

“Better Than Childless?” The Likelihood of Becoming a Later-age Single Mother at First Childbirth According to Socioeconomic Characteristics and Proximity to Parents

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Background

In 2020, 14% of the total households with children were headed by single parents (Eurostat, 2021). An overwhelming majority of single parents are single mothers (Nieuwenhuis, 2020). Single motherhood intrigues researchers and policymakers alike – on one hand, it reflects women’s empowerment, on the other, it has been a driver of precarity.

Most single mothers assumed custody over their children following separation from a partner, and literature on single motherhood is often focused on this subgroup. Others become *single mothers at childbirth* due to unintended pregnancies or separation during pregnancy. Studies on single mothers at childbirth find that they are a vulnerable group with little financial means, less educated, and younger than partnered mothers (Jalovaara & Andersson, 2018; Koops et al., 2021). On the other hand, qualitative studies documented a rise in highly educated, financially-stable women who actively choose to be single mothers in advanced maternal ages (35+) because difficulties finding a partner and other life circumstances prevented them from entering motherhood sooner (Jadva et al., 2009; Mannis, 1999; Volgsten & Schmidt, 2021). These contrasts hint at a changing face and increasing diversity of single mothers at childbirth. These also hint at how socioeconomic status (SES) does not only affect the likelihood, but also the type and timing of single motherhood. Consequently, the type and timing of single motherhood is associated with different socioeconomic risks.

In Belgium, where abortion is legal and fertility treatments for single women are covered by health insurance, becoming a single mother at childbirth may be the result of active reproductive choices. Single mothers at childbirth may therefore be women who chose to keep an unplanned pregnancy or those who chose to conceive alone. As grandparents are now becoming more involved in childcare (Buchanan & Rotkirch, 2018), single motherhood may also be facilitated by support available from family members. Yet numbers on women starting motherhood while unpartnered (not married nor in a cohabiting relationship) are largely lacking. Official statistics often only distinguish between women who were married or unmarried at the time of their childbirth.

These unconventional paths to entering motherhood deserve attention as they play an important role in understanding the different ways in which social inequality affects family formation. Studying later-age single mothers at childbirth becomes more relevant when situated in a society where women struggle to fulfill their fertility intentions, where involuntary childlessness is increasing, and where low fertility presents pressing challenges for the future.

Question and Hypotheses

I ask: how do SES and proximity to parents impact a woman’s likelihood of becoming a single mother at *first childbirth* vs remaining unpartnered and childless, and how does the

effect of SES vary by age? I hypothesize that (H1) proximity to parents (↑ childcare support) increases the likelihood of becoming a single mother at childbirth, and (H2) the effect of SES on becoming a single mother at childbirth reverses with increasing age, from negative to positive.

Data

This study uses data from Belgian registers and censuses from 1995 to 2015. The woman is the unit of analysis and having a first birth as a single woman is the event of interest.

A monthly longitudinal dataset was created with women of childbearing age (14 to 49) from January 1995 to January 2015. The starting point was a base dataset of Belgian-born women aged 14 to 49 who were childless at the beginning of 1995. Other women are gradually added to the dataset from the year of their 14th birthday.

Information on women's *first childbirth* – the exact date of birth, identifier of the child, identifier of a registered coparent – were added to the month-year of the child's birth in the dataset. In the case of multiple births, one random child was selected and added to the dataset.

The final dataset contained 2,154,749 women, 870,604 became first-time mothers during the observation period.

Analytical strategy

The prevalence of single mothers at first childbirth will be estimated from 1995 to 2014. Tables and figures will show trends in the educational attainment and age of these women.

Next, event history analysis will be conducted to model the likelihood of becoming a single mother at first birth versus remaining unpartnered and childless. Women become at risk of first birth as a single mother from the month of their 14th birthday. They remain in the study until the month after the first of these events: their death, their 49th birthday, or their first childbirth. Months where women are living outside of Belgium are excluded from the analysis. Women are also excluded from the analysis for months when they are partnered.

Partnership status is a binary, time-varying variable that is key to identifying single mothers at childbirth. A woman is considered *partnered* for months when she is married, or for when she is in a non-marital cohabiting union.

Key predictor variables are *socioeconomic status (SES)* and *proximity to parents*. Women's and their parents' educational attainment are used as an indicator of *socioeconomic status (SES)*. Their highest educational attainment as of the 2011 census was used. Proximity to women's parents (*proximity*) is another time-varying variable that is derived from the municipality of residence of the woman and her parents for each month. Women's birth cohort, their region of birth (Wallonia, Flanders, Brussels), and the period of observations will be used as controls.

Separate cox proportional hazards regression models will be fitted for women for when they are in the young childbearing ages (14 to 24), middle childbearing ages (25 to 34), and

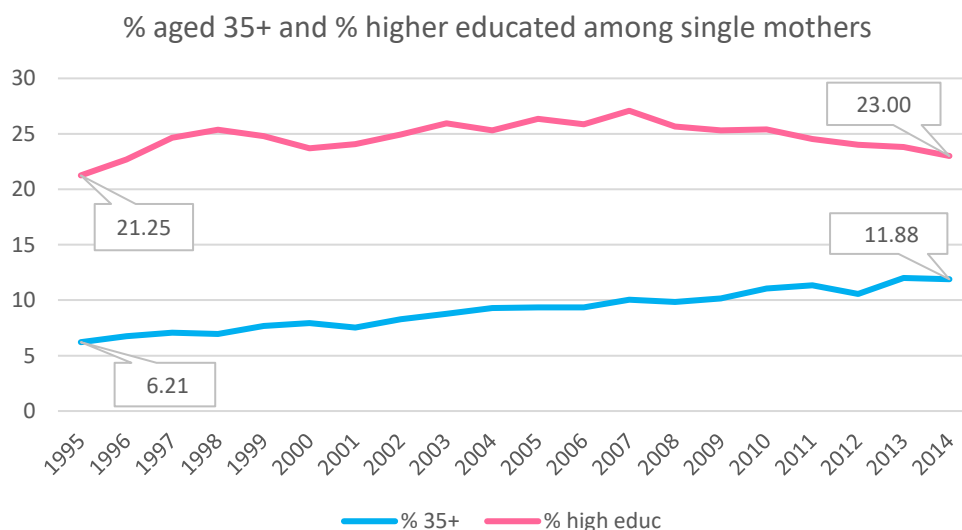
later childbearing ages (35 to 49), to observe differences in how predictor variables are associated with first birth as a single mother.

Preliminary findings

In the pooled sample, 13.9% of women were unpartnered at the time of their first childbirth. Among the single mothers (n = 121, 398), 19.4% did not register a co-parent for their child. The plurality of single mothers (40.9%) was between 25 and 34 years old when they had their first birth.

The proportion of single mothers at first childbirth increased from 10.6% in 1995 to 14.4% in 2014. Among these women, the proportion of unpartnered first-time mothers aged 35 and above steadily increased, from 6.2% in 1995 to 11.2% in 2014. The proportion of highly educated women among unpartnered first-time mothers have remained above 21% from 1995, peaking at 27.1% in 2007. These trends are shown in Figure 1.

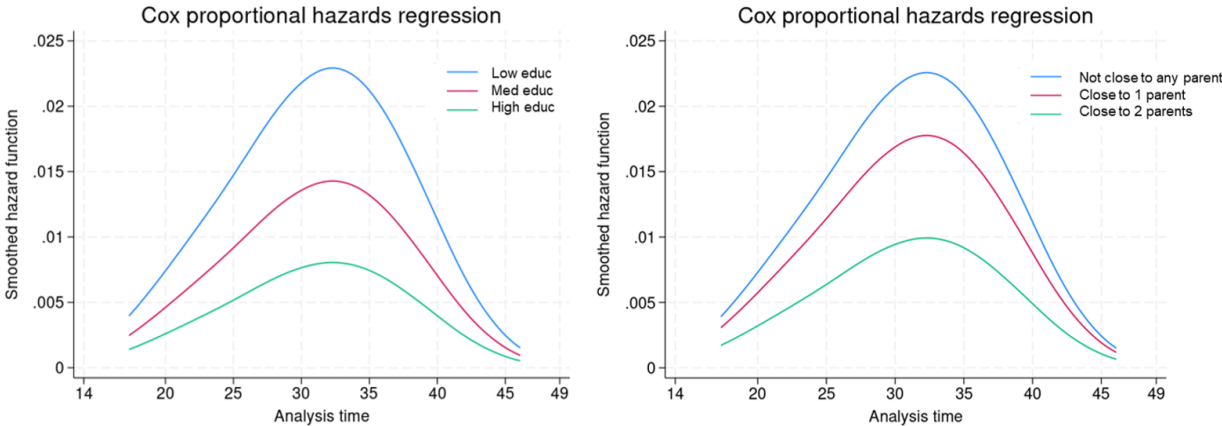
Figure 1. Percentage of single mothers at first childbirth who are at least 35 years old and who are highly educated: Belgium, 1995 to 2014



Single mothers of different age groups seem to also have different characteristics. More than half of unpartnered mothers aged 35+ have higher education, while only 7% of single mothers less than 25 years do. At the time of childbirth, less than half (48%) of later-age single mothers live close to at least one parent during childbirth, while 77% of unpartnered mothers below 25 did.

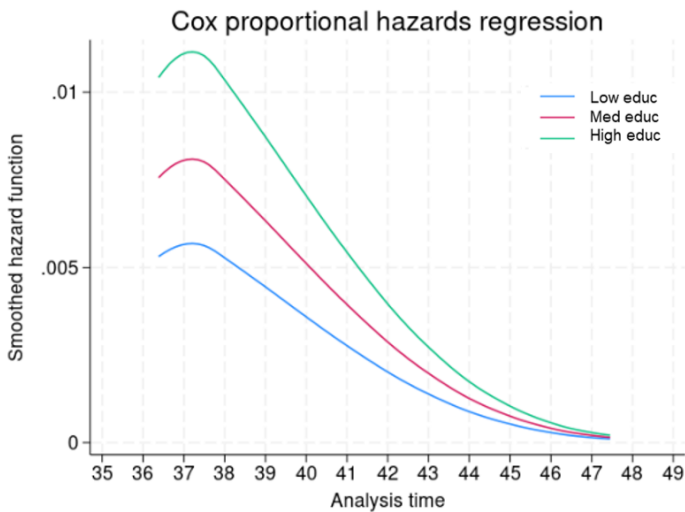
With the current variables, the Cox proportional hazards model for all women shows that the hazard of becoming a single mother at first birth increases until around age 33 then tapers off (Figure 2). The woman's education and her parents' education have a statistically significant, inverse relationship with likelihood of unpartnered first birth. Proximity to parents also has a significant, inverse relationship with becoming a single mother first birth.

Figure 2. Hazard function of becoming a single mother at first childbirth from ages 14 to 49, according to woman’s education and proximity to parents



However, the relationship with education reverses with age. Among later-aged women who are unpartnered and childless, higher education is associated with a higher hazard of becoming an unpartnered first-time mother (Figure 3).

Figure 3. Hazard function of becoming a single mother at first childbirth from 35 to 49, according to woman’s education



This might be an indication of women choosing single motherhood despite its precarity, as opposed to remaining permanently childless. Women from higher socioeconomic status may be more equipped to address the challenges that come with single parenthood, and thus be more willing to begin motherhood while unpartnered.

Meanwhile, relationship between proximity and single motherhood remains the same in the models fitted for women in the three age groups. This may bring additional precarity for mothers who come from less advantaged backgrounds, as distance from parents may signify less childrearing support.

For the conference, the models and its variables will be revisited and refined. The yearly information on the woman’s household income based on tax records will also be added to the analysis.

References

- Buchanan, A., & Rotkirch, A. (2018). Twenty-first century grandparents: Global perspectives on changing roles and consequences. *Contemporary Social Science*, 13(2), 131–144. <https://doi.org/10.1080/21582041.2018.1467034>
- Eurostat. (2021, January 6). *How many single-parent households are there in the EU? How many single-parent households are there in the EU?*
- Jadva, V., Badger, S., Morrisette, M., & Golombok, S. (2009). ‘Mom by choice, single by life’s circumstance...’ Findings from a large scale survey of the experiences of single mothers by choice. *Human Fertility*, 12(4), 175–184. <https://doi.org/10.3109/14647270903373867>
- Jalovaara, M., & Andersson, G. (2018). Disparities in Children’s Family Experiences by Mother’s Socioeconomic Status: The Case of Finland. *Population Research and Policy Review*, 37(5), 751–768. <https://doi.org/10.1007/s11113-018-9485-1>
- Koops, J. C., Liefbroer, A. C., & Gauthier, A. H. (2021). Socio-Economic Differences in the Prevalence of Single Motherhood in North America and Europe. *European Journal of Population*, 37(4–5), 825–849. <https://doi.org/10.1007/s10680-021-09591-3>
- Mannis, V. S. (1999). Single Mothers by Choice. *Family Relations*, 48(2), 121. <https://doi.org/10.2307/585075>
- Nieuwenhuis, R. (2020). *The situation of single parents in the EU*. Policy Department for Citizens’ Rights and Constitutional Affairs, European Parliament. [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/659870/IPOL_STU\(2020\)659870_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/659870/IPOL_STU(2020)659870_EN.pdf)
- Volgsten, H., & Schmidt, L. (2021). Motherhood through medically assisted reproduction – characteristics and motivations of Swedish single mothers by choice. *Human Fertility*, 24(3), 219–225. <https://doi.org/10.1080/14647273.2019.1606457>