilities (Beham, Präg, Drobnic 2012) or to reduce working hours in older age. Therefore, it is not clear if part-time employment will have a negative effect on subjective well-being, as it might be the desired option for women who cope with career and care obligations but also deprive them of income and job mobility (Ponomarenko, 2016).

To summarize, literature provide us with mixed findings about the positive or negative influence that inactivity periods, unemployment and part-time work could have on the subjective well-being of women in later-life (Ponomarenko 2016). Therefore, this topic deserves more research, in particular, looking at the development of the whole working trajectory in conjunction with family-related events.

4.2.2. Family pathways and subjective wellbeing

Several factors suggest that family and family resources are central to explaining the reasons and the individual differences of SWB (Hansen 2010). Indeed, they can increase SWB by satisfying needs that are directly related to it. For example, the family can be considered the group in which the widest range of resource exchanges happen and where the greatest potential exists for

satisfying personal needs (Hansen 2010). Marriage and children, for example, usually offer companionship and support and promote feelings of connection, identity, respect and love. Both the family and the financial resources it provides can also promote feelings of control and security, respect from others, and contribute to self-fulfilment (Hansen 2010). Intimate relationships can respond to the negative effects of various life stressors on SWB (Johnson, Krueger 2006).

Marriage appears to be one of the most influential circumstances affecting SWB (Daukantaite 2006). Indeed, ample empirical literature demonstrates the positive effect of marriage (and cohabitation) on various indicators of SWB (e.g., Diener et al. 1999; Mroczek, Spiro 2005; Pinquart, Sorensen 2001; Mirowsky, Ross 2003; Ross et al. 1990; Waldron, Hughes, Brooks 1996). This effect has been found in many countries (Diener, Gohm et al. 2000; Stack, Eshleman 1998) and it remains also after controlling for age, gender or income (Hansen 2010). Moreover, previous literature shows that trajectories characterized by long and stable relationships with a partner are associated with good health and great life satisfaction (Hughes, Waite 2009; Stutzer, Frey 2006; Dupre et al. 2009; Monden, Uunk, 2013). On the contrary, divorce has been shown to have long-lasting adverse health effects for women, but not for those who find another partner (Hughes, Waite 2009).

Instead, research on the impact of having a child on psychological well-being has led to conflicting results (Albertini, Arpino 2018; Waldron, Weiss, Hughes 1998). Motherhood seems to have both harmful and beneficial effects: having children can increase economic difficulties, increase or decrease social contacts (e.g., Ross et al. 1990). Some studies have found lower levels of life satisfaction for people without children (Ross, Mirowsky, 2002; Connidis, McMullin 1993; Hansen et al. 2009), and others (e.g. Hank, Wagner 2013) found that childless individuals are no worse off than parents. Even among the studies on parenting combined with marital trajectories, the results are mixed. Some find lasting marriage to be the best for mothers' health (Avison et al. 2008), while others report no difference in health between single and married mothers (Meadows, McLanahan, Brooks-Gunn 2008). It has been also found

that having children at home tends to have more damaging consequences for women than men in terms of psychological suffering (Hansen 2009). This result is usually related to the stress of combining parenting, marriage, and work. However, the discomfort among women associated with child-rearing may be influenced by the istitutional and cultural context because it can be tied with traditional gender roles and can change with the development of labour and parenting policies (Hansen 2009).

From a life course perspective, it would be preferable to look at the entire development of the family history (the whole trajectory), rather than investigating the association between marital status or transition to motherhood with psychological wellbeing (Barban 2013). Under this perspective, characteristics such as type, duration of unions, or the order of events may have an effect on later health outcomes (Peters, Liefbroer 1997). Moreover, different life domains are strictly intertwined. For example, marital status is clearly connected with other events that happen during the life course, such as having a child, leaving the parental home, and starting to work (Barban 2013). The interdependence of life sphere makes it difficult to identify the effect of a single life course event, such as marriage, without taking into account other transitions such as childbearing. In addition to this, also health outcomes are the result of the cumulative influence of multiple factors experienced during the life course (Halfon, Hochstein 2002). Therefore, it is necessary to take into account the whole life course development in order to study the effects on health outcomes (Barban 2013).

4.2.3. The combination of work-family trajectories

As anticipated, several studies shown the effects of family relationships and employment on mental and physical health, examining these states separately (Klumb, Lampert 2004; Manzoli et al. 2007). Nevertheless, the studies of the effects of the intertwined life trajectories are few (Casini et al. 2013; Nyman, Spak, Hensing 2012; Pavalko, Gong, Long 2007).

The life-course perspective (Elder 1995) stresses as the trajectories in different life domains are interconnected. International literature has explored

the interdependence between family and work careers (e.g., O'Rand, Henretta 1999) and the investigation on timing and sequencing of life events often illustrates interconnections among sub-trajectories in an individual's life (Call, Hagestad 2007). For example, it has been shown that educational and occupational pathways influence marital and parental trajectories (Hill, Mattessich 1979). However, few studies have examined the combined effect of work and family spheres on the subjective wellbeing (Cullati 2014). Some of them underline that employment promotes mothers' health by providing economic and social resources (Nordenmark 2004), and women who combine a relatively strong attachment to the labour market with a stable marriage/relationship will have a higher level of wellbeing in later life than those who have been out of the labour market for long periods because of family responsibilities (McMunn et al. 2006). Conversely, other authors, argue that the difficult balance between paid work and care responsibilities increases stress among women, damaging health and well-being (Gove 1984; Johansson et al. 2007). Wahrendorf (2014) found that the best quality of life was found among women with a period of domestic work followed by employment (mixed histories), whereas women with a continued employment had a lower quality of life. Additionally, women had significantly lower quality of life in later life if their previous employment histories were dominated by domestic work only (home-maker histories). In other words, women whose employment histories were either dominated by employment or by domestic work had a lower quality of life in later life.

Two main theories are found in literature: The role stress and role accumulation theory. According to the first one, the combination of family and employment related roles creates more demands than one can manage. Dividing time and attention between children, partner and a job can lead to a conflict of roles and put pressure on women, which, consequently, can result in illness and distress (Hansen, 2009). On the other hand, the role accumulation theory, suggests that the managing multiple roles has in general positive effects on life satisfaction and health (Lahelma et al. 2002; Sieber 1974). According to this theory, multiple roles (such as working, partner and parent) provide a range of

resources that is greater than the possible stressful effects they could cause. Having a paid job outside the home can result in additional social contacts, professional challenges, and self-respect, as well as more financial independence (Hansen 2009). Balancing work and family makes it possible to find satisfaction and support in one life sphere when having problems in another as each individual role involve specific elements that promote satisfaction and well-being (Hansen 2009; Fokkema 2002).

Hence, recognizing the interdependence between paid work, marriage, motherhood and care tasks, I will examine the association between the interplay of career and family patterns and women's life satisfaction in later-life, considering family formation, childbearing and labour market experiences.

4.3. Data and methods

4.3.1. Data

I use data from the Survey of Health, Aging, and Retirement in Europe (SHARE). Specifically, for the MCSA, I use the third and seventh waves, SHARELIFE, which were collected in 2008/2009 and 2017. SHARELIFE provides detailed retrospective information about individual work-family trajectories starting from early adulthood until retirement. For the regression analysis and the sample selection, I used the regular waves of the survey (1, 2, 4, 5, 6) and the panel part of wave 7.

4.3.2. Sample selection

The analytic sample encompasses all women aged 50-75, who were not working any more at the time of the interview and reported being retired. Hence, the initial sample is composed by 23.355 women. The work-family trajectories have been measured from age 20 to 50. Since SHARELIFE does not provide current information and only retrospective events, the sample is constructed by identifying first the population of interest in the regular panel waves. Then, information about employment and family history is added to this sample. When matching the regular panel waves with the retrospective information

(SHARELIFE) 5.941 respondents could not be matched. Lastly, I selected the country of interest for the analysis (number of dropped cases N=6.424). Including only persons with non-missing information in the multivariate analyses, I arrive at the final sample of 5.841 retired women from 17 European countries.

4.3.3. Methods

In this study, I employ multichannel sequence analysis (Gauthier et al. 2010; Pollock 2007; Madero-Cabib, Fasang 2016) and cluster analysis to identify different type of joint work–family trajectories followed by women across the life course. Then, with regression analysis, I examine how these typical work–family life course pathways are associated with life satisfaction in retirement.

Multichannel sequence analysis. Multichannel sequence analysis (Gauthier et al. 2010; Pollock 2007) is an expansion of sequence analysis (Abbott 1995; MacIndoe, Abbott 2004) that allows to quantify the distance between individual sequences in several domains (Gauthier et al. 2010; Pollock 2007). It means that two individual sequences are considered similar if they are composed of similar states −experienced at similar time-points − in at least two domains (Madero-Cabib, Fasang 2016). The output of multichannel sequence analysis is a pairwise distance matrix that, in this case, summarises the distance between the two-dimensional work-family sequences.

In this study, I use the multichannel optimal matching with substitution costs derived from the transition rates between two states (Aisenbrey, Fasang 2017; Studer et al. 2011). Therefore, the cost specification is not subject to the researcher's discretional decision but derives from the data itself. The logic is that replacing the states between which people frequently transit should be "cheaper" and consequently produce less distance, compared to the substitution of the states between which transitions occur very seldom (Aisenbrey, Fasang 2017).

The transition rate between two states is the probability of moving from one state to another (Aisenbrey, Fasang 2017). On the basis of the transition rates, the replacement costs (SC) between state i and state j are calculated as

$$SC= 2 - p(si \mid sj) - p(sj \mid si)$$

where «p (si | sj) is the probability of observing state si at time t + 1 given that state sj has been observed at time t. The idea is to set a high cost when changes between si and sj are seldom observed, and lower cost when they are frequent» (Gabadinho et al. 2011, 26)

Substitution costs based on transition rates range between zero and two. Zero is the lowest substitution cost possible when the likelihood of transition between two states is 100%; 2 is the highest possible substitution cost when the probability of transition between two states is zero. I establish indel costs (costs for insertion or deletion) of one, which corresponds to half of the maximum substitution cost (see Aisenbrey, Fasang 2017).

The work-family sequences are aligned as follows: the family states and the work states of person are jointly aligned with the family states and work states of another individual (Aisenbrey, Fasang 2017). The alignment produces a pairwise distance matrix, that summarizes distances between each pair of multidimensional sequences (Aisenbrey, Fasang 2017). To explore the robustness of the results, I tried another cost specification and chose the cost specification above because it generated the most distinct cluster specification indicated by several cluster cut-off criteria[12]. Furthermore, it is an empirically based cost specification that avoids potentially arbitrary cost specifications from the researcher (Aisenbrey, Fasang 2017).

Consequently, to identify homogeneous groups of sequences that represent typical life course profiles, I use ward cluster analysis (Ward 1963) on the

[12] The other cost specifications I tested was optimal matching with substitution costs 2 and indel costs 1. The substantive results with this alternative cost specifications were very similar to our final cost specification (see Appendix 2). I chose the substitution costs based on transition rates because they give a data-based specification that does not rely on arbitrary researcher' decision.

distance matrix resulting from MCSA. Like in the other chapters, to determine the most appropriate number of clusters, I considered several cluster cut-off criteria, including the Average Silhouette Width (ASW) and Point Biserial Correlation (PBC) (Hennig, Liao 2013; Studer 2013) that identify the most discriminant number of groups (see Appendix 1).

In this study, employment and family trajectories are measured as longitudinal sequences in yearly intervals from ages 20 to 50. Work trajectories were specified based on five states: (1) "undergoing education", (2) "out of the labour market" which includes housework and inactive women, (3) "unemployment", (4) "full-time work", including civil servants and self-employed, (5) "part-time work" comprising all forms of self-reported part-time work, and the last is (6) retired.

To construct the family trajectories, I considered seven states based on a combination of the number of children and civil status: (1) "single, no child", (2) "partnered, no children", (3) "partnered, 1 child", (4) "partnered, 2 children", (5) "partnered, 3+ children" (6) "divorced, with and without children", and (7) "widow". I do not separate marriage and cohabitation, and being single is defined as not being in a cohabiting relationship and also includes persons who were never married.

Just to give an example of possible sequences, tab. 1 shows an example of two work-family sequences from the age of 20 to 30 for the work and family states as defined above.

Tab. 1. Example of two work- family sequences for two individuals aged 20 to 30.

Work sequence											
Respondent/Age	20	21	22	23	24	25	26	27	28	29	30
Women 1	PT	PT	PT	PT	PT	PT	FT	FT	FT	FT	FT
Women 2	FT	FT	FT	FT	FT	OLF	FT	OLF	OLF	OLF	OLF
Family sequence											
Respondent/Age	20	21	22	23	24	25	26	27	28	29	30
Women 1	S	P	P	P1C	P1C	P1C	P1C	P2C	P2C	P2C	P2C
Women 2	S	S	S	S	S	P	P1C	P1C	P2C	P2C	P2C

Legend	
FT:	Full-time employed
OLF:	Out of the labour force
PT:	Part-time employed
S:	Single
P:	Partnered
P1C:	Partnered, 1 child
P2C:	Partnered, 2 children

Dependent variable: subjective wellbeing. Unlike other more immediate concepts (such as income, age, gender, etc.), the concept of well-being is not easy to measure. Schematically, it can be divided into two categories: hedonic well-being (which includes life evaluation and affect) and eudaimonic well-being (psychological "wellness"). Indeed, most well-being measures are developed from one of these two distinct philosophical traditions (see paragraph *3.4.3* for more information).

In this study, SWB is the dependent variable, measured by life satisfaction on a 0–10 scale; 10 being the most positive satisfaction with life. The life satisfaction scale, in general, asks the person for the overall evaluation of his/her life, rather than summing up his satisfaction with specific sectors (Diener et al. 1985). This measure belongs to the hedonic view of well-being and represents its cognitive component, which is a judgemental process in which individuals assess the quality of their life based on their own set of criteria (Pavot, Diener 1993). Life satisfaction evaluates life as a whole rather than the current feelings and, therefore, integrates long-term developments (Diener 2009).

Independent variables. To assess the associations between work-life trajectories and life satisfaction in retirement I use linear regression models,

employing the clusters of joint work-family life courses as main independent variables to predict the indicators of women's life satisfaction.

The analysis proceeds with a stepwise approach. I first include only the work-family clusters and, secondly, I add respondent's age ate the time of the interview and dummies variables for the country of residence. In a third step, I include controls for educational level and subsequently, economic situation and participation in social activities. Lastly, I include health variables.

The educational degree obtained was measured according to the 1997 International Standard Classification of Education or ISCED-97 (UNESCO 2006) and it has been codified in 4 categories: Isced 0 &1, Isced 2, Isced 3 & 4 and Isced 5 & 6. Since the financial position is known to be significantly associated with older people's life satisfaction (Pinquart, Sörensen 2000), I control for the economic situation using the Household income variable. It is assessed with the question 'How much was the overall household income after taxes that your household had in an average month of [{previous year}]?'. Household income refers to the sum of all household members' net income. All household incomes are converted into Euros values using the annual average exchange rate. Furthermore, bad health has been found to have a significant negative effect on subjective wellbeing among the elderly (Midanik et al. 1995; Dwyer, Mitchell 1999), and health has been found to be strongly associated to life satisfaction (von Heideken Wagert et al. 2005; Xavier et al. 2003). The positive correlation between self-rated health and life satisfaction has been identified both in cross-sectional and in longitudinal studies (Mroczek, Spiro 2005). However, objective health measures have not been investigated as frequently as self-reports ones in life satisfaction studies, and the relationship is not yet clear (Berg 2008). Therefore, I included in the analysis the presence of limitations with activities of daily living (adl) and with instrumental activities of daily living (iadl). I codified it in a dummy variable: no limitations/one more adl or iadl. I also include self-perceived health (very good/excellent or less than very good), and presence of chronic diseases (no/two or more chronic diseases). To conclude, it has been shown that social networks and relationships also play a role in influencing life satisfaction in old age (Berg 2008). Social networks are

generally described in terms of frequency of social contacts or quality of social networking and social support (Cohen, Gottlieb, Underwood 2001; Berg 2008). Nevertheless, also community engagement seems to play a crucial role in shaping life satisfaction in later life (Ward, Kilburn 1983). Cutler (1982) argued that "voluntary associations may provide much satisfaction to the newly or recently retired person and such satisfaction may contribute to overall life satisfaction". Hence, I included a dummy variable, recording the participation in social activities, that is charity work or social/sport club.

4.4. Results

4.4.1. Work-family life course

The cluster cut-off criteria introduced above clearly suggest thirteen clusters as the best grouping with an ASW of .37 (Studer 2013) (see cluster cut-off criteria in Appendix 1). Fig. 1 illustrates the thirteen groups of work-family trajectories as state distribution plots (Gabadinho et al. 2011). The work trajectory is displayed above, and the corresponding family trajectory of the same individuals is displayed on the bottom of the cluster itself. They show the proportion of individuals in each cluster in a respective sequence state, such as 'full-time employment', which are indicated by different colours.

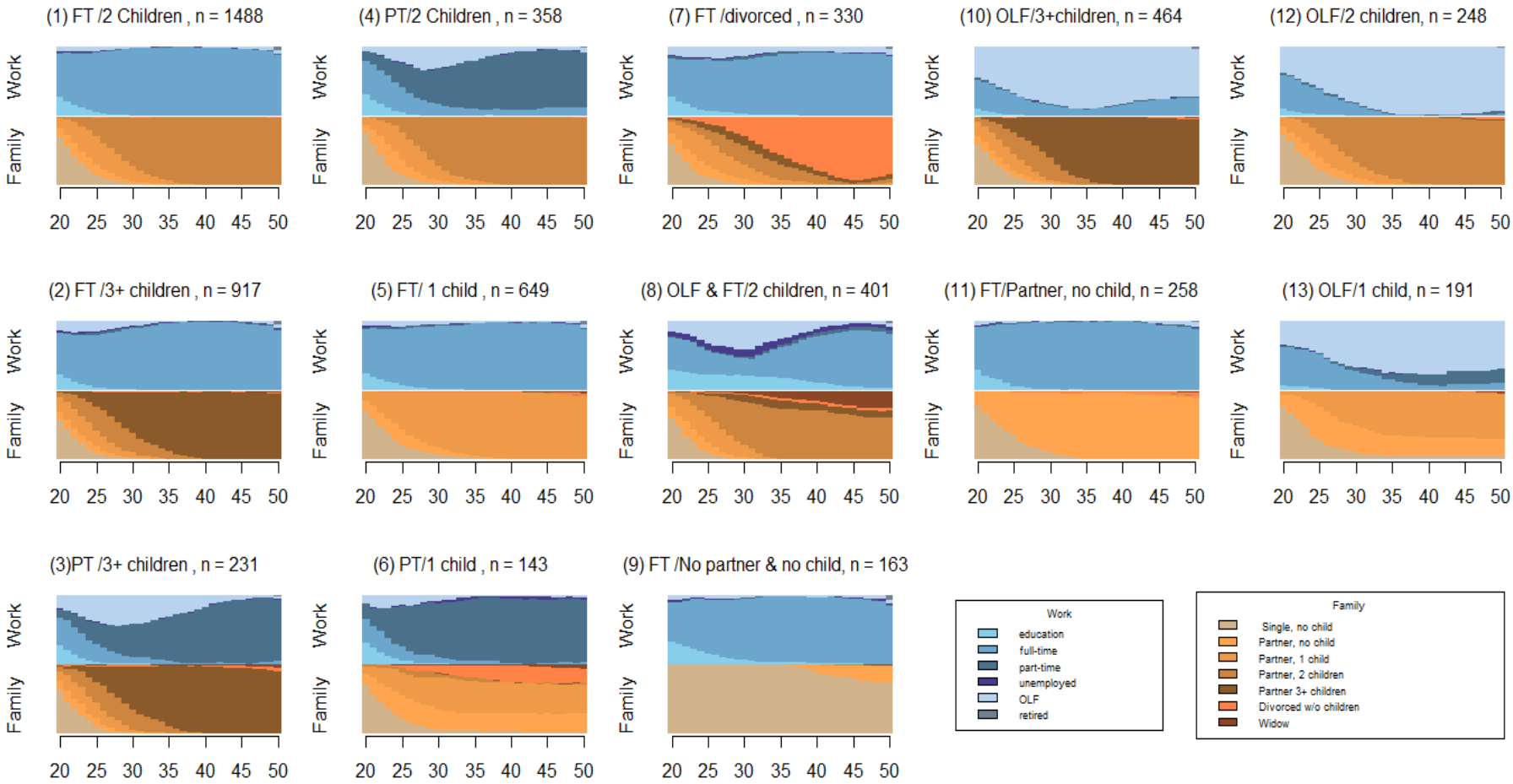
The first typical cluster, named '(1) full-time employed/ 2 children', is the largest group and accounts for 25 per cent of the sample. This group represents a life-course trajectory characterized by a continuous full-time job in combination with the presence of 2 children. The second cluster is named '(2) full-time employed/3+ children' and differs from group 1, essentially because women in this group have 3 or more children instead of two children.

The third cluster is named '(3) part-time employed/3+ children'. This group represents a life-course trajectory characterized by a continuous part-time job in combination with the presence of 3 or more children. The fourth cluster is the '(4) part-time employed/2+ children', the fifth is named '(3) full-time employed/1 child', the sixth cluster is named '(6) part-time employed/1 child'. The seventh group is the '(7) full-time employed/divorce w/o children'. Women

in this group had a relationship finished due to divorce and they generally have children. The eight cluster is the '(8) out of labour force and FT/2 children', and it identifies mothers who had mainly a full-time working trajectory, interrupted by some years of inactivity. The ninth group is the '(9) full-time employed/No partner, no child'. It is characterized by single women, without children. As for the working sphere, they have a continuous and full-time job. The tenth cluster '(10) out of labour force/3+ children', and it identifies women who became mothers and permanently abandoned the labour market. The following group is the '(11) full-time employed/Partner, no child'. It is characterized by partnered women, without children and a continuous and full-time job. Lastly, the twelfth and thirteenth are named '(12) out of labour force/2 children', and '(13) out of labour force/1 child'.

Among the clusters, there are quite large differences in the distribution of educational levels (Table 2). In particular, the work-family pathways characterized by full-time and part-time work, are mainly composed of women with a high level of education (Isced 3 & 4 and Isced 5 & 6 exceed 60% of the total). Conversely, the trajectory characterized by long periods out of the workforce (cluster 10, 12 and 13), is predominantly composed of women with a low educational level (Isced 0 & 1).

Fig. 1. Work-family life course trajectories (20-50 years of age)



Notes: Meaning of categories: FT = Full-Time; OLF; = Out of Labour Force; PT = Part-time; SNC=single, no child; PNC=Partner, no child

Tab. 2. Descriptive information of nine groups of work–family trajectories.

	1	**2**	**3**	**4**	**5**	**6**
	FT 2 children	FT 3+ children	PT 3+ children	PT 2 children	FT 1 child	PT 1 child
% Total	25.5	15.7	3.9	6.1	11.1	2.4
N	1.488	917	231	358	649	143
% ISCED						
0 & 1	11.8	24.6	20.3	14.2	13.7	14.0
2	16.1	20.7	17.3	17.9	17.4	21.0
3 & 4	47.6	34.1	37.2	41.1	46.5	35.0
5 & 6	24.5	20.5	25.1	26.8	22.3	30.1
Tot	100	100	100	100	100	100
Duration employment state						
Education	1.0	0.8	0.9	1.0	1.1	1.1
Ft	28.6	24.4	3.6	5.9	27.9	2.9
Pt	0.2	0.4	18.9	19.0	0.4	24.1
Unemployment	0.2	0.3	0.2	0.2	0.2	0.8
OLF	1.0	2.0	7.4	4.8	1.3	2.1
Duration employment state						
Single, no child	2.7	2.1	2.1	2.8	3.5	3.9
Partner, no child	1.5	0.9	1.1	2.0	2.3	8.5
Partner, 1 child	4.0	2.3	2.1	3.9	24.2	12.2
Partner, 2 children	22.3	4.1	3.8	22.1	0.0	1.1
Partner, 3+ children	0	20.9	20.9	0.0	0.0	0.1
Divorced	0.3	0.4	0.7	0.2	0.6	4.6
Widow	0.1	0.2	0.3	0.0	0.3	0.5

Notes: Meaning of categories: FT = Full-Time; OLF; = Out of Labour Force; PT = Part-time; SNC=single, no child; PNC=Partner, no child

Tab 2. Continue

	7	**8**	**9**	**10**	**11**	**12**	**13**
	FT Divorced	OLF & FT 2 children	FT SNC	OLF 3+ children	FT PNC	OLF 2 children	OLF 1 child
% Total	5.7	6.9	2.8	7.9	4.4	4.2	3.3
N	330	401	163	464	258	248	191
% ISCED							
0 & 1	11.8	22.7	20.2	34.7	15.1	43.1	33.5
2	19.7	21.9	12.3	24.1	18.2	19.8	24.6
3 & 4	40.6	33.8	33.7	30.8	42.2	27.8	32.5
5 & 6	27.9	21.7	33.7	10.3	24.4	9.3	9.4
Tot	100	100	100	100	100	100	
Duration employment state							
Education	1.3	4.7	2.2	0.3	1.1	0.4	0.3
Ft	25.4	16.4	27.0	6.6	28.6	4.2	7.1
Pt	0.6	1.0	0.2	0.5	0.3	0.6	3.2
Unemployment	0.3	2.4	0.3	0.0	0.1	0.0	0.2
OLF	3.3	6.3	1.1	23.5	0.7	25.8	20.1
Duration family state							
Single, no child	2.1	2.1	28.7	2.32	4.4	3.4	5.1
Partner, no child	1.9	1.4	2.2	0.9	25.3	1.7	9.9
Partner, 1 child	4.1	3.6	0.1	2.1	0.3	4.0	15.6
Partner, 2+ children	4.1	17.0	0.2	3.7	0.0	21.5	0.0
Partner, 3+ children	2.6	2.4	0.2	21.4	0.0	0.1	0.0
Divorced	16.0	0.9	0.0	0.3	0.7	0.2	0.2
Widow	0.0	3.5	0.0	0.1	0.2	0.1	0.2

Notes: Meaning of categories: FT = Full-Time; OLF; = Out of Labour Force; PT = Part-time; SNC=single, no child; PNC=Partner, no child

4.4.2. Work–family life courses and life satisfaction

The distribution of the dependent and independent variables and other descriptive information are displayed on Table 3. The average score of the life satisfaction indicator is 7.7. Moreover, most of the women in the sample possess a medium educational level, have a partner and report to have not very good health.

Tab. 3. Descriptive Statistics

	Mean (*std); %*
Age	66.2
	(0.1)
Satisfaction with life	7.7
	(0.02)
Education	
Isced 0 & 1	19.6
Isced 2	18.9
Isced 3 & 4	39.6
Isced 5 & 6	21.9
Current Marital status	
Partnered	69.3
Separated/divorced	10.1
Single	3.6
Widow	17.0
Hausehold income	3,717.5
	(202.0)
N of limitations with instrumental activities of daily living	
One ore more	14.7
N of limitations with activities of daily living	
One ore more	8,1
Self-perceived health	
Very good/excellent	23.5
Number of chronic diseases	
2 ore more	57.3
Participation in voluntary work or sport/social club	
Yes	32.5
N	5,841

Figure 2 shows the life satisfaction average (and C.I.) by work-family life course. In the graph, the categories of my explanatory variables are reported on the x-axis. The cluster '(4) part-time employed/2+ children' shows the

highest level of life satisfaction, and the cluster '(13) OLF/1 child' shows the lowest one. Given these first results, cluster 4 will be taken as the reference category in the

Fig. 2. Mean of Life satisfaction by work-family pathways. (95% C.I.)

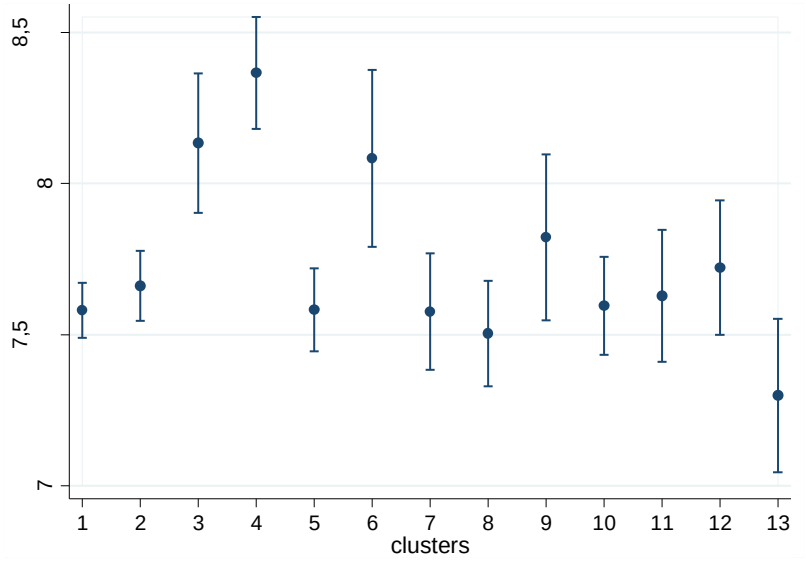


Table 4 reports the results of linear regression models that assess the association of work-family life courses with life satisfaction. Overall, the findings support greater life satisfaction for a working life course characterized by part-time work. Most work-family clusters show lower life satisfaction compared with the work-family pattern of '(4) part-time employed/2+ children', the reference category (step 1, Table 3). These negative effects remain strong and significant once controlling for age, country, and level of education for seven work-family trajectories (step 3, Table 3). For instance, the group '(1) FT employed/2+ children' is associated with 0.24 points less life satisfaction on average than cluster '(4) part-time employed/2+ children'. Having had some periods out of the labour force also reduces life satisfaction of 0.44 points, 0.26 and 0.52 points respectively for pathways '(8) OLF & FT employed/2 children, '(10) OLF/3+ children' and '(13) OLF/1 child'. Moreover, the cluster '(7) FT employed/divorced' reports the lower level of life satisfaction with 0.57 points less than the reference category.

Once controlling for all the covariates (step 5, table 3), clusters 1, 5, 7, 8, 11 and 13 remain negative and significant. The other pathways also show a negative coefficient, but it is not statistically significant. The association between the aforementioned work-family pathways and individuals' life satisfaction is statistically significant but when focusing on the social significance of these effects we should note that its size is apparently small (the coefficients range from -0.23 to -0.48). This is because, although the life satisfaction scale ranges theoretically from 0 to 10, most respondents report high values (Albertini, Arpino 2018). In our sample, the average value of life satisfaction is 7.7. The substantive importance of the estimated coefficients of the work-family pathways is also clear when we observe that other determinants of life satisfaction show similar effects in terms of size (even if with opposite directions). For example, the coefficients for Isced 5 & 6 (reference is Isced 0 & 1) is 0.38, those for the 5th income decile (reference is first decile) is 0.55 (Tab. 4, model 5).

Tab. 3. Linear regression models on individual life satisfaction

	Model 1	Model 2	Model 3	Model 4	Model 5
Work-family life course: (4) Part-time/2 children (ref.)					
(1) FT/2 children	-,78***	-,19	-,24*	-,22*	-,26**
(2) FT/3+ children	-,70***	-,20	-,18	-,14	-,16
(3) PT/3+ children	-,23	-,12	-,09	-,07	-,10
(5) FT/1 child	-,78***	-,24	-,28*	-,22	-,23*
(6) PT/ 1 child	-,28	-,23	-,23	-,18	-,18
(7) FT/Divorced	-,79***	-,54***	-,57***	-,48***	-,48***
(8) OLF & FT/2 children	-,86***	-,44***	-,44***	-,39**	-,38**
(9) FT/No partner, no child	-,54**	-,13	-,21	-,09	-,11
(10) OLF/3+ children	-,77***	-,35**	-,26*	-,18	-,18
(11) FT/Partner, no child	-,74***	-,30*	-,33*	-,30*	-,30*
(12) OLF/2 children	-,64***	-,15	-,05	-,01	-,02
(13) OLF/1 child	-1,07***	-,59***	-,52**	-,43***	-,40**
Age		,00	,01	,01*	,02***
Education: Isced 0 or 1 (ref.)					
Isced 2			,32***	,25**	,21**
Isced 3 or 4			,50***	,38***	,26***
Isced 5 or 6			,75***	,56***	,38***
Household income in quintile: 1° quintile (ref.)					
2° quintile				,30**	,24**
3° quintile				,54***	,48***
4° quintile				,78***	,66***
5° quintile				,70***	,55***
Participation in charity work or in social/sport club: no (ref.)					
Yes				,29***	,21***
Adl or Iadl Limitation: no (ref.)					
One or more					-,72***
Chronic diseases: no (ref.)					
Two or more					-,18***
Self-perceived health: excellent/ very good (ref.)					
Less than very good					-,62***

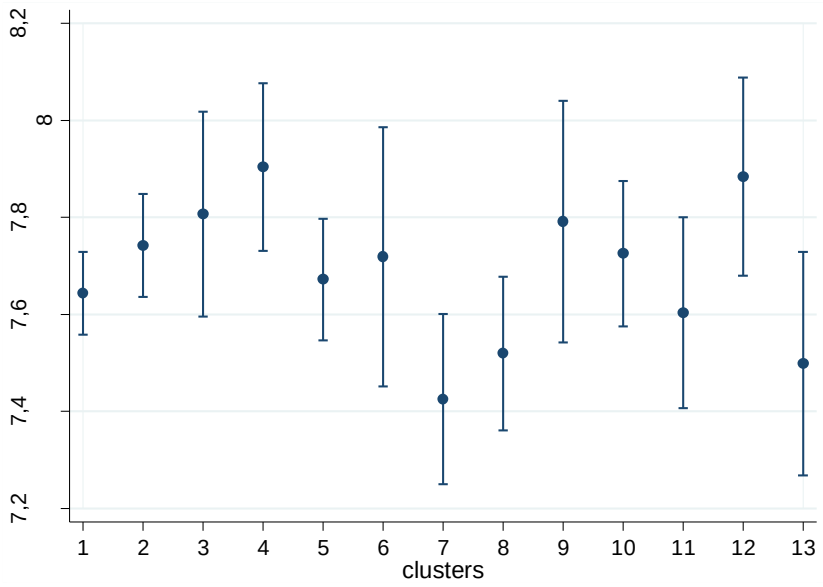
Notes: *p < .05; **p < .01; ***p < .001
Meaning of categories: FT = Full-Time; OLF; = Out of Labour Force; PT = Part-Time
All model (except for model 1) are also control for country of residence.

Therefore, concerning the other covariates, we notice that the higher is the level of education, the higher is the level of life satisfaction. Having a favourable economic situation is also associated with a higher level of satisfaction compared to the reference category. Moreover, participating in

social activities, such as volunteering or sports/social clubs, increases life satisfaction with a coefficient of 0.21. Finally, having one or more limitations with activities of daily or with instrumental activities of daily living decreases the level of life satisfaction, as well as having chronic diseases and self-perceived poor health[13].

To better appreciate my main findings from model 5, I used the estimated coefficients to predict the life satisfaction average for each work-family pathway. The predicted values are displayed in Figure 3 together with confidence intervals at the 5% significance level. The categories of my explanatory variables are reported on the y-axis.

Fig. 3. Predicted life satisfaction level by work-family trajectories (95% C.I.)



The graph confirms that work-family trajectories matter: cluster 13, 11, 8, 7, 5 and 1 show the lowest life satisfaction level. This means that working full-time, both in combination with children's presence and not, reduces the level of life satisfaction. Inactive or discontinuous career also shows negative association with life satisfaction, whether in combination with one or two children

[13] See Appendix 3 for country groups-specific analysis and Appendix 4 for gender-specific analysis.

4.5. Discussion and conclusion

This study relied on longitudinal life course information from SHARELIFE data to compare how different female work-family life courses affect later-life satisfaction. Overall, findings show a lower level of life satisfaction for several work-family profiles that differ from the cluster of part-time employment combined with two children (Group 4). I took into account longitudinal work-family pathways across the entire adult life course as determining factors of subjective well-being in retirement. Results show that the longitudinal work-family trajectories influence life satisfaction in retirement, and even after controlling for the covariates, the negative association of the clusters (1), (5), (7), (8), (11) and (13) remains significant. This result highlights the importance of exploring long periods of the life course and not just events close to the retirement transition as determinants of life satisfaction in old age.

In general, the results show a positive effect of part-time working trajectories on life satisfaction. Indeed, all the life course trajectories characterized by part-time work show a higher level of life satisfaction compared to the other pathways. One explanation for these results could be that part-time work help women to reconcile work and family responsibilities. Moreover, I recognized the importance of family processes next to employment by conceptualizing adult life courses as interrelated multidimensional work-family trajectories. For instance, a part-time trajectory was associated with higher life satisfaction in retirement when combined with a stable marriage and two children than when it was coupled with one child or three or more children. In these cases, in fact, the coefficients, although not statistically significant, suggest negative associations. Furthermore, these analyses suggested that labour market inactivity, in combination with children's presence, is negatively related to life satisfaction in old age, compared to a part-time trajectory (again in combination with children). As there are few studies on the negative effects of labour market inactivity, this finding is remarkable. On the other side, full-time trajectories, combined with motherhood are associated with a lower level of

satisfaction with life. These results are in line with some studies (Gove 1984; Johansson et al. 2007) that show as the difficult balance between paid work and care responsibilities increase stress among women, damaging health and well-being. In line with previous findings (e.g., Lu et al., 2017; Wahrendorf, 2014), my results showed that women who undertook part-time jobs had higher life satisfaction in comparison to those who were mostly in full-time work. Thus, the findings seem to suggest the importance of work-life balance for women's later life wellbeing (Lu et al., 2017). Furthermore, even women who experienced long career breaks or a weak attachment to the labour market, combined with having one child, had lower life satisfaction than those with histories combining childcare (2 children) with part-time work. This result suggests that either weak labour market attachment or strong attachment (at the expense of other roles), might both be damaging for wellbeing. This finding may indicate that taking part-time work when, for example, children are young can have long-term positive consequences for women's well-being. In conclusion, the findings suggest that women benefit - in terms of life satisfaction - from trajectories that intertwine work and family care.

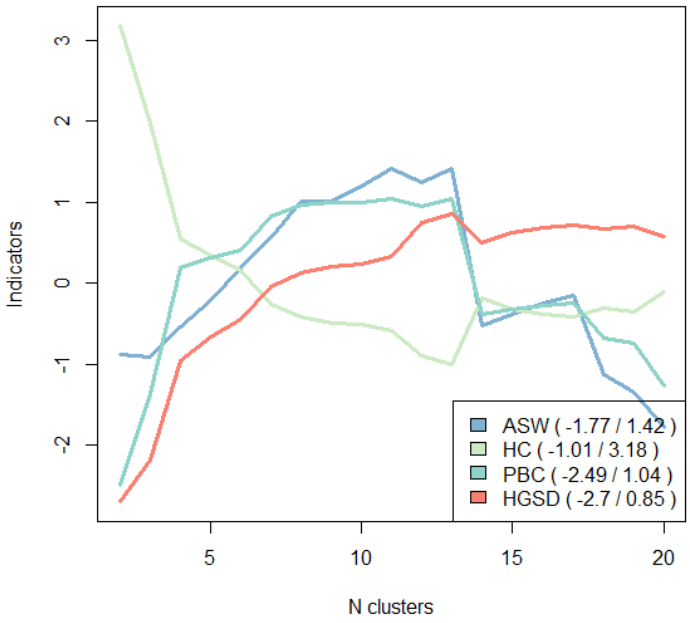
This study has some limitations. A potential endogeneity bias regarding the effects of life course pathways on subjective well-being must be addressed. The direction of the causality of lower/greater life satisfaction and the characteristics of the work-family trajectory cannot be discovered with the current OLS analysis of life satisfaction. Therefore, we must interpret the results as associations. Furthermore, it was not possible to untangle the heterogeneous category of inactivity in the labour market. It can include many different reasons for not being part of the workforce, including disability, or housework. Therefore, more research is needed to study this category and its effect on well-being. Also, the country variation was not addressed (I only controlled for country dummies), so it was not possible to deal with policies and institutional measures. Indeed, it might be interesting to examine how different policies or, more generally, different welfare systems, shape work-family pathways and how they affect life satisfaction. Moreover, I take into account life satisfaction as indicator of SWB, but it would be interesting to

extend the analysis to other domain, such as physical health or financial well-being as additional indicators of quality of life in old age.

To conclude, this study underlines the strength of a life course perspective to directly examine how life trajectories earlier in the life course could influence outcomes later in life. The importance of an analytical view (Elder 1985) that takes into account long life courses has long been proclaimed in the principles of the life course paradigm (Elder et al. 2003). Through the application of a methodological approach to handling life-course information, I can broadly enlarge the perspective on the work-family models typically followed by women and on the outcomes they have in old age. Sequence analysis allows the management of all the information on the work-family trajectory, considering the serial succession of different states, their duration and ordering rather than just single events or single time points. This point is of substantial importance if we think of life transitions as processes that evolve over time.

Appendix 1

Fig. A1.1. — Cluster cut-off criteria for work-family clusters derived with multichannel sequence analysis and substitution costs based on transition rates



Appendix 2

Fig. A2.1. — Cluster cut-off criteria for work-family clusters derived with multichannel sequence analysis with arbitrary substitution costs of 2

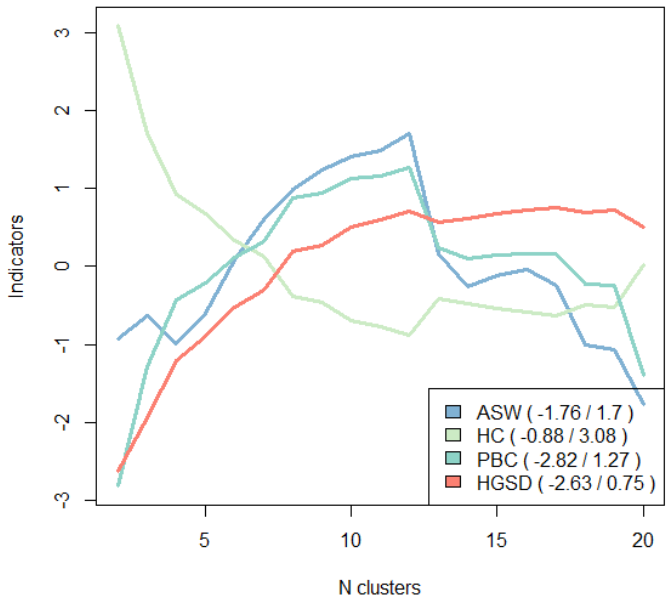
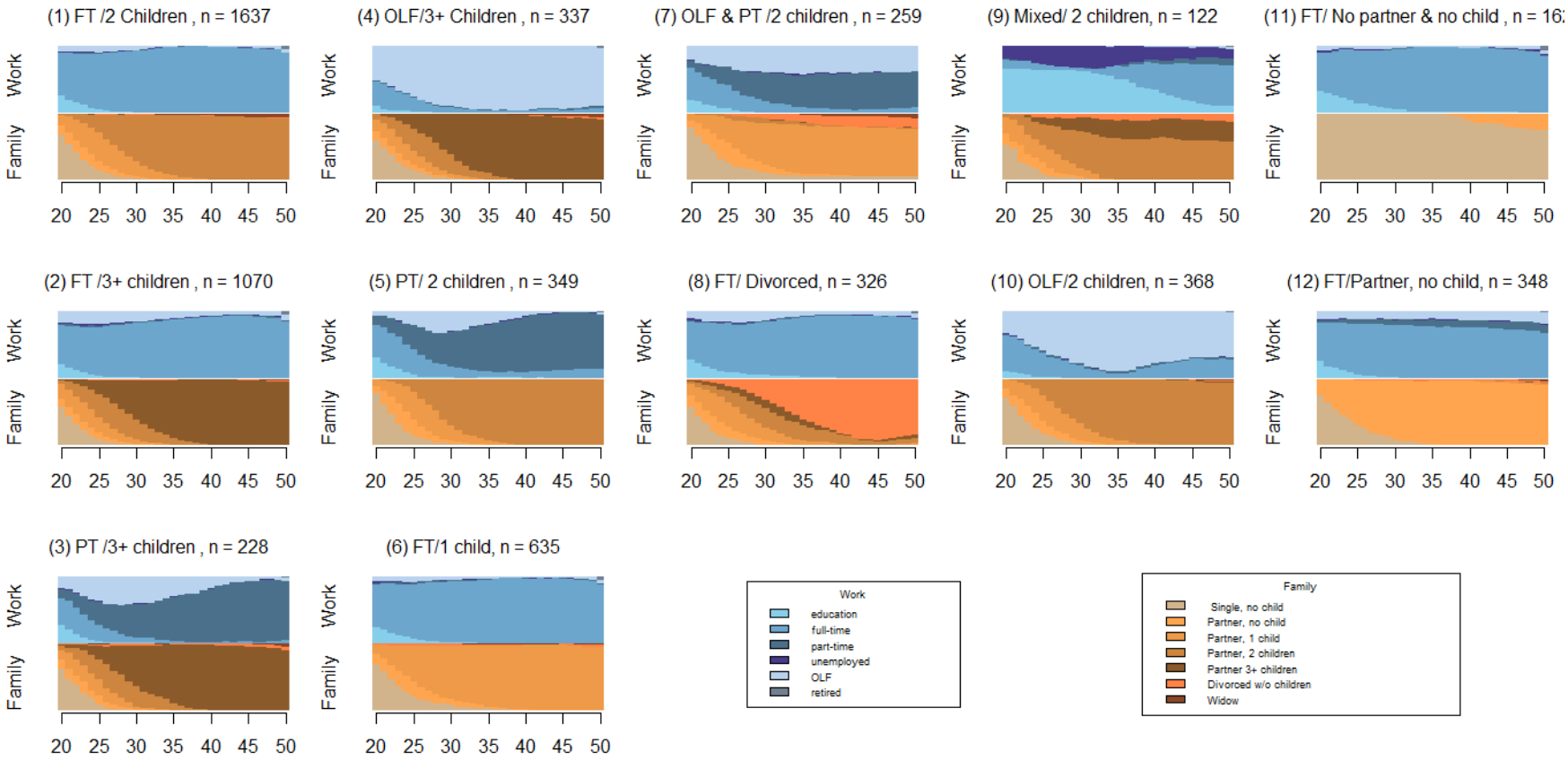


Fig. A2.2. Work-family life course trajectories (20-50 years of age). Clusters derived with multichannel sequence analysis with arbitrary substitution costs of 2.



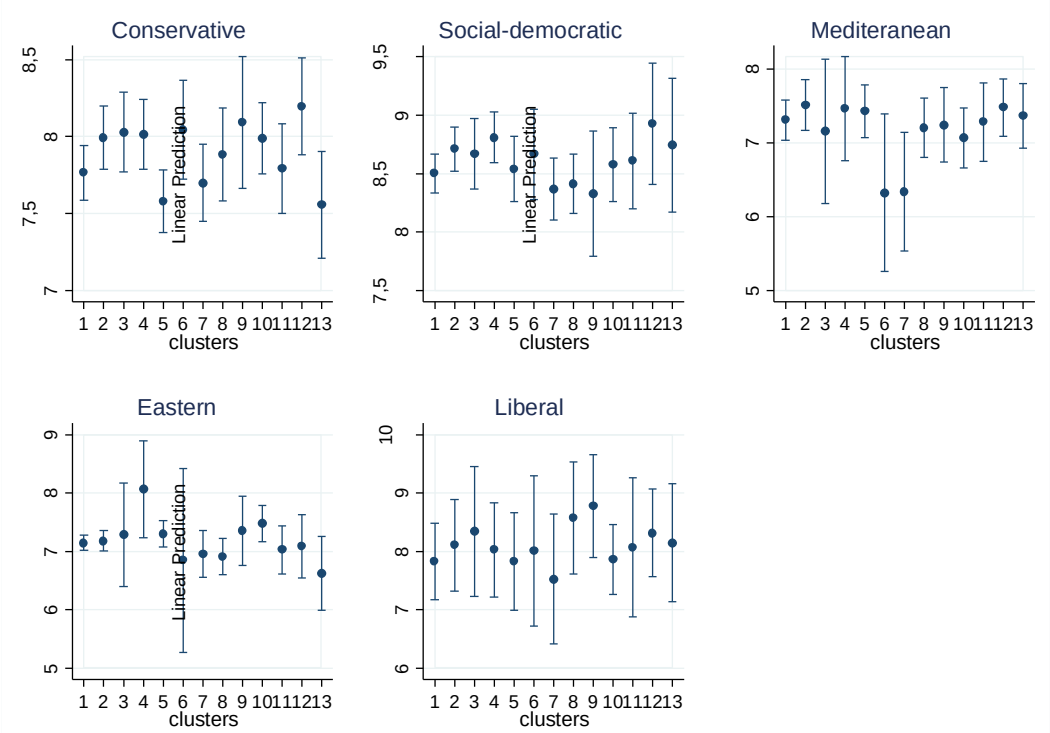
Tab. A2.1. Linear regression model on life satisfaction. Clusters derived with multichannel sequence analysis with arbitrary substitution costs of 2.

	Coef.
Work-family life course: Part-time/2 children (ref.)	
(1) FT/2 children	-,26**
(2) FT/3+ children	-,15
(3) PT/3+ children	-,09
(4) OLF/3+ children	-,19
(6) FT/ 1 child	-,21
(7) OLF & FT/2 children	-,30*
(8) FT/Divorced	-,46***
(9) Mixed/2 children	-,44*
(10) OLF/2 children	-,03
(11) FT/No partner, no child	-,09
(12) FT/Partner, no child	-,29*
Age	,02***
Education: Isced 0 or 1 (ref.)	
Isced 2	,21**
Isced 3 or 4	,26***
Isced 5 or 6	,38***
Household income in quintile: 1° quintile (ref.)	
2° quintile	,23**
3° quintile	,48***
4° quintile	,67***
5° quintile	,55***
Participation in charity work or in social/sport club: no (ref.)	
Yes	,21***
Adl or Iadl Limitation: no (ref.)	
One or more	-,73***
Chronic diseases: no (ref.)	
Two or more	-,18***
Self-perceived health: excellent/ very good (ref.)	
Less than very good	-,62***

Notes: *p < .05; **p < .01; ***p < .001
Meaning of categories: FT = Full-Time; OLF; = Out of Labour Force; PT = Part-Time
Model additionally controlled for country of residence.

Appendix 3

Fig. A3. Predicted life satisfaction level by work-family trajectories (95% C.I.). Models controlled for covariates.



Appendix 4

Fig. A4. Work-family life course trajectories (20-50 years of age) for men

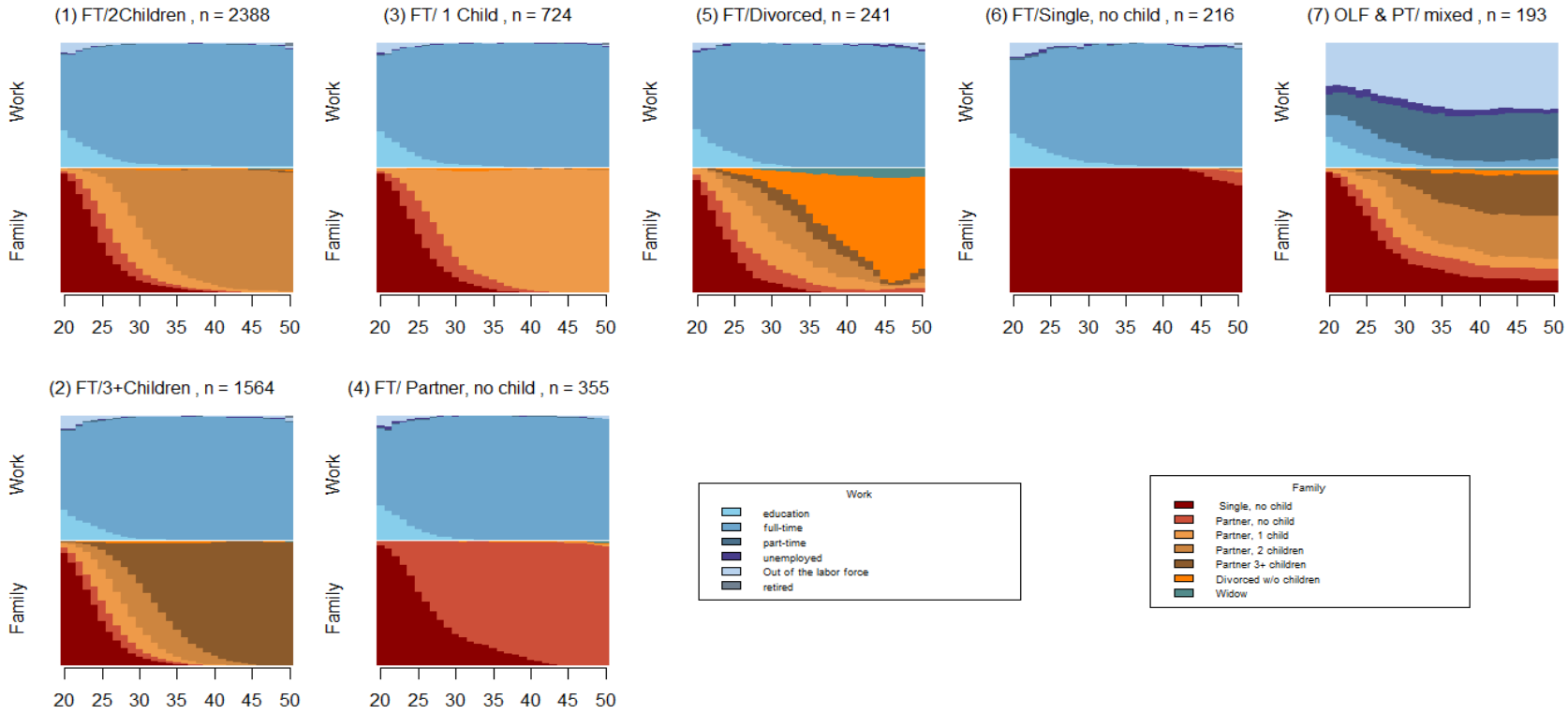
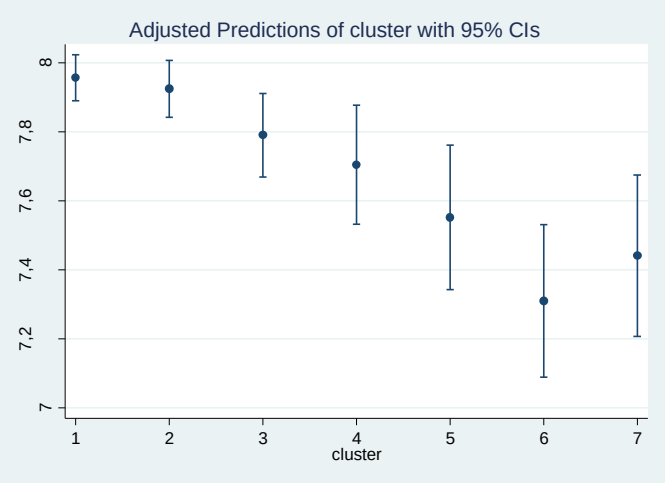


Fig. A4.2. Mean of Life satisfaction by work-family pathways form men. (95% C.I.)



Tab. A4. Linear regression model on life satisfaction for men.

	Coef.
Work-family life course: FT/2 children (ref.)	
FT/3+children	-,04
FT/1 child	-,08
FT/Partner, no child	-,23**
FT/Divorced	-,43***
FT/single, no child	-,47***
OLF & PT/Mixed	-,40***
Age	,01**
Education: Isced 0 or 1 (ref.)	
Isced 2	,12
Isced 3 or 4	,23***
Isced 5 or 6	,26***
Household income in quintile: 1° quintile (ref.)	
2° quintile	,33***
3° quintile	,56***
4° quintile	,72***
5° quintile	,58***
Participation in charity work or in social/sport club: no (ref.)	
Yes	,18***
Adl or Iadl Limitation: no (ref.)	
One or more	-,71***
Chronic diseases: no (ref.)	
Two or more	-,14**
Self-perceived health: excellent/ very good (ref.)	
Less than very good	-,64***

Meaning of categories: FT = Full-Time; OLF; = Out of Labour Force; PT = Part-Time
Model additionally controlled for country of residence.

CONCLUSION

Retirement *per se* is an increasingly salient issue as the population ages, and female retirement is an important part of that issue. Indeed, not only the participation of women in the labour market has increased significantly in recent decades, but now women work for a longer period during their life-course than before. This dynamic ensures that today women represent a large part of the retired population.

While the literature on male retirement decision-making and retirement consequences is abundant, there are relatively few studies that have explored the relationship between working and family trajectories and retirement outcomes for women. Those studies have often focused on linear working paths, without considering other types of career trajectories. The traditional definitions of work and retirement have excluded unpaid work from the retirement investigations, omitting many people (especially women) who have worked intermittently, who have spent time for care responsibilities or have worked part-time. Hence, since the concept of retirement has been constructed around the male experience of full-time-continuous-paid work, women's experiences have been often excluded from retirement studies (Weatherill 1994). For this reason, it was worth analysing the female retirement experience, recognizing the exchanges between family and work roles, between the public and private sphere.

Hence, the primary purpose of this dissertation was to explore -through three studies- different outcomes of the female retirement process. In particular, I investigated the association between work and family life trajectories with the timing of exit from the labour market and with subjective well-being in retirement. The three studies utilized data from the Survey of Health, Ageing and Retirement in Europe (SHARE).

I. Summary of the main findings

In the **first** contribution (Chapter II), I investigated the retirement timing of women from three European countries (Italy, Germany and Denmark), according to their career trajectory. On the one hand, the literature shown evidence that women with fewer interruptions due to caring tasks (Pienta et al. 1994), that remained in the labour market in their fertile age (Henretta et al. 1993; Pienta 1999; Pienta et al. 1994) and who have a continuous and full-time career, are more likely to work at an older age too. On the other, other studies have shown that periods of discontinuity or part-time work lead to a later retirement age compared to stable working history (Raymo et al. 2010; Bardasi, Jenkins 2002; Pienta 1999; Lanninger, Sundström 2014; Hinrichs 2012; O'Rand, Henretta 1999; Radl 2013; Konig 2017), meaning that women with a continuous and stable participation in the labour market retire first (O'Rand, Henretta 1982; O'Rand, Henretta, Krecker 1992). The first contribution, therefore, investigated the relation between the structure of women's careers and the timing of the exit from work. The countries that I analysed belong to different welfare regimes and differ with respect to the pension systems (Esping-Andersen 1990; Bonoli 2003), the structure of the labour market, and the female labour market participation. So, I was interested in understanding how female career structures shape retirement timing and if exist differences between diverse istitutional context. In Italy, I observed a negative and significant probability of retirement for the discontinuous and part-time clusters compared to the full-time one. In Germany and particularly in Denmark, the coefficients for those pathways (distinct from the full-time one), are not significant and close to zero. These results suggest that career pathways influence women's retirement timing in a country with a Mediterranean welfare regime. In Italy, the characteristics of the female labour market, the unequal division of the care tasks inside the family, and the mechanisms of the pension system could force women with discontinuous or part-time careers to remain in the labour market longer. In fact, they could have great difficulty in reaching the requirements to retire, or they could have too

low pensions. This dynamic does not seem to occur in Denmark and Germany, where the characteristics of the female labour market participation, as well as the pension system, try to balance the inequalities that generally afflict women, making that the career structure does not influence the timing of exit from the workforce.

In the **second** contribution (Chapter III), I investigated the change in subjective well-being of European women before and after the retirement transition. In previous literature, there is both evidence that supports an increase in well-being after retirement (e.g., Latif 2011; Reitzes, Mutran, Fernandez 1996; Isaksson, Johansson 2000) and results that go in the opposite direction (e.g., Kim, Moen 2002; Richardson, Kilty 1991). There are also studies that find no effects of the retirement transition on well-being (e.g., Crowley 1985; Warr et al. 2004; Luhmann et al. 2012). The chapter considered the entire working life course of European women to examine whether a possible change in subjective well-being (through retirement transition) differs according to the structure of the working career. I found some evidence that the retirement transition affects life satisfaction differently, depending on the working trajectories. In particular, the trajectories characterized by discontinuity or part-time periods, showed a continuous increase in life satisfaction, passing from employment (or unemployment) to retirement. For other trajectories, such as the full-time one, retirement seems to not have implications for subjective wellbeing. Therefore, the results diverge from the assumptions of the Role theory according to which the withdrawal from the role of "worker" -through the retirement transition- could lead to a decrease in subjective well-being. Perhaps, the traditional gender roles, which still see women as family carers and primary domestic workers, bring them to occupy a diversified set of roles (e.g., mothers, wives, workers, old parent's carers) and to identify these roles as an important source of identity. This dynamic could make them perceive the transition to retirement not as a "damaging" event for their well-being since they can immediately replace the role of worker with other roles. To determine if traditional sex-and-gender-roles actually do come

into play in influencing subjective wellbeing, future research could examine individuals' sex-role attitudes and practices (Talaga & Beehr 1995). Indeed, they could be examined for their ability to moderate the relationship between care responsibilities and unpaid work and employment/retirement status (Talaga & Beehr, 1995).

In the **third** contribution (Chapter IV), the relationship between working careers, family histories and life satisfaction in later-life has be examined. In the literature, the understanding of how work and family pathways develop throughout the life-course and how they together affect health remains limited. Furthermore, little attention has been paid specifically to the relationship between family, work and subjective wellbeing for women in older age (Frech, Damaske 2012). My results show that the longitudinal work-family trajectories influence life satisfaction in retirement, highlighting the importance of exploring the life course and not just events close to the retirement transition as determinants of life satisfaction in old age. All the life course trajectories characterized by part-time work show a higher general level of life satisfaction compared to the other pathways. Hence, part-time work could be a positive experience and might help women to reconcile work and family responsibilities. Moreover, a part-time trajectory was associated with higher life satisfaction in retirement when combined with a stable marriage and two children, than when combined with one child or more than two children. Furthermore, these analyses demonstrated that labour market inactivity, joined with children's presence, is negatively related to life satisfaction in old age, compared to a part-time trajectory (again combined with children). On the other side, full-time working trajectories lead to a lower level of satisfaction with life. The explanation of this last result could go in two directions: on the one hand, in line with some studies (Gove 1984; Johansson et al. 2007), the balance between paid work and care responsibilities could increase stress among women with a full-time continuous career, damaging their well-being and life satisfaction. In this sense, mothers that work part-time could be more likely to reconcile work and family duties. On the other hand, we should

emphasize the importance that social norms have in shaping individual behaviours for the cohorts of women I have analysed. Social norms can be defined as "informal social regularities that individuals feel obligated to follow because of an internalized sense of duty, because of a fear of non-legal sanctions, or both" (McAdams 1997, 340). The failure to comply with a social norm can have an impact in two ways: individuals sanction themselves for failing to respect their internalized norms; second, individuals face external sanctions because they do not comply with the expectations of their social environment. The consequences of this dynamic are expected to reduce individual subjective well-being, because they can lead, for example, to lower self-confidence and feelings of inadequacy (Stam et al. 2016). With regard to work and family duties, social norms (which concern the cohorts of the analysis) implied that women who do not have children or have children and a full-time career experienced a higher degree of sanctioning, which led to lower levels of wellbeing than, for instance, part-time employed mothers. Indeed, the social norms around motherhood, expected mothers to stay at home to care for their children instead of pursuing their careers, and mothers were seen as fully responsible for the children and their development. Women, who have had full-time careers or who have not children, may have perceived social judgments for not having spent sufficient time in the role of mothers and wives. As a result, these women could report a lower level of life satisfaction. (Preisner et al. 2018). However, if this dynamic can be true for the cohorts of women who are included in my analyzes and who retired in the years of observation of the present study, for the younger cohorts, that is, for female workers who are now in the labour market, the results are expected to differ. In fact, social norms have, in part, changed. Today's expectations of and about women include successful participation in the labour market, reconciliation of family life and work, and an endeavour to fulfil the role of the autonomous woman (Preisner et al. 2018). Today, working mothers are more commonly perceived as emancipated role models rather than accused of neglecting their children in favour of their careers.

II. Limitations

The limitations of the single empirical studies have been discussed in the respective sections. In this section, I want to highlight some conceptual weaknesses. First of all, even though the use of the complete employment and family history is an advantage compared to other studies of retirement outcomes, the comprehensiveness goes along with the reduction of detailed information about the life course. For example, this includes the type of labour market inactivity, voluntariness of transitions as well as financial or living conditions. Moreover, the circumstances of joblessness or inactivity cannot be investigated and, therefore, the interpretability of the causal relation is difficult.

Another limitation regards the definition of retirement that I used. Only the self-reported measure to distinguish between being employed, unemployed, inactive or retired has been taken into consideration. In the literature, the retirement status has been defined in several ways. Some definitions are based on objective measures such as reducing working hours or receiving a pension, whereas others are based on subjective self-report measures (Kim and Moen 2002; Shultz and Wang 2011). The problem with the self-reported evaluations regards the fact that it may vary depending on the formulation of the survey questions (Eyjólfsdóttir et al. 2019), and that the definition of retirement can change from interviewee to interviewee (Cahill et al. 2015). Therefore, it would be desirable that future research could use and compare different definitions of retirement status, to gain a deeper and broader knowledge of the phenomenon.

Another weakness of the study regards the macro-level analysis. Indeed, the "social policy aspect" was not elaborated in the studies of employment and family biography, because it added another level of complexity to the life-course analyses and because it sensibly reduces the sample (by country). In the present work, only the first chapter addressed the differences in the labour market and pension system between countries, nevertheless, social policy measures were not implemented in the analysis. However, a large body of literature is devoted to studying the effectiveness of policy measures and

welfare institution in promoting or avoiding early exit from the labour market, in helping work-life balance, in encouraging subjective well-being. For example, countries could implement active and passive policy measures against unemployment, fund generous parental leaves, implement active ageing policies, etc. Hence, career and family differentiation and retirement outcomes are not only the result of individual factors but are also due to levels of decommodification and public intervention. Second, some may argue that clustering of histories should have been conducted for countries separately. However, country-specific clustering would have complicated comparisons between contexts, such that I would have had used three different cluster solutions as outcomes in the regression analyses, making meaningful comparisons of links between retiring timing and working histories between countries impossible. Regarding the second and third chapters, I have not been able to do separate analysis by country. First, those studies focus on individual determinants and thereby, I did not consider details on country specific policies and pension schemes. Moreover, the existing sample size is not large enough to warrant the additional complexity that would have been involved in country-specific analyses. In addition, while it is plausible that the national context affects types of employment histories, the association between wellbeing and employment histories in later life may be less affected. However, when testing links between life course trajectories and well-being in the third chapter, regression models were adjusted for country affiliation. In the second chapter, this was not possible because the fixed effects regression models do not allow to control for time-constant variables. However, in both chapters I inserted an Appendix section, showing some country-groups analysis.

The last limitation regards the data used. Like all longitudinal panel surveys, SHARE is also at risk of attrition and survival bias and this thesis has not empirically explored their impact on the results. Preliminary analysis undertaken by the SHARE team has demonstrated that there were few differences between those who dropped out of the survey and those who remained (Schröder 2008). Nevertheless, we cannot exclude that the attrition is

not random, but is correlated with our variables of interest. Further, although the analysis contained in this thesis eliminated cases with missing values, it has not considered the extent to which this influenced the results or examined potential bias resulting from the elimination. Therefore, it cannot be ruled out that the elimination of cases with missing data may have influenced some of the results observed.

A further drawback of the data relates to the retrospective nature of some of the exposure variables used in the analysis, which may be affected by recall bias. Recall bias can occur when individuals do not correctly remember details relating to a particular event that took place in the past and the anchoring can result from the projection of current events (for example experiencing depression) on to answers about events in the past (Mazzonna, Havari 2011). The risk of recall bias in SHARE was reduced by the use of the life-grid method of data collection, which has been shown to facilitate the recall of prior circumstances with accuracy (Berney, Blane 1997).

III. Concluding remarks

The working history of women is likely to be more discontinuous compared to men, as women are typically seen as the primary caretakers of children and thus often assume the primary responsibility for child-rearing and for family demands. These responsibilities may result in women entering working life later and experiencing several entries and exits during their careers (Talaga & Beehr 1995). The numerous studies that have dealt with the relationship between women and the labour market have focused on the inequalities that affect the female component in terms of lower activity and employment rates, lower wages, and greater difficulties in reconciling work-life than male colleagues. On the other hand, the factors that influence women's conclusion of the career pathway, the timing of retirement and the retirement process in general, have scarcely been investigated. Moreover, it is unclear from previous studies whether women with a continuous work history are more inclined to continue working at an older age than women with a

discontinuous working path or vice versa. Similarly, there are conflicting results regarding the influence of the retirement transition on life satisfaction, in relation to family and working life-course.

The empirical studies of this thesis stressed the importance of employment and family biography in shaping the female retirement process and its consequences. The findings add to the literature on retirement and ageing in several ways. Following the approaches of Elder (1998) and O'Rand (1996), a life course perspective was applied to the study of retirement and well-being in old age. It included a dynamic view of retirement that places importance on the sequences, trajectories and transitions of individual experiences. The three studies complemented the research on female retirement and old age characteristics, considering the structure and development of the course of life as a determinant of later-life outcomes. Results have shown -concentrating on women- that well-being in old age and the timing of the retirement transition are influenced by the structure of working and family life course.

The findings from this dissertation suggest that the research needs to continue to focus on what factors influence the female retirement process, and what additional variables might be included in female retirement research. Moreover, if the taking of traditional gender-and-sex roles is history-dependent, that is, if being socialized during a certain epoch has, in part, led older women to make their decisions inside the family and the labour market, future studies of retirement might gradually provide different results (Talaga & Beehr 1995). If younger women are less likely to assume what is currently considered "traditional" sex roles, then future generations of older women (and men) might use different criteria in making their employment and retirement decisions. It will be stimulating to examine future research for possible social changes influencing (also) retirement.

REFERENCES

Abbott, A. 1995. Sequence analysis: New methods for old ideas. *Annual Review of Sociology*, *21*(1), 93-113.

Abbott, A. and Hrycak, A. 1990. Measuring resemblance in sequence data: An optimal matching analysis of musicians' careers. *American journal of sociology*, 96(1), 144-185.

Abbott, A. and Tsay, A. 2000. Sequence analysis and optimal matching methods in sociology: Review and prospect. *Sociological Methods & Research*, 29(1), 3-33.

Adams, G. A., and Beehr, T. A. (Eds.). 2003. *Retirement: Reasons, processes, and results.* Springer Publishing Company.

Adams, G. A., Prescher, J., Beehr, T. A. and Lepisto, L. 2002. Applying work-role attachment theory to retirement decision-making. *The International Journal of Aging and Human Development*, 54(2), 125-137.

Aisenbrey, S. and Fasang, A. 2017. The interplay of work and family trajectories over the life course: Germany and the United States in comparison. *American Journal of Sociology*, 122(5), 1448-1484.

Aisenbrey, S., and Fasang, A. E. 2010. New life for old ideas: The" second wave" of sequence analysis bringing the" course" back into the life course. *Sociological methods and research*, 38(3), 420-462.

Alavinia, S. M. and Burdorf, A. 2008. Unemployment and retirement and ill-health: a cross-sectional analysis across European countries. *International Archives of Occupational and Environmental Health*, 82(1), 39-45.

Albertini, M. and Arpino, B. 2018. Childlessness, parenthood and subjective wellbeing: The relevance of conceptualizing parenthood and childlessness as a continuum. In Proceedings of the European Population Conference 2018, Brussels, Belgium, 6–9 June 2018.

Aliaga, C. 2006. How is the time of women and men distributed in Europe?. Eurostat.

Allison, P. D. 1984. *Event history analysis: Regression for longitudinal event data* (No. 46). Sage.

Alwin, D.F. and McCammon, R.J., 2003. Generations, cohorts, and social change. In *Handbook of the life course*, Boston: Springer, 23-49.

Alwin, D.F., Felmlee, D.H. and Kreager, D.A., 2018. *Social Networks and the Life Course. Integrating the Development of Human Lives and Social Relational Network.* Cham: Springer International Publishing.

Andersen, J. G. 2011. "Denmark: The Silent Revolution toward a Multipillar Pension System." In (Ed.) Ebbinghaus, B. *Varieties of Pension Governance: Pension Privatization in Europe*. Oxford University Press, 183–209.

Andersson, P. 2008. Happiness and health: Well-being among the self-employed. *The Journal of Socio-Economics*, 37(1), 213-236.

Andrews, F. M., and Whithey, S. B. 1976. *Social indicators of well-being: Americans' perceptions of life quality*. New York: Plenum.

Antonova, L., Aranda, L., Pasini, G. and Trevisan, E. 2014. Migration, family history and pension: the second release of the SHARE Job Episodes Panel. In: SHARE (Ed.), *Working Paper Series* (Vol. 18-2014).

Appold, S. J. 2004. How much longer would men work if there were no employment dislocation? Estimates from cause-elimination work life tables. *Social Science Research*, 33(4), 660-680.

Arber, S., and Ginn, J. 1995. *Choice and constraint in the retirement of older married women. Connecting gender and ageing: A sociological approach*, 69-86.

Armstrong-Stassen, M. and Cameron, S. 2005. Factors related to the career satisfaction of older managerial and professional women. *Career Development International*, 10(3), 203-215.

Ashforth, B. E. 2001. B.E. *Role transitions in organizational life: An identity-based perspective*. Mahwah, NJ: Erlbaum.

Atchley, R. C. 1971. Retirement and leisure participation: Continuity or crisis?. *The Gerontologist*, 11(1_Part_1), 13-17.

Atchley, R. C. 1976. *The sociology of retirement*. John Wiley & Sons.

Atchley, R. C. 1982. Retirement as a social institution. *Annual Review of Sociology*, 8(1), 263-287.

Atchley, R. C. 1993. Continuity theory and the evolution of activity in later adulthood. In Kelly, J. R. (ed.), *Activity and Aging: Staying Involved in Later Life*. Newbury Park, California: Sage, 5–16.

Atchley, R. C. 1999. *Continuity and adaptation in aging: Creating positive experiences*. Johns Hopkins University Press.

August, R. A. 2011. Women's retirement meanings: context, changes, and organizational lessons. *Gender in Management: An International Journal*.

August, R. A. and Quintero, V. C. 2001. The role of opportunity structures in older women workers' careers. *Journal of Employment Counseling*, 38(2), 62-81.

Avison, W. R., Davies, L., Willson, A. and Shuey, K. 2008. Family structure and mothers' mental health: A life course perspective on stability and change. *Advances in Life Course Research*, 13, 233-255.

Bambra, C., and Eikemo, T. A. 2009. Welfare state regimes, unemployment and health: a comparative study of the relationship between unemployment and self-reported health in 23 European countries. *Journal of Epidemiology & Community Health*, 63(2), 92-98.

Barban, N. 2013. Family trajectories and health: A life course perspective. E*uropean Journal of Population/Revue européenne de Démographie*, 29(4), 357-385.

Barbieri, P., and Scherer, S. 2011. Retirement in Italy: rising social inequalities across generations. In *Aging Populations, Globalization and the Labor Market*. Edward Elgar Publishing.

Barbieri, P., and Scherer, S. 2009. Labour market flexibilization and its consequences in Italy. *European sociological review*, 25(6), 677-692.

Bardasi, E., and Jenkins, S. P. 2002. *Income in later life: work history matters.* Policy Press.

Barer, B. M. 1994. Men and women aging differently. *The International Journal of Aging and Human Development*, 38(1), 29-40.

Baunach, D.M., 2012. Changing same-sex marriage attitudes in America from 1988 through 2010. *Public Opinion Quarterly*, 76(2), 364-378.

Beham, B., Präg, P., and Drobnič, S. 2012. Who's got the balance? A study of satisfaction with the work–family balance among part-time service sector employees in five western European countries. *The International Journal of Human Resource Management*, 23(18), 3725-3741.

Bender, K. A., and Jivan, N. A. 2005. *What makes retirees happy?* (Vol. 28). Center for Retirement Research at Boston College.

Bennett, J. and Moehring, K. 2015. Cumulative (dis) advantage? The impact of labour market policies on late career employment from a life course perspective. *Journal of Social Policy*, 44(2), 213.

Berchick, E. R., Gallo, W. T., Maralani, V. and Kasl, S. V. 2012. Inequality and the association between involuntary job loss and depressive symptoms. *Social Science & Medicine*, 75(10), 1891-1894.

Berg, A. I. 2008. Life satisfaction in late life: Markers and predictors of level and change among 80+ year olds. Ph.D dissertation: University of Gothenburg.

Berney, L. R., and Blane, D. B. 1997. Collecting retrospective data: accuracy of recall after 50 years judged against historical records. *Social science & medicine*, 45(10), 1519-1525.

Bertolini, S., De Luigi, N., Giullari, B., Goglio, V., Rizza, R., and Santangelo, F. 2016. Retirement in a context of strong institutional uncertainty and territorial diversities: The case of Italy. In Hofäcker D., Hess M., König S. (eds) Delaying Retirement, London: Palgrave Macmillan, 97-122.

Bianchi, S.M. and Milkie, M.A., 2010. Work and family research in the first decade of the 21st century. *Journal of Marriage and Family*, 72(3), 705-725.

Billari, F. C. and Piccarreta, R. 2005. Analyzing demographic life courses through sequence analysis. *Mathematical population studies*, 12(2), 81-106.

Bird, C. E. 1999. Gender, household labor, and psychological distress: The impact of the amount and division of housework. *Journal of Health and Social behavior*, 32-45.

Blau, G., Petrucci, T. and McClendon, J. 2013. Correlates of life satisfaction and unemployment stigma and the impact of length of unemployment on a unique unemployed sample. *Career Development International*, 18(3), 257-280.

Blázquez Cuesta, M. and Moral Carcedo, J. 2014. Women's part-time jobs:"Flexirisky" employment in five European countries. *International Labour Review*, 153(2), 269-292.

Blossfeld, H. P. 1995. Changes in the process of family formation and women's growing economic independence: A comparison of nine countries. *The new role of women: Family formation in modern societies*, 3-32.

Blossfeld, H. P., Buchholz, S., and Hofäcker, D. 2006. Globalization, uncertainty and late careers in society. Routledge.

Blossfeld, H.-P., and Rohwer, G. 2002. *Techniques of event history modeling: New approaches to causal analysis* (2nd ed.). Lawrence Erlbaum Associates Publishers.

Boje, T. P., and Leira, A. 2000. Introduction: gender, welfare state and the market-towards a new division of labour. *Routledge Research in Gender and Society*, 4, 1-20.

Bonoli, G. 2003. Two Worlds of Pension Reform in Western Europe. *Comparative politics*, 399-416.

Booth, A. L., Dolado, J. J., and Frank, J. 2002. Symposium on temporary work: Introduction. *The Economic Journal*, 112(480), F181-F188.

Borrero, L., and Kruger, T. M. 2015. The nature and meaning of identity in retired professional women. *Journal of women & aging*, 27(4), 309-329.

Börsch-Supan, A. and Schnabel, R. 1998. Social security and declining labor-force participation in Germany. *The American Economic Review*, 88(2), 173-178.

Börsch-Supan, A., Hank, K. and Jürges, H. 2005. A new comprehensive and international view on ageing: introducing the 'Survey of Health, Ageing and Retirement in Europe'. *European Journal of Ageing*, 2(4), 245-253.

Boye, K. 2008. Happy hour? Studies on well-being and time spent on paid and unpaid work (Doctoral dissertation, Institutet för social forskning (SOFI)).

Broadbridge, A 2010. Choice or constraint? Tensions in female retail executives' career narratives. Gender in Management: *An International Journal*, 25(3), 244–260.

Broom, D. H., D'souza, R. M., Strazdins, L., Butterworth, P., Parslow, R. and Rodgers, B. 2006. The lesser evil: bad jobs or unemployment? A survey of mid- aged Australians. *Social science & medicine*, 63(3), 575-586.

Brown, T. H. and Warner, D. F. 2008. Divergent pathways? Racial/ethnic differences in older women's labor force withdrawal. The Journals of Gerontology Series B: *Psychological Sciences and Social Sciences*, 63(3), S122-S134.

Brugiavini, A., Cavapozzi, D., Pasini, G. and Trevisan, E. 2013. Working life histories from SHARELIFE: a retrospective panel. In SHARE (Ed.), *Working Paper Series* (Vol. 11‑2013).

Brugiavini, A., Orso, C. E., Genie, M. G., Naci, R., and Pasini, G. 2019. Combining the retrospective interviews of wave 3 and wave 7: the third release of the SHARE Job Episodes Panel. *SHARE Working Paper Series (36-2019).* Munich: Munich Center for the Economics of Aging (MEA).

Bryant, F. B. andVeroff, J. 1984. Dimensions of subjective mental health in American men and women. *Journal of Health and Social Behavior*, 116-135.

Buchholz, S., Rinklake, A., Schilling, J., Kurz, K., Schmelzer, P., and Blossfeld, H. P. 2011. "Aging populations, globalization and the labor market: comparing late working life and retirement in modern societies". In *Aging Populations, Globalization and the Labor Market.* Cheltenham: Edward Elgar, 3-32.

Budig, M. J. and England, P. 2001. The wage penalty for motherhood. *American Sociological Review*, 204-225.

Bullock, S. (1994). Women and work. Zed Books.

Burke, R. J. and McKeen, C. A. 1993. Career priority patterns among managerial and professional women. *Applied Psychology: An International Review.*

Busch, A., and Holst, E. 2011. Gender-specific occupational segregation, glass ceiling effects, and earnings in managerial positions: Results of a fixed effects model, IZA Discussion Paper No. 5448.

Byles, J., Tavener, M., Robinson, I., Parkinson, L., Smith, P. W., Stevenson, D., ... and Curryer, C. 2013. Transforming retirement: New definitions of life after work. *Journal of women & aging*, 25(1), 24-44

Cahill, K. E., Giandrea, M. D., and Quinn, J. F. 2013. Bridge employment. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 293–310). Oxford University Press.

Cahill, K. E., Giandrea, M. D., and Quinn, J. F. 2015. Retirement patterns and the macroeconomy, 1992–2010: The prevalence and determinants of bridge jobs, phased retirement, and reentry among three recent cohorts of older Americans. *The Gerontologist*, 55(3), 384-403.

Calasanti, T. M. 1993. Bringing in diversity: Toward an inclusive theory of retirement. *Journal of Aging Studies*, 7(2), 133-150.

Calasanti, T. M. 1996. Gender and life satisfaction in retirement: An assessment of the male model. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 51(1), S18-S29.

Calvo, E. and Sarkisian, N. 2011. Retirement and well-being: Examining the characteristics of life course transitions. IPP Documento de Trabajo, 2.

Carter, M. A. T. and Cook, K. 1995. Adaptation to retirement: Role changes and psychological resources. *The Career Development Quarterly*, 44(1), 67-82.

Casarico, A. and Profeta, P. A. 2009. Uguaglianza di genere e sistemi pensionistici: aspetti critici e prospettive per l'Italia. *Studi e Note Di Economia*, 293-315.

Casini, A., Godin, I., Clays, E. and Kittel, F. 2013. Gender difference in sickness absence from work: a multiple mediation analysis of psychosocial factors. *The European Journal of Public Health*, 23(4), 635-642.

Chandola, T., Brunner, E., and Marmot, M. 2006. Chronic stress at work and the metabolic syndrome: prospective study. *Bmj*, 332(7540), 521-525.

Choi, N. G. 2002. Self-Defined Retirement Status and Engagement in Paid Work among Older Working-Age Women: Comparison between Childless Women and Mothers. *Sociological Inquiry*, 72(1), 43-71.

Cinamon, R. G., and Rich, Y. 2002. Gender differences in the importance of work and family roles: Implications for work–family conflict. *Sex roles*, 47(11), 531-541.

Cipollone, A., Patacchini, E., and Vallanti, G. 2012. Women's labour market performance in Europe: Trends and shaping factors. *CEPS Special Report*, September.

Clark, A. E. 2003. Unemployment as a social norm: Psychological evidence from panel data. *Journal of labor economics*, 21(2), 323-351.

Clark, A. E., Diener, E., Georgellis, Y. and Lucas, R. E. 2008. Lags and leads in life satisfaction: A test of the baseline hypothesis. The Economic Journal, 118(529), F222-F243.

Clark, A., Georgellis, Y. and Sanfey, P. 2001. Scarring: The psychological impact of past unemployment. *Economica*, 68(270), 221-241.

Clausen, J. A., and Gilens, M. 1990. Personality and labor force participation across the life course: A longitudinal study of women's careers. In *Sociological Forum* (Vol. 5, No. 4, pp. 595-618). Kluwer Academic Publishers-Plenum Publishers.

Cohen, S., Gottlieb, B. H., and Underwood, L. G. 2001. Social relationships and health: challenges for measurement and intervention. *Advances in Mind-Body Medicine*. 17(2), 129–141.

Connidis, I. A. and McMullin, J. A. 1993. To have or have not: Parent status and the subjective well-being of older men and women. *The Gerontologist*, 33(5), 630-636.

Cooke, P. J., Melchert, T. P. and Connor, K. 2016. Measuring well-being: A review of instruments. The Counseling Psychologist, 44(5), 730-757.

Cornwell, B. 2015. *Social sequence analysis: Methods and applications* (Vol. 37). Cambridge University Press.

Cotter, D. A., Hermsen, J. M., Ovadia, S., and Vanneman, R. 2001. The glass ceiling effect. *Social forces*, 80(2), 655-681.

Crosnoe, R. and Elder Jr, G. H. 2004. From childhood to the later years: Pathways of human development. *Research on Aging*, 26(6), 623-654.

Crowley, J. E. 1985. "Longitudinal effects of retirement on men's psychological and physical well-being". In H. S. Parnes, J. E. Crowley, R. J. Haurin, L. J. Less, W. R. Morgan, M. F. L., and G. Nestel (Eds.), *Retirement among American men*, MA: Lexington Books, 147-173.

Cullati, S. 2014. The influence of work-family conflict trajectories on self-rated health trajectories in Switzerland: A life course approach. *Social Science & Medicine,* 113, 23-33.

Cunningham, M., 2007. Influences of women's employment on the gendered division of household labor over the life course: Evidence from a 31-year panel study. *Journal of family issues*, 28(3), 422-444.

Cutler, N. E. 1982. Voluntary Association Participation and Life Satisfaction: Replication, Revision, and Extension, *The International Journal of Aging and Human Development*, 14(2), 127–137.

Dahl, E. and Birkelund, G. E. 1997. Health inequalities in later life in a social democratic welfare state. *Social Science & Medicine*, 44(6), 871-881.

Damman, M., Henkens, K. and Kalmijn, M. 2011. The impact of midlife educational, work, health, and family experiences on men's early retirement. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66(5), 617-627.

Damman, M., Henkens, K. and Kalmijn, M. 2015. Missing work after retirement: The role of life histories in the retirement adjustment process. *The Gerontologist*, 55(5), 802-813.

Damman, M., Henkens, K. and Kalmijn, M. 2015. Women's retirement intentions and behavior: The role of childbearing and marital histories. *European Journal of Population*, 31(4), 339-363.

Dannefer, D. 1987. Aging as intracohort differentiation: Accentuation, the Matthew effect, and the life course. In *Sociological Forum* (Vol. 2, No. 2, pp. 211-236). Kluwer Academic Publishers.

Daukantaitė, D. 2006. *Subjective well-being in Swedish women* (Doctoral dissertation, Psykologiska institutionen).

Davidson, J. 1982. *Issues of employment and retirement in the lives of women over age 40*, New York: Praeger, 95-114.

De Preter, H., Van Looy, D. and Mortelmans, D. 2013. Individual and institutional push and pull factors as predictors of retirement timing in Europe: A multilevel analysis. *Journal of Aging Studies*, 27(4), 299-307.

De Vaus, D., and Wells, Y. 2004. What should mature age workers do to promote health and wellbeing in retirement. *Health Issues*, 80, 23-26.

DeGraff, D.S. and Centanni, R.M., 2017. Double Shift, Double Balance: Housework in the Presence of Children in the United States. In *Gender and Time Use in a Global Context*, New York: Palgrave Macmillan, 305-331.

Denaeghel, K., Mortelmans, D. and Borghgraef, A. 2011. Spousal influence on the retirement decisions of single-earner and dual-earner couples. *Advances in life course research*, 16(3), 112-123.

Dewilde, C. 2012. Lifecourse determinants and incomes in retirement: Belgium and the United Kingdom compared. *Ageing & Society*, 32(4), 587-615.

Di Tella, R., MacCulloch, R.J. and Oswald, A.J., 2001. Preferences over inflation and unemployment: Evidence from surveys of happiness. *American economic review*, 91(1), 335-341.

Diener, E. 1984. Subjective well-being. *Psychological Bulletin*, 95(3), 542-575.

Diener, E. 2006. Guidelines for national indicators of subjective well-being and ill-being. *Journal of happiness studies*, 7(4), 397-404.

Diener, E. 2009. *Subjective well-being. In The science of well-being*, Dordrecht: Springer, 11-58.

Diener, E. and Emmons, R. A. 1984. The independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47(5), 1105.

Diener, E. D., Emmons, R. A., Larsen, R. J. and Griffin, S. 1985. The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.

Diener, E., Gohm, C. L., Suh, E., and Oishi, S. 2000. Similarity of the relations between marital status and subjective well-being across cultures. *Journal of cross-cultural psychology*, 31(4), 419-436.

Diener, E., Suh, E. M., Lucas, R. E., and Smith, H. L. 1999. Subjective well-being: Three decades of progress. *Psychological bulletin*, 125(2), 276.

Dingemans, E. and Möhring, K. 2019. A life course perspective on working after retirement: What role does the work history play?. *Advances in Life Course Research*, 39, 23-33.

DiPrete, T. A. and Eirich, G. M. 2006. Cumulative advantage as a mechanism for inequality: A review of theoretical and empirical developments. *Annu. Rev. Sociol.*, 32, 271-297.

Dolado, J. J., Felgueroso, F., and Jimeno, J. F. (2002*). Recent trends in occupational segregation by gender: a look across the Atlantic.* Available at SSRN 320108.

Dolan, P., Peasgood, T. and White, M. 2008. Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of economic psychology*, 29(1), 94-122.

Drentea, P. 2002. Retirement and mental health. *Journal of Aging and Health*, 14(2), 167-194.

Drobnič, S. 2002. Retirement timing in Germany: The impact of household characteristics. *International Journal of Sociology*, 32(2), 75-102.

Duberley, J. and Carmichael, F. 2016. Career pathways into retirement in the UK: Linking older women's pasts to the present. Gender, *Work & Organization*, 23(6), 582-599.

Duberley, J., Carmichael, F. and Szmigin, I. 2014. Exploring women's retirement: Continuity, context and career transition. *Gender, Work & Organization*, 21(1), 71-90.

Dupre, M. E., Beck, A. N. and Meadows, S. O. 2009. Marital trajectories and mortality among US adults. *American journal of epidemiology*, 170(5), 546-555.

Dwyer, D. S. and Mitchell, O. S. 1999. Health problems as determinants of retirement: Are self-rated measures endogenous?. Journal of Health Economics, 18(2), 173-193.

Ebbinghaus, B. 2006. *Reforming early retirement in Europe, Japan and the USA*. Oxford University Press.

Ebbinghaus, B., and Hofäcker, D. 2013. Reversing Early Retirement in Advanced Welfare EconomiesA Paradigm Shift to Overcome Push and Pull Factors. *Comparative Population Studies*, 38(4).

Eggs, J. 2013. *Unemployment benefit II, unemployment and health* (No. 12/2013). IAB-discussion paper.

Eibich, P. 2015. Understanding the effect of retirement on health: Mechanisms and heterogeneity. *Journal of health economics*, 43, 1-12.

Ekerdt, D. J. and Deviney, S. 1990. On defining persons as retired. *Journal of Aging Studies*, 4(3), 211-229.

Elder Jr, G. H., and Giele, J. Z. 2009. *The craft of life course research*. The Guilford Press.

Elder, G. H. 1985. *Life course dynamics: Trajectories and transitions, 1968-1980*. Ithaca, NY: Cornell University Press.

Elder, G. H. 1994. Time, human agency, and social change: Perspectives on the life course. *Social psychology quarterly*, 4-15.

Elder, G. H. 1998. The life course as developmental theory. *Child development*, 69(1), 1-12.

Elder, G. H., and Johnson, M. K. 2018. The life course and aging: Challenges, lessons, and new directions. In *Ivitation to the life course: Toward new understandings of later life* (pp. 49-81). Routledge.

Elder, G. H., Johnson, M. K., and Crosnoe, R. 2003. "The emergence and development of life course theory". In *Handbook of the life course*, Boston: Springer, 3-19.

Elder, G. H., Jr. 1995. The life course paradigm: Social change and individual development. In P. Moen, G. H. Elder, Jr., and K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development*, American Psychological Association, 101–139.

Elder, G. H., Johnson, M. K. and Crosnoe, R. 2003. The emergence and development of life course theory. In Mortimer, J. T. and Shanahan, M. J. (eds), *Handbook of the life course*. Kluwer Academic, New York, 3–19.

Elder. G. H., George, L. K., and Shanahan, M. J. 1996. Psychosocial stress over the life course. In H. B. Kaplan (Eds.), *Psychosocial stress: Perspectives on structure, theory, life course, and methods*, Orlando, FL: Academic, 247–292.

Engelhardt, H. 2012. Late Careers in Europe: Effects of Individual and Institutional Factors. *European Sociological Review*, 28(4), 550-563.

Erdner, R. A., and Guy, R. F. 1990. Career identification and women's attitudes toward retirement. *The International Journal of Aging and Human Development*, 30(2), 129-139.

Ervasti, H. and Venetoklis, T. 2010. Unemployment and subjective well-being: An empirical test of deprivation theory, incentive paradigm and financial strain approach. *Acta Sociologica*, 53(2), 119-139.

Esping-Andersen, G. 1990. *The three worlds of welfare capitalism*. Princeton University Press.

Esping-Andersen, G. 1999. *The sustainability of welfare states into the 21st century*. Barcelona, Spain: Fundació Rafael Campalans.

Ettner, S. L. 1995. The impact of "parent care" on female labor supply decisions. *Demography*, 32(1), 63-80.

Statistics Unemployment. 2018. Eurostat. ec. europa. eu/eurostat/statistics-explained/index. php? title= Unemployment_statistics.

Everingham, C., Warner-Smith, P., and Byles, J. 2007, November. "Transforming retirement: Re-thinking models of retirement to accommodate the experiences of women". In *Women's Studies International Forum*, Pergamon, 30 (6), 512-522

Evetts, J. 2000. Analysing change in women's careers: Culture, structure and action dimensions. *Gender, Work & Organization*, 7(1), 57-67.

Eyjólfsdóttir, H. S., Baumann, I., Agahi, N., and Lennartsson, C. 2019. How to Measure Retirement Age? A Comparison of Survey and Register Data. *Journal of Population Ageing*, 1-19.

Fadila, D. E. S., and Alam, R. R. 2016. Factors affecting adjustment to retirement among retiree's elderly persons. *Journal of Nursing Education and Practice*, 6(8), 112-122.

Fasang, A. E. 2010. Retirement: Institutional pathways and individual trajectories in Britain and Germany. *Sociological Research Online*, 15(2), 1-16.

Fasang, A. E., Aisenbrey, S. and Schömann, K. 2013. Women's retirement income in Germany and Britain. *European Sociological Review*, 29(5), 968-980.

Ferrera, M. 1996. The Southern model of welfare in social Europe. Journal of *European Social Policy*, 6(1), 17-37.

Feuerbach, E. J. and Erdwins, C. J. 1994. Women's retirement: The influence of work history. *Journal of Women & Aging*, 6(3), 69-85.

Finch, N. 2014. Why are women more likely than men to extend paid work? The impact of work–family life history. *European Journal of Ageing*, 11(1), 31-39.

Fisher, G. G., Chaffee, D. S., and Sonnega, A. 2016. Retirement timing: A review and recommendations for future research. *Work, Aging and Retirement*, 2(2), 230-261.

Fokkema, T. 2002. Combining a job and children: contrasting the health of married and divorced women in the Netherlands?. *Social science & medicine*, 54(5), 741-752.

Folbre, N., Yoon, J., Finnoff, K. and Fuligni, A.S., 2005. By what measure? Family time devoted to children in the United States. *Demography*, 42(2), 373-390.

Fortin, N. M. 2005. Gender role attitudes and the labour-market outcomes of women across OECD countries. *Oxford Review of Economic Policy*, 21(3), 416-438.

Fouarge, D., and Muffels, R. 2008. Part-time work and childbirth in Europe: scarring the career or meeting working-time preferences?. Edward Elgar Publishing.

Fouarge, D., and Muffels, R. 2009. Working part-time in the British, German and Dutch labour market: Scarring for the wage career*?*. *Schmollers Jahrbuch*, 129, 217-226.

Fouquereau, E., Fernandez, A., Fonseca, A. M., Paul, M. C., and Uotinen, V. (2005). Perceptions of and satisfaction with retirement: A comparison of six European Union countries. *Psychology and Aging*, 20(3), 524.

Frech, A. and Damaske, S. 2012. The relationships between mothers' work pathways and physical and mental health. Journal of Health and Social Behavior, 53(4), 396-412.

Freedman, M. 1999. *Prime time: How baby boomers will revolutionize retirement and transform America*. New York: Public Affairs.

Frericks, P., Knijn, T. and Maier, R. 2009. Pension reforms, working patterns and gender pension gaps in Europe. *Gender, Work, and Organization*, 16, 710–30.

Fry, P. S. 1992. Major social theories of aging and their implications for counseling concepts and practice: A critical review. *The Counseling Psychologist*, 20(2), 246-329.

Gabadinho, A., Ritschard, G., Mueller, N. S. and Studer, M. 2011. Analyzing and visualizing state sequences in R with TraMineR. *Journal of Statistical Software*, 40(4), 1-37.

Gallo, W. T., Bradley, E. H., Siegel, M. and Kasl, S. V. 2000. Health effects of involuntary job loss among older workers: findings from the health and retirement survey. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55(3), S131-S140.

Gauthier, J. A., Widmer, E. D., Bucher, P. and Notredame, C. 2010. 1. Multichannel sequence analysis applied to social science data. *Sociological Methodology*, 40(1), 1-38.

George, L. K. 1992. "Economic status and subjective well-being: A review of the literature and an agenda for future research." in N.E. Cutler, D.W. Gregg and M.P. Lawton (eds.), *Aging, Money, and Life Satisfaction: Aspects of Financial Gerontology*, New York: Springer, 69-99.

George, L. K. 1999. Life-course perspectives on mental health. In *Handbook of the sociology of mental health*, Boston: Springer, 565-583.

George, L.K., 1993. Sociological perspectives on life transitions. *Annual review of sociology*, 19(1), 353-373.

Gettings, P. E., and Anderson, L. B. 2018. Applying a life course perspective to retirement: A literature review and research agenda for communication scholars. *Annals of the International Communication Association*, 42(3), 224-241.

Ginn, J. and Arber, S. 1992. Towards women's independence: pension systems in three contrasting European welfare states. *Journal of European Social Policy*, 2(4), 255-277.

Glass Jr, J. C., and Kilpatrick, B. B. 1998. Gender comparisons of baby boomers and financial preparation for retirement. *Educational Gerontology: An International Quarterly*, 24(8), 719-745.

Gornick, J. C., and Jacobs, J. A. 1998. Gender, the welfare state, and public employment: A comparative study of seven industrialized countries. *American Sociological Review*, 688-710.

Gove, W. R. 1984. Gender differences in mental and physical illness: The effects of fixed roles and nurturant roles. *Social Science & Medicine*, 19(2), 77-84.

Gustafsson, S. 1995. Public policies and women´s labour force participation. *Investment in women's human capital*, 91.

Gutek, B. A., and Larwood, L. E. 1987. *Women's career development*. Sage Publications, Inc.

Hagestad, G. O. and Call, V. R. 2007. Pathways to childlessness: A life course perspective. *Journal of Family Issues*, 28(10), 1338-1361.

Hakim, C. 1991. Grateful slaves and self-made women: fact and fantasy in women's work orientations. *European Sociological Review*, 7(2), 101-121.

Hakim, C. 1996. *Key issues in women's work: Female heterogeneity and the polarisation of women's employment*. A&C Black.

Hakim, C. 1998. Developing a sociology for the twenty-first century: Preference Theory. *The British Journal of Sociology*, 49(1), 137-143.

Hakim, C. 2000. *Work-lifestyle choices in the 21st century: Preference theory*. OUp Oxford.

Hakim, C. 2002. Lifestyle preferences as determinants of women's differentiated labor market careers. *Work and Occupations*, 29(4), 428-459.

Hakim, C. 2003. A new approach to explaining fertility patterns: Preference theory. *Population and Development Review*, 29(3), 349-374.

Hakim, C. 2007. "Preference Theory". In Ritzer, G. (Ed.), *The Blackwell Encyclopedia of Sociology*, New York, Blackwell Publishing.

Halfon, N. and Hochstein, M. 2002. Life course health development: an integrated framework for developing health, policy, and research. *The Milbank Quarterly*, 80(3), 433-479.

Hall, E. M. 1992. Double exposure: the combined impact of the home and work environments on psychosomatic strain in Swedish women and men. *International Journal of Health Services*, 22(2), 239-260.

Hammer, L.B., Allen, E. and Grigsby, T.D., 1997. Work–family conflict in dual-earner couples: Within-individual and crossover effects of work and family. *Journal of vocational behavior*, 50(2), 185-203.

Hamming, R. W. 1950. Error detecting and error correcting codes. *The Bell system technical journal*, 29(2), 147-160.

Han, S. K. and Moen, P. 1999. Clocking out: Temporal patterning of retirement. *American Journal of Sociology*, 105(1), 191-236.

Hank, K. 2004. Effects of early life family events on women's late life labour market behaviour: An analysis of the relationship between childbearing and retirement in western Germany. *European Sociological Review*, 20(3), 189-198.

Hank, K. and Korbmacher, J. M. 2013. Parenthood and retirement: Gender, cohort, and welfare regime differences. *European Societies*, 15(3), 446-461.

Hank, K. and Wagner, M. 2013. Parenthood, marital status, and well-being in later life: Evidence from SHARE. *Social Indicators Research*, 114(2), 639-653.

Hansen, H. T. and Lorentzen, T. 2019. Work and welfare-state trajectories in Norway over two decades: Has the goal of getting more people into work been achieved?. *International Journal of Social Welfare*, 28(3), 246-259.

Hansen, T. 2010. *Subjective well-being in the second half of life: The influence of family and household resources*. Department of Behavioural Sciences in Medicine, Faculty of Medicine, University of Oslo.

Hansen, T., Slagsvold, B. and Moum, T. 2009. Childlessness and psychological well-being in midlife and old age: An examination of parental status effects across a range of outcomes. *Social indicators research*, 94(2), 343-362.

Hardy, M. A. 1991. Employment after Retirement: Who Gets Back in.?. *Research on Aging*, 13(3), 267-288.

Haring-Hidore, M., Stock, W. A., Okun, M. A. and Witter, R. A. 1985. Marital status and subjective well-being: A research synthesis. *Journal of Marriage and the Family*, 947-953.

Hatch, L. R. and Thompson, A. 1992. Family responsibilities and women's retirement. *Families and Retirement*, 99-113.

Hayward, M. D., Friedman, S. and Chen, H. 1998. Career trajectories and older men's retirement. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 53(2), S91-S103.

Hennig, C. and Liao, T. F. 2013. How to find an appropriate clustering for mixed-type variables with application to socio-economic stratification. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 62(3), 309-369.

Henretta, J. C. and O'Rand, A. M. 1980. Labor-force participation of older married women. *Soc. Sec. Bull.*, 43, 10.

Henretta, J. C., O'Rand, A. M. and Chan, C. G. 1993. Joint role investments and synchronization of retirement: A sequential approach to couples' retirement timing. *Social Forces*, 71(4), 981-1000.

Hershey, D. A., and Henkens, K. 2014. Impact of different types of retirement transitions on perceived satisfaction with life. *The Gerontologist*, 54(2), 232-244.

Herzog, A. R. and Rodgers, W. L. 1981. Age and satisfaction: Data from several large surveys. *Research on Aging*, 3(2), 142-165.

Herzog, A., House, J. S. and Morgan, J. N. 1991. Relation of work and retirement to health and well-being in older age. *Psychology and Aging*, 6(2), 202.

Hess, M. 2016. Germany: A successful reversal of early retirement?. In Hofäcker D., Hess M., König S. (eds) *Delaying Retirement*, London: Palgrave Macmillan, 147-169.

Hetschko, C., Knabe, A., and Schöb, R. 2014. Changing identity: Retiring from unemployment. *The Economic Journal*, 124(575), 149-166.

Heybroek, L., Haynes, M. and Baxter, J. 2015. Life satisfaction and retirement in Australia: A longitudinal approach. *Work, Aging and Retirement*, 1(2), 166-180.

Hilbourne, M. 1999. Living together full time? Middle-class couples approaching retirement. *Ageing & Society*, 19(2), 161-183.

Hill, R., and Mattessich, P. 1979. Family development theory and life-span development. *Life-span development and behavior*.

Hinrichs, K. 2012. Germany: A flexible labour market plus pension reforms means poverty in old age. In *Labour Market Flexibility and Pension Reforms*, London: Palgrave Macmillan, 29-61.

Hochschild, Arlie. 1989. *The second shift: Working parents and the revolution at home*. New York: Viking.

Hofäcker, D. 2010. *Older workers in a globalizing world: an international comparison of retirement and late-career patterns in Western industrialized countries*. Edward Elgar Publishing.

Holden, K. C. and Kuo, H. H. D. 1996. Complex marital histories and economic well-being: The continuing legacy of divorce and widowhood as the HRS cohort approaches retirement. *The Gerontologist*, 36(3), 383-390.

Horner, E. M. (2014). Subjective well-being and retirement: Analysis and policy recommendations. *Journal of Happiness Studies*, 15(1), 125-144.

Hoven, H., Dragano, N., Blane, D., and Wahrendorf, M. 2018. Early adversity and late life employment history—A sequence analysis based on SHARE. *Work, aging and retirement*, 4(3), 238-250.

Huang, Q., and Sverke, M. 2007. Women's occupational career patterns over 27 years: Relations to family of origin, life careers, and wellness. *Journal of vocational behavior*, 70(2), 369-397.

Hughes, M. E. and Waite, L. J. 2009. Marital biography and health at mid-life. *Journal of Health and Social Behavior*, 50(3), 344-358.

Huppert, F. A., Marks, N., Clark, A., Siegrist, J., Stutzer, A., Vittersø, J. and Wahrendorf, M. 2009. Measuring well-being across Europe: Description of the ESS well-being module and preliminary findings. *Social Indicators Research*, 91(3), 301-315.

Hutchison, E. 2011. A life course perspective. In E. Hutchinson (Ed.). *Dimensions of human behaviour: The changing life course*, London: SAGE Publications, 1–38.

Hutchison, E. D. 2019. An update on the relevance of the life course perspective for social work. *Families in Society*, 100(4), 351-366.

Insler, M. 2014. The health consequences of retirement. *Journal of Human Resources*, 49(1), 195-233.

Isaksson, K. and Johansson, G. 2000. Adaptation to continued work and early retirement following downsizing: Long-term effects and gender differences. *Journal of Occupational and Organizational Psychology*, 73(2), 241-256.

Jaeger, M. M. and Holm, A. 2004. *How stressful is retirement? New evidence from a longitudinal, fixed-effects analysi*s. Centre for Applied Microeconometrics, Copenhagen.

Janzen, B. L. and Muhajarine, N. 2003. Social role occupancy, gender, income adequacy, life stage and health: a longitudinal study of employed Canadian men and women. *Social Science & Medicine*, 57(8), 1491-1503.

Jaumotte, F. 2003. Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries. *OECD Working Paper* No. 376. Available at SSRN: https://ssrn.com/abstract=2344556

Jaumotte, F. 2004. Labour force participation of women. *OECD Economic Studies*, 2003(2), 51-108.

Jefferis, B. J., Nazareth, I., Marston, L., Moreno-Kustner, B., Bellón, J. Á., Svab, I., ... and Vicente, B. 2011. Associations between unemployment and major depressive disorder: evidence from an international, prospective study (the predict cohort). *Social science & medicine*, 73(11), 1627-1634.

Jenkins, S. P. 1995. Easy estimation methods for discrete-time duration models. *Oxford Bulletin of Economics and Statistics*, 57(1), 129-136.

Jepsen, D. A. and Choudhuri, E. 2001. Stability and change in 25-year occupational career patterns. *The Career Development Quarterly*, 50(1), 3-19.

Johansson, G., Huang, Q., and Lindfors, P. 2007. A life-span perspective on women's careers, health, and well-being. *Social Science & Medicine*, 65(4), 685-697.

Johnson, W., and Krueger, R. F. 2006. How money buys happiness: genetic and environmental processes linking finances and life satisfaction. *Journal of personality and social psychology*, 90(4), 680.

Kahneman, D., Diener, E., and Schwarz, N. (Eds.). 1999. *Well-being: Foundations of hedonic psychology*. Russell Sage Foundation.

Kalenkoski, C.M., Ribar, D.C. and Stratton, L.S., 2005. Parental child care in single-parent, cohabiting, and married-couple families: Time-diary evidence from the United Kingdom. *American Economic Review*, 95(2),194-198.

Kashdan, T. B., Biswas-Diener, R., and King, L. A. 2008. Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology*, 3(4), 219-233.

Kaskie, B., Imhof, S., Cavanaugh, J., and Culp, K. 2008. Civic engagement as a retirement role for aging Americans. *The Gerontologist*, 48(3), 368-377.

Kasl, S. V. and Jones, B. A. 2000. The impact of job loss and retirement on health. *Social epidemiology*, 118-136.

Kassenboehmer, S. C. and Haisken-DeNew, J. P. 2009. You're fired! The causal negative effect of entry unemployment on life satisfaction. *The Economic Journal*, 119(536), 448-462.

Kim, J. E. and Moen, P. 2001. Is retirement good or bad for subjective well-being?. Current Directions in Psychological Science, 10(3), 83-86.

Kim, J. E. and Moen, P. 2002. Retirement transitions, gender, and psychological well-being a life-course,ecological model. *The Journals of*

Gerontology Series B: Psychological Sciences and Social Sciences, 57(3), 212-222

Kim, M. H., Kim, C. Y., Park, J. K. and Kawachi, I. 2008. Is precarious employment damaging to self-rated health? Results of propensity score matching methods, using longitudinal data in South Korea. *Social Science & Medicine*, 67(12), 1982-1994.

Kinnunen, M. L., Kaprio, J., and Pulkkinen, L. 2005. Allostatic load of men and women in early middle age. *Journal of Individual Differences*, 26(1), 20-28.

Kivimaki, M., Nyberg, S. T., Batty, G. D., Fransson, E. I., Heikkila, K., Alfredsson, L., ... and Casini, A. „et al. 2012. Job strain as a risk factor for coronary heart disease: A collaborative meta-analysis of individual participant data. *Lancet*, 350(9852), 1491-1497.

Klumb, P. L. and Lampert, T. 2004. Women, work, and well-being 1950–2000: a review and methodological critique. *Social Science & Medicine*, 58(6), 1007-1024.

Knuth, M. and Kalina, T. 2002. Early exit from the labour force between exclusion and privilege: unemployment as a transition from employment to retirement in West Germany. *European societies*, 4(4), 393-418.

Kohli, M., 2007. The institutionalization of the life course: Looking back to look ahead. *Research in human development*, 4(3-4), 253-271.

Komp-Leukkunen, K. 2019. Capturing the diversity of working age life-courses: A European perspective on cohorts born before 1945. *Plos one*, 14(2).

König, S. 2017. Career histories as determinants of gendered retirement timing in the Danish and Swedish pension systems. *European Journal of Ageing*, 14(4), 397-406.

König, S. and Schilling, J. 2016. The outdistanced vanguard: Early retirement policy in Denmark as an obstacle to progress in active aging. In Hofäcker D., Hess M., König S. (eds) *Delaying Retirement*, London: Palgrave Macmillan, 291-313.

Korpi, W., Ferrarini, T. and Englund, S. 2013. Women's opportunities under different family policy constellations: Gender, class, and inequality tradeoffs in western countries re-examined. *Social Politics: International Studies in Gender, State & Society*, 20(1), 1-40.

Krantz, G. and Ostergren, P. O. 2001. Double exposure: The combined impact of domestic responsibilities and job strain on common symptoms in employed Swedish women. *The European Journal of Public Health*, 11(4), 413-419.

Krantz, G., Berntsson, L. and Lundberg, U. 2005. Total workload, work stress and perceived symptoms in Swedish male and female white-collar employees. *The European Journal of Public Health*, 15(2), 209-214.

Kurdek, L. A. 1991. The relations between reported well-being and divorce history, availability of a proximate adult, and gender. *Journal of Marriage and the Family*, 71-78.

Lacey, R., Stafford, M., Sacker, A. and McMunn, A. 2016. Work-family life courses and subjective wellbeing in the MRC National Survey of Health and Development (the 1946 British birth cohort study). *Journal of Population Ageing*, 9(1-2), 69-89.

Lahelma, E., Arber, S., Kivelä, K., and Roos, E. 2002. Multiple roles and health among British and Finnish women: the influence of socioeconomic circumstances. *Social science & medicine*, 54(5), 727-740.

Latif, E. 2011. The impact of retirement on psychological well-being in Canada. *The Journal of SocioEconomics*, 40(4), 373-380.

Leahy, M. and Doughney, J. 2006. Women, work and preference formation: a critique of Catherine Hakim's preference theory. *Journal of Law and Governance*, 1(1).

Lee, Y., Chi, I., and Palinkas, L. A. 2019. Retirement, leisure activity engagement, and cognition among older adults in the United States. *Journal of Aging and Health*, 31(7), 1212-1234.

Lesnard, L. 2010. Setting cost in optimal matching to uncover contemporaneous socio-temporal patterns. *Sociological Methods & Research*, 38(3), 389-419.

Loretto, W. and Vickerstaff, S. 2013. The domestic and gendered context for retirement. *Human Relations*, 66,1, 69–90.

Lucas, R. E., Diener, E. and Suh, E. 1996. Discriminant validity of well-being measures. *Journal of personality and social psychology*, 71(3), 616.

Luhmann, M., Hofmann, W., Eid, M. and Lucas, R. E. 2012. Subjective well-being and adaptation to life events: a meta-analysis. *Journal of Personality and Social Psychology*, 102(3), 592.

Lynch, J., and Smith, G. D. 2005. A life course approach to chronic disease epidemiology. *Annu. Rev. Public Health*, 26, 1-35.

Macindoe, H., and Abbott, A. 2004. "Sequence analysis and optimal matching techniques for social science data". In Hardy, M., and Bryman, A. *Handbook of data analysis*, SAGE Publications, 387-406.

Macmillan, R. (Ed.). 2005. *The structure of the life course: Standardized? Individualized? Differentiated?*. Elsevier.

Madero-Cabib, I. 2015. The life course determinants of vulnerability in late careers. *Longitudinal and Life Course Studies*, 6(1), 88-106.

Madero-Cabib, I. and Fasang, A. E. 2016. Gendered work–family life courses and financial well-being in retirement. *Advances in Life Course Research*, 27, 43-60.

Majeed, T., Forder, P., and Byles, J. 2014. Employment status and chronic diseases: A cross-sectional study among 60–64 year old men and women. *International Journal of Aging and Society*, 3(3), 33-43.

Manzoli, L., Villari, P., Pirone, G. M. and Boccia, A. 2007. Marital status and mortality in the elderly: a systematic review and meta-analysis. *Social Science & Medicine*, 64(1), 77-94.

Marks, N. F., Lambert, J. D. and Choi, H. 2002. Transitions to caregiving, gender, and psychological well-being: A prospective US national study. *Journal of Marriage and Family*, 64(3), 657-667.

Matthews, R. A., and Fisher, G. G. 2012. Family, work, and the retirement process: A review and new. *The Oxford handbook of retirement*, 354.

Mayer, K. U. 2004. *Life courses and life chances in a comparative perspective*. Mannheimer Zentrum für Europäische Sozialforschung.

Mayer, K. U. 2009. New directions in life course research. *Annual review of sociology*, 35, 413-433.

Mayring, P. 2000. Retirement as crisis or good fortune? Results of a quantitative-qualitative longitudinal study. Zeitschrift fur Gerontologie und Geriatrie, 33(2), 124-133.

Mazzonna, F. 2014. The long-lasting effects of family background: A European cross-country comparison. *Economics of Education Review*, 40, 25-42.

Mazzonna, F., and Havari, E. 2011. Can we trust older people's statements on their childhood circumstances? Evidence from SHARELIFE. SHARE Working Paper Series 05-2011, Available at SSRN: https://ssrn.com/abstract=2004299

Mazzonna, F., and Peracchi, F. 2012. Ageing, cognitive abilities and retirement. *European Economic Review*, 56(4), 691-710.

McAdams, R. H. 1997. The origin, development, and regulation of norms. *Michigan law review*, 96(2), 338-433.

McDonough, P., Worts, D., Booker, C., McMunn, A. and Sacker, A. 2015. Cumulative disadvantage, employment–marriage, and health inequalities among American and British mothers. Advances in Life Course Research, 25, 49-66.

McKee-Ryan, F., Song, Z., Wanberg, C. R. and Kinicki, A. J. 2005. Psychological and physical well-being during unemployment: a meta-analytic study. *Journal Of Applied Psychology*, 90(1), 53.

McMunn, A., Bartley, M., Hardy, R. and Kuh, D. 2006. Life course social roles and women's health in mid-life: causation or selection?. *Journal of Epidemiology & Community Health*, 60(6), 484-489.

McNair, S., Flynn, M., Owen, L., Humphreys, C., and Woodfield, S. 2004. *Changing work in later life: A study of job transitions. Centre for Research into the Older Workforce*, University of Surrey, 93.

McPhedran, S. 2012. The labor of a lifetime? Health and occupation type as predictors of workforce exit among older Australians. *Journal of aging and health*, 24(2), 345-360.

McPherson, B. D. 1990. *Aging as a social process: An introduction to individual and population aging*. Butterworth-Heinemann.

Meadows, S. O., McLanahan, S. S. and Brooks-Gunn, J. 2008. Stability and change in family structure and maternal health trajectories. *American Sociological Review*, 73(2), 314-334.

Mein, G., Martikainen, P., Hemingway, H., Stansfeld, S. and Marmot, M. 2003. Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *Journal of Epidemiology & Community Health*, 57(1), 46-49.

Mein, G., Martikainen, P., Stansfeld, S. A., Brunner, E. J., Fuhrer, R., and Marmot, M. G. 2000. Predictors of early retirement in British civil servants. *Age and ageing*, 29(6), 529-536.

life-courses: A European perspective on cohorts born before 1945. Plos one, 14(2), e0212400.

Messing, K., Punnett, L., Bond, M., Alexanderson, K., Pyle, J., Zahm, S., Weg man, D., Stock, S. R. and de Grosbois, S. 2003. Be the fairest of them all: challenges and recommendations for the treatment of gender in occupational health research. *American Journal of Industrial Medicine*, 43, 6, 618–2.

Midanik, L. T., Soghikian, K., Ransom, L. J. and Tekawa, I. S. 1995. The effect of retirement on mental health and health behaviors: The Kaiser Permanente Retirement Study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 50(1), S59-S61.

Milkie, M.A., Raley, S.B. and Bianchi, S.M., 2009. Taking on the second shift: Time allocations and time pressures of US parents with preschoolers. *Social Forces*, 88(2), 487-517.

Mills, M. 2011. The fundamentals of survival and event history analysis. *In Introducing Survival Analysis and Event History Analysis.* London: SAGE Publications, 1-17.

Mills, M. and Blossfeld, H. P. 2003. Globalization, uncertainty and changes in early life courses. Zeitschrift für Erziehungswissenschaft, 6(2), 188-218.

Mirowsky, J., and Ross, C. E. 2003. *Social causes of psychological distress*. Transaction Publishers.

Moen, P. 1996. A life course perspective on retirement, gender, and well-being. *Journal of occupational health psychology*, 1(2), 131.

Moen, P. 2001. The gendered life course. In R. H. Binstock and L. K. George (Eds.), *Handbook of aging and the social sciences*, Academic Press, 179–196.

Moen, P. 2016. Work over the gendered life course. In *Handbook of the life course* (pp. 249-275). Springer, Cham.

Moen, P. and Chermack, K. 2005. Gender disparities in health: Strategic selection, careers, and cycles of control. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 60(Special_Issue_2), S99-S108.

Moen, P., and Roehling, P. 2005. *The Career Mystique: Cracks in the American Dream*. Rowman & Littlefield.

Moen, P., Dempster-McClain, D. and Williams Jr, R. M. 1992. Successful aging: A life-course perspective on women's multiple roles and health. *American Journal of Sociology*, 97(6), 1612-1638.

Moen, P., Erickson, M. A. and Dempster-McClain, D. 2000. Social role identities among older adults in a continuing care retirement community. *Research on Aging*, 22(5), 559-579.

Moen, P., Kim, J. E. and Hofmeister, H. 2001. Couples' work/retirement transitions, gender, and marital quality. *Social Psychology Quarterly*, 55-71.

Monden, C. W. and Uunk, W. J. 2013. For better and for worse: The relationship between union dissolution and self-assessed health in European panel data. *European Journal of Population/Revue europeenne de demographie*, 29(1), 103-125.

Mood, C. 2010. Logistic regression: Why we cannot do what we think we can do, and what we can do about it. *European Sociological Review*, 26(1), 67-82.

Mortimer, J. T., and Shanahan, M. J. (Eds.). 2007. *Handbook of the life course*. Springer Science & Business Media.

Mroczek, D. K. and Spiro III, A. 2005. Change in life satisfaction during adulthood: findings from the veterans affairs normative aging study. *Journal of Personality and Social Psychology*, 88(1), 189.

Newman, E. S., Sherman, S. R. and Higgins, C. E. 1982. Retirement expectations and plans: A comparison of professional men and women. In *Women's Retirement: Policy Implications of Recent Research*, 113-122.

Nordenmark, M. 2004. Multiple social roles and well-being: a longitudinal test of the role stress theory and the role expansion theory. *Acta Sociologica*, 47(2), 115-126.

Nyman, C. S., Spak, L. and Hensing, G. 2012. Are there any associations between single and/or multiple social roles and self-rated physical health, psychiatric disorder and long-term sickness absence in women?. *Italian Journal of Public Health*, 9(1).

O' Neil, D. A., Hopkins, M. M. and Bilimoria, D. 2008. Women's careers at the start of the 21st century: Patterns and paradoxes. *Journal of Business Ethics*, 80(4), 727-743.

O' Rand, A. M. 1996. The cumulative stratification of the life course. *Handbook of Aging and the Social Sciences*, 4, 188-207.

O’ Rand, A. M. 1996. The precious and the precocious: Understanding cumulative disadvantage and cumulative advantage over the life course. *The Gerontologist*, 36(2), 230-238.

O’ Rand, A. M. and Henretta, J. C. 1982. Delayed career entry, industrial pension structure, and early retirement in a cohort of unmarried women. *American Sociological Review*, 365-373.

O’ Rand, A. M., and Henretta, J. C. 1999. *Age and inequality*. Denver, CO: Westview.

O’ Rand, A. M., Henretta, J. C. and Krecker, M. L. 1992. Family pathways to retirement. *Families and Retirement*, 81-98.

O’ Rand, A. 2006. Stratification and the life course: Social origins, life course capital and cohort inequality. In Binstock, R. H., and George, L. *Handbook of aging and the social sciences*, New York: Academic Press. 145–162.

OECD. 1999. OECD Employment Outlook 1999: June, OECD Publishing, Paris, https://doi.org/10.1787/empl_outlook-1999-en.

OECD. 2008. OECD factbook 2008: Economic, environmental and social statistics. Publications de l'OCDE.

OECD. 2018. OECD.stat Labour Force participation rate https://stats.oecd.org/index.aspx?queryid=64197#.

O'Neil, D. A., Bilimoria, D., and Saatcioglu, A. 2004. Women's career types: attributions of satisfaction with career success. *Career Development International.*

Onyx, J., and Benton, P. 1996. Retirement: A problematic concept for older women. *Journal of Women & Aging*, 8(2), 19-34.

Orel, N. A., Ford, R. A., and Brock, C. 2004. Women's financial planning for retirement: The impact of disruptive life events. *Journal of Women & Aging*, 16(3-4), 39-53.

Organisation for Economic Co-operation and Development (OECD). 2013. Activation strategies for stronger and more inclusive labour markets in G20 countries: key policy challenges and good practices.

Parker, S. C., and Rougier, J. C. 2007. The retirement behaviour of the self-employed in Britain. *Applied Economics*, 39(6), 697-713.

Pavalko, E. K. and Woodbury, S. 2000. Social roles as process: Caregiving careers and women's health. *Journal of Health and Social Behavior*, 91-105.

Pavalko, E. K., Elder Jr, G. H. and Clipp, E. C. 1993. Worklives and longevity: Insights from a life course perspective. *Journal of Health and Social Behavior*, 363-380.

Pavalko, E. K., Gong, F. and Long, J. S. 2007. Women's work, cohort change, and health. *Journal of Health and Social Behavior*, 48(4), 352-368.

Pavot, W. and Diener, E. 1993. The affective and cognitive context of self-reported measures of subjective well-being. *Social Indicators Research,* 28(1), 1-20.

Pavot, W. and Diener, E. 2004. The subjective evaluation of well-being in adulthood: Findings and implications. *Ageing International*, 29(2), 113-135.

Peters, A. and Liefbroer, A. C. 1997. Beyond marital status: Partner history and well-being in old age. *Journal of Marriage and the Family*, 687-699.

Petrongolo, B. (2004). Gender segregation in employment contracts. *Journal of the European Economic Association*, 2(2-3), 331-345.

Petters, J. S. and Asuquo, P. N. 2008. Work-role attachment and retirement intentions of public school teachers in Calabar, Nigeria. *Studies on Home and Community Science*, 2(1), 11-17.

Pienta, A. 1999. Early childbearing patterns and women's labor force behavior in later life. *Journal of Women & Aging*, 11(1), 69-84.

Pienta, A. M., Burr, J. A. and Mutchler, J. E. 1994. Women's labor force participation in later life: The effects of early work and family experiences. *Journal of Gerontology*, 49(5), S231-S239.

Pinquart, M. and Sörensen, S. 2000. Influences of socioeconomic status, social network, and competence on subjective well-being in later life: a meta-analysis. *Psychology and aging*, 15(2), 187.

Pinquart, M. and Sörensen, S. 2001. Gender differences in self-concept and psychological well-being in old age: A meta-analysis. *The Journals of Gerontology Series B: Psychological sciences and social sciences*, 56(4), P195-P213.

Pinquart, M., and Schindler, I. 2009. Change of leisure satisfaction in the transition to retirement: A latent-class analysis. *Leisure Sciences*, 31(4), 311-329.

Pirani, E., De Santis, G., and Zanasi, F. 2021. Retirement? Other Ways Out of the Labour Market Are Far More Worrying for Health: Results from a Matching Approach Study. *Journal of Aging and Health*, 08982643211039637.

Pollock, G. 2007. Holistic trajectories: a study of combined employment, housing and family careers by using multiple-sequence analysis. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 170(1), 167-183.

Ponomarenko, V. 2016. Cumulative disadvantages of non-employment and non-standard work for career patterns and subjective well-being in retirement. *Advances in Life Course Research*, 30, 133-148.

Ponomarenko, V., Leist, A. K., and Chauvel, L. 2019. Increases in wellbeing in the transition to retirement for the unemployed: catching up with formerly employed persons. *Ageing & Society*, 39(2), 254-276.

Preisner, K., Neuberger, F., Posselt, L. and Kratz, F. 2018. Motherhood, employment, and life satisfaction: trends in Germany between 1984 and 2015. *Journal of Marriage and Family*, 80(5), 1107-1124.

Presser, H. B. 1994. Employment schedules among dual-earner spouses and the division of household labor by gender. *American Sociological Review*, 348-364.

Price, C. A. 1998. *Women and retirement: The unexplored transition*. Garland Pub.

Price, C. A. 2000. Women and retirement: Relinquishing professional identity. *Journal of aging Studies*, 14(1), 81-101.

Price, C. A. 2002. Retirement for women: The impact of employment. *Journal of Women & Aging*, 14(3-4), 41-57.

Price, C. A. and Joo, E. 2005. Exploring the relationship between marital status and women's retirement satisfaction. *The International Journal of Aging and Human Development*, 61(1), 37-55.

Price, C. A. and Nesteruk, O. 2010. Creating retirement paths: Examples from the lives of women. *Journal of Women & Aging*, 22(2), 136-149.

Pringle, J. K. and Dixon, K. M. 2003. Re-incarnating life in the careers of women. *Career Development International*, 8(6), 291-300.

Quick, H. E. and Moen, P. 1998. Gender, employment and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, 3(1), 44.

Radl, J. 2012. Labour market exit and social stratification in Western Europe: The effects of social class and gender on the timing of retirement. *European Sociological Review*, 29(3), 654-668.

Radl, J. 2013. ¿ Por qué las mujeres en España se jubilan más tarde que los hombres?/Why do Women in Spain Retire Later than Men?. *Reis*, 109-121.

Radl, J. 2014. *Retirement timing and social stratification: A comparative study of labor market exit and age norms in Western Europe*. Walter de Gruyter.

Raymo, J. M., Warren, J. R., Sweeney, M. M., Hauser, R. M. and Ho, J. H. 2010. Later-life employment preferences and outcomes: The role of midlife work experiences. *Research on Aging*, 32(4), 419-466.

Reitzes, D. C. and Mutran, E. J. 2004. The transition to retirement: Stages and factors that influence retirement adjustment. *The International Journal of Aging and Human Development*, 59(1), 63-84.

Reitzes, D. C., Mutran, E. J. and Fernandez, M. E. 1994. Middle-aged working men and women: Similar and different paths to self-esteem. *Research on Aging*, 16(4), 355-374.

Reitzes, D. C., Mutran, E. J. and Fernandez, M. E. 1996. Does retirement hurt weil-being? Factors influencing self-esteem and depression among retires and workers. *The Gerontologist*, 36(5), 649- 656

Reyneri, E. 2005. *Sociologia del mercato del lavoro*, Bologna: Il Mulino.

Richardson, V. and Kilty, K. M. 1991. Adjustment to retirement: Continuity vs. discontinuity. *The international journal of aging and human development*, 33(2), 151-169.

Richardson, V. E. 1999. Women and retirement. *Journal of Women & Aging*, 11(2-3), 49-66.

Riekhoff, A. J. 2018. Institutional and socio-economic drivers of work-to-retirement trajectories in the Netherlands. *Ageing & Society*, 38(3), 568-593.

Riley, M. W., and Riley, J. W., Jr. 1994. Structural lag: Past and future. In M. W. Riley, R. L. Kahn, and A. Foner (Eds.), *Age and structural lag: The mismatch between people's lives and opportunities in work, family, and leisure*, New York: Wiley, 15–36.

Riumallo-Herl, C., Basu, S., Stuckler, D., Courtin, E. and Avendano, M. 2014. Job loss, wealth and depression during the Great Recession in the USA and Europe. *International Journal of Epidemiology*, 43(5), 1508-1517.

Rosenman, L., and Scott, W. 2009. Financing old age: why is there still gender inequality?. *Australian Social Work*, 62(2), 287-298.

Rosina, A., and Saraceno, C. 2008. Interferenze asimmetriche. Uno studio della discontinuità lavorativa femminile. Economia & lavoro, 42(2), 149-0.

Ross, C. E. and Mirowsky, J. 1995. Does employment affect health?. Journal of Health and Social Behavior, 230-243.

Ross, C. E. and Mirowsky, J. 2002. Family relationships, social support and subjective life expectancy. *Journal of Health and Social Behavior*, 469-489.

Ross, C. E., Mirowsky, J. and Goldsteen, K. 1990. The impact of the family on health: The decade in review. *Journal of Marriage and the Family*, 52(4), 1059-1078.

Rousseeuw, P. J. 1987. Silhouettes: a graphical aid to the interpretation and validation of cluster analysis. *Journal of Computational and Applied Mathematics*, 20, 53-65.

Rubery, J. 2015. Change at work: feminisation, fragmentation and financialisation. *Employee Relations*, 37,6, 633–44.

Rubery, J., Grimshaw, D., Fagan, C., Figueiredo, H. and Smith, M. 2003. Gender equality still on the European agenda—but for how long?. *Industrial Relations Journal*, 34(5), 477-497.

Ruppanner, L. and Pixley, J.E., 2012. Work-to-family and family-to-work spillover: The implications of childcare policy and maximum work-hour legislation. *Journal of Family and Economic Issues*, 33(3), 283-297.

Ryan, R. M. and Deci, E. L. 2001. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166.

Ryff, C. D. 1989. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069.

Ryff, C. D. and Keyes, C. L. M. 1995. The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719.

Ryser, V. A., and Wernli, B. 2017. How does transitioning into retirement impact the individual emotional system? Evidence from the Swiss context. *Advances in Life Course Research*, 32, 42-54.

Sackmann, R. and Wingens, M. 2003. From transitions to trajectories. Sequence types. In Heinz, W. R. and Marshall, V. W. (eds), *Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations*. Aldine de Gruyter, New York, 93–115.

Saraceno, C. 2003. La conciliazione di responsabilità familiari e attività lavorative in Italia: paradossi ed equilibri imperfetti. *Polis*, 17(2), 199-228.

Scherer, S. 2001. Early Career Patterns: A Comparison of Great Britain and West Germany. *European Sociological Review*, 4, 119-44.

Schils, T. 2005. *Early retirement patterns in Europe: A comparative panel study* (Vol. 17). Rozenberg Publishers.

Schimmack, U., Schupp, J. and Wagner, G. G. 2008. The influence of environment and personality on the affective and cognitive component of subjective well-being. *Social indicators research*, 89(1), 41-60.

Schmähl, W. 1989. Labour force participation and social pension systems. *Workers Versus Pensioners: Intergenerational Justice in an Ageing World*. Manchester and New York, 137-161.

Schober, P. S. 2013. The parenthood effect on gender inequality: Explaining the change in paid and domestic work when British couples become parents. *European Sociological Review*, 29(1), 74-85.

Schröder, M. 2008. Attrition. In A. Börsch-Supan, A. Brugiavini, H. Jürges, A. Kapteyn, J.P. Mackenbach, J. Siegrist, et al. (Eds.), *First Results from the Survey of Health, Ageing and Retirement in Europe (2004-2007). Starting the Longitudinal Dimension*, Mannheim: Mannheim Research Institute for the Economics of Aging (MEA).

Schulze, I., and Jochem, S. 2007. Germany: Beyond Policy Gridlock. In Immergut, E. M., Anderson, K., M, and Schulze, I. *The Handbook of West European Pension Politics Oxford,* Oxford University Press, 660-710.

Settersten, R. A. 2003. *Invitation to the life course: Toward new understandings of later life*, Amityville, NY: Baywood, 15-45.

Settersten, R. A. 2003. *Age structuring and the rhythm of the life course. In Handbook of the life course*, Springer, Boston, MA, 81-98.

Shanahan, M. J. 2000. Pathways to adulthood in changing societies: Variability and mechanisms in life course perspective. *Annual review of sociology*, 26(1), 667-692.

Shavit, Y., and Blossfeld, H. P. 1996. Equalizing educational opportunity: Do gender and class compete?. *Can education be equalized*, 233-254.

Shin, D. C. and Johnson, D. M. 1978. Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5(1-4), 475-492.

Sieber, S. D. 1974. Toward a theory of role accumulation. *American sociological review*, 567-578.

Simmons, B. A. and Betschild, M. J. 2001. Women's retirement, work and life paths: Changes, disruptions and discontinuities. *Journal of Women & Aging*, 13(4), 53-70.

Simonton, D. 1998. *A history of European women's work: 1700 to the present*. Taylor & Francis US.

Singer, J. D., and Willett, J. B. 2003. *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press.

Skirboll, E. and Silverman, M. 1992. Women's retirement: A case study approach. *Journal of Women & Aging*, 4(1), 77-90.

Slevin, K. F. and Wingrove, C. R. 1995. Women in retirement: A review and critique of empirical research since 1976. *Sociological Inquiry*, 65(1), 1-21.

Smart, R., and Peterson, C. 1997. Super's career stages and the decision to change careers. *Journal of vocational behavior*, 51(3), 358-374.

Soidre, T. 2005. Retirement-age preferences of women and men aged 55–64 years in Sweden. *Ageing & Society*, 25(6), 943-963.

Solem, P. E., Syse, A., Furunes, T., Mykletun, R. J., De Lange, A., Schaufeli, W., and Ilmarinen, J. 2016. To leave or not to leave: retirement intentions and retirement behaviour. *Ageing & Society*, 36(2), 259-281.

Sorensen, A. 1983. Women's employment patterns after marriage. *Journal of Marriage and the Family*, 45, 311-321.

Stack, S., and Eshleman, J. R. 1998. Marital status and happiness: A 17-nation study. *Journal of Marriage and the Family*, 527-536.

Stam, K., Sieben, I., Verbakel, E. and de Graaf, P. M. 2016. Employment status and subjective well-being: the role of the social norm to work. *Work, Employment and Society*, 30(2), 309-333.

Stansfeld, S. A., Fuhrer, R., Shipley, M. J. and Marmot, M. G. 1999. Work characteristics predict psychiatric disorder: prospective results from the Whitehall II Study. *Occupational & Environmental Medicine*, 56, 5, 302–7.

Stone, L. O., Institut de la statistique du Québec, and Statistics Canada. 2006. Unpaid Work Analysis Division. *New frontiers of research on retirement*. Statistics Canada, Unpaid Work Analysis Division.

Strandh, M., Winefield, A., Nilsson, K. and Hammarström, A. 2014. Unemployment and mental health scarring during the life course. *The European Journal of Public Health*, 24(3), 440-445.

Struffolino E. and Zaccaria D. 2016. Early retirement in Italy in a life-course perspective: Do preferences matter? *LIVES Working Paper* 2016/50, doi:10.12682/lives.2296-1658.2016.50

Studer, M. 2013. WeightedCluster *Library Manual: A practical guide to creating typologies of trajectories in the social sciences with R*. Lausanne: University of Lausanne (LIVES Working Papers 2013/24).

Studer, M., Ritschard, G., Gabadinho, A. and Müller, N. S. 2011. Discrepancy analysis of state sequences. *Sociological Methods & Research*, 40(3), 471-510.

Stutzer, A. 2004. The role of income aspirations in individual happiness. *Journal of Economic Behavior & Organization*, 54(1), 89-109.

Stutzer, A. and Frey, B. S. 2006. Does marriage make people happy, or do happy people get married?. *The Journal of Socio-Economics*, 35(2), 326-347.

Svensson, I., Lundholm, E., De Luna, X. and Malmberg, G. 2015. Family life course and the timing of women's retirement–a sequence analysis approach. *Population, Space and Place*, 21(8), 856-871.

Syse, A., Veenstra, M., Furunes, T., Mykletun, R. J., & Solem, P. E. 2017. Changes in health and health behavior associated with retirement. *Journal of aging and Health*, 29(1), 99-127.

Szinovacz, M. and Ekerdt, D. J. 1996. Families and retirement. *Aging and the Family: Theory and Research*, 375-400.

Szinovacz, M. E. 2003. Contexts and pathways: Retirement as institution, process, and experience. *Retirement: Reasons, Rrocesses, and Results*, 6-52.

Szinovacz, M. E. and Schaffer, A. M. 2000. Effects of retirement on marital conflict tactics. *Journal of Family Issues*, 21(3), 367-389.

Szinovacz, M. E., and Davey, A. 2006. Effects of retirement and grandchild care on depressive symptoms. *The International Journal of Aging and Human Development*, 62(1), 1-20.

Szinovacz, M. E., DeViney, S. and Davey, A. 2001. Influences of family obligations and relationships on retirement: Variations by gender, race, and marital status. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(1), S20-S27.

Szinovacz, M., and D. J. Ekerdt. 1995. Families and Retirement. In *Handbook on Aging and the Family*, edited by R. Blieszner and V. H. Bedford. Westport, CT: Greenwood, 243-268.

Talaga, J. A., and Beehr T. A. 1995. Are there gender differences in predicting retirement decisions?. *Journal of Applied Psychology*, 80(1), 16.

Team, R. C. 2012. R: *A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing, 10.

Thornton, A. and Young-DeMarco, L., 2001. Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s. *Journal of marriage and family*, 63(4), 1009-1037.

Tomlinson, J. 2006. Women's work-life balance trajectories in the UK: Reformulating choice and constraint in transitions through part-time work across the life-course. *British Journal of Guidance & Counselling*, 34(3), 365-382.

Treas, J., van der Lippe, T., and Tai, T. O. C. 2011. The happy homemaker? Married women's well-being in cross-national perspective. *Social forces*, 90(1), 111-132.

Trentini, M. 2021. Retirement timing in Italy: rising age and the advantages of a stable working career. *Ageing & Society*, 41(8), 1878-1896.

UNESCO 2006 [1997]. International Standard Classification of Education: ISCED 1997 (re- edition), Montreal: UNESCO Institute for Statistics. http://www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED_A.pdf.

Uunk, W., Kalmijn, M., and Muffels, R. 2005. The impact of young children on women's labour supply: a reassessment of institutional effects in Europe. *Acta sociologica*, 48(1), 41-62.

van der Heide, I., van Rijn, R. M., Robroek, S. J., Burdorf, A., and Proper, K. I. 2013. Is retirement good for your health? A systematic review of longitudinal studies. *BMC public health*, 13(1), 1-11.

van der Noordt, M., IJzelenberg, H., Droomers, M. and Proper, K.I., 2014. Health effects of employment: a systematic review of prospective studies. *Occupational and environmental medicine*, 71(10), 730-736.

van Doorne-Huiskes, A., Van Hoof, J., and Roelofs, E. (Eds.). 1995. *Women and the European labour markets*. London: Paul Chapman.

Van Solinge, H. 2015. Retirement, Adjustment To. *The Encyclopedia of Adulthood and Aging*, 1-5.

Van Solinge, H. and Henkens, K. 2014. Work-related factors as predictors in the retirement decision-making process of older workers in the Netherlands. *Ageing & Society*, 34(9), 1551-1574.

Van Solinge, H., and Henkens, K. 2005. Couples' adjustment to retirement: A multi-actor panel study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 60(1), S11-S20.

Van Solinge, H., and Henkens, K. 2008. Adjustment to and satisfaction with retirement: Two of a kind?. *Psychology and Aging*, 23(2), 422.

Vinick, B. H. and Ekerdt, D. J. 1991. Retirement: What happens to husband-wife relationships?. *Journal of Geriatric Psychiatry* 24(1), 23–40.

Virtanen, M., Oksanen, T., Batty, G. D., Ala-Mursula, L., Salo, P., Elovainio, M., ... and Kivimäki, M. 2014. Extending employment beyond the

pensionable age: a cohort study of the influence of chronic diseases, health risk factors, and working conditions. *Plos one*, 9(2), e88695.

Visser, M., Gesthuizen, M., Kraaykamp, G. and Wolbers, M. H. 2016. Inequality among older workers in the Netherlands: A life course and social stratification perspective on early retirement. *European Sociological Review*, 32(3), 370-382.

Von Bonsdorff, M. E., Shultz, K. S., Leskinen, E. and Tansky, J. 2009. The choice between retirement and bridge employment: A continuity theory and life course perspective. *The International Journal of Aging and Human Development*, 69(2), 79-100.

von Heideken Wagert, P., Ronnmark, B., Rosendahl, E., Lundin-Olsson, L., Gustavsson, J. M., Nygren, B., et al. 2005. Morale in the oldest old: the Umea 85+ study. *Age and Ageing*, 34(3), 249-255.

Waddell, G. and Burton, A. K. 2006. *Is work good for your health and well-being?*. The Stationery Office.

Wahrendorf, M. 2015. Previous employment histories and quality of life in older ages: Sequence analyses using SHARELIFE. *Ageing and Society*, 35(9).

Wahrendorf, M., Akinwale, B., Landy, R., Matthews, K. and Blane, D. 2017. Who in Europe works beyond the state pension age and under which conditions? Results from SHARE. *Journal of Population Ageing*, 10(3), 269-285.

Wahrendorf, M., Dragano, N., and Siegrist, J. 2013. Social position, work stress, and retirement intentions: a study with older employees from 11 European countries. *European sociological review*, 29(4), 792-802.

Waldron, I., Hughes, M. E. and Brooks, T. L. 1996. Marriage protection and marriage selection—prospective evidence for reciprocal effects of marital status and health. *Social science & Medicine*, 43(1), 113-123.

Waldron, I., Weiss, C. C. and Hughes, M. E. 1998. Interacting effects of multiple roles on women's health. *Journal of Health and Social Behavior*, 216-236.

Walker, A., and Maltby, T. 2012. Active ageing: A strategic policy solution to demographic ageing in the European Union. *International journal of social welfare*, 21, S117-S130.

Walters, S. 2005. Making the best of a bad job? Female part-timers' orientations and attitudes to work. Gender, *Work & Organization*, 12(3), 193-216.

Wang, M. 2007. Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92(2), 455.

Wang, M. 2012. Health and fiscal and psychological well-being in retirement. In J. W. Hedge and W. C. Borman (Eds.), *Oxford library of psychology. The Oxford handbook of work and aging*, Oxford University Press, 570–584.

Wang, M., and Shi, J. (2014). Psychological research on retirement. *Annual review of psychology*, 65, 209-233.

Wang, M., and Shultz, K. S. 2010. Employee retirement: A review and recommendations for future investigation. *Journal of Management*, 36(1), 172-206.

Wang, M., Henkens, K. and van Solinge, H. 2011. Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist*, 66(3), 204.

Wang, M., Zhan, Y., Liu, S. and Shultz, K. S. 2008. Antecedents of bridge employment: A longitudinal investigation. *Journal of Applied Psychology*, 93(4), 818.

Ward Jr, J. H. 1963. Hierarchical grouping to optimize an objective function. Journal of the *American Satistical Association*, 58(301), 236-244.

Ward, R. A., and Kilburn, H. 1983. Community access and satisfaction: racial differences in later life. *The International Journal of Aging and Human Development*, 16(3), 209-219.

Warr, P., Butcher, V., Robertson, I. and Callinan, M. 2004. Older people's well-being as a function of employment, retirement, environmental

characteristics and role preference. *British journal of Psychology*, 95(3), 297-324.

Warren, A. M. and Kevin Kelloway, E. 2010. Retirement decisions in the context of the abolishment of mandatory retirement. *International Journal of Manpower*, 31(3), 286-305.

Weatherill, P. 1994. *Do women retire?: A feminist critique of the social construction of retirement*. https://ro.ecu.edu.au/theses_hons/612

Weaver, D. A. (1994). The work and retirement decisions of older women: A literature review. *Soc. Sec. Bull.*, 57, 3.

Wennemo Lanninger, A. and Sundström, M. 2014. Part-Time Work in the Nordic Region. Part-time work, gender and economic distribution in the Nordic countries. *Tema Nord*, 503.

Wetzel, M., Huxhold, O., and Tesch-Römer, C. 2016. Transition into retirement affects life satisfaction: Short-and long-term development depends on last labor market status and education. *Social Indicators Research*, 125(3), 991-1009.

Whelan, C. T. and McGinnity, F. 2000. Unemployment and satisfaction: a European analysis. *Welfare regimes and the experience of unemployment in Europe*, 286-306.

Widmer, E. D., and Ritschard, G. 2009. The de-standardization of the life course: Are men and women equal?. *Advances in Life Course Research*, 14(1-2), 28-39.

Wolcott, I. 1998. *Families in later life: Dimensions of retirement*. Australian Institute of Family Studies.

Worts, D., Corna, L., Sacker, A., McMunn, A., and McDonough, P. 2016. Understanding older adults' labour market trajectories: A comparative gendered life course perspective. *Longitudinal and Life Course Studies*, 7(4), 347-367.

Wright S., and Soutter, A. K. 2015. Women and Retirement. In: Pachana N. (eds) *Encyclopedia of Geropsychology*, Singapore: Springer.

Xavier, F. M., Ferraz, M., Marc, N., Escosteguy, N. U. and Moriguchi, E. H. 2003. Elderly people's definition of quality of life. *Brazilian Journal of Psychiatry*, 25(1), 31-39.

Yamaguchi, K. 1991. *Event history analysis*. Sage.

Young, C. 2012. Losing a job: The nonpecuniary cost of unemployment in the United States. *Social Forces*, 91(2), 609-634.

Zanier, M. L. and Crespi, I. 2015. Facing the Gender Gap in Aging: Italian Women's Pension in the European Context. *Social Sciences*, 4(4), 1185-1206.

Zella, S., and Harper, S. 2020. The impact of life course employment and domestic duties on the well-being of retired women and the social protection systems that frame this. *Journal of aging and health*, 32(5-6), 285-295.

Zimmerman, L., Mitchell, B., Wister, A., and Gutman, G. 2000. Unanticipated consequences: A comparison of expected and actual retirement timing among older women. *Journal of Women & Aging*, 12(1-2), 109-128.

ACKNOWLEDGMENTS

La stesura di questa tesi è stata un'esperienza stimolante, impossibile senza il supporto personale e pratico di diverse persone. Vorrei quindi esprimere la mia gratitudine al mio supervisore, colleghi, amici e familiari per il loro sostegno negli ultimi anni.

Desidero ringraziare il mio supervisore Marco Albertini per la pazienza, il supporto costante, l'aiuto e le lavate di capo. I suoi consigli metodologici e le discussioni sui problemi teorici sono state inestimabili. Ho apprezzato molto le nostre conversazioni, da cui trarrò beneficio anche negli anni a venire.

Sono anche grata a tutti i/le colleghi/e del dottorato che con il loro calore, critiche costruttive e suggerimenti hanno contribuito al superamento dei momenti più difficili. Una menzione speciale va a Eleonora Buono, per le svariate discussioni accademiche e personali e per le emozionanti letture dei tarocchi.

Buona parte della riuscita di questa tesi è dovuta alle persone con cui ho condiviso la mia esistenza a Bologna: alle/al mie/o fantastiche/o coinquiline/o, Jana, Erica e Euplio che hanno sopportato gioie e dolori di questi 3 anni, agli amici e amiche "storici/e" in città e a quelli/e relativamente nuovi/e, che mi hanno adottata in questo periodo così particolare. Grazie anche alla Palestrina Popolare che mi ha dato l'opportunità di sfogare il corpo (con i pugni) e la mente (con le discussioni politiche). Grazie anche alle mie due famiglie in Bolognina.

Un ringraziamento anche alle "bimbe/i" di Casciana per le nottate al circolino, le cene, le risate e gli attimi si svago.

Desidero anche ringraziare Peio per il supporto continuo e assoluto. Peio, sei un ottimo compagno e hai reso la distanza una nullità. Ti ringrazio anche per i mesi intensi vissuti insieme a Madrid, per gli scambi intellettuali, per il modo in cui riesci a farmi vedere le cose da un altro punto di vista, per avermi aiutato a superare le battute d'arresto e per le tanto necessarie discussioni e attività extra-accademiche.

Infine, desidero ringraziare la mia famiglia biologica. Mia sorella Irene, perché è un esempio di onestà, costanza e sensibilità: grazie per i mille consigli e le mille riletture della tesi. Grazie infinite ai miei genitori, per avermi supportato e accompagnato durante questi anni e per avermi insegnato l'importanza e l'amore per l'empowerment, la libertà e la lotta. I vostri valori sono i miei valori:

"Ho sentito che non volete imparare niente.
Deduco: siete milionari.
Il vostro futuro è assicurato - esso è
Davanti a voi in piena luce. I vostri genitori
Hanno fatto sì che i vostri piedi
Non urtino nessuna pietra. Allora non devi
Imparare niente. Così come sei
Puoi rimanere.
E se, nonostante ciò, ci sono delle difficoltà, dato che
i tempi,
Come ho sentito, sono insicuri
Hai i tuoi capi che ti dicono esattamente
Ciò che devi fare affinché stiate bene.
Essi hanno letto i libri di quelli
Che sanno le verità
Che hanno validità in tutti i tempi
E le ricette che aiutano sempre.
Dato che ci sono così tanti che pensano per te
Non devi muovere un dito.
Però, se non fosse così
Allora dovresti studiare."