Transition to adulthood in England and Wales: The analysis of life trajectories of young adults

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor in Philosophy by:

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Abstract

This thesis investigates various life trajectories of young people in England and Wales during the transition to adulthood. This thesis moves beyond one-event transitions and investigates *education and employment, partnership, and residential careers* from a longitudinal perspective. This thesis investigates how the trajectories are influenced by birth cohort, parental socio-economic background, and individual's life course characteristics. This thesis investigates the cohorts born between 1974 and 1991 who experienced their transition to adulthood since the beginning of the 1990s. Overall, the longitudinal analysis of 5-year birth cohorts highlighted significant changes in life course trajectories over the last 25 years, while some continuity was observed as well. This thesis presents evidence towards "protracted" youth transitions with further postponement of leaving the parental home and first partnership formation, which can be partially explained by the expansion of further and higher education. Overall, the analysis suggests that together with the postponement, life course trajectories among the youngest cohorts have become more complex with a higher number of events occuring in all life domains (e.g. higher rates of moving and higher rates of separation from first cohabiting unions). Overall, the findings suggest that there is a trend towards a convergence in trajectories between men and women, although persistent inequalities are observed in labour market outcomes. Findings of this thesis provide evidence that parental socio-economic background which has traditionally played an important role in shaping young people's life course trajectories in Britain still explains a large part of the variation in transitions. Young people from more advantaged backgrounds are more likely to obtain high qualifications and profit from higher returns to longer time spent in education. Despite an increase in the proportion of young people from less advantaged backgrounds going into higher education, they are still much less likely to occupy professional and managerial positions. In contrast to previous arguments, parental socio-economic background was found to play little role in partnership transitions among the cohorts studied in this thesis.

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Chapter I

Introduction

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1.1 Introduction

Over the past few decades, transitions to adulthood in industrialised countries have become de-standardised and individualised, resulting in a larger freedom of lifestyles choices (Shanahan, 2000; Surkyn & Lestaehghe, 2004; Macmillan, 2005; Billari & Liefbroer, 2010). In the UK, the continuous expansion of higher and further education since the beginning of the 1980s increased educational access of traditionally excluded groups, e.g. ethnic minorities, and young people from lower socio-economic backgrounds (Lymperopoulou & Parameshwaran, 2015; Murphy et al., 2018). The increased freedom of choices in personal life stem from further increase and public acceptance of non-marital cohabitation, the emergence of the "Living-apart-Together" (LAT) relationships, introduction of civil partnerships and same-sex marriages (Ermisch & Francesconi, 2000; Haskey 2005; Ermisch & Siedler, 2009). These developments have substantially weakened the social "age deadlines" for the occurrence of specific life events and have led to an emergence of the "biographies of choice" (Huinink, 2013). At the same time, young people going through the transition to adulthood in the early 1990s and later were severely affected by the economic and housing crisis. Thus, an increased rate of unemployment, low affordability of housing and retrenchments of welfare benefits have led to an increased economic precarity, especially among less advantaged groups of young people (MacDonald, 1997; Furlong & Cartmel, 2007; Stone et al., 2011; Berrington et al., 2014; Furlong et al., 2018). What remains unclear is how these positive and negative socio-economic developments have affected various transitions in early adulthood over the past few decades. The aims of the thesis are:

1. *To study three main domains of the life trajectories of young people in England and Wales: education and employment, partnership, and residential careers.*
2. *To investigate how the transition to adulthood in England and Wales is influenced by birth cohort, parental socio-economic background and individual's life course characteristics.*

There are many reasons why it is important to study youth transitions. An "extension" or "protraction" of youth as a phenomenon is directly related to increased life expectancy, which, together with low fertility rates, have contributed to rapid population ageing, and thus a declining share of young people in the population. The rising difficulties of gaining financial independence for young adults have increased the financial burden on their parents, the so called "sandwich" generation (Pierret, 2006; Grundy & Henretta, 2013). This

generation of people who are now in their 40s-60s carry the double burden of caring for their now living longer parents and their "boomerang" children, who frequently come back to the parental nest during the periods of increased labour market uncertainty and troubled personal circumstances, such as partnership dissolution. In the bigger picture, it remains unclear where young people stand in the line of social roles' reallocation and how long the youth phase lasts if everyone is living longer (Neugarten et al., 1965; Model et al., 1976; Hogan & Astone, 1986; Boulding, 2003). Since the 1980s, the increased tensions between generations have been often highlighted in the media from a mostly punitive perspective. Young people have been often called the "lost generation", "generation rent", "twixters", "parasite singles", accused that the origins of their economic problems lie in their lack of personal initiative (The Atlantic, Sep 22, 2011; The New York Times, Aug 21, 2011; The Guardian, Oct 30, 2015; Mar 14, 2016; Furlong et al., 2018).

How does this thesis improve our understanding of the transition to adulthood? The traditional concept of the transition to adulthood includes four dimensions – leaving the parental home, completion of education, becoming financially independent and entering the first cohabitating union or marriage (Billari, 2001; Billari & Liefbroer, 2010; Liefbroer & Toulemon, 2010; Huinink, 2013). This thesis moves beyond one-event transitions and investigates life course trajectories from a longitudinal perspective. More specifically, it addresses the following research questions: How have education and employment careers of young adults changed? (Chapter II); How have partnership transitions changed? (Chapter III); How have migration trajectories changed? (Chapter IV). This thesis investigates the cohorts born between 1974 and 1991 who experienced their transition to adulthood since the beginning of the 1990s. On the one hand, they could stand as a relatively homogeneous group of people compared to the older cohorts which were the forerunners of the Second Demographic Transition. On the other hand, investigating changes and continuities in life course trajectories by 5-year birth cohorts (the approach presented in this thesis, as opposed to the classical 10-year threshold), has an advantage of unravelling the micro-social changes occurring in the transition to adulthood over the last 25 years.

As a result of the increased feminisation of higher education and the labour market, evidence has shown that women's and men's life course trajectories become more alike in the early stage of the life course (Winkler-Dworak & Toulemon, 2007; Stone et al., 2014). Yet, the large gender pay gap and disadvantaged labour market position of women point towards the persistence of gender differences in employment and education careers

(Harkness, 1996; Bynner & Parsons, 2001; Olsen et al., 2018). This thesis will thus contribute to the discussion of whether there is a convergence or divergence in various life course trajectories among young men and women, i.e. education and employment, partnership, and residential careers.

Transition to adulthood in Britain was traditionally found to be determined by socio-economic background (Cavalli & Galland, 1995; Coffield, 1995; Bynner, 2001, 2005). Rapid school-to-work transitions with early family formation patterns have been mostly prevalent among young people from less advantaged backgrounds ("fast-track"). In contrast, young people from more advantaged backgrounds have traditionally followed their parents' routes into higher education and experienced the prolonged pathways to adulthood with "positive" individualisation which allowed them to explore various options in life ("slow-track"). With the success of the Widening Participation in higher education programmes and the general postponement of family formation, it remains unclear which role an individual's social background plays in shaping young people's lives. This thesis will thus contribute to the discussion of convergence and polarisation in life course trajectories among young people from different social backgrounds.

To answer the research questions, this thesis applies a combination of advanced methods of longitudinal data analysis. Sequence analysis is used to study education and employment trajectories. The identified clusters are then incorporated into multinomial logistic regression to investigate the link between the pathways and occupational outcomes in later life (Chapter II). A series of competing risks event-history models is applied to investigate partnership transitions (Chapter III) – first co-residential union (cohabitation or direct marriage), outcomes of first cohabitation (separation or conversion to marriage), and repartnering (cohabitation or direct marriage). Multistate event-history models for repeated events are employed to analyse leaving the parental home and subsequent moving trajectories among young people (Chapter IV).

There are currently only a few longitudinal studies on transition to adulthood among the recent birth cohorts in the UK, and this thesis offers a significant contribution to the literature in this growing field of Demographic Research. It moves beyond single transitions and focuses on life course trajectories instead in order to present a holistic picture of the continuities and changes during the transition to adulthood. This thesis also investigates the most recent cohorts about whom little is known, and follows them up-to-date, and uses finer 5-year birth cohorts. The findings of this thesis contribute to the long-standing

discussion of how (and whether) various life course trajectories differ by gender and how they are affected by the parental socio-economic background.

The remainder of this chapter is structured as follows. Section 1.2 provides a theoretical framework for this study and discusses the concept of the transition to adulthood from a Life Course perspective. Sections 1.3 and 1.4 give an overview on the data and methods used in the analyses. Overarching research questions and chapter summary are outlined in section 1.5. Finally, co-authors' contributions are presented in section 1.6.

1.2 Theoretical framework

1.2.1 The concept of the Transition to Adulthood

The challenges of the transition to adulthood, as well as the opportunities and place of young people in society, have attracted attention of scholars from various social science disciplines, such as, demography, human geography, sociology, and developmental psychology (Cavalli & Galland, 1995; Arnett, 2000, 2006; Holdsworth, 2000; Mulder & Clark, 2000, 2002; Billari, 2001; 2004; Bynner, 2001, 2005; Cook & Fustenberg, 2002; Mills & Blossfeld, 2003; Valentine, 2003; Furlong & Cartmel, 2007; Billari & Liefbroer, 2010; Stone et al., 2011; 2014; Huinink, 2013). The wide variety of disciplines studying the subject has created a diversity in approaches towards conceptualising of this period in human development. Yet, there exists no single definition for the transition to adulthood. Some scholars refer to the extension or prolongation of a "youth phase" of the life course (Berger, 1960; Cavalli & Galland, 1995; Bynner, 2005), others use the terms "postadolescence" (Erikson, 1963; Buchmann, 1989), "emerging adulthood" (Arnett, 2000; Arnett, 2006), "boomerang age" (Mitchell, 2007), and "young adults" (Da Vanzo & Goldscheider, 1990; Furlong & Cartmel, 2007).

As there exists no clearly outlined cut-points to define when the adulthood begins, most of the approaches fall under two main categories. The first group adopts a life course perspective and focuses on the timing and sequences of the occurrence of life course events, such as leaving the parental home, completing education, entering the labour market, getting married and becoming a parent. The other group usually criticizes the age-specific event-based approach, advocating the importance of subjective indicators and perceptions of becoming an adult. The latter concept is also referred to as the "emerging adulthood" and describes the transition to adulthood as a time of exploration of life's

possibilities and experiences in love, work, and worldviews (Arnett, 2000, 2006). The period is characterised through five main features: *age of identity explorations, age of instability, age of feeling in-between, self-focused age, age of possibilities.* "Emerging adulthood" is distinguished by relative independence from societal normative expectations and puts into focus the "individualistic qualities of character" regarding accepting responsibility for one's self, making independent decisions and becoming financially independent (Arnett, 2000). Young people are thus seen more as active agents rather than subjects to structural factors.

It is undoubtedly the case that young people's perceptions of becoming an adult are an important part of the process and are related to reaching certain stages in life. Some studies find, though, that going through the key demographic transitions in early life does not necessarily lead to self-identification as an adult (Shanahan, 2000; Shanahan et al., 2005; Benson & Furstenberg, 2006; Hartmann & Schwartz, 2007). Adult identity and perception of maturing have thus been shown to alter once a person experiences various life course events, most importantly, becoming financially independent (Ibid.). The combination of both approaches would unquestionably provide a better picture on the changing nature of the transition to adulthood, although, due to the quantitative nature of this research, this thesis primarily builds on the theoretical framework of the Life Course Theory (LCT) approach.

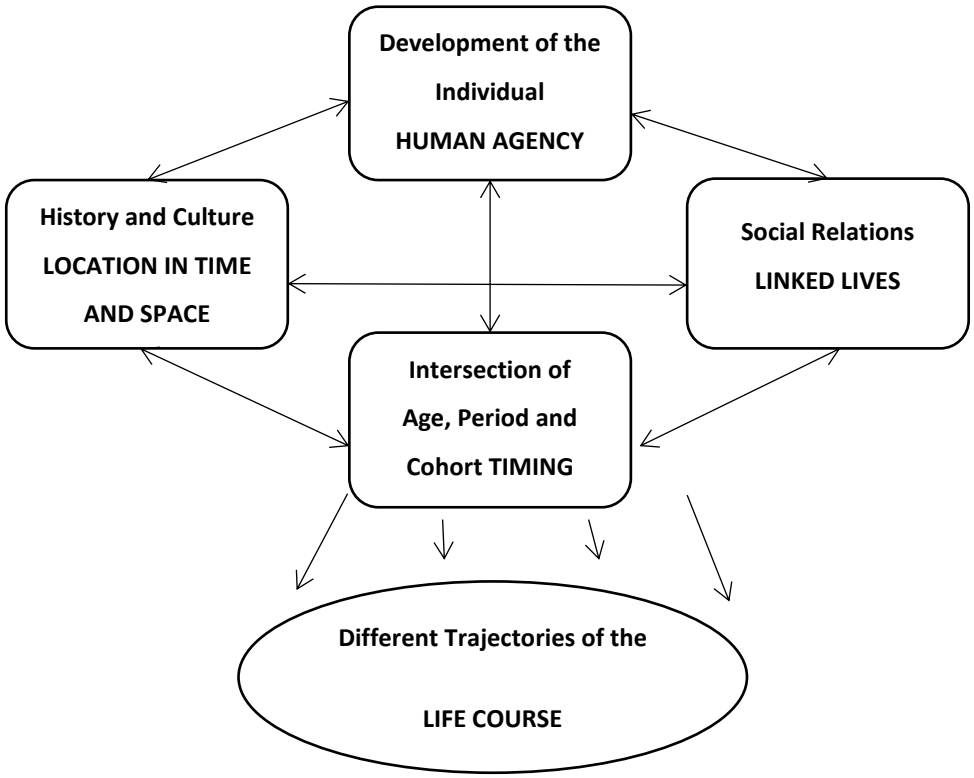
1.2.2 Life Course Theory and restructuring of a "youth phase"

1.2.2.1 Life Course paradigm

As defined by Giele and Elder (1998), "life course refers to a sequence of socially defined events and roles that the individual enacts over the time" (p. 22). The theory focuses on looking at human lives from the perspective of going through various transitions and trajectories in life. Transitions mark a discrete life change (event) in a particular life course dimension as people move from one role to another (e.g. from being a student to starting a working life). Transitions therefore result in change in status and/or perceived social role. A series of transitions together form trajectories (Elder, 1985; Giele & Elder, 1998). Transitions are shorter in duration, while trajectories are long-term pathways which reflect the dynamics of the life course. As Elder (1985) further notes, "transitions are always embedded in trajectories that give them discrete form and meaning" (p.31).

The LCT considers individual transitions and trajectories in relation to various socio-cultural and institutional arrangements. The paradigm includes four central dimensions: *the interplay of human live and historical times, the timing of lives, linked or interdependent lives, and human agency in choice making* (Giele & Elder, 1998; Figure 1.1). The interplay of human live and historical times is also called the "location in time and place" and represents macro-level period effects. Linked or interdependent lives account for all levels of social interactions, such as family, kinships, friends, and other social networks. This dimension also incorporates the influence of socio-economic background and geographical context in shaping life course trajectories. Human agency in decision-making refers to individual goal orientations and motives, values, and adaptation strategies. The timing dimension refers to the incidence, duration and sequences of life events and roles that form trajectories. This dimension also reflects how an individual adapts to the societal age norms regarding fulfilling various roles ("normative timetables"). The life course paradigm considers the four dimensions to be interrelated between each other and thus leading to the variety of different life course trajectories.

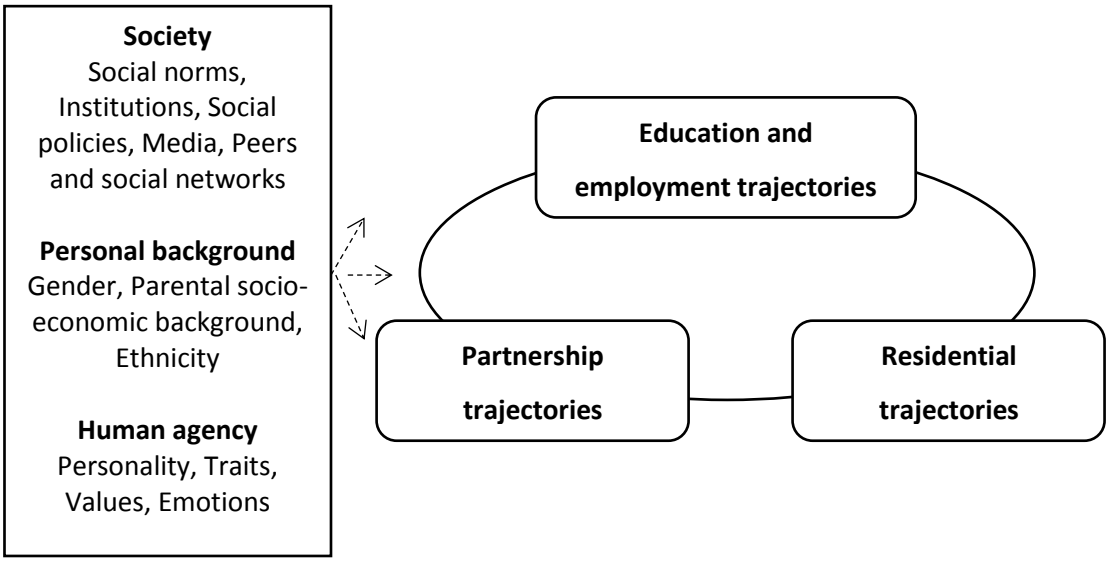
Figure 1.1 Key elements of the Life Course Theory



Source: Giele and Elder (1998).

The multidimensional nature of the Life Course Theory provides a rich opportunity to study various transitions occurring in the young adult ages. Figure 1.2 presents an application of the adopted LCT to the transition to adulthood. The key event-markers in early adulthood – leaving the parental home, completing education, entering the labour market, getting married and becoming a parent – are incorporated in three life course trajectories. Changes in education and employment, partnership, and residential careers are the key focus of this thesis. The trajectories are interrelated and altogether shaped by both societal (e.g. social norms and institutional background) and personal factors (gender, parental SES, personality traits), which are discussed in more detail in the following sections 1.2.2.2, 1.2.2.3, and 1.2.3.

Figure 1.2 A schematic presentation of the Life Course Theory applied to the Transition to Adulthood



Source: own representation.

1.2.2.2 Individualisation of the life course

The transition to adulthood from a life course perspective has shown to be a dynamic concept. Model, Fustenberg, and Hershberg (1976) were among the first scholars to define the transition to adulthood by focusing on five particular transitions: exit from school; entrance to the work-force; departure from the family of origin; marriage; and the establishment of a household. By comparing post war cohorts of young Americans to their counterparts in the late 19th century, they showed that the process of growing up started

to follow “more prescribed and tightly defined schedule of life course organization” (Model et al., 1976, p. 20), and that “the prevalence of the usual transitions somewhat increased”, suggesting the emergence of standardised life course trajectories. On the other hand, despite the emergence of a societally normative timetable, they also showed that the growing variety of choices about sequencing and combining statuses might have caused the phenomenon of holding of several statuses simultaneously. The latter suggests the shift in the transition to adulthood from a linear progression to a serial pattern of concurrent or even “disordered” events occurring all about the same time, which leads to an increase in variety of individualised life course trajectories.

A number of socio-economic and cultural changes that took place in industrialised countries since the end of the 1960s/beginning of the 1970s under the umbrella of the Second Demographic Transition (SDT; Lesthaeghe & van de Kaa, 1986) have undoubtedly influenced the perceptions of maturing and becoming an adult through all dimensions of the life course paradigm. The SDT could be briefly described through the simultaneous occurrence of the expansion of higher education, economic restructuring, an increase in women’s labour force participation, introduction of reliable contraceptives and ideational changes towards individualistic goals and decreased normative control (the SDT is discussed in more detail in section 1.2.2.3). The SDT provided a solid ground to assume an almost universal disruption in the traditional pattern of going to school, finding a partner, moving in together, buying a house, and starting a family. This further triggered a discussion regarding the restructuring and de-standardisation of the life course trajectories (Schanahan, 2000; Macmillan, 2005; Huinink, 2013).

The main arguments in favour of de-standardisation and individualisation of the life course can be summarised following Macmillan (2005). First, an increasing variation in the timing and sequence of life events has been observed in various domains (for instance, the diverse patterns in routes and timing of leaving the parental home; Billari & Liefbroer, 2010; Iacovou, 2010). The second group of arguments builds around an increased deviation away from social norms and can be described through multiple dimensions. On the one hand, a greater instability and reversibility of roles has been observed (e.g. an increase in divorce and repartnering (Ermisch & Francesconi, 2000; Wu & Schimmele, 2005; Steele et al., 2006; Skew et al., 2009) or returning to the parental home (Golscheider & Goldscheider, 1999; Stone et al., 2014). On the other hand, an increase in the decoupling and occupation of

multiple roles has become more common as well (e.g. an increase in cohabitation and non-marital fertility; Perelli-Harris et al., 2010).

Another factor also speaking in favour of individualisation of the life course would be a larger freedom for individuals to decide for themselves how to organise their own life which has resulted from a decrease in normative controls (Liefbroer, 1999; Shanahan, 2000; Beck & Beck-Gernsheim, 2002). This argument refers directly to the human agency dimension in terms of the Life Course paradigm, and this aspect seems to be the hardest to operationalise or take into account. As the range of alternatives in life has becomes wider it is not only a problem of which option to choose but also when (Mills & Blossfeld, 2003). In the case of young people's decisions that would mean weighing pros and cons while making a decision about whether to stay with parents or move out, whether to continue education or try to find a job and so on. Yet, the deep origins of young people's motivations and perceptions about own abilities and chances in life remain unknown.

Although, some young people have managed to benefit from an increased flexibility in work and relationships by finding their own unique and autonomous way to social and economic independence, it has been advocated that young people have not been equally exposed to the rising opportunities and thus a "structured individualisation" is in place. This would mean that trajectories in early adulthood differ by origins and social class, leaving people from less advantaged backgrounds with more limited choices in life (Roberts et al., 1994; Furlong & Cartmel, 2007; Côté, 2002; Côté & Bynner, 2008; Furstenberg, 2008). McLanaghan (2004) argues that societal developments which started during the Second Demographic transition, in particular women's growing economic independence, have led to greater disparities in children's resources ("diverging destinies"). Thus, children of highly-educated mothers are more likely to grow up in two-parent families with more resources (e.g. parents' time and money). In contrast, children of low educated mothers, who are often excluded from the labour market, are more likely to grow up in single-parent deprived households. Further evidence suggests that young people from advantaged backgrounds are more likely to follow their parents' routes into leaving the parental home to enrol into higher education (De Jong Gierveld et al., 1991; Holdsworth, 2004; Patiniotis & Holdsworth, 2005). Their subsequent returns to education and smoother transition to the working life have also shown to be positively associated with greater financial stability in the future. In contrast, young people from less advantaged backgrounds are more likely to experience precarious and turbulent transitions into labour market. Unemployment and

economic hardship might as well stand in a way of gaining financial and residential independence among vulnerable groups of young people (Stone et al., 2011). This ongoing discussion of polarisation (or "youth divide") in life course trajectories among young people from higher and lower socio-economic backgrounds poses a further question as to whether or not de-standardisation in the life course is a transitory case on a way to a new standard but socially stratified model of transition to adulthood. Re-standardisation could therefore be defined in several ways. For example, if the age patterns subsequently narrow or connection between life events eventually strengthens, then it is likely that a common sequence of events will appear again (Huinink, 2013).

Referring back to the conceptualisation of the transition to adulthood, the cultural and economic changes that have occurred in the last decades have triggered the transformation of the modern definition of adulthood, as compared to the one proposed by Model et al. (1976), such that it now includes four markers – leaving the parental home, completion of education, becoming financially independent and entering a first union (Billari et al, 2001; Billari & Liefbroer, 2010; Liefbroer & Toulemon, 2010; Huinink, 2013). Research to date on the transition to adulthood has widely adopted the life course framework, but has focused mostly on studying discrete life events (e.g. leaving parental home or forming first union; Goldscheider & DaVanzo, 1989; De Jong Gierveld et al., 1991; Berrington & Diamond, 2000; Iacovou, 2002) explaining the cultural and institutional nature of heterogeneity in transitions around the world (Cook & Fustenberg, 2002; Billari, 2004); and investigating the convergence/ divergence of patterns in timing and sequencing of events in different countries (Billari & Liefbroer, 2010). Research on longitudinal life trajectories of young people is scarce.

As shown in this chapter, the increased reversibility of events as well as a greater variation in timing and sequences of how they occur encourages looking beyond a one-event-a-time (transitions) approach and instead studying the life trajectories of young people that arise from the interaction of multiple transitions. This would provide much more detailed information on the patterns than studies that focus only on discrete life events. For these reasons this thesis takes a life course approach and focuses on investigating changes in three life domains, namely employment and education pathways, partnership careers, and moving trajectories among young people in Britain.

1.2.2.3 The Second Demographic Transition

As mentioned in the previous section, de-standardisation and individualisation of the life course in the second half of the 20th century has often been discussed in light of the Second Demographic Transition theory which incorporates ideational shifts alongside the socio-economic developments in explaining changes in family and fertility behaviour. This section presents the main points summarised by the theory in the 1980s together with the most recent developments.

Changes in the economic and social structure

Economic restructuring together with the expansion of higher education are often indicated among the most prominent changes in the economic and social structure that have occurred since the 1960s (Lesthaeghe & van de Kaa, 1986; Liefbroer, 1999). Economic restructuring towards information technology demanded more highly skilled workers and triggered the expansion of higher and further education among young adults. Since the late 1950s the variety of educational routes in European countries (e.g. polytechnics, vocational training courses, and apprenticeships) has increased and become available for wider groups of population, in particular among women[1] (Liefbroer, 1999; Garrouste, 2010). The prolonged period spent in education has subsequently triggered the almost universal postponement in family formation among young people. Once women gained access to education, the traditional pathways of leaving the parental home through getting married and starting a family began to change. Among highly educated women, the rapidly changing socio-economic context stimulated the development of new ambitions for establishing themselves in the labour market and building a professional career which subsequently delayed family formation (Oppenheimer, 1994, 1997; Blossfeld, 1995).

Changes in the economic and social structure were occurring simultaneously with the introduction of new policy acts regulating family life in the vast majority of Western European countries. Thus, a change in the divorce law occurred in the late 1960s-1970s and allowed couples to divorce without proving "fault" (e.g. adultery, violence, insanity) in countries where it was restricted before (e.g. Germany, Italy, the UK), which caused a large increase in the divorce rates (e.g. ONS, 2015b). Further developments included an introduction of universal paid maternity and later paternity leave, which were varying

[1] The changing socio-economic context in the UK is discussed separately in more detail in Chapter I.

dramatically (and still do) by the length and the payment rate across the countries (DICE, 2015). Nevertheless, these reforms symbolised the first steps towards shifting away from the traditional exclusion of women from labour market after the childbirth. Another significant development was the beginning of the movement in support of same-sex marriages which started around 1970s. Gradually the movement led to the legalisation of civil partnerships between same-sex couples in the vast majority of "old" Western European countries starting with Denmark in 1989 and the subsequent establishment of same-sex marriages since the beginning of 2000s.

Technological innovation

Technological innovations that fall under the umbrella of the SDT usually refer to changes in contraceptive behaviour. The introduction of reliable contraceptive methods (such as the contraceptive pill, intrauterine device (IUDs), vasectomy) together with the widespread dissemination of information about contraception in the mass media have collectively been described as the "contraceptive revolution" (Westoff & Ryder, 1977). The "revolution" has led to a rapid decline in the unwanted pregnancies, which together with an increase in legalized abortions in many countries, have led to a dramatic decline in fertility in developed countries (Ibid.; Bongaarts, 1978). Further innovations included the introduction of in vitro fertilisation (IVF) which has significantly improved the chances of becoming a parent among who could have potentially ended up involuntary childless (te Velde et al., 2012).

Cultural changes

The technological innovations and changes in economic and social structure were accompanied by cultural changes in norms and attitudes towards career pursuits, family formation, and self-development. The ideational changes have implied a larger freedom of lifestyle choices driven by pursuit of self-actualisation and recognition (the co called "higher order needs" in the Maslow's hierarchy of needs (1954)). Alongside the feminisation of higher education and the labour market, the re-emergence of feminism has also played an important role in the shift towards gender equality and further re-orientation of priorities towards self-realisation in professional spheres, particularly among highly educated women (McLanaghan, 2004; Surkyn & Lestaeghe, 2004; Lestaeghe, 2010).

The increased role of individual agency in life choices was supported by a simultaneous decrease in normative controls. Traditionally, each society develops its own normative

timetables for various stages of life careers (Hogan & Astone, 1986; Neugarten et al., 1965; Riley, 1987; Billari & Liefbroer, 2007). This results in the existence of the so called "age deadlines", which prescribe an individual a status of being "too early", "too late", or "on time" with their life trajectories, for example, with regards to family formation (Settersten, 2003; Billari et al., 2010). However, these timetables do not stay regular. Age norms transform under the influence of new institutional arrangements (Riley, 1987). Thus, prolonged stay in education, an increase in cohabitation and subsequent postponement of entering a marriage and starting a family have substantially "loosened" the tight societal schedules.

With the gradual transformation of partnership and fertility patterns, the meaning of marriage and cohabitation in society has been evolving as well. On the one hand, marriage has lost its universal significance as an integral stage in life (Cherlin, 2004; Seltzer, 2004). On the other hand, cohabitation has not completely forced marriage out, but affected the meaning people attach to non-marital unions, e.g. seeing cohabitation as an alternative or prelude to marriage to an alternative to being single (the meaning of cohabitation is described in more detail in section 2.2.2). The reassessment of family orientation together with the longer time spent being single and the wide access to effective contraceptive methods have affected the dramatic reshaping of fertility intentions and subsequent lower fertility. On the one hand, an increase in childfree movements and voluntary ideational childlessness has been observed alongside its gradual public acceptance (Noordhizen et al., 2010; Merz & Liefbroer, 2012). On the other hand, there has been an increase in "ambivalent" childlessness as well (Kneale & Joshi, 2009; Berrington, 2017), which was affected by the emergence of a group of "perpetual postponers" – individuals who maintained a latent desire for children but were delaying the actual childbearing until it was too late (Berrington, 2004).

To sum up, the SDT's aim was to provide an overarching ground for explaining some of the common patterns in the demographic behaviour in the second half of the 20th century, which would stress the role of individual agency and changes in values. The theory was criticised on a number of occasions for lacking evidence of its prevalence in countries outside of Western Europe (Coleman, 2004; Lestaeghe, 2010). Thus, it was advocated that the origins of nonmarital cohabitation and childbearing in some countries, e.g. the US or Russia, are linked to the pattern of economic disadvantage and poverty (Bumpass & Sweet, 1989; Perelli-Harris & Gerber, 2011). The theory was also criticised for overlooking the

influence of gender inequalities and gender-equity regimes on fertility and family changes (e.g. Esping-Anderson & Billari, 2015), as well as for underestimating the role of social inequalities and structural constraints in shaping life course trajectories (Zaidi & Morgan, 2017). These critical points are undoubtedly crucial for understanding the societal and demographic change occurred in the second half of the 20th century. Nevertheless, the SDT provides a multidimensional perspective on the main developments which have been affecting the socio-economic context and social norms in which young people born after the 1960s were growing up and thus shaping their decisions during the transition to adulthood.

1.2.3 Western European patterns in transition to adulthood

Institutional structure, social policies and cultural norms shape the patterns of the transition to adulthood prevalent in society and explain much of the cross-country heterogeneity in early adulthood developments (Billari, 2004: Billari & Liefbroer, 2010; Iacovou, 2010). The heterogeneity of welfare arrangements and social attitudes towards becoming an adult in Europe have resulted in the formation of three common patterns which summarise the timing and sequences of main transitions in early adulthood (Cavalli & Galland, 1995). The "Mediterranean pattern" is characterised through the prolonged stay in the parental home and synchronisation between leaving home and marriage (also called "the latest-late"). This pattern is prevalent in the countries with "strong family ties" and less generous state support where young people are highly dependent on family resources, e.g. Italy and Spain. The "French and Northern European pattern" is distinguished through the prolonged time living as a single and a prevalence of household formation which precedes family formation ("the earliest-early"). This pattern is common in the countries with "weaker family ties" and more generous state support allowing larger independence in early adulthood, e.g. Germany and Sweden. The "British pattern" falls into a separate category as being distinctive from the other European countries. It is usually described through early transitions from school to work and delayed – but heterogonous – household and family formation, also called the "model of early maturing".

Table 1.1 provides an overview on the changes occurring in the timing of the main transitions in early adulthood over the last 25 years in the countries representing the three patterns outlined above: Germany and Sweden have been selected as an example for the "French and French and Northern European pattern", Italy and Spain for the

"Mediterranean pattern", and the UK. The table contains information on the mean age at leaving the parental home, first marriage and first parenthood, as well as the proportion of early school leavers. Although, the mean age at leaving the parental home has not changed much over the last 15 years (Table 1.1.a), the distinguished country patterns remain clearly pronounced. Young men and women in Italy and Spain leave the parental home much later than in Germany, Sweden and the UK. Overall, men leave the parental home earlier than women across all countries. The proportion of early school leavers has reduced gradually in all countries reflecting the overall continuous expansion of further and higher education. The proportion is much lower in Germany and Sweden (below 10% in 2014), but remains relatively high in Italy and Spain (12% and 18% among Italian women and men in 2014; 26% and 32% among Spanish women and men, respectively; Table 1.1.b). In all countries the share of early school leavers is lower among women than among men. The proportion has reduced drastically among young people in the UK (from 33% in 1992 to 11% in 2014 in men and from 25% to 11% in women during the same period). A universal further postponement of marriage and childbearing has been observed across all countries between 1990 and 2014 (Table 1.1.c and Table 1.1.d). Little cross-national differences exist within women and men, but men on average experience the transitions later.

Table 1.1 a) Mean age at leaving the parental home; b) proportion of early school leavers; c) mean age at first marriage; d) mean age at first birth, in selected Western European countries, 1990-2014

Country/Year	1990	1995	2000	2005	2010	2014
a) mean age at leaving the parental home						
women						
Germany			23	23	23	23
Sweden			NA	NA	20	21
Italy			NA	28	29	29
Spain			29	28	28	28
UK			22	22	23	24
men						
Germany			25	25	25	25
Sweden			NA	NA	21	21
Italy			NA	31	31	31
Spain			30	29	29	30
UK			24	25	25	25
b) proportion of early school leavers (18-24 yrs olds)						
women						
Germany			15	14	11	9
Sweden		6	6	10	6	6
Italy	35	30	22	18	15	12

Country/Year	1990	1995	2000	2005	2010	2014
Spain	36	29	23	25	23	18
UK	37	NA	18	11	14	11
men						
Germany			14	13	13	10
Sweden		9	9	12	8	7
Italy	40	36	29	26	22	18
Spain	45	38	35	37	34	26
UK	33	NA	19	13	16	13
c) mean age at first marriage						
women						
Germany	26	27	28	30	30	31
Sweden	28	29	31	32	33	33
Italy	26	27	28	29	30	31
Spain	26	27	28	29	31	32
UK**	25	27	28	30	30	31
men						
Germany	28	30	31	33	33	34
Sweden	30	32	33	35	36	36
Italy	28	30	31	32	33	34
Spain	28	29	30	32	33	34
UK**	27	29	31	32	32	33
d) mean age at first birth (women)						
Germany	27	28	29	30	29	29
Sweden	26	27	28	29	29	29
Italy	27	28	29	30	30	31
Spain	27	28	29	29	30	31
UK**	26	26	27	27	28	29

*Note **: The proportion of early school leavers refers to the percentage of young people aged 18 to 24 who have completed at most lower secondary education and is not involved in further education or training (Eurostat 2018; estimates are based on Labour Force Survey (LFS)). Data for 1990 refers to 1992 as the earliest available. ** Data on mean age at first marriage and mean age at first birth refer to England and Wales. All figures in the table are rounded to the nearest whole number.

Source: Eurostat (2018); UNECE statistical database (2018).

Patterns presented in Table 1.1 draw a general picture on the timing and development of some of the transitions in early adulthood over the past 25 years in selected European countries. The countries from all three classical patterns outlined earlier in the chapter share some commonalities in the postponement of marriage and family formation, yet the differences in leaving the parental home and further education and employment trajectories remain striking. Although the figures presented above are merely descriptive and do not provide insights into the origins and heterogeneity in life course trajectories

within countries, it provides a good ground to place changes occurring in the transition to adulthood among British youth, which are studied in detail in this thesis, in comparison to their European counterparts.

1.3 Data

1.3.1 The British Household Panel Survey (BHPS) and the United Kingdom Household Longitudinal Study (UKHLS)

Each chapter of this thesis uses the British Household Panel Survey (BHPS), the longest running household panel in the UK, which was carried out between 1991 and 2009 by the ESRC UK Longitudinal Studies Centre and the Institute for Social and Economic Research (ISER) at the University of Essex. Chapters II and III additionally use data from the successor of the BHPS – the United Kingdom Household Longitudinal Study (UKHLS). One of the biggest advantages of using this data as opposed to three longitudinal cohort studies: National Child Development Study (cohort born 1958); 1970 British Cohort Study; and the Millennium Cohort Study (cohort born 2000), - is that it opens up an opportunity to investigate the micro-social changes occurring in the most recent 5-year birth cohorts of young adults not captured in these studies.

The BHPS was designed as an annual survey of a nationally representative sample of more than 5,000 households drawn from the Postcode Address File in England, Wales, or Scotland south of the Caledonian Canal (Taylor et al., 2010).[2] Additional sub-samples were added to the BHPS in Wave 9 (1999-2000) and Wave 11 (2001-2002). From Wave 9, two additional subsamples from Scotland and Wales were recruited, and at Wave 11 an additional sample from Northern Ireland (which formed the Northern Ireland Household Panel Study or NIHPS), was added to increase the coverage of the study to the whole of the United Kingdom.

All individuals enumerated in responding households in Wave 1 became part of the longitudinal sample and are conventionally referred to as Original Sample Members (OSMs). Approximately 10,000 individuals aged 16 and older were interviewed during the first wave. The sample for the subsequent waves consists of all adults from the households

[2] Data description is based on two user manuals: Taylor et al. (2010) prepared to the complete BHPS user manual volume A; The UKHLS user manual for Waves 1–7 was prepared by Gundi Knies in 2017.

recruited in Wave 1, regardless of whether they have been interviewed in Wave 1 and if they split-off from original households. Thus, young adults were followed continuously when they left the parental home, regardless of whether that would be to live in student accommodation, move in with a partner or live independently in a private or social rented sector. New entrants to the sample (Temporary Sample Members; TSMs) were eligible for an interview as long as they were living with an OSM and either shared living accommodation or shared one meal a day and had that address as their only or main residence. TSMs were not followed if they no longer co-resided with OSMs unless they have had a child together with OSMs. Children born to OSMs automatically became OSMs and thus were continuously followed throughout the duration of the study. The following rules were changed in UKHLS, but this does not affect the analysis in this thesis as the sample is drawn from BHPS.

The BHPS has a complex data structure and consists of multiple data "files" (identical wave to wave) containing different types of information. A household level data (wHHRESP)[3] refers to the household questionnaire and includes the following set of questions: Size and condition of dwelling; ownership status, length of tenure, previous ownership and interview characteristics. Relationship between household members can be identified using household relationship matrix (wEGOALT). There are two types of individual data files. The first individual level data (wINDALL) refers to all members of the households enumerated in the household grid (most importantly for this analysis, the wINDALL file enlists children of all ages before they reach the age 16 and become eligible for an interview). The second data file (wINDRESP) contains substantive information on all responding individuals aged 16 and older, regardless of whether they completed the full interview themselves or whether the interview was completed on their behalf by a proxy respondent (nominated household member). The individual questionnaire covers the following topics: individual demographics (e.g. age, sex, and ethnicity), residential mobility, neighbourhood, health and caring, current employment and earnings, employment changes over the past year, values and opinions, wealth and income. The main themes are covered at every wave (Core Components) and thus are present in wave-to-wave repeated files. Some topics (e.g. values and opinions) are covered periodically (Rotating Core Components). Additionally, some sets of questions were only asked once (Non-Core or Variable Components). Retrospective work histories together with the lifetime childbirth, marital and relationship histories were collected in Wave 2 (1992-1993), Wave 11 (2001-2002), and Wave 12 (2002-2003). Work

[3] "w" stands for the wave name: from "a" to "r" in the BHPS and from "a" to "g" in the UKHLS.

histories were additionally collected in UKHLS Wave 1 (2009-2010; for the new entrants) and Wave 5 (2013-2015). Lifetime childbirth, marital and relationship histories were collected in Wave 1 (2009-2010; for the new entrants) and Wave 6 (2014-2016).

The BHPS fieldwork was conducted annually between September and April, starting in September 1991 (Wave 1) and finishing in April 2009 for the last, 18th Wave of the BHPS. From Wave 19, the BHPS was succeeded with a new longitudinal study called *Understanding Society*, or the United Kingdom Household Longitudinal Study (UKHLS), conducted by ISER. The BHPS Wave 19 became part of Understanding Society Wave 2 (fieldwork carried out between January 2010 and March 2011). The gap between interviews in Waves 18 and 19 for the BHPS sample ranged between 16 and 30 months rather than the standard 12 months. From Wave 2 onwards, the BHPS sample has become a permanent part of Understanding Society and thus interviews have been conducted annually again. Data collection for each wave of the UKHLS takes place over a 24-month period, but individual respondents are interviewed around the same time each year. National Opinion Polls (NOP) conducted the fieldwork for the BHPS. Fieldwork for Understanding Society was conducted by the National Centre for Social Research (NatCen) with collaboration with the Central Survey Unit of the Northern Ireland Statistics and Research Agency (NISRA) in Northern Ireland (Waves 1 to 5) and by TNS BMRB (now known as Kantar Public), with collaboration from Millward Brown Ulster in Northern Ireland (Waves 6 to 9).

Understanding Society sampled approximately 40,000 new households in the United Kingdom at Wave 1, including a boosted ethnic minority sample. The UKHLS has 8 waves of data, although only 6 waves were available by the time the main analysis presented in this thesis was conducted. The UKHLS collects the same information on major life events and follows a similar questionnaire structure as the BHPS. This opens up opportunities to recreate complete longitudinal life course trajectories of young adults (collected both prospectively and retrospectively) over the 25-year period 1991-2016. For the purposes of this thesis, only the BHPS subsample which was followed in the UKHLS was used in the analyses.

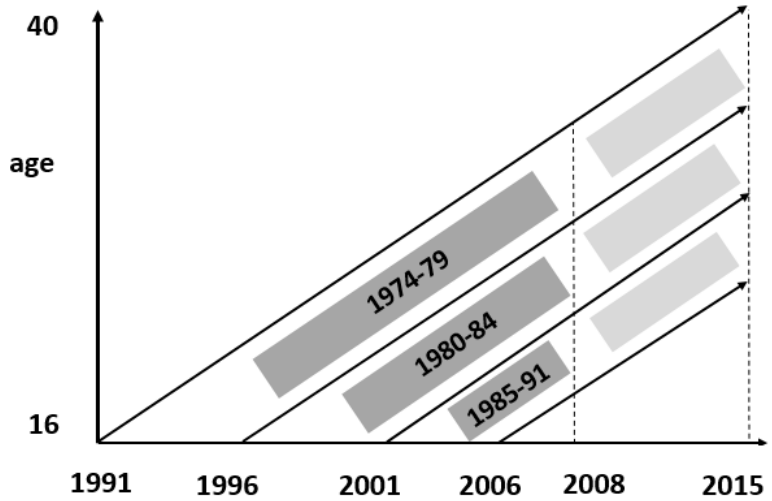
1.3.2 Sample

Individual interviews in the BHPS are carried out with persons aged 16 and over, with children under 16 being enlisted in the household grid. Once an individual turns 16, he/she

becomes eligible for an adult interview.[4] Thus, the sample is restricted to individuals who lived with their parents or relatives at the beginning of the adult interview. Due to the high attrition rate and small sample of respondents recruited in Scotland, the analysis conducted in this thesis focuses on young people who were living in England and Wales at age 16.

To analyse various aspects of the transition to adulthood, individual's life histories were created in century-months[5] from the moment young people turn 16 (minimum age at leaving school in the UK for all cohorts in the dataset) until they are followed in the dataset. To extend the observation window, the BHPS and UKHLS data were merged together, but the analysis is restricted to the subsample recruited in BHPS and thus no new entrants were added. Only respondents present at least two consecutive waves were included. The official harmonised Understanding Society and BHPS dataset became available in November 2017, after the main analyses for this thesis were conducted, and therefore this thesis is based at least in part upon analyses of a merged dataset created by Elizabeth Washbrook and Hill Kulu as part of an ESRC funded research project on Interrelationships between Housing Transitions and Fertility in Britain and Australia.

Figure 1.3 Lexis diagram for the sample selection



Source: Own representation.

[4] Youth survey for children aged 11-15 in the household was carried out from BHPS Wave 4 onwards, although including individuals from this age group goes beyond the scope of this thesis.

[5] Century-months is a way of setting up the data that converts the timing of any events in life to the time passed since January 1900. For example, if the interview was conducted in October 1997, it would be turned into the time calculated in months since the beginning of the century: (1997-1900)*12+10=1174.

Figure 1.3 presents a Lexis diagram for the sample used in the analyses. Individuals are observed from the moment they turn 16 between 1991-1996; 1996-2001; and 2001-2006 and thus belong to three birth cohorts: 1974-79; 1980-84; 1985-89(91).

Cohort selection was motivated by two main reasons. First, the three birth cohorts in the samples are relatively young and are undergoing (or have undergone) some of the transitions to adulthood in the period after the 1990s. The data allows studying retrospective employment and family histories of older cohorts as well, although a lot of is known about various transitions in these cohorts already (e.g. Beaujouan & Bhrolchain, 2011; McMunn et al., 2015). The younger cohorts, on the contrary, have not been studied in full. They are of particular interest as they have been experiencing the transitions already after the first peak of the expansion of higher education and shift from a manufacturing to a service economy. Their life trajectories could thus have similar patterns. On the other hand, housing and economic crisis, together with the introduction of tuition fees and further decrease in the normative controls could lead to significant differences in their experiences. As the pace of the socio-economic changes in the post 1990 world was extremely fast, it is therefore beneficial to investigate changes by looking at 5-year birth cohorts in order to better capture the changes and continuity in life course trajectories. The second reason is more practical. As opposed to employment and education, fertility and partnership histories, internal migration was only captured prospectively, and thus it is impossible to recreate moving trajectories for young people born before 1974 and turned 16 after 1991.

Due to the panel attrition, it was difficult to select one sample of individuals and use it to answer each of the research questions of this thesis. Sample sizes, data source, and cohort selection are presented in Table 1.2.

Table 1.2 Data and sample for each thesis chapter

Chapter	Data source	Sample size	Cohorts
II	BHPS (18 waves) + UKHLS (Waves 2-6)	1,401	1974-79; 1980-84; 1985-90
III	BHPS (18 waves) + UKHLS (Waves 2-6)	3,233	1974-79; 1980-84; 1985-91
IV	BHPS (18 waves)	2,562	1974-79; 1980-84; 1985-89

Source: Own calculation.

The sample in Chapter II (1,401 persons) is significantly smaller than in the other chapters as it analyses education and employment histories of young people for whom it was possible to construct the 10-year monthly histories between ages 16 and 26. Since Wave 6 of UKHLS was conducted between 2014 and 2016, the histories for individuals born after 1990 could not be constructed. This does not necessarily imply that each of the sample members was present in 10 consecutive waves, but that it was possible to reconstruct the histories using prospective and retrospective data.

The samples in Chapter III and Chapter IV both comprise all respondents who were captured in at least two waves of the BHPS. The sample in Chapter IV (2,562 persons) contains individuals who were observed only in the BHPS until 2008. The sample for Chapter III (3,233 persons) was selected to study partnership transitions. The sample is bigger than in Chapter IV as it was extended by including persons born in 1990–91 who turned 16 between 2006-2007 (Wave 16) and 2008-2009 (Wave 18) and were followed in the UKHLS Wave 2. They were not present in the sample used in Chapter IV as they could not be observed for at least two consecutive waves before the end of the BHPS survey in 2009.

Panel attrition is one of the biggest challenges in the longitudinal data. In general, attrition in panel studies is often attributed to two main factors: hard to follow respondents who have moved between waves, and survey non-response (Groves & Couper, 1998). Age, education, sex, socio-economic status, physical health are the key drivers of panel attrition due to non-response (Ibid.; Fitzgerald et al., 1998). Rabe and Taylor (2010) and Washbrook et al. (2014) have investigated the first cause of attrition in the BHPS and found that it is not related to mobility rates, and thus it should not bias the analysis of moving trajectories. Uhrig (2008) has confirmed the similar nature and causes of the attrition in the BHPS as found in other studies. According to Lynn and Borkowska (2018), 70% of the initial BHPS sample were still participating after 12 years and 40% were still participating after 24 years. They found that attrition was higher amongst younger age groups, men, black people, people on lower incomes, and in the West Midlands.

To reflect upon the attrition in the sample used in Chapter IV, the 5-waves participation rates were calculated for all cohorts as a proportion of persons followed up for 5 waves of more (not necessarily subsequently). 90% of persons in the 1974-79 cohort on average participated in at least 5 waves (71% on average were followed for 10 or more waves);

these proportions are 83% for the 1980-84 cohort (with 67% on average followed for 8 or more waves); and 80% for the 1985-1989 cohort. For Chapter III, the proportions of the original BHPS subsample of young adults who were followed in the UKHLS are presented. The proportions were much lower for the two older cohorts: 40% from the 1974–79 cohort; 42% from the 1980–1984 cohort; and 58% from the 1985–91 cohort. The panel attrition rates for the subsample studied in this thesis are in line with the attrition rates calculated for the whole BHPS subsample by Lynn and Borkowska (2018). The other factors among the key drivers of attrition (age, sex, education, SES) are the control variables in all models presented in this thesis.

The use of weights in longitudinal studies is not straightforward. Traditionally weights are applied to adjust for unequal selection probabilities, nonresponse, attrition, and potential sampling error. Cross-sectional weights produced annually for BHPS were created to represent the UK population in 1991. Considering some of the respondents who became eligible for an interview at age 16 between 1991 and 2008 might not have been present in the study in 1991, their cross-sectional weight in wave 1 would be 0 and therefore weighted cohort analysis would exclude them from estimates. Longitudinal weights produced for both BHPS and Understanding Society could only be applied for the balanced panel of individuals. The sample used in this thesis is an unbalanced panel and therefore applying weights would inevitably leave to the reduction in the sample size which might make some comparisons between the subgroups not possible. With regards to the arguments outlined above, weights have not been used in the analysis presented in this thesis.

Each chapter contains a separate section on data description and reflects in more detail on data imputation and creating of the life histories for the particular purposes of the analysis.

1.4 Methods

1.5.1 Statistical methods

A combination of methods of longitudinal data analysis has been used to answer the research questions of this thesis (outlined in the Table 1.3). To study the first set of research questions related to education and employment trajectories among young people (Chapter II), two methods are used – sequence analysis and multinomial logistic regression

(described in sections 1.5.1.1. and 1.5.1.2). To study changes in partnership transitions (Chapter III), competing risks event history models are applied (described in section 1.5.1.3). Finally, multistate event history models are used to investigate how internal migration patterns among young people have changed (Chapter IV). The following section provides a short overview on the methods applied in the analyses; the modelling strategies and specifications are described in more detail in the statistical methods section of each chapter. Discussion of covariates is presented in section 1.5.2.

Table 1.3 Statistical methods applied in each chapter

Variables	Chapters		
	II	III	IV
Dependent variable (s)	*Education and employment sequences; Occupational outcomes at age 26*	*First union formation (cohabitation vs. marriage); Outcomes of first cohabitation (marriage vs. separation); Dissolution of first marriages; Second union formation (cohabitation vs. marriage)*	*Short- and long-distance moves by order: All moves First moves Second moves Third and higher order moves*
Methods	Sequence analysis Multinomial logistic regression	Competing risks event history models	Multistate event history models

Source: Own representation.

1.5.1.1 Sequence analysis

Sequence analysis is a useful technique for gaining an overview of dominant life trajectories among a population of interest. The method represents each individual life course by a string of states and aims to describe and visualise sequences, compare individual sequences and identify the common types of sequences among populations of interest (Abbott, 1995). At the beginning of the observation period individuals are aged 16 and are in full-time education (finishing secondary school). As time passes they can either stay in education, enter part- or full-time employment, become unemployed or non-active. To compare the monthly sequences of individual trajectories, the specification of dynamic hamming distance (DHD) measure is applied. DHD pays attention to the timing of transitions and derives the substitution costs from the transition frequencies over time as opposed to other distance measures (e.g. Optimal Matching) which hold them constant (Lesnard, 2010; see Figure 1A in the Appendix). The substitution costs are therefore driven from data and represent the transition rates experienced by the real population in the

sample. Different types of school-to-work trajectories are then identified by applying cluster analysis to the distances between sequences.

For the cluster analysis, the partitioning around medoids algorithm (*k-medoids*) is applied. It selects *k* representative objects (medoids) in order to obtain *k* final clusters. A medoid is an object of the cluster for which the average dissimilarity to all other objects in the cluster is minimal (Kaufmann & Rousseeuw 2005). Sequence analysis is discussed in more detail in section 3.2.2.1.

1.5.1.2 Multinomial logistic regression

In Chapter I, after applying sequence and cluster analyses, the multinomial logistic regression is applied to investigate how individual characteristics (cohort, gender, parental SES, and region of residence) are related to the probability of following a particular school-to-work pathway, where the pathways are used as an outcome variable. Next, the method is applied to analyse the link between the individual characteristics and experienced education and employment trajectories and the occupational outcomes at age 26 (outcomes are defined as depend variable). Multinomial logistic regression is an extension to the binary logistic regression with more than two possible outcomes and can be formalised as followed:

$$ln\frac{\Pr(y = m \mid \mathrm{x})}{\Pr(y = b \mid \mathrm{x})} = \mathrm{x}\beta_{m \mid b} \qquad for\ m = 1\ to\ J$$

Where *b* is the base category or reference group to which all other groups are compared. *J* is the number of possible outcomes. Solving this equation for each *m*, the predicted probabilities of an individual *x* falling into group (outcome) *m* can be calculated as followed:

$\Pr(y = m \mid \mathrm{x}) = \frac{\exp(\mathrm{x}\beta_{m \mid b})}{\sum_{j=1}^{J}\exp(\mathrm{x}\beta_{j \mid b})}$, where $\sum_m \Pr(y = m) = 1$ (Long & Freese, 2001).

1.5.1.3 Multistate Event History Analysis

Event history analysis is centred on estimating *transition rates* in various life course domains and is perfectly tailored for studying various transitions in early adulthood. Transition rates are also called *hazard/intensity rates* or *risk functions*. Event history models estimate the *hazard rate h(t)* which stands for the probability that an event occurs during

the interval (*t, t')* (Kalbfleisch & Prentice, 2011). The hazard rate *h(t)* can also be interpreted as the propensity to change from origin state *j* (e.g. single) to destination state *k* (e.g. first union formation) at time *t* (formula below).

$$h(t) = \lim_{t' \to t} \frac{\Pr(t \leq T \leq t' \mid T \geq t)}{t' - t}$$

Event history analysis is used to study the duration until the occurrence of the event of interest. The duration is measured from the time at which an individual becomes exposed to the *risk* of experiencing the event, which in this study denotes the time after young people turn 16 years old. If by the end of the observation period the event has not occurred (e.g. an individual never left the parental home), the observation is considered to be *right-censored*. The vast majority of event history applications hold right-censored observations under the assumption that censoring times are independent of event times, i.e. censoring is *non-informative* and lead to the same likelihood function (e.g. Steele, 2005). Essentially it is assumed that individuals are not selectively withdrawn from the sample because they are more or less likely to experience the event.

In chapters III and IV piecewise constant exponential competing risks event history models are used to study partnerships and internal migration trajectories among young people in England and Wales. Exponential models assume that the transition rate can vary with different combinations of covariates but is time-constant (Blossfeld et al., 2009). Piecewise constant specification splits the time axis into time periods and assumes that transition rates differ between the intervals, but remain constant in each of them (e.g. the rate of leaving the parental home at age 18-21 years would likely be higher than among 16-17 year olds, although is held constant in each of the intervals).

Competing risks generalise standard survival analysis of a single event to investigating multiple first event types (Beyersmann et al., 2012). The hazard rates for the occurrence of an event are estimated for each event type *r* (*r*=1…*k*) in the presence of all other types of events and sometimes called the *cause-specific hazard*. They can be defined as follows:

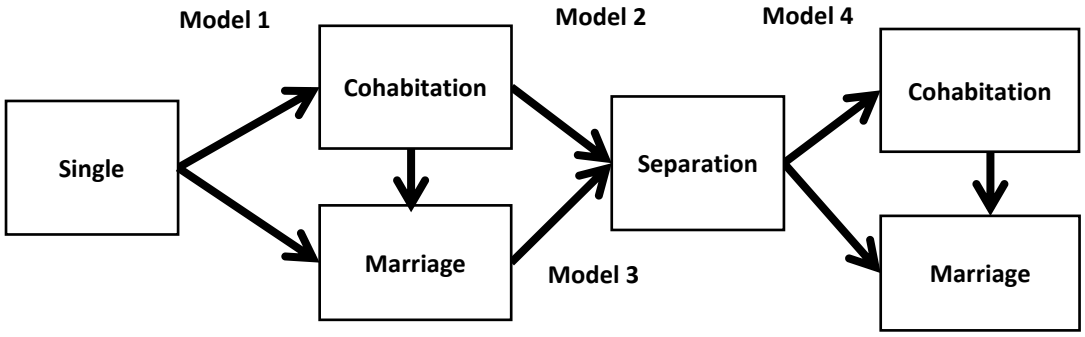
$$h^{(r)}(t) = \lim_{t' \to t} \frac{\Pr(t \leq T \leq t', \mathrm{R} = \mathrm{r} \mid T \geq t)}{t' - t}$$

Competing risks analysis therefore investigates the relationship between the event's occurrence time and the event type and allows the simultaneous analysis of: 1) the

likelihood of experiencing of competing events; 2) duration spent in one or other status; 3) the sequence of events; and 4) adjustment of transition rates to population heterogeneity.

In chapter III, competing risk event history models are employed to study four partnership transitions (Figure 1.4). The analysis investigates the first partnership formation and its progression since the age of 16 – the legal minimum age of marriage in the UK. Individuals can then either remain single (i.e. never experienced a first event of a co-residential union) or form a first cohabiting or marital union (those are modelled as competing risks; Model 1). Those who cohabit are at risk of either marrying or separating from their cohabiting partner (Model 2). Married individuals are at risk of experiencing a single event – divorce (Model 3). Following separation, individuals are at risk of repartnering, which can take a form of a cohabiting or marital union (Model 4). They can as well remain separated.

Figure 1.4 Competing risks framework for partnership experiences



Source: Own representation.

The models 1,2, and 4 can be formalised as follows:

$$\ln \mu_{iT}(t) = \ln y\ (t) + \sum_k \alpha_k x_{ik} + \sum \beta_j w_{ij}(t) + \gamma T \quad ,$$

where μ_{iT} is the hazard of an event of type *T* (cohabitation or direct marriage, separation or marriage) for individual *i* and *y(t)* is the baseline hazard. The model assumes a common baseline for all transition types in each model (e.g. cohabitation and marriage). Transition-specific effects can be allowed by the inclusion of an interaction term between a covariate and the transition type. x_k represents time-constant variables and $w_j(t)$ represents time-varying variables.

For the dissolution of marriages with first partners, the piecewise constant hazard model is formalised as:

$$\ln \mu_i (t) = \ln y(t) + \sum_k \alpha_k x_{ik} + \sum_j \beta_j \, w_{ij}(t),$$

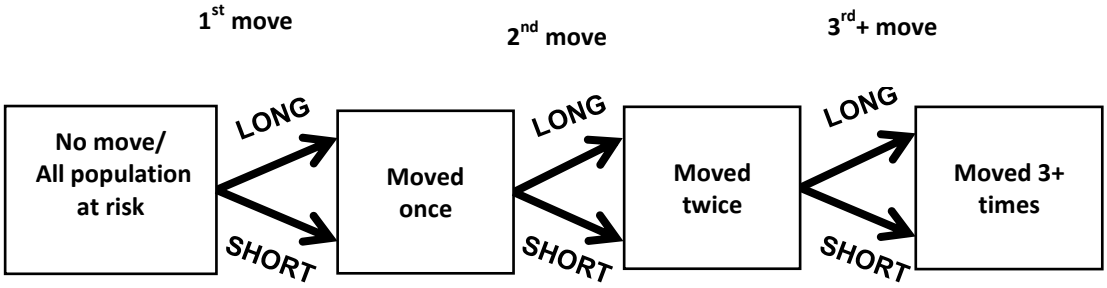
where $\mu_i (t)$ denotes the hazard of marital dissolution, $y(t)$ denotes marriage duration, x_k represents time-constant variables, and $w_j(t)$ represents time-varying variables.

Chapter IV differs from III in that competing risks are applied to a sequence of repeated events (long- and short-distance moves) which are modelled together as a progression (Figure 1.5) and thus bring a multistate perspective into the analysis (Beyersmann et al., 2012). The model is specified as a piecewise constant exponential model and is formalised as follows:

$$\ln \mu_{im}^{SD}(t) = \ln \mu_0{}^{SD}(t) + \sum_k \alpha_k^{SD} x_{imk} + \sum_j \beta_j^{SD} w_{imj}(t) + \varepsilon_i^{SD},$$
$$\ln \mu_{im}^{LD}(t) = \ln \mu_0{}^{LD}(t) + \sum_k \alpha_k^{LD} x_{imk} + \sum_j \beta_j^{LD} w_{imj}(t) + \varepsilon_i^{LD}$$

where $\mu_{im}^{SD}(t)$ and $\mu_{im}^{LD}(t)$ denote the risk of the *m*th short(SD)- and long(LD)-distance move for individual i, $\mu_0(t)$ denotes a piecewise constant age baseline (age or time since previous move for second and higher order moves), x_k represents time-constant variables and $w_j(t)$ represents time-varying variables. Since residential episodes are nested within individuals, an individual-level error term ε_i was added to the equation to control for the clustering and unobserved determinants of residential changes (Cleves et al., 2010; Putter et al., 2007).

Figure 1.5 Multistate framework for repeated long- and short-distance moves



Source: Own representation.

1.5.2 Covariates

In line with the aims of this thesis, each chapter investigates how life course trajectories during the transition to adulthood have changed by cohort, gender, and parental SES – the three main independent variables in the analyses. The dependent (outcome) variables and the additional covariates are shown in Table 1.4.

Table 1.4 Dependent and independent variables in each chapter

Variables	Chapters		
	II	III	IV
Dependent variable (s)	*Education and employment sequences; Occupational outcomes at age 26*	*First union formation (cohabitation vs. marriage); Outcomes of first cohabitation (marriage vs. separation); Dissolution of first marriages; Second union formation (cohabitation vs. marriage)*	*Short- and long-distance moves by order: All moves First moves Second moves Third and higher order moves*
Independent variable(s)	Sex Cohort Parental occupational class Region of residence at age 16 Migration between ages 16 and 26	Age Sex Cohort Parental occupational class Educational level Economic activity status Residential context Anticipation of a child Presence of children in the household	Age Sex Cohort Parental occupational class Partnership status Educational level Economic activity status Residential context Time since previous move

Source: Own representation.

Chapter II focuses on education and employment sequences and occupational outcomes at age 26. Apart from cohort, gender, and parental SES, analysis additionally takes into account the region of residence at age 16 and internal migration to the South East of England between ages 16 and 26. This region is traditionally known for being the social and

occupational “escalator” in the UK and thus attracting many young people and affecting their education and employment trajectories and occupational outcomes in later life. (Fielding, 1992; Faggian & McCann, 2009; Duke-Williams, 2009). Four partnership transitions (first union formation, outcomes of first cohabitation, dissolution of first marriages and repartnering) are in the focus of the analysis in Chapter III. Educational level has been added to the main covariates as education is traditionally linked to the postponement of union and family formation (Berrington & Diamond, 2000; Winkler-Dworak & Toulemon, 2007; Ní Bhrolcháin & Beaujouan, 2012). Economic activity status is included to adjust for the economic (in)stability which was found to effect partnership transitions too (Smock & Manning, 1997; Ermisch & Francesconi, 2000; Wu & Pollard, 2000). Parenthood is a vital part of individual partnership and family trajectories and influences dramatically the transitions between various partnership types (Wu, 1995; Clarkberg, 1997; Manning & Smock 1997, 2002; Perelli-Harris et al., 2012). Therefore, anticipation of a child and presence of children in the household have been added as covariates as well. All partnership transitions models are controlled for the residential context distinguishing between London and the rest of the country. In chapter IV, changes in partnership status, educational attainment, and economic activity status have been included into the analysis of long- and short-distance moves as the key mobility event-triggers (Mulder & Hooimeijer, 1999; Clark & Huang, 2004; Clark & Whiters, 2007; Clark, 2013; Falkingham et al., 2016). Including the residential context variable allows to investigate additional drivers of young people’s residential mobility, namely moves from rural to urban areas, intra-urban, intra-rural moves, as well as the migration to and from London (Fielding, 1992; Joshi et al., 2005; Duke-Williams, 2009). Due to the sample limitations, different levels of geography have been used throughout the thesis. Additional sensitivity analysis and discussion are presented in each chapter, accordingly. This thesis could not investigate the important ethnic differences in the transition to adulthood patterns due the small sample of ethnic minorities recruited in BHPS.

1.5 Chapter summary

Chapter II provides an overview on the changing socio-economic context in the UK since the 1990s. Major changes in education and labour market, partnership transitions and fertility trends, internal migration, housing and living arrangements among young people are discussed in order to show the bigger picture of socio-economic circumstances influencing life trajectories of young people in Britain.

Chapter III studies education and employment trajectories of youth people born in England and Wales between 1974 and 1990 for the period of 10 years after they finish compulsory school at age 16. Youth transitions in Britain were shown to vary by social class and gender, with young people from less advantaged backgrounds following rapid school-to-work trajectories. With the increased individualisation of the life course and expansion of higher education on the one hand, and increased economic precarity and labour market uncertainty among young people on the other hand, it remains unclear how school-to-work sequences have changed over the past 25 years (between 1991 and 2016) and how are they are affected by gender and parental SES. The chapter therefore investigates the following research questions: *"How have education and employment trajectories changed since the rapid expansion of further and higher education in the beginning of 1990s? What is the association between education and employment trajectories and occupational outcomes 10 years after completing compulsory school education? How do occupational outcomes differ by level of education with regards to cohort, gender, and parental socio-economic background?"* A combination of sequence analysis and multinomial logistic regression is applied to identify the common school-to-work pathways and investigate how individual characteristics (cohort, gender, and parental SES) influence the probability to follow a certain pathway. The identified pathways are then incorporated in the analysis of occupational outcomes at age 26. Finally, occupational returns to education are studied by including interactions between educational attainment and cohort, gender, and parental SES. The findings are discussed in light of individualisation of the life course, social inequalities and the persistence of pattern of disadvantage among particular groups of population.

Chapter III studies how partnership transitions of young people born between 1974 and 1991 in England and Wales have changed between 1991 and 2016. While past research has examined the spread of non-marital cohabitation and trends in marriage and divorce among older cohorts, little is known about partnership transitions of the youngest cohorts which were affected most by both ideational and economic changes in society. It is yet unclear whether partnership trajectories of young adults today continue to follow the trends set up by older cohorts or whether the new patterns of partnership behaviour emerged. The chapter studies the following research questions: *"How have partnerships experinces changed across the cohorts? How do partnership histories differ by gender, parental socio-economic background, and educational attainment?"* Competing risks event history analysis were applied to investigate young people's partnership experiences,

focusing on four transitions – first union formation (cohabitation or direct marriage), outcomes of first cohabiting unions (end of cohabitation via marriage or separation), dissolution of marriages with first partners (basic single-event history approach), and second union formation (cohabitation or direct marriage). Trajectories have been analysed from cohort and gender perspective, controlling for the parental SES and educational attainment.

Chapter IV examines how internal migration patterns among young people born between 1974 and 1989 in England and Wales have changed between 1991 and 2008. Various socio-economic changes that occurred in Britain since the 1990s suggest that spatial mobility among young people could have both increased (as a result of the expansion of higher education and more turbulent partnership transitions) and decreased (influenced by unaffordability of housing and increased economic hardship). Migration theory suggests that a decision to move is motivated by both life course event-triggers, such as changes in occupation, family and partnership status and personal/environmental factors, such as neighbourhood preferences or importance of proximity of friends and parents. Considering the increased freedom of lifestyle choices as well as the dramatic changes in the economic and social structure occurred since the 1990s, it is unclear how internal migration patterns have changed and to which extent migration decision of young people can be explained through the changes observed in education, employment, and partnership domains in life. The chapter therefore investigates the following questions: *"How have the moving trajectories changed across cohorts? How do moving trajectories differ by gender and socio-economic background? How much variation in spatial mobility across birth cohorts and between males and females is associated with changes in educational enrolment and level, partnership status and economic activity?"* Multistate event history analysis is applied to analyse repeated short- and long-distance moves of young people since the age of 16.

Taken together, this thesis investigates various life course trajectories during the transition to adulthood in Britain. Education and employment careers, partnership experiences and spatial mobility are analysed by three main dimensions: cohort, gender, and parental socio-economic background. The combination of sequence analysis, multinomial logistic regression, and multistate framework provides new insights into the complexity of young people's transitions during the early stage of the life course.

1.6 Contributions

Chapter I and Chapter II: Alina Pelikh was the sole author on these chapters. Chapter III: Pelikh was the lead author for this chapter which was co-authored by Hill Kulu and Julia Mikolai. Pelikh and Kulu both conceptualized and designed the study. Mikolai provided assistance with data linkage of BHPS and UKHLS. Pelikh planned the study, conducted analyses and wrote the chapter. Kulu and Mikolai contributed to revisions of the manuscript. Chapter IV: Pelikh was the lead author for this chapter which was co-authored by Kulu. Pelikh and Kulu both conceptualized and designed the study. Pelikh planned the study, conducted data setup and analysis and wrote the chapter. Kulu contributed to revisions of the manuscript. After initial draft of each of the three analysis chapters (Chapters II, III, and IV), Paul Williamson, Francisco Rowe-Gonzalez and Gemma Catney have provided valuable feedback which ensured the continuing growth and development of the thesis.

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Chapter II

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2. The changing socio-economic context in the UK

2.1 Education and labour market

2.1.1 Labour market structure

Following economic trends towards globalisation and expansion of high technology production in the 1970s, the UK labour market started shifting from manufacturing towards service economy. The restructuring of the labour market affected mostly young people who were ready and available for work but did not have specific qualifications. Young people in Britain were traditionally encouraged to choose work over further education having positive expectations regarding future income and career prospects as gaining qualifications and further training was largely available at work (Roberts et al., 1994; Raffe et al., 1998; Bynner, 2001). The restructuring of the labour market resulted in the dramatic decline in the demand for unskilled youth and the decrease in the employment in labour-intensive industries, which dominantly employed school leavers with no further qualification (Maguire & Maguire, 1997). Thus the manufacturing sector which was giving a quarter of 16-24 year olds their jobs in 1981, employed only 8% of workers by 2011 (Table 2.1), while service sector jobs like selling catering and clerical continually increased (Ashton et al., 1990; Sissons & Jones 2012, Spence, 2011).

Table 2.1 Employment of 16-24 year olds by industry in 1981 and 2011, %

Employment by industry	1981	2011
Agriculture, Forestry and Fishing	2	1
Energy and Water	7	1
Manufacturing	24	8
Construction	7	7
Distribution, Hotels and Restaurants	24	39
Transport and Communication	5	5
Banking and Finance	11	13
Other Services	19	27

Source: Sissons & Jones (2012); calculations based on Labour Force Survey.

The shift to a service economy and the rapid development of information technology led to the restructuring of labour market skills and subsequent polarisation of jobs (Ashton et al., 1990; White, 1992; Goos & Manning, 2007). On the one hand, the rising demand was observed in high-skilled and well-paid professional and managerial occupations which require nonroutine cognitive skills, so called “lovely” jobs (Goos & Manning, 2007). On the

other hand, the demand for the low-paid nonroutine manual skilled labour – also called "lousy" jobs – which require high level of soft skills (e.g. carers and low-level hospitality positions) remained high as well and supported the persistence of "low skills equilibrium" in many places and sectors (Ibid., Soskice & Finegold, 1988; Government Office for Science, 2017). Job polarisation was also inflated by the significant decline in the number of "middling" jobs, mainly clerical and skilled manual occupations in manufacturing which require routine manual and cognitive skills. Further polarisation occurred within and between occupations and led to the rise in wage inequality observed over the same period (Goos & Manning, 2007; Goos, Manning, Salomons, 2014; Bell & Blanchflower, 2010). Recent labour market projections show a continuing strong increase in managerial and professional posts as well as in caring, leisure and other service occupations which could lead to further increases in job and wage polarisation (Sissons & Jones, 2012).

The restructuring of the labour market was accompanied by a steady increase in qualification requirements. Thus jobs requiring no qualifications on entry fell from 37% in 1986 to 23% in 2012, while jobs requiring a degree rose from 10% in 1986 to 26% in 2012 (Gallie et al., 2014). In 1986, around two-thirds (63%) of part-time jobs required no qualification on entry, but by 2012 this had fallen to less than a third (30%) (Ibid.). It is argued that some employers have been deliberately raising the minimum educational standards for recruiting young new employees (often not required in practice) thus triggering the spread of the credentialism culture (Goos & Manning, 2007; Cote & Bynner, 2008). The rising standards of qualifications required for the labour market entry together with the changing nature of jobs led to the expansion of higher education and diversification of education services (discussed in the section 2.1.3).

The rapid increase in the numbers of highly-educated individuals nevertheless did not ensure a job placement for all graduates, but on the contrary contributed to further widening of the skill mismatch in the British labour market. Skills mismatch refers to a misalignment between the supply and demand for skills, which occurs when the volume and type of skills available do not match those required by employers (Government Office for Science, 2017). Thus, the estimates show that around 25-30% of UK graduates have reported to be overeducated for their jobs (Battu et al., 2000; Chevalier & Lindley, 2009).[6]

[6] This average estimate can vary widely depending on how overqualification is defined. Three measures have been proposed and most commonly used (e.g. see applications by Battu et al., 2000, Green & McIntosh, 2007; Chevalier & Lindley, 2009). The first and surpassingly most objective way suggests using various dictionaries for occupation. The second measure applies worker's subjective

On the other hand, a survey of employers has shown that there is a significant shortage of skills resulting from a subject mismatch, e.g. the lack of graduates with certain degrees like engineering and computing skills. Additionally, employers are reported to assign a high value to non-academic skills like entrepreneurial, managerial and leadership which university graduates are quite often unable to show (Government Office for Science, 2017). Both overqualification and mismatch of skills can lead to difficulties in finding a job and increased unemployment among young people with higher as well as lower qualifications.

As a result of labour market restructuring, the concept of a "job for life" became an attribute of the past whereas the new terms of employment could not guarantee the same stability and have become less structured (Bruegel & Hegewish, 1994). On the one hand, this led to a number of negative consequences such as an increase in youth unemployment, involuntary part-time employment and a rising number of genuinely overqualified young people - those who are not in a traditional graduate occupation and are not satisfied with the match between their job and their education (MacDonald, 1997; Chevalier & Lindley, 2009). On the other, it offered an opportunity for flexible working arrangements for those willing to be self-employed or to combine work with further education.

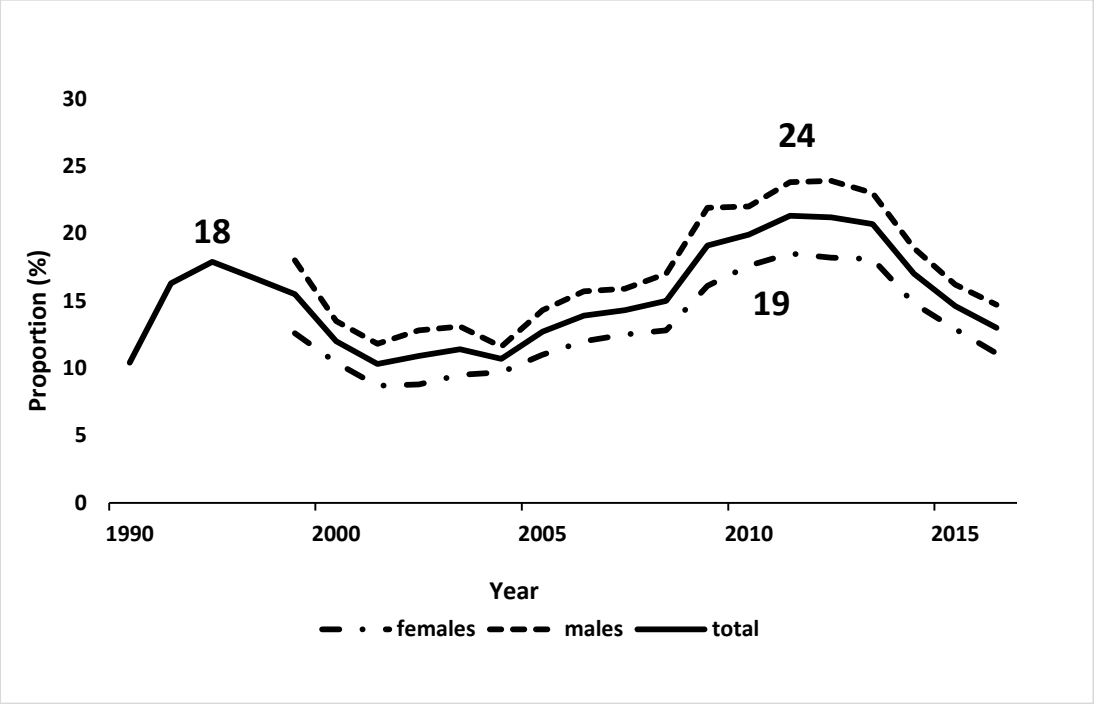
2.1.2 Youth unemployment

Youth unemployment has been shown to be one of the most sensitive indicators to economic recessions and labour market fluctuations in the recent decades. The rate has reached its highest peaks twice since the beginning of the 1990s, rising to approximately 18% in 1993 and to 22% in 2011 during the recession.[7] The lowest rate was registered in 2001 when it went down to 11% (Figure 2.1). The rate for men remains consistently higher than for women over the whole data series with the gap varying between 3 and 5 percentage points.

assessment of skills required for his or her own job. The third indicator compares individual's educational attainment with the average level of education within each occupation.

[7] Youth unemployment rate is calculated as a proportion of unemployed people (those seeking and available to work) among economically active population which includes both employed and unemployed subjects (International Labour Organisation; definition available from https://millenni-umindicators.un.org/unsd/mdg/Metadata.aspx?IndicatorId=0&SeriesId=596). Students are considered to be economically inactive and are thus not included.

Figure 2.1 Unemployment among young men and women aged 16-24 years in the UK, 1990-2016



Source: UNECE statistical database (compiled from national (ONS) and international (Eurostat and ILO) official sources).

The increase in youth unemployment was observed alongside the increase in the amount of jobless young people who were not looking for jobs and were thus out of the labour market. The broader category of young people not in education, employment or training (NEET) includes among others those who are looking after family or home, long-term sick, disabled, or taking maternity leave. The proportion of NEETs has been holding at the level of around 13% among 16-24 years olds in the early 2000s, increased to 19% in 2011 and stabilised later at the level of 11-12% until today (House of Commons, 2018). Around 1.02 million young people were jobless in November 2011 and 993,000 of them were claiming Job Seeker's Allowance (JSA)[8] - £56.25 a week for under 25 year olds. By the end of 2017, 794,000 young people aged 16 to 24 years in the UK were NEETs. 42% of them were looking for work and available for work and therefore classified as unemployed (197,000 men and 134,000 women); the remainder were either not looking for work and/or not available for work and therefore classified as economically inactive (212,000 men and 251,000 women) (ONS, 2018). Both unemployment and NEET rates have shown to

[8] Jobseeker's Allowance (JSA) was introduced in 1996 as the main form of unemployment benefit.

be much higher for young people with no qualification compared to graduates (Sissons & Jones, 2012, Bell & Blanchflower, 2010, Burgess et al., 2003).

Facing the changing structure of the labour market and the increased mismatch between the demand and supply for specific skills required in service economy, the government tried to target the problem of youth unemployment and unfitness for work with the introduction of the new training programmes. The first of such initiatives – the Youth Opportunity Programme (YOP) – was launched in 1978. It was expanded into the New Training Initiative in 1981 and subsequently replaced with the Youth Training Scheme (YTS) in 1983 and the National Vocational Qualifications (NVQs) in the mid 1980s. Alongside with the fall in the number of school-leavers entering employment from school (decreased from 50% in 1979 to less than 10% in 1992), YTS was attracting around a quarter of young people aged 16 in the 1980s (Bradley, 1995). The next round of programmes introduced in the 1990s included the Youth Training (YT) (1993), Modern Apprenticeships and Accelerated Modern Apprenticeships (1996), the New Deal for Young People (1998), and the most recent Work Programme (2011). With the second phase in the expansion of higher education in 1990s (discussed in 2.1.3), the proportion of young people participating in vocational training has reduced in the 1990s, but the numbers increased dramatically in 2000s reaching over 899,400 apprenticeship participants in 2015 (Department for Education, 2017). By various schemes and plans of action, these programmes aimed to tackle the issue of youth unemployment. The government tried to involve school leavers in vocational training and thus encourage them to acquire skills required to meet the quality standards expected to job beginners, as was first mentioned in the New Training Initiative paper by the Department of Employment in 1981. Despite these efforts and investments into these programmes, most of the initiatives failed to secure steady employment for the participants and have been criticised for being stratified between high- and low-quality offered placements (Finegold & Soskice, 1988; Ashton et al., 1990; White, 1992; Furlong et al., 2018).

2.1.3 The expansion of higher education

Public education in the UK requires 11 compulsory years of schooling with aim of passing a number of General Certificates of Secondary Education (GCCSs) at the age of 16. Students aiming to go to university have to obtain further education in form of A-levels or equivalent (e.g. International Baccalaureate). According to the Education and Skills Act (2008), since

2013 the minimum age at leaving school was raised to 17 years old, and since 2015 up to 18 years old, requiring young people to either stay in full-time education, start an apprenticeship or traineeship or spend 20 hours or more a week working or volunteering, while in part-time education or training.

The gradual expansion of higher and further education in the UK has started as a result of the shift from manufacturing to a service economy in the late 1970s in response to the increased demand for highly skilled workers. The higher education Age Participation Index[9] of those under 21 years old increased from 12% in 1979 to 30% in the early 1990s (Department for Education, 2017). The API was replaced in 1999 by the Higher Education Initial Participation Rate (HEIPR). The HEIPR is a measure of progress towards the government's target (expressed as a Public Service Agreement (PSA) target for the Department for Education and Skills) to "increase participation in Higher Education towards 50% of those aged 18 to 30 with growth of at least a percentage point every two years in the academic year 2010-11" (House of Commons Public Accounts Committee, 2009). The HEIPR measures the sum of participation rates for each age 17–30, roughly equivalent to the probability that a 17 year old will enter higher education by age 30 (Ibid.).[10]

The HEIPR does not include UK students studying at institutions outside the UK which became a common practice among young people worldwide in recent decades. Ramsden (2005) estimated around 4,500 English domiciled initial entrants to higher education studying wholly overseas in 2004 which would contribute to another one percentage point increase in HEIPR. A figure of roughly 31,000 UK students studying overseas in total in 2014/2015 was estimated by the United Nations Educational, Scientific and Cultural Organization (UNESCO Institute of Statistics, 2018).

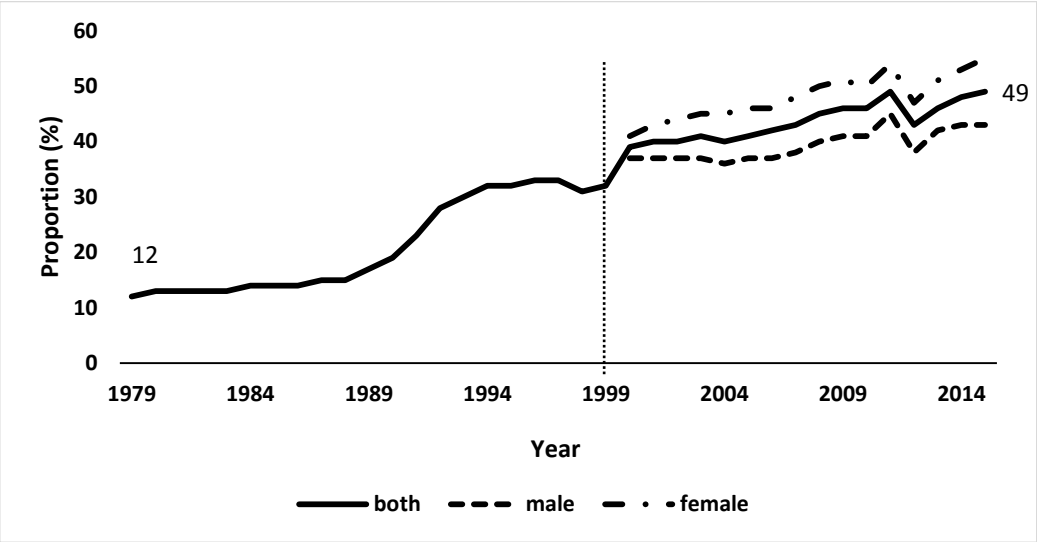
[9] The API is defined as the number of UK domiciled young (aged under 21 years) initial entrants to full-time and sandwich undergraduate courses of higher education in Great Britain, expressed as a proportion of the averaged Great Britain 18 to 19 year old population. (Department for Education and Skills, 2007)

[10] The HEIPR counts English-domiciled 17-30 year old Higher Education students. Students are counted if they participate for at least six months on a course expected to last for at least six months, except that students are not counted if they have participated in Higher Education previously for at least six months. Students at FECs in England, Scotland and Wales are counted if they are on courses designated as National Vocational Qualification Level 4 or above, or listed as Higher Education. The HEIPR does not count English domiciled Higher Education students: at FECs in Northern Ireland; privately funded institutions, with the exception of the University of Buckingham from 2004/05; at institutions outside the UK.

Figure 2.2 shows the participation rate in higher education for the period 1979–2015. The average rate increased from 39% in 2000 to 49% in 2015 almost meeting the government's target. In 2016, the Universities and Colleges Admissions Services (UCAS) published the report which says that the university entry rate for 18-year-olds was around 32.5 % in England and 29.5% in Wales.

Whilst overall participation in higher education has increased, the pace and extent to which various subgroups shared in the increase vary vastly by gender and socio-economic background. Historically, female participation in higher education was significantly lower than male participation (Broecke & Hamid, 2008). In 1992, the gender-specific participation rates reached the same level creating a reverse gap. Since the beginning of the century the gap has continuously widened from 4 percentage points in 2000 to 12 percentage points in 2015, with females' participation rate reaching 55% in 2015 (Figure 2.2). Since the increases in tuition fees in 2003 and 2009 and the abolishment of the system of upfront payment for education, the participation rate among young people from lower socio-economic backgrounds has increased substantially. Although, the proportion of people from more advantaged backgrounds who go into higher education is still more than two times lager the proportion of young people from lower socio-economic groups (Department for Education, 2017).

Figure 2.2 Participation in higher education in Britain, 1979-2016



Note: Figures for the period 1979-1999 refer to API and to HEIPR afterwards. Figures for the period 2000-2006 refer to the revised numbers according to the new methodology introduced in 2006. The revisions have reduced the figures across the whole time series by one to two percentage points (Department for Education and Skills, 2007).
Source: Department for Education and Skills/Department for Business Innovations and Skills (2017).

Alongside the increase in higher and further education rates among school-leavers, the proportion of young people staying in or entering higher education between ages 21 and 30 has increased as well (Thompson & Bekhradnia, 2012). Considering the changing nature of skills demanded on the labour market and longer years of working life due to the increase in life expectancy, the Government has acknowledged the importance of skills assessment and projections of qualifications needed in the future and included it into their new Industrial Strategy. The Strategy sets out a long term plan to boost the productivity and earning power of people throughout the UK by building the right skills through lifelong learning which includes the whole range of various pathways like formal and informal learning as well as workplace learning (Government Office for Science, 2017).

2.1.4 Tuition fees and student debt

The vast majority of UK universities are public and did not charge any fees until late 1990s. Tuition fees were first introduced at the amount of £1,000 across all universities by the 1998 Teaching and Higher Education Act. They were subsequently raised up to £3,000 for students enrolling on courses for the academic year of 2006–07 and up to £9,000 for entrants in 2012–2013.[11] The introduction of tuition fees together with various student finance schemes has continuously led to an increase in student debt.

The complex scheme of student finance in the UK includes various options. Students from less advantaged socio-economic backgrounds are eligible to apply for a fee waiver, maintenance grant or bursaries which do not need to be paid back. Other financial schemes include student loans for fees and maintenance. Tuition Fee loans are available for all students and ensure that there are no upfront payment of tuition fees for new students. Maintenance loans consist of two parts – a guaranteed loan and a means-tested loan. In 2015, the new set of educational reforms replaced maintenance grants with loans for new students from England to secure the increased payback of loans which could potentially lead to the further increase in student debt (Bolton, 2018).

[11] Tuition fees in Scotland were set due to a special scheme after some debates in the Parliament. They were first switched to graduate endowment fee (Education Act, 2001), but the scheme was later cancelled in 2007 (Graduate Endowment Abolition, 2007). The tuition fees for 2018–2019 academic year are set at the level of £1,820 and could be covered fully by the Student Awards Agency for Scotland (SAAS) for Scottish students or via fees loans for students from England, Wales, and Northern Ireland.

The Institute for Fiscal Studies (2017) calculated the average debt on graduation of the new cohort of students to be over £50,000 (including approximately £27,000 of tuition fee debt, £18,000 of maintenance debt and £6,000 of interest accrued over the three years of studying), which is more than double the average debt students had before the increase of tuition fees. Furthermore, the recent reforms have led to the widening of the student gap between young people from various socio-economic contexts and thus students from the poorest 40% of families graduating with debts around £57,000 compared with around £43,000 for students from the richest 30% of families (Institute for Fiscal Studies, 2017).

2.2 Partnership transitions and fertility

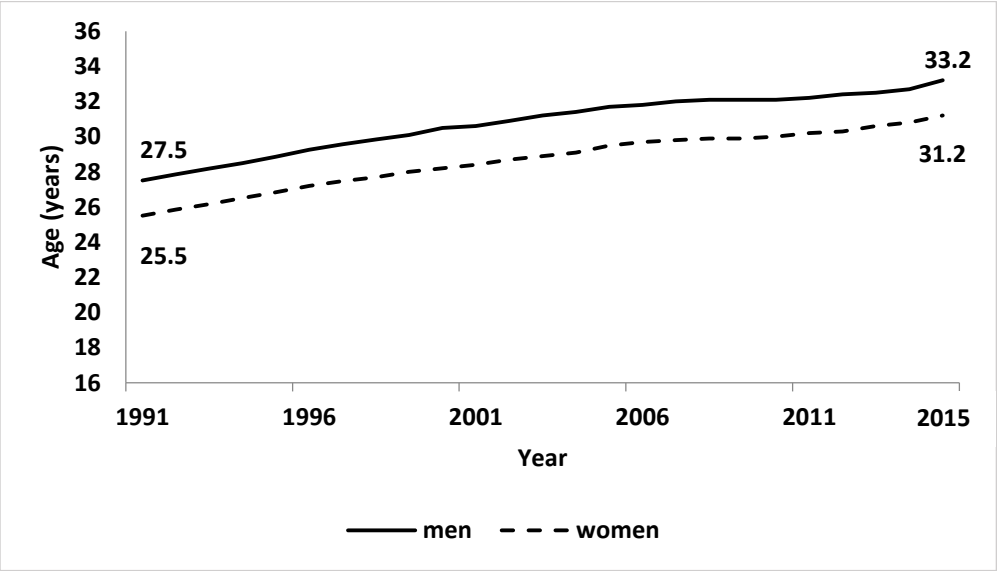
2.2.1 Variety of partnership experiences

Cultural changes associated with the Second Demographic transition, such as contraceptive revolution, an increased orientation on individualistic goals and the decrease in normative controls have contributed to an emergence of variety in partnership experiences. The traditional routes of family formation and childbearing through marriage have been vastly affected by the spread of cohabitation across the industrialised countries (Rindfuss & VandenHeuvel, 1990; Bumpass, Sweet, & Cherlin, 1991; Manting, 1996; Murphy, 2000; Kiernan, 2001; Andersson & Philipov, 2002; Cherlin, 2004; Seltzer, 2004; Heuveline & Timberlake, 2004; Perelli-Harris & Sanchez Gassen, 2012;). An increase in children born out of wedlock as well as in the total number of partnerships (including the newly emerged living-apart-together (LAT) relationships) experienced over the early stage of the life course has been widely observed as well (Hobcraft, 1996; Berrington, 2001; Haskey 2005; Ermisch & Siedler 2009; Perelli-Harris et al., 2010). First cohabiting unions among the youngest cohorts have shown to be more likely to end up in separation rather than in marriage (Manning & Smock, 2002; Jalovaara 2013; Mäenpää & Jalovaara, 2014) and serial cohabitations have become quite common (Cohen & Manning, 2010; Lichter et al., 2000).

As in other developed countries, a significant decrease in the proportion of first unions which start as direct marriage alongside the increase in the prevalence of premarital cohabitation, and the postponement of a first marriage has been observed in the UK (Berrington & Diamond, 2000; Berrington, 2001; Ermisch & Francesconi, 2000; Murphy, 2000; Steele et al., 2006; Beaujouan & Ní Bhrolcháin, 2011; Hannemann & Kulu, 2015). Figure 2.3 shows that between 1991 and 2015 the mean age at marriage in men has

increased from 27.5 to 33.2, as compared to an increase from 25.5 to 31.2 years in women (ONS, 2018).

Figure 2.3 The mean age at marriage in England and Wales by sex, 1991-2015



Source: ONS (2018).

Alongside the increase in the mean age at marriage, an increase in the proportion of young people cohabiting prior to marriage has been observed as well. The percentage of men cohabiting prior to marriage among the age group 20–24 has increased from 49% to 72%, as compared to an increase from 49% to 77%[12] in women (Table 2.2). Among young people aged 25–29, the share has increased from 53% to 85% in men and from 57% to 87% in women. Among the age group 30-34 year olds (in which the vast majority of first marriages occurs currently) the proportion has increased from 63% to 90% among men and from 68% to 91% among women. Murphy (2000) compared various sources of survey data on partnership histories and found that less than 1% of women aged 18–49 were cohabiting until the late 1960s, with the figure rising to about 10% in the early 1990s. It has been further confirmed that cohabiting couples (with or without children) has been the fastest growing family type over the last 20 years in the UK, with the numbers of cohabiters more than doubling from 1.5 million families in 1996 to 3.3 million families in 2017 (ONS, 2017).

[12] The proportion includes all marriages, both civil and religious. Figures for cohabitation among religious marriages have been much lower in 1994, but the gap has gradually closed to less than 5 percentage point difference among 25-34 year olds men and women in 2015, and to 18 percentage points on average among 20-24 year olds.

Table 2.2 Proportion of men and women cohabiting prior to marriage in England and Wales, 1994-2015

Year of marriage	Age at marriage		
	20 to 24	25 to 29	30 to 34
Men			
1994	49	53	63
1999	61	67	75
2004	67	74	81
2009	70	80	85
2015	72	85	90
Women			
1994	49	57	68
1999	63	70	79
2004	71	77	83
2009	75	83	86
2015	77	87	91

Source: ONS (2018). The figures are rounded to the nearest whole number.

Contrary to some other countries (e.g. the US), where cohabitation first spread among people from lower socio-economic groups, cohabitation in the UK in 1960s became more prevalent among individuals from higher socio-economic backgrounds (Ermisch & Francesconi, 1996) as well as among highly educated (Ní Bhrolcháin & Beaujouan, 2013). The average duration of cohabitation in Britain increased slightly from 14 to 20 months between 1960s and 1980s (Murphy 2000), but cohabitation as such remained a relatively short-term experience, with the proportion of cohabiters still living together (without getting married) after 10 years remaining just over 10% over the past 30 years (Beaujonan & Ní Bhrolcháin, 2011). Although, in many developed countries (e.g. the US and Canada) the rise in cohabitation has offset changes in the levels and timing of marriage, and, thus, the mean age at first union formation has not changed over the last few decades (as shown in Manning and Payne (2014), Wright (2016)), further postponement of first partnerships has been observed in Britain (Ermisch & Francesconi, 2000; Beaujouan & Ní Bhrolcháin, 2011).

With cohabitation becoming an almost universal and socially acceptable experience (Beaujouan & Ní Bhrolcháin, 2011), there exists no common law marriage in England and Wales, meaning cohabiting couples do not have the same legal rights as married couples. The Cohabitation Rights Bill, which addresses the rights of cohabiting couples (including property rights), is currently in the early stages of parliamentary consideration (ONS, 2017; House of Lords, 2017).

As cohabitation became widespread, separation and divorce levels have also increased. According to the ONS (2015), 22% of marriages in 1970 had ended by the 15th wedding anniversary, whereas 33% of marriages in 1995 had ended after the same period of time. For the most recent marriage cohorts (those who married after 2000), there is some evidence of a decline in the proportion of marriages ending in divorce.

An increase in repartnering (Ermisch & Francesconi, 2000; Skew et al. 2009) and in higher-order unions ("serial cohabiters") has been observed among younger cohorts in Britain as well (Holdsworth & Elliott, 2001; Beaujouan & Ní Bhrolcháin, 2011; Bukodi, 2012). As there exists no official statistics to cover the number of cohabitations over the life course, several survey analyses have provided a range of figures for the proportion of those who experienced serial partnerships. Bukodi (2012) has shown that 10% of men aged 19-34 in birth 1958 cohort had multiple cohabitations, whereas Holdsworth and Elliot (2001) found a much higher proportion of 18-20% of women and men in early 30s to have had more than one partnership in 1991. Beaujouan and Ní Bhrolcháin (2011) have shown that 97% of men and 98% of women have never lived with any other partner before marriage in in 1980–84, whereas the proportion declined to 81% and 84% in in 2004–07.

2.2.2 The meaning of cohabitation

Although the increased prevalence of cohabitation across the industrialised countries has been well documented, research has shown that the meaning of cohabitation is not universal and differs vastly across various countries and contexts (Bumpass et al., 1991; Manting, 1996; Manning & Smock, 2002; Heuveline & Timberlake, 2004; Perelli-Harris et al., 2014; Hiekel et al., 2015).

One group of explanation of this phenomenon includes the changes in family and relationship values associated with the increased individualisation and decreased normative controls in young peoples' lives. Early research distinguished between cohabitation as a prelude or alternative to being married, and later included the meaning of an alternative to being single — a stage when young people postpone family formation and prefer cohabiting rather than living separately during courtship with no marriage and childbearing intentions (Rindfuss & VandenHeuvel, 1990). Further to that, Manning and Smock (2005) discovered the pattern of "sliding" or "drifting" in and out of cohabitation among young Americans. According to this concept, young people reported that cohabitation was not seen as an alternative to marriage, but rather a natural progression in

relationships (not necessarily leading to marriage), and, thus, was seen more as an alternative to being single.

Heuveline and Timberlake (2004) further conceptualised six ideal types of cohabitations as: *marginal* (common in the societies where non-marital cohabitation is uncommon), *prelude to marriage* ("testing" ground for a relationship in societies where divorce rates are high, but cultural norms are unsupportive of cohabitation in the long-term), *stage in the marriage process* (a temporary phase prior to marriage), *alternative to single* (dating-like relationship with lower level of commitment in early adulthood), *alternative to marriage* (common in the societies where cohabitation is widely accepted, although a choice to cohabit and start a family in cohabitation is based on strong individual preferences; cohabitation is perceived to be different from marriage; low transition to marriage due to ideological perceptions), and *indistinguishable from marriage* (in the societies where cohabitation is socially accepted and supported institutionally; a transition to marriage may be quite common as it is not perceived as any different to cohabitation). According to their analysis on 17 industrialised countries, in the early 1990s most unmarried couples appeared to enter cohabitation with the intention of marrying falling into "prelude to marriage" or "stage in marriage process" groups. Cohabitation spells were found to last on average less than 3 years (with exceptions of France, Sweden and Canada), with a higher proportion of cohabitations converting to marriage. As a result of different attitudes towards cohabitation, a further analysis has shown that the outcomes of cohabitations (separation or marriage) vary vastly depending on the meaning the cohabiters assign to these unions (Manning & Smock, 2002; Hiekel et al., 2015).

Apart from changes in values and attitudes, another group of explanations of young adults' partnership behaviour is usually associated with economic constraints (Clarkberg, 1999; Kravdal, 1999; Smock & Manning 1997; Manning & Smock 2002, 2005; Sassler & Miller, 2011). Living together as a couple might be seen more convenient and less financially burdening as opposed to living single (Raley et al.,2007; Sassler, 2004; Sassler & Miller, 2011). The housing crises together with the changes in housing benefits regulation in Britain led to the increased number of people living in shared housing in their 20s and early 30s (Heath & Clever, 2003; Heath & Kenyon, 2001; Berrington & Stone, 2014), where many of the first cohabiting unions start. Other cohabiters are prone to stay in cohabitation due to the financial costs associated with getting married (Kravdal, 1999; Manning & Smock, 2002, 2005).

In the UK, where cohabitation is universally widespread, little is known about the current state and meaning which young people ascribe to cohabitation. Qualitative study by Berrington and colleagues (2015) investigated the link between cohabitation, marriage and the level of commitment people assign to it. The results showed that there was no difference in the perception of the level of commitment which would have been based solely on the type of union, though marriage remained an ideal among most respondents. Even though increasing numbers of cohabiters expressed their commitment through rearing children together and leading finances jointly rather than in registering a marriage, highly educated people were more prompt to report the preference towards the traditional pattern of having children in legal marriage.

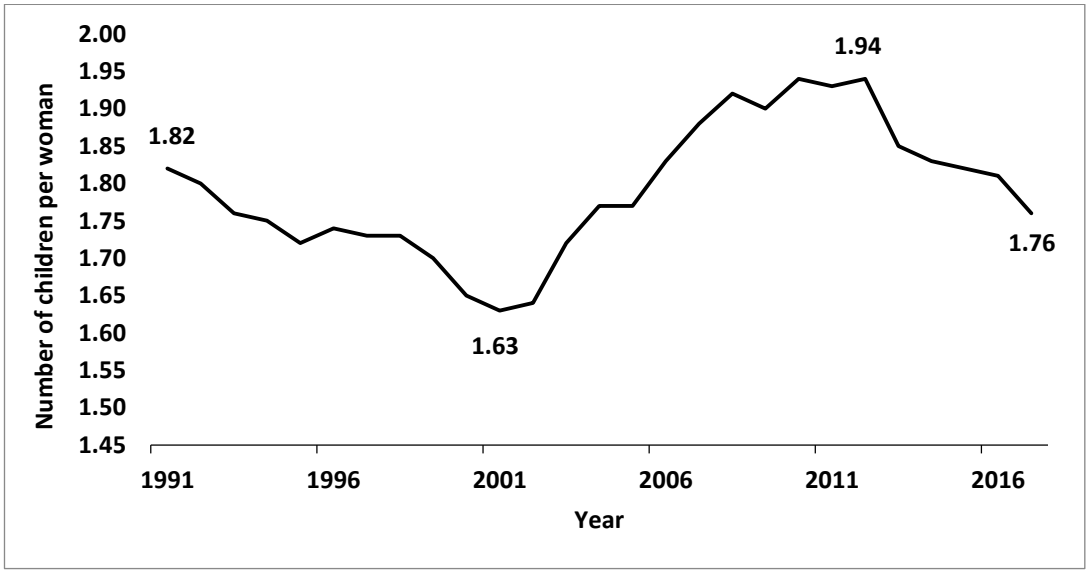
Following the increased heterogeneity in cohabitation experiences, a question regarding the stability of this type of unions arises as well. Since the increase in nonmarital cohabitation, this type of union was often conceptualised as a kind of "trial marriage", time that couples spend in order to get to know each other better and decide whether they want to take it to the next step. This is a very similar definition to the "prelude to marriage" and "stage in marriage process" types defined by Heuveline and Timberlake (2004). On the one hand, this concept implicates that lower quality cohabitations are weeded out during the relative early stage of cohabitation and, thus, those converted to marriage are supposed to be more stable. On the other, high risk of marriage dissolution among former cohabiters suggest that there exists some sort of selection into these unions, which makes them more vulnerable. Liefbroer and Dourleiin (2006) have found that union dissolution risks vary greatly depending on how common cohabitation is in the society. Former cohabiters have shown to exhibit higher rates of union dissolution only in the societies where cohabitation is uncommon (selection into cohabitation) or in the societies where the majority of unions begin with cohabitation (selection into direct marriage). Manning and Cohen (2012) confirmed the diffusion hypothesis of reduced effect of premarital cohabitation on marital stability among marriages between 1996 and 2006 in the US, when the share of these marriages increased significantly. A number of studies in the US confirmed no significant effect of premarital cohabitation by modelling the risk of marital union dissolution simultaneously to the risk of union formation to control for selection (Lillard et al., 1995), although in Germany (Brüderl et al., 1997) and Austria (Kulu & Boyle, 2010) evidence was found that premarital cohabitation reduces the risk of union dissolution after controlling for the selection effects. In Britain, research on earlier cohorts by Haskey (1992) and Berrington and Diamond (1999) found evidence of an increased

marriage dissolution rates among those who cohabited prior to marriage, although, that is to be expected according to Liefbroer and Dourlejin (2006) as premarital cohabitation was less common among 1958 birth cohort and thus selection could be in place. Steele et al. (2006) showed that for 1970s cohort no effect of premarital cohabitation on marital dissolution was found after controlling for selection into direct marriage, when cohabitation was the most common type of first union formation.

2.2.3 Trends in fertility

In the last 70 years the total fertility rate (TFR) in the UK has not fallen below the level of 1.6 children per woman (ONS, 2018a). The rate has reached its highest peak of 1.94 children per woman in 2010 and 2012 after a steady decrease from 2.93 in 1964. A significant decrease was observed over the past 5 years, with the rate decreasing to 1.76 children per woman in 2017 (Figure 2.4), yet the fertility levels in Britain are still one of the highest in Western Europe (Eurostat, 2018).

Figure 2.4 Total fertility rate in England and Wales, 1991-2017

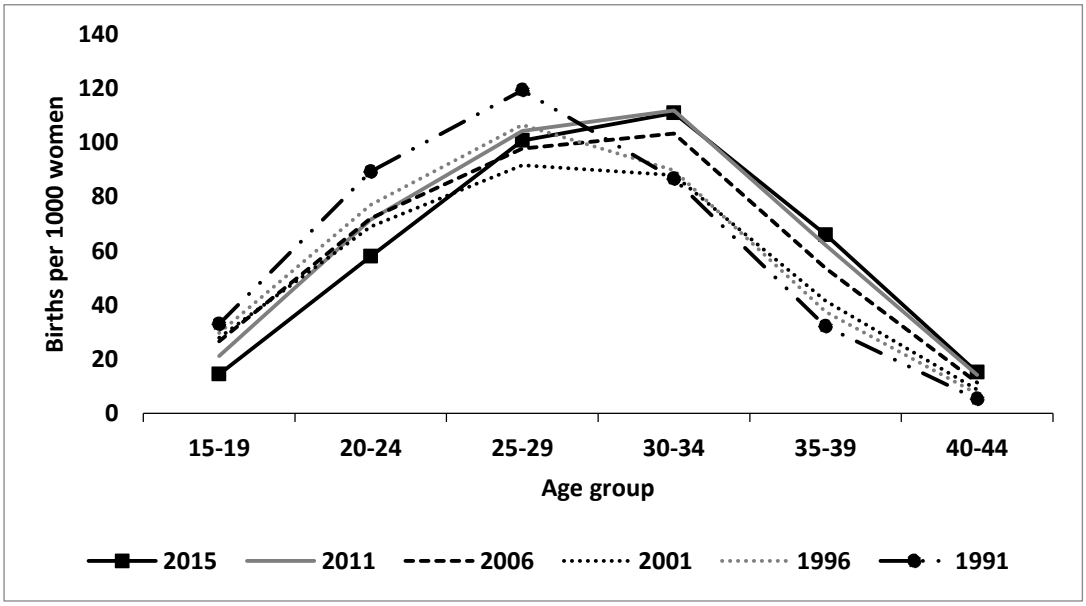


Source: ONS (2016).

Figure 2.5 presents the age-specific fertility rates in England and Wales between 1991 and 2015. A postponement of births is observed through an increase in the mean age at first birth and the shift of the age-specific fertility peak from 25-29 to 30-34 years olds. 119 births per 1000 women aged 25-29 were occurring in 1991, as compared to 111 among 30-34 year olds in 2015. The peak was more pronounced in 1991, whereas the curve has

become more flat by 2015 suggesting an increased heterogeneity in timing of childbearing. The general postponement in childbearing has often been explained through the increase in the educational enrolments among young people (Ní Bhrolcháin & Beaujouan, 2012). Hence, many young people spent longer time in education and being single and postpone family formation.

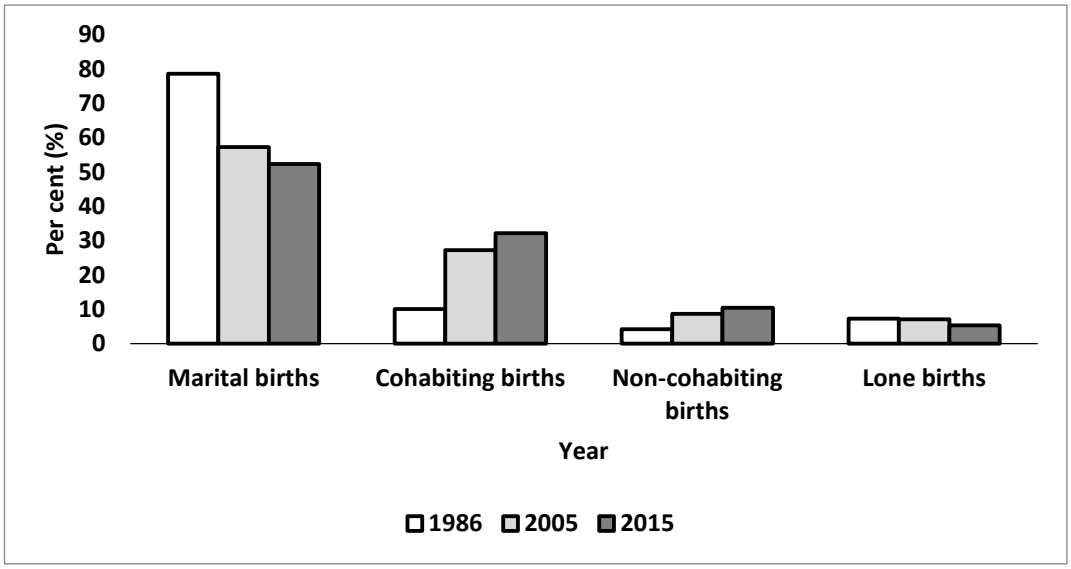
Figure 2.5 Age-specific fertility rates in England and Wales, 1991-2015



Source: ONS (2015).

Another significant difference in fertility patterns which was observed over the last few decades is an increase in births occurring outside of marriage (Hobcraft, 1996; Steele t al., 2006; Sigle-Rushton, 2008; ONS, 2016a). Thus, the proportion of marital births has fallen from 79% in 1986 to 53% in 2015 (ONS, 2015a; Figure 2.6). On the contrary, births among cohabiting couples have increased from 10% to 32% (out of all births) during the same period, reflecting upon the increase in prevalence as well as the changing nature of cohabiting unions.

Figure 2.6 Live births by type of registration in England and Wales, 1986, 2005, 2015.



Note: "Marital births" refer to births occurred within marriage or civil partnership; "cohabiting births" refer to births which were registered jointly by both parents who provided the same address; "Non-cohabiting births" refer to births which were registered jointly by both parents who provided different addresses; "lone births" refer to sole registration. Information about whether a couple jointly registering a birth were living at the same address is only available back to 1986.
Source: ONS (2016a).

The neoliberal welfare system in family policy in the UK implies the so called "laissez-faire approach" where the most deprived socio-economic groups are being supported by the state, resulting in British fertility being "educationally and socially polarised" with high "concentration ratios" (Ekert-Jaffe et al., 2002; Sigle-Rushton, 2008). Thus, higher fertility rates are observed among the most disadvantaged (including teenage pregnancy) on the one hand, and postponement of childbearing with eventual higher rates of childlessness amongst most advantaged on the other (Ekert-Jaffé et al., 2002; Rendall & Smallwood, 2003; Ratcliffe & Smith, 2006; Sigle-Rushton, 2008; Berrington et al., 2015).

A steady increase in childlessness in the UK been observed since cohorts born in mid 1940s (Rendall & Smallwood, 2003; Sigle-Rushton, 2008; Berrington, 2017). The positive educational gradient in childlessness exists as well, but only among women. Although in general, the rates of childlessness are higher among men than women. Berrington (2017) shows that, on average, there are twice as many childless women among highly educated, as compared to low educated among different birth cohorts – 22% compared to 10% among born in 1960s and 19% compared to 8% born in 1940s.

Figure 2.5 also highlights a significant decrease in teenage fertility. Historically, teenage fertility rates in the UK have been one of the highest among European countries (Darroch et al., 2001; Eurostat, 2018). Since the introduction of the Teenage Pregnancy Strategy in 1999 whose aim was to halve under 18 conception rates, 60% reduction in the rate has been observed in England between 1998 and 2016 (Public Health England, 2018). Despite the rate is currently at its lowest in the past 40 years (19 per 1000 women aged 15-17), the levels of teenage pregnancies still vary vastly by regions and levels of deprivation (ONS, 2018b). Although, recent research shows that the association between deprivation and teenage pregnancies has been weakening and areas with the least educational attainment are becoming more similar to the more educated areas (Crawford et al., 2013; Heap, 2018).

An increase in non-marital cohabitation as well as in dissolution of cohabiting couples has affected significantly the routes into lone parenthood in the UK (Berrington, 2014). The proportion of lone parents out of all families has increased from 8% in 1971 to 19% in 1991, continuously going up until reaching its highest peak of 27% in 2002 and stalling at the level of 21-22% over the last 15 years (ONS, 2013; ONS, 2017). Alongside the increase in the proportion of lone parenthood among all families, it has been shown that more than half of families with children in poverty are lone parents (Gregg et al., 2009).

The increase in lone parenthood is solely attributed to an increase in the proportion of women, who have never been married, with the proportion of lone fathers varying between 1% and 2% out of all families over the last 40 years (ONS, 2013). Further evidence was found that the routes into lone motherhood vary dramatically by educational level. An overall increase in the proportion of never married lone mothers has been observed among low and middle educated women. Almost one-in-ten low educated mothers were never married in the early 1990s, as compared to almost one-in-five in 2015 (Understanding Society, 2018). The proportion has increased from less than 5% among middle educated to almost 16% during the same time period. An overall proportion of lone mothers has increased from 30% to 40% among low educated mothers and from 20% to 35% among middle educated. On the contrary, there has been no change in the routes into lone motherhood observed among highly educated, with less than 5% lone mothers being never married and an overall proportion of lone mothers persistently holding below 20% (Ibid.).

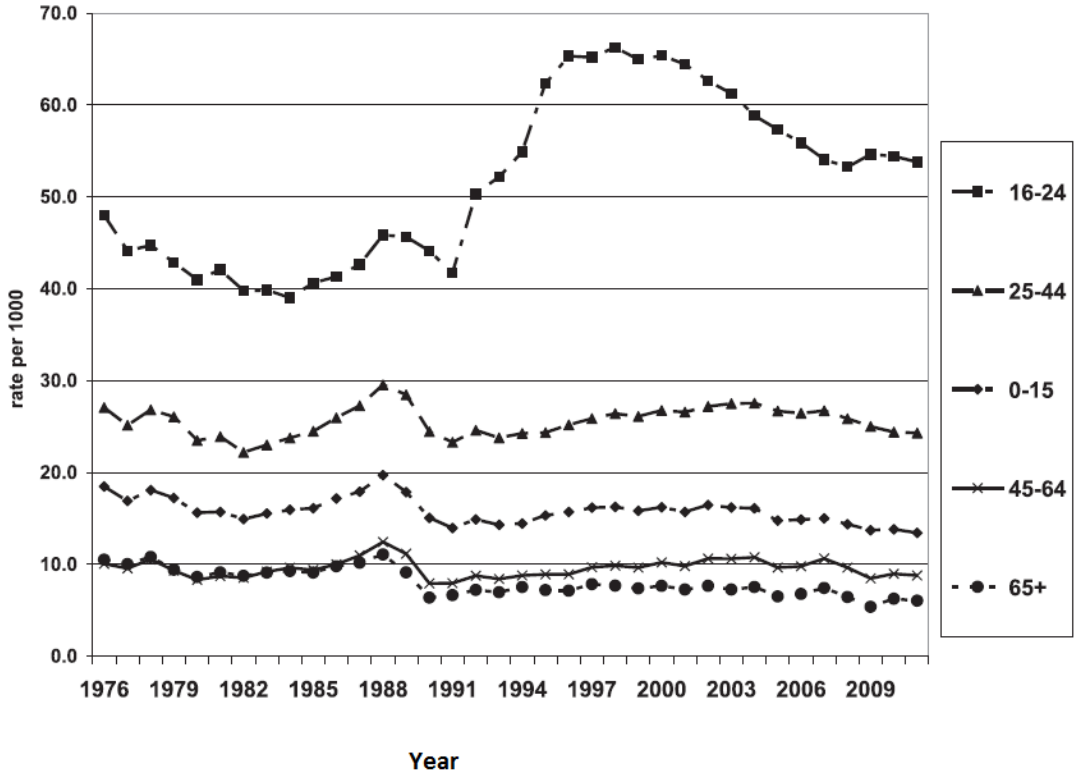
2.3 Internal migration among young people

2.3.1 Short- and long-distance moves

Residential changes and migration are highly related to changes in other life course domains, such as, changes in labour market or partnership status (Courgeau, 1985; Mulder & Hooimeijer, 1999; Kulu, 2008; Mulder & Wagner, 1993; Clark & Huang, 2003; Falkingham et al., 2016). Timing of some of the events like leaving the parental home, entering the labour market and first co-residential partnership has shown to be highly dependent on institutional structure and cultural norms across countries. Each society develops its own normative timetables for accepted stages of life careers (Hogan & Astone, 1986; Neugarten et al., 1965; Riley, 1987; Billari & Liefbroer, 2007) and thus migration as well was shown to follow strict age patterns – the so called "migration schedules" (Castro & Rogers, 1981). Since early adulthood is marked with the occurance of a rich spectrum of life course events trigerring moves, the highest concentration of migration is therefore observed at young ages (Duke-Williams, 2009; Bernard et al,. 2014, Champion & Shuttleworth, 2017a,b; Kulu et al., 2018).

There exists a long-standing tradition of distinguishing between short- and long-distance moves by considering the former being driven by housing adjustments and the latter by changes in employment (Detang-Dessendre & Molho, 1999; Mulder & Clark, 2000; Clark & Huang, 2003; Boyle et al., 2008; Kulu, 2008). Recent studies on internal migration in the UK show a decrease in the overall internal migration over the last four decades, caused mostly by the decrease in the short-distance moves (Champion & Shuttleworth, 2017a). Contrary to the overall trend, only a small decline was observed in the short-distance moves among young people, whereas long-distance migration rates have increased triggered by the expansion of higher education (Figure 2.7). The rate of inter-regional migration (defined as long-distance) among 16–24 year olds has increased from just over 40 per thousand in 1991 to 65 in 1996, stalled until 2001 before starting to steadily decrease until reaching the level of 53–54 per thousand in late 2000s (Champion & Shuttleworth, 2017b). Age profiles of short- and long-distance migration in the UK have been shown to be quite similar, with short-distance moves peaking at age 24 and long-distance at age 21 (Bernard et al., 2016).

Figure 2.7 Migration rate between the former Government Office Regions of England and Wales for years 1976-2011, by age group



Source: Champion & Shuttleworth (2017b): Calculated from the NHSCR-based migration matrix supplied by ONS. Crown Copyright.

2.3.2 The "escalator" region

From a geographical point of view, the migration rate from rural to urban areas has been traditionally high among young people and related to the start of an educational route or employment career (e.g. Joshi et al., 2005). Besides the urban-rural migration pattern, the persistence of a "North-South Divide", with the North being portrayed in a less advantaged socio-economic position than the South, is yet another long-standing tradition in British geography (e.g. Baker & Billinge, 2004). In the recent decades, particularly after the restructuring of the labour market in the 1970s, London and the South East of England – the so called "escalator" or "engine-room" region – became a top attractive destination of highly skilled migration from the rest of the country. Fielding (1992) has described the three-stage approach towards explaining this distinguishing pattern of internal migration in Britain. The first step – "stepping on the escalator" – is the stage when young people move to London and the South East after being attracted by a wide variety of educational and employment opportunities in the region. Once they move, they are being "taken up by the

escalator" with increased chances of social mobility, including occupational and income benefits. The last stage of migration includes "stepping off the escalator" and moving to more environmentally-attractive regions after experiencing the upward mobility.

The expansion of higher education has stimulated the increased migration towards so called second-order cities (e.g. Birmingham, Manchester, Leeds, Newcastle, Bristol, Sheffield, Liverpool, Nottingham, and Leicester). Although, those areas have been shown to lack the opportunity to create the same attractive employment conditions for graduates or draw highly qualified young people from elsewhere if compared to London and the South East (Duke-Williams, 2009; Faggian & McCann, 2009; Champion et al., 2014). An exception of an early "stepping off" the escalator was recently observed among highly educated Scots returning back to Scotland while still being in the early and mid-careers (Findlay et al., 2008). It is yet unclear whether this might become a new emerging trend or an example of a selective return migration. Returning to the parental home is yet another post-student migration destination that received a lot of attention in the recent decade. The increased youth unemployment together with the tight housing market conditions have forced young people experiencing difficulties to find a job and maintain paying the rent to move back (or "boomerang") to their parental homes (Sage et al., 2013; Stone et al., 2014).

2.3.3 Environmental factors and internal migration

However, research has shown that considering migration to be driven purely by economic rationality would be too simplistic. With the increased individualisation and diversity of life course transitions, non-monetary factors started playing an important role in shaping moving trajectories especially among young people (Clark & Whiters, 2007; Smith & Finney, 2015; Vilhelmson & Thulin, 2016; Sheller & Urry, 2006). Those factors can be broadly referred to as environmental and personal reasons. Living environment, lifestyle, neighbourhood quality as well as "gentrification" and "studentification" [13] of the areas, and search of self-identification and further personal development contribute to our understanding of hard-to-measure rationality behind people's decision to move (Lundholm et al., 2004; Morrison & Clark, 2011; Niedomysl, 2011; Vilhelmson & Thulin, 2016; Duncan and Smith 2006; Smith & Holt, 2007; Hochstenbach & Boterman, 2017). For example, it was found that couples having a new baby tend to move to a better neighbourhood (Rabe &

[13] "Studentification" is defined through the increased concentration of students in privately-rented accommodation in particular neighbourhoods (Smith, 2005).

Taylor, 2010), families with children are likely to move to new residence with the proximity to the "right school" (Butler et al., 2007; Smith & Jöns, 2015). Among other factors affecting migration decisions at younger ages, subjective well-being as well as proximity of peers and parents have been shown to be important (De Jong, 1991; Michielin et al., 2008; Sage et al., 2013; Nowok et al., 2013).

2.4 Housing and living arrangements

2.4.1 Leaving the parental home

Leaving the parental home and becoming residentially independent is an important integral part of the transition to adulthood (Billari, 2001; Billari & Liefbroer, 2010; Huinink, 2013). Various societal changes such as economic restructuring, increased housing prices, residualisation of social housing sector as well as the subsequent rise in private renting have contributed to an increased variety of housing pathways and living arrangements among young adults in Britain (Ford et al., 2002; Stone et al., 2011; Clapham et al., 2014). Leaving the parental home has thus become highly dependent on the local housing prices, parental resources and their willingness to support young people (Coulter, 2017b; Bayrakdar & Coulter, 2018). As a result, the mean age of leaving the parental home has been gradually increasing over the last few decades (ONS, 2016b; Pelikh & Kulu, 2018).

Delayed leaving the parental home and precariousness that force those who left to co-reside with their parent again is reflected in the increased proportion of young adults living with their parents in their 20s and early 30s (Table 2.3). Women were traditionally leaving the parental home earlier than men to enter cohabitation or marriage (Berrington & Murphy, 1994; Berrington, 2001), but alongside the expansion of higher education and universal delay in family formation, more young women started staying in the parental home for longer periods of time. The share of young men aged 20-24 living with their parents has increased from 50% in 1991 to 55% in 2016 compared to an increase from 32% to 43% in women. An increase in the proportion of young adults aged 25-29 living with their parents between 1991 and 2016 has been observed as well. The share has increased from 19% to 28% in men and from 9% to 14% in women. The increase in co-residence with parents among this age group in particular is related to an increased complexity of various life-course transitions. "Turning points" such as leaving full-time education, unemployment, or partnership dissolution have contributed to higher rates of "boomeranging" back to the

parental home, especially among non-resident young fathers (Berrington & Stone, 2014; Stone et al., 2014).

Table 2.3 Share of young people living with their parents by age and sex, 1991-2016

Age/Year	1991	1996	2001	2006	2011	2016
Men						
20-24	50	55	52	53	52	55
25-29	19	23	24	23	24	28
30-34	9	9	9	9	10	10
Women						
20-24	32	35	33	35	38	43
25-29	9	10	11	11	13	14
30-34	5	3	3	3	4	4

Source: ONS (2017).

2.4.2 Housing sector and policy

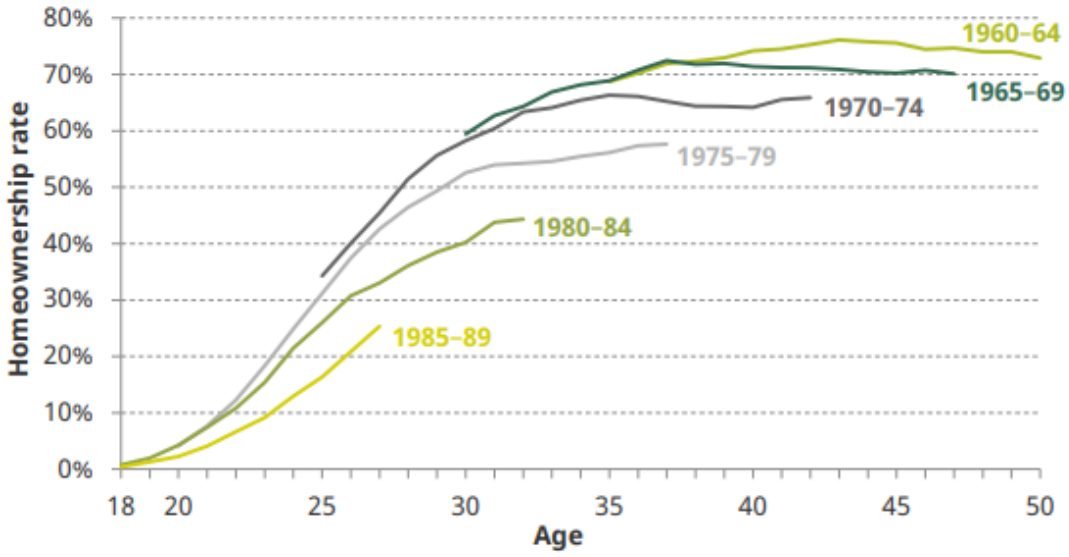
2.4.2.1 Homeownership

Housing transitions, and in particular a change from renting to owning, have been traditionally embedded in the normative timetables developed across societies (Perin, 1977). In Britain, the concept of the "housing ladder" with homeownership crowning the top of it was also supported by the idea of a "property-owning democracy" which gained influence under the leadership of Margaret Thatcher in the 1970s and 1980s (Francis, 2011). The government saw a big significance in creating opportunities for the middle class to buy property. The "Right to Buy" was introduced in the Housing Act 1980 and allowed social renters to purchase their houses from the councils with a discount of up to 60%. At the same time, councils were forbidden to build new property in order to replace the sold one. This development together with the emergence of unregulated private housing sector have been traditionally benched as the beginning of the long-standing housing crisis in Britain with the deficit in social housing and increased housing prices (e.g. Robertson, 2017).

Several economic shocks including the housing crisis and governmental reforms have affected significantly the homeownership rates among young people. Figure 2.8 represents a steady decrease in homeownership rate between cohorts born in 1960s and late 1980s observed over the period between 1996 and 2016. The significant decrease in the rates is especially pronounced between young people born in late 1970s and 1980s. At age 27,

those born in 1985-89 had a homeownership rate of 25%, compared with 33% among young people born in 1980-84 and 43% for those born in 1974-79 (Cribb et al., 2018). The dramatic decrease in the homeownership rates is associated with the increase in housing prices and lack of mortgage credit. The house price to income ratio has increased from 2 to 3 times from the beginning of 1980s to the beginning of 1990s and to 4-4.5 times a decade late stalling at this level until today (ONS, 2016). According to Shelter (2015), a working young family had to wait on average 12 years to save up a deposit to buy their own home, and 6.5 years for couples without children. The increase in the minimum deposit for mortgage has made it less affordable especially for first time buyers. With the introduction of the Help to Buy equity loan scheme in 2012 there has been an increase but the level still remains below the average observed prior to 2003 (ONS, 2016). The scheme has offered buyers a 20% equity loan that can be used towards the cost of buying a new build home, allowing people to buy with a 5% deposit. Despite the overall decrease in the homeownership rate, the significant differences between the low and the high occupational classes were observed as well, with young adults in dual-earner families with advantaged jobs experiencing the smallest fall in homeownership (Coulter, 2017a; Cribb et al., 2018).

Figure 2.8 Homeownership rate by cohort and age, 1996-2016



Source: Cribb et al. (2018). Calculations based on Labour Force Survey 1996 to 2016.

2.4.4.2 Private and social renting

The decrease in homeownership in the UK was accompanied by the residualisation of the social housing sector and subsequent increase in private renting sector (ONS, 2016). A series of the austerity welfare benefits reforms has persistently cut young people's access to social renting while creating a long-term increase in social queue (Clapham et al., 2012). The three policies are usually recognised to have influenced young people's living arrangements the most, namely the Single Room Rent (SRR) and the subsequent Shared Accommodation Rate (SAR), The Local Housing Allowance (LHA) and the so called "bedroom tax". In 1996, the government introduced the SRR for under 25s capping the housing benefit for young adults at the level of the cost of a single room or bedsit (Kemp & Rugg, 1998). In 2012, the SAR extended the previous age range of claimants up to the age of 35. The LHA was originally introduced in 2008 to restrict the housing benefit correcting for the size of the household and the local rents and was subsequently reduced under the Localism Act 2011 (Berrington & Stone, 2014). This has led to further decrease in access to social renting among young people who were not considered to be a priority case anymore and thus some of them have faced the increased risk of homelessness (Rugg & Quilgars 2015; Fitzpatrick et al., 2017). "The bedroom tax" was introduced under the Welfare Reform Act 2012 and has set up a new rule for calculating the housing benefit by taking into account the number of bedrooms in the property. The reform was intended to free up housing for those living in overcrowded households and thus reduced the housing benefit by 14% if social tenants had a spare bedroom or 25% if they have two or more (DWP, 2012).

The subsequent increase in private renting together with the decreased access to home ownership has triggered the social debate regarding the lack of housing opportunities for young people, thus making them the perpetual renters or so called "Generation Rent" (Fitzpatrick et al., 2017; Rugg & Quilgars, 2015; Coulter, 2017a). Although, factors other than the tight housing market, like the increased number of students and young professionals as well as the delay in union formation, have contributed to the increase in private renting too. A growth in the number of single-person households as well as in the number of people living in shared housing in their 20s and early 30s was observed over the last few decades (Heath & Kenyon, 2001; Rugg et al., 2002; Heath & Cleaver, 2003). Research has shown that young people's experiences of shared housing have changed their perception of independence and home and increased the importance of housemates in the

lives of sharers, bringing a new perspective on the housing trajectories in early adulthood (Heath & Kenyon, 2001; Heath & Cleaver, 2003).

The expansion of higher education has triggered the spread of the cultural expectations of shared or communal living during studenthood (Heath & Kenyon, 2001; Rugg et al., 2002). Savills Research (2007) has shown how the reliance of full-time students on the private rental sector has increased over time. Their estimates pointed that around 46% of all students were living in Housing in Multiple Occupation (HMO) in 2007, as compared with 37% in 1997. On the housing market, the expansion of higher education has led to the increased studentification of some areas near university campuses, which are associated with geographies of low-quality, high-density student houses of HMOs (Smith, 2005; Kinton et al., 2018). On the other hand, an increase in purpose-built student accommodation (PBSA) of higher quality and rental prices was observed as well (Savills Research, 2009; Rugg & Quilgars, 2015). Altogether, these developments have led to more polarised student accommodation markets with those who cannot afford the expensive higher-quality renting being forced to concentrate in lower-cost, downgraded neighbourhoods (Hubbard, 2009; Kinton et al., 2018).

To sum up, Chapter I has provided an overview of the main socio-economic changes occurring in Britain since the beginning of the 1990s which have affected the transition to adulthood. Education and employment careers of young people were affected mostly by the following changes: 1) the restructuring and polarisation of the labour market; 2) an increase in youth unemployment and NEETs; 3) the expansion of higher and further education; 4) introduction and increase in tuition fees. Changes in partnership transitions were reflected in further increases in cohabitation, separation, and repartnering together with an increase in non-marital childbearing and lone parenthood, decrease in teenage pregnancies and increase in childlessness. Residential careers were affected most by the expansion of higher education with London and the South East of England continuously playing the “escalator” role for occupational and social mobility, especially in young adulthood. Housing crisis and the reduction of housing allowance and benefits for young people also dramatically affected living arrangements among young adults.

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Chapter III

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Chapter II is the first out of three empirical chapters presented in this thesis. Chapter II is looking at the employment and education careers among young adults, following their career paths after leaving school until the age 26. Chapter II builds on Chapter I by investigating how labour market restructuring and the expansion of higher education have influenced the school-to-work pathways. It will further investigate whether traditional gender and socio-economic differences in education and employment career still persist and how they have evolved over time. Chapter II is a draft paper which will be submitted to Population Studies journal shortly.

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Accelerated School-to-Work transition in Britain: Still true?

This paper investigates whether the British pattern of the transition to adulthood with an early transition from school to work still exists. We apply sequence analysis to combined life histories from the British Household Panel Survey (BHPS) and the Understanding Society study (UKHLS) to gain a holistic picture of how education and employment trajectories of young adults born between 1974 and 1990 in England and Wales differ by birth cohort, gender, and socio-economic background. Next, we investigate how various trajectories lead to inequalities in labour market outcomes in later life. Around half of young people in the sample follow the rapid school-to-work trajectories with around one third of young adults obtaining a higher education degree by age 26. The distinctive British early transition from school to work is still prevalent, although trajectories have become more complex and precarious, in particular among young people from lower socio-economic backgrounds. Yet, the decrease in the direct school-to-work trajectories among the youngest cohort was replaced by the prolonged stay in education and increase in part-time employment. The proportion of university graduates from lower socio-economic backgrounds has increased among the youngest cohort yet remains disproportionally low. Consequently, the chances of being in professional and managerial occupations remain significantly lower among highly educated young people from disadvantaged backgrounds.

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3.1 Introduction

Employment and education careers of young people are embedded in the complex structure of various life course developments during the transition to adulthood, including partnership and family transitions, and housing and residential trajectories. As a result of a various socio-economic changes, such as the expansion of higher education, increase in gender equality and decrease in normative controls, life course transitions during the early stage of adulthood have become less standardised, more turbulent, individualised, and "protracted" (Billari & Liefbroer, 2010; Elzinga & Liefbroer, 2007; Huinink, 2013; Liefbroer, 1999; Macmillan, 2005; Shanahan, 2000).

The British pattern of the transition to adulthood is usually described as "accelerated" with an early transition from school to work (Bynner, 2001; Cavalli & Galland, 1995). This tradition stems from open labour market relationships based on free market forces and competition and a flexible education and training system that allows various pathways of obtaining necessary work qualifications (Blossfeld et al., 2005; Raffe et al., 1998; Bynner, 2001; Mills & Blossfeld, 2003). The shift to a service economy starting in the 1970s and rapid development of information technology led to the restructuring of the labour market and a subsequent polarisation of jobs (Ashton et al., 1990; White, 1992; Goos & Manning, 2007). As the increased demand for highly skilled labour led to the expansion of higher and further education and offered career prospects for some, less advantaged young people were left with greater uncertainty. Yet, the British youth which has had positive perceptions regarding future career prospects without continuing education, faced a new reality of scarce employment opportunities without having specific qualifications (Roberts et al., 1994; Maguire & Maguire, 1997; Bynner, 2001). Thus, the traditional rapid school-to-work trajectories have become harder to achieve and posed a greater pressure on young people's decisions of post-school activities. With the increased individualisation of the life course and further expansion of higher education, and in particular the widening participation among young people from lower socio-economic backgrounds (Murphy et al., 2018), on the one hand, and increased uncertainty due to the restructuring of the labour market, on the other hand, it remains unclear how school-to-work trajectories have changed in the last 25 years and how they are defined by gender and parental socio-economic background.

This paper contributes to the literature in two ways. Frist, we conduct sequence analysis on combined life histories from the British Household Panel Survey (BHPS) and the Understanding Society study (UKHLS) in order to gain a holistic picture of changes and continuities in school-to-work pathways of young people between 1991 and 2016 and factors affecting it. Second, we investigate the link between the trajectories and the occupational outcomes at age 26. Previous work has focused mainly on early labour market outcomes, such as destination of graduates' trajectories and one year post-graduation (e.g. Smith et al., 2001; Howieson & Ianelli, 2008) or measured the returns to education at a specific age, e.g. age 33 in Blundell et al. (2000). Although, these studies usually advocate towards better employment prospects among highly educated, they have ignored how school-to-work pathways have affected the occupational outcomes. We investigate occupational outcomes at age 26 by taking into account how various transitions in education and employment careers affect labour market prospects and to what extent outcomes are dependent on individual characteristics (e.g. gender and parental socio-economic background).

3.2 Research questions

We address three key research questions outlined below:

1) How have education and employment trajectories changed since the rapid expansion of further and higher education in the beginning of 1990s?
2) What is the association between education and employment trajectories and occupational outcomes 10 years after completing compulsory school education?
3) How do occupational outcomes differ by level of education with regards to cohort, gender, and parental socio-economic background?

3.2.1 The British pattern of the transition to adulthood

Socio-economic and cultural changes which occurred in society since the 1960s (and often referred as the Second Demographic Transition (van de Kaa, 1987)) have dramatically influenced young people's lives in industrialised countries, leading to de-standardisation and individualisation of life trajectories (Buchman, 1989; Liefbroer, 1999; Schanahan, 2000; Macmillan, 2005). The decrease in normative controls and increased individualisation of the life course has led to a larger freedom of personal life decisions and the fulfilling of own pursuits in various life domains to a greater extent, leading to the expansion of biographical trajectories (Shanahan, 2000; Macmillan, 2005; Huinink, 2013).

Although, a lot of evidence was found in favour of de-standardisation and individualisation of the life course, there exists another point of view showing the prevalence of structured trajectories defined by socio-economic origins (Côté, 2002; Furlong & Cartmel, 2007; Côté & Bynner, 2008; Furstenberg, 2008). Traditionally, education and employment trajectories of young people in Britain were found to be largely influenced by social class, gender, and ethnicity (Bynner, 2001, 2005; Cavalli & Galland, 1995; Coffield, 1995). These differences in British society are often referred to as "youth divide" – the polarisation between the advantaged and the disadvantaged – and the existence of so called "fast-" and "slow-track" in the transition to adulthood (Bynner 2001, 2005; Jones, 2002).

"Slow-track" is associated with prolonged pathways to adulthood and "positive" individualisation which allows young people from more advantaged backgrounds to find their own flexible way to explore various options in life. This flexibility often leads to prolonged periods spent in education and the postponement of labour market entry and family formation. Following the "slow-track" is traditionally prevalent among young people from more advantaged backgrounds, and among those whose parents have tertiary education (Bynner & Joshi, 2002; Patiniotis & Holdsworth, 2005).

"Fast-track", on the contrary, relates to young people from lower socio-economic backgrounds who tend to leave school at minimum age 16[14] and rapidly start work and family careers. The routes of the existence of the "fast track" lie in the tradition of a high demand for unskilled youth in labour-intensive industries in Britain which allowed young people to enter the labour market straight after finishing compulsory school without any further qualifications before 1990s (Ashton et al., 1990; Maguire & Maguire, 1997). The shift of the economy towards service activities has resulted in increasing polarisation among young people. On the one hand, the rising demand was observed in high-skilled and well-paid professional and managerial occupations. On the other hand, technology could not provide a substitute for those kinds of low-paid nonroutine manual skilled labour that require high levels of soft skills (Goos & Manning, 2007). Thus high demand for the service jobs (e.g. carers and low-level hospitality positions) and a decrease in the number of "middling" jobs supported the persistence of a "low skills equilibrium" in many places and sectors (Ibid., Finegold & Soskice, 1988; Government Office for Science, 2017). Nevertheless, even in the low-skilled sector young people were confronted with the need

[14] The minimum age at leaving school has been increased from 15 to 16 years in 1972, to 17 years old in 2013, and up to 18 years in 2015 (Education and Skills Act 2008).

for further training before applying for a job (Bynner, 2001; Gallie et al., 2014), which stimulated the expansion of higher and further education.

As a response to the economic restructuring towards highly technological services, the higher education participation rate has increased gradually from 12% in 1979 to 30% in the early 1990s, and 49% in 2015 (Department for Education, 2017). Increases in enrolment rates vary markedly across population subgroups, with women and young people from lower socio-economic background historically showing lower participation rate (Broecke & Hamid, 2008; Murphy et al., 2018). In 1992, women's higher education participation rate exceeded men's. In 2015, women's rate was 55% compared to 43% in men (Department for Education and Skills/Department for Business Innovations and Skills, 2017). Since the increases in tuition fees in 2003 and 2009 and the abolishment of the system of upfront payment for education, the participation rate among young people from lower socio-economic background has increased substantially (Murphy et al., 2018). Even so, the proportion of people from more advantaged backgrounds who go into higher education is still more than two times larger than the proportion of young people from lower socio-economic groups (Department for Education, 2017).

The "slow-" and "fast-track" division of youth has been criticized for not taking into account economic precarity which might stand in the way of rapid transitions (Stone et al., 2011), as well as overlooking the existence of the "middling" pathway (Roberts 2011, 2013; MacDonald, 2011). Yet, one on the one hand, we observe an increase in the variety of educational options after school, but on the other, these opportunities might be structurally limited. Therefore, we expect to see an increased diversity in the sequences of events careers over time, but we anticipate them to vary by cohort, gender, and parental SES.

3.2.2 Long-term labour market precarity

The restructuring of the labour market in the UK has significantly disadvantaged the employment prospects of young people by lowering prospects and increasing labour market uncertainty, especially among lower socio-economic groups. On the one hand, this was reflected in the high proportion of NEETs[15]. On the other hand, the terms of employment have become more uncertain as well, thus, an increase in prevalence of

[15] The proportion of NEETs has been holding at the level of around 13% among 16-24 years in the early 2000s, went up to 19% in 2011 and stabilised later at the level of 11-12% until today (House of Commons, 2018)).

temporary and zero hours contracts (Williamson, 1997; MacDonald, 1997; Berrington et al., 2014; Furlong et al., 2018) as well as the persistence of the "low-pay, no-pay cycles" (sequences of periods of low pay and worklessness; Schieldrick et al., 2010;) among young people was observed.

The youth unemployment rate has been steadily increasing throughout the 2000s reaching the level of 22% in 2011 and decreasing to 13% in 2016 (ONS, 2018a). The increase in youth unemployment poses a threat on young people's careers in the long-term. Individuals experiencing longer spells of unemployment find it harder to find a new job and are at risk of losing some of their skills (Arumlampalam, 2001; Bell & Blanchflower, 2010). The first spell of unemployment, especially for those transitioning to the labour market straight from school, has the largest scarring effect on future employment and earnings (Arumlampalam, 2001; Gregg & Tominey, 2005; Bell & Blanchflower, 2010; Sissons & Jones, 2012).

Previous research has shown that employment outcomes throughout the early years of adulthood (both in terms of occupation and employment conditions) were quite persistent and varied by educational qualifications, leaving the low educated in the most precarious labour market positions, i.e. long-term unemployed and non-active (Crawford et al., 2014; Howieson & Ianelli, 2008). Both unemployment and NEETs rates have been shown to be much higher for young people with no qualification compared to graduates (Sissons & Jones, 2012, Bell & Blanchflower, 2010, Burgess et al., 2003).

We hypothesize that longer spells of unemployment and non-activity during the early adult years have a negative long-term effect on occupational outcomes in later life.

3.2.3 Returns to education

Education is considered an important predictor of future income trajectories, occupational and social mobility. Salary returns to education have been shown to vary with the level of qualification, parental socio-economic background and gender (Card, 1999; Dearden et al., 2002; Friedman et al., 2017). Much less is known about the interaction with the short- and long-term occupational outcomes and mobility.

In the UK, returns were found to be universally higher for academic than vocational training, although after taking into account time spent in education, the actual earnings return per year become closer between the two (e.g. Dearden et al., 2002). Significant

differences were found with regards to the type of vocational training (e.g. largest pay-off was observed in teaching and nursing qualifications) whereas the wage premium was small (Ibid.). Research has shown that despite an increase in the numbers of highly educated young people in the 1990s, no decrease has been observed in the returns, with highly educated showing higher occupational progression and income trajectories (Harkness & Machin, 1999; Walker & Zhu, 2003; McIntosh, 2006). The latter suggests that educational differences in occupation and earning are expected to be found, yet it is unclear whether the magnitude of this effect will vary by cohort.

Pronounced gender differences were found in regards to education and earnings. Gender pay gap is a prominent long-standing feature of the UK labour market (Harkness, 1996; Olsen et al., 2018). The differences are especially pronounced between low educated men and women. Low educated women were found to be the more disadvantaged financially and often excluded from the labour market (Howieson & Ianelli, 2008; Bynner & Parsons, 2001), with a persistently higher proportion of NEETs among 16-24 year olds as compared to men (ONS, 2018b). On the contrary, highly educated women had better chances to occupy professional and managerial positions than men, yet the gender pay is still observed (Blundell et al., 2000, Dearden et al., 2002). The gap was found to be decreasing with the level of education, with the lowest difference found among highly educated men and women (Blundell et al., 2000). With the increased feminisation of higher education and the labour market, we expect gender differences in occupational outcomes to become smaller among highly educated men and women. Although, no evidence suggests expecting an improvement of the labour market prospects among low educated women, as compared to men.

The increase in higher education enrolment rates over the past two decades was observed alongside the decrease in occupational mobility. Nightingale et al. (2017) have shown that the rates were relatively stable between 1992 and 2005, with around 20% of young people experiencing upward mobility and around 12-13% experiencing downward mobility. Both rates have decreased by about a half between 2005 and 2013, with a slight recovery observed in the recent years. The decrease in social mobility was to large extent stimulated by the emerged skills mismatch on the labour market. Thus, the increase in the numbers of highly educated people could not ensure the successful entry into the labour market among all graduates. Skills surpluses therefore may be seen as underutilisation and overqualification (Felstead & Green, 2013). The estimates show that around 25-30% of UK

graduates reported being overqualified for their jobs (Battu et al., 2000; Chevalier & Lindley, 2009).

Although the numbers of highly educated young people from lower socio-economic background have increased, a persistent gap in future career trajectories and earnings is still observed, compared to highly educated young people from higher socio-economic groups (Friedman et al., 2017). We therefore expect occupational outcomes to still be vastly effected by personal socio-economic background.

3.3 Data, methods, and variables

3.3.1 Data

For the analysis, we used the combined data from the British Household Panel Survey (BHPS) and the Understanding Society study (UKHLS) (ISER 2010, 2014; ISER et al., 2016). The BHPS is an annual panel survey of a nationally representative sample of about 5,500 households and 10,000 individuals recruited in 1991. The survey contains 18 waves conducted between 1991 and 2009. The dataset contains detailed information on educational and employment changes, residential changes, and parental socio-economic characteristics. The dataset contains information on the economic activity status, educational attainment and type of occupation by various classifications, start date of up to 2 employment spells per year. Only spells reported as primary economic activity were taken into consideration. Additionally, completed educational and employment histories of the respondents were collected in BHPS: Wave 2 (1992-1993), Wave 11 (2001-2002), and Wave 12 (2002-2003); economic activity histories were collected in UKHLS Wave 1 (2009-2010; for the new entrants) and Wave 5 (2013-2015).

The UKHLS was launched in 2009 as a successor of the BHPS and has recruited more than 50,000 new respondents in Wave 1, boosting substantially the ethnic minority subsample. A subsample of BHPS respondents was followed from Wave 2 (2010) onwards. This means the full employment and education sequences could be constructed from year 1991. Due to the limited representativeness of ethnic minorities in BHPS, our analysis does not look into ethnic differences in education and employment trajectories. The UKHLS has 8 waves of data, although, only 6 waves were available by the time this analysis was conducted. The UKHLS and BHPS have the same survey design and collect similar information on major life events. We extended the observation window for the original BHPS sample for 6 years using UKHLS data to allow us to investigate employment and education careers of younger

cohorts born in the 1980s as well. We focused our analysis on people who turned 16 between 1991 and 2008 in England and Wales and followed them for as long as they remained in the survey. The sample is restricted to respondents for whom 10-year employment and education histories between the years they turn 16 and 26 could be constructed. The final sample contains 1,401 individuals from three birth cohorts observed between 1991 and 2015: 1974–79 (721 persons), 1980–84 (451 persons) and 1985–90 (229 persons).

3.3.2 Methods

First, sequence analysis is used to define educational and employment trajectories and assess the persistence of the traditional British pattern of accelerated School-to-Work transition. Then, multinomial logistic regressions are employed to investigate the role of family and personal background characteristics in influencing individual educational and employment trajectories during the transition to adulthood, and to analyse the way these trajectories lead to a particular occupational outcome at age 26.

3.3.2.1 Sequence analysis

Sequence analysis represents each individual life course by a string of states and aims to describe and visualise sequences, compare individual sequences and identify the common types of sequences among populations of interest (Abbott, 1995). The method allows to study a longitudinal series of interrelated transitions (e.g. from being unemployed to being employed part-time and then full-time), as opposed to the vast majority of methods used in the life course research which usually focus on one transition (e.g. logistic regression or basic event history models). Sequence analysis has been widely used while analysing school-to-work trajectories (Halpin & Chan, 1998; Scherer, 2001; McVicar & Anyadike-Danes, 2002; Quintini & Manfredi, 2009).

A first task is to define standard educational and employment trajectories. At the beginning of the observation period, individuals are aged 16 and are in full-time education (finishing secondary school). As time passes, we distinguish between the five economic activity states that young people are going through: employed full-time, employed part-time, full-time student, unemployed, economically inactive. The category “non-active” (economically inactive) refers to individuals involved in family care, being sick or disabled, taking parental leave, governmental training.

Once individual sequences are created, due to the large possible number of combination of states, an appropriate distance measure is used to reduce the number of sequences and make them more similar. Similarity and dissimilarity between individual sequences are defined in terms of the number, order, and duration of states within the sequences. The algorithm of transforming one sequence into another includes three operations: substitution (one state is substituted with another), insertion (an additional state can be added at any place in the sequence), and deletion (any state can be deled to make sequences more similar). All operations come at a "cost" which the researcher defines arbitrary based on theory or empirical estimations. The distance between two sequences is defined by the minimum "cost" of operation that could be undertaken to transform one sequence into another (Abbott & Tsay, 2000).

To compare the monthly sequences of individual trajectories, we use the specification of Dynamic Hamming Distance (DHD) measure. DHD compares sequences element-wise based on a substitution matrix. Substitution costs are not fixed by the researcher, but based on transition rates for each time point separately (Lesnard, 2010; see Figure 1A in the Appendix A). By taking into account the timing of transitions, DHD differs crucially to the widely used Optimal Matching technique (OM), which allows for insertion and deletion operations which shifts substantially the timing and keep the substitution costs fixed. As "costs" can vary over time, e.g. the transition rate from being a student to entering full-time employment might be different if we compare these transitions at ages 16, 18 and 22 for example; and they should not be assigned as equal. After applying DHD, we obtain estimates of dissimilarities between individual educational and employment sequences.

Dissimilarity estimates produced from the sequence analysis are the key input data for the cluster analysis. Individual sequences are grouped together to produce the most common education and employment trajectories among young people. For the cluster analysis, we use the partitioning around medoids algorithm (*k-medoids*). The *K-medoid* method is more robust towards outliers compared to *k-means* method as it minimises the sum of dissimilarities as opposed to the sum of squared interval-scaled distances (Kaufmann & Rousseeuw 2005). It selects *k* representative medoids to split the data into *k* final clusters. A medoid is an object of the cluster for which the average dissimilarity to all other objects in the cluster is minimal.

There exists no unique solution in defining the number of clusters. We followed a three-stage approach. First, we analysed dendrograms produced from applying Ward's

hierarchical clustering algorithm to identify natural breaks in the data. Second, we computed the Studer et al. (2011) discrepancy measures of a set of sequences – pseudo F and pseudo R^2 to compare the goodness of cluster solutions (Table 1A in the Appendix A). Based on the distance, size and discrepancy parameters of cluster solutions, six and seven cluster solutions were chosen as the number of splits for the *k-medoids* algorithm. We explored partitioning into eight clusters which was determined to lead to the emergence of small cluster sizes and regarded as unsuitable for analysis. Third, we compared the silhouettes of six and seven cluster solutions. The six cluster solution seemed to produce more distinct clusters with higher silhouette width parameters (see Table 2A in the Appendix A). Six representative school-to-work trajectories were thus defined.

3.3.2.2 Multinomial logistic regression

After applying sequence and cluster analyses, we use the multinomial logistic regression for two purposes. First, we investigate how individual characteristics (cohort, gender, parental SES, and region of residence) are related to the probability of following a particular school-to-work pathway, where the pathways are used as an outcome variable. Next, we analyse the link between the individual characteristics and experienced education and employment trajectories and the occupational outcomes at age 26 (outcomes are used as dependent variable). The model can be formalised as followed:

$$ln\frac{\Pr(y = m \mid \mathrm{x})}{\Pr\ (y = b \mid \mathrm{x})} = \mathrm{x}\beta_{m \mid b} \qquad for\ m = 1\ to\ J$$

where *b* is the base category or reference group. *J* stands for the number of possible outcomes. Solving this equation for each *m*, the predicted probabilities of an individual *x* falling into group (outcome) *m* can be calculated as followed:

$$\Pr(\ y = m \mid \mathrm{x}) = \frac{\exp(\mathrm{x}\beta_{m \mid b})}{\sum_{j=1}^{J} \exp(\mathrm{x}\beta_{j \mid b})}$$

Where $\sum_m \Pr(y = m) = 1$.

In the first set of models, *J* represents six education and employment clusters resulting from sequence analysis (“Rapid School-to-Work”; “Part-time employed”; “Non-Active”; “Unemployed”; “Higher education to Work”; “Prolonged Studies” as explained in section 4.1)

In the second set of models, *J* stands for five categories of occupational outcomes at age 26. To identify own occupational achievements we applied the Registrar-General Social Classification. The outcomes were grouped into three categories: "Professional & Managerial"; "Skilled non-manual"; "Skilled manual & Unskilled" (which also included partly skilled and those in armed forces). Being "Non-Active" or "Unemployed" contribute to the fourth and fifth occupational outcomes in the model.

3.3.3 Variables

Cohort, gender, and parental socio-economic background are our main covariates. We compare education and employment careers of young men and women born in 1974–79, 1980–84, and 1985–90. We model them together with cohort and gender used as dummy variables. Educational level was measured as: (1) low (compulsory school education, GCSE or equivalent); (2) medium ("A-levels" or equivalent); and (3) high ("1st Degree" or any other higher degree).[16]

To measure the parental socio-economic background we used data on occupational class coded using the Goldthorpe social class schema. The schema distinguishes between service class (mostly professional & managerial occupations), intermediate class (routine non-manual occupations, small proprietors, technicians), and working class (skilled manual, semi- and unskilled occupations) (Goldthorpe, 1983; Goldthorpe et al., 1980). If the occupational class of the mother and the father was different, we used father's occupational status. Various socio-economic classifications used by the Office for National Statistics such as the National Statistics Socio-economic Classification (NS-SEC), Standard Occupation Classification (SOC 2000 and SOC 2010), Registrar General's Social Class (SG) and Socio-economic Groups (SEG) are essentially all based on the Goldthorpe social class schema (ONS, 2019). Every time the new classification was produced by ONS it took into account modernisation of the labour market and the newest features of employment relations, i.e. aspects of work and of the labour contract. The latest classifications such as NS-SEC and SOC would capture the occupational outcomes of the youngest cohorts in the sample the best. However, as the oldest cohort in the sample entered the labour market before 2000s, Registrar General's Social Class (SC) was selected as an appropriate comparable measure of occupational outcomes of young adults and is consistently used in the BHPS and UKHLS. Considering young adults' parents have been established in the

[16] Information about the highest qualification was harmonised by the Understanding Society Support Team and accounts for the relevant level of received vocational training.

labour market before the changes were introduced in the Registrar General's Social Class (SC) used in BHPS, Goldthorpe social class schema serves as a more conservative measure to capture the family socio-economic background.

We additionally controlled for region of residence at age 16 in the model predicting education and employment pathways, distinguishing between "London and the South East", and the rest of England and Wales[17]. London and the South East of England are traditionally considered to be a human-capital "escalator" region due to the variety of available jobs and education opportunities as well as faster career progression (Fielding, 1992; Faggian & McCann, 2009). We have used two reference points in time to construct the migration trajectory for modelling occupational outcomes – region of residency at age 16 and region of residence at age 26. A respondent might either stay outside of London and the South East (lived outside of London and the South East at 16 and remained living outside of London and the South East at 26), move to London and the South East (lived outside of London and the South East at 16 and was living in London and the South East at 26), stay in London and the South East (lived in London and the South East at 16 and remained living in London and the South East at 26), move out of London and the South East (lived in London and the South East at 16 and lived outside of London and the South East at age 26)[18].

3.4 Results

We present the results in two parts. We analyse school-to-work trajectories between ages 16 and 26 (section 3.4.1) and examine the way they influence occupational outcomes in early working life (i.e. age 26; section 3.4.2).

3.4.1 Education and employment career sequences

3.4.1.1 Defining school-to-work pathways

The results of the analysis of education and employment trajectories among young people are structured as following. First, we discuss the descriptive findings regarding the complexity and changes in time spent in various economic activity spells by cohort and gender. Next, we present the results of sequence and cluster analysis applications and describe the distinguishing features of each of the six final clusters (the mean time spent in

[17] Sensitivity analysis of different levels of geographies in discussed in more detail in section 3.4.1.3
[18] If a sample member has moved to Scotland, he remains in the dataset and his region of residence is coded as "outside of London and the South East". There are less than 10 such cases in the sample.

various employment states, size and medoid of each cluster). We analyse how the distribution by clusters differ by cohort, gender, parental SES, and region of residence at age 16. We then describe how individual characteristics are related to the probability of following a particular school-to-work pathway.

Table 3.1 reports the mean time spent in each of the five labour market states (in months) and the mean number of spells across various labour market activity statuses by cohort and gender. The mean number of months spent in full-time employment between age 16 and 26 has declined considerably over time. Earlier cohorts (i.e. 1974-79 and 1980-84) spent over 50 months in full-time employment, while cohort born 1985-90 were in full-time work for an average of 42 months and significantly more time in education and part-time employment. This can be attributed to the continuous expansion of further and higher education.

The maximum number of changes in labour market states experienced by a person in the sample was 10, both for males and females.[19] The mean number of spells was consistently increasing among all cohorts with the youngest cohort experiencing less structured transitions than the older two cohorts. The increase in Shannon's entropy measure of sequence complexity confirms this finding (see Table 3.2). This evidence suggests that pathways have become more chaotic among the youngest cohorts and might be a reflection of the changing labour market and difficulties to find a job.

Women persistently spend less time in full-time employment and more time in part-time work or being inactive, compared to men across the three cohorts. The mean number of spells is higher among women in all cohorts suggesting that women experience more turbulent employment and education trajectories (Table 3.1).

[19] In this paper we do not account for the change of employers if someone has changed jobs but remained employed.

Table 3.1 Mean time (in months) spent in each state and mean number of states by cohort and gender

Cohort	Labour market activity status					Mean number of spells
	Full-time Employed	Part-time Employed	Student	Unem-ployed	Non-active	
1974-79						
Males	61	5	38	11	5	3.1
Females	48	11	38	8	16	3.5
Total	54	8	38	9	10	3.3
1980-84						
Males	59	4	39	12	5	3.3
Females	42	12	43	7	16	3.5
Total	51	8	41	9	11	3.4
1985-90						
Males	50	11	44	12	3	3.5
Females	37	16	41	9	17	4.1
Total	42	14	43	10	12	3.9

Note: Months are rounded to the nearest whole number.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

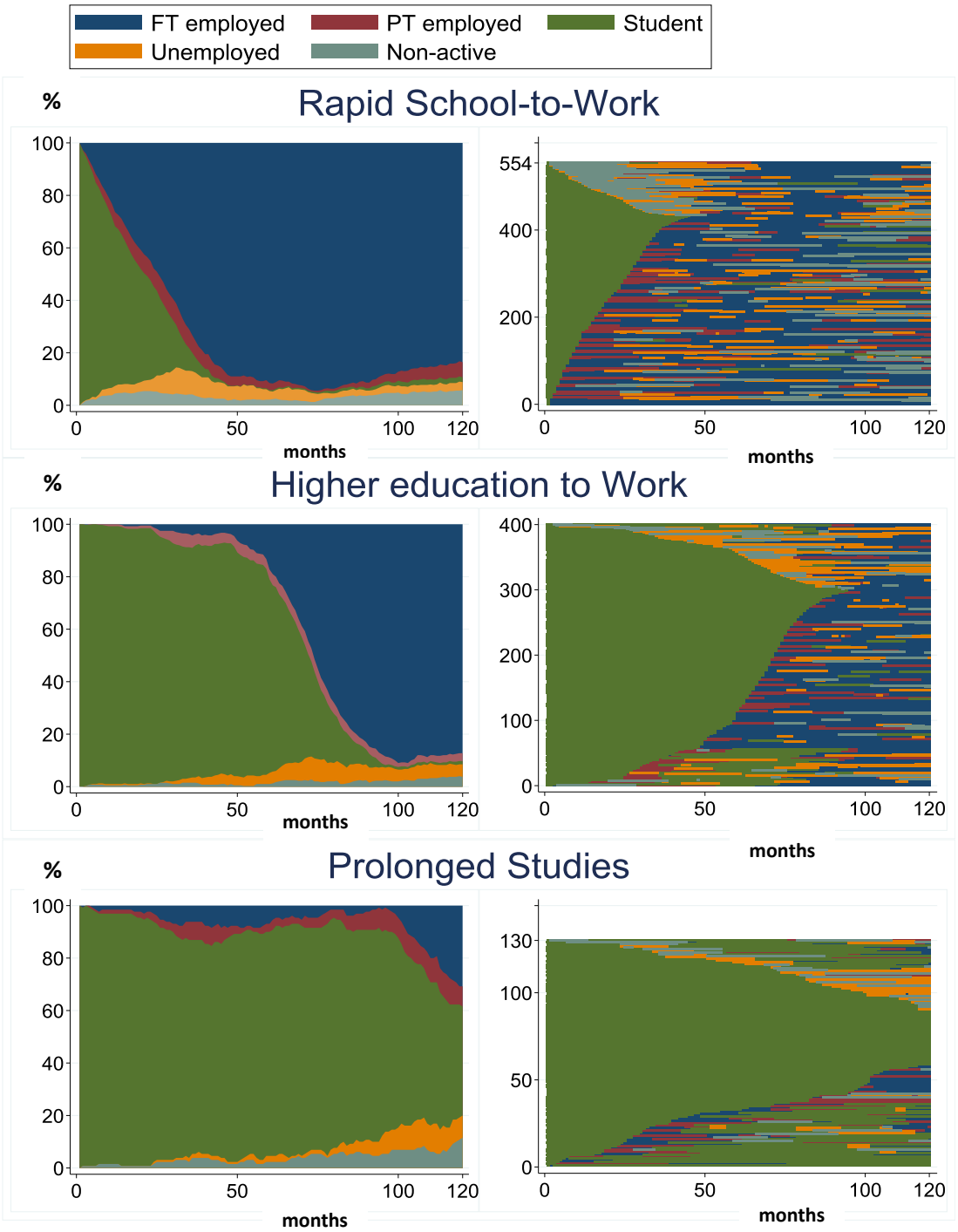
Table 3.2 Shannon's entropy measure for sequences by gender and cohort

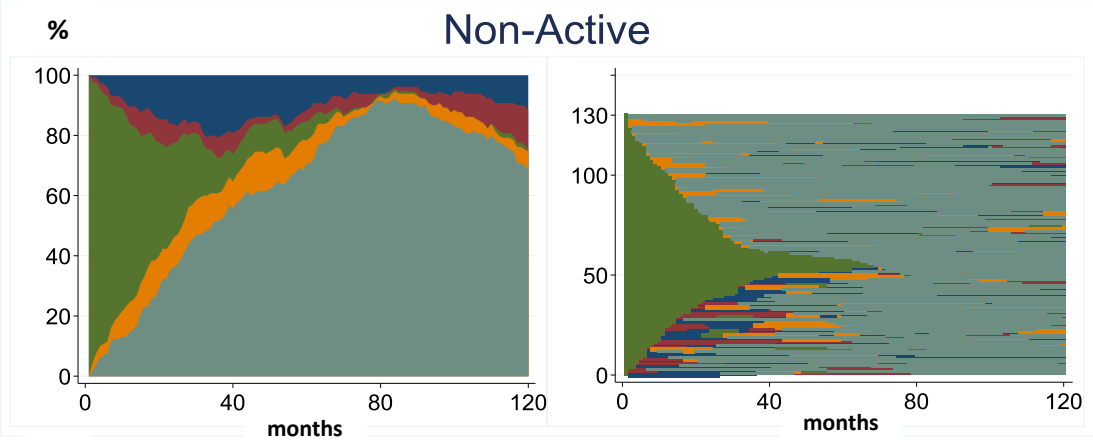
Gender	Cohort		
	1974-79	1980-84	1985-90
Males			
Entropy measure	0.974	0.977	0.999
Entropy measure 2	0.029	0.031	0.034
Females			
Entropy measure	1.130	1.137	1.213
Entropy measure 2	0.036	0.037	0.046
Total			
Entropy measure	1.050	1.058	1.123
Entropy measure 2	0.033	0.034	0.041

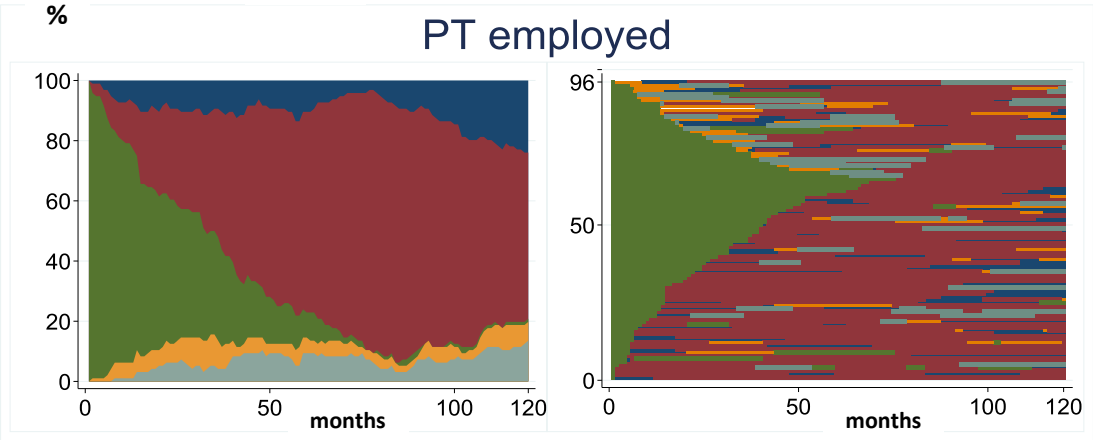
Note: Shannon's entropy (or "complexity") measure is based on relative duration spent in the different states (Shannon et al., 1948). Entropy measure 2 takes into account the number of spells and the sequence length.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

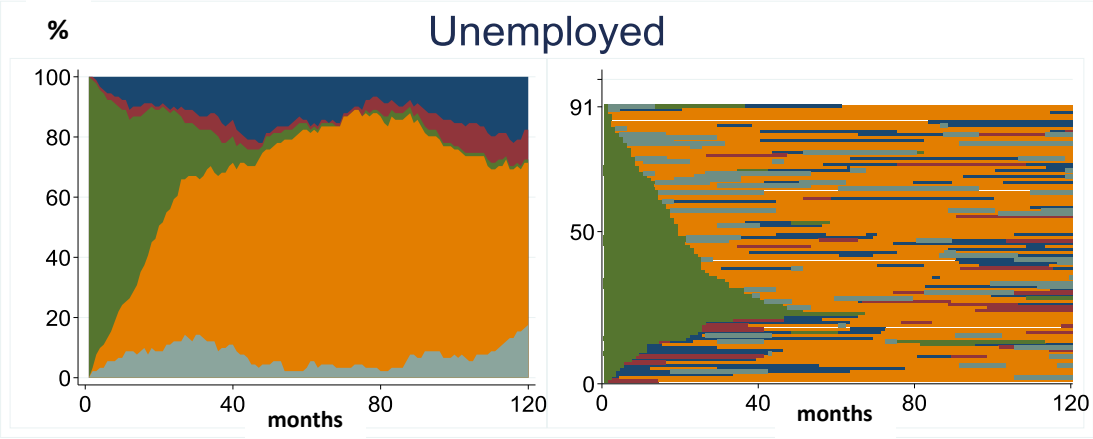
Figure 3.1 presents pairwise chronogram and indexplots for the representative sequences identified through the sequence and cluster analysis. Chronograms on the left side show the distribution of individuals across employment states by month scale. Index plots on the right side represent individual sequences over time. Each horizontal line represents an individual trajectory and different colour denotes each activity status. All individuals start at age 16 being enrolled in full-time education (still at school; green colour). The graphs should be read from left to the right. Index plots point out that many young adults, even in clusters where full-time employment is prevalent, do also experience spells of unemployment, part-time employment, and non-activity.

Figure 3.1 Combined chronogram and indexplots for education and employment pathways









Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Six distinctive educational and employment pathways were identified as: "Rapid School-to-Work"; "Higher education to Work"; "Prolonged Studies"; "Non-Active"; "Part-time employed"; and "Unemployed". Table 3.3 provides a summary of the number of months spent in each state by cluster together with the cluster size and medoids. A medoid is a young person in the cluster for whom the average dissimilarity of education and employment trajectory to all other objects in the cluster is minimal. For example, a medoid in the "Rapid School-to-Work" cluster is an individual who has spent the first 20 months after turning 16 in education and the next 100 months being full-time employed.

Overall, the “Rapid School-to-Work” transitions contribute almost 40% of all cases, suggesting that the accelerated British pattern of entering the labour market straight after school still dominates among young people. This pathway is characterised by little amount of time spent in education after age 16, with about 75% of time spent in full-time employment. Around 1/3 of young people opt for higher education prior to entering the labour market and refer to the second biggest cluster – “Higher education to Work”. This trajectory denotes individuals who spent around 5.5 years in education after the age of 16 and almost 4 years being employed. The third pathway describes a pattern of “Prolonged Studies” where on average 8 years is spent in education and 1 year being employed. 9% of young people in the sample are staying in education for a prolonged period of time. Around 1/5 of young people experience more turbulent and less structured transitions with longer spells of being non-active, unemployed or part-time employed. The “Non-Active” pathway refer to the cluster where individuals have spent around 6 years out of 10 being non-active with short spells of being employed. The “Part-time employed” pathways is defined by the prolonged time spent being part-time employed (~50% of time) with approximately 2.5 years spent in education and 1 year being full-time employed. The modal plot in the Appendix A (Figure 2A) provides a visual illustration of an artificial sequence composed by the most frequent state at each month after age 16 for each of the above clusters. Table 3A in the Appendix A additionally shows that the mean number of states in most of the clusters (with an exception of “Part-time employed” and “Non-active”) has been continuously increasing confirming that transitions among younger cohort have become more turbulent.

Table 3.3 Mean time spent in each state by cluster (in months) with size and medoid of each cluster

Pathways	FT Emp.	PT Emp.	Stu-dent	Un-emp.	Non-active	Size	%	Medoid
Rapid School-to-Work	88	5	19	5	4	554	40	20 S - 100 FT
Higher education to Work	45	4	65	5	2	400	29	71 S - 49 FT
Prolonged studies	8	6	98	4	5	130	9	120 S
Non-Active	12	6	20	8	74	130	9	20 S- 100 NA
Part-time employed	13	67	27	6	8	96	7	31 S - 89 PT
Unemployed	16	5	19	72	9	91	6	19 S - 101 U

Note: Months are rounded to the nearest whole number. "S" stands for being a student; "N-A" for being non-active; "PT" for being part-time employed; "FT" for being full-time employed; "U" for being unemployed.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

3.4.1.2 Personal background characteristics by pathways

Next, we investigated how the defined sequences are linked to the personal background characteristics to see whether any variation is observed by cohort, gender, and parental SES. Table 3.4 shows the distribution of educational and employment pathways across key individual background characteristics. It reveals key changes in the pathways undertaken by young people over time. The most pronounced changes are the significant decrease in the proportion of "Rapid School-to-Work" trajectories, and mirroring increase in "Part-time employment" and "Prolonged studies" for the youngest cohort.

Table 3.4 Background characteristics of education and employment pathways, % in rows

	Rapid School-to-Work	Higher education to Work	Prolonged studies	Non-Active	Part-time employed	Unemployed	Total number of people (100%)
Cohort							
1974-79	43	29	8	9	6	6	721
1980-84	39	28	10	9	6	8	451
1985-90	31	29	12	10	12	6	229
Gender							
Male	47	28	9	3	4	8	687
Female	32	29	10	15	9	5	714
Parental SES							
Service class	33	41	12	5	6	3	534
Intermediate class	45	23	8	9	8	7	379
Working class	49	18	6	13	6	7	366
Missing*	23	20	11	18	10	19	122
Region of residence at age 16							
Rest of E &W	38	29	9	11	7	7	1,066
London & SE	44	28	11	5	7	4	335
Total	40	29	9	9	7	6	1,401

Note: * - The category "missing" refer to young people whose parents were unemployed, non-active or had missing values in the occupation question.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

As expected, considerable differences in the distribution of trajectories are found with regards to parental socio-economic background. Almost half of young people from less advantaged backgrounds fall into "Rapid School-to-Work" trajectories as opposed to 1/3 from more advantaged backgrounds. Half of young people from the most advantaged background transition into higher or further education after school, compared to almost a third and a quarter of young people from intermediate and working class backgrounds. The highest proportion of young people in the "Prolonged studies" cluster comes from the service class. Young people from the working class comprise the highest proportion of the "Non-active" cluster.

Pronounced gender differences by pathways have been observed as well. Almost half of men and 1/3 of women in the sample fall into "Rapid School-to-Work" trajectory with equal proportions of men and women (37% and 39% correspondingly) opting for higher education after school. Among men and women together, women contribute to more than 80% of "Non-active" and 70% of "Part-time employment" clusters. To further investigate gender differences in the prevalence of these two clusters, we looked at the distribution of

their achieved educational level at age 26 with relation to the pathway they followed (Table 3.5). 80% of women in the "Non-active" cluster and 60% of women in the "Part-time employment" cluster remained low educated by the age 26. A similar tendency was seen among men, although the numbers are too small to draw firm conclusions. Both trajectories were more common among those with low educational level.

Table 3.5 Male and female educational attainment at age 26 and distribution by clusters

	Level of education			
Pathways	**High**	**Medium**	**Low**	**Total**
Rapid School-to-Work				
Males	7	32	61	324(100)
Females	11	39	50	230(100)
Non-Active				
Males	9	22	70	23(100)
Females	10	10	79	107(100)
Part-time employed				
Males	27	17	57	30(100)
Females	15	24	61	66(100)
Unemployed				
Males	2	17	81	54(100)
Females	11	8	81	37(100)
Higher education to Work				
Males	62	25	13	194(100)
Females	72	22	6	206(100)
Prolonged studies				
Males	45	24	31	62(100)
Females	40	31	29	68(100)
Total	410(29)	372(27)	619(44)	1,401(100)

Note: Proportions are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

We additionally looked at the distribution of clusters by educational attainment in the end of the observation period (Table 3.6). As expected, the majority of highly educated people (79%) have followed the "Higher education to Work" or "Prolonged studies" pathways, while a few (12%) obtained qualification while experiencing a "Rapid School-to-Work" trajectory. Even so, the latter was more common among medium and low educated individuals, with half of people in these groups making a "Rapid School-to-Work" transition. Low educated individuals tend to be largely engaged in "Non-active" and "Unemployed" pathways.

Table 3.6 Educational attainment at age 26 by education and employment pathways

Education and employment pathway	Educational level at age 26		
	High	Medium	Low
Rapid School-to-Work	12	52	50
Non-Active	3	4	16
Part-time employed	4	6	9
Unemployed	1	3	12
Higher education to Work	66	25	6
Prolonged studies	13	10	6
Total	100	100	100

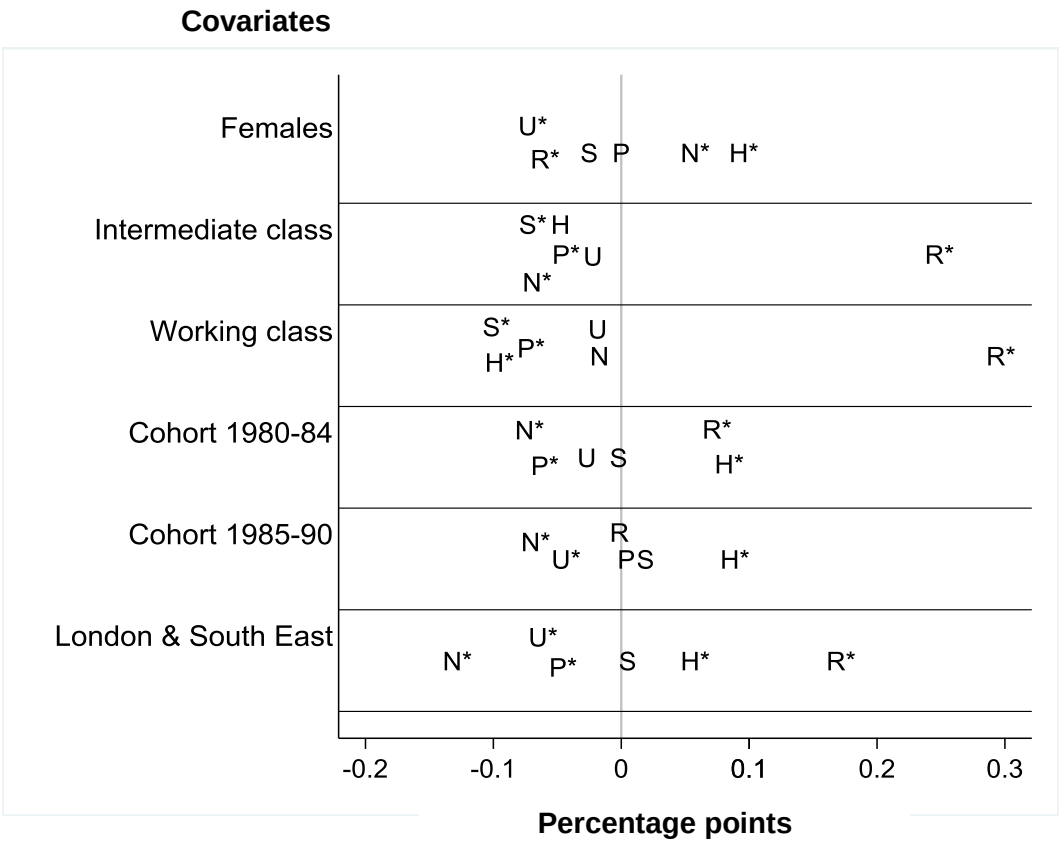
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

The distribution of clusters by the region of residence at age 16 shows a similar prevalence of "Rapid School-to-Work" and "Higher education to Work" trajectories both among those living in London and the South East of England as well as elsewhere. The differences are observed in the lower proportion of young people following "Non-Active" and "Unemployed" trajectories in the rest of England and Wales, pointing to the larger availability of jobs in the "escalator" region.

3.4.1.3 Probability of following school-to-work pathways

The background characteristics of education and employment trajectories have provided a good overview of the distribution of the main variables of interest. Next, we analysed how background characteristics (cohort, gender, parental SES and region of residence at age 16) relate to the probability of belonging to a certain education and employment pathway. Following McVicar and Anyadike-Danes (2002), we used our six education and employment clusters as outcome variable in a multinomial logistic regression analysis, with "Rapid School-to-Work" cluster chosen as a reference category (predicted probabilities of clusters are presented in Table 4A in the Appendix A). Based on our multinomial logistic regression estimates, Figure 3.2 presents the marginal effects of covariates on the probability of transitioning through a given pathway (a full table with estimates from multinomial logistic regression models is presented in the Appendix A: Table 5A_1 reports relative risks; Table 6A reports marginal effects presented on the graph below).

Figure 3.2 Marginal effects on six pathways outcomes probabilities estimated from multinomial logit models



Note: "R" refers to "Rapid School-to-Work" cluster; "N" to "Non-active"; "P" to "Part-time employed"; "U" to "Unemployed" , "H" to "Higher education to Work"; "S" to "Prolonged studies". Covariates are presented on the vertical axe. Males, young people from service background, young people born in 1974-79, and those not living in London and the South East at age 16 are chosen as reference categories. Marginal effects show the differences in the predicted probabilities for cases in one category relative to the reference category when all other variables equal their means. Reference categories refer to the 0 line (0 percentage point difference). E.g. pathways placed left from 0 line for "Females" row mean females have lower likelihood of following "U", "R", "S", "P" clusters (compared to males). Similarly, the probability of following "N" pathway is 6 percentage points higher for females than for males and is placed on the right side of the 0 line. The probability of following "H" pathway is 10 percentage points higher for females than for males and is placed further right from the "N".
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Individuals from cohorts 1980-84 and 1985-90 were more likely to continue education after school and were surprisingly less likely to follow the "Non-active" pathway compared to the oldest cohort born 1974-79. According to our model estimations, females are much less likely to follow "Rapid School-to-Work" and "Unemployment" pathways, but are significantly more likely to follow "Non-active" and "Higher education to Work" pathways than men, which confirm the descriptive findings. Socio-economic background is also a significant factor for predicting education and employment pathways. Young people from

less advantaged backgrounds were much more likely to follow the Rapid School-to-Work transitions and less likely to experience the prolonged education pathway as compared to the most advantaged group. Young people from lower socio-economic backgrounds were also less likely to experience longer spells of part-time employment. With regards to geography, young people living in London and South East at age 16 were significantly more likely to either follow the Rapid School-to-Work trajectories or opt for university degree. They were also significantly less likely to follow more turbulent pathways of non-activity, part-time employment and unemployment, confirming the relevance of labour market conditions in defining young people's choices and future career prospects.

Tables 5A_2, 5A_3, 5A_3 and Tables 6A_2, 6A_3, 6A_4 in the Appendix A present results from a sensitivity analysis of various levels of geographies and report relative risks and marginal effects, correspondingly. Model 5A_2 takes into account urban vs. rural level of geography. Young people living in an urban area at age 16 were significantly more likely to follow "Higher education to Work" and "Rapid School-to-Work" trajectory compared to those living in rural areas. They were less likely to follow "Non-active", "Part-time employed" or "Unemployed" trajectories than young people living in a rural area. Model presented in Table 5A_3 further distinguishes between London and other urban areas. Although the coefficients are significant, the differences in magnitude of the effects between London and other urban areas are minor and therefore the model does not bring additional insights into the analysis. Model 5A_4 takes into account the regional level of geography and distinguishes between London and the South East, South West, East, Midlands, North, and Wales. Although, some coefficients are significant, the sample size is too small to make any plausible conclusions as some categories contain less than 5 people per cell (e.g. two people in the South West and three people in the East following the "Unemployed" pathway). Both urban/rural and regional levels of geographies play an important role in both predicting employment and education trajectories as well as occupational outcomes. Apart from the sample size *per se*, another reason for capturing geography at the level of London and the South East vs the rest of England and Wales is associated with a high heterogeneity of labour market areas within urban and rural areas, as well as within regions. As the sample size is not big enough to perform a smaller level geography analysis, a more general division will capture the advantageous labour market position of London and the South East and serve as a contextual variable.

In general, this analysis extends the descriptive findings of section 3.4.1.2 and confirms the significant association between education and employment pathways and cohort, gender, parental SES, and region of residence.

3.4.2 Occupational outcomes at age 26

Collectively, personal background characteristics, and education and employment pathways are key in shaping labour market outcomes in the transition to the workforce. We explore the influence of these factors on occupational outcomes ten years after completion of compulsory education, employing a series of multinomial logistic models. Our dependent variable comprises five potential outcomes: Professional and managerial occupation, skilled non-manual occupation; skilled manual and unskilled occupation; non-active, and unemployed. These outcomes are measured at age 26. Given small numbers, those remaining in education at this age are considered to be non-active, comprising around 1/3 of this group.

The results are reported in the following order: First, we investigate the effects of education and employment pathways on occupational outcomes including the six representative trajectories identified above as dummy covariates in our model. The “Rapid School-to-Work” pathway is used as reference category. Next, we analyse the influence of personal background characteristics (cohort, gender, parental SES) and how interactions between these characteristics and education play out. We additionally control for the effects of the “escalator” region and distinguish between those who moved to or lived in London and the South East of England and those who moved to or lived in the rest of England and Wales.

Table 3.5 presents the marginal effects of covariates on occupational outcomes probabilities estimated from multinomial logistic models (a full table with relative risks estimates from multinomial logistic regression models is presented in Table 9A_1 in the Appendix A). The predicted probability of being in skilled manual or unskilled occupation is the highest (0.27), following the skilled non-manual and professional occupations (0.23 and 0.21, accordingly, see Table 7A in the Appendix A). Table 8A in the Appendix A presents the distribution of covariates by occupational outcomes.

Table 3.5 Marginal effects on occupational outcomes at age 26 probabilities estimated from multinomial logit models

Variables	Prof & Manag	Skilled Non-Manual	Skilled manual / Unskil	Non-Active	Unem-ployed
Cohort (1974-79 - Ref.)					
1980-84	-0.008	0.026	***0.045***	-0.034	-0.030
	(0.022	(0.022)	(0.022)	(0.020)	(0.015)
1985-90	-0.032	-0.039	***0.070***	0.008	-0.007
	(0.030	(0.032)	(0.029)	(0.025)	(0.020)
Gender (Males - Ref.)					
Females	0.034	***0.128***	***-0.112***	0.003	***-0.053***
	(0.020	(0.020)	(0.020)	(0.018)	(0.015)
Parental SES (Service class - Ref.)					
Intermediate class	***-0.087***	0.020	***0.157***	-0.022	***-0.068***
	(0.022	(0.023)	(0.023)	(0.020)	(0.017)
Working class	***-0.119***	-0.036	***0.231***	-0.029	***-0.047***
	(0.024	(0.025)	(0.021)	(0.020)	(0.015)
Missing	***-0.169***	0.013	***0.169***	-0.043	0.030
	(0.048	(0.044)	(0.039)	(0.034)	(0.021)
Migration between ages 16 and 26 (Stayed outside London and SE - Ref.)					
Moved to London & SE	***0.103***	0.047	0.007	-0.037	-0.120
	(0.045)	(0.054	(0.067)	(0.058)	(0.076)
Stayed in London & SE	0.008	0.019	***0.087***	***-0.079***	***-0.035***
	(0.024)	(0.026)	(0.025)	(0.025)	(0.019)
Moved out from London & SE	0.014	0.024	0.028	-0.015	-0.050
	(0.050)	(0.053)	(0.055)	(0.049)	(0.046)
Education and Employment Pathways (Rapid School-to-Work -Ref.)					
Higher education to Work	***0.189***	***0.051***	***-0.127***	***-0.094***	-0.019
	(0.020)	(0.022)	(0.024)	(0.026)	(0.017)
Prolonged studies	***0.126***	***-0.162***	***-0.251***	***0.263***	0.024
	(0.038)	(0.052)	(0.054)	(0.025)	(0.025)
Non-Active	-0.064	***-0.169***	***-0.109***	***0.323***	0.019
	(0.061)	(0.058)	(0.047)	(0.025)	(0.029)
Part-time employed	0.078	-0.044	-0.040	0.026	-0.020
	(0.041)	(0.042)	(0.040)	(0.037)	(0.033)
Unemployed	-0.049	***-0.230***	-0.042	***0.129***	***0.193***
	(0.081)	(0.088)	(0.051)	(0.040)	(0.020)

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses. Marginal effects show the differences in the predicted probabilities for cases in one category relative to the reference category when all other variables equal their means. Reference categories refer to the 0 percentage point difference. E.g. young people from working class are on average 12 percentage points less likely to be in professional and managerial professions at age 26 and 23 percentage points more likely to be in skilled manual or unskilled occupations, given all other covariates are taken at their means.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 9A_2 and Table 9A_3 in the Appendix A report relative risks and marginal effects of multinomial logistic models with cohort gender, parental SES, and migration trajectory

before including education and employment pathway in the models. Education and employment trajectories are a significant predictor of occupational outcomes, although including trajectories in the model stepwise has only a mild mediating effect on the main coefficients obtained in Table 9A_1 in the Appendix and Table 3.5. The latter confirms the significant effect of gender, parental SES, and migration trajectory on predicting occupational outcomes at age 26.

Those who have opted for higher education (clusters "Higher education to Work" and "Prolonged studies") have significantly higher chances (18.9 and 12.6 percentage points respectively) of being in professional and managerial positions and less chance of being in skilled manual or unskilled occupations compared to those who followed the "Rapid School-to-Work" pathway. Transitioning through a part-time employment pathway also leads to higher chances of being in a professional and managerial occupation. This finding is somewhat surprising at a first glance, but can mask the effect of qualification mismatch, i.e. inability to find a suitable full-time job, and serve as an alternative to being unemployed while looking for a better employment. On the other hand, it might suggest that being employed on a part-time job enables to accumulate working experience which is increasingly valued in the labour market and seems to be essential for high-skilled occupations.

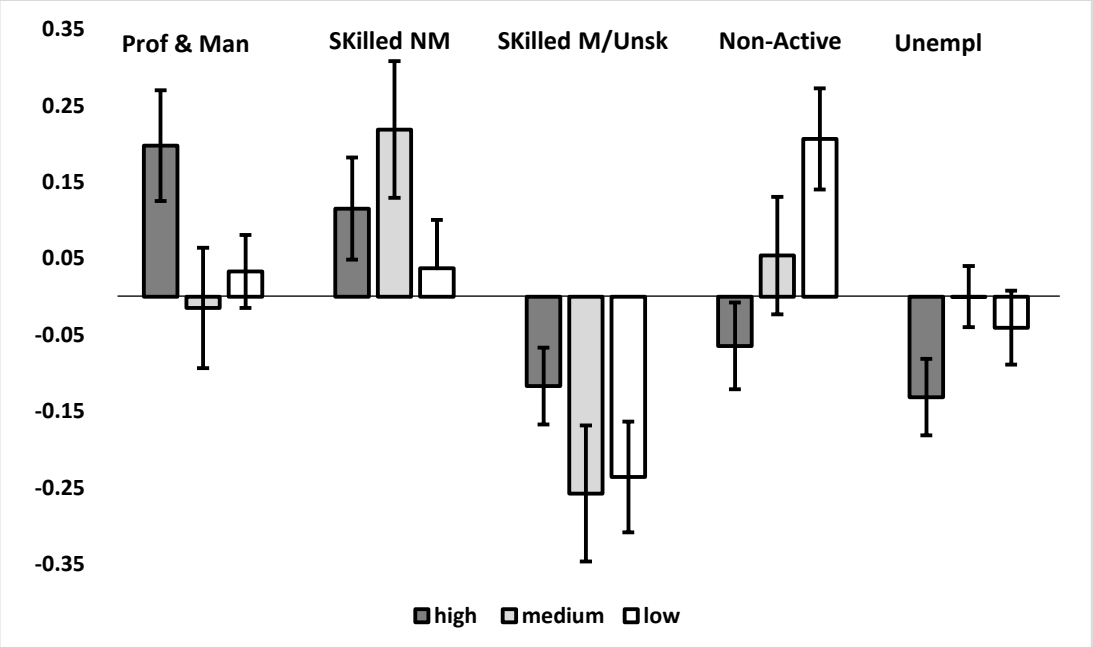
Following the "Non-active" and "Unemployment" trajectories significantly reduce the chances to be employed and increases the chances of staying out of the labour market at age 26 compared to the "Rapid School-to-Work" trajectory. This finding suggests that longer spells of non-activity and unemployment reduce the chances of being successfully integrated into the labour market and thus have a scarring effect on future employment trajectories which might lead to persistent disadvantage in later life.

Overall, our estimations show that the higher the educational level is the better the chances of being in professional and managerial occupations are, although the chances of being unemployed are higher as well. The question arises as to whether the expansion of higher education has worsened the chances of a successful transition to the labour market among the youngest cohort due to the increase in competition and overqualification. Our main model estimations suggest that the cohort variable is not significant and therefore factors affecting occupational outcomes of young people should not differ by cohort. We additionally checked the interaction effect between the cohort and educational level (Table 10A in the Appendix A). The effect was significant only for the middle cohort born 1980-84

and therefore we can conclude that the effects of educational attainment on occupational outcomes were significant but did not differ by cohort and thus the expansion of higher education did not affect people from the youngest cohort in any different way than those in the older two cohorts.

Women are more likely to be in professional and skilled non-manual occupations, but less likely to be in skilled manual occupations or unemployed. Regardless of the educational level, women are more likely to be in skilled non-manual occupations and less likely to be in skilled manual occupations (Figure 3.3; Table 11A in the Appendix A). Highly educated women have higher chances of being in professional and managerial positions and are less likely to be non-active or unemployed than highly educated men. These findings are confirmed by additional regression estimates from a model including only highly educated individuals (Table 12A in the Appendix A), suggesting that highly educated women do have better employment chances than men. Low educated women, on the contrary, have a much higher chance to be non-active and thus excluded from the labour market.

Figure 3.3 Marginal effects of education on occupational outcome probabilities for women compared to men

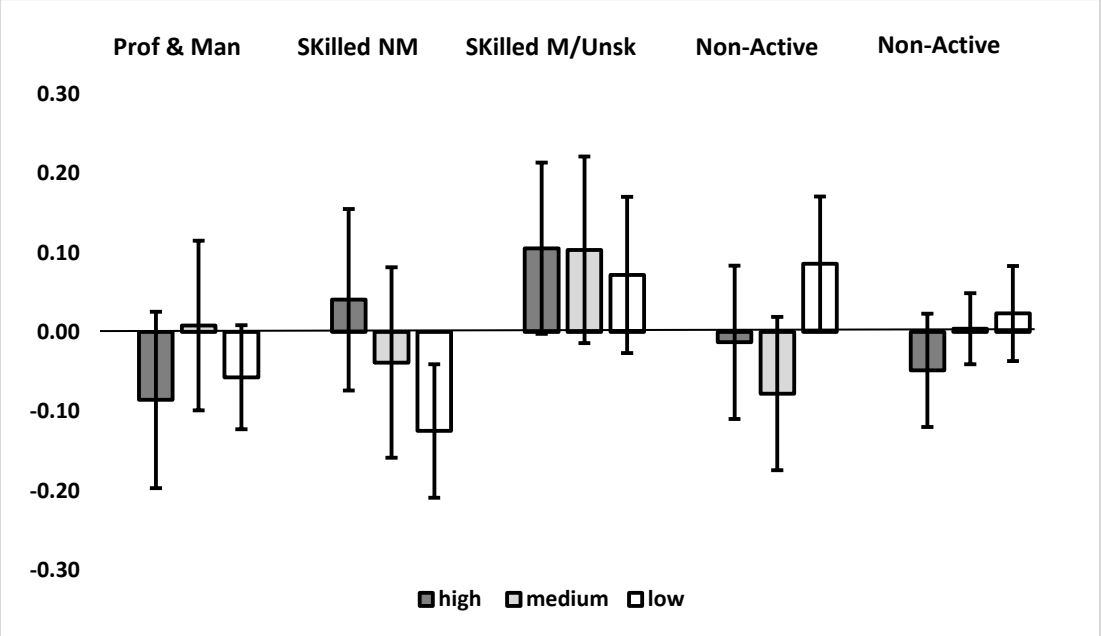


Note: Men are the reference category.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

The results also reveal that young people from working class backgrounds experience lower chances of being in professional and managerial positions and higher chances of transitioning to skilled manual or unskilled occupations. Since the expansion of higher

education has prompted increased participation rates of young people from less advantaged background among the youngest cohorts, the question arises whether obtaining a degree influences labour market outcomes differently for various socio-economic groups. To this end, we include an interaction term between education and socio-economic background in the model (Table 13A in the Appendix A). Figure 3.4 shows the marginal effects of education on occupational outcome probabilities among young people from a working class compared to a service class background. The results for the intermediate class were mostly not significant (Table 13A in the Appendix A). Highly educated young people from a working class background experience higher probability of being in skilled manual occupations compared to highly educated young people from more advantaged backgrounds. The latter suggests that despite having a degree young people from the working class are still left in a less favourable position than highly educated young people from more advantaged backgrounds. Additionally, we ran the model on occupational outcomes including only highly educated individuals (Table 12A in the Appendix A). The results confirm lower chances of highly educated young people from working class backgrounds achieving the same level of labour market success as their counterparts from more advantaged backgrounds.

Figure 3.4 Marginal effects of education on occupational outcome probabilities among young people from a working class background



Note: Figures represent the marginal effects for young people from the working class compared to service class. Service class is the reference category.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

We additionally controlled for the migration pattern between age 16 and 26. The results confirmed the "escalator" effects of London and South East suggesting that residents and in-migrants experience higher chances of being in professional and managerial occupations and lower chances of being unemployed or non-active (Table 3.5).

3.5 Discussion

In this paper we analysed 10-year school-to-work trajectories and labour market outcomes among young people born in the late 1970s and 1980s. A core aim of our research was to assess changes and continuities in the traditional British pattern of the transition to adulthood characterised by a rapid entry into the working life. We show that trajectories have become more complex and diverse, with longer time spent in education or vocational training observed among the youngest cohorts. Still, almost a half of men and third of women are following the traditional British pattern of rapid school-to-work transitions. Our analysis shows that occupational outcomes 10 years after school are linked to the individual education and employment trajectories, but the magnitude of these effects is altered by gender and parental socio-economic background. Despite an overall positive association between entering higher education and securing a job which is high in the occupational hierarchy, highly educated young people from working class families have significantly lower chances of being in professional and managerial occupations after graduation. We also find further evidence for the persistence of patterns of disadvantage over time. Thus, low-educated young people as well as those from lower socio-economic backgrounds are more likely to be engaged in low skill occupations or experience longer spells of unemployment and non-activity. Longer time spent in unemployment or non-activity lead to higher chances of staying unemployed or non-active and might have a continuous scarring effect in later life. Low-educated women, in particular, were found to be highly likely excluded from the labour market for the longer periods.

Despite the fact that accelerated pathways from school to work have remained the most prevalent among young adults aged 16 to 26 over the last 25 years, the pathways themselves have changed. We have observed the continuous decrease in the mean time spent in full-time employment and an increase in part-time employment and time spent in education among the youngest cohorts. The shift towards part-time employment might, on the one hand, mirror an increase in flexible working arrangements for those who seek them, but on the other hand, it may mask the lack of opportunities to find a full-time job.

The continuous expansion of higher and further education has resulted in a steady increase in the proportion of young people continuing education after school. Although, despite the prolonged stay in education, the proportion of highly educated individuals in each cohort by age 26 increased very little. This finding poses further question whether time spent in education without an increase in qualifications can be seen as a way to avoid unemployment or non-activity. The effects of educational attainment on occupational outcomes did not differ by cohort and thus the expansion of higher education did not affect young people from the three cohorts of interest differently. And yet, many young adults across all cohorts experience spells of unemployment, part-time employment, and non-activity even in clusters where full-time employment and education are prevalent, suggesting that periods of temporary uncertainty has become an integral part of school-to-work trajectories.

Education and employment transitions are still highly defined by gender. Women on average spent less time being full-time employed and more time being part-time employment or being non-active. Almost half of men and less than 1/3 of women followed the "Rapid School-to-Work pathway". As expected, gender differences were observed in the occupational outcomes at age 26. Whilst highly educated women exhibit higher chances of being in professional and managerial positions than highly educated men, low educated women are at high risk of either working part-time or being completely excluded from the labour market.

Pronounced differences were observed in school-to-work trajectories as well as in occupational outcomes with regards to the parental socio-economic background. "Rapid School-to-Work" pathways are mostly followed by young people from less advantaged backgrounds. More than half of the young people from the service class opt for continuing education after school, compared to less than a quarter from the working class. Although with the overall expansion of higher education and increased shares of individuals from working class backgrounds opting for university degree, our analysis confirms that this does not lead to equal opportunities on the labour market after graduation. Highly educated young people from less advantaged backgrounds experience lower chances of securing a job in professional and management occupations compared to their counterparts from more advantaged backgrounds. The fact that highly educated young people from less advantaged backgrounds are doing worse in the labour market than their counterparts from privileged backgrounds calls for the better understanding of factors driving these

differences. Previous evidence found the significance of pre-university educational achievements (Del Bono & Holford, 2018), educational aspirations and cultural background (Croll, 2008; Berrington et al., 2016), as well as interpersonal skills (Longhi et al., 2018) and social networks on educational performance and future labour market achievements. Future research could study how the combination of these factors affects education and employment trajectories from a longitudinal perspective to help implementing evidence-based policies in the future.

This paper provides a strong evidence of persistence in less favourable outcomes. While the increased uncertainty in the labour market results in the large proportion of young people experiencing at least one spell of unemployed or non-activity in early career, for some this period might result in long-term unstructured "patchwork careers". Our analysis shows more disrupted and disadvantaged pathways of "Non-active" and "Unemployed" increase the chances of staying non-active or unemployed for longer periods of time and pose a serious threat for young people's future career progression. This finding confirms some of the earlier evidence found regarding the persistence of precarious employment conditions among less advantaged youth, e.g. the existence of the "low-pay, no-pay cycles" (Crawford et al., 2008; Schieldrick et al., 2010; Furlong et al., 2018). We show that longer periods of time spent unemployed or non-active are more prevalent among those without qualifications, although might also occur among highly educated (as also shown e.g. Bell & Blanchflower, 2010).

A few directions for future research and policy implications must be discussed. Our analysis has shown how crucial past school developments are for future career and labour market outcomes of those in their mid 20s. Future analysis could incorporate longer sequences and occupational mobility for older cohorts, as well as compare outcomes in long-term earning trajectories. This could improve our understanding of mechanisms of reproduction of social inequalities which stem from the education and employment trajectories in early adulthood and be used as evidence for planning effective policy intervention to help those in vulnerable positions not to fall into the long-term pattern of disadvantage.

Although we confirm that highly educated women have higher chances attaining professional and managerial positions by their mid 20s, there remains strong evidence of the existence of gender pay gap in these occupations later in life (Blundell et al., 2010; Olsen et al., 2018). It is therefore important to further investigate how other life course events (e.g. career breaks and occupational downgrading after childbirth) might have a

scarring effect on women's employment later in life. Considering the decrease in teenage pregnancies and overall postponement of starting a family (Public Health England, 2018; Ní Bhrolcháin & Beaujouan, 2012), it remains unclear why low educated women are excluded from the labour market and suffer greater consequences than low educated men. This calls for a better understanding of female careers in general.

Extended periods of job insecurity and unemployment have been shown to have negative consequences on young people's well-being and mental health and might lead to severe illnesses, depression and low self-esteem, which subsequently pose a threat towards future employability chances (Bell & Blanchflower, 2010; Sissons & Jones, 2012). On a macro level, youth unemployment, underemployment and non-activity have a large scarring effect on public finance. As the origins of the precarious educational and employment trajectories are multifold, it is clear that improving career advice services and continuing with the widening participation programmes could help creating a stimulating environment during the time of making career decisions in secondary school. A better communication between employers and universities could contribute to a decrease in the skills mismatch and reduce in the numbers of young people forced to start jobs which require lower qualification than those they possess.

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Chapter IV

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Chapter III builds upon Chapter I and Chapter II and investigates how partnership transitions have changed in early adulthood. Chapter II has shown that education and employment trajectories are still largely defined by gender and socio-economic background. Young people from less advantaged backgrounds were found to be persistently more likely to follow the rapid school-to-work trajectories and thus could be more prompt to follow "the fast track" in family careers as well. On the other hand, the analysis has shown a persistence of disadvantaged patterns with longer cycles of being unemployed and non-active among low educated and lower SES groups which could alter their partnership trajectories. Low educated women as well were found to be excluded from the labour market, confirming the persistence of gender differences, despite the feminisation of higher education and labour market. Chapter III adds up how gender and socio-economic background affect partnership transitions. If little or no differences are observed, that would suit as a further evidence of de-coupling of roles in lives and a potential emergence of a new standardised pattern in partnership transitions. Furthermore, a summary of period patterns in fertility and partnership transitions in Chapter I has shown a universal increase in non-marital cohabitation and childbearing over the past few decades. Chapter III will shed light as to whether we observe any further differences among the three birth cohorts, which entered their first unions after cohabitation has become a cultural norm. Chapter III is a draft paper which will be submitted shortly to Advances in Life Course Research journal.

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Make Up and Break Up? Partnership Transitions of Young Adults in England and Wales

This study investigates partnership transitions of young adults born between 1974 and 1991 in England and Wales. These cohorts were affected most by societal changes including the expansion of higher education, the increase in gender equality, and ideational changes. It is yet unclear whether partnership trajectories of young adults today continue to follow the trends set up by older cohorts and which implications it might have on later life outcomes. This study applies competing risks event history analysis to combined data from the British Household Panel Survey and the UK Household Longitudinal Study to determine how birth cohort, gender, socio-economic background, and educational attainment influence partnership changes. Cohabitation has become a universal form of first union formation among young adults born in the late 1970s and in the 1980s in England and Wales, but their first unions do not last long. While cohabiters are equally likely to marry or separate in the oldest cohort (1974–79), cohabiting unions are very likely to end in separation among the two youngest cohorts (1980–84 and 1985–91). Repartnering levels have also increased; they are the highest among the youngest cohort leading to an increase in serial cohabitations. The increased prevalence of sliding into and out of cohabitation reflects significant changes in the meaning young people attach to first partnerships. The analysis shows little differences in partnership patterns by socio-economic background and educational level supporting that the main changes have taken place across birth cohorts.

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4.1 Introduction

First union formation is traditionally considered to be an important marker of the transition to adulthood next to leaving the parental home, completing education, and entry into the labour market (Billari 2001; Billari & Liefbroer, 2010; Huinink, 2013). Perceptions of maturing and becoming an adult have been affected by societal changes including the expansion of higher education, the increase in gender equality, and ideational changes (van de Kaa, 1987). These have led to the emergence of new living arrangements such as non-marital cohabitation, living-apart-together (LAT) relationships and shared housing (Liefbroer, 1999; Corijn & Klijzing, 2001; Mills & Blossfeld, 2003; Furlong & Cartmel, 2007). Additionally, the decrease in normative controls and increased individualisation have led to a larger freedom of personal life decisions and greater extent of fulfilling individual pursuits in various life domains including partnerships (Liefbroer, 1999; Shanahan, 2000; Beck & Beck-Gernsheim, 2001; Macmillan, 2005). As a result, the standardised pattern of marriage, co-residence, and family formation has gradually vanished. This raises the question of whether and how young adults' partnership experiences have changed over the past few decades.

There is a large body of literature on single-event partnership experiences, i.e. first union formation, union dissolution, and repartnering in industrialised countries (e.g. Wu & Balakshiran, 1995; Berrington & Diamond, 2000; Wu & Pollard, 2000; Berrington, 2001; Manning & Smock, 2002; Wu & Schimmele, 2005; Skew et al., 2009; Guzzo, 2014; Mooyaart & Liefbroer, 2016). Research has examined the effect of changes in other life course domains such as education and employment on various partnership transitions (e.g. Thorntonet al., 1995; Smock & Manning, 1997; Clarkberg, 1999; Berrington & Diamond, 2000; Wu & Pollard, 2000; Winkler-Dworak & Toulemon, 2007; Jalovaara & Fasang, 2015). Additionally, a few recent studies have investigated partnership trajectories (Ermisch & Francesconi, 2000; Steele et al., 2006; Hannemann & Kulu, 2015; Perelli-Harris & Lyons-Amos, 2015, 2016). However, these studies have not examined partnership transitions of the youngest cohorts born in the 1980s which were affected most by both ideational and economic changes in society, i.e. the expansion of higher education, globalisation of the labour market, and contraceptive revolution. Considering the increased complexity and individualisation of the life course, it is yet unclear whether partnership trajectories of young adults today continue to follow the trends set up by older cohorts and what implications it might have on later life outcomes.

This paper contributes to the literature by focusing on partnership experiences of young adults born between 1974 and 1991 in England and Wales. Specifically, we address four research questions, i.e. how partnership transitions have changed across cohorts among men and women and how they have been affected by parental socio-economic background and educational attainment. These dimensions are particularly interesting to study as previous research has shown that the timing and type of partnership transitions individuals experience vary by social background, educational level, and gender. However, we do not know whether and how these associations hold among younger cohorts. In particular, the British pattern of the transition to adulthood is quite distinctive as it has been traditionally associated with early transition from school to work followed by diverse household and family formation patterns (Cavalli & Galland, 1995), varying according to class, gender, and ethnicity (Cavalli & Galland, 1995; Coffield, 1995; Bynner, 2001, 2005). Parental socio-economic resources play a significant role in shaping young people's life courses through the transmission of educational choices, expectations on 'leaving the nest', and attitudes towards cohabitation and marriage (Berrington & Diamond, 2000; Wiik, 2009; Mooyaart & Liefbroer, 2016). Women's increased participation rates in higher education and the ongoing feminisation of the labour market in Britain have contributed to the changing role of women in society increasing similarity in life transitions among young women and men (Stone et al., 2014; Falkingham et al., 2016).

We compare partnership transitions of men and women born in 1974–79, 1980–84, and 1985–91 and follow them between 1991 and 2015. We investigate smaller cohorts as opposed to traditional 10-year groups to see whether there are any gradual trends in partnership transitions. We conduct a longitudinal analysis of partnership experiences and investigate factors influencing four transitions: first union formation, outcome of first cohabiting unions (end of cohabitation via marriage or separation), dissolution of marriages with first partners, and second union formation. We apply competing risks event history models to combined life histories from the British Household Panel Survey (BHPS) and the Understanding Society study (UKHLS).

4.2 Research questions

We address two key research questions outlined below:

1) How have partnerships experiences changed across the cohorts?

2) How do partnership histories differ by gender, parental socio-economic background, and educational attainment?

4.3 Background

4.3.1 Cohort changes in partnership experiences

In the last decades, the proportion of first unions which start as direct marriage has decreased, whereas age at first marriage as well as the prevalence of non-marital cohabitation has increased in the UK (Berrington & Diamond, 2000; Ermisch & Francesconi, 2000; Murphy 2000; Steele et al.i, 2006; Hannemann & Kulu, 2015). Between 1994 and 2014, the proportion of young men and women aged 20-29 who were cohabiting prior to marriage increased from around 50% to 80% (Office for National Statistics 2017). Following the increase in pre-marital cohabitation, the direct marriage rate has declined dramatically. The proportion of women who married directly fell from 54% in the 1950–1962 birth cohort to 21% in the 1963–1976 cohort (Ermisch & Francesconi, 2000). At the same time, the mean age at first marriage has increased rapidly from 27.5 in 1991 to 32.7 in 2014 among men and from 25.5 to 30.8 among women (Office for National Statistics 2017). The mean age at first union formation has also increased indicating that the spread of cohabitation has not offset changes in the levels and timing of marriage (Ermisch & Francesconi, 2000).

Separation and divorce levels have been increasing as well. Previous research on the UK shows that while one-fifth of marriages that were formed between 1965 and 1974 ended in divorce before their 15th anniversary, more than one-third of the post-1995 marriages have experienced separation (Hannemann & Kulu, 2015). In line with this, repartnering rates have gone up with cohabitation being the predominant way of repartnering both after non-marital separation and divorce (Ermisch & Francesconi, 2000; Steele et al., 2006; Skew et al., 2009). Regardless of the type of first union, an increase in higher-order unions and in the number of serial cohabiters (i.e. individuals who experience a series of cohabiting unions) has been observed among younger cohorts in Britain as well (Beaujouan & Ní Bhrolcháin, 2011; Bukodi, 2012).

Following from the above, our hypotheses regarding cohort differences in partnership experiences are as follows. *We expect a continuing decrease in direct marriage rates and an overall postponement of partnership formation among the youngest cohorts (Hypothesis 1a). Cohabiters in the youngest cohort are expected to have higher separation rates and*

lower marriage rates compared to older cohorts (Hypothesis 1b). Last, we expect higher rates of repartnering among the youngest cohorts (Hypothesis 1c).

4.3.2 Gender differences in partnership experiences

Research shows that women leave the parental home and enter first unions earlier than men (Berrington & Murphy, 1994; Berrington, 2001; Andersson & Philipov, 2002; Winkler-Dworak & Toulemon, 2007). Prior to the expansion of higher education which started in the 1980s, the gender gap in the timing of leaving the parental home was solely attributed to partnership formation (Berrington & Murphy, 1994; Berrington, 2001). After the expansion of higher education, females' enrolment rates in the UK have increased and exceeded those of men, creating a reverse gender gap (Broecke & Hamed, 2008) and proposing another explanation for leaving the parental home earlier. Today women still enter first unions earlier than men in most countries (Wright 2016a; Andersson et al., 2017).

In the late 1980s and early 1990s women were more likely than men to marry their first cohabitating partner, and men had a greater probability to dissolve their first cohabiting unions (Thornton, 1988; Wu & Balakshiran, 1995). Women's higher marriage rates in the past might be associated with financial dependence on their partners and social attitudes towards non-marital unions. Most recent studies have found no gender differences in the outcome of cohabitation (Jalovaara & Fasang, 2015; Wright, 2016b), possibly due to women's increased independence in Western societies, and the increased acceptance of non-marital unions.

Research on gender differences in repartnering has investigated the reasons why men's and women's repartnering rates might differ depending on economic resources of both partners and the context in which separation occurred (Sweeney, 1997; Shafer & James, 2013; Pasteels & Mortelmans, 2017). Studies show that men are more likely to form a second union than women in several countries, e.g. in Australia (Skew et al., 2009), the Netherlands (Poortman, 2007), and Canada (Wu & Schimmele, 2005). However, no gender differences were detected in the UK (Skew et al., 2009).

Our hypotheses regarding gender differences in partnership experiences are as follows. *We expect women to enter a first union earlier than men (Hypothesis 2a). Additionally, we expect cohabiting men and women to have similar separation and marriage rates (Hypothesis 2b) and separated men and women to have similar rates of repartnering (Hypothesis 2c).*

4.3.3 Parental socio-economic background and partnership experiences

Parental education and resources influence both the timing of union formation and the type of first union. Young people from more advantaged backgrounds postpone entry into first union and marriage due to higher rates of university attendance (Berrington & Diamond, 2000; Wiik, 2009; Mooyaart & Liefbroer, 2016). Findings on the effect of parental socio-economic status on the type of first union vary across studies; a positive association was found between parental education and entry into cohabitation in the Netherlands (Liefbroer, 1991; Mooyaart & Liefbroer, 2016), whereas this association was negative in the US (Bumpass & Lu, 2000). In Norway, the vast majority of young adults enter cohabitation regardless of parental education (Wiik, 2009). In Britain, cohabitation was more widespread among individuals whose father had professional occupations (Ermisch & Francesconi, 1996), although this finding has not been confirmed by more recent research (Berrington & Diamond, 2000).

Given the universal spread of cohabitation, the question arises as to whether parental socio-economic resources have any influence on the outcome of first cohabitations. Economic resources have been shown to influence union stability. Cohabiting couples with more socio-economic resources are less likely to separate (Smock & Manning, 1997; Ermisch & Francesconi, 2000; Wu & Pollard, 2000). Similarly, Duvander (1999) found that persons from disadvantaged parental socio-economic backgrounds are less likely to marry and more likely to separate than those from more advantaged background. However, Ermisch and Francesconi (2000) and Berrington (2001) did not find any association between parental socio-economic background and the outcome of first cohabitations in Britain. Previous literature has not studied the influence of parental socio-economic resources on repartnering.

Our hypotheses regarding the influence of parental socio-economic background on partnership experiences of young people are as follows. *We expect young adults from more advantaged families to postpone entry into first union (Hypothesis 3a), although we expect individuals with different parental socio-economic backgrounds to have similar rates of entry into first marriage or cohabitation (Hypothesis 3b). We expect parental socio-economic background to have little influence (if any) on both the outcomes of cohabiting unions and on rates of repartnering (Hypothesis 3c and 3d).*

4.3.4 Education and partnership experiences

The postponement of union and family formation is often linked to the expansion of higher education (Berrington & Diamond, 2000; Winkler-Dworak & Toulemon, 2007; Ní Bhrolcháin & Beaujouan, 2012). Economic theory suggests that people with higher education have better labour market prospects and, thus, are more attractive on the partnership and marriage market. Previous research has shown that highly educated individuals postpone union and family formation (e.g. Berrington & Diamond, 2000).

Mixed results were reported for the effect of education on the outcome of cohabiting unions. Some studies show that highly educated people, who have accumulated more human capital and have better opportunities on both the labour market and partner market, have more stable cohabiting unions and higher marriage rates than low educated people (Duvander, 1999; Wu & Pollard, 2000; Guzzo, 2014). However, Liefbroer and Douerleijn (2006) found no effect of education on union stability in 14 European countries. Similarly, Ermisch and Francesconi (2000) and Berrington (2001) reported no effect of education on the outcomes of cohabitation in Britain. Mixed evidence on marital stability was observed in the UK; some studies found a negative relationship between education and divorce (Berrington & Diamond, 1999), others observed a positive effect (Chan & Halpin, 2005), and some studies reported no significant educational differences in divorce rates (Steele et al., 2006).

Previous studies suggest that the influence of education is similar on repartnering as to first union formation (Sweeney, 1997; Skew et al., 2009; Shafer & James, 2013). As higher education is associated with better economic prospects, it is expected that repartnering rates would be higher among the highly educated. In Canada, highly educated men and women were more likely to repartner (Wu & Schimmele, 2005), but no evidence was found in the UK and Australia (Skew et al., 2009).

Our hypotheses regarding the influence of education on partnership experiences of young people are as follows. *We expect highly educated young people to postpone entry into first union (Hypothesis 4a). At the same time, we expect the outcomes of cohabitation to be similar among the high and low educated (Hypothesis 4b). Last, highly educated men and women are expected to have higher rates of repartnering than their low educated counterparts (Hypothesis 4c).*

In this paper, we focus mainly on four factors influencing partnership experiences. We recognise, though, that other life course and personal characteristics have a significant influence on partnership experiences as well, though they are out of scope of this paper and we only mention them briefly. Such factors as timing and type of parent's first union and marriage formation (Thornton, 1991; Mooyaart & Liefbroer, 2016), whether parents separated later in life (Thornton, 1991; Berrington & Diamond, 2000; Wolfinger, 2000); religion (Thornton et al., 1992; Berrington & Diamond, 2000; Lehrer, 2004), ethnicity (Manning & Smock, 2002; Hannemann & Kulu, 2015; Kleinepier & de Valk, 2016) as well as living independently prior to forming a union (Berrington & Diamond, 2000) have shown to have a significant influence on patterns of first union formation. Factors affecting cohabitations outcomes include marital expectations or intentions of partners (Manning & Smock, 2002; Guzzo, 2009; 2014; Hiekel et al., 2015), age at first union formation (Wu & Balakrishan, 1995; Clarkberg, 1997; Ermisch & Francesconi, 2000; Liefbroer & Dourleijn, 2006; Guzzo, 2009, 2014), presence and birth of children (Wu, 1995; Manning & Smock 1997, 2002; Manning, 2004; Perelli-Harris et al.,2012), ethnicity (Guzzo, 2014; Hannemann & Kulu, 2015), religion (Manning & Smock, 2002; Manning, 2004), and family structure (Axinn & Thornton, 1996; Duvander, 1999; Manning & Smock, 2002; Steele et., 2006). Research has shown that a group of factors affecting repartnering is quite similar to those related to the first union formation, i.e. includes age at first union formation, presence and number of children, education, employment, religion, residential context, ethnicity, family background (Sweeney, 1997; Wu & Schimmele, 2005; Poortman, 2007; Skew et al., 2009; Shafer & James, 2013; Hannemann & Kulu, 2015).

4.4 Data, methods, and variables

4.4.1 Data

We combined data from the British Household Panel Survey (BHPS) and the Understanding Society study (UKHLS) (Institute for Social and Economic Research 2010, 2014; Institute for Social and Economic Research et al. 2016). The BHPS is an annual panel survey of a nationally representative sample of about 5,500 households and 10,000 individuals recruited in 1991. The dataset contains detailed information on union formation and dissolution, birth of children, residential and housing changes, and educational and employment changes. Additionally, retrospective partnership histories were collected in waves 2, 11, and 12 of the BHPS (Pronzato, 2010). The dataset contains information on the type (cohabitation or marriage), start date, and end date of up to 9 unions and how the

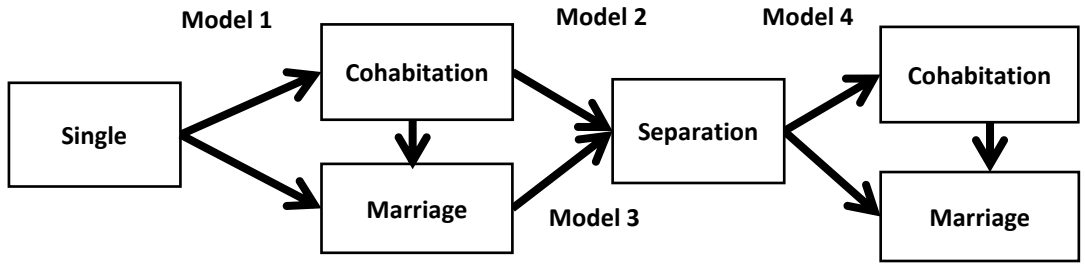
unions ended (separation, divorce or widowhood). UKHLS was launched in 2009 and it follows BHPS respondents from wave two (2010) onwards. We extended the observation window for the original BHPS sample by following them up to wave 6 of UKHLS which was conducted between 2014 and 2016. The two studies have the same design and collect information on major life events.

We followed persons who reached age 16 between 1991 and 2008 in England and Wales, and for whom data was collected both prospectively and retrospectively to have the most complete information on all life domains. Only respondents who were present at two or more consecutive waves were included. The final sample contains 3,233 individuals from three birth cohorts: 1974–79, 1980–84 and 1985–91, observed between 1991 and 2015. In total, 48% of BHPS respondents in the sample were followed up in UKHLS. The proportions by cohorts are as follows: 40% from the 1974–79 cohort; 42% from the 1980–1984 cohort; and 58% from the 1985–91 cohort. Events which happened between the last BHPS wave and wave 2 of UKHLS have been recorded using retrospective information from wave 2 of UKHLS.

4.4.2 Methods

In the beginning of the observation period, individuals are 16 years old and never partnered. They can then either remain single (i.e. never partnered) or form a first cohabiting or marital union (Figure 4.1). Those who cohabit can either marry their cohabiting partner or separate. Similarly, married individuals may experience divorce. Following separation, individuals can either form a second cohabiting or marital union or remain separated.

Figure 4.1 Partnership transitions of young adults



Source: own representation.

We analyse each set of transitions separately, conducting analyses of first (Model 1) and second union formation (Model 4) as well as the outcomes of first cohabiting unions

(Model 2) using competing risks event history models. Competing risks event history models are a powerful tool for investigating complex partnership trajectories (Berrington & Diamond, 2000; Hannemann & Kulu, 2015). For dissolution of marriages[20] with the first partner (Model 3), we apply a standard event history model.

We specify piecewise constant exponential models to study the hazard of the each set of transitions separately:

$$\begin{aligned} \ln \mu_i^A(t) &= \ln y^A(t) + \sum_k \alpha_k^A x_{ik} + \sum_j \beta_j^A w_{ij}(t), \\ \ln \mu_i^B(t) &= \ln y^B(t) + \sum_k \alpha_k^B x_{ik} + \sum_j \beta_j^B w_{ij}(t) \end{aligned} \qquad (1)$$

where for first and second union formation $\mu_i^A(t)$ and $\mu_i^B(t)$ denote the hazard of forming a cohabiting union or marriage for individual i, respectively, and $y^A(t)$ and $y^B(t)$ denote the baseline hazard (age for first unions, and time since first union dissolution for second unions). For cohabitation outcomes, $\mu_i^A(t)$ denotes the hazard of union dissolution and $\mu_i^B(t)$ is the hazard of marriage, $y^A(t)$ and $y^B(t)$ denote the baseline hazard (duration of first cohabitation). x_k represents time-constant variables and $w_j(t)$ represents time-varying variables. As partnership episodes are nested within individuals, we used clustered standard errors (Cleves et al., 2010; Putter et al., 2007). For the main event of interest (A or B) individuals are censored at the time when they experience the competing event (B or A, accordingly).

The model defined in Equation 1 allows us to study the effects of covariates on each transition type (e.g. the effect of education on cohabitation and marriage). However, the relative importance of the type of transition (cohabitation vs marriage) is difficult to explicitly measure using separate models. We thus extend the conventional continuous-time competing risks model to also measure the relative importance of each transition type.

$$\ln \mu_{iT}(t) = \ln y\ (t) + \sum_k \alpha_k x_{ik} + \sum \beta_j w_{ij}(t) + \gamma T\ , \qquad (2)$$

[20] We use the term "dissolution" instead of "divorce" as we are interested in the timing of separation and not the actual timing of divorce, which might be delayed due to various institutional arrangements.

where μ_{iT} is the hazard of an event of type *T* (cohabitation or direct marriage, separation or marriage) for individual *i* and γ is the parameter for transition type *T*. The model assumes a common baseline for all transition types (e.g. cohabitation and marriage); the levels of partnership transitions can vary by transition type, but the effect of control variables remains the same. Transition-specific effects can be allowed by the inclusion of an interaction term between a covariate and the transition type. The model is fitted by using extended data where each person has *T* records; *T* = 2 in this study.

For the dissolution of marriages with first partners, the piecewise constant hazard model is formalised as:

$$\ln \mu_i (t) = \ln y(t) + \sum_k \alpha_k x_{ik} + \sum_j \beta_j \, w_{ij}(t), \qquad (3)$$

where $\mu_i (t)$ denotes the hazard of marital dissolution, $y(t)$ denotes marriage duration, x_k represents time-constant variables, and $w_j(t)$ represents time-varying variables.

4.4.3 Variables

Cohort, gender, and parental socio-economic backgound are the main explanatory time-constant variables used in this study. Parental socio-economic background is measured using parental occupational class. The panel contains information on respondent's mother's and father's occupational status, which is available from the household grid. We used data from the wave where respondents became 16 and, therefore, this information is taken from the BHPS. If the occupational class of the mother and the father was different, we used information on the father's occupational status. The categories were coded using the Goldthorpe social class schema, distinguishing between service, intermediate, and working class (Goldthorpe et al., 1980; Goldthorpe, 1983).

Educational level is a time-varying variable measured as: (1) school (compulsory school education, GCSE or equivalent); (2) medium ("A-levels" or equivalent); and (3) high ("1st Degree" or any other higher degree). We additionally controlled for a time-varying economic activity status (employed; full-time student; unemployed; and other or missing), presence of children in the household, whether the woman in the couple was pregnant, and the area type of residence (London and rest of the country).

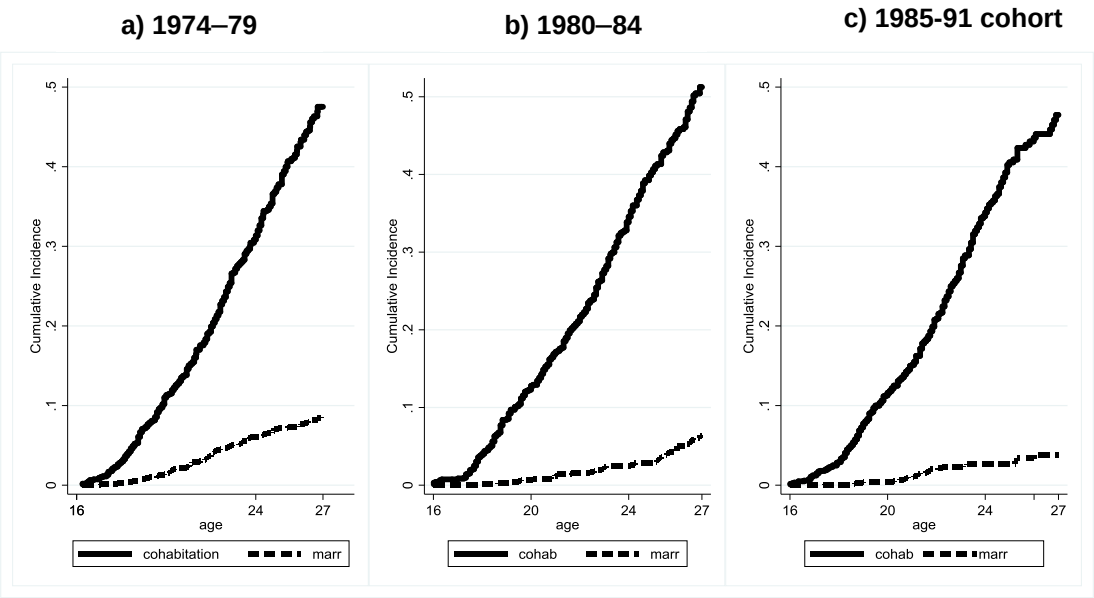
4.5 Results

We present the results for each set of transitions (i.e. first union formation, outcome of first cohabiting unions, dissolution of marriages with first partners, and second union formation) separately. We first report cumulative incidence functions for first union formation by birth cohort and type of union (cohabitation vs. marriage), and for the outcome of first cohabiting unions by type of outcomes (separation vs. marriages). For second union formation we show the cumulative distribution function by cohort. Table 1B in the Appendix B contains information on exposure times and occurrences by the main covariates for each set of transitions. Second, we present multivariate results for cohort, gender, parental socio-economic background, and educational differences in partnership transitions.

4.5.1 First union formation

The vast majority (90%) of the 1974–79 cohort have formed a first union by the end of the observation period (age 40); these figures are 82% for the 1980–84 cohort (age 35) and 56% for the 1985–91 cohort (age 27), accordingly. Comparing levels of union formation at age 27, we find that the youngest cohort is significantly less likely to form a first union than the other two cohorts, supporting the idea of the postponement of union formation. This is also confirmed by summary statistics: The median age at entry into first union among the youngest cohort is approximately one year higher than for the two older cohorts (Table 2B in the Appendix B). We also observe significant changes in the type of first union. Although the proportion of people entering a cohabiting union is similar across the cohorts, direct marriage rates decline from 18% in the 1974–79 cohort to 10% in the 1980–84 cohort, and to less than 5% among the youngest cohort (Figure 4.2). As the levels of direct marriage among the older cohorts have reached a plateau shortly after the age 27, we do not expect a significant increase in the proportion among the youngest censored cohort in the future. As the length of the observation differ by cohort, we present the modelling results using a subsample of young people from all cohorts truncated at age 27.

Figure 4.2 Cumulative incidence functions of entering a first union by type of union and cohort



Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

To further investigate cohort differences in first union formation, we estimated regression models with an interaction between the type of union (cohabitation or marriage) and cohort. Young adults from all three cohorts are more likely to enter a first union via cohabitation than marriage, as expected; direct marriage rates decline across cohorts when controlled for gender, parental socio-economic background, education, economic activity status, residential context, presence of children, and whether the woman is pregnant (Figure 4.3a; full results are presented in Table 4.2).

Next, we analysed the levels of first union formation by gender (Figure 4.3b). Most first unions among young men and women begin as cohabitation, as expected. Women form first unions (both cohabitations and marriages) earlier than men. The gender gap in the timing of union formation is approximately three years and has not changed across cohorts (Table 2B in Appendix B).

Next we study the effects of parental socio-economic background and own educational level on first union formation. These two factors are not independent from each other and more importantly might be closely linked to the probability of experiencing a pre-partnership pregnancy. As such, we present the occurrence and exposure descriptive statistics in Table 4.2 and results from a stepwise modelling procedure in Table 4.2.

20% of first unions were formed after experiencing a pre-partnership pregnancy. The rates of entering first union are much higher among those who experienced a pre-partnership pregnancy regardless of parental socio-economic background or level of education (Table 4.1). Around 26% of young people from working class entered first union after experiencing a pre-partnership conception compared to 12% of young people from service class (Table 4.1b). However, among those who have not experienced a pre-partnership conception, the rate of entering first union did not differ by parental socio-economic background (Table 4.1a). This is reflected in the results from including the covariates stepwise in Table 4.3. Before controlling for pre-partnership conception and the number of children, young people from working class show higher rates of first union formation. The results are mediated by including anticipation of a child variable. Figure 4.3c shows that differences between the social classes become insignificant suggesting a lack of socio-economic gradient in the levels of first union formation and the type of first union after controlling for pre-partnership pregnancy. We performed additional analyses (not shown) by cohort and gender and found that the results hold for all cohorts for both men and women.

Table 4.1 Occurrence & exposure of first union formation by pre-partnership anticipation of a child and a) parental SES; b) educational level

a) Have not experienced pre-partnership pregnancy

Covariates	Person-months	Events	Haz. rate	95% confidence interval	
Parental occupational class					
Service class	88486	349	0.0039	0.0036	0.0044
Intermediate class	64917	257	0.0040	0.0035	0.0045
Working class	57478	259	0.0045	0.0040	0.0051
Missing class	19020	82	0.0043	0.0035	0.0054
Total	229901	947	0.0041	0.0039	0.0044
Educational level					
High	21831	196	0.0090	0.0078	0.0103
Medium	65755	280	0.0043	0.0038	0.0048
School	112838	425	0.0038	0.0034	0.0041
Missing	29476	46	0.0016	0.0012	0.0021
Total	229901	947	0.0041	0.0039	0.0044

b) Have experienced pre-partnership conception

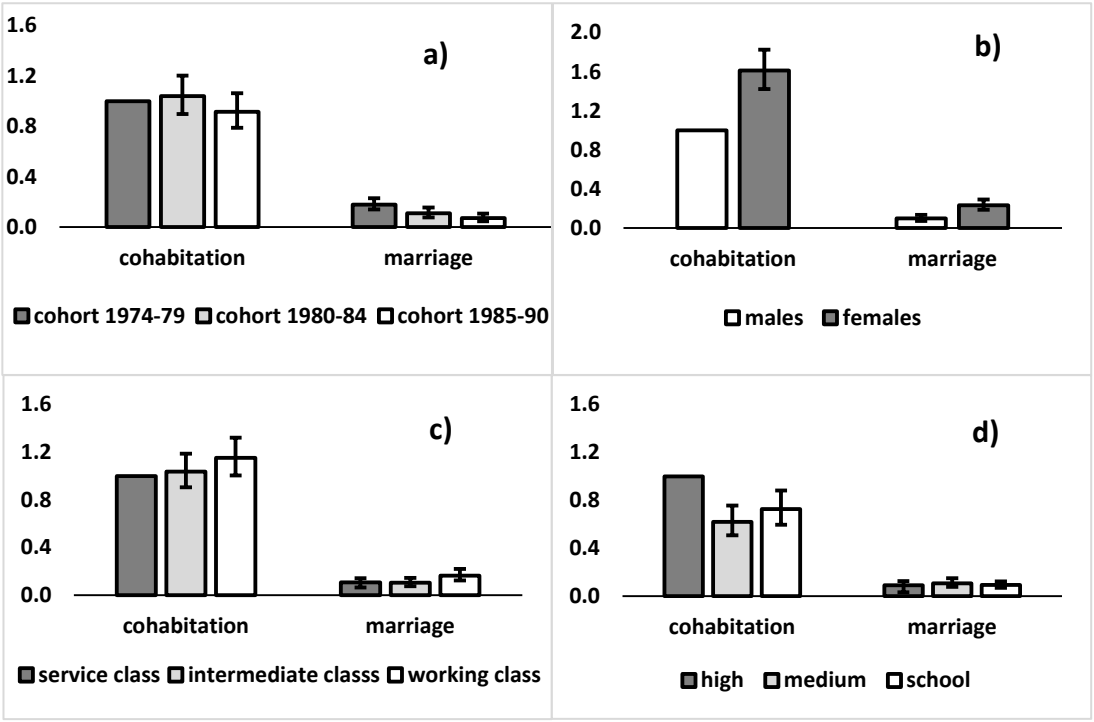
Covariates	Person-months	Events	Haz. rate	95% confidence interval		% of all unions by class
Parental occupational class						
Service class	4205	46	0.0109	0.0082	0.0146	12
Intermediate class	6125	59	0.0096	0.0075	0.0124	19
Working class	7712	91	0.0118	0.0096	0.0145	26
Missing class	3558	36	0.0101	0.0073	0.0140	31
Total	21601	232	0.0107	0.0094	0.0122	
Educational level						**% of all unions by education**
High	465	10	0.0215	0.0116	0.0399	5
Medium	3641	38	0.0104	0.0076	0.0143	12
School	14996	163	0.0109	0.0093	0.0127	28
Missing	2499	21	0.0084	0.0055	0.0129	31
Total	21601	232	0.0107	0.0094	0.0122	

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Next, we investigated the relationship between educational level, first union formation, and pre-partnership pregnancy (Figure 4.3d). Around 28% of low educated young people entered first union after experiencing a pre-partnership conception compared to only 5% of highly educated (Table 4.1b). Regardless of pre-partnership conception, highly educated show the highest risk of entering first union (Table 4.1). The differences become even more pronounced once the anticipation of a child variable is included in the analysis (Table 4.2). Cohabitation is the most common type of first union among all educational groups. Additional analysis by cohort revealed some differences (Table 2B in the Appendix B). Among the oldest cohort, the highly educated enter first unions later than those with the lowest educational levels. In contrast, among the youngest cohort, the highly educated are more likely to enter a first union earlier than the lower educated. Around 20% of unions in the oldest cohort were formed whilst still enrolled in education; this increased up to 39% in the youngest cohort. The similarity between the educational groups among younger cohorts could be an outcome of the expansion of higher education, which has enabled young people from less advantaged backgrounds to go to university.[21] Further analysis showed that the educational gradient of entering a first union is pronounced among men, but not among women (Figure 1B in the Appendix B).

[21] Around one third of individuals in each cohort has obtained higher education by age 28.

Figure 4.3 Relative risks of first union formation by type of union and a) cohort; b) gender c) parental occupational class; d) educational level



Note: Models are controlled for economic activity status, residential context (London/not London), presence of children, and pregnancy status. The first bar on each graph represents the reference category, i.e. "cohort 1974-79" on graph a).
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 4.2 provides information on the effect of the control variables (column a) on the risk of entering a first union. Young people from all cohorts who were living in London postpone entering a first union and show the lowest rates of union formation. The effect remained significant and stable through after including the main covariates stepwise. This can be explained by high prices and tight housing markets in the capital city (Clark & Huang, 2004). Tables 3B in the Appendix B presents the results from a sensitivity analysis of various levels of geographies and reports hazard rates of first union formation before and after including anticipation of a child variable. Model 3B_a is the final model with "London vs the rest of England and Wales" variable discussed above. Model 3B_b distinguishes between London, other urban, and rural areas. Although the differences between those living in rural areas and London are significant, the differences between urban and rural areas are not significant and therefore do not bring additional insights into the analysis confirming a unique pattern of postponed partnership formation in the capital. Model 3B_c takes into account the regional level of geography and distinguishes between London and the South East, South West, East, Midlands, North, and Wales. Although, some coefficients are

significant, the sample size is too small to make any plausible conclusions as some categories contain less than 10 people per cell (e.g. 7 people in the East experienced pre-birth pregnancy).

Additional analysis (not shown) showed that the effects of covariates on the risk of entering cohabitation and marriage are similar.

Table 4.2 Relative risks of first union formation. Stepwise models

Variables	a) Haz. rate	Sig	b) Haz. rate	Sig	c) Haz. rate	Sig	d) Haz. rate	Sig	e) Haz. rate	Sig
Age (Baseline hazard)										
16-17	0.000	***	0.001	***	0.001	***	0.001	***	0.001	***
18-21	0.002	***	0.002	***	0.002	***	0.002	***	0.002	***
22-27	0.003	***	0.004	***	0.003	***	0.003	***	0.003	***
Sex (Males - Ref.)										
Females	1.98	***	1.98	***	1.95	***	1.73	***	1.68	***
Cohort (1974-79 - Ref.)										
1980-1984	0.99		0.98		0.98		0.97		0.97	
1985-1990	0.85	*	0.86	*	0.85	*	0.84	**	0.84	*
Parental occupational class (Service class - Ref.)										
Intermediate class	1.08		1.08		1.07		1.03		1.03	
Working class	1.32	***	1.29	***	1.27	**	1.19	*	1.19	*
Missing	1.32	*	1.30	*	1.23		1.10		1.06	
Residential context (London - Ref.)										
Rest of England and Wales	1.62	***	1.64	***	1.62	***	1.61	***	1.62	***
Educational level (School - Ref.)										
Medium			0.77	***	0.81	**	0.87		0.89	
High			1.09		1.17		1.28	**	1.33	**
Missing			0.77		0.82		0.84		0.86	
Economic Activity Status (Employed - Ref.)										
Full-time student					1.31	**	1.09		1.04	
Unemployed					1.78	***	1.31	*	1.19	
Others/Missing					0.92		0.91		0.90	
Anticipation of a child (Woman herself or man's partner not pregnant -Ref.)										
Pregnant							9.14	***	8.72	***
Number of children (None – Ref.)										
One and more children									1.49	**
Type of 1st union (Cohabitation – Ref.)										
Direct marriage	0.13	***	0.13	***	0.13	***	0.13	***	0.13	***

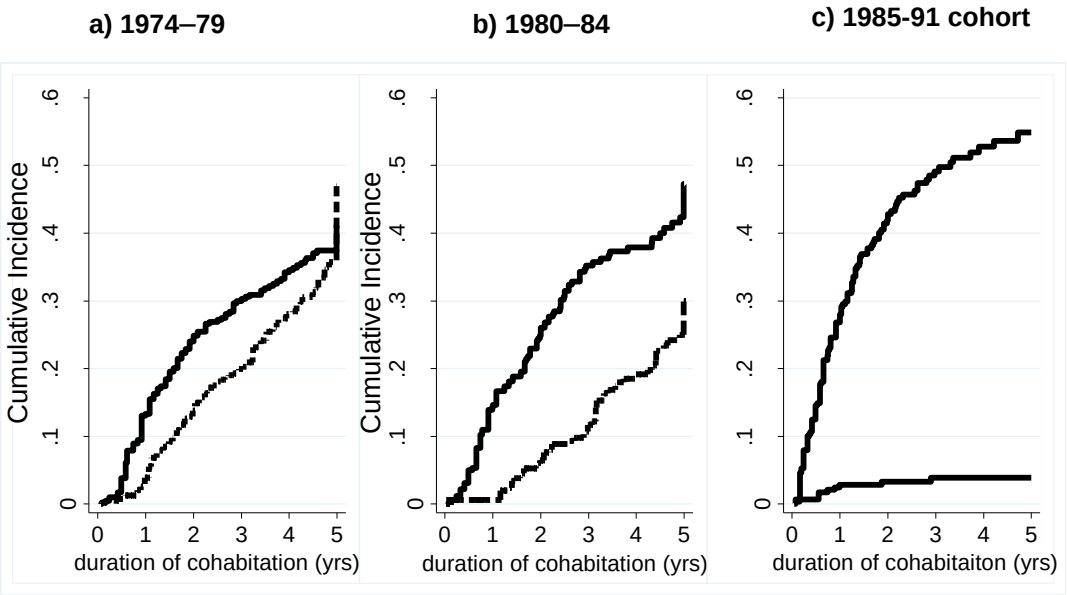
Note: * p<0.05; ** p<0.01; *** p<0.001.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

4.5.2 Outcomes of first cohabitations

In the oldest cohort (1974–79) cohabiters are almost equally likely to marry or separate (Figure 4.4). By contrast, cohabiting unions among the two youngest cohorts are more likely to end in separation than in marriage. The risk of separation has thus increased across cohorts and rose rapidly at early durations; 25% and 27% of couples in the 1974–79 and 1980–84 cohort have separated within two years of cohabitation, respectively, whereas the figure is 43% in the youngest cohort. This indicates that cohabiting unions have become less stable over time.

Figure 4.4 Cumulative incidence function of cohabitations ending in separation or marriage, by cohort



Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations. Same as in the analysis presented in 4.5.1, all partnership histories are truncated at age 27 to have a like-for-like cohort comparison. Observations on the graph are additionally censored after 5 years of cohabitation duration for presenting purposes as only 10% of cohabiting partners in cohort 1985-91, 11% in cohort 1980-84, and 16% in cohort 1974-79 were still together. The regression models include the whole length of cohabitation duration until an individual turns 27 years old.

The results of the regression analysis confirmed that the likelihood of the transition from cohabitation to marriage declines by cohort (Figure 4.5a). Separation rates were significantly higher for the youngest cohort after adjusting for the control variables. Next, we analysed the outcome of first cohabiting unions by gender adjusted to other covariates. Both men and women are more likely to separate from their first cohabiting partner than to marry them (Figure 4.5b). Cohabiting women exhibit slightly higher rates of separation than men, but the differences are not significant.

The analysis in 4.5.1 has emphasised the significant differences in the occurrence of pre-partnership pregnancies among various socio-economic groups. Table 4.3 presents the results from the stepwise regression analysis before and after including a pregnancy variable as well as number of children in the models. Additional descriptive analysis in Table 4B in the Appendix B shows a low occurrence of both separation and marriage while a woman in a cohabiting couple is pregnant which effects the level of significance of this variable in the models. Separation rates among couples with children born before or in cohabitation are lower, whilst marriage rates are similar.

Table 4.3 Relative risks of end of first cohabitation

Variables	a) Haz. rate	Sig	b) Haz. rate	Sig	c) Haz. rate	Sig	d) Haz. rate	Sig
Duration of 1st cohabitation (Baseline hazard)								
<1 year	0.013	***	0.014	***	0.014	***	0.014	***
1-2 years	0.016	***	0.016	***	0.016	***	0.016	***
3-5 years	0.014	***	0.015	***	0.015	***	0.015	***
Age (22-27 - Ref.)								
16-17	0.86		0.89		0.89		0.92	
18-21	0.96		0.97		0.97		0.97	
Sex (Males - Ref.)								
Females	1.02		1.02		1.01		1.01	
Cohort (1974-79 - Ref.)								
1980-1984	0.84		0.85		0.85		0.84	
1985-1990	0.95		0.96		0.96		0.94	
Parental occupational class (Service class - Ref.)								
Intermediate class	0.90		0.90		0.90		0.90	
Working class	1.00		1.00		1.00		1.01	
Missing	0.89		0.89		0.89		0.91	
Educational level (School - Ref.)								
Medium	1.26	*	1.24	*	1.24	*	1.25	*
High	1.07		1.04		1.03		1.04	
Missing	0.55		0.54		0.54		0.54	
Economic Activity Status (Employed - Ref.)								
Full-time student	1.21		1.24		1.25		1.26	
Unemployed	0.97		1.01		1.04		1.04	
Others/Missing	0.20	*	0.20	*	0.20	*	0.20	*
Anticipation of a child (Woman herself or man's partner not pregnant - Ref.)								
Pregnant			0.53	**	0.53	**	0.53	**
Number of children (None - Ref.)								
One and more children					0.96		0.95	
Outcome of 1st union (Separation - Ref.)								
Direct marriage	0.56	***	0.53	***	0.56	***	0.56	***
Residential context I (London - Ref.)								
Rest of England and Wales	0.93		0.93		0.93			
Residential context II (Rural - Ref.)								
London							1.00	
Other urban							0.86	

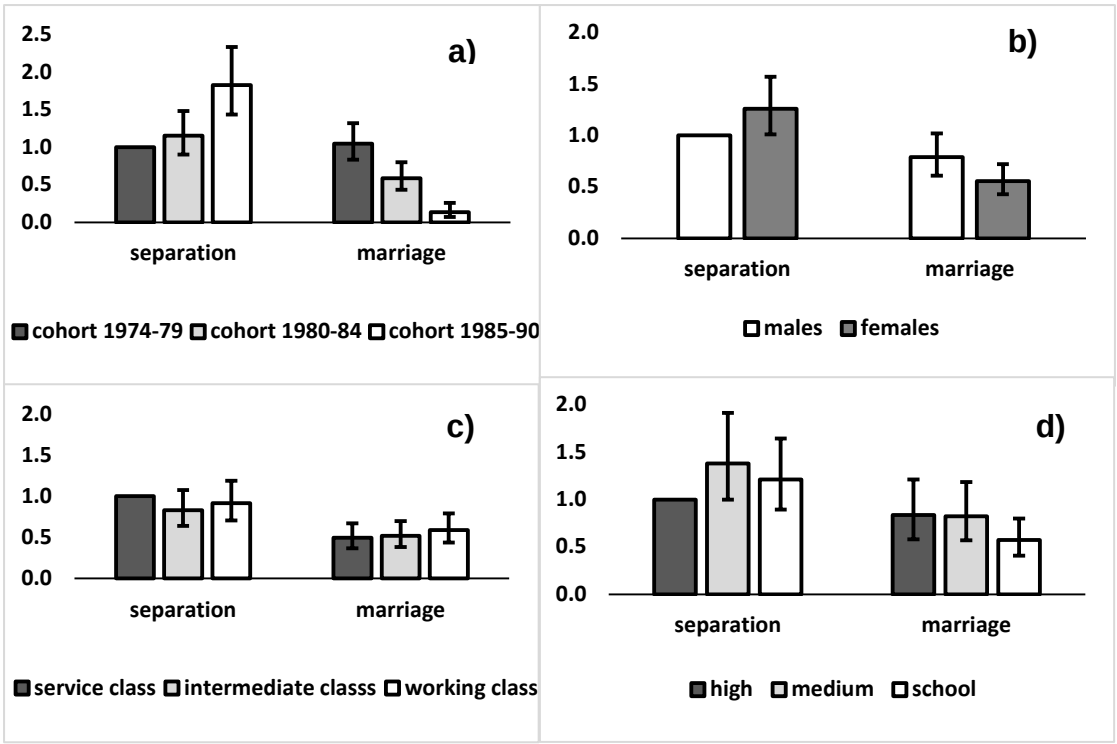
Note: * p<0.05; ** p<0.01; *** p<0.001.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

To further analyse whether there are any differences in the outcomes of first cohabitations with regards to socio-economic status variables, both anticipation of a child as well as the number of children is controlled for. Among all socio-economic groups the risk of separation is higher than that of marriage (Figure 4.5c). The differences seem to be pronounced among persons from more advantaged social backgrounds. Similarly, among all educational groups, the rates of separation are higher than those of marriage both before and after controlling for anticipation of a child and the number of children (Figure 4.5d). On the other hand, after controlling for socio-economic characteristics, the level of separation rates among cohabitees with children is still lower than among childless people, but has no effect on the likelihood of marrying a cohabiting partner (Figure 2B in the Appendix B).

Table 4.3d) presents additional sensitivity analysis on the aggregation of the geography level. No significant differences were observed between London, other urban, and rural areas, therefore the aggregated level of geography - London vs the rest of England and Wales - was used in the main analysis; the differences were not significant.

Figure 4.5 Relative risks of separating or marrying first cohabiting partner by a) cohort; b) gender; c) parental occupational class; d) educational level



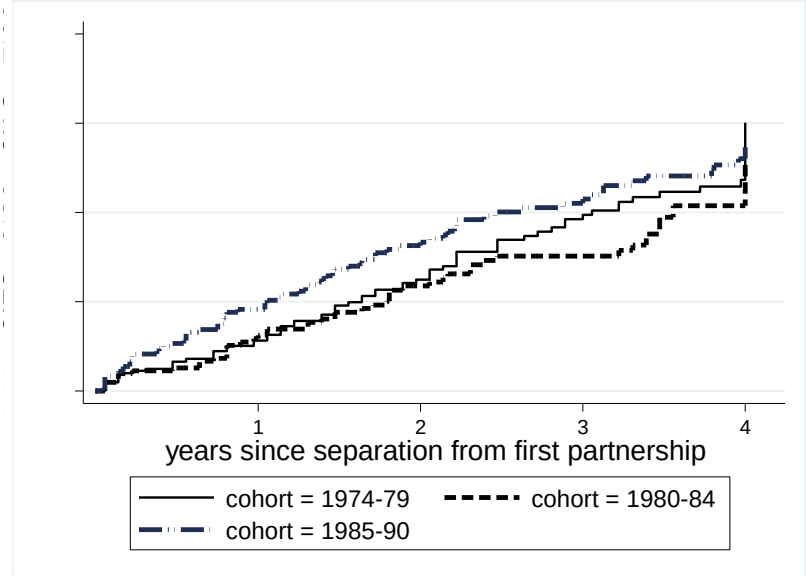
Note: Models are controlled for economic activity status, residential context (London/not London), age at first union, presence of children, and pregnancy status. The first bar on each graph represents the reference category, i.e. "cohort 1974-79" on graph a).
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

The proportion of young people who were married at least once by age 27 is 27% among the 1974–79 cohort, 14% among the 1980–84 cohort and 5% among 1985-91 cohort. Unfortunately, due to the small sample size further analysis of dissolution of marriages with first partners across cohorts is not possible.

4.5.3 Second unions

More than 60% of the separated respondents from each cohort in the sample formed a second union after 4 years following separation. The youngest cohort exhibits the highest rates of repartnering (Figure 4.6). The median time until repartnering decreased from 3.2 years among the 1974–79 cohort to 2.5 years among the 1985–91 cohort.

Figure 4.6 Cumulative distribution function of entering a second union by cohort



Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

However, the differences in repartnering rates between the cohorts become insignificant when controlled for other variables in the model (Table 4.4). Due to the small sample size, we do not distinguish between the type of second union and present the results from the stepwise modelling procedure in order to avoid the risk of overcontrolling. We found neither gender or socio-economic differences nor educational gradient in repartnering before or after controlling for the pre-partnership pregnancy and number of children. Pregnancy increases the likelihood of second union formation similar to first union formation. Residential context and employment status did not have a significant effect on the risk of repartnering. Although, there were no observed differences in repartnering behaviour, these results should be interpreted with caution because of the small sample size.

Table 4.4 Relative risks for second union formation. Stepwise models

Variables	a) Haz. rate	Sig	b) Haz. rate	Sig	c) Haz. rate	Sig	d) Haz. rate	Sig	e) Haz. rate	Sig	f) Haz. rate	Sig
Time since separation from first union (Baseline hazard)												
<1 year	0.013	***	0.017	***	0.016	***	0.013	***	0.014	***	0.014	***
1-2 years	0.016	***	0.020	***	0.019	***	0.016	***	0.016	***	0.016	***
3-4 years	0.014	***	0.028	***	0.027	***	0.022	***	0.023	***	0.023	***
Age at first union (22-27 - Ref.)												
16-17	0.94		0.95		1.02		1.08		1.07		1.10	
18-21	0.86		0.86		0.88		0.91		0.90		0.93	
Sex (Males - Ref.)												
Females	1.14		1.13		1.09		1.04		1.01		1.02	
Cohort (1974-79 - Ref.)												
1980-1984	0.85		0.84		0.84		0.82		0.82		0.82	
1985-1990	1.17		1.17		1.23		1.19		1.16		1.17	
Parental occupational class (Service class - Ref.)												
Intermediate class			1.04				1.04		1.00		1.02	
Working class			0.84				0.90		0.86		0.86	
Missing			0.94				1.03		1.04		1.08	
Educational level (School - Ref.)												
Medium					0.99		0.97		0.97		0.94	
High					1.05		1.05		1.08		1.02	
Missing					0.17		0.17		0.17		0.17	
Economic Activity Status (Employed - Ref.)												
Full-time student							0.70		0.68		0.71	
Unemployed							0.98		0.93		1.01	
Others/Missing							2.07		2.25		2.44	
Anticipation of a child (Woman herself or man's partner not pregnant -Ref.)												
Pregnant									2.31	**	2.32	**
Number of children (None – Ref.)												
One and more children											0.82	
Residential context (London - Ref.)												
Rest of E &W							1.33		1.30		1.32	

Note: * p<0.05; ** p<0.01; *** p<0.001.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

4.6 Discussion

This paper has investigated various partnership transitions among young adults in England and Wales by cohort, gender, parental socio-economic background, and education by applying competing risks event history models. We first studied cohort changes in partnership experiences. We observed postponement of first union formation and an almost universal prevalence of cohabitation as the main form of first union formation across all cohorts for both men and women, supporting our hypothesis. Despite the fact that cohabitation is the predominant way of first union formation, levels of union formation are the lowest among the youngest cohort due to the decrease in direct marriages. Therefore, our findings contribute to the discussion of the continuing declining trend in direct marriages and point out that this form of first union formation has almost disappeared among the youngest cohorts.

Considering that the vast majority of first unions begin as cohabitations, we expected higher separation than marriage rates in these unions following the trends in various developed countries where cohabitation is widespread (Manning & Smock, 2002; Jalovaara, 2013). Although, we found that cohabiting unions have indeed become less stable among the youngest cohorts, the overwhelming prevalence of first union dissolution is somewhat surprising. Compared to individuals from the 1974–79 cohort who were almost equally likely to marry or separate from their first cohabiting partners, the youngest cohort is significantly more likely to separate from their first partner than to marry them. In line with this, individuals from cohort 1985–91 showed the highest rates or repartnering which could be a sign of an increase in numbers of serial cohabiters among young adults.

These findings suggest that the prevalence of short-term cohabitation is common among the youngest cohorts. Additionally, the meaning of cohabitation might be different for individuals in the youngest cohort. While among older cohorts first co-residential unions were likely to be treated as sort of trial marriages, young adults born in the 1980s are likely to move together for different reasons. The lack of normative constraints, convenience, and economic reasons are likely underlying factors of this phenomenon (Sassler, 2004; Manning & Smock, 2005). Therefore, our findings provide support for the previous notion of increased sliding in and out of cohabitation (Manning & Smock, 2005). Some evidence from qualitative research in the UK (e.g. Berrington et al., 2015) suggests that cohabiters do not ascribe lower levels of commitment to cohabitation than to marriage. This poses further questions on whether the lack of constraints allows an increase in poor matches

between partners, which would be weeded out during cohabitation, leading to almost universal breakdown of first cohabiting unions among the youngest cohorts. Further qualitative research into the meaning that young people attach to cohabitation and the perceptions of courtship process is needed to deepen our understanding of current and future trends in partnership experiences (Manning & Smock, 2005; Hiekel et al., 2014; Perelli-Harris et al., 2014).

Our second research question investigated gender differences in partnership experiences. We found that women enter first unions earlier than men by approximately 3 years, as expected. Both men and women are more likely to separate from their first cohabiting partner than to marry them. No gender differences were observed in repartnering rates. The results suggest that there is a convergence in partnership experiences among young men and women. Following the discourse on women's changing role in society, our findings provide support for the notion of similarity in life course transitions among young men and women (Winkler-Dworak & Toulemon, 2007; Stone et al., 2014; Jalovaara & Fasang, 2015; Wright, 2016b).

Our third research question studied how partnership experiences differ by parental socio-economic background. The results show that individuals from working class backgrounds form first unions earlier among the 1974–79 and 1980–84 cohorts than those from more advantaged backgrounds, whereas the reverse is observed among the 1985–91 cohort, which partially confirms our hypothesis that persons from more advantaged families postpone entry into first union. This might be explained by further gradual expansion of higher education among young people regardless of parental socio-economic background. On the other hand, significant differences were observed in the occurrence of pre-partnership pregnancies among various socio-economic groups. Thus, over a quarter of cohabiting unions among young people from less advantaged backgrounds was formed following the occurrence of a pre-partnership pregnancy. After controlling for pre-partnership pregnancy, no differences by parental social class were observed in cohabitation or marriage formation rates, confirming earlier findings that cohabitation in Britain is non-selective by this criteria (Berrington & Diamond, 2000). Cohabiting partners are more likely to separate than to marry regardless of parental background, although young people from more advantaged backgrounds repartner quicker, suggesting that they might be more attractive on the partner market. Our findings show that parental socio-economic background plays a minor role in defining young people's partnership

experiences, supporting the notion that the influence of individual experiences are more important for individuals' partnership behaviour than ascribed socio-economic status (e.g. Berrington & Diamond, 2000; Mäenpää & Jalovaara, 2014).

The fourth research question investigated educational differences in partnership experiences. We expected highly educated individuals to postpone entry into first union based on trends for the older cohorts, but this hypothesis was only partially confirmed. The delay among highly educated was observed among the 1974-79 cohort, but highly educated were the earliest to form a union among the youngest cohort. Almost a third of unions among low educated young people started following the occurrence of a pre-partnership pregnancy. We observed no educational gradient in cohabitation or marriage among young adults. Highly educated men showed the highest rate of entering a first union, while no educational differences were found among women. Education did not affect cohabitation outcomes, though the highly educated repartnered quicker than their lower educated counterparts. We conclude that partnership experiences still differ by education, although, these differences have become less pronounced potentially due to the expansion of higher education.

A few directions for future research must be discussed. Although we have controlled for and discussed the effect of pre-partnership pregnancy and the presence of children in the household on various partnership transitions, these relationships are complex. Research has found a significant negative educational gradient of childbearing among cohabiters affecting the subsequent stability of such unions (Berrington, 2001; Steele et al., 2005, 2006; Perelli-Harris, 2012). Parental socio-economic status was also found to be an important predictor of partnership context at childbirth (Koops et al., 2017). In our sample, 27% of first-time cohabiters had a child within the first cohabitation with almost 65% of the former being low educated, suggesting that further research is needed to investigate how these patterns might have changed across cohorts. Additionally, we do not have information on non-coresidential unions in the dataset. Previous research has shown that around half of the living-apart-together (LAT) relationships become co-residential unions (Haskey, 2005; Ermisch & Siedler, 2009; Schnor, 2015) and, thus, including these transitions might bring further insight to partnership experiences among young people today.

Applying competing risks models to longitudinal data from England and Wales, this study has shown that partnership experiences among young adults have changed over time. Cohabitation has become almost a universal form of first union formation, but does not

tend to last long regardless of individuals' economic prospects or educational attainment. Most separated former cohabiters exhibit high rates of repartnering. On the other hand, the general postponement of first unions which might be due to the spread of LAT relationships marks the prevalence of two types of partnership behaviours — postponement of first co-residential union formation and an increase in serial cohabitations. Further questions arise as to why individuals fall into one group or another considering no observed socio-economic characteristics could fully account for it. Our approach could be applied to data from other industrialised countries to improve our understanding of modern family formation patterns and investigate whether partnership transitions still differ in line with previously defined patterns of the transition to adulthood.

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Chapter V

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Chapter V builds upon previous chapters by investigating spatial mobility of young people during the transition to adulthood. Theory suggests that moves are to a large extent triggered by changes in employment activity or family-related adjustments. Chapter II has shown that education and employment trajectories among young become have become more turbulent over time, with longer periods spent in education on average. Chapter III has shown further postponement of first unions and higher rates of separation among the youngest cohort. Yet, the question remains how changes in these two life domains have effected leaving the parental home and higher order moves among young adults. Chapter I has provided background on changes in housing and living arrangements over time, which could have essentially led to both higher and lower spatial mobility among young people. Chapter IV therefore investigates how moving trajectories have changed over time and how they have been affected by other life course domains. If little or no change is explained through employment- and family-related activities, this could indicate the increased significance of environmental motives behind young people's moves. This could further suggest the increased role of individual factors, such as personality traits and self-development, driving young people's behaviour and life course trajectories during the transition to adulthood. Chapter IV is based upon the research paper of the same name published in Population, Space and Place 24 (2018) e2125. Chapter IV extends the published version of the paper by incorporating explicitly the research questions and including Piecewise constant baseline hazard for 1st moves in Figure 1C as well as additional sensitivity analysis in Table 2C in the Appendix C.

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Short- and Long-Distance Moves of Young Adults

During the Transition to Adulthood in Britain

This study examines spatial mobility of young adults in England and Wales in the 1990s and the 2000s. We investigate short- and long-distance moves of young people by cohort and gender adjusted for individuals' socio-economic characteristics and changes in other life domains. We study how much employment, partnership and family changes explain variation in spatial mobility across birth cohorts and between males and females. We apply multistate event history analysis to data from the British Household Panel Survey (BHPS). We move beyond a single-event-approach and analyse moving trajectories of young adults. The results show that the youngest cohort (born in 1985-89) leaves the parental home later than the two older cohorts (born in 1974-79 and 1980-84), but once they leave the parental nest, they exhibit elevated levels of spatial mobility. We find that females leave the parental home earlier than males; however, there are no gender differences in the levels of higher-order moves. By contrast, socio-economic differences in spatial mobility are persistent; young people from advantaged backgrounds are spatially more mobile than those who come from disadvantaged families. Changes in educational enrolment and level, partnership status and economic activity explain only little of the differences in spatial mobility across cohorts and between males and females suggesting also the importance of other motives behind the moves. The results are similar for short- and long-distance moves, although the risk levels are higher for the former.

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5.1 Introduction

Leaving the parental home is traditionally considered to be one of the significant markers of the transition to adulthood, together with the formation of a first union, completing education and entry into the labour market (Billari, 2001; Billari & Liefbroer, 2010; Liefbroer & Toulemon, 2010; Huinink, 2013). However, in the past few decades, these transitions have become less standardised and more individualised and "protracted" (Liefbroer, 1999; Shanahan, 2000; Macmillan, 2005; Elzinga & Liefbroer, 2007; Billari & Liefbroer, 2010; Huinink, 2013). The expansion of higher education, professionalisation and feminisation of the labour market have led to a variety of trajectories and pathways to social and economic independence. Many young people stay longer in education, and postpone entry into the labour force and union formation (Corijn & Klijzing, 2001; Billari & Liefbroer, 2010). Another important recent development is that an increasing number of young people who stay longer in the parental home are forced to move back after graduation (so called "boomerangs"; Stone et al., 2014).

There is a growing body of literature investigating the complexity and variety of transition to adulthood (Holdsworth, 2000; Shanahan, 2000; Berrington, 2001; Iacovou, 2002; Settersten & Ray, 2010; Huinink, 2013). However, residential mobility of young people have not been studied, except moves directly related to leaving the parental home (Goldscheider, Thornton, & Yang, 2001; Mulder & Clark, 2000; Hochstenbach & Boterman, 2017). This paper examines spatial mobility of young people in England and Wales in the 1990s and the 2000s. Our contribution is threefold. First, we analyse moving trajectories instead of one/first move to improve our understanding of the patterns of spatial mobility of young people. We examine changes in spatial mobility by birth cohort (born in 1974-79, 1980-84 and 1985-89) and by gender. Second, we investigate residential changes in relation to changes in other life domains, such as employment, education and partnership histories, which are important determinants of residential changes. Third, we distinguish between short- and long-distance moves to gain a better understanding of how education, employment, and family life shape spatial mobility of young people.

5.2 Research questions

We address three key research questions outlined below:

3) How have the moving trajectories changed across cohorts?
4) How do moving trajectories differ by gender and socio-economic background?

5) How much variation in spatial mobility across birth cohorts and between males and females is associated with changes in educational enrolment and level, partnership status and economic activity?

5.3 Spatial mobility over the early stage of the life course

Young people are one of the most mobile group of population in the UK (Duke-Williams, 2009; Champion & Shuttleworth, 2017b). Young people's migration careers begin once they move out of the parental home. However, many studies have shown that often young people return or "boomerang" to their parental home throughout the early stage of the life course (Da Vanzo & Goldscheider, 1990; Goldscheider et al., 1993; Jones, 1995; Mulder & Clark, 2002; Sage et al., 2013; Stone et al., 2014). Therefore, the holistic life course approach towards migration careers has become popular in Demographic Research (Clark, 2013; Clark & Huang, 2003; Falkingham, Sage, Stone, & Vlachantoni, 2016; Mulder & Hooimeijer, 1999; Mulder & Wagner, 1993). The life course approach suggests that any decision in life, in particular a decision to move or to stay, is connected to other life domains ('linked lives'), such as education and employment careers, partnership and family histories (Giele & Elder, 1998). Research has also shown that it is important to look at moves as a continuity process, actively involving human agency at all stages of decision-making and the realisation of intentions (Halfacree & Boyle, 1993; Kley & Mulder, 2010; Kley, 2011).

5.3.1 Leaving the parental home

There is a large body of literature on "pathways into independent living" studying the relationships between leaving the parental home and marriage, work or education (Goldscheider & DaVanzo, 1989; De Jong Gierveld, Liefbroer, & Beekink, 1991; Berrington & Murphy, 1994; Holdsworth, 2000; Berrington, 2001; Iacovou, 2002; Settersten & Ray, 2010; Huinink, 2013). Studies also demonstrate that moving decisions are taken under the constraints of welfare state provision, housing policies and family financial support (Cavalli & Galland, 1995; Jones, 1995; Corijn & Klijzing, 2001; Cook & Furstenberg, 2002; Billari, 2004). The decision to move out of the parental home is based on personal preferences, beliefs or aspirations as well as on socially accepted normative timetables for different life stages (Neugarten, Moore, & Lowe, 1965; Hogan & Astone, 1986; Holdsworth & Morgan, 2005; Billari & Liefbroer, 2007). Research has shown that parental expectations on "leaving the nest" as well as their willingness and opportunity to support their children in the future

have a large effect on the timing and destination of the first move (Whittington & Peters, 1996; Goldscheider et al., 2001; Settersten & Ray, 2010; Hochstenbach & Boterman, 2017).

The British pattern of the transition to adulthood is usually described as "accelerated" with an early transition from school to work followed by heterogeneous household and family formation (Cavalli & Galland, 1995; Bynner, 2001). These transitions vary according to class, gender, and ethnicity (Coffield, 1995; Bynner, 2001, 2005) with parental socioeconomic resources playing a significant role in the timing and the destination of home leaving. Research shows that young people from advantaged backgrounds leave home earlier for education-related reasons than those from disadvantaged families (De Jong Gierveld et al., 1991; Berrington & Murphy, 1994; Ermisch & Di Salvo, 1997; Holdsworth, 2000; Berrington, 2001; Furstenberg, 2008; Goldscheider, Hofferth, & Curtin, 2014). Leaving the parental home for educational reasons is thus an important step towards adulthood and independence among young adults whose parents have tertiary education (De Jong Gierveld et al., 1991; Holdsworth, 2004; Patiniotis & Holdsworth, 2005). However, leaving the parental home for further studies is not universal and not the only pathway into independent living. The decision to stay in the parental home might be a result of both unaffordability to start living independently as well as personal preferences (Da Vanzo & Goldscheider, 1990; Patiniotis & Holdsworth, 2005).

5.3.2 Reasons/motives for long- and short-distance moves

5.3.2.1 Mobility "triggers" and housing adjustments

Residential changes can be triggered by a number of events, such as changes in occupation, relationships, family and partnership status (Mulder & Hooimeijer, 1999; Clark & Huang, 2004; Clark & Whiters, 2007; Clark, 2013; Falkingham et al., 2016). Finding a job becomes a priority among young people who have recently finished their education regardless of their qualification. Therefore, a change in the economic activity status acts as an important trigger for mobility of young people.

Family changes represent another group of mobility triggers, which may explain spatial mobility among young people. A large body of literature has focused on the effect of life events on mobility, such as entering cohabitation or marriage (Mulder & Wagner, 1993; Clark & Huang, 2003), divorce or union dissolution (Feijten & Van Ham, 2008; Mulder & Wagner, 2010), childbirth (Kulu, 2008; Kulu & Milewski, 2008; Michielin & Mulder, 2008;

Kulu & Steele, 2013) as well on the interrelationships between mobility, employment and family trajectories (Courgeau, 1985; Clark & Withers, 2009).

Previous research has shown that short-distance moves are normally driven by housing adjustments, whereas long-distance moves are due to changes in employment (Detang-Dessendre & Molho, 1999; Mulder & Clark, 2000; Clark & Huang, 2003; Boyle et al., 2008; Kulu, 2008). However, given the increased diversity of life course transitions, family structure and living arrangements, recent research has shown that such a distinction cannot fully account for the complexity of moving decisions (Clark & Whiters, 2007; Smith & Finney, 2015). Bernard, Bell and Charles-Edwards (2016) showed that age profile of short- and long-distance moves of young people in Britain are generally similar. Research in the United Kingdom, the United States, and Nordic countries has found that a large share of long-distance moves are attributed to reasons other than employment related (Clark & Huang, 2004; Lundholm et al., 2004; Clark & Whiters, 2007; Clark & Maas, 2012; Coulter & Scott, 2015).

5.3.2.2 Environmental and other reasons for moves

Environmental factors have also shown to be important when considering young adults' residential mobility. The broad category of those reasons include changing living environment (i.e. moving closer to the nature or to the big city), moving away from the current life situation, moves motivated by personal development (Lundholm et al., 2004; Morrison & Clark, 2011; Niedomysl, 2011; Geist & McManus, 2012; Vilhelmson & Thulin, 2016).

Rabe and Taylor (2010) found that neighbourhood qualities influenced the residential mobility of young people in Britain. Research on "studentification", "gentrification" and city branding (Duncan & Smith 2006; Smith & Holt, 2007; Hochstenbach & Boterman, 2017) has significantly improved our understanding of young people's mobility, suggesting that some moves could be motivated by the search of self-identification and personal development.

The variety of living arrangements among young people, particularly the increased number of shared housing encourages to investigate non-economic aspects of residential mobility. Heath and Cleaver (2003) found that young people's experiences of shared housing have changed the meaning of home and increased the importance of housemates in the lives of sharers, which directly effects residential mobility. Other factors affecting the decision to

move and moving distance include the proximity of peers, relatives and "parental safety net" (De Jong Gierveld et al., 1991; Michielin, Mulder & Zorlu, 2008; Sage et al., 2013). The Internet and social media play a significant role in young people's perception of distance by reducing both the transaction costs of a move and the asymmetry of information during the pre-move phase (Dekker & Engbersen, 2014). It has been argued that the Internet use might not be a driving force of migration itself, but rather seen as an "enabler" or "catalyst" in spatial mobility (Vilhelmson & Thulin, 2013; Thulin & Vilhelmson, 2014).

5.3.3 Gender differences

Research shows that females move more often than males (Fielding & Halford, 1993; Faggian et al., 2007). One of the main drivers of females' migration behaviour is traditionally considered to be family formation. On average, females enter cohabitation or marriage earlier than males, which for a long time was the single major factor explaining the gender gap in the timing of leaving the parental home (Berrington & Murphy, 1994; Berrington, 2001). Research has shown that residential changes (including the first move) related to entry into marriage are more often short-distance moves (Mulder & Wagner, 1993; Detang-Dessendre & Molho, 2000). Research on family migration usually distinguishes between "tied stayers" and "tied movers" who are in most cases females following their partners to the location of their new job. This often has negative consequences on their careers (Boyle et al., 2001; Cooke, 2001, 2003; Smits, Mulder, & Hooimeijer, 2003).

The changing nature of gender-specific education and employment careers over time is also important. Professionalisation and feminisation of the labour market in Britain since the late 1980s increased the share of women who move for educational reasons. Fielding and Halford (1993) found that higher mobility among women is associated with moves between labour markets and may also lead to or be determined by upward social mobility. Boyle and Halfacree (1995) also observed higher mobility among some groups of women among service class, which was mainly attributed to the increase in women's career aspirations. Investigating the patterns in post-studies migration, Faggian et al. (2007) reached to the conclusion that "women use migration as a means of partially compensating for gender differences in the ease of accessing labour markets" (p. 538). Studies also show that dual career households tend to move less due to the complex nexus of career-family decisions (Bailey et al., 2004; Clark & Withers, 2009).

5.3.4 Changes over time

Various social and economic changes in Britain support both increased and decreased spatial mobility across the cohorts (Champion & Shuttleworth, 2017a, 2017b). On the one hand, the expansion of higher education in Britain in the 1990s led to elevated levels of leaving the parental home, but postponed the age of the move as many had to complete A levels first. Further professionalisation of the labour market has led to a qualification mismatch on the labour market (Chevalier & Lindley, 2009) and forced young adults to move to more attractive labour market areas, e.g. "escalator regions" in the South East of England (Fielding, 1992; Smith & Holt, 2007; Faggian & McCann, 2009; Smith & Sage, 2014). During the recent decades, cohabitation and "living-apart-together" (LAT) relationships have become more common among young adults, whereas the direct marriage rates have significantly declined alongside the increase in the age at marriage (Ermisch & Francesconi, 2000; Haskey, 2005; Sobotka & Toulemon, 2008; Ermisch & Siedler, 2009). The increase in cohabitation, separation and re-partnering levels suggests that young people move more often to adjust their housing conditions to changing partnership statuses; all these changes might lead to the increase in spatial mobility (Thomson, 2014; Hannemann & Kulu, 2015; Mikolai & Kulu, 2017).

By contrast, unaffordability of housing, introduction of tuition fees and the subsequent economic hardship could be obstacles on the way of gaining independence for some groups of young adults. The residualisation of the social housing sector and increased barriers to home ownership led to the increase in the private renting sector and change of living arrangements among young people (Clapham et al., 2014; Berrington & Stone, 2014). The introduction of tuition fees in 1998 and their subsequent increase has raised the levels of student debt, which may be a barrier to financial and residential independence of young people (Stone et al., 2011). Hence, many young people tend to stay in their parental home longer or move back after graduation (Ibid., 2011). The increase of dual career households and LAT relationships could lead to the decrease in "tied" female migration and postponement of family formation and thus reduce spatial mobility (Cooke, 2001).

Another factor affecting young peoples' mobility trajectories is the type of residential context. High prices and tight housing markets in big cities especially in London can be an obstacle for young people intending to change their living arrangements (Clark & Huang, 2004), including leaving the parental home (Higher Education Funding Council for England, 2009). The general postponement of marriage and childbearing in London (Kulu &

Washbrook, 2014) together with a large proportion of young singles living in shared housing might be another reason for the lower residential mobility.

During the last few decades, socioeconomic and cultural changes, particularly expansion of higher education and professionalisation and feminisation of the labour market, have led to increased difficulties in decision-making especially in the early stage of the life course (Francesconi & Golsch; 2005; Furlong & Cartmel, 2007; Liefbroer, 1999; Mills & Blossfeld, 2003). These changes have led to the increased divergence in life careers between young people from more advantaged and disadvantaged backgrounds and prompted the emergence of a variety of living arrangements, individualisation of migration and family trajectories, and pathways to social and economic independence (Elzinga & Liefbroer, 2007; Huinink, 2013; Macmillan, 2005). This may have increased polarisation among young adults by migration trajectories; those who prolong staying in the parental home due to economic reasons or personal preferences and those whose migration careers begin earlier and are less stuctured. The increased individualisation of the life course is also reflected in the increased importance of environmental and personal motives behind the decision to move among young people.

5.3.5 Hypotheses

As our literature review shows, a decision to move is motivated by two groups of factors. The first group includes life course events, such as changes in occupation, family and partnership status. The second group includes reasons, which are harder to measure, such as environmental factors, neighbourhood preferences, importance of proximity of friends and parents, and search for a better quality of life. Various societal changes support both increased and decreased mobility among young people. Based on previous research we first expect to observe the postponement of leaving the parental home among the youngest cohort (H1). However, we do not expect lower overall spatial mobility among this cohort. Hence, an interesting question is how much polarisation in migration behaviour we will observe among young adults in Britain. Second, we expect young women to show higher spatial mobility than men (H2). Third, we expect young people from more advantaged socioeconomic backgrounds to leave the parental home earlier than those who come from disadvantaged families (H3). Fourth, we expect young people in London to leave the parental home later and show lower spatial mobility later than those living outside of London (H4). Fifth, we expect similar patterns for short- and long-distance moves among young adults, although the risk levels are higher for the former type of moves than the

latter (H5). Finally, we expect changes in educational enrolment and level, partnership status and economic activity to explain some of the cohort and gender differences in long- and short-distance moves (H6). However, an interesting question is how much variation in spatial mobility across birth cohorts and between males and females is left after accounting for changes in these life domains.

5.4 Data, variables and method

5.4.1 Sample

The British Household Panel Survey (BHPS) is an annual panel survey consisting of a nationally representative sample of about 5,500 households recruited in 1991, containing a total of approximately 10,000 individuals. The BHPS provides a good opportunity to investigate spatial mobility and other life course trajectories of young people. It contains detailed annual information about residential and housing changes, educational and employment changes, union formation and dissolution, and the birth of children. Respondents are also asked to provide the year and month of a move. However, short-term temporary changes in living arrangements between the waves cannot be identified because only one move per wave is reported. The place of residence is recorded at each panel; we use information on the local authority districts (LAD) of the respondents' place of residence. LAD is a generic term used to cover London boroughs, metropolitan districts, unitary authorities and non-metropolitan districts in England; unitary authorities in Wales; council areas in Scotland; and district council areas in Northern Ireland (ONS, 2016). Our sample includes data from 274 LADs.

Because information on the moves was collected at each panel wave (and not retrospectively), we followed only persons who reached the age of 16 between 1991 and 2006 in England and Wales, for whom the data was collected prospectively. Only respondents present at least two consecutive waves were included.

The final sample contains 2,562 individuals from three birth cohorts: 1974-79, 1980-84 and 1985-90, observed over the period of 1991-2008. We observed individuals from age 16 and followed them until their last interview date. Calculating panel attrition for such samples is not straightforward (Stone et al., 2014). We calculated the proportion of individuals who participated at least in five waves or more (not necessarily subsequently). According to this approach, 90% of respondents in the 1974-79 cohort participated on average in at least in five waves; these proportions are 83% for the 1980-84 cohort; and 80% for the youngest

1985-89 cohort. The dataset has a few other limitations, e.g. temporary migration out of Britain ("gap year" or exchange studies abroad, including a move to Northern Ireland) was coded in the same way as a missing wave due to other reasons; the reasons of moving have not been recorded explicitly; for many cases answers are missing.

During the data preparation, we had to address the issue of missing months for major events, such as moves or changes in employment, education and partnership status. In order to minimise the error we assumed events with missing month to happen in July. Life events that were reported in the same month were ordered in the following way: union dissolution (beginning of the month - 0) – change in employment and education spell (middle of the month - 1/2) – move (7/12 of the month) – cohabitation (2/3 of the month).[22]

5.4.2 Variables

Distance of move

We distinguished between short- and long-distance moves. There are two ways of defining short- and long-distance moves. The first method uses the distance of move, and normally defines a move of more than 50 km as a long-distance move (Boyle, 1995; Boyle, Cooke, Halfacree, & Smith, 2001; Clark & Huang, 2004; Champion & Shuttleworth, 2017a). Another way is to use functional labour market areas to distinguish between moves within and between labour market areas as short- and long-distance moves, respectively (Clark & Huang, 2003; Kulu & Washbrook, 2014).

In this study, a move is considered to be short distance if it occurred within a labour market area (LMA), and long-distance if an individual moved to a different LMA. The advantage of this approach over the distance-based approach is that it distinguishes better the moves within the individuals' daily "activity spaces" from those between them. A LMA consists of an urban centre and the surrounding local authority areas, if at least 15% of the area's employed population commuted to the urban centre in 2001. The areas were created by using 2001 Census commuting flow data.[23] Our sample covers information from 218 labour market areas in Britain, with the London region made up of 33 smaller local districts. The

[22] Additionally, sensitivity analysis showed that coefficients for the order and type of move, cohort, gender, parental SES and residential context did not change regardless of whether we had assigned the move to 1/3, 7/12 or 7/8 of the month (not shown).

[23] The current ONS criteria for defining Travel to Work Areas (TTWAs) is that generally at least 75% of an area's resident workforce work in the area and at least 75% of the people who work in the area also live in the area.

ways of defining urban thresholds are widely discussed in migration literature (Coombes, 2000; Hugo et al., 2003). Kulu and Washbrook (2014) showed a high consistency of fertility levels by applying 15%, 20% and 30% thresholds.

Order of move

We distinguished between first moves (leaving the parental home), second moves and higher order moves.

Parental socioeconomic status

Parental occupational class was used to control for socioeconomic background. The panel contains information on respondent's mother's and father's occupational status, which is available from the household grid. We used data from the wave where respondents became 16. In case the occupational class of the mother and the father was different, priority was given to the information about the father's occupational status. The categories were coded using the Goldthorpe social class schema, distinguishing between service, intermediate and working class (Goldthorpe et al., 1980; Goldthorpe, 1983).

Educational level

The minimum school-leaving age in Britain for all individuals in our sample was 16 years. The variable is based on the self-reported question about the highest qualification degree obtained at the time of the interview and is therefore time-varying. We specified three levels for this covariate: (1) compulsory school education (GCSE or equivalent); (2) post-compulsory education ("A levels", "Higher National Certificate (HNC) or Diploma (HND)", "teaching qualifications" and other professional certificates); (3) bachelor's degree or higher ("higher Degree" and "first-degree" categories).

Partnership status

Information on partnership histories is available both from the panel and from the marital and union histories which were collected additionally in waves 2, 11 and 12, respectively (Pronzato, 2010). The dataset contains information on the type of union (cohabitation or marriage), starting and ending date of the union and how the union ended (divorce or widowhood if were married; separation or marriage if were cohabitating).

Additional control variables

We additionally controlled for a time-varying economic activity status which included categories: (1) working full-time; (2) working part-time; (3) full-time students; (4) unemployed; (5) others or missing. We also accounted for the area type of residence, distinguishing between London, other urban areas, and towns and rural areas.

5.4.3 Method

We used multistate event history analysis to examine spatial mobility of young adults. Each individual in the sample is at the risk of moving several times. Moves are treated as repeated events and we distinguish between short- and long-distance moves, treating them as competing events. This approach has proved to be a powerful tool for investigating complex moving trajectories (Kulu, 2008; Kulu & Steele, 2013). We specify a piecewise constant exponential model, which can be formalised as follows:

$$\ln \mu_{im}^{SD}(t) = \ln \mu_0{}^{SD}(t) + \sum_k \alpha_k^{SD} x_{imk} + \sum_j \beta_j^{SD} w_{imj}(t) + \varepsilon_i^{SD},$$
$$\ln \mu_{im}^{LD}(t) = \ln \mu_0{}^{LD}(t) + \sum_k \alpha_k^{LD} x_{imk} + \sum_j \beta_j^{LD} w_{imj}(t) + \varepsilon_i^{LD}$$

where $\mu_{im}^{SD}(t)$ and $\mu_{im}^{LD}(t)$ denote the risk of the *m*th short(SD)- and long(LD)-distance move for individual i, $\mu_0(t)$ denotes a piecewise constant age baseline[24] (age or time since previous move for second and higher order moves), x_k represents time-constant variables and $w_j(t)$ represents time-varying variables. Since residential episodes are nested within individuals, an individual-level error term ε_i was added to the equation to control for the clustering and unobserved determinants of residential changes (Cleves et al., 2010; Putter et al., 2007).

First, we analyse the hazard of moving by the order of move, cohort and gender. We then include the covariates and fit separate models for all, first, second, and higher order moves to further investigate whether there are differences by cohort and gender in spatial mobility patterns throughout the early stage of the life course. Next, we fit models with three-way interactions between cohort or gender, order and distance of move to

[24] The cut-point intervals were selected based on the first moves age-specific rates – 24, 60, 96 and 132 months (presented in Figure 1AC in Appendix C).

investigate whether the trends in short- and long-distance moves differ from each other. We compare the results for the interaction models, containing all time-varying covariates to those with only fixed covariates to investigate how much the changes in educational enrolment and level, partnership status and economic activity account for differences in spatial mobility across birth cohorts and between men and women.

5.5 Results

First, we analyse the risk of a move among all cohorts. Table 5.1 provides information on the number of events (moves), number of person-years, hazard rates, and the median age at move by order of moves. In our sample, 50% of respondents have left the parental home by age 22. A half of those who left home moved for the second time within approximately 2 years. The annual rate of moves for the sample is 189 moves per 1,000 person-years. The rates for the second and higher order moves are higher than that of first moves.

Table 5.1 Occurrence and exposure table by order of moves

Move order	Person-years	Moves	Rate	Survival time			
				25%	50%	75%	
1st move	12,108.48	1,358	0.112	19.3	21.8	26	(age in years)
2nd move	2,941.85	900	0.306	1	1.9	4.2	(time since 1st move)
3rd+moves	4,660.26	1,470	0.315				
Total	19,710.58	3,728	0.189				

Source: BHPS waves 1-18; own calculations.

Table 5.2 provides an overview on the median age at first move by cohort and gender. The median age of leaving the parental home among the youngest cohort is approximately one year higher than for the other two cohorts (22.5 years for the 1985-1989 cohort, 21.4 and 21.6 for the 1974-1979 and 1980-1984 cohorts respectively). The question arises as to whether this signals the postponement of moves or rather is a marker of reduced mobility (or eventually both). Among all cohorts, females leave the parental home earlier than males. Together with the general postponement of first moves, the gender gap increased from 1.2 to 2 years between the cohorts 1974-79 and 1985-89.

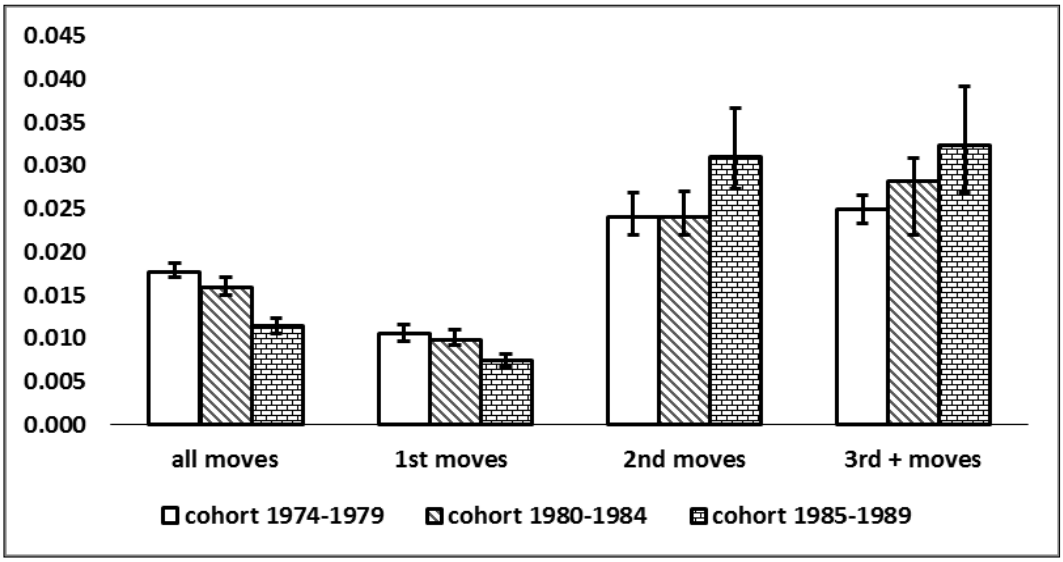
Table 5.2 Median age at first move by cohort and gender

Cohort	Gender	Age	Median age for both genders	Gender gap
1974-1979	females	20.9	21.4	1.2
	males	22.1		
1980-1984	females	20.8	21.6	2.1
	males	22.9		
1985-1989	females	21.3	22.5	2
	males	23.3		
Overall	females	20.9	21.8	1.9
	males	22.8		

Source: BHPS waves 1-18; own calculations.

Next, we analysed the hazard rates for all moves and by order of moves for each cohort. Figure 5.1 shows that the hazard rates for all moves decrease across cohorts. Rates for the youngest cohort are significantly lower for all and for first moves, which supports the postponement of moves among the youngest cohort. However, the analysis also demonstrates that spatial mobility levels among those who left home is higher for the youngest cohort than for the two older cohorts.

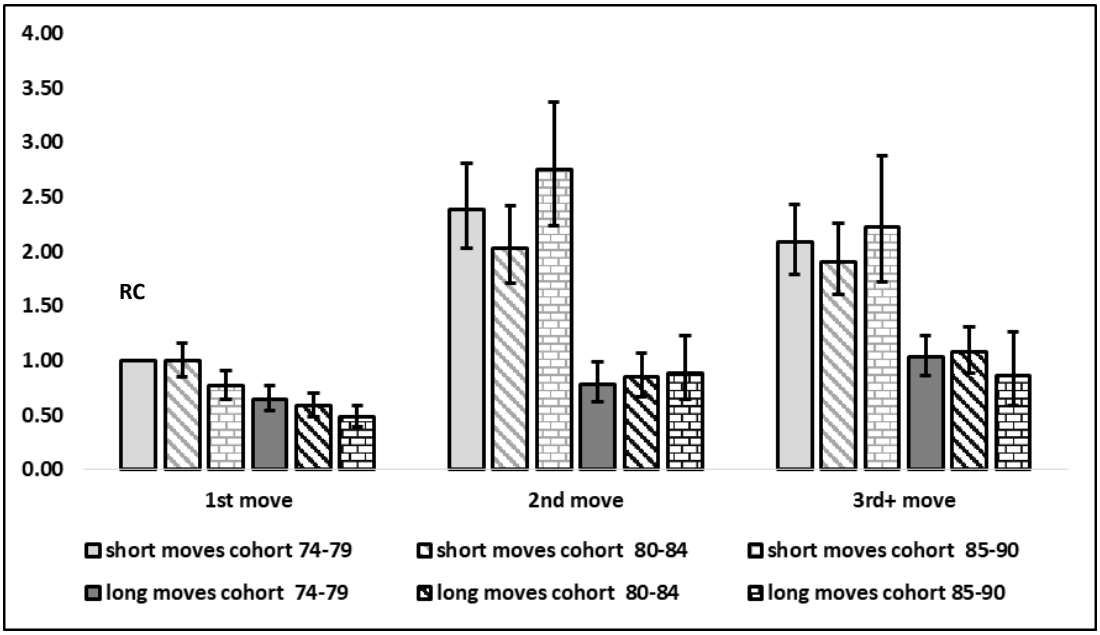
Figure 5.1 Hazard rates for all moves by cohort and order of move



Source: BHPS waves 1-18; own calculations.

In order to investigate cohort and gender differences in spatial mobility, we fitted separate models with a three-way interaction term between distance, order of move, and cohort or gender. Figure 5.2 provides relative hazard rates of first, second and higher order short- and long-distance moves by cohort. Young adults from all three cohorts are more likely to move short than long distance, as expected (e.g. Mulder & Clark, 2000). However, for the first moves the differences in mobility levels by distance of move are the smallest, suggesting that an increasing number of young adults are long-distance home-leavers. A tendency (although not statistically significant) towards higher order mobility among the youngest cohort can be attributed mostly to short-distance moves.

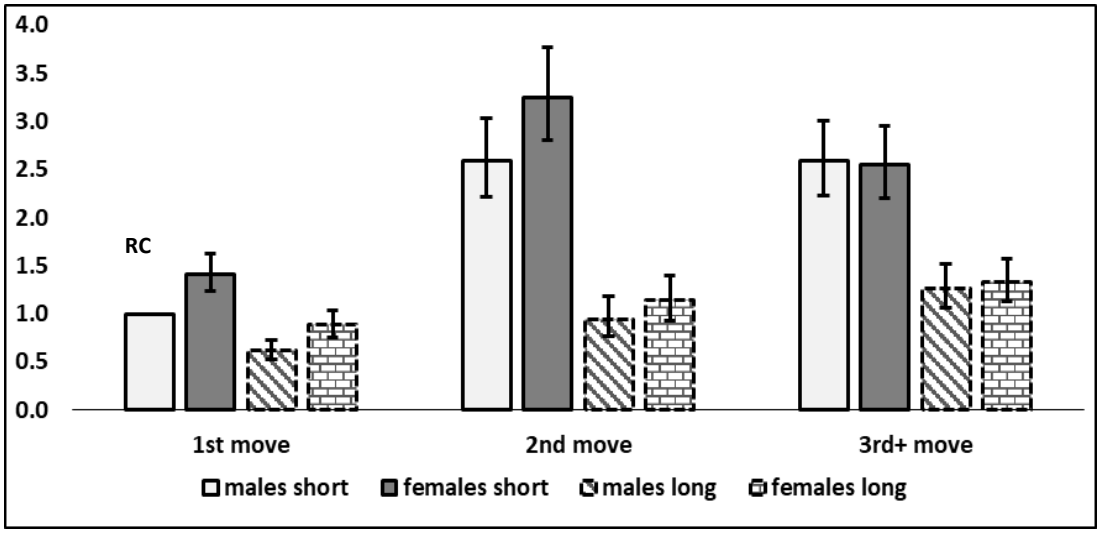
Figure 5.2 Relative risks of moving by order and type of move and cohort



Note: The model is controlled for gender, partnership and economic activity status, parental SES, education level, area type. Young people from the 1974-79 birth cohort moving short distance first time were chosen as a reference category.
Source: BHPS waves 1-18; own calculations.

Figure 5.3 shows the intensity of moves throughout the early stage of the life course separately for males and females. Females from all cohorts move out of the parental home earlier than males, both for short- and long-distances. The majority of moves are short-distance among both males and females. For higher order moves (3rd+) gender differences in the risk of a move disappear both in short- and long-distance moves.

Figure 5.3 Relative risks of moving by order and type of move and gender



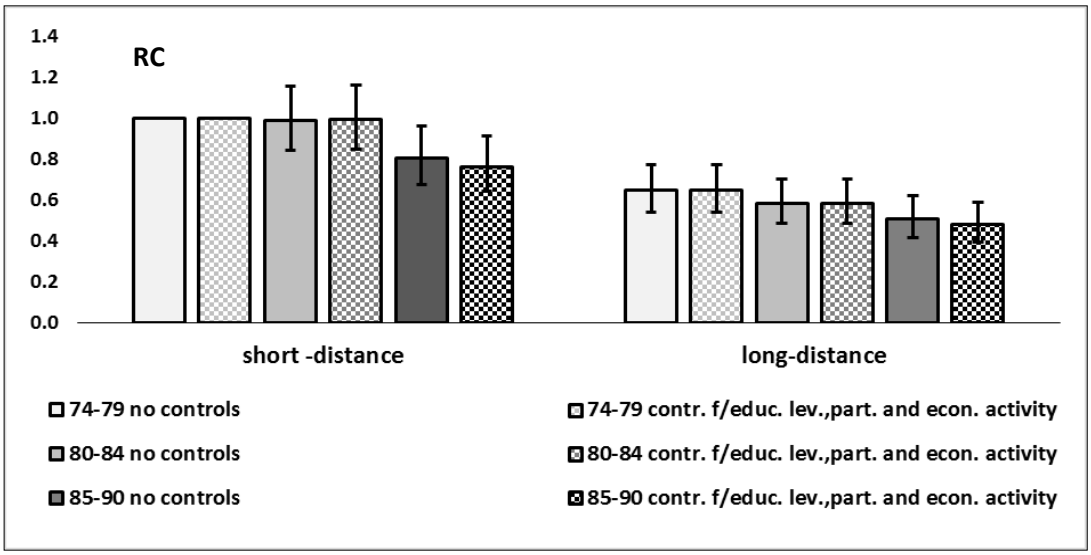
Note: The model is controlled for cohort, partnership and economic activity status, parental SES, education level, area type. Males moving short distance first time were chosen as a reference category.
Source: BHPS waves 1-18; own calculations.

Figure 5.4 shows the results for the cohort standardisation of first moves by educational level, partnership status and economic activity. By including education, employment and partnership as time-varying covariates into the model we account both for the influence of a status change (event-'trigger') as well as for the differences in mobility levels depending on current education, partnership status and economic activity. For instance, moves due to the change of educational level from "post-compulsory" to a "degree" level (meaning finishing education and moving) as well as moves of highly educated persons will appear in the model under the same category. However, we believe that will not bias the analysis, as the main question is whether the cohort and gender differences persist after adjusting for compositional factors. Future research could explicitly distinguish between variation "within individuals" and "between individuals".[25] After including control variables into the model, the coefficients only slightly changed. This suggests that little (if any) of the cohort

[25] In line with the order of life events which we ascribed to the simultaneous events (described in the section 3.1), moves of individuals with the reported partnership status "cohabiting" refer to the moves of those already living together with their partner, whereas moves of those who start living with a partner (and therefore the move happens at the same time as the cohabitation spell begins) would fall under the moves of single or separated (depending on the union order). The coefficients are especially sensitive in the models for the first moves, as the category "cohabiting" and "married" include a few cases when individuals started living together under their parents' roofs and therefore were more prone to move out. The coefficients for the economic activity status should be interpreted following the same logic. For example, moves of unemployed individuals are related to both moves of unemployed and moves due to becoming unemployed.

differences in mobility can be explained by the changes in educational enrolment and level, partnership status and economic activity. Figure 2C in the Appendix C illustrates the same analysis for second and higher order short-distance moves supporting the findings for the first moves.

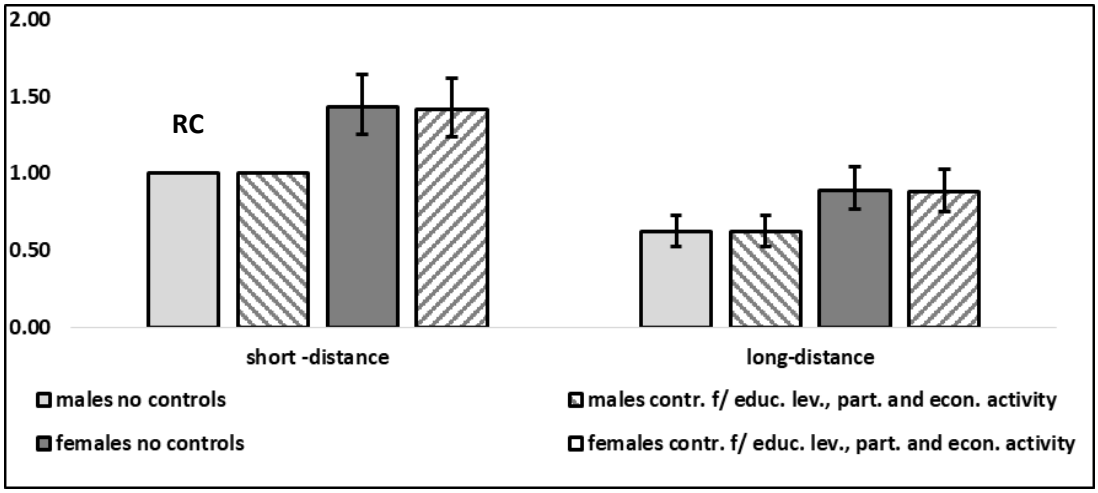
Figure 5.4 Standardised cohort differences in 1st short- and long- distance moves (by educational level, partnership and economic activity status status)



Note: Young people from the 1974-79 birth cohort moving short distance first time were chosen as a reference category.
Source: BHPS waves 1-18; own calculations.

Figure 5.5 shows that gender differences in first moves persist after controlling for all time-varying covariates of interest for both types of moves. They are significant across all three cohorts in short- and long-distance moves. Figure 3C in the Appendix C shows the effects of partnership status and educational level on hazards for the second and higher order short-distance moves as they reveal some fluctuation compared to the long-distance moves. Gender differences in second moves became slightly larger after controlling for partnership status, but its inclusion has little impact on third and higher order moves. After controlling for educational level, the coefficients for both males and females decreased and became insignificant. Therefore, it can be concluded that both cohort and gender differences in short- and long-distance moves showed only little changes after controlling for all covariates of interest.

Figure 5.5 Standardised gender differences in 1st short- and long- distance moves (by educational level, partnership and economic activity status status)



Note: Males moving short distance first time were chosen as a reference category.
Source: BHPS waves 1-18; own calculations.

Finally, Table 5.3 contains information on the effect of control variables. Table 1AC in the Appendix C contains information on the distribution of exposure time and occurrences of moves by main covariates. As expected, young people from advantaged socioeconomic background leave the parental home earlier than those who come from disadvantaged families. Young people from the two older cohorts who were living in London at age 16 left the parental home later than their counterparts outside of London. For the risk of a higher order of move, the differences between London and the rest of the country became less pronounced for all cohorts. There were no geographical differences for the youngest cohort. Table 2C in the Appendix C presents additional sensitivity analysis with regards to the regional level of geography (only coefficients for geography variables are shown as it did not affect any other covariates). The results confirm that young people from London and the South East experienced the lowest risk of first move compared to the rest of England and Wales which can be explained by the postponement of moves and tight housing market. The results for second and higher order moves should be interpreted with caution due to the small sample size (e.g. only 40 second moves and less than 100 higher order moves in the East).

Table 5.3 Relative risks for all moves and by order of move

Variables	All moves		First moves		Second moves		Third and higher order moves	
	Haz. Ratio	Sig	Haz. Ratio	Sig	Haz. Ratio	Sig	Haz. Ratio	Sig
Age	**Baseline hazards**							
16-17	0.002	***	0.002	***				
18-20	0.005	***	0.005	***				
21-23	0.005	***	0.004	***				
24-26	0.004	***	0.004	***				
27+	0.003	***	0.003	***				
Time since previous move					**Baseline hazards**			
First move	1							
0-1 years	1.79				0.009	***	0.012	***
1-3 years	2.54	***			0.012	***	0.018	***
3-5 years	1.90	***			0.009	***	0.013	***
5 + years	1.55	***			0.006	***	0.011	***
Adjustment for the 3rd+ moves	0.97							
Sex								
Males	1		1		1		1	
Females	1.20	***	1.36	***	1.23	**	1.04	
Cohort								
1974-1979	1		1		1		1	
1980-1984	0.94		0.97		0.95		1.06	
1985-1989	0.87	**	0.75	***	1.15		1.21	*
Parental occupational class								
Service class	1		1		1		1	
Intermediate class	0.87	**	0.86	**	0.77	**	0.86	*
Working class	0.93		0.90		0.97		0.86	*
Missing	0.92		0.96		0.81		0.88	
Partnership status								
Single	1		1		1		1	
Cohabitating	0.97		4.22	***	1.26		0.88	
Married	0.79	**	2.82	***	1.03		0.67	*
Separated	1.49	***	1.67	**	1.09		0.94	
Educational level								
Compulsory school education	1		1		1		1	
Post-compulsory education	1.37	***	1.65	***	1.16		1.01	
Bachelor's degree or higher	1.85	***	2.27	***	3.54	*	0.90	
Economic Activity Status								
Full-time employed	1		1		1		1	
Part-time employed	0.81	**	0.96		1.02		0.85	
Full-time student	1.15	**	1.22	**	1.12		1.27	**
Unemployed	1.25	***	1.40	**	1.24		0.95	
Others/Missing	0.91		0.87		1.00		0.76	*
Residential context								
London	1		1		1		1	
Other urban	1.31	***	1.50	***	1.19		1.14	
Small towns and rural areas	1.36	***	1.56	***	1.22	*	1.15	*
Type of move								
Short-distance	1		1		1		1	
Long-distance	0.51	***	0.50	***	0.50	***	0.51	***

Source: BHPS waves 1-18; own calculations. Note: *p<0.05, **p<0.01, ***p<0.001.

5.6 Discussion

In this paper we analysed order-specific moves of young people in Britain during the transition to adulthood. We investigated cohort and gender differences in short- and long-distance moves among young adults since age 16. The analysis of spatial mobility by cohort supported our hypothesis on the low risk of a first move among the youngest cohort (H1). We found evidence for the postponement of leaving the parental home among the youngest cohort by approximately a year compared to the older cohorts, supporting the overall trends towards "protracted" youth transitions (Liefbroer, 1999; Billari & Liefbroer, 2010). Despite the observed general decline in mobility, we found a tendancy towards higher levels of second and higher order moves among the youngest cohort. The results for both short- and long-distance moves showed that changes in educational enrolment and level, partnership status and economic activity explained little (if any) of the differences in spatial mobility across cohorts (H6), which suggests the increasing importance of other motives behind the moves of young people (e.g. environmental and social reasons, personal preferences, family ties and cultural norms). The tendency towards elevated levels of second and higher order moves among the youngest cohort may provide support for the growing polarisation between the "stayers" (those who prolong staying in the parental home) and the "movers" (those who move out and show a relatively high mobility rate). This observation is in line with previous findings of higher spatial mobility among those who moved at least once (repeat-movers) (Clark & Huang, 2004; Clark & Whithers, 2007).

Our analysis of gender differences in spatial mobility among young people supported that females leave the parental home earlier than males among all cohorts (H2). It is likely that some of these gender differences are due to females' earlier entry into partnership as well as a reflection of the reverse gender gap in education observed in Britian since the beginning of the 1990s. After controlling for partnership status and educational level, gender differences in first moves still persisted, but they disappeared for higher order moves. This finding contradicts our expectation (H2) on women's higher mobility during the transition to adulthood. The convergence of mobility patterns by gender supports the tendency towards similarity in life transitions among young people (Winkler-Dworak & Toulemon, 2007; Stone et al., 2014), resulting from a longstanding process of the changing role of women in British society (Falkingham et al., 2016).

Our analysis supports that young adults from more advantaged socioeconomic backgrounds leave the parental nest earlier among all cohorts (H3). The polarisation by

spatial mobility observed among young adults contributes to the general discussion of the increased divergence in life careers between young people from more advantaged and disadvantaged backgrounds in Britain (Coffield, 1995; Berrington, 2001; Bynner, 2001, 2005; Ekert-Jaffe et al., 2002; Stone et al., 2011). The analysis also supported the hypothesis regarding later leaving of the parental home among Londoners for all cohorts, although, we did not find any evidence for lower mobility in London compared to other urban areas (H4). Overall, the results were similar for short- and long-distance moves, although the risk levels were higher for the former than the latter (H5).

In this paper, we mostly analysed cohort and gender differences, by considering the influence of changes in other life domains, namely education, employment and partnership careers. We found that the youngest cohort postpones leaving the parental home, but there is a tendency towards elevated levels of second and further moves, which might be a sign of polarisation in spatial mobility. We found that females leave the parental home earlier than males, but afterwards the patterns in spatial mobility among males and females converge. Further research is needed to determine to what extent the polarisation among cohorts, if true, is driven by the increased economic precarity among young people (high tuition fees, lower level of labour market security and limited affordability of housing) or by other factors. A more detailed analysis of the effects of each transition in education, employment and partnership careers might provide further insights into the spatial mobility patterns among young people. Another question remains as to whether the convergence of gender mobility patterns could also be a result of self-selection among the more mobile young people.

Research on young adults' complex transitions and changing values further supports the idea of thinking beyond the simple economic rationality behind the moves, which might as well contribute to our understanding of mobility polarisation. After controlling for the effects of some of the migration events-triggers, such as changes in employment, relationships and family size, the cohort differences in spatial mobility persisted, suggesting the importance of other factors. These motives include among others changing living environment, neighbourhood quality and specific preferences, personal development, proximity to the parental home and peers (living in shared housing) as well as other family ties. The concept of "lifestyle migration" (Walford & Stockdale, 2015) and the "new mobility paradigm" (Sheller & Urry, 2006) propose further meaning of movements as an active practice rather than simply the goal-oriented adjustment process and therefore

might be seen as an alternative explanation for young people's movements. Further research is needed to investigate the reasons behind the increased mobility of "movers" and investigate as to whether this is a sign of establishment of a new "social norm" in mobility linked to the "age of migration" and transformed cultural meaning of shared housing or whether this is driven mostly by the environmental and social factors.

Applying multistate models to longitudinal data from Britain, this study showed significant differences in spatial mobility among young adults by birth cohort, gender and socioeconomic background. The future research should combine individual histories from the BHPS and the Understanding Society study (UKHLS) to study life histories of the youngest cohort; and also apply qualitative methods. Further the suggested approach could be applied to data from other industrialised countries to improve our understanding of how much changes in educational level, partnership and economic activity status explain changes in spatial mobility and reasons for moving among young people in industrialised countries. Given the increased cross-national heterogeneity in the timing and sequencing of events during the transition to adulthood an important question is whether spatial mobility patterns among young adult increasingly vary across countries.

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Chapter VI

Conclusions

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6.1 Introduction

The aims of this thesis were to study life trajectories of young people in England and Wales and to investigate how the transition to adulthood is influenced by birth cohort, parental socio-economic background, and individual's life course characteristics. This thesis examined the following overarching research questions: How have education and employment careers of young adults changed? (Chapter II); How have partnership transitions changed? (Chapter III); How have the moving trajectories changed? (Chapter IV). The following section summarises the research findings (6.2). This is followed by the discussion of conclusions (6.3) and contributions (6.4). Policy implications of this research are mentioned in 6.5. Finally, opportunities for future research are presented in section 6.6.

6.2 Summary of findings

6.2.1 Employment and education trajectories of young adults

Chapter II investigated changes and continuities in education and employment trajectories among young people in England and Wales from three birth cohorts: 1974-79; 1980-84; 1985-90. Using the combined data from BHPS and UKHLS, the analysis focused on the events occurring in the period between ages 16 and 26. The chapter's aim was to address the following research questions: *"How have education and employment trajectories changed since the rapid expansion of further and higher education in the beginning of 1990s? What is the association between education and employment trajectories and occupational outcomes 10 years after completing compulsory school education? How do occupational outcomes differ by level of education with regards to cohort, gender, and parental socio-economic background?"* A combination of sequence analysis and multinomial logistic regression was applied to investigate how school-to-work sequences have changed by cohort and how they have been affected by gender and parental socio-economic background. The analysis identified six distinctive educational and employment pathways: "Rapid School-to-Work"; "Higher education to Work"; "Prolonged Studies"; "Non-Active"; "Part-time Employed"; and "Unemployed". Further expansion of higher and further education has reflected in the increased proportion of young people staying in education after school among the youngest cohorts. However, the analysis has revealed the persistence in the rapid school-to-work trajectories among young people from less

advantaged backgrounds. Trajectories of the younger cohorts were found to become more turbulent and complex, reflecting on the changing nature of the labour market structure and increased difficulty of finding a suitable job. Education and employment trajectories were found to be a good predictor of the occupational outcomes at age 26, but the effects varied by gender and parental socio-economic background. Thus, despite an overall positive association between higher education and better employment chances in the future, highly educated young people from lower socio-economic backgrounds had lower chances of being in professional and managerial occupations after graduation. The analysis also highlighted the persistence of patterns of disadvantage over time. Thus, low educated young people as well as those from lower socio-economic backgrounds were found to be more likely engaged in low-skilled occupations or experience longer spells of unemployment and non-activity, which could result in a long-term exclusion from the labour market. Low educated women, but not low educated men, were found to be highly likely excluded from the labour market in a long-term.

6.2.2 Partnership transitions of young adults

Chapter III analysed how partnership transitions of young people born in England and Wales between 1974 and 1991 have changed over the past 25 years. In particular, this chapter aimed to address the following research questions: *"How have partnerships experinces changed across the cohorts? How do partnership histories differ by gender, parental socio-economic background, and educational attainment?"* Competing risks event history models were applied to the combined data from BHPS and UKHLS to investigate young people's partnership experiences, focusing on four transitions – first union formation (cohabitation or direct marriage), outcomes of first cohabiting unions (end of cohabitation via marriage or separation), dissolution of marriages with first partners, and second union formation (cohabitation or direct marriage). The results showed that cohabitation has become a universal form of first union formation among young people, with the levels of direct marriage continuously declining across cohorts and reaching a plateau among the youngest cohort. While cohabiters from the oldest cohort (1974-79) were found to be equally likely to marry or separate from their first partner, cohabiting unions among the two youngest cohorts (1980–84 and 1985–91) almost universally end in separation. The levels of repartnering were found to be the highest among the youngest cohort suggesting a potential increase in serial cohabitations to be observed in the future.

Further analysis showed little differences in partnership experiences by socio-economic background and educational level supporting that the main changes have taken place across birth cohorts. Women were found to enter first unions earlier than men by approximately 3 years, although no differences in the outcomes of first cohabitation or repartnering were observed.

6.2.3 Short- and long-distance moves of young adults

Chapter IV analysed how internal migration trajectories of young people born in England and Wales between 1974 and 1989 have changed over the period between 1991 and 2008. This chapter was designed to address the following research questions: *"How have the moving trajectories changed across cohorts? How do moving trajectories differ by gender and socio-economic background? How much variation in spatial mobility across birth cohorts and between males and females is associated with changes in educational enrolment and level, partnership status and economic activity?"* Multistate event history analysis was applied to the data from BHPS to analyse short- and long-distance moves of young people during the transition to adulthood. The results showed that the youngest cohort (born in 1985-89) leaves the parental home by almost one year later than the two older cohorts (born in 1974-79 and 1980-84). However, once they move out, they show higher levels of spatial mobility (e.g. higher rates of third and higher order of move). The levels of short-distance moves are overall higher than the levels of long-distance moves. Females were found to leave the parental home earlier than males, although no differences were observed in the levels of higher-order moves. The analysis highlighted the perstistence of socio-economic differences in spatial mobility. Young adults from more advantaged socioeconomic backgrounds leave the parental home earlier among all cohorts and remain spatially more mobile in the early adulthood. After controlling for changes in other life course domains (i.e. educational enrolment and level, partnership status and economic activity) differences in spatial mobility among cohorts and between males and females remained pronounced. This suggests the increased importance of other motives behind the moves among the youngest cohort, going beyond the conventional explanation of moves triggered by changes in occupation, relationships, family and partnership status.

6.3 Conclusions and discussion

This thesis investigated three key life course trajectories during the transition to adulthood in England and Wales in the period between 1991 and 2016. Education and employment careers, partnership experiences and spatial mobility were analysed by three main dimensions: cohort, gender, and parental socio-economic background. The following section discusses the conclusions drawn from the findings of each chapter according to these dimensions.

6.3.1 Cohort

Overall, the longitudinal analysis of 5-year birth cohorts highlighted significant changes in life course trajectories over the last 25 years, while some continuity was observed as well.

Analysing the three dimensions of the life course, this thesis finds further evidence for the postponement of leaving the parental home, finishing education, and starting a partnership among the youngest cohorts, supporting the overall trends towards “protracted” youth transitions (Liefbroer, 1999; Billari & Liefbroer, 2010). However, despite this postponement, the frequency of occurrence of events in later life suggests that lives of young people have become more "turbulent" and "eventful". Thus, after postponing of leaving the parental home, the levels of second and higher order moves among the youngest cohort were found to be the highest. Similarly, the youngest cohort was found to futher postpone entering the first cohabiting union, yet their first unions almost universally end in separation. High levels of repartnering suggest that there might be a potential increase in serial cohabitations in the future. An increase in the mean number of education and employment transitions across the early stage of the life course also supports an idea that life course trajectories have become more complex. Further expansion of higher and further education has reflected in the universal increase in time spent in education among the youngest cohort. And yet, young adults across all cohorts and regardless of the pathway they follow experience spells of unemployment, part-time employment, and non-activity, suggesting that periods of temporary uncertainty have become an integral part of school-to-work trajectories.

The fact that trajectories of the youngest cohort differ from the two oldest cohorts pose further questions whether this is caused by period (structural) effects, e.g. the outbreak of

the financial crisis in 2008-2009 and continuous tightening of the housing market, or whether it symbolises the emergence of a new model in the transition to adulthood. Thus, for example, the prevalence of short-term cohabitation among the youngest cohorts supports the previous notion of increased sliding in and out of cohabitation (Manning & Smock, 2005). While among older cohorts first co-residential unions were likely to be seen as sort of trial marriages, young adults born in the 1980s are likely to move together for different reasons. A lack of normative constraints as well as convenience and economic reasons have been proposed as explanations of the underlying mechanism of these changes (Sassler, 2004; Manning & Smock, 2005), yet the precise origins of this phenomenon are unclear. The results for both short- and long-distance moves have shown that changes in educational enrolment and level, partnership status and economic activity explained little of the differences in spatial mobility across cohorts, which suggests the increasing importance of other motives behind the moves of young people (e.g. environmental and social reasons, personal preferences, family ties and cultural norms). Altogether, these findings suggest an increased role of human agency and unobserved factors shaping young people decisions in early adult years.

6.3.2 Gender

One of the aims of this thesis was to investigate how life course transitions in early adulthood differ by gender. Overall, the findings suggest that there is a trend towards a convergence in trajectories between men and women, although persistent inequalities are observed in labour market outcomes.

Women across all cohorts were found to leave the parental home and enter first union earlier than men. However, since the expansion of higher education among women, these two dimensions have become more de-coupled, with women leaving home more often for educational reasons rather than for partnership formation. No gender differences were observed in the outcomes of first cohabiting unions, thus both men and women were more likely to separate from their first cohabiting partner than to marry them. No gender differences were observed in repartnering rates either. Similarly, no gender differences were observed in higher order moves. The convergence of mobility and partnership patterns by gender supports the tendency towards similarity in life course transitions among young men and women (Winkler-Dworak & Toulemon, 2007; Stone et al., 2014; Jalovaara & Fasang 2015; Wright 2016).

On the contrary, striking differences were observed in education and employment trajectories. Findings in this thesis confirm that since the 1990s women's higher education enrolment rates were slightly higher than men's. However, in the first 10 years after finishing compulsory school, women on average were found to spend less time being full-time employed and more time being in part-time employment or non-active, as compared to men. The gender differences were found to be persistent in the occupational outcomes as well. At age 26, highly educated women had higher chances of being employed in professional and managerial occupations than highly educated men. Though, low educated women were found to be excluded from the labour market, confirming the persistence of gender inequalities, despite the feminisation of higher education and labour market. Altogether, the findings suggest that despite the convergence of partnership and moving life trajectories among men and women, there is strong evidence in occupational and labour market gender differences. In particular, low educated women are highly likely to follow precarious employment trajectories, which might have severe negative effect on their outcomes later in life. Another warning aspect of this finding is that implying that low educated women are likely to fall into the trap of precarious and sporadic employment trajectories suggests that their children are likely to suffer from limited resources in childhood. This thus could contribute to reproduction of social inequalities and further polarisation between the social classes, supporting the "diverging destinies" thesis (McLanaghan, 2004).

6.3.3 Parental socio-economic background

Parental socio-economic background was the third dimension of the investigation of the transition to adulthood in England and Wales. Traditionally, life course trajectories of young people in Britain were found to be largely influenced by social class (Bynner, 2001, 2005; Cavalli & Galland, 1995; Coffield, 1995). Analysis presented in this thesis confirms that parental socio-economic background plays an important role defining young people's education, employment, and residential trajectories, although, does not affect partnership transitions to the same extent.

Young people from more advantaged backgrounds were found to leave the parental home earlier for educational reasons and thus follow their parents' educational routes. They remain more spatially mobile over the early stage of the life course. Young people from the lower socio-economic background are less likely to continue education after school and

more likely to follow rapid school-to-work trajectories. Overall, despite an increase in the numbers of graduates from less advantaged backgrounds over time, highly educated young people from working class families have significantly lower chances of being in professional and managerial occupations after graduation. Young people from lower socio-economic backgrounds are more likely to be engaged in low-skilled occupations or experience longer spells of unemployment and non-activity. In contrast to previous arguments, parental socio-economic background was found to play little (if any) role in partnership transitions among the cohorts studied in this thesis. Altogether, some evidence was found towards increasing convergence in life trajectories (in particular partnership transitions) between young people from more and less advantaged backgrounds. On the contrary, education and employment trajectories remain highly influenced by prior socio-economic parental resources, with young people from disadvantaged backgrounds experiencing higher chances of following precarious and turbulent employment trajectories in the long-term.

6.4 Contributions of this thesis

Youngest birth cohorts

This thesis contributes to the literature in a number of ways. First, it brings new substantive knowledge about the most recent birth cohorts in England and Wales, which have started their transitions to adulthood in the period of rapid socio-economic changes after the 1990s and about whom still little is known. It investigates 5-year birth cohorts (1974-79; 1980-84; 1989-89(91)) as opposed to the conventional 10-year threshold and shows an advantage of this approach in investigating the micro-social changes occurring in the transition to adulthood over the last 25 years. This thesis presents evidence towards "protracted" youth transitions with further postponement of leaving the parental home and first partnership formation, which can be partially explained by the expansion of further and higher education. Overall, the analysis suggests that together with the postponement, life course trajectories among the youngest cohorts have become more complex with a higher number of events occuring in all life domains.

Alongside looking into cohort patterns this thesis has examined how life course trajectories are shaped by individual characteristics, in particular gender and parental socio-economic background. As observed in the earlier cohorts, women born between 1974 and 1991 were found to be leaving the parental home and entering first partnership earlier than men, although no gender differences were observed in subsequent partnership and migration

trajectories. In contrast, persistent inequalities were observed in labour market outcomes, with low educated women showing alarmingly high rates of exclusion from the labour market. Findings of this thesis provide evidence that parental socio-economic background which has traditionally played an important role in shaping young people's life course trajectories in Britain still explains a large part of the variation in transitions. Young people from more advantaged backgrounds are more likely to obtain high qualifications and profit from higher returns to longer time spent in education. Despite an increase in the proportion of young people from less advantaged backgrounds going into higher education, they are still much less likely to occupy professional and managerial positions.

Convergence/divergence of life trajectories

Second, this thesis contributes to the theoretical discussion of polarisation and "structured individualisation" of the life course among British youth as well as to the discussion of convergence/divergence of gender trajectories in early adult years. These considerations are directly linked to the previous discussion regarding the role of the parental socio-economic background and gender in shaping young people's lives. Evidence was found towards the persistence of social class and gender differences in shaping education and employment trajectories suggesting that these trajectories on average remain highly defined by background characteristics. Although, no gender or parental SES differences in partnership trajectories were found, supporting the notion that the influence of individual experiences are more important for individuals' partnership behaviour than ascribed socio-economic status (e.g. Berrington & Diamond, 2000; Mäenpää & Jalovaara, 2014). Analysis of migration trajectories, on the one hand, has reflected the influence of the parental socio-economic background, i.e. young people from more advantaged backgrounds move more often. Yet on the other hand, further findings have highlighted the importance of environmental and personal reasons behind the migration behaviour among the youngest cohorts, which speaks in favour of increased individualisation behind one's decision to move. Altogether, there exists no direct answer to the question whether young people's trajectories have become more structurally polarised or whether trajectories have become more individualised and driven by own agency as evidence in support of both statements was presented in this thesis. Although, with the overall postponement of partnerships and childbearing among the recent cohorts and precarious conditions of labour and housing markets, no support was found towards the persistence of "slow" and "fast-tracks" among British youth.

Analysis of life trajectories

Third, this thesis takes a longitudinal life course perspective and analyses trajectories as opposed to conventional single transitions during the transition to adulthood. Applying the combination of sequence analysis and multinomial logistic regression has improved our understanding of the changes and continuities in school-to-work trajectories among young people. It has as well provided robust evidence of the link between the trajectories, individual characteristics and occupational outcomes in later life. Analysing partnership and migration life course trajectories by applying multistate event history models has shown the importance of taking into account that multiple transitions might be occurring simultaneously (e.g. moves can be triggered by changes in employment or partnership status) and thus the application provides a more robust picture of the transitions of interest. The other strength of this approach is that it allows the simultaneous analysis of: 1) the likelihood of experiencing of competing life events; 2) duration spent in one or another status; 3) the sequence of events; and 4) adjustment of transition rates to population heterogeneity.

6.5 Policy implications

This thesis has investigated how life course trajectories among young people in England and Wales have changed over the past 25 years and how gender and parental socio-economic background have effected these changes. Main policy implications come from the research on education and employment transitions presented in Chapter II.

First, this thesis has shown that school-to-work trajectories have become more turbulent, with periods of unemployment and non-activity becoming an almost universal integral part of education and employment trajectories among young people entering the labour market after the 1990s in the UK. For young people from lower socio-economic backgrounds temporary labour market precarity has shown to likely turn into a case of persistent disadvantage. Thus spells of unemployment and non-activity encountered in early ages have shown to increase the chances of experiencing precarious employment conditions or non-activity in the long term. This not only poses a serious threat for young people's future career progression, but has also found to have a dramatic effect on young people's well-being and mental health with a high likelihood of leading to severe illnesses, depression and low self-esteem (Bell & Blanchflower, 2010; Sissons & Jones, 2012). Negative effects of youth unemployment on society in general, including large scarring effects on public

finance have been widely recognised. Thus reducing the proportion of NEETs and developing a global strategy for youth employment has been announced as vital indicators of the United Nations *Sustainable Development Goal* (SDG) number 8 – "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (United Nations, 2018). Yet, more action is needed on the frontier of improving young people's employability on a regional level. In particular, better communication between employers and schools as well as universities could improve our understanding and reduce the skills mismatch on the labour market.

Second, findings of this thesis have demonstrated that despite an increase in the number of graduates from lower socio-economic backgrounds, highly educated young people from working class families have significantly lower chances of being in professional and managerial occupations after graduation. Further evidence suggests that higher education performance is positively associated with parental education and resources and thus children of people with higher academic achievements perform better at school and university (e.g. Smith & Robin, 2001). Prior qualifications obtained during A-levels or equivalent vocational training as well were found to explain part of the socio-economic gaps in university dropout and degree class (e.g. Del Bono & Holford, 2018). Therefore, improving career advice services and support at both school and university levels could further help young people from less advantaged backgrounds to find their way in succeeding in education and entering the labour market. The continuation of Outreach and Widening Participation programmes are as well essential for creating a stimulating environment during the time when students (and their parents) have to make a choice regarding the future career.

Third, despite the convergence in partnership and migration trajectories among men and women, striking difference are still observed in school-to-work trajectories. Since 1992, the participation rate of women in higher education has been persistently higher than among men. Highly educated women have shown to be likely employed in professional and managerial positions, yet there is strong evidence towards the existence of a gender pay gap in these occupations later in life (Blundell et al., 2010; Olsen et al., 2018). It is essential to understand how other life course events (e.g. career breaks and occupational downgrading after childbirth) might have a scarring effect on women's employment later in life and introduce new policies helping women to reconcile work and family life. Another striking finding is the polarisation of employment trajectories among high and low

educated women. Thus, low educated women are at high risk of either working part-time or being completely excluded from the labour market, although no similar pattern was found among low educated men. It therefore remains unclear why low educated women are excluded from the labour market and suffer greater consequences than low educated men and calls for a better understanding of female careers in general.

6.6 Opportunities for further research

Analysis presented in this thesis is based on the data from 18 waves of the BHPS and 6 waves of the UKHLS. Incorporating further waves of Understanding Society could extend the observation window for the youngest cohorts and thus allow the comparison of trends in later life and investigate how these are affected by the conditions in early adulthood. Moreover, incorporating further waves would open up an opportunity to investigate life course trajectories among cohorts born after 1991 and analyse whether they follow the trends set up by the earlier cohort born in 1985-90.

Following the argument for incorporating further waves, analysis in this thesis could not explore in full the transition to first parenthood as the event has been experienced by only less than a half of the sample of the youngest cohort. Research on older cohort has shown childbearing in the UK is "educationally and socially polarised" with higher fertility rates among the most disadvantaged on the one hand, and postponed childbearing with eventual higher rates of childlessness amongst most advantaged on the other (Ekert-Jaffé et al., 2002; Rendall & Smallwood, 2003; Ratcliffe & Smith, 2006; Sigle-Rushton, 2008; Berrington et al., 2015). Considering the overall postponement of childbearing, drastic decrease in teenage pregnancies and increase in the in number of births occurring outside of marriage (Hobcraft, 1996; Steele et al., 2006; Sigle-Rushton, 2008), further analysis of the transition to parenthood (once the event occurs) could undoubtedly add to the picture of changing patterns in the transition to adulthood.

Analysis in Chapter IV has highlighted the importance of environmental and personal reasons behind the migration behaviour among the youngest cohorts. One of the limitations of the data used for the analysis in this thesis is that is does not allow to adjust for various characteristics of housing quality which were often argued to be an important determinant behind residential mobility (Gambaro et al., 2017). Yet, it remains unclear to what extent increased spatial mobility among the youngest cohorts is a result of individualised behaviours in the "age of migration" or poor housing conditions. Extending

the analysis to other data sources, e.g. the English Housing Survey, could potentially help answering this question.

Future research could also investigate changes in the transition to adulthood among ethnic minorities. Due to the low number of ethnic minorities in the BHPS sample and high panel attrition, it was not possible to conduct a thorough analysis of life course trajectories among different ethnic groups in this thesis. For a few decades ethnic minorities groups were less likely to obtain higher education compared with the White British group mostly due to the lower socio-economic status (Heath & Brinbaum, 2007). Since 1991 the proportion of young people enrolled in higher education has increased among all ethnic groups in the UK (Lymperpolou & Parameshwaran, 2015). According to 2011 Census data, young people aged 16-24 from almost all ethnic minority groups were more likely to have academic qualifications than the White British group, with young people of Indian and Chinese origins reporting the highest proportions of highly educated (Ibid.). Although, despite the increased rate of participation in higher education, labour market outcomes among ethnic minorities were found to be worse, as compared to the White British group (Rafferty, 2012). It is yet unclear, how education and employment trajectories differ among ethnic minorities and which factors affect the successful entry into the labour market the most. Moreover, high heterogeneity in partnership experiences (Hannemann & Kulu, 2015) and fertility patterns among ethnic minorities (Kulu & Hannemann, 2016) has been observed as well. Thus, investigating life course trajectories in early adulthood among ethnic minorities could improve our understanding of the reproduction of social inequalities and contribute to the discussion about polarisation among British youth.

One of the methodological directions for future research could be to study various transitions in early adulthood simultaneously to control for the selection effects at different stages (e.g. Lillard et al., 1995; Steele et al., 2006; Mikolai & Kulu, 2018). Multiple imputation for employment and education sequences (Halpin, 2012) could also be applied in order to increase the number of observation for the youngest cohort.

Longitudinal approach adopted in this thesis has provided new insights into our undertanding of how young people's trajectories in life have changed over the past 25 years in Britian. Similarly, this approach could be applied to data from other industrialised countries. This could improve our understanding of changes occurred in early adulthood in most recent cohorts and could contribute to the broader theoretical discussion of individualisaiton and de-standardisation of the early life course. Given the decreased cross-

national heterogeneity in the timing and sequencing of events during the transition to adulthood among the most recent cohorts (as presented in Table 1.1), another interesting question would be to investigate how much variation is still observed among the three Western European patterns of the transition to adulthood outlined in the introduction of this thesis. Extending the geographical focus to the US, Australia, Canada, and New Zealand could also contribute to understanding whether the British pattern standing alone among European countries but might be a part of a wider pattern of the transition to adulthood observed in countries with the (neo)liberal welfare regime.

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Appendix A:

Chapter III

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Table 1A Cluster-specific pseudo F and R^2 tests to determine the number of clusters

	Four clusters	Five clusters	Six clusters	Seven clusters	Eight clusters
Pseudo F	125.56, p<0.001	112.57, p<0.001	102.18, p<0.001	93.59, p<0.001	86.99, p<0.001
Pseudo R^2	.30	.34	.37	0.39	0.41

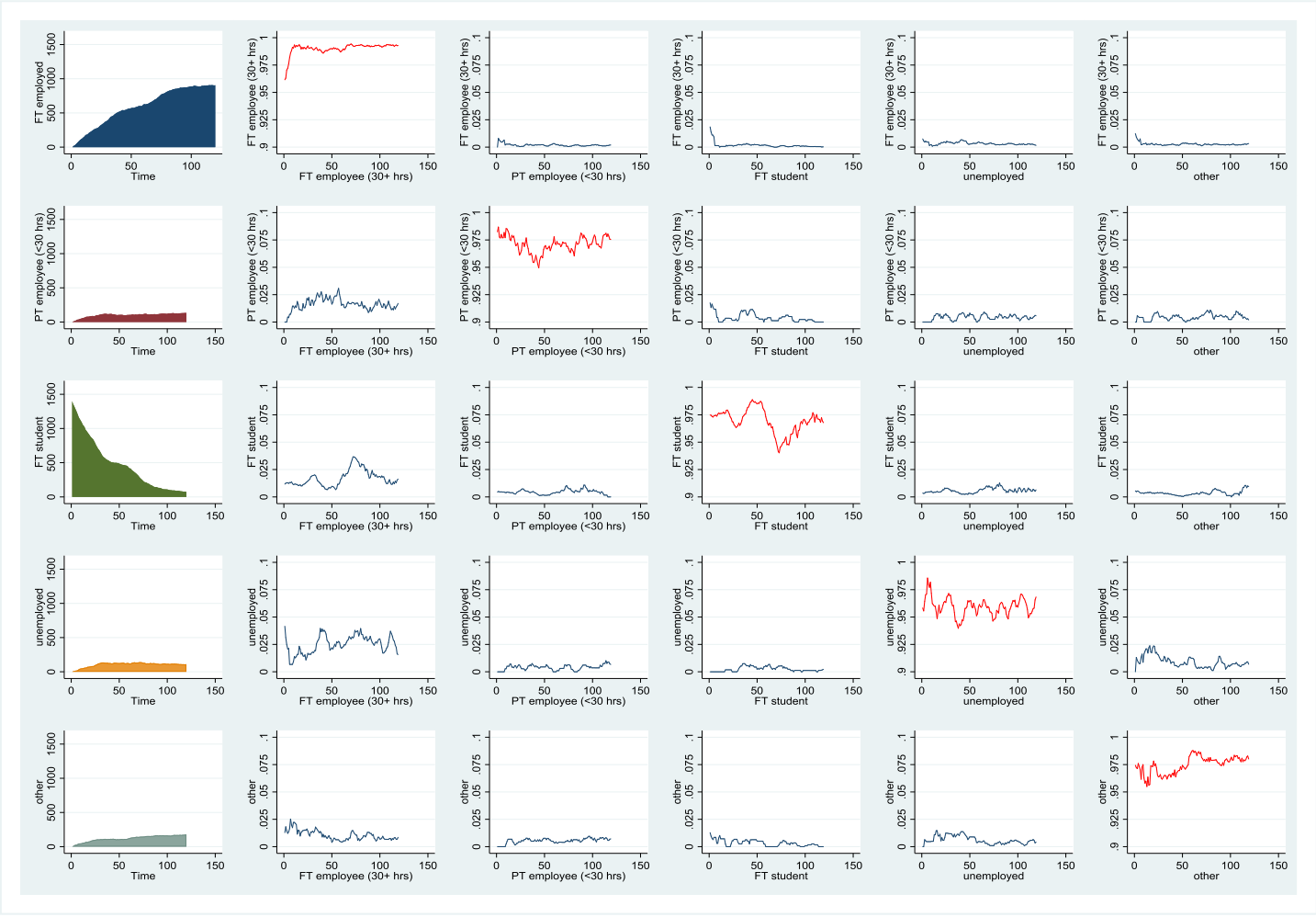
Note: Pseudo F compares the sum of the squares explained by the cluster solution with the total sum by running 5,000 permutations of sequence reallocation based on the group membership vector (Studer et al., 2011). Pseudo R^2 shows the percent of total variability explained.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 2A Silhouette parameters for six-and seven-cluster solution

Six cluster solution				
Cluster	**N of objects**	**Min width**	**Mean width**	**Max width**
1	91	-0.11	0.30	0.62
2	130	-0.09	0.37	0.64
3	96	-0.18	0.24	0.56
4	554	-0.15	0.42	0.62
5	400	-0.04	0.39	0.64
6	130	-0.02	0.35	0.59
Seven cluster solution				
Cluster	**N of objects**	**Min width**	**Mean width**	**Max width**
1	50	-0.14	0.19	0.49
2	90	-0.13	0.30	0.62
3	534	-0.16	0.44	0.64
4	85	-0.21	0.20	0.49
5	382	-0.03	0.42	0.66
6	129	-0.03	0.34	0.58
7	131	-0.17	0.36	0.63

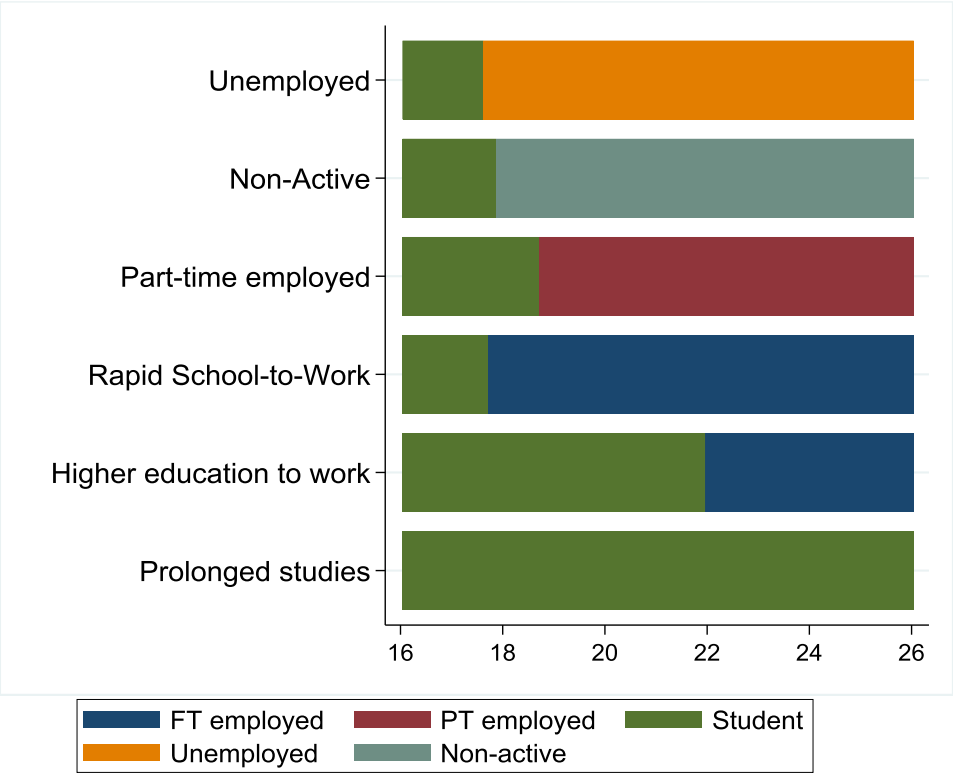
Note: Each cluster is represented by one silhouette, showing which objects lie well within the cluster and which objects hold an intermediate position. Silhouette width compares, for each case, the mean distance to other cases in the cluster, and the mean distance to the nearest neighbour cluster. Cases with the silhouette width closest to 1 are considered to be well classified, whereas cases with width closest to -1 are highly likely to be misplaced (Kaufmann & Rousseeuw, 2005).
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Figure 1A Transition matrix for dynamic hamming



Note: Age on the X axis is presented in months. "Other" refers to economically inactive.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Figure 2A Modal plot for education and employment pathways



Note: Age on the X axis is presented in years.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 3A Mean number of states by cluster and cohort

Pathways	Cohort 1974-79	1980-84	1985-90
Rapid School-to-Work	3.2	3.2	3.7
Higher education to Work	3.0	3.2	3.8
Prolonged studies	2.7	3.0	3.5
Non-Active	4.8	4.4	4.1
Part-time employed	4.1	4.0	4.1
Unemployed	4.3	4.4	4.6

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 4A Predicted probabilities for education and employment pathways

Predicted probability for pathways	Mean	Std. Dev.	Min	Max
Rapid School-to-Work	0.35	0.15	0.13	0.73
Higher education to Work	0.24	0.08	0.10	0.46
Prolonged studies	0.11	0.05	0.04	0.20
Non-Active	0.12	0.07	0.01	0.32
Part-time employed	0.09	0.04	0.02	0.18
Unemployed	0.09	0.06	0.01	0.33

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 5A_1 Multinomial logit models of education and employment pathways outcomes with London & SE vs rest of England & Wales geography

	HE-to-work			Prolonged studies			Non-active			PT employed			Unemployed		
	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z
Gender (Males - Ref.)															
Females	1.841	***	0.000	0.964		0.838	1.954	***	0.000	1.212		0.299	0.527	**	0.003
	(0.250)			(0.173)			(0.325)			(0.224)			(0.113)		
Parental SES (Service class -Ref.)															
Intermediate class	0.367	***	0.000	0.225	***	0.000	0.249	***	0.000	0.262	***	0.000	0.309	***	0.000
	(0.058)			(0.049)			(0.054)			(0.058)			(0.073)		
Working class	0.254	***	0.000	0.147	***	0.000	0.318	***	0.000	0.167	***	0.000	0.300	***	0.000
	(0.043)			(0.036)			(0.061)			(0.041)			(0.068)		
Missing class	0.571		0.057	0.580		0.124	1.032		0.920	0.631		0.209	1.877	*	0.043
	(0.168)			(0.205)			(0.322)			(0.232)			(0.583)		
Cohort (1974-79 - Ref.)															
1980-84	1.116		0.450	0.745		0.127	0.410	***	0.000	0.396	***	0.000	0.537	**	0.004
	(0.162)			(0.143)			(0.082)			(0.092)			(0.116)		
1985-90	1.478	*	0.047	1.194		0.482	0.559	*	0.030	1.029		0.911	0.576		0.085
	(0.292)			(0.302)			(0.149)			(0.265)			(0.184)		
Region of residence at age 16 (Rest of E&W- Ref.)															
London and the South															
East	0.739	*	0.047	0.578	**	0.007	0.187	***	0.000	0.326	***	0.000	0.262	***	0.000
	(0.113)			(0.118)			(0.050)			(0.081)			(0.075)		

Note: *p<0.05,**p<0.15, ***p<0.001. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 5A_2 Multinomial logit models of education and employment pathways outcomes with urban/rural level of geography

	HE-to-work			Prolonged studies			Non-active			PT employed			Unemployed		
	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z
Gender (Males - ref.)															
Females	1.577	**	0.001	1.015		0.934	1.885	***	0.000	1.256		0.223	0.509	**	0.002
	(0.215)			(0.184)			(0.314)			(0.235)			(0.109)		
Parental SES (Service class -Ref.)															
Intermediate class	0.336	***	0.000	0.233	***	0.000	0.263	***	0.000	0.280	***	0.000	0.327	***	0.000
	(0.053)			(0.051)			(0.057)			(0.063)			(0.078)		
Working class	0.237	***	0.000	0.155	***	0.000	0.361	***	0.000	0.187	***	0.000	0.329	***	0.000
	(0.040)			(0.038)			(0.070)			(0.047)			(0.076)		
Missing class	0.514	*	0.025	0.631		0.197	1.163		0.632	0.734		0.405	2.145	*	0.016
	(0.152)			(0.225)			(0.366)			(0.273)			(0.676)		
Cohort (1974-79 - Ref.)															
1980-84	1.001		0.993	0.800		0.255	0.438	***	0.000	0.434	***	0.000	0.564	**	0.009
	(0.146)			(0.157)			(0.088)			(0.102)			(0.123)		
1985-90	1.387		0.097	1.252		0.376	0.589	*	0.046	1.090		0.738	0.597		0.107
	(0.273)			(0.319)			(0.157)			(0.282)			(0.191)		
Region of residence at age 16 (Rural- Ref.)															
urban	1.349	*	0.019	0.571	**	0.002	0.390	***	0.000	0.383	***	0.000	0.449	***	0.000
	(0.173)			(0.102)			(0.070)			(0.078)			(0.090)		

Note: *p<0.05,**p<0.15, ***p<0.001. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 5A_3 Multinomial logit models of education and employment pathways outcomes with London/urban/rural level of geography

	HE-to-work			Prolonged studies			Non-active			PT employed			Unemployed		
	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z
Gender (Males - ref.)															
Females	1.583	**	0.001	1.022		0.903	1.909	***	0.000	1.265		0.209	0.517	**	0.002
	(0.217)			(0.186)			(0.318)			(0.237)			(0.111)		
Parental SES (Service class -Ref.)															
Intermediate class	0.336	***	0.000	0.232	***	0.000	0.259	***	0.000	0.279	***	0.000	0.323	***	0.000
	(0.053)			(0.051)			(0.057)			(0.063)			(0.078)		
Working class	0.236	***	0.000	0.154	***	0.000	0.357	***	0.000	0.186	***	0.000	0.325	***	0.000
	(0.040)			(0.038)			(0.069)			(0.047)			(0.075)		
Missing class	0.513	*	0.024	0.628		0.192	1.155		0.646	0.730		0.397	2.126	*	0.017
	(0.152)			(0.224)			(0.363)			(0.271)			(0.671)		
Cohort (1974-79 - Ref.)															
1980-84	1.002		0.988	0.800		0.254	0.437	***	0.000	0.434	***	0.000	0.562	**	0.008
	(0.146)			(0.157)			(0.088)			(0.102)			(0.123)		
1985-90	1.386		0.098	1.249		0.382	0.584	*	0.044	1.087		0.747	0.593		0.103
	(0.273)			(0.318)			(0.156)			(0.281)			(0.190)		
Region of residence at age 16 (Rural- Ref.)															
London	1.246		0.323	0.476	*	0.029	0.250	***	0.000	0.313	**	0.003	0.280	**	0.005
	(0.277)			(0.162)			(0.095)			(0.124)			(0.126)		
other urban	1.375	*	0.022	0.600	**	0.009	0.435	***	0.000	0.405	***	0.000	0.502	**	0.001
	(0.191)			(0.118)			(0.084)			(0.090)			(0.109)		

Note: *p<0.05,**p<0.15, ***p<0.001. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 5A_4 Multinomial logit models of education and employment pathways outcomes with regional level of geography

	HE-to-work			Prolonged studies			Non-active			PT employed			Unemployed		
	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z
Gender (Males - ref.)															
Females	1.515	**	0.003	1.045		0.814	1.789	**	0.001	1.269		0.214	0.506	**	0.002
	(0.214)			(0.197)			(0.305)			(0.243)			(0.112)		
Parental SES (Service class -Ref.)															
Intermediate class	0.304	***	0.000	0.275	***	0.000	0.304	***	0.000	0.347	***	0.000	0.404	**	0.001
	(0.054)			(0.066)			(0.071)			(0.084)			(0.109)		
Working class	0.208	***	0.000	0.183	***	0.000	0.422	***	0.000	0.228	***	0.000	0.427	**	0.001
	(0.039)			(0.050)			(0.092)			(0.063)			(0.114)		
Missing class	0.529	*	0.039	0.713		0.374	1.161		0.656	0.897		0.779	0.114	**	0.006
	(0.163)			(0.272)			(0.389)			(0.347)			(0.877)		
Cohort (1974-79 - Ref.)															
1980-84	0.951		0.760	1.038		0.867	0.517		0.002	0.540	*	0.014	0.690		0.127
	(0.156)			(0.228)			(0.112)			(0.135)			(0.168)		
1985-90	1.392		0.123	1.721		0.052	0.760		0.333	1.427		0.208	0.665		0.257
	(0.298)			(0.481)			(0.215)			(0.403)			(0.239)		
Region of residence at age 16 (London and South East- Ref.)															
South West	1.411		0.167	0.362	*	0.010	0.341	**	0.003	0.320	**	0.006	0.099	**	0.002
	(0.351)			(0.143)			(0.124)			(0.132)			(0.073)		
East	0.814		0.569	0.400		0.057	0.362	*	0.033	0.506		0.134	0.271	*	0.038
	(0.294)			(0.193)			(0.173)			(0.230)			(0.171)		
Midlands	1.198		0.391	0.378	**	0.002	0.594	*	0.035	0.276	***	0.000	0.589		0.057
	(0.252)			(0.117)			(0.147)			(0.094)			(0.164)		
North	1.747	**	0.002	0.548	*	0.016	0.519	**	0.005	0.521	*	0.010	0.393	**	0.001
	(0.317)			(0.137)			(0.121)			(0.132)			(0.111)		
Wales	1.145		0.585	0.610		0.112	0.472	*	0.019	0.478	*	0.033	0.633		0.183
	(0.283)			(0.190)			(0.152)			(0.165)			(0.217)		

Note: *p<0.05,**p<0.15, ***p<0.001. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 6A_1 Marginal effects on education and employment pathways outcomes probabilities estimated from multinomial logit models with London & SE vs rest of England & Wales geography

Variables	Rapid School-to-Work	Higher education to Work	Prolonged studies	Non-Active	Part-time employed	Unem-ployed
Gender (Males - ref.)						
Females	***-0.060***	***0.096***	-0.025	***0.058***	0	***-0.068***
	(0.022)	(0.020)	(0.014)	(0.016)	(0.013)	(0.014)
Parental SES (Service class -Ref.)						
Intermed class	***0.249***	-0.045	***-0.068***	***-0.065***	***-0.043***	-0.028
	(0.025)	(0.0240	(0.018)	(0.020)	(0.016)	(0.016)
Working class	***0.297***	***-0.095***	***-0.096***	-0.017	***-0.071***	-0.018
	(0.0240	(0.025)	(0.020)	(0.017)	(0.018)	(0.015)
Missing	0.057	***-0.085***	-0.037	0.025	-0.026	***0.066***
	(0.048)	(0.042)	(0.028)	(0.027)	(0.026)	(0.020)
Cohort (1974-79 - Ref.)						
1980-84	***0.077***	***0.084***	-0.002	***-0.072***	***-0.059***	-0.027
	(0.025)	(0.022)	(0.016)	(0.018)	(0.017)	(0.015)
1985-90	-0.001	***0.089***	0.019	***-0.068***	0.004	***-0.043***
	(0.034)	(0.029)	(0.021)	(0.024)	(0.019)	(0.022)
Region of residence at age 16 (Rest of E&W- Ref.)						
London and South East	***0.172***	***0.058***	0.005	***-0.128***	***-0.046***	***-0.060***
	(0.026)	(0.024)	(0.017)	(0.026)	(0.019)	(0.020)

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 6A_2 Marginal effects on education and employment pathways outcomes probabilities estimated from multinomial logit models with urban/rural level of geography

Variables	Rapid School-to-Work	Higher education to Work	Prolonged studies	Non-Active	Part-time employed	Unem-ployed
Gender (Males - ref.)						
Females	***-0.050***	***0.070***	-0.015	***0.058***	0.006	***-0.068***
	(0.023)	(0.021)	(0.014)	(0.016)	(0.013)	(0.014)
Parental SES (Service class -Ref.)						
Intermed class	***0.251***	***-0.069***	***-0.061***	***-0.06***	***-0.036***	-0.024
	(0.025)	(0.024)	(0.018)	(0.020)	(0.016)	(0.016)
Working class	***0.290***	***-0.121***	***-0.089***	-0.006	***-0.061***	-0.014
	(0.024)	(0.026)	(0.020)	(0.018)	(0.018)	(0.015)
Missing	0.051	***-0.117***	-0.030	0.036	-0.014	***0.074***
	(0.048)	(0.043)	(0.028)	(0.027)	(0.026)	(0.021)
Cohort (1974-79 - Ref.)						
1980-84	***0.076***	***0.058***	0.005	***-0.066***	***-0.049***	-0.024
	(0.025)	(0.023)	(0.016)	(0.019)	(0.017)	(0.015)
1985-90	-0.002	***0.075***	0.023	***-0.063***	0.009	-0.041
	(0.034)	(0.030)	(0.021)	(0.025)	(0.018)	(0.022)
Region of residence at age 16 (Rural- Ref.)						
Urban	***0.076***	***0.130***	***-0.029***	***-0.078***	***-0.058***	***-0.041***
	(0.022)	(0.020)	(0.014)	(0.016)	(0.014)	(0.013)

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 6A_3 Marginal effects on education and employment pathways outcomes probabilities estimated from multinomial logit models with London/urban/rural level of geography

Variables	Rapid School-to-Work	Higher educ. to Work	Prolonged studies	Non-Active	Part-time employed	Unem-ployed
Gender (Males - ref.)						
Females	***-0.052***	***0.069***	-0.015	***0.058***	0.006	***-0.067***
	0.023	0.021	0.014	0.016	0.013	0.014
Parental SES (Service class -Ref.)						
Intermed class	***0.252***	***-0.068***	***-0.061***	***-0.061***	***-0.036***	-0.025
	0.025	0.024	0.018	0.02	0.016	0.016
Working class	***0.292***	***-0.12***	***-0.089***	-0.007	***-0.061***	-0.014
	0.024	0.026	0.02	0.018	0.018	0.015
Missing	0.052	***-0.117***	-0.03	0.036	-0.014	***0.074***
	0.048	0.043	0.028	0.027	0.026	0.021
Cohort (1974-79 - Ref.)						
1980-84	***0.076***	***0.058***	0.005	***-0.066***	***-0.049***	-0.024
	0.025	0.023	0.016	0.019	0.017	0.015
1985-90	-0.001	***0.075***	0.023	***-0.063***	0.009	***-0.042***
	0.034	0.03	0.021	0.025	0.018	0.022
Region of residence at age 16 (Rural- Ref.)						
London	***0.124***	***0.146***	-0.031	***-0.111***	***-0.061***	***-0.066***
	0.041	0.035	0.028	0.037	0.03	0.032
Other urban	***0.064***	***0.126***	-0.028	***-0.069***	***-0.057***	***-0.035***
	0.024	0.021	0.016	0.018	0.016	0.014

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 6A_4 Marginal effects on education and employment pathways outcomes probabilities estimated from multinomial logit models with regional level of geography

Variables	Rapid School-to-Work	Higher educ. to Work	Prolonged studies	Non-Active	Part-time employed	Unem-ployed
Gender (Males - Ref.)						
Females	***-0.049***	***0.077***	-0.012	***0.049***	0.001	***-0.066***
	0.022	0.021	0.014	0.016	0.013	0.014
Parental SES (Service class -Ref.)						
Intermed class	***0.239***	***-0.095***	***-0.049***	***-0.054***	-0.029	-0.012
	0.027	0.026	0.018	0.022	0.017	0.017
Working class	***0.273***	***-0.154***	***-0.073***	0.003	***-0.049***	0.001
	0.027	0.027	0.021	0.020	0.019	0.017
Missing	***0.042***	***-0.131***	-0.020	***0.036***	***-0.006***	0.078
	0.049	0.044	0.028	0.028	0.027	0.021
Cohort (1974-79 - Ref.)						
1980-84	***0.065***	***0.051***	0.011	***-0.060***	***-0.046***	-0.020
	0.026	0.025	0.017	0.020	0.018	0.016
1985-90	-0.019	0.055	0.029	-0.049	0.018	-0.034
	0.035	0.032	0.022	0.026	0.020	0.023
Region of residence at age 16 (London and South East- Ref.)						
South West	***0.137***	***0.167***	-0.045	-0.067	-0.049	***-0.143***
	0.046	0.040	0.032	0.036	0.031	0.053
East	***0.135***	0.037	-0.036	-0.063	-0.009	-0.064
	0.059	0.057	0.039	0.047	0.034	0.044
Midlands	***0.082***	***0.094***	***-0.060***	-0.022	***-0.079***	-0.015
	0.035	0.033	0.025	0.023	0.025	0.018
North	0.039	***0.147***	-0.037	***-0.056***	***-0.035***	***-0.058***
	0.030	0.027	0.019	0.021	0.018	0.018
Wales	0.059	0.060	-0.014	-0.058	-0.033	-0.014
	0.040	0.038	0.024	0.031	0.025	0.023

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 7A Predicted probabilities for occupational outcomes at age 26

Predicted probability for pathways	Mean	Std. Dev.	Min	Max
Professional & Managerial	0.21	0.17	0.01	0.66
Skilled Non-Manual	0.23	0.13	0.01	0.54
Skilled manual	0.27	0.20	0.01	0.76
Non-Active	0.20	0.21	0.02	0.79
Unemployed	0.09	0.13	0.00	0.79

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 8A Distribution of covariates by occupational outcomes at age 26

Variables	Prof & Manag	Skilled Non-Manual	Skilled manual	Non-Active	Unem-ployed	Total
Cohort						
1974-79	153(21)	181(25)	216(30)	121(17)	50(7)	721(100)
1980-84	100(22)	113(25)	112(25)	85(19)	41(9)	451(100)
1985-90	45(20)	44(19)	59(26)	58(25)	23(10)	229(100)
Gender						
Male	131(19)	133(19)	265(39)	92(13)	66(10)	687(100)
Female	167(23)	205(29)	122(17)	172(24)	48(7)	714(100)
Parental SES						
Service class	170(32)	148(28)	114(21)	75(14)	27(5)	534(100)
Intermediate class	68(18)	99(26)	107(28)	79(21)	26(7)	379(100)
Working class	48(13)	68(19)	139(38)	80(22)	31(8)	366(100)
Missing	12(10)	23(19)	27(22)	30(25)	30(25)	122(100)
Migration between ages 16 and 26						
Moved to London & SE	26(44)	16(27)	8(14)	8(14)	1(2)	59(100)
Stayed in London & SE	66(24)	73(26)	80(29)	41(15)	20(7)	280(100)
Moved out from London & SE	14(25)	15(27)	13(24)	10(18)	3(5)	55(100)
Stayed outside London and SE	192(19)	234(23)	286(28)	205(20)	90(9)	1,007 (100)
Educational level at age 26						
High	175(43)	114(28)	49(12)	47(11)	25(6)	410(100)
Medium	69(19)	109(29)	114(31)	66(18)	14(4)	372(100)
Low	54(9)	115(19)	224(36)	151(24)	75(12)	619(100)
Education and Employment Pathways						
Rapid School-to-Work	71(13)	156(28)	262(47)	46(8)	19(3)	554(100)
Non-Active	7(5)	10(8)	15(12)	90(69)	8(6)	130(100)
Part-time employed	22(23)	25(26)	27(28)	16(17)	6(6)	96(100)
Unemployed	4(4)	4(4)	17(19)	17(19)	49(49)	91(100)
Higher education to Work	166(42)	131(33)	57(14)	25(6)	21(5)	400(100)
Prolonged studies	28(22)	12(9)	9(7)	70(54)	11(8)	130(100)

Note: Proportions are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 9A_1 Multinomial logit models occupational outcomes at age 26 (final model as Table 3.5, relative risks)

	Skilled Non-Manual		Skilled manual/Unskilled		Non-active		Unemployed	
	RRR	P>z	RRR	P>z	RRR	P>z	RRR	P>z
Gender (Males - ref.)								
Females	1.441 *	0.019	0.440 ***	0.000	0.746	0.112	0.377 ***	0.000
	0.225		0.077		0.137		0.089	
Parental SES (Service class -Ref.)								
Intermediate class	1.741 **	0.002	3.476 ***	0.000	1.324	0.186	0.700	0.209
	0.319		0.667		0.281		0.199	
Working class	1.635 *	0.020	6.230 ***	0.000	1.604	0.041	1.157	0.604
	0.344		1.266		0.370		0.326	
Missing class	2.538 *	0.013	6.030 ***	0.000	1.944	0.097	3.833 **	0.001
	0.954		2.301		0.778		1.580	
Cohort (1974-79 - Ref.)								
1980-84	1.185	0.319	1.288	0.168	0.805	0.284	0.698	0.148
	0.202		0.237		0.163		0.173	
1985-90	1.000	0.999	1.722 *	0.028	1.292	0.321	1.145	0.670
	0.243		0.427		0.333		0.364	
Region of residence at age 16 (Rest of E&W- Ref.)								
Moved to London & SE	0.747	0.394	0.553	0.197	0.396	0.053	0.116 *	0.043
	0.255		0.254		0.190		0.124	
Stayed in London & SE	1.077	0.702	1.456	0.066	0.551 *	0.013	0.597	0.083
	0.209		0.298		0.133		0.178	
Moved out from London & SE	1.048	0.905	1.043	0.922	0.799	0.631	0.481	0.287
	0.410		0.453		0.373		0.331	
Education and Employment Pathways (Rapid School-to-Work -Ref.)								
Higher education to Work	0.482 ***	0.000	0.179 ***	0.000	0.179 ***	0.000	0.241	0.000
	0.077		0.034		0.044		0.065	
Prolonged studies	0.244 ***	0.000	0.150 ***	0.000	3.209 ***	0.000	0.814	0.610
	0.090		0.062		0.872		0.328	
Non-Active	0.622	0.357	0.892	0.814	13.848 ***	0.000	2.391	0.123
	0.321		0.435		5.962		1.350	
Part-time employed	0.556	0.070	0.534	0.058	0.781	0.498	0.519	0.191
	0.180		0.176		0.285		0.260	
Unemployed	0.453	0.272	1.239	0.709	4.098 *	0.015	19.006 ***	0.000
	0.327		0.714		2.366		10.602	

Note: *p<0.05,**p<0.15, ***p<0.001. Standard errors are reported in parentheses.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 9A_2 Multinomial logit models occupational outcomes at age 26 before including School-to-Work pathway (relative risks)

	Skilled Non-Manual			Skilled manual/Unskilled			Non-active			Unemployed		
	RRR		P>z	RRR		P>z	RRR		P>z	RRR		P>z
Gender (Males - ref.)												
Females	1.125		0.425	0.324	***	0.000	0.935		0.664	0.321	***	0.000
	(0.166)			(0.052)			(0.144)			(0.066)		
Parental SES (Service class -Ref.)												
Intermediate class	1.555	*	0.014	2.809	***	0.000	1.558	*	0.020	0.914		0.222
	(0.281)			(0.512)			(0.296)			(0.233)		
Working class	1.518	*	0.047	5.599	***	0.000	2.234	***	0.000	1.628		0.058
	(0.319)			(1.097)			(0.464)			(0.418)		
Missing class	1.994		0.062	4.403	***	0.000	3.300	**	0.001	6.459	***	0.000
	(0.737)			(1.610)			(1.182)			(2.381)		
Cohort (1974-79 - Ref.)												
1980-84	0.906		0.544	0.878		0.444	0.753		0.105	0.667		0.062
	(0.148)			(0.149)			(0.132)			(0.145)		
1985-90	0.731		0.183	1.049		0.836	1.034		0.882	0.806		0.454
	(0.172)			(0.241)			(0.234)			(0.232)		
Region of residence at age 16 (Rest of E&W- Ref.)												
Moved to London & SE	0.518	*	0.045	0.271	***	0.002	0.271	**	0.002	0.061	**	0.007
	(0.170)			(0.116)			(0.113)			(0.063)		
Stayed in London & SE	0.881		0.499	1.072		0.716	0.513	**	0.002	0.478	**	0.007
	(0.166)			(0.204)			(0.111)			(0.131)		
Moved out from London & SE	0.937		0.866	0.811		0.614	0.593		0.222	0.391		0.149
	(0.360)			(0.336)			(0.253)			(0.255)		

Note: *p<0.05,**p<0.15, ***p<0.001. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 9A_3 Marginal effects on occupational outcomes at age 26 probabilities estimated from multinomial logit models before including Schhol-to-Work pathway

Variables	Prof & Manag	Skilled Non-Manual	Skilled manual / Unskil	Non-Active	Unem-ployed
Cohort (1974-79 - Ref.)					
1980-84	0.029	0.012	0.008	-0.026	-0.024
	(0.021)	(0.023)	(0.023)	(0.023)	(0.016)
1985-90	0.016	-0.054	0.029	0.023	-0.014
	(0.029)	(0.032)	(0.031)	(0.028)	(0.021)
Gender (Males - Ref.)					
Females	***0.064***	***0.107***	***-0.166***	***0.064***	***-0.069***
	(0.018)	(0.020)	(0.020)	(0.019)	(0.014)
Parental SES (Service class - Ref.)					
Intermediate class	***-0.083***	0.003	***0.135***	0.000	***-0.055***
	(0.022)	(0.024)	(0.024)	(0.023)	(0.018)
Working class	***-0.136***	***-0.068***	***0.222***	0.012	-0.031
	(0.024)	(0.025)	(0.023)	(0.023)	(0.017)
Missing	-0.179	-0.056	0.109	0.044	0.082
	(0.047)	(0.043)	(0.041)	(0.037)	(0.021)
Migration between ages 16 and 26 (Stayed outside London and SE - Ref.)					
Moved to London & SE	***0.191***	0.077	-0.049	-0.053	-0.165
	(0.044)	(0.057)	(0.073)	(0.065)	(0.088)
Stayed in London & SE	0.044	0.023	***0.072***	***-0.089***	-0.049
	(0.024)	(0.026)	(0.026)	(0.028)	(0.021)
Moved out from London & SE	0.050	0.045	0.019	-0.051	-0.063
	(0.049)	(0.055)	(0.060)	(0.058)	(0.052)

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 10A Marginal effects of education and cohort interaction on occupational outcomes probabilities

Variables	Prof & Manag	Skilled Non-Manual	Skilled manual	Non-Active	Unem-ployed
Cohort 1980-84 (cohort 1974-79- Ref.)					
High	***0.142***	***0.091***	-0.040	***-0.098***	***-0.095***
	(0.046)	(0.044)	(0.032)	(0.032)	(0.024)
Medium	***0.121***	-0.074	-0.067	-0.001	0.021
	(0.052)	(0.055)	(0.054)	(0.046)	(0.026)
Low	-0.002	0.017	-0.044	0.009	0.019
	(0.026)	(0.036)	(0.039)	(0.037)	(0.027)
Cohort 1985-90 (cohort 1974-79- Ref.)					
High	0.108	-0.017	-0.046	-0.037	-0.008
	(0.058)	(0.051)	(0.040)	(0.047)	(0.041)
Medium	-0.036	-0.074	-0.019	0.097	0.032
	(0.048)	(0.061)	(0.064)	(0.058)	(0.052)
Low	0.031	-0.079	0.019	0.037	-0.007
	(0.040)	(0.042)	(0.056)	(0.051)	(0.034)

Note: The interaction term is not significant (Likelihood-ration test LR chi2(24) = 28.51; Prob > chi2 = 0.027). Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 11A Marginal effects of education on pathways outcomes probabilities for men and women

Educational level	Prof & Manag	Skilled Non-Manual	Skilled manual	Non-Active	Unem-ployed
Males- Ref.					
High	***0.198***	***0.115***	***-0.117***	***-0.064***	***-0.132***
	(0.037)	(0.034)	(0.026)	(0.029)	(0.026)
Medium	-0.015	***0.219***	***-0.258***	0.054	0.000
	(0.040)	(0.046)	(0.045)	(0.039)	(0.022)
Low	0.033	0.037	***-0.236***	***0.206***	-0.041
	(0.024)	(0.032)	(0.037)	(0.034)	(0.025)

Note: The interaction term is significant (Likelihood-ration test LR chi2(24) = 40.06; Prob > chi2 = 0.000). Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 12A Marginal effects on occupational outcomes at age 26 probabilities for highly educated

Variables	Prof & Manag	Skilled Non-Manual	Skilled manual	Non-Active	Unem-ployed
Parental SES (Service class -Ref.)					
Intermediate class	0.005	0.017	0.026	-0.012	-0.036
	(0.056)	(0.054)	(0.039)	(0.042)	(0.034)
Working class	***-0.147***	0.034	***0.089***	0.046	-0.022
	(0.068)	(0.062)	(0.041)	(0.043)	(0.039)
Missing	-0.113	0.042	0.021	-0.017	0.066
	(0.107)	(0.095)	(0.069)	(0.075)	(0.041)
Gender (Males - ref.)					
Females	***0.190***	0.042	***-0.113***	-0.039	***-0.080***
	(0.039)	(0.039)	(0.030)	(0.029)	(0.025)
Cohort (1974-79 - Ref.)					
1980-84	***0.098***	0.073	-0.054	-0.042	***-0.075***
	(0.046)	(0.044)	(0.034)	(0.036)	(0.032)
1985-90	0.069	-0.039	-0.063	0.019	0.015
	(0.061)	(0.062)	(0.045)	(0.041)	(0.029)
Migration between ages 16 and 26 (Stayed outside London and SE – Ref.)					
Moved to London & SE	***0.199***	0.023	-0.002	-0.132	-0.087
	(0.081)	(0.082)	(0.060)	(0.087)	(0.073)
Stayed in London & SE	0.042	0.084	-0.007	-0.061	-0.058
	(0.052)	(0.048)	(0.036)	(0.041)	(0.033)
Moved out from London & SE	0.083	-0.003	0.069	-0.118	-0.031
	(0.112)	(0.120)	(0.086)	(0.124)	(0.076)

Note: Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 13A Marginal effects of education and socio-economic background interaction on occupational outcomes probabilities

Variables	Prof & Manag	Skilled Non-Manual	Skilled manual	Non-Active	Unem-ployed
Intermediate class (Service class- Ref.)					
High	0.051	0.047	0.018	-0.057	***-0.059***
	(0.057)	(0.052)	(0.038)	(0.040)	(0.029)
Medium	0.002	0.024	0.037	-0.051	-0.011
	(0.049)	(0.058)	(0.054)	(0.047)	(0.018)
Low	-0.043	-0.046	-0.031	***0.103***	0.017
	(0.035)	(0.047)	(0.050)	(0.046)	(0.031)
Working class (Service class- Ref.)					
High	-0.085	0.041	***0.106***	-0.013	-0.048
	(0.057)	(0.058)	(0.055)	(0.049)	(0.036)
Medium	0.008	-0.038	0.104	-0.078	0.004
	(0.054)	(0.061)	(0.060)	(0.049)	(0.023)
Low	-0.057	***-0.125***	0.072	***0.086***	0.024
	(0.033)	(0.043)	(0.050)	(0.043)	(0.031)

Note: The interaction term is not significant (Likelihood-ration test LR chi2(24) = 28.08; Prob > chi2 = 0.2565). Estimates in italics and bold denote statistical significance at the 5% level. Standard errors are reported in parentheses.

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Appendix B:

Chapter IV

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Table 1B Person–months at risk and number of events by covariates for a) first union formation; b) end of first cohabitation (via marriage or separation); c) second union formation

	a) First union						b) End of cohabitation						d) Second union			
Covariates	Person-months	%	cohabitation events	%	marriage events	%	Person - months	%	separation events	%	marriage events	%	Person - months	%	cohabitation & marriages events	%
Cohort																
1974-1979	93780	37	403	46	73	55	14089	44	143	46	150	69	3782	37	74	37
1980-1984	74646	30	333	30	35	27	10195	32	114	30	58	27	3283	32	55	27
1985-1990	83077	33	307	24	24	18	7664	24	134	24	10	5	3177	31	73	36
Total	***251503***		***1043***		***132***		***31948***		***391***		***218***		***10242***	100	***202***	100
Sex																
Males	136777	54	427	41	42	32	12113	38	132	34	104	48	3298	32	58	29
Females	114726	46	620	59	90	68	19835	62	259	66	114	52	6943	68	144	71
Parental occupational class																
Service class	92691	37	356	34	39	30	9420	29	129	33	64	29	3110	30	63	31
Intermediate class	71042	28	287	28	29	22	9839	31	109	10	68	31	2752	27	59	29
Working class	65191	26	306	29	44	33	9286	29	112	11	72	33	3188	31	56	28
Missing	22579	9	98	9	20	15	3403	11	41	4	14	6	1192	12	24	12
Educational level																
High	22297	9	189	18	17	13	5677	18	62	16	52	24	1765	17	38	19
Medium	69396	28	271	26	47	36	6785	21	99	25	59	27	2562	25	51	25
School	127834	51	522	50	66	50	18344	57	222	57	105	48	5665	55	112	55
Missing	31976	13	65	6	2	2	1141	4	8	2	2	1	249	2	1	0
Economic Activity Status																
Employed	198748	79.02	798	76.5	98	74.24	23076	72	282	72	172	79	7064	69	142	70
Student	19982	8	112	11	17	13	2762	9	47	12	12	6	1193	12	17	8
Unemployed	11371	5	95	9	15	11	5499	17	61	16	33	15	1900	19	39	19
Others/Missing	21401	9	42	4	2	2	610	2	1	0	1	0	85	1	4	2

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	a) First union						b) End of cohabitation						d) Second union			
Covariates	Person-months	%	cohabitation events	%	marriage events	%	Person - months	%	separation events	%	marriage events	%	Person - months	%	cohabitation & marriages events	%
Anticipation of a child																
Not pregnant	248755	99	912	87	122	92	29152	91	380	97	201	92	9758	95	182	90
Pregnant	2748	1	135	13	10	8	2795	9	11	3	17	8	484	5	20	10
Number of children																
None	246059	98	963	92	114	86	21411	67	278	71	145	67	6474	63	131	65
One and more	5443	2	84	8	18	14	10537	33	113	29	73	33	3768	37	71	35
Residential context I																
London	34367	48	942	328	115	397	2706	8	33	8	25	11	824	8	13	6
Rest of England and Wales	217135	306	105	37	17	59	29242	92	358	92	193	89	9417	92	189	94
Residential context II																
London	34367	14	105	10	17	13	2706	8	33	8	25	11	824	8	13	6
Other urban	99640	40	423	41	60	45	13572	42	155	40	83	38	4190	41	86	43
Rural	117495	47	519	50	55	42	15670	49	203	52	110	50	5228	51	103	51
Residential context III																
London and the South East	71055	28	246	24	29	22										
South West	19843	8	103	10	7	5										
East	9118	4	49	5	6	5										
Midlands	40758	16	190	18	32	24										
North	60483	24	235	23	37	28										
Wales	46555	19	175	17	18	14										
Age at first union																
16-17							3760	12	46	12	13	6	1492	15	32	16
18-21							16185	51	220	56	84	39	6546	64	126	62
22-27							12002	38	125	32	121	56	2200	21	44	22

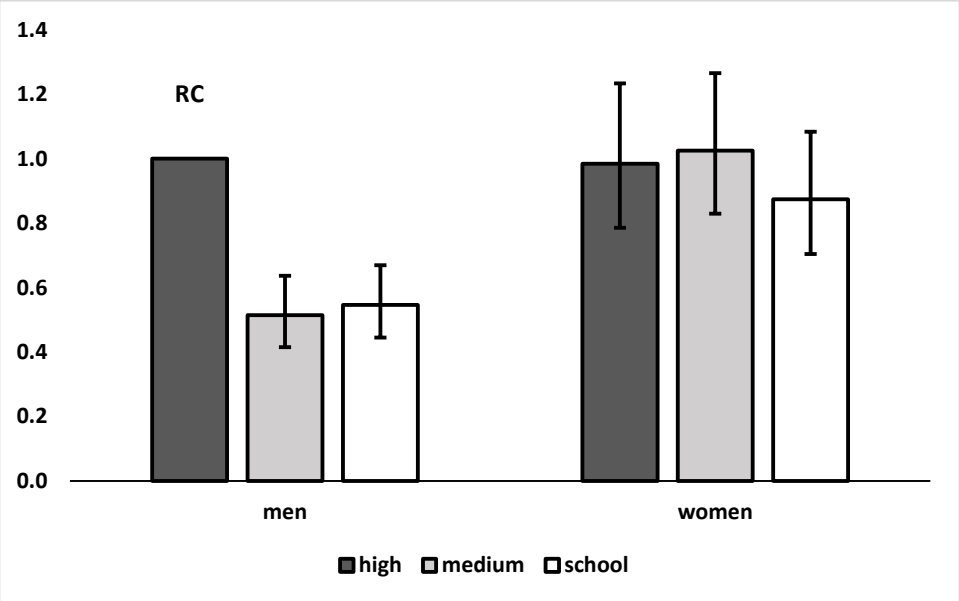
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 2B Median age at first union by cohort, gender, parental socio-economic background, educational attainment

Cohort	Gender			Parental socio-economic background			Educational attainment		
	Women	Men	Total	Service class	Interm class	Work. class	Higher	Med.	School
1974–1979	24.3	27.1	25.9	27.0	26.4	24.8	26.2	26.2	25.2
1980–1984	24.2	27.5	26	26.3	26.4	25.2	24.0	27.0	25.7
1985–1991	24.7	–	26.9	25.3	26.9	26.9	25.2	27.4	27.4
Overall	24.3	27.2	26	26.4	26.5	25.2	25.2	26.7	25.8

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Figure 1B Relative risks of 1st union formation by educational level and gender



Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 3B Relative risks for first union formation with different levels of geographies before (.1) and after (.2) including anticipation of a child variable : 1) London vs the rest of England and Wales ; 2) London vs other urban vs rural; 3) regional level

Variables	1) London vs. the rest of the E&W				2) London vs other urban vs rural				3) Regional level			
	1.1) Baseline hazard	Sig	1.2) Baseline hazard	Sig	2.1) Baseline hazard	Sig	2.2) Baseline hazard	Sig	3.1) Baseline hazard	Sig	3.2) Baseline hazard	Sig
Age (Baseline hazard)												
16-17	0.001	***	0.001	***	0.001	***	0.001	***	0.001	***	0.001	***
18-21	0.002	***	0.002	***	0.003	***	0.003	***	0.002	***	0.002	***
22-27	0.003	***	0.003	***	0.006	***	0.006	***	0.004	***	0.004	***
Sex (Males - Ref.)												
Females	1.95	***	1.68	***	1.95	***	1.68	***	1.92	***	1.65	***
Cohort (1974-79 - Ref.)												
1980-1984	0.98		0.97		0.98		0.97		1.02		1.02	
1985-1990	0.85	*	0.84	*	0.85	*	0.83	*	0.91		0.9	*
Parental occupational class (Service class - Ref.)												
Service class	1		1		1		1		1		1	
Intermediate class	1.07		1.03		1.07		1.03		1.09		1.05	
Working class	1.27	**	1.19	*	1.27	**	1.19	*	1.3	***	1.21	*
Missing	1.23		1.06		1.24		1.06		1.27	*	1.09	
Educational level (School - Ref.)												
School	1		1		1		1		1		1	
Medium	0.81	**	0.89		0.81	**	0.89		0.81	**	0.88	
High	1.17		1.33	**	1.16		1.33	**	1.17		1.34	**
Missing	0.82		0.86		0.82		0.86		0.84		0.88	
Economic Activity Status (Employed - Ref.)												
Employed	1		1		1		1		1		1	
Full-time student	1.31	**	1.04		1.31	**	1.04		1.3	*	1.02	
Unemployed	1.78	***	1.19		1.78	***	1.19		1.8	***	1.19	
Others/Missing	0.92		0.9		0.92		0.91		0.9		0.89	

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Variables	1) London vs. the rest of the E&W				2) London vs other urban vs rural				3) Regional level			
	1.1) Baseline hazard	Sig	1.2) Baseline hazard	Sig	2.1) Baseline hazard	Sig	2.2) Baseline hazard	Sig	3.1) Baseline hazard	Sig	3.2) Baseline hazard	Sig
Anticipation of a child (Woman herself or man's partner not pregnant -Ref.)												
not pregnant			1				1				1	
Pregnant			8.72	***			8.73	***			8.77	***
Number of children (None - Ref.)												
One and more			1.49	**			1.49	**			1.52	*
Type of 1st union (Cohabitation - Ref.)												
Direct marriage	0.13	***	0.13	***	0.13	***	0.13	***	0.13	***	0.13	
Residential context I (London - Ref.)												
Rest of the E&W	1.62	***	1.62	***								
Residential context II (Rural - Ref.)												
London					0.6	***	0.6	***				
Other urban					0.95		0.95					
Residential context III (London and the South East - Ref.)												
South West									1.39	**	1.45	**
East									1.63	***	1.58	**
Midlands									1.39	***	1.41	***
North									1.09		1.09	
Wales									1.03		1.02	

Note: * p<0.05; ** p<0.01; *** p<0.001

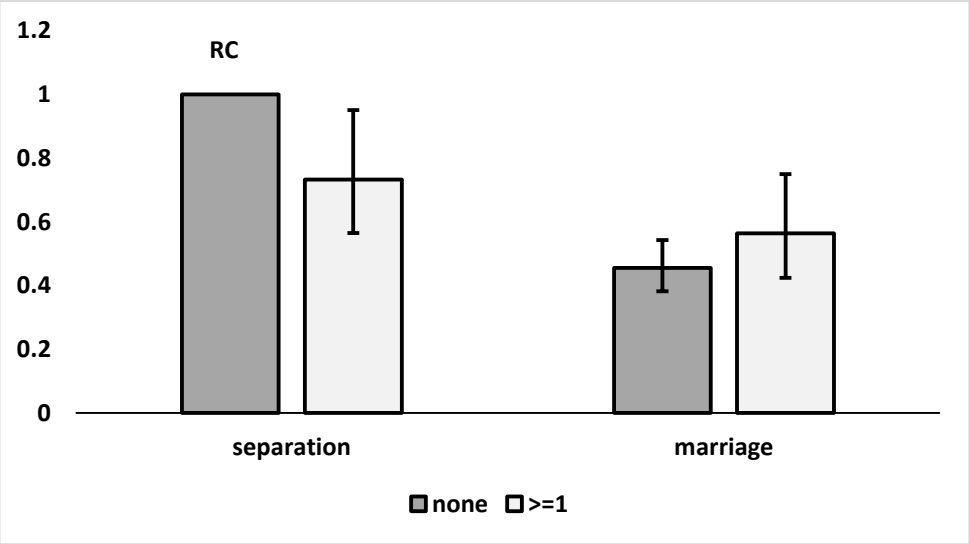
Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Table 4B Occurrence & exposure of separation and marriage from first cohabiting unions by a) pregnancy after the begin of cohabitation; b) number of children; c) pre-partnership pregnancy status

	Person-months	Events	Haz. rate	95% confidence interval	
a) Pregnancy after the begin of cohabitation					
Separation					
Not pregnant prior to separation	29152	380	0.013	0.012	0.014
Pregnant at separation	2795	11	0.004	0.002	0.007
Total	31948	391	0.012	0.011	0.014
Marriage					
Not pregnant prior to marriage	29152	201	0.007	0.006	0.008
Pregnant at marriage	2795	17	0.006	0.004	0.010
Total	31948	218	0.007	0.006	0.008
a) Number of children					
Separation					
No children born before or in cohabitation	21411	278	0.013	0.012	0.015
One or more children born before or in cohabitation	10537	113	0.011	0.009	0.013
Total	31948	391	0.012	0.011	0.014
Marriage					
No children born before or in cohabitation	21411	145	0.007	0.006	0.008
One or more children born before or in cohabitation	10537	73	0.007	0.006	0.009
Total	31948	218	0.007	0.006	0.008
b) Pre-partnership pregnancy					
Separation					
No pre-partnership pregnancy	18639	269	0.014	0.013	0.016
Had pre-partnership pregnancy	13309	122	0.009	0.008	0.011
Total	31948	391	0.012	0.011	0.014
Marriage					
No pre-partnership pregnancy	18639	114	0.006	0.005	0.007
Had pre-partnership pregnancy	13309	104	0.008	0.006	0.009
Total	31948	218	0.007	0.006	0.008

Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

Figure 2B Cohabitation outcomes by presence of newborn children in the household



Source: BHPS waves 1–18 and UKHLS waves 2–6; own calculations.

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Appendix C:

Chapter V

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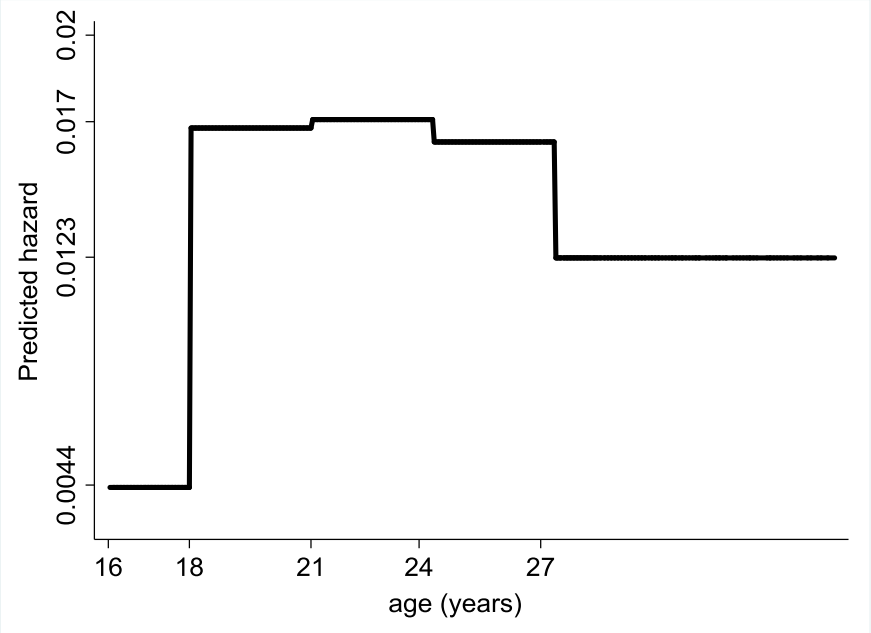
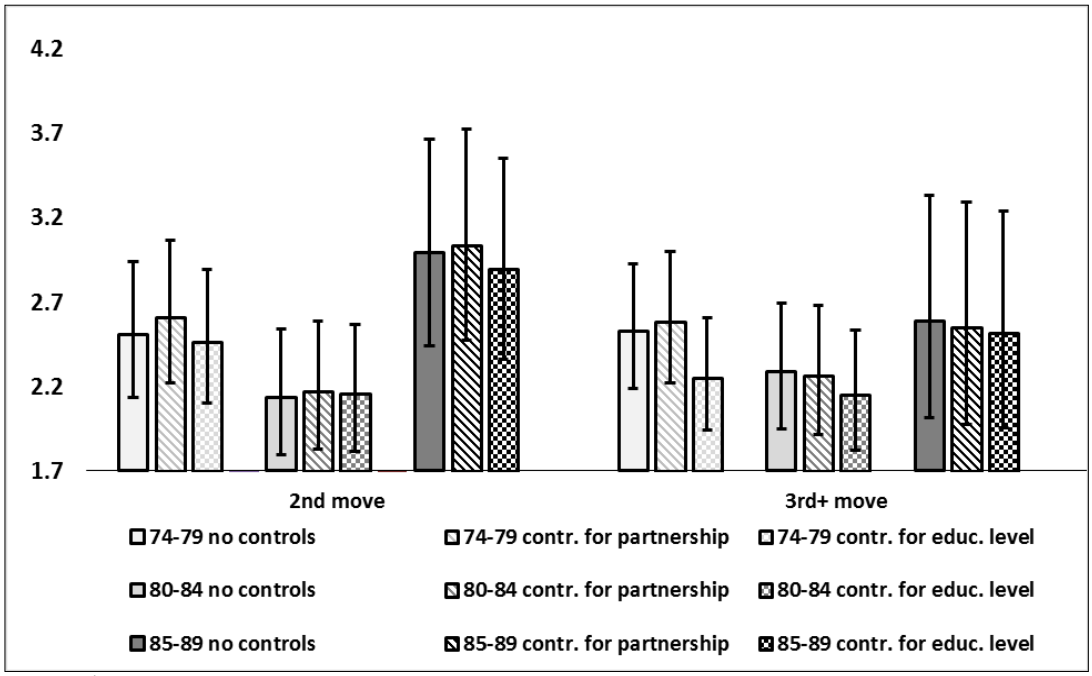
Figure 1C Piecewise constant baseline hazard for 1st moves



Source: BHPS waves 1-18; own calculations.

Figure 2C Standardised cohort differences in 2nd and 3+ short-distance moves (by educational level and partnership status)



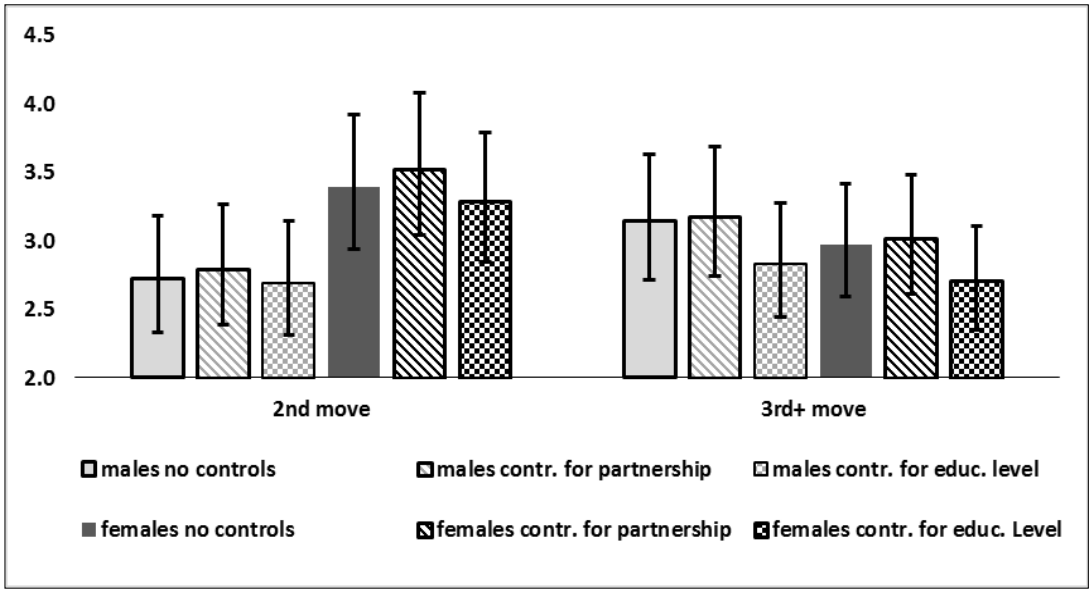
Note: 1st moves for the birth cohort 1975-79 is the reference category.
Source: BHPS waves 1-18; own calculations.

Table 1C Person-months at risk and number of events by covariates

Covariate	Risk-time (person-years)	%	Events	%
Order of move				
1st move	12108.48	61.4	1358	36.4
2nd move	2941.85	14.9	900	24.1
3rd+ move	4660.26	23.6	1470	39.4
Type of move				
Short-distance			2472	66.3
Long-distance			1253	33.7
Cohort				
1974-1979	8570.08	43.5	1834	49.2
1980-1984	6518.75	33.1	1264	33.9
1985-1989	4621.75	23.4	630	16.9
Sex				
Males	10050.75	51	1669	44.8
Females	9659.83	49	2059	55.2
Parental occupational class				
Service class	7354.92	37.3	1642	44
Intermediate class	5608.33	28.5	924	24.8
Working class	4990.58	25.3	850	22.8
Missings	1756.75	8.9	312	8.4
Educational level				
Compulsory school education	12238.17	62.1	1601	42.9
Post-compulsory education	5761.08	29.2	1476	39.6
Bachelor's degree or higher	1711.33	8.7	651	17.5
Partnership status				
Single	15544.36	78.9	2579	69.2
Cohabitating	2196.46	11.1	576	15.5
Married	1192.95	6.1	238	6.4
Separated	776.82	3.9	335	9
Economic Activity Status				
Full-time employed	8159.92	41.4	1785	47.9
Part-time employed	1473.42	7.5	240	6.4
Full-time student	6304.08	32	1035	27.8
Unemployed	1441	7.3	327	8.8
Others/Missings	2332.17	11.8	341	9.1
Residential context				
London	2711.81	13.7	429	11.51
Other urban	7917.59	40.2	1537	41.23
Small towns and rural areas	9081.18	46.1	1762	47.26
Total	19710.58	100	3728	100

Source: BHPS waves 1-18; own calculations.

Figure 3C Standardised gender differences in 2nd and 3+ short-distance moves (by educational level and partnership status)



Note: 1st moves for males is the reference category.
Source: BHPS waves 1-18; own calculations.

Table 2C Relative risks for all moves and by order of move with regional level of geography

Variables	All moves		First moves		Second moves		Third and higher order moves	
	Haz. Ratio	Sig	Haz. Ratio	Sig	Haz. Ratio	Sig	Haz. Ratio	Sig
Residential context								
London and South East	1		1		1		1	
South West	1.44	***	1.46	***	1.44	**	1.44	***
East	1.11		1.40	*	1.32	*	0.85	
Midlands	1.05		1.25	**	1.10	**	0.95	
North	1.15	**	1.28	**	1.30	**	1.07	
Wales	0.97		0.98		0.99		1.02	