Research Article

Differences in leaving home by individual and parental education among young adults in Europe

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Contents

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Abstract

BACKGROUND
There is a strong variation in young adults' leaving-home behavior throughout Europe. Earlier research has indicated that individual and parental education are crucial determinants of leaving home. It is, however, unclear how country contexts shape the association between young adults' education as well as parental education and leaving the parental home.

OBJECTIVE
The current study examines country differences in the effect of young adults' education and parental education on leaving the parental home for the first time across 17 European countries.

METHODS
We use data from the Harmonized Histories Program for 85,243 young adults (aged 16–35 years) in 17 European countries. We estimate discrete-time competing-risks event history models of leaving home to live without a partner versus with a partner.

RESULTS
Our results underscore the importance of the country context in shaping young adults' leaving home and how it is affected by educational attainment, enrollment, and parental education. For example, the positive educational gradient in leaving home to live without a partner was found to be stronger in most of the Western European countries (except Austria) and less strong in Sweden and Norway and in most of the Eastern European countries (except the Czech Republic, Hungary, and Poland).

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CONTRIBUTION
This study complements and updates our understanding of leaving home in Europe by focusing on the relation between young adults' education and parental education and leaving home across Western and Eastern European countries.

1. Introduction

A wealth of literature exists on the leaving home of young adults in Europe (e.g., Aassve et al. 2002; Aassve, Arpino, and Billari 2013; Billari and Liefbroer 2010; Chiuri and Del Boca 2010; Iacovou 2001, 2010), documenting strong variations in timing and pathways within and across European countries. From another body of literature (e.g., Liefbroer and Billari 2010; Blossfeld and Huinink 1991; Mulder and Hooimeijer 2002; Settersten, Furstenberg, and Rumbaut 2005; Ward and Spitze 2007) it is known that both individual education and parental education – through their linkages to young adults' opportunity and need structure – are important determinants of leaving the parental home. It is likely that the relative weight of individual and parental education may differ across European country contexts, where young adults face different welfare and housing market systems and cultures when making the choice to leave the parental home (via a specific pathway) (e.g., Esping-Andersen 1990, 1999; Fenger 2007; Ferrera 1996; Hajnal 1965; Reher 1998).

Knowledge about how young adults leaving home unfolds across European countries – particularly in what way individual education and parental education (and status) are more or less strongly linked with leaving home across different country contexts – is important for understanding the intergenerational transmission of demographic behavior. Yet, while the large demographic research literature has addressed a broad array of individual, parental, and contextual characteristics shaping leaving the parental home, only a few studies have examined the relative importance of individual and parental characteristics across European countries; these mainly considered young adults' or parental income and employment status (e.g., Aassve et al. 2002; Billari 2004; Iacovou 2010).

The key motivation behind this paper, therefore, is to better understand the variation in the first-time leaving home process by studying whether the association between education, parental education, and leaving the parental home is conditioned by the national context. We specifically ask the following research questions: (1) To what extent does the timing of leaving home – and the different pathways out of the parental home – vary by education and parental education in Europe? (2) How do education and parental education interact with national context across Europe? To address these

questions, we draw on data from the Harmonized Histories Program (n = 85,243) for 17 European countries and conduct discrete-time event history analyses that include not only variables measuring young adults' individual and family characteristics, but also country fixed effects and their interactions with education and parental education. This approach allows us to identify differences between individual countries – unlike approaches that make broader comparisons across groups of countries (i.e., running separate regressions for groups of countries), which have been adopted in a fair number of studies (e.g., Iacovou 2001, 2004). Furthermore, we specifically distinguish between two pathways out of the parental home: leaving home to live without a partner and leaving home to live with a partner (including both marriage and cohabitation). Prior research has amply demonstrated the importance of distinguishing between different pathways out of the parental home and investigating these as competing risks. The most important distinction made in the literature is indeed between leaving home to live with a partner and to live without a partner (Buck and Scott 1993; Goldscheider and Goldscheider 1999; Mulder and Clark 2000; Zorlu and Mulder 2010). However, comparative studies making this distinction and including a large number of European countries are rare (cf. Iacovou 2010).

It has repeatedly been shown that are substantial gender differences in leaving the parental home, and that analyses of leaving home are best performed separately for men and women (e.g., Aassve et al. 2002; Buck and Scott 1993; Mulder, Clark, and Wagner 2002), which is why we do so here, too. Our analysis differs from the previous research literature in three respects. First, we test whether or not European countries – with different welfare and housing market systems and cultures – differ in the way the transition out of the parental home (via different pathways) varies with education and parental education differences. Second, many leaving home studies are based on data for single countries, compare only a small number of European countries, are in part descriptive, and have rarely included Eastern European countries (Aassve et al. 2002; Bernhardt, Gähler, and Goldscheider 2005; Billari and Liefbroer 2010; Billari, Philipov, and Baizán 2001; Holdsworth 2000; Iacovou 2010; Mandic 2008; Mulder, Clark, and Wagner 2002). Our analysis goes beyond single-country approaches and includes both Western and Eastern European countries in a comparative, cross-national analysis. Third, unlike earlier work, we also compare young adults from Western and Eastern European countries in the period from the mid-1940s to the early 1970s, so that we look at leaving-home behavior over the whole period since the Second World War.

2. Background

The timing of leaving home and the different pathways out of the parental home are known to be influenced by three sets of factors: individual characteristics (e.g., level of education and family background), parental characteristics (e.g., parental education and homeownership of parents), and contextual characteristics (e.g., wider social institutions, broad historical trends, and sociocultural regimes and cultures) (e.g., Aassve, Arpino, and Billari 2013; Blaauboer and Mulder 2010; Goldscheider and Goldscheider 1999; Iacovou 2001, 2010). These findings are well established in the research literature and we describe them only briefly because our main focus lies on analyzing the differential effects across countries.

2.1 Leaving home and education

Educational enrollment and the level of educational attainment are critical determinants of the likelihood of leaving home and the pathways taken in various countries. Different levels of educational attainment are linked to different preferences for living arrangements, because a higher completed level of education often indicates a high degree of nontraditionalism and highly valuing independence (Liefbroer and Billari 2010). Furthermore, pursuing higher education triggers young adults to leave the parental home to live alone or to share with roommates (Bernhardt, Gähler, and Goldscheider 2005; De Jong Gierveld, Liefbroer, and Beekink 1991; Mulder and Hooimeijer 2002). 'Role incompatibility' between being a student and being married or cohabiting may also be a constraining factor for leaving home to live with a partner (Blossfeld and Huinink 1991). Higher levels of education are also associated with a higher earning potential and may increase the risk of leaving the parental home, because young adults who have completed higher education are in an economically better position to leave (Mulder and Hooimeijer 2002). At the same time, however, students frequently rely on their parents' financial support, which may delay moving out (Stone, Berrington, and Falkingham 2014) and makes moving out to live with a partner unlikely (Aassve et al. 2002; Blossfeld et al. 2006; Goldscheider and Waite 1986; Liefbroer and Corijn 1999).

2.2 Leaving home and parental education

Parental education is linked – via the transmission of both cultural and economic resources – to decisions about leaving home (Settersten, Furstenberg, and Rumbaut

2005; Ward and Spitze 2007). This firstly means that parents who have attained a higher level of education will hold and transfer specific norms and values regarding leaving home and act as models of specific leaving-home behavior for their adult children (Hammel 1990). The socialization hypothesis posits that parents transfer cultural resources, such as values and attitudes with regard to timing of life course events, to their children. It also stresses the importance of imitation and role modeling as principles of learning about demographic behavior during childhood and adolescence. In the case of parents from higher educational backgrounds, the relatively strong emphasis on autonomy and human capital accumulation (e.g., higher education and higher-status jobs) and discouragement of potentially costly and nonreversible life course transitions (e.g., starting a union and having the first child) (Kohn, Slomczynski, and Schoenbach 1986) seem to be associated with early leaving home, but an unlikely direct transition to living with a partner (Avery, Goldscheider, and Speare 1992; Blaauboer and Mulder 2010). This secondly means that parents with different levels of education will differ in the amount of economic resources they can transfer to their adult children and how they use these resources. The feathered-nest hypothesis posits that young adults are reluctant to leave from rather comfortable homes provided by affluent parents, particularly when they would leave to live alone (Avery, Goldscheider, and Speare 1992; Goldscheider and Goldscheider 1999). Conversely, one could also hypothesize that parents will use their resources to help their child establish a household of their own. Research findings are mixed, with findings by De Jong Gierveld, Liefbroer, and Beekink (1991) supporting the second hypothesis. It has also been shown that the effect of parental education and resources varies by age of the young adult (e.g., Mulder and Clark 2002).

2.3 Variation in leaving the parental home across Europe

Our main interest lies in highlighting differences in leaving the parental home (via different pathways) between countries with distinct institutional and normative settings (see also Chiuri and Del Boca 2010; Iacovou 2010). To explain cross-national differences, three theoretical arguments can be put forward. (1) Institutional context (e.g., labor and housing markets, as well as education opportunities), (2) public policies and welfare regimes, and (3) long-term cultural continuities – and arguably a complex interplay between them – could shape the leaving-home behavior of young adults by creating a country-specific set of opportunities and constraints, and may guide choices between leaving the parental home to live without a partner and leaving the parental home to live with a partner (Aassve, Arpino, and Billari 2013; Esping-Andersen 1990, 1999; Fenger 2007; Ferrera 1996; Hajnal 1965; Iacovou 2010; Reher 1998). Note that

we cannot isolate the effect of institutional and welfare regime differences from that of long-standing and persistent cultural differences, which is why we make predictions about how these three different factors taken together shape young adults' pathways from the parental home. Toward this end, we formulate hypotheses about contextual differences in the effects of education (differentiated furthermore by enrollment in and level of education) and parental education. We describe the specific countries along the three dimensions and then derive hypotheses at the end. Table 1 provides additional country-specific information about age at leaving home, share of men and women in higher education, and general policy and socio-cultural environments across the 17 European countries.

Table 1:   Country-specific sample information

	Mean age at leaving home [1]		% High education [1]		Public policies and welfare regimes [2]	% Young adults living with parents [3]
	Men	Women	Men	Women		
Austria	24.8	22.8	20.5	19.4	Conservative-corporatist	Low
Belgium	25.3	23.7	35.5	37.6	Conservative-corporatist	Low
France	23.4	22.6	26.1	30.1	Conservative-corporatist	Low
Germany	23.5	22.4	36.3	28.7	Conservative-corporatist	Low
The Netherlands	23.9	22.2	41.5	33.5	Conservative-corporatist	Low
Bulgaria	26.3	23.5	16.9	28.5	Post-communist	High
Czech Republic	26.7	24.2	19.3	13.8	Post-communist	High
Estonia	22.1	21.7	24.1	41.5	Former-USSR	Medium
Georgia	25.3	24.2	31.7	29.5	Developing welfare states	High
Hungary	27.2	24.1	16.1	20.1	Post-communist	High
Lithuania	22.8	23.3	20.4	28.7	Former-USSR type	Medium
Poland	25.7	27.2	13.5	16.0	Post-communist European	High
Romania	23.2	26.6	11.1	10.4	Developing welfare states	High
Russia	23.2	24.1	38.3	51.8	Former-USSR	High
Italy	26.3	29.0	13.1	13.0	Conservative-corporatist	High
Norway	20.7	21.6	33.6	41.9	Social-democratic	Very low
Sweden	20.7	21.9	28.7	41.3	Social-democratic	Very low

Source: [1] Harmonized Histories. Own calculations. [2] Fenger 2007. [3] Mandic 2008; Iacovou 2004

Norway and Sweden exhibit 'weak family ties' and tend to display patterns of early home-leaving (Liefbroer and Billari 2010; Reher 1998). In these countries, normative expectations favor priority of the individual over the family, place a high importance of young people's autonomy, dispense with traditional gender roles (i.e., male breadwinner model), and are more gender-equal than most other countries – a feature that has also been linked to Norway's and Sweden's advanced position in the Second Demographic Transition (Lesthaeghe 2010). Additionally, the level of social security is high, welfare state transfers are strong, and access to rented or owned housing is relatively easy. Moreover, in Norway and Sweden the structural opportunities in terms of housing market access and welfare state support are such that young adults across educational categories can leave the parental home rather easily. In

this setting enrollment in (higher) education also triggers leaving home to live without a partner (Nilsson and Strandh 1999).

France, Belgium, and the Netherlands have less pronounced family obligations and a high level of social security which encourages, like in Northern European countries, intergenerational independence and an early exit from the parental home. The housing market is such that renting is easier than buying and homeownership is restricted to more affluent young adults (or those who can rely on family help) (Mulder and Billari 2010). Typically, in these countries, young adults set up their own independent household before starting a family and time spent living as a single is prolonged (Iacovou 2001, 2004). Compared to Norway and Sweden, gender equality and autonomy are important but somewhat less dominant cultural values in these Western European countries. Austria and Germany are examples of countries where traditional gender roles within the couple (i.e., breadwinner model) remain strong and the level of gender equality is not as high as in Norway or Sweden (Liefbroer and Billari 2010; Reher 1998). Evidence suggests that marriage is still highly valued, and that young people – rather than avoiding it altogether – are postponing marriage (Perelli-Harris et al. 2012). Still, a desynchronization of partnership formation and leaving home is noticeable and leaving home for education or autonomy is socially accepted and encouraged (Luetzelberger 2014). Enrollment in higher education is thus frequently associated with a step toward residential independence, particularly leaving the parental home to live without a partner. However, the structural opportunities (in particular access to housing markets and wage returns of education) are such that leaving the parental home may be easier for the better educated. As a result, the effect of young adults' education on leaving home to live without a partner should be stronger.

Italy exhibits 'strong family ties' – where young adults tend to leave home at later ages and there is also a synchronization between leaving home and partnership formation (typically marriage) (Holdsworth 2000; Reher 1998; Santarelli and Cottone 2009). Furthermore, Italy is characterized by a high unemployment rate, traditional gender roles within the couple, a less comprehensive welfare structure, and a difficult homeownership regime (Ferrera 1996; Mulder and Billari 2010). This means that leaving home is relatively difficult for young adults – due to a difficult housing market entry and the need to rely on intergenerational assistance rather than welfare transfers – and is also strongly linked to partnership formation (Luetzelberger 2014).

Because of Italy's mix of traditional values – implying late leaving home and typically via leaving home to live with a partner – and quite difficult opportunity structures, young adults' level of education is likely important in determining leaving-home behavior. Parental education is important, too, but in a very traditional country, where family and kinship ties are strong (Reher 1998) and interdependence of family members is supported (Luetzelberger 2014), early leaving home and leaving home to

live without a partner may still be less acceptable – even for young adults coming from families with higher education backgrounds. As a result, the effect of parental education on leaving home to live without a partner should be less strong. With respect to enrollment in education, it has been noted that this is less frequently associated with an exit from the parental home – possibly due to a large geographical spread of universities in Italy, allowing young adults to continue living with their parents while studying (Billari 2004).

Russia, Bulgaria, Romania, and Georgia have had a distinct cultural pattern of family formation characterized by nearly universal, early marriage, late leaving home, and formation of extended family households. There is also a strong reliance on informal support due to low affluence, low levels of state welfare transfers, low wage returns, and lack of a well-developed rental market (Fenger 2007; Robila 2004). Poland is slightly different in that the emphasis on strong traditional and religious values as well as on conservative gender roles and support for the breadwinner model is particularly strong (e.g., Mynarska and Bernardi 2007). Finally, Lithuania and Estonia have been characterized as having 'weak family ties' – where intergenerational relationships are assumed to be less important (Reher 1998). In terms of the specific family and kinship system (more individualistic, strong focus on autonomy, and early leaving home), they are similar to Northern and Western European countries (Hajnal 1965). The rather poor welfare safety net with restricted access and limited coverage may result in relatively high reliance on intergenerational relations. It is important to note that welfare level differences among Eastern European countries already existed during communist times and have continued with the end of communism and the postcommunist economic and policy transformations. The restructuring of the welfare systems was quite country-specific and arguably with varying degrees of success (Fenger 2007). Today, some countries like the Czech Republic, Hungary, Poland, and Bulgaria come close to welfare system types in Western Europe, but with lower levels of social spending than in the West. The welfare state is more precarious, by comparison, in Russia, Estonia and Lithuania; it provides very low levels of social security and has the least comprehensive social programs in Romania and Georgia (Fenger 2007).

In many Eastern European countries – with overall inefficient labor markets and thus low wage returns, as well as poor welfare-state provisions – early leaving home and leaving home to live without a partner is generally difficult for young adults. This is arguably enhanced by the more traditional values, which favor family closeness and early family formation, and where marriage is the most important reason for leaving home (Hajnal 1965; Reher 1998). Estonia and Lithuania are expected to depart from this pattern, because prevailing family values less strongly endorse marriage as the only reason for leaving home. However, the effect of parental education on leaving home to

live without a partner should be less strong in Eastern European countries, because in these more traditional countries with strong family ties (Reher 1998) and a tendency towards intergenerational coresidence (Hajnal 1965; Mandic 2008), leaving home to live without a partner may still be less acceptable – even for young adults coming from families with higher education backgrounds. It may also be that young adults tend to mimic their own parents' demographic behavior, which then makes leaving home to live with a partner more likely in the Eastern European context.

The arguments above lead to several expectations about the direct effect of young adults' education, enrollment, parental education, and country on leaving home – distinguished between leaving home to live without a partner and leaving home to live with a partner. The arguments also lead to expectations about how the effect of women's education, enrollment, and parental education differ by country. Table 2 summarizes all expectations.

Table 2:   Overview of the hypotheses (main effects and interactions with country)

	Left to live without a partner				Left to live with a partner			
		Enrollment	Education	Parental education		Enrollment	Education	Parental education
Main effect →		+	+	+		−	−	−
Interaction ↘								
Austria	+	+	+	+	−	+	+	−
Belgium	+	+	+	+	−	+	+	−
France	+	+	+	+	−	+	+	−
Germany	+	+	+	+	−	+	+	−
The Netherlands	+	+	+	+	−	+	+	−
Bulgaria	−	−	−	−	+	−	−	+
Czech Republic	−	−	−	−	+	−	−	+
Estonia	+	−	−	−	−	−	−	+
Georgia	−	−	−	−	+	−	−	+
Hungary	−	−	−	−	+	−	−	+
Lithuania	+	−	−	−	−	−	−	+
Poland	−	−	−	−	+	−	−	+
Romania	−	−	−	−	+	−	−	+
Russia	−	−	−	−	+	−	−	+
Italy	−	−	+	−	+	−	−	+
Norway	+	+	−	+	−	+	+	−
Sweden	+	+	−	+	−	+	+	−

Note: Main effect: + indicates a positive main effect; – indicates a negative main effect. Interaction: + indicates a positive interaction effect; – indicates a negative interaction effect. For example: We expect a positive effect of enrollment on the likelihood to leave home to live without a partner. In Austria, the positive effect of enrollment on the likelihood of leaving home to live without a partner is stronger (positive interaction effect). In Bulgaria, the positive effect of enrollment on the likelihood of leaving home to live without a partner is less strong (negative interaction effect).

2.4 Control variables

Leaving home (to live without and with a partner) is also influenced by the number of siblings young adults have: If space and parental resources have to be shared among many siblings, the likelihood of intergenerational coresidence decreases (Ward and Spitze 2007) and the timing of leaving the parental home speeds up (De Jong Gierveld, Liefbroer, and Beekink 1991). Changes in family structure, such as parental separation or divorce, tend to accelerate young adults' leaving the parental home, because these changes negatively influence and disrupt family relationships. The strongest effects of parental separation and divorce are often found – in the US context – for leaving home to live without a partner, although leaving home to live with a partner is also accelerated (Aquilino 1991). Finally, young adults' transition to adulthood has changed over time in Europe (e.g., Blossfeld et al. 2006; Lesthaeghe 2010) – most notably with respect to the different pathways taken from the parental home. More young adults in younger cohorts choose to live independently and fewer choose to leave the parental home to live with a partner (Billari and Liefbroer 2010).

3. Data, measures, and methods

3.1 Data

The data has been derived from the Harmonized Histories Project (see http://www.nonmarital.org) (Perelli-Harris, Kreyenfeld, and Kubisch 2010) and is mainly built from the first wave of the Generations and Gender Survey (GGS), an internationally comparable and harmonized set of survey data (see http://www.ggp-i.org). The data set contains information about a broad range of socioeconomic, demographic, and family characteristics. We use data for young adults born between 1945 and 1972 from 17 European countries (Austria, Belgium, France, Germany, the Netherlands; Bulgaria, Czech Republic, Estonia, Georgia, Hungary, Lithuania, Poland, Romania, Russia; Italy; Norway and Sweden). We deemed observations of respondents who reported leaving the parental home for the first time before age 16 as either unrealistic or outliers and dropped them from the analysis (n = 6,176). We also dropped cases with missing information on whether or not respondents have left the parental home (n = 3,863). There were three variables with missing values (number of siblings, parental education, and education) that we addressed through a simple univariate sampling imputation (hot deck). This method is a more suitable means of imputation than, for example, mean imputation or multiple imputation, because the variables with

missing values are categorical and the percentage of missing values was less than five (Allison 2003).

3.2 Measures

3.2.1 Dependent variable: Two pathways from the parental home

Based on the detailed life history calendar (i.e., the year of specific life course transitions), we constructed two different pathways out of the parental home: leaving home to live without a partner versus leaving home to live with a partner. If respondents start to live with a partner in the same year they leave home, they are classified as 'leaving home to live with a partner.' All others who leave home are classified as 'leaving home to live without a partner.'[4] Following Blaauboer and Mulder (2010), process time starts at age 16 and ends at age 35, because events happening before or after those ages are considered to be out of the ordinary. Note that we measured age at the end of the year (i.e., age at leaving home = year of the event – year of birth). Cases were censored at the time of interview or at age 35 when the transition out of the parental home had not been made by that age. Our sample of 85,243 respondents consists of 46,945 women (who were observed along 321,412 person-years) and 38,298 men (who were observed along 326,721 person-years). The total number of observed events for women and men is shown in Table 3.

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[4] We rely on self-reported information of the date when young adults had left the parental home for the first time (for longer than three months), because we think that for young adults in the European context it is a fairly good indicator. We realize though that leaving home can be a continuous process – with repeated moves from and back to the parental home – and defining and measuring 'having left home' may otherwise be quite difficult (for a detailed discussion cf. Buck and Scott 1993). Note that the Harmonized Histories do not give us any information on returning to the parental home, so we have to focus on leaving home for the first time as a nonrepeatable event. This also means that our following findings cannot be straightforwardly applied to second or further exits from the parental home, for which different processes might be at work.

Table 3:   **Descriptive statistics**

Variables	Women		Men	
	N	%	N	%
Whole sample	46,945	100	38,298	100
Pathway out of the parental home				
Not having left	2,899	6.59	4,062	10.86
Left to live alone	17,942	36.85	19,124	49.50
Left to live with a partner	26,104	56.56	15,112	39.63
Education				
Low	8,608	18.49	6,824	18.59
Medium	25,117	49.85	22,200	58.17
High	13,220	31.66	9,274	23.24
Parental education				
Not high	40,345	85.17	33,204	86.94
High	6,600	14.83	5,094	13.06
Number of siblings				
0	4,271	9.60	3,644	9.36
1	15,215	32.23	12,561	32.80
2	11,509	23.83	9,489	24.77
3 or more	15,950	34.34	12,604	33.07
Parental divorce (before age 15)				
Yes	2,304	6.04	1,597	4.36
No	35,852	76.83	29,523	77.47
Unknown	8,789	17.13	7,178	18.17
Cohort				
1945–1954	15,514	33.25	12,768	31.92
1955–1964	16,928	38.36	13,839	36.05
1965–1972	14,503	28.39	11,691	32.03
Country				
Austria	1,138	1.41	727	2.32
Belgium	1,917	2.20	1,804	4.65
Bulgaria	2,979	1.46	2,431	6.57
Czech Republic	2,318	2.13	2,049	5.14
Estonia	2,014	0.25	1,142	3.76
France	2,828	11.88	2,218	6.02
Georgia	2,717	0.90	2,121	5.53
Germany	2,472	14.78	1,885	5.37
Hungary	2,909	2.14	2,206	6.09
Italy	3,239	12.12	2,921	7.66
Lithuania	1,960	0.72	1,910	4.68
The Netherlands	2,844	2.74	2,033	5.56
Norway	3,757	0.92	3,596	9.28
Poland	5,460	8.01	4,078	10.24
Romania	2,792	4.32	2,925	6.45
Russia	3,195	32.28	2,019	5.32
Sweden	2,406	1.71	2,233	5.38

Source: Harmonized Histories. Own calculations. Unweighted N and weighted %.

3.2.2 Independent variables

We used information on the completed level of education of the respondent at the time of interview and the date of obtaining this qualification to construct a time-varying covariate combining both enrollment and level of education.[5] The variable is based on the international standard classification (ISCED 1997) and has four categories: 1 = in education, 2 = low education (ISCED 0–2), 3 = medium education (ISCED 3–4), and 4 = high education (ISCED 5–6). Parental education was included as a dummy variable, indicating whether at least one parent had a high level of education (ISCED 5–6) (= 1) or not (= 0).[6] To control for possible crowding effects (Ward and Spitze 2007), we included a categorical variable for the number of siblings: 0 = no siblings, 1 = one sibling, 2 = two siblings, and 3 = three or more siblings. Whether or not the respondents' parents had divorced or separated before the respondent was aged 15 (Aquilino 1991) was also included (1 = yes and 0 = no). A separate category 'unknown' (= 3) was used for those who did not provide information on this question (no imputation was performed, as there are more missing cases than parental separations). Three birth cohorts (1 = 1945–1954, 2 = 1955–1964, and 3 = 1965–1972) are included in the models, as well as dummy variables for the 17 European countries. We included the duration variable age in linear as well as in logistic form. This parameterization leads to a similar shape as a polynomial squared function. We did not have preconceived theoretical expectations about the baseline hazard of leaving home, but tested different specifications of it and found that a linear-logistic specification had the best fit (smallest AIC and BIC values). Figure 1 presents the baseline hazards graphically, and Table 3 shows descriptive statistics of the variables. The Harmonized Histories surveys are relatively comparable, but we include weights in the analysis of the pooled sample – based on the provided sample weights and normalized to the population size – to create a sample that represents the European population (i.e., each country is represented in proportion to its population size within the respective nation).

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[5] In the GGS surveys (Wave 1), the date of obtaining the highest level of education is only measured retrospectively at the time of the interview. We corrected the date using average time spent in education (separately by country) if there were inconsistencies or implausible information. There were, however, relatively few of such cases.

[6] The correlation between individual level of education and parental education was small: Cramér's V = 0.333 for women and Cramér's V = 0.327 for men.

Figure 1: **The separate (without vs. with) and combined (with/ without) baseline hazard**
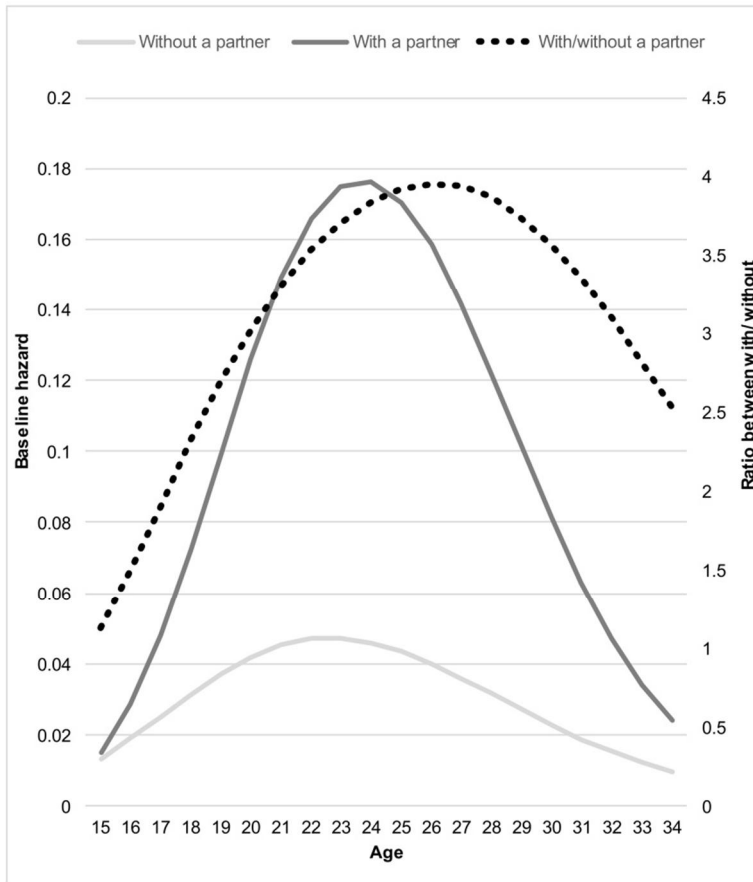
3.3 Method: A discrete-time competing-risks model

We estimated discrete-time event history models (multinomial logistic regressions of person-years) separately for men and women to model young adults' leaving home and used a competing risks approach, where leaving the parental home to live alone and leaving home to live with a partner are the outcomes of interest (Allison 1982; Steele

2005). The discrete-time approach has the advantage that it is straightforward to include nonproportional hazards and time-varying covariates (Steele 2005). By using a competing risks approach, we allow the determinants to differ between the decision to leave the parental home to live without a partner and the decision to leave the parental home to live with a partner (Iacovou 2010). The standard errors of the models were corrected for the clustering of observations in period-person combinations. The discrete-time multinomial logit model is given by:

$$\log \frac{h_{ti}^{(r)}}{h_{ti}^{(0)}} = \alpha^{(r)}(t) + \beta^{(r)'} x_{ti}^{(r)} \quad r = 1, \dots, k,$$

where $h_{ti}^{(r)}$ is the probability of transitioning from the parental home (state 0) to state r at age t for the young adult i.

The number of countries (N = 17) in our sample is too small to apply multilevel modeling, which is why we opt to alternatively use country fixed effects. We also considered broader comparisons across groups of countries with similar culture and welfare states, an approach that has been adopted in a fair number of studies (e.g., Iacovou 2001, 2004) but masks within-group differences. In preliminary analyses, we compared the survival functions for women and men in 17 countries among 4 broad country groups: Northern, Western, Eastern, and Southern Europe. Our results (not shown) indicated that while some country groupings were fairly consistent (i.e., countries in Northern Europe), most country groupings exhibited heterogeneity in the overall timing of leaving home among the different countries. Notable outliers were Belgium and Poland, where leaving home occurs later than in the other countries in the groups they belong to. In Estonia, however, leaving home occurs earlier than in the other Eastern European countries.

4. Results

Table A-1 (in the Appendix) presents the coefficients of women's and men's level of education and parental education from the multinomial logistic regression model without any interactions. We find that, after they have completed their studies, young adults with a high educational level have a (slightly) higher risk of leaving home to live without a partner than those with less education (for women: b = 0.04, p > .10; for men: b = 0.42, p < .001). For young women, however, the coefficient is not significantly different from zero, and there is thus only evidence for a positive effect of educational attainment on the likelihood of leaving home to live without a partner for young men. Young adults who are enrolled in education have a higher risk of leaving home to live

without a partner compared to those with a low level of education (for women: b = 0.56, p < .001; for men: b = 0.42, p < .001). The association between level of education and the likelihood of leaving home to live with a partner plays out differently between young women and men: Highly educated women have a lower risk of leaving home to live with a partner (b = –0.23, p < .001), whereas highly educated men have a higher risk of leaving home to live with a partner (b = 0.32, p < .001). However, both young women and men who are enrolled in education have a considerably lower risk of leaving home to live with a partner (for women: b = –0.70, p < .001; for men: b = –0.25, p < .001).

Furthermore, having a highly educated parent increases young adults' likelihood of leaving home to live without a partner (for women: b = 0.12, p < .01; for men: b = 0.11, p < .001) and decreases the likelihood of leaving home to live with a partner (for women: b = –0.13, p < .001; for men: b = –0.07, p < .05). We also note that (1) the effect of parental education is only slightly reduced when the young adult's level of education is included and vice versa that (2) the effect of the young adult's level of education is not reduced when parental education is included (results not shown). The difference by parental education is thus only very slightly mediated by level of education. Let us also note that our expectations on the differences between countries (as indicated by the country dummies) in leaving home seem overall to be confirmed – with some exceptions: Young adults in Belgium have a higher risk of leaving the parental home to live with a partner than their counterparts in other countries (see Table A-1). Young adults in Italy, Bulgaria, the Czech Republic, Hungary, Poland, Romania, and Russia are not found to be more likely to leave home to live with a partner. What we see, instead, is a negative gradient for leaving home without a partner compared to the other countries.

To assess whether the effects of education and parental education vary across the 17 European countries, we present interaction effects of the key independent variables with the country dummy variables (from the full model) graphically in Figures 2 and 3, but now broken down by educational category. (Table A-2 in the Appendix additionally shows the full models). The LR test between the baseline model (without interactions) and the full model (with interactions) suggests that the full model fits better than the baseline model (for women: $\chi^2(128) = 2147.41$, p < .001; for men: $\chi^2(128) = 1821.22$, p < .001). We also tested separately the improvement in fit for each interaction effect so as not to include noise into our models. Turning first to the results of the interaction between education and country, we see that enrollment in education is an important determinant of leaving the parental home across most European countries: If young adults are still in education they generally have a high risk of leaving the parental home to live without a partner, but a low risk of leaving to live with a partner. We hypothesized that the positive educational gradient for leaving home to live without a

partner would be stronger in the different Western European countries and Italy, but less strong in the different Northern and Eastern European countries – and find some evidence for this. Some interactions are negative (Table A-2), but an overall positive educational gradient exists for leaving home to live without a partner for men and women (Figure 2). Only for young women in Austria is the positive gradient less apparent. Highly educated young adults in Italy have a higher (but not significantly higher) risk of leaving to live with a partner than young adults from other European countries. In Sweden and Norway, we see (Figure 2) that the positive educational gradient is less strong (this does not hold for Norwegian men, but the interaction effects here are not significantly different from zero). Finally, in most Eastern European countries – with the exception of the Czech Republic, Hungary, and Poland, where highly educated young adults still have a slightly higher risk of leaving the parental home to live with a partner – the positive educational gradient is less strong.

Figure 2:   Odds ratios of leaving the parental home to live without a partner by level of education and country
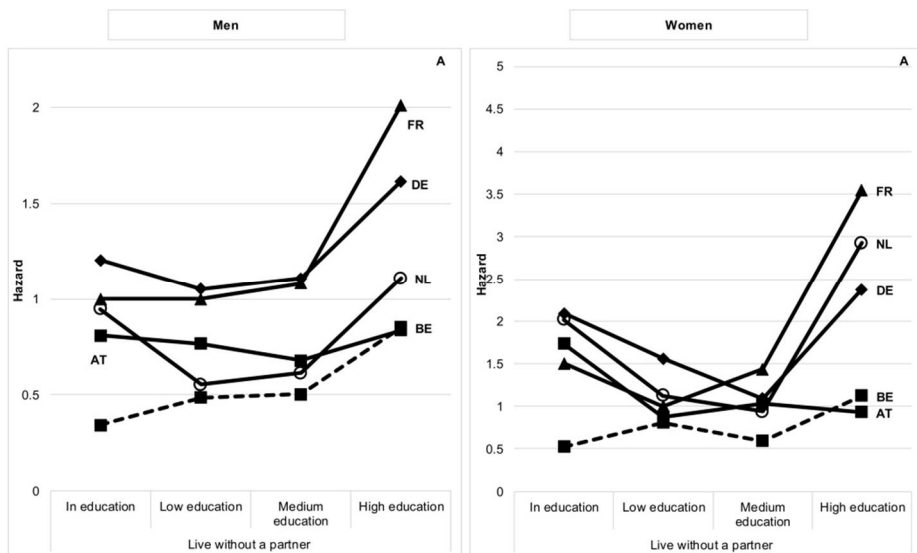
Figure 2: **(Continued)**
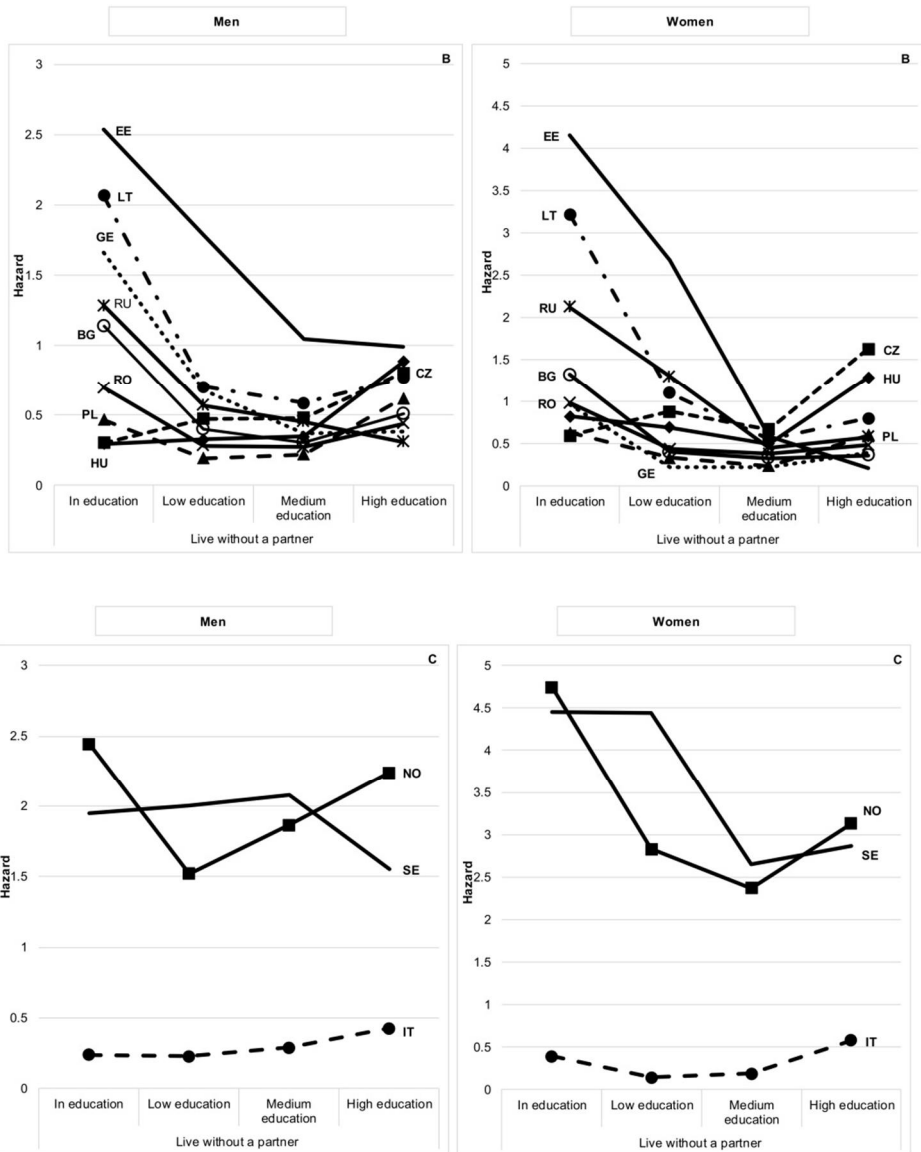
Figure 3: **Odds ratios of leaving the parental home to live with a partner by level of education and country**
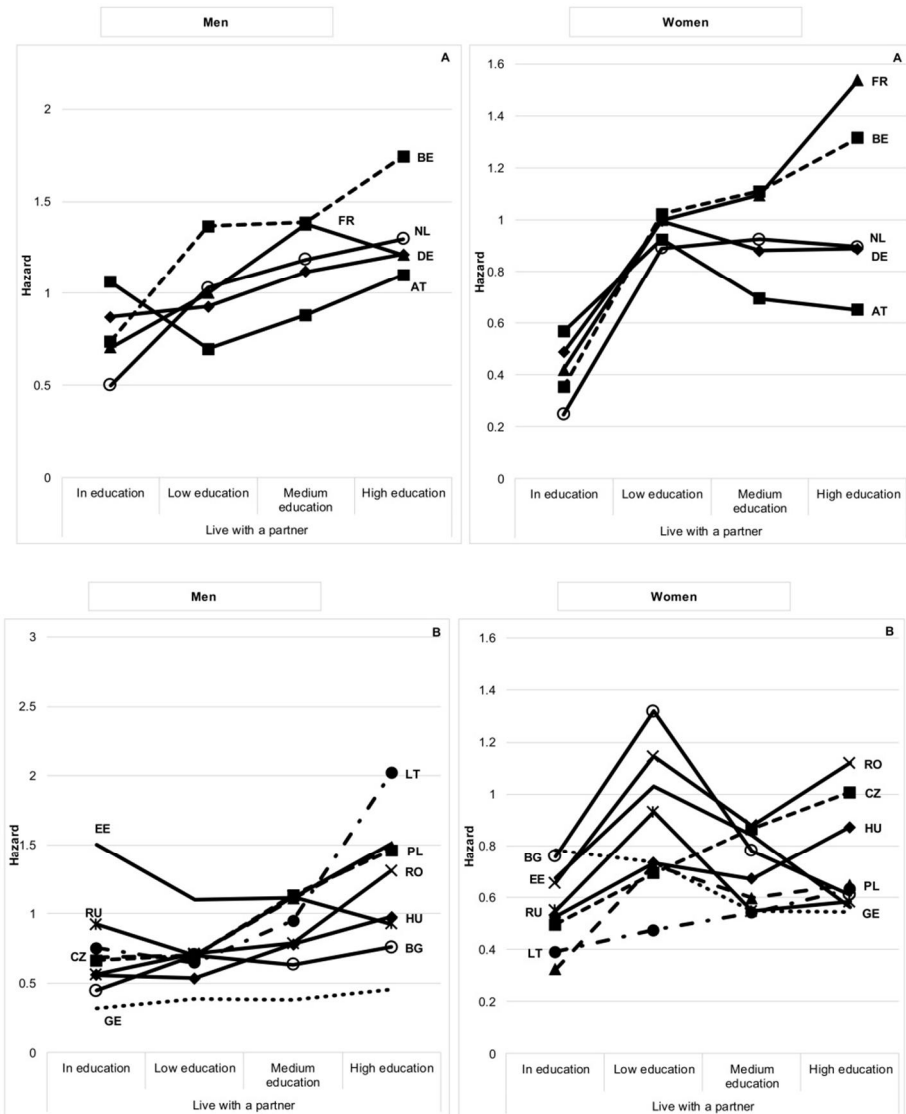
Figure 3:   (Continued)
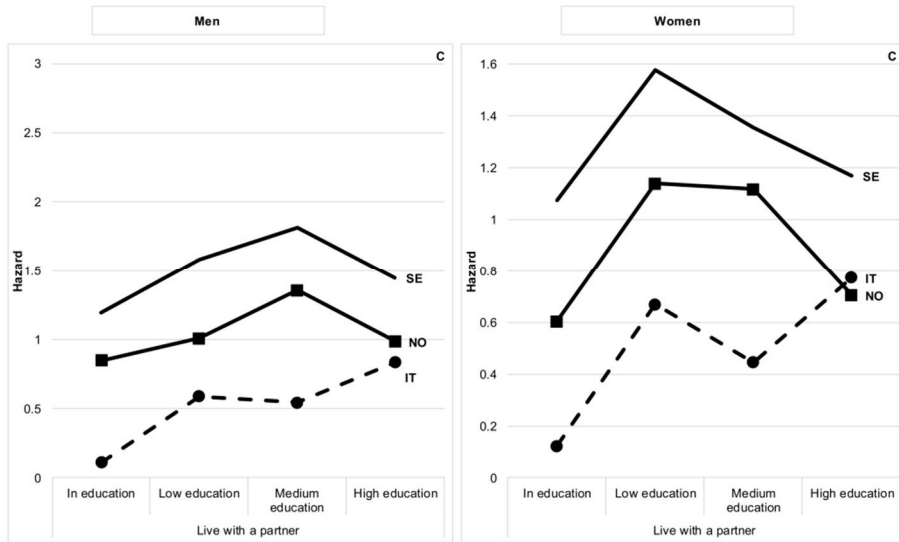
We furthermore hypothesized that the negative educational gradient for leaving home to live with a partner would be stronger in Italy and the Eastern European countries, but less strong in the different Northern and Western European countries. This is only marginally supported for the Western European countries (the interaction effects are negative, but the negative gradient does not appear to be very strong in Figure 3). For Italy, the interaction effects are negative, but a positive educational gradient exists for leaving home to live with a partner (Figure 3). This is also the case in the Czech Republic, Hungary, Lithuania (but the coefficients are not significantly different from zero), Poland, and Romania. In Bulgaria, Estonia, Russia, and Georgia young women with a low level of education have a higher risk of leaving home to live with a partner than of leaving home to live without a partner In Bulgaria, Estonia, Russia, and Georgia young adults with a low level of education have a higher risk of leaving home to live with a partner than of leaving home to live without a partner.

Finally, we look at the results with regard to how the impact of enrollment differs between countries. The hypothesis on cross-national differences in the positive effect of enrollment on the likelihood of leaving home to live without a partner – stronger in Western European countries and Sweden and Norway, but less strong in Italy and the Eastern European countries – is not confirmed (Table A-2). We note, though, that some

of the interaction effects are in the expected direction, but are not significantly different from zero (e.g., interaction effect for the Netherlands, Austria, Norway, and Hungary). The negative effect of enrollment on the likelihood of leaving home to live with a partner is stronger for young adults in Italy (as expected), but not for young adults in the Eastern European countries. Here, the negative effect of enrollment is less strong (see Table A-2). This is also the case for young women in Norway and Sweden (as expected) and young adults in Austria and Germany (as expected), but not in Belgium and the Netherlands.

Turning to the results of the interaction between parental education and country (Table A-2), we see negative interaction effects for the risk of leaving home to live without a partner in most of the Eastern European countries (except the Czech Republic and Poland, where the coefficients are not significantly different from zero) and Italy. Hence, the average effect of high parental education (for women: $b = .12$; for men: $b = .11$) is even smaller in these countries. In the Western European countries, the interaction effects are mostly in the expected direction, but are not significantly different from zero. In Norway and Sweden, however, the parental education gradient is as expected less strong (for men and women). All in all, there is partial support for a less strong parental education gradient in leaving home to live without a partner in the Eastern European countries, while we find almost no support that the negative effect of high parental education on leaving home to live with a partner differs significantly across the 17 European countries. Only in Poland and Russia is the effect of parental education less strong (as expected). Table 4 presents an overview of all the hypotheses and whether they are supported.

The results for the control variables, number of siblings, parental divorce before age 15, and cohort are not unexpected (see Table A-2 for estimates). Compared to having no siblings at all, having three or more siblings is associated with a much greater likelihood of leaving the parental home for men and women. Parental divorce before the age of 15 also has a positive effect on the transition out of the parental home. The cohort effects are only marginally significant: compared to their older counterparts born in 1945–1954, women from the cohort 1955–1964 have a slightly higher likelihood of leaving the parental home. Compared to the cohort 1945–1954, however, men from younger cohorts have a lower risk of leaving home to live with a partner.

Table 4: **Overview of the hypotheses (main effects and interactions with country) and their (non) confirmation**

	Left to live without a partner				Left to live with a partner			
		Enrollment	Education	Parental education		Enrollment	Education	Parental education
Main effect →		+ ✓	+ ✓	+ ✓		− ✓	− ✗	− ✓
Interaction ↘								
Austria	+ ✓	+ ✗	+ ✗	+ ✓	− ✓	+ ✓	+ ✓	− ✗
Belgium	+ ✓	+ ✗	+ ✓	+ ✓	− ✓	+ ✗	+ ✓	− ✗
France	+ ✓	+ ✗	+ ✓	+ ✓	− ✓	+ ✓	+ ✓	− ✗
Germany	+ ✓	+ ✗	+ ✓	+ ✓	− ✓	+ ✓	+ ✓	− ✗
The Netherlands	+ ✓	+ ✗	+ ✓	+ ✓	− ✓	+ ✗	+ ✓	− ✗
Bulgaria	− ✗	− ✗	− ✓	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Czech Republic	− ✗	− ✗	− ✓	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Estonia	+ ✓	− ✗	− ✓	− ✓	− ✓	− ✗	+ ✗	+ ✗
Georgia	− ✗	− ✗	− ✓	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Hungary	− ✗	− ✗	− ✓	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Lithuania	+ ✓	− ✗	− ✓	− ✓	− ✓	− ✗	+ ✗	+ ✗
Poland	− ✗	− ✗	− ✗	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Romania	− ✗	− ✗	− ✓	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Russia	− ✗	− ✗	− ✓	− ✓	+ ✗	− ✗	+ ✗	+ ✗
Italy	− ✗	− ✗	+ ✗	− ✓	+ ✗	− ✓	− ✗	+ ✗
Norway	+ ✓	+ ✗	− ✓	+ ✗	− ✓	+ ✓	+ ✗	− ✗
Sweden	+ ✓	+ ✗	− ✓	+ ✗	− ✓	+ ✓	+ ✗	− ✗

Note: ✓ indicates that the effect was found; − indicates that the effect was not found; ✗ indicates that the opposite effect was found.

The results presented above consider whether young men's and women's level of education and enrollment, respectively, determine the risk of leaving home (via different pathways). However, there is the possibility that young men's and women's level of education are themselves shaped by the timing and pathway of leaving home. Particularly respondents in the youngest cohort of our sample may not have completed their education process (i.e., 4% of young women and 3% of young men). We therefore ran the same models but excluded all observations from the youngest cohort where young men and women, respectively, had not yet finished their educational process. The results strongly resemble the results presented in Tables A-5 and A-6 (results for the sensitivity analysis are available upon request to authors).

5. Conclusion and discussion

Using recent European data for 17 countries, this study has enhanced our understanding of cross-national variation in the leaving home process by (1) studying the relation

between level of individual and parental education, young adults' timing of leaving home, and how this differs across countries and (2) by considering leaving home to live without a partner and leaving home to live with a partner as competing risks. Our first aim was to find out how the timing of young adults leaving home – and the different pathways out of the parental home – varies by education and parental education in Europe. An important extension of previous comparative research is that, unlike previous studies (Aassve et al. 2002; Chiuri and Del Boca 2010; Iacovou 2010), we compared young adults across Western and Eastern European countries and thus covered a substantial portion of contemporary Europe. Overall, our findings indicate that the impact of educational attainment on leaving home (both to live without and with a partner) is quite small, especially when compared to the impact of enrollment in education. Enrollment in education is clearly positively related to leaving home to live without a partner, but negatively related with leaving home to live with a partner across all 17 European countries and for men and women. This finding emphasizes the (1) importance of educational enrollment and being a student, rather than the level of education, as a driving force behind different pathways taken from the parental home and that (2) role incompatibility (Blossfeld and Huinink 1991) seems to hold across various European contexts.

Furthermore, our findings point to parental education as a non-negligible – independent of young adults' own education – determinant of leaving home differences, which, in a comparative perspective, echoes findings from single-country studies on Western Europe on the importance of social background and social class for determining residential transitions (e.g., Blaauboer and Mulder 2010). The analysis of country differences in the pathways of young adults leaving home are also noteworthy and provide a more nuanced picture than broad generalizations across groups of countries (Chiuri and Del Boca 2010; Iacovou 2010). The more complex patterns emerging from our analysis – particularly the observed heterogeneity in young adults' leaving home among Western and Eastern European countries – demonstrate the danger of masking country specificities in residential transitions.

Our second – and more important – aim was to find out how young adults' education and parental education interact with the national context across Europe. First, our results show that the educational gradient in leaving home varies considerably among the 17 European countries. With respect to leaving home to live without a partner, the positive educational gradient for young adults is stronger in most of the Western European countries (except Austria) and less strong in Sweden and Norway and in most of the Eastern European countries (except the Czech Republic, Hungary, and Poland). This could suggest that young adults' education may be less of a decisive determinant of leaving home to live without a partner in national contexts where (1) leaving home is easy for most people, such as in Sweden and Norway (possibly due to a

high level of social security, strong welfare state transfers, easy access to rented or owned housing, and social acceptability of leaving home via various pathways other than partnership formation); or (2) leaving home is particularly difficult, such as in Bulgaria, Romania, and Georgia (possibly due to a low level of social security, weak welfare state transfers, difficult access to rented or owned housing, and social unacceptability of leaving home via pathways other than partnership formation). The exceptions to this general pattern, on the other hand, could in the case of Austria – which does not have weak welfare state policies but is a predominantly Catholic country – point to long-standing and persistent cultural differences being more traditional or family-oriented than we initially assumed. In the cases of the Czech Republic, Hungary, and Poland, this could be considered as signs of defamilialization of the welfare state, perhaps mirroring the transitional nature of welfare state policies among countries in this European region (Thévenon 2011).

With respect to leaving home to live with a partner, the findings on the negative educational gradient are mixed. For the Western European countries, there is some indication that the relation between level of education and leaving home to live with a partner is less strong. Previous research has documented a reversal of the educational gradient in entering a partnership (from negative to positive) particularly for women, because in comparatively gender egalitarian countries higher education and economic potential increase women's attractiveness in the marriage market (Kalmijn 2013). Second, our results show that enrollment in education affects leaving home differently among the 17 European countries. This seems only to be the case, however, with respect to the negative effect of enrollment on the likelihood of leaving home to live with a partner. This negative effect is stronger for young adults in Italy and less strong in Norway, Sweden, Austria and Germany – lending support to our reasoning that it is easy to live with a partner even during educational enrollment for young adults in Northern and Western European countries (possibly due to comprehensive social policies), but hard for young adults in Italy (possibly due to less comprehensive social policies and spread of universities). Contrary to our predictions, the negative effect of enrollment was also less strong in most Eastern European countries. This could indicate that the link between leaving home and partnership formation in the Eastern European socio-cultural settings is stronger than we had anticipated.

Third, our results show that the parental educational gradient varies among the 17 European countries. It seems that parental education is particularly relevant in determining leaving the parental home to live without a partner. In countries where leaving home is rather difficult and may also be risky in terms of social mobility and poverty – notably in many Eastern European countries – parental education is less of a push factor and young adults with a highly educated parent have a lowered risk of leaving home to live without a partner. Quite unexpectedly, this also seems to hold in

Sweden and Norway – often considered forerunners of the Second Demographic Transition, with a strong welfare support for young adults (Billari and Liefbroer 2010; Lesthaeghe 2010; Thévenon 2011) and where normative expectations favor priority of the individual over the family and attach a great importance to young people's autonomy (Reher 1998). Perhaps, especially in Norway and Sweden, the more advantaged young men and women may nevertheless stay longer with their parents because the parental home has a strong appeal ('feathered nest'), enabling young adults to increase their living standards and further human capital accumulation.

While we have been able to establish cross-national variation in the effect of education and parental education on pathways out of the parental home – which was remarkably similar for men and women, serving as a first test of robustness of the findings in specific national contexts – further research on the educational gradient to test the robustness of these findings and interpretations would be welcome. We also acknowledge other limitations of our study. First, we recognize that there is still a potential for reverse causation. Our sensitivity analyses show that the potential for reverse causation with young men's and women's education is small, but it is also possible, for example, that family-oriented young adults may prefer to partner and leave education earlier than more career-oriented ones, leading to different pathways from the parental home. We therefore leave it to future research to study the causal pathways more thoroughly. Second, the limited information available at the individual level (the data does not, for example, contain any information on income or employment) may cause the results to be biased due to omitted relevant variables. Third, we only considered specific interactions between young adults' education and parental education, respectively, with the country; there could be others. Following Iacovou's (2010) research on the differential effect of income by age across countries, the extent to which the effect of young adults' education and parental education on pathways out of the parental home are age graded, for example, may be worthwhile investigating. Fourth, our analysis of pathways from the parental home makes a simple differentiation between only two dimensions (to live without a partner vs. to live with a partner). While this is in line with established research practices and mainly due to available information in the Harmonized Histories data, not distinguishing other possible pathways (e.g., leaving home for education) may lead to an underestimation of the effects of parental education and may conceal patterns of leaving home linked to specific pathways. The implications of a more encompassing operationalization of leaving home pathways is an open question for future research that importantly informs an understanding of cross-national differences in leaving home.

If we want to understand the contemporary structuring of young adults' leaving home, we need to build on both macro and micro perspectives. While we are able to point only tentatively to some factors at the country level underlying differences in

leaving home, future research could include fixed effects for countries and macro-level indicators for country-period combinations. This would more directly measure the institutional context (e.g., labor and housing markets, as well as education opportunities), public policies and welfare regimes, and long-term cultural continuities. This is arguably more of a challenge for researchers if (1) Eastern European countries are to be included – and we would indeed argue that a comprehensive understanding of European diversity in leaving-home behavior depends on this – and (2) a long time period is included, because of the relative scarcity of contextual data.

Nevertheless, the findings reported in the current study provide new insights into leaving-home behavior by making a link between macro-level factors and micro-level determinants of the different pathways from the parental home (living without a partner vs. living with a partner) young adults take across Europe. They reveal that enrollment, overall, is more important than level of education in determining whether or not young adults leave home to live with or without a partner – underscoring role incompatibility (Blossfeld and Huinink 1991). But enrollment also differentially affects leaving home in the different countries. The negative effect of enrollment on leaving home to live with a partner is, for example, particularly reinforced in Italy. Young adults' level of education, conversely, seems to be an important determinant of leaving home to live without a partner in the Western, Eastern, and Northern European countries. Finally, parental education is particularly relevant in determining leaving the parental home to live without a partner across countries – indicating that the impact of intergenerational transmission of leaving home is pathway-specific and country-specific, and similarly strong between young men and women. In all, our findings have thus shown that the country context is important for explaining young adults' leaving-home behavior, over and above of enrollment, level of education, and parental education. Because it could not be established which causes underlie the variability at the country level, how the country context shapes the gradient of education and parental education (as well as other individual level characteristics) deserves attention in future comparative research on leaving home in Europe.

6. Acknowledgements

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Appendix

Table A-1:   Discrete time multinomial logistic regression of the transition out of the parental home (main effects)

Variables	Men								Women							
	Left to live without a partner			Left to live with a partner					Left to live without a partner			Left to live with a partner				
	b		SE	b		SE			b		SE	b		SE		
Constant	−44.74	***	1.11	−92.20	***	1.40			−33.71	***	1.76	−66.28	***	1.57		
Age	−0.92	***	0.03	−1.53	***	0.03			−0.67	***	0.04	−1.24	***	0.03		
Age logged	20.25	***	0.54	39.96	***	0.64			14.64	***	0.86	29.82	***	0.74		
Education (ref. Low)																
In education	0.42	***	0.03	−0.25	***	0.04			0.56	***	0.05	−0.70	***	0.04		
Medium	−0.03		0.03	0.16	***	0.02			−0.02		0.05	−0.19	***	0.03		
High	0.42	***	0.05	0.32	***	0.04			0.04		0.08	−0.23	***	0.05		
Parental education (ref. Not high)																
High	0.11	***	0.02	−0.07	*	0.03			0.12	**	0.04	−0.13	**	0.04		
Number of siblings (ref. 0 siblings)																
1	0.12	***	0.03	0.14	***	0.03			0.33	***	0.06	0.18	***	0.04		
2	0.19	***	0.03	0.26	***	0.03			0.49	***	0.06	0.33	***	0.05		
3 or more	0.28	***	0.03	0.31	***	0.03			0.61	***	0.06	0.34	***	0.04		
Parental divorce before age 15 (ref. No)																
Yes	0.17	***	0.04	0.28	***	0.05			0.13	*	0.06	0.15	*	0.06		
Unknown	−0.05		0.03	−0.36	***	0.04			0.01		0.05	−0.17	***	0.05		
Cohort (ref. 1945–1954)																
1955–1964	0.01		0.02	−0.16	***	0.02			0.10	**	0.04	−0.01		0.03		
1965–1972	−0.03		0.02	−0.30	***	0.02			−0.01		0.04	−0.10	**	0.03		
Country (ref. France)																
Austria	−0.34	***	0.07	−0.22	**	0.08			0.07		0.06	−0.11	†	0.06		
Belgium	−0.92	***	0.05	0.10	†	0.05			−0.71	***	0.06	0.03		0.04		
Germany	0.05		0.05	−0.04		0.07			0.21	***	0.05	−0.01		0.05		
The Netherlands	−0.22	***	0.05	−0.09		0.06			0.30	***	0.05	−0.03		0.04		
Bulgaria	−0.60	***	0.05	−0.57	***	0.06			−0.54	***	0.06	0.08	*	0.04		
Czech Republic	−0.90	***	0.05	−0.13	*	0.05			−0.55	***	0.06	−0.05		0.05		
Estonia	0.45	***	0.05	0.17	*	0.08			0.59	***	0.05	0.10	*	0.05		
Georgia	−0.22	***	0.04	−1.12	***	0.07			−0.84	***	0.05	−0.10	*	0.04		
Hungary	−1.07	***	0.05	−0.48	***	0.05			−0.59	***	0.05	−0.17	***	0.04		
Lithuania	0.13	**	0.04	−0.19	**	0.06			0.33	***	0.05	−0.35	***	0.05		
Poland	−1.20	***	0.05	−0.12	*	0.06			−1.07	***	0.06	−0.34	***	0.05		
Romania	−0.93	***	0.05	−0.40	***	0.05			−0.71	***	0.06	0.11	**	0.04		
Russia	−0.30	***	0.05	−0.11	†	0.06			−0.04		0.05	−0.16	***	0.04		
Italy	−1.33	***	0.05	−0.73	***	0.05			−1.58	***	0.07	−0.57	***	0.04		
Norway	0.59	***	0.04	0.01		0.06			0.92	***	0.04	0.14	**	0.05		
Sweden	0.52	***	0.05	0.36	***	0.07			0.88	***	0.06	0.49	***	0.06		

Table A-1:   (Continued)

Variables	Men				Women			
	Left to live without a partner		Left to live with a partner		Left to live without a partner		Left to live with a partner	
	b	SE	b	SE	b	SE	b	SE
Observed N-person years	326,721				321,412			
Pseudo-R2	0.10				0.07			
Model Chisq	17,168.9				13,223.5			
df	58				58			
Pseudo-Loglikelihood	−124,787.9				−147,634.4			
AIC	249,695.7				295,388.7			
BIC	250,337.5				296,029.5			
Unweighted N	38,298				46,945			

Source: Harmonized Histories. Own calculations.
Notes: Base category: Staying in the parental home. † $p < 0.1$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. p-values corrected for clustering.

Table A-2:   Discrete time multinomial logistic regression of the transition out of the parental home (main + interaction effects)

Variables	Men						Women					
	Left to live without a partner			Left to live with a partner			Left to live without a partner			Left to live with a partner		
	b		SE	b		SE	b		SE	b		SE
Constant	–43.46	***	1.12	–92.75	***	1.42	–31.89	***	1.77	–66.28	***	1.58
Age	–0.88	***	0.03	–1.54	***	0.03	–0.62	***	0.04	–1.24	***	0.03
Age logged	19.60	***	0.54	40.17	***	0.64	13.69	***	0.86	29.76	***	0.75
Education (ref. Low)												
In education	0.00		0.08	–0.35	*	0.15	0.41	***	0.10	–0.87	***	0.08
Medium	0.08		0.09	0.32	**	0.10	0.36	**	0.11	0.09		0.07
High	0.70	***	0.15	0.19		0.18	1.27	***	0.17	0.43	**	0.14
Parental education (ref. Not high)												
High	0.43	***	0.10	0.06		0.18	0.35	***	0.09	–0.36	*	0.14
Number of siblings (ref. 0 siblings)												
1	0.11	**	0.03	0.14	***	0.03	0.33	***	0.06	0.19	***	0.04
2	0.17	***	0.03	0.26	***	0.03	0.47	***	0.06	0.33	***	0.05
3 or more	0.27	***	0.03	0.31	***	0.03	0.60	***	0.06	0.34	***	0.04
Parental divorce before age 15 (ref. No)												
Yes	0.17	***	0.04	0.27	***	0.05	0.14	*	0.06	0.16	**	0.06
Unknown	–0.05		0.03	–0.34	***	0.04	0.01		0.05	–0.18	***	0.05
Cohort (ref. 1945–1954)												
1955–1964	0.00		0.02	–0.16	***	0.02	0.11	**	0.04	0.00		0.03
1965–1972	–0.02		0.02	–0.30	***	0.02	0.01		0.04	–0.09	**	0.03
Country (ref. France)												
Austria	–0.27		0.23	–0.36		0.27	–0.13		0.20	–0.08		0.13
Belgium	–0.73	***	0.11	0.31	**	0.10	–0.21		0.13	0.02		0.08
Germany	0.05		0.16	–0.08		0.21	0.45	**	0.15	0.00		0.12
The Netherlands	–0.59	***	0.17	0.03		0.18	0.12		0.19	–0.12		0.14
Bulgaria	–0.93	***	0.10	–0.36	**	0.10	–0.93	***	0.17	0.28	***	0.08
Czech Republic	–0.75	***	0.12	–0.36	**	0.12	–0.14		0.13	–0.37	***	0.09
Estonia	0.58	***	0.13	0.10		0.19	0.98	***	0.15	0.03		0.14
Georgia	–0.40	*	0.18	–0.95	***	0.22	–1.52	***	0.33	–0.31	*	0.12
Hungary	–1.13	***	0.13	–0.63	***	0.12	–0.37	**	0.14	–0.31	***	0.08
Lithuania	–0.36	*	0.14	–0.44	**	0.15	0.09		0.25	–0.75	***	0.19
Poland	–1.67	***	0.12	–0.36	**	0.11	–1.11	***	0.13	–0.32	***	0.08
Romania	–1.29	***	0.11	–0.34	**	0.10	–0.83	***	0.13	0.13	*	0.07
Russia	–0.57	**	0.17	–0.35	*	0.17	0.26		0.17	–0.07		0.13
Italy	–1.48	***	0.10	–0.53	***	0.09	–1.99	***	0.14	–0.40	***	0.06
Norway	0.42	***	0.09	0.01		0.13	1.04	***	0.11	0.13		0.09
Sweden	0.70	***	0.11	0.46	**	0.15	1.49	***	0.15	0.46	**	0.16

Table A-2: (Continued)

Variables	Men				Women			
	Left to live without a partner		Left to live with a partner		Left to live without a partner		Left to live with a partner	
	b	SE	b	SE	b	SE	b	SE
Parental education * Country								
High * Austria	0.27	0.23	−0.15	0.35	0.14	0.18	−0.20	0.26
High * Belgium	−0.10	0.14	−0.23	0.20	0.18	0.14	0.24	0.16
High * Germany	−0.10	0.12	0.07	0.23	−0.19	0.12	0.18	0.17
High * The Netherlands	0.35 **	0.12	−0.17	0.23	0.24 *	0.12	0.22	0.17
High * Bulgaria	−0.48 **	0.14	−0.05	0.22	−0.32 *	0.14	−0.17	0.16
High * Czech Republic	0.02	0.16	−0.08	0.22	0.12	0.16	0.20	0.18
High * Estonia	−0.76 ***	0.15	0.02	0.24	−0.80 ***	0.13	0.21	0.18
High * Georgia	−0.92 ***	0.12	−0.24	0.22	−0.40 **	0.13	−0.08	0.16
High * Hungary	−0.03	0.16	−0.18	0.22	−0.25 †	0.15	0.05	0.17
High * Lithuania	−0.88 ***	0.15	−0.03	0.23	−0.79 ***	0.14	0.28	0.18
High * Poland	0.12	0.14	0.03	0.21	0.13	0.14	0.30 †	0.17
High * Romania	−0.86 **	0.30	0.16	0.29	−0.59 *	0.28	−0.35	0.24
High * Russia	−0.32 *	0.13	−0.07	0.20	−0.40 **	0.12	0.37 **	0.16
High * Italy	−0.28	0.21	−0.41	0.26	−0.16	0.25	0.13	0.22
High * Norway	−0.36 **	0.11	−0.16	0.22	−0.42 ***	0.11	0.14	0.17
High * Sweden	−0.36 **	0.11	−0.10	0.22	−0.45 ***	0.11	−0.06	0.17
Education * Country								
In education * Austria	0.06	0.25	0.77 *	0.33	0.28	0.22	0.38 *	0.17
In education * Belgium	−0.35 *	0.14	−0.27	0.18	−0.84 ***	0.16	−0.19	0.12
In education * Germany	0.14	0.17	0.29	0.26	−0.12	0.16	0.15	0.15
In education * The Netherlands	0.54 **	0.18	−0.37	0.26	0.18	0.20	−0.42 *	0.18
In education * Bulgaria	1.05 ***	0.12	−0.10	0.20	0.80 ***	0.19	0.32 **	0.11
In education * Czech Republic	−0.46 **	0.15	0.29	0.19	−0.80 ***	0.16	0.53 ***	0.12
In education * Estonia	0.35 *	0.15	0.66 **	0.25	0.03	0.17	0.45 **	0.17
In education * Georgia	0.91 ***	0.19	0.14	0.28	1.06 **	0.34	0.93 ***	0.14
In education * Hungary	−0.11	0.16	0.39 †	0.20	−0.24	0.16	0.54 ***	0.11
In education * Lithuania	1.08 ***	0.15	0.50 *	0.22	0.67 **	0.25	0.68 **	0.21
In education * Poland	0.90 ***	0.14	0.33 †	0.17	0.23	0.14	0.06	0.10
In education * Romania	0.92 ***	0.13	0.11	0.18	0.41 **	0.15	0.31 **	0.11
In education * Russia	0.81 ***	0.18	0.62 **	0.23	0.08	0.18	0.34 *	0.15
In education * Italy	0.04	0.15	−1.33 ***	0.29	0.64 ***	0.18	−0.83 ***	0.15
In education * Norway	0.48 ***	0.11	0.17	0.20	0.11	0.13	0.24 †	0.12
In education * Sweden	−0.03	0.12	0.07	0.22	−0.41 **	0.16	0.49 **	0.17
Medium * Austria	−0.20	0.25	−0.09	0.29	0.16	0.23	−0.29 †	0.15
Medium * Belgium	−0.04	0.15	−0.30 *	0.13	−0.31	0.19	0.08	0.11
Medium * Germany	−0.03	0.18	−0.13	0.23	−0.36 *	0.18	−0.12	0.14

Table A-2:   (Continued)

Variables	Men				Women			
	Left to live without a partner		Left to live with a partner		Left to live without a partner		Left to live with a partner	
	b	SE	b	SE	b	SE	b	SE
Education * Country (Continued)								
Medium * The Netherlands	0.02	0.19	−0.18	0.19	−0.19	0.21	0.04	0.15
Medium * Bulgaria	−0.36 **	0.14	−0.42 **	0.13	−0.21	0.22	−0.53 ***	0.10
Medium * Czech Republic	−0.07	0.14	0.16	0.14	−0.27 †	0.16	0.22 *	0.11
Medium * Estonia	−0.62 ***	0.17	−0.31	0.22	−1.53 ***	0.22	−0.20	0.17
Medium * Georgia	−0.70 **	0.20	−0.35	0.24	0.01	0.36	−0.30 *	0.14
Medium * Hungary	−0.03	0.16	0.06	0.14	−0.34 *	0.17	−0.09	0.10
Medium * Lithuania	−0.26	0.17	0.06	0.17	−0.69 *	0.28	0.13	0.20
Medium * Poland	0.05	0.14	0.14	0.12	−0.34 *	0.15	−0.19 *	0.09
Medium * Romania	−0.12	0.14	−0.22 †	0.12	−0.15	0.18	−0.27 **	0.09
Medium * Russia	−0.31	0.19	0.15	0.19	−1.07 ***	0.20	−0.53 ***	0.14
Medium * Italy	0.16	0.13	−0.40 **	0.12	0.30	0.19	−0.41 ***	0.09
Medium * Norway	0.13	0.12	−0.02	0.15	−0.18	0.15	−0.02	0.13
Medium * Sweden	−0.04	0.13	−0.18	0.18	−0.52 **	0.18	−0.15	0.18
High * Austria	−0.61	0.51	0.27	0.42	−1.20 **	0.45	−0.78 **	0.29
High * Belgium	−0.14	0.20	0.05	0.21	−0.94 ***	0.23	−0.18	0.16
High * Germany	−0.27	0.28	0.08	0.33	−0.85 **	0.28	−0.54 *	0.25
High * The Netherlands	0.00	0.23	0.04	0.26	−0.31	0.26	−0.42 *	0.22
High * Bulgaria	−0.45	0.28	−0.11	0.24	−1.37 ***	0.34	−1.20 ***	0.18
High * Czech Republic	−0.17	0.24	0.54 *	0.23	−0.64 *	0.28	−0.06	0.21
High * Estonia	−1.29 **	0.41	0.12	0.35	−3.85 ***	0.50	−1.03 ***	0.23
High * Georgia	−1.26 ***	0.29	−0.03	0.30	−0.70 †	0.41	−0.74 ***	0.20
High * Hungary	0.30	0.24	0.41 †	0.24	−0.64 **	0.24	−0.25	0.17
High * Lithuania	−0.61	0.40	0.95 **	0.28	−1.59 ***	0.40	−0.14	0.27
High * Poland	0.48 †	0.26	0.56 *	0.22	−0.67 **	0.25	−0.54 **	0.17
High * Romania	−0.24	0.34	0.42 †	0.23	−1.18 **	0.42	−0.45 *	0.20
High * Russia	−1.32 ***	0.28	0.09	0.26	−2.08 ***	0.25	−0.90 ***	0.19
High * Italy	−0.08	0.26	0.16	0.22	0.17	0.30	−0.28	0.18
High * Norway	−0.31	0.25	−0.21	0.30	−1.16 ***	0.32	−0.91 **	0.31
High * Sweden	−0.96 **	0.29	−0.28	0.33	−1.70 ***	0.30	−0.73 *	0.29
Observed N-person years	326,721				321,412			
Pseudo-R2	0.11				0.08			
Model Chisq	18,727.3				18,179.1			
df	186				186			
Pseudo-Loglikelihood	−123,823.8				−146,619.8			
AIC	248,023.6				293,615.7			
BIC	250,034.6				195,623.6			
Unweighted N	38,298				46,945			

Source: Harmonized Histories. Own calculations.
Notes: Base category: Staying in the parental home. † p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001. p-values corrected for clustering.