Parental Death in Childhood and Family-Life Transitions in 21 Countries

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Parental death in childhood is a traumatic life event with long-term negative consequences for children. A wide range of studies have documented that early parental death was negatively associated with children's outcomes in adulthood, including lower educational attainment (Barclay & Hällsten, 2022; Bussemakers et al., 2022; Kailaheimo-Lönnqvist & Erola, 2020; Kailaheimo-Lönnqvist & Kotimäki, 2020; Prix & Erola, 2017), more mental health disorders (Appel et al., 2013; Berg et al., 2016; Böckerman et al., 2023; Kailaheimo-Lönnqvist & Kotimäki, 2020), and higher mortality risks (Rostila & Saarela, 2011; Smith et al., 2014).

However, only a few studies focused on how parental death in childhood affected later family-life transitions, such as leaving home and family formation. Two early studies found that parental death accelerated early home leaving of young adults in the UK (Cherlin et al., 1995; Kiernan, 1992). A few studies found that children who experienced parental death in childhood were more likely to have a first partner and have a child earlier in Denmark, Norway, and France (Beaujouan & Solaz, 2023; Høeg et al., 2018; Reneflot, 2011), whereas no accelerating effects in partnership formation and childbearing were found in the United Kingdom (Kiernan, 1992). Most of these studies focused on outcomes in early adulthood because of data limitations. These studies also examined only one dimension of family-life transitions. Moreover, more research is needed to understand variations in the effects of parental death. For instance, we know little about whether the effects of parental death differ across national contexts.

In this article, we examine how parental death before age 18 affects the timing of family-life transitions. We make three contributions to the literature. First, we analyzed three demographic behaviours together from a life course perspective: *leaving home, forming a first partnership, and entering parenthood* (Billari & Liefbroer, 2010). Moreover, we not only measure transitions in early adulthood but also include transitions in subsequent life stages. Accordingly, our study contrasts with prior research and provides a more comprehensive picture of how children experience family-life transitions after they lose their parent in childhood.

Second, we provide new insights into theoretical mechanisms on how parental death influences family-life transitions by directly comparing the effects of mother's and father's death. We derive hypotheses from three theoretical perspectives regarding the economic resource, the household resources, and the quality of relationships. The consequences of mother's death may differ from father's death. For instance, the death of a father may lead to more loss in economic resources, whereas the death of a mother may result in greater loss in household resources. Moreover, widowed fathers may be more likely to re-partner than widowed mothers (van Dijk & Kok, 2021; Van Poppel, 1995), which may further influence children's family-life transitions differently.

Third, we expand our analysis to 21 European countries and examine how the country context moderates the effects of parental death on family-life transitions. We focus on three country-level indicators: social security, female labour force participation rate, and gender norms in the family. European countries differ substantially in these dimensions. For example, Nordic European countries have more social security, higher female labour force participation rates, and more egalitarian gender norms in the family. In contrast, some Eastern and Central European countries (e.g., Russia and Lithuania) tend to have more traditional gender norms in the family and lower levels of social security, despite relatively high female participation rates. Studying such country variation allows for distinguishing between the economic resource and the household resource perspective.

Hypotheses

Hypothesis 1: Parental death has an accelerating effect on family-life transitions.

Hypothesis 2a: According to the economic resource perspective, the accelerating effect should be stronger for father's death than mother's death.

Hypothesis 2b: According to the household resource and relationship quality perspective, the accelerating effect should be stronger for mother's death than father's death.

Hypothesis 3: The accelerating effects of father's death on family-life transitions are weaker in countries with more social security (H3a) and higher female labour force participation (H3b); the accelerating effects of mother's death on family-life transitions are weaker in countries with more egalitarian gender norms in the family (H3c).

Data and method

We used data from the Generations and Gender Survey (GGS) (Gauthier et al., 2025). GGS is a cross-national and large-scale survey on the life course and family dynamics. The data were collected over two rounds, in the 2000s and 2020s. We harmonized two rounds of GGS and selected 21 European countries: Austria, Belgium, Belarus, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, France, Georgia, Germany, Hungary, Lithuania, the Netherlands, Norway, Poland, Romania, Russia, Sweden, Moldova, and the United Kingdom.

We selected the sample in three ways. First, we selected respondents who were born after 1945. Second, we excluded those respondents who experienced parental separation before age 18. Third, we excluded children who lost both parents before age 18, as the proportion was too small for analysis. After all selections and excluding the missing values, the analytical sample included 154,575 children, including 7,432 children who lost their father before age 18 and 2,318 children who lost their mother before age 18.

We focused on three dependent variables: the timing of leaving home, the timing of first partnership formation, and the timing of entering parenthood. We constructed these three variables based on the detailed retrospective life history in the data, which included the specific dates of leaving home, forming a first partnership, and having a first child. As we used event-history analysis, a person-period file was created with different observation windows for each outcome. For leaving home, respondents were considered at risk from age 1 until the age of leaving home or right-censored at age 30. For partnership formation, respondents entered the risk set starting from age 14 and exited at the age of having a first partner or right-censored at age 40. Similarly, for entering parenthood, respondents entered the risk set at age 16 and exited the risk at the age of having a first biological child or when right-censored at age 40.

The key independent variable is parental death before age 18. The respondents were asked separately whether their mother or father was alive or not. If not, respondents were asked to report the year of mother's or father's death. Based on these questions, we constructed a time-varying binary variable indicating whether the respondent experienced parental death or not up to age 18 in the person-period file. Moreover, we constructed another independent variable with three categories: mother's death before age 18, father's death before age 18, and no parental death before age 18.

We added the control variables in models, including the child's gender, birth cohort (1946-1955, 1956-1965, 1966-1975, 1976-1985, 1986-2004), the highest level of parental education (primary education or lower, secondary education, and tertiary education), age of child, and country dummies.

We focused on three country-level moderators: social security, female labour force participation rate, and gender norms in the family. We measured social security as a country's public spending of social benefits as a percentage of GDP in 1999. A higher percentage of social benefits spending indicates a higher level of social security in a country. Female labour force participation rate was measured as a country's proportion of women aged 25-54 active in the labour market in 1995. Gender norms in the family were measured as country-level gender-role attitudes. We used the European Values Study (EVS, 2008) to construct country-level gender-role attitudes. We constructed an index based on the average of seven items rated on a four-option Likert Scale. The index was aggregated to the country level, with the score ranging from 1 to 4. A higher score indicates a more egalitarian gender-role attitude in the country.

We had two main steps for the analysis. First, we used discrete-time event-history models to examine the effects of parental death before age 18 across all countries at the micro-level. In the first step, we estimated the effects of early parental death across countries by controlling for country dummies in all models. We estimated two models for each outcome. In the first model, we estimated the effects of parental death, regardless of the deceased parent's gender; in the second model, we separated mother's and father's death. Second, for the macro-level analysis, we used random-effects meta-regression models to estimate whether the country-level indicators moderated the effects of parental death (Harbord & Higgins, 2008; Liefbroer & Zoutewelle-Terovan, 2021). Meta-regression analysis was used because it could provide more reliable estimates than multilevel models in the case of a few macro units. We first estimated discrete-time event-history models for each country. Next, we obtained the log-odds coefficients from each country and regressed those associations on macro-level predictors, using standard errors as weights.

Results

Table 1 shows the effects of parental death before age 18 on three family-life transitions using discrete-time event-history models after controlling for all covariates. First, in Model 1, we found that parental death had a positive and significant effect on leaving home. Children who experienced parental death had, on average, 1.17 times higher odds (b=0.156) of leaving home earlier than those who did not. In Model 2, we separated mother's and father's death. We found that the effect of mother's death had a stronger accelerating effect on leaving home than father's death, and the difference is significant ($p<0.001$). Second, we found a positive and significant effect of parental death on first partnership formation. The effect is relatively weak, with children who lost a parent having 1.04 times higher odds of finding a first partner earlier than those who did not (b=0.044). Model 4 shows that only mother's death had a significant and positive effect on the first partnership formation, not for father's death. Third, we found that parental death did not have an accelerating effect on entering parenthood, and also no difference was found between mother's and father's death.

Table 2 presents meta-regression models of parental death effects on leaving home. We added three country-level indicators separately in the model. In contrast with our hypotheses from the economic resource perspective, we found that the effects of father's death death did not become weaker with more social security (Model 2) and higher female labor force participation (Model 4). However, in line with the household resource perspective, we found that the effects of mother's death were stronger in countries with more egalitarian gender norms once we excluded Denmark as an outlier (Model 6). Figure 1 visualizes the association between mother's death effects and country-level gender-role attitudes. For instance, Lithuania and Russia had more traditional gender norms and the effects of mother's death were also stronger in these countries. In contrast, Norway and Sweden had more egalitarian gender norms and the effects of mother's death were weak. Denmark was an outlier with an egalitarian gender norm but the strongest mother's death effect.

Discussion and next step

Overall, parental death in childhood accelerated the timing of leaving home and the first partnership formation, but not for entering parenthood. The strength of the association between parental death and family-life transitions varied by the deceased parent's gender and country context.

In line with the household resource and the relationship quality perspectives, mother's death had a stronger accelerating effect on home-leaving than father's death. Also, mother's death had an accelerating effect on the first partnership formation, but not for father's death. According to the household resource perspective, children who experienced parental death leave home and start family formation earlier because widowed fathers have few household resources, including time and ability for caregiving and household chores. Moreover, children who experienced mother's death were more likely to leave home earlier because of the low relationship quality with the potential stepparent, considering widowed fathers were more likely to re-partner than widowed mothers.

At the country level, we found that mother's death had a weaker effect on home-leaving in countries with more egalitarian gender norms. According to the household resource perspective, widowed fathers in countries with more egalitarian gender norms had more household resources because they were more expected and able to take up childrearing responsibilities, which reduced the effects of mother's death.

We performed additional analyses in the full paper. First, we examined whether the effects of parental death vary by the child's gender. Interestingly, we found that parental death accelerated first partnership formation and entering parenthood for girls, but not for boys. Second, we found that the strongest effect on home-leaving was when children lived with a stepparent, which is consistent with our expectation. We will present those results in the full paper.

Table 1. The effects of parental death on family-life transitions.

	Leaving home M1	Leaving home M2	First partnership M3	First partnership M4	Entering parenthood M5	Entering parenthood M6
Parental death before age 18 (ref. no)						
Yes	0.156***		0.044**		0.027	
	(0.000)		(0.003)		(0.092)	
Parental death before age 18 (ref. no death)						
Father's death		0.108***		0.031		0.022
		(0.000)		(0.065)		(0.243)
Mother's death		0.326***		0.088**		0.046
		(0.000)		(0.003)		(0.157)
N (person-period)	2616338	2616338	1775905	1775905	1775905	1775905

Note. Models in the table were discrete-time logit models. The coefficients (log odds) were shown. All models were weighted and controlled for covariates, including birth cohort, parental education, country dummies, and duration (age). *p*-values in parentheses. * p<0.05, ** p<0.01, *** p<0.001

Table 2. Meta-regression of parental death effects on leaving home

	M1 Mother	M2 Father	M3 Mother	M4 Father	M5 Mother	M6 Mother	M7 Father
Social security	0.002	0.013					
	(0.846)	(0.068)					
Female labour force participation rate			0.004	-0.000			
			(0.530)	(0.992)			
Country-level gender role attitudes					-0.113	-0.439*	-0.027
					(0.624)	(0.026)	(0.875)
N(country)	19	19	19	19	19	18	19

Note. Model 6 for leaving home excluded Denmark. Mother is mother's death effects. Father is father's death effects. *p*-values in parentheses. * p<0.05.

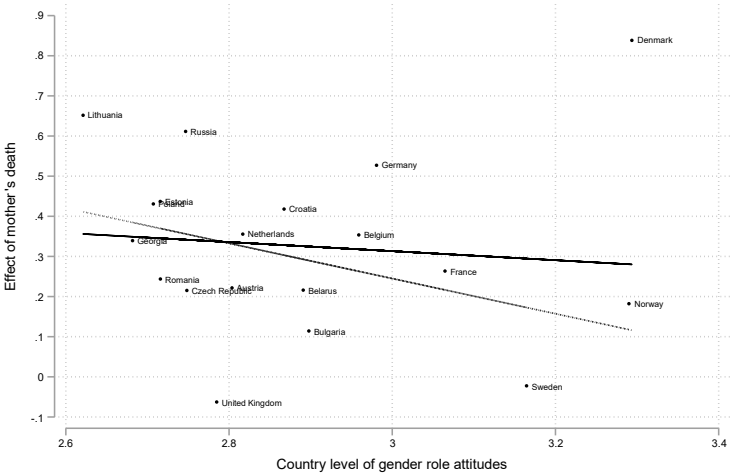

Figure 1. The association between the mother's death effects and the country-level of gender role attitudes. Note. The solid line is the model including all 19 countries. The dotted line is the model excluding Denmark.

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