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## MOTHERHOOD AFTER THE AGE OF 35 IN POLAND

### INTRODUCTION

The aim of this article is to study the phenomenon of late motherhood in Poland. For this purpose, late motherhood is defined – following the approach used in previous studies of this subject (e.g. Carolan 2007, Cooke et al. 2010, Windridge and Berryman 1999) – as experiencing the first child birth after reaching the age of 35 years old. It is an exploratory study which describes life trajectories of women who postponed motherhood until late ages and verifies whether their life paths are different from those of mothers who gave birth earlier in their lives. To achieve this aim, I compare life paths of *older mothers*, i.e. women who gave first birth after turning 35 years old with the lives of *younger mothers* – i.e. women who gave first birth before turning 30 years old<sup>1</sup>. As previous research proved that partnership, employment and educational histories interact strongly with the fertility career, I also focused on women's life developments in these three spheres.

In the heart of this analysis lies the key premise of the life course theory that the decision to become a mother is strongly influenced by past experiences and the current context of women's lives. To incorporate different life spheres into one path, we draw on the life course theory using sequence analysis. The main idea of this method is to represent one's life as a chain of states creating a life trajectory. This

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<sup>1</sup> The terms *younger* and *older* mothers were chosen out of necessity to differentiate *older* mothers from their counterparts who gave birth earlier in their lives. After careful consideration of many suggestions, this solution was chosen as the simplest and most convenient in this text. It is a strictly working term – it does not reflect any subjective opinions of the author on what a standard age for childbirth should be.

technique is not new in social research (Abbott 1990), but has not been often used in fertility studies (e.g. Baizán et al. 2002, Mynarska et al. 2013). Using sequence analysis enables adopting a holistic view on the life course and observing life course developments in parallel, showing not only when crucial events took place, but also what were the precedent, concurrent and subsequent circumstances of these changes.

This study sheds light on the process of postponing motherhood to the age 35 or after. Fertility postponement is a widespread phenomenon across Western European countries (Kohler et al. 2002, Sobotka 2004). People who delay the transition into parenthood tend to have lower fertility than those who decide on motherhood early in their lives (Kohler and Ortega 2002, Kohler et al. 2002). Therefore, motherhood postponement might have a negative impact on the population size. Later births also decrease population growth by lengthening the time until the next generation reaches the childbearing age (Coale and Tye 1961). Although numerous studies have been conducted to investigate determinants of motherhood postponement, much less research has been carried out on postponement of fertility to considerably later ages, i.e. beyond the age 35 or 40 (Benzies et al. 2006, Soloway et al. 1987). There have been attempts to study late fertility, but researchers mainly focused on medical consequences of delaying childbirth or on the result of the mother's age on child's health and well-being (see e.g. review by Boivin et al. 2009, Cooke et al. 2010). This article supplements previous research by studying what happens before the childbirth – namely how various life course developments crisscross over the life course leading women to late motherhood.

Studying the postponement of motherhood to later ages is particularly important in the case of Poland. This country underwent a major and rapid change in fertility behaviours after the year 1989 (Kotowska 2009, Matysiak et al. 2014) including a marked postponement of childbearing. We can observe an increase in mean age at first birth (from 23.3 in 1985 to 26.5 in 2012<sup>2</sup>) and a significant growth of the group of mothers who gave first birth after turning 35 years old. On average, during the decade between 2002 and 2012, the age-specific first birth rates showed the greatest increase for this age group (own computations based on the National Birth Register 2014) and the proportion of women who had their first child after turning 35 rose from 2.3% in 2002 to 6.1% in 2012 (Eurostat 2014). *Older* mothers constitute a new and rapidly growing category of Polish women, which has not been researched yet.

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<sup>2</sup> Own computations based on the National Birth Register.

## LITERATURE REVIEW

Literature on motherhood postponement describes a vast range of factors potentially affecting the decision about the timing of first childbirth. Among them are factors directly affecting conception – such as spread of contraceptive methods and raising awareness about family planning – but also factors that might affect individual preferences in birth timing or influence the realization of these preferences. These include various socio-economic factors such as increased enrollment in education among women or growing female labour force participation (Kohler et al. 2002, Sobotka 2004), limited housing availability (Mulder 2006, Rindfuss and Brauner-Otto 2008) or economic uncertainty (Adsera 2004, Kreyenfeld 2010). The proponents of the Second Demographic Transition theory draw attention to how shifts in values and attitudes may lead to the postponement of parenthood (Lesthaeghe 1995, Van de Kaa 1987). In addition, the importance of changing gender roles has been discussed in this respect (McDonald 2006). Several researchers formulate hypotheses that motherhood postponement might be also related to changes in conjugal behaviours (Baizán et al. 2003, Testa 2007). More and more research sheds light on the relation between family policies and motherhood intentions or childbearing postponement (a broad review is provided e.g. by Balbo et al. 2013, Mills et al. 2011).

In the life course perspective it has been shown that three life spheres are crucial for the decision to have a child. *Older* mothers are usually highly educated and hold better career positions (Windridge and Berryman 1999, Boivin et al. 2009, Erlick Robinson et al. 1987). They find it difficult to leave work and they admit that opportunities for future promotions affected the timing of their first pregnancy (Carolan 2007). They mention troubles in finding the “right” partner – i.e. someone they would want to form a family with (Benzies et al. 2006). Therefore, results from previous research lead to a conclusion that one should explore educational and professional careers, as well as partnership histories to understand late motherhood. In addition, during a series of in-depth interviews conducted between 2004 and 2005 among Poles who postponed motherhood (Mynarska 2011), these three life spheres were named as the most important factors taken into account while deciding when to have the first child. What is more, employment and union stability is still perceived as an “absolute necessity” for entering parenthood (Mynarska and Styrac 2014). In the next sections, I shortly review the literature on the relations between experiences in these three spheres and the decision about the timing of first child birth.

### EDUCATION

There is a strong correlation between prolonging education by women and postponing childbearing (Kravdal and Rindfuss 2008, Mills et al. 2011, Rindfuss et al. 1980, Sobotka 2004). On one hand, researchers focus on the impact of remaining in education on the timing of the first childbirth. One of the arguments might be that

since both education and childbearing are time consuming, women who decide to pursue higher education might decide to delay their maternal plans. Some studies, in fact, show that postponing motherhood during education can be just a result of the time taken to complete schooling (Hoem 1986, Blossfeld and Huinink 1991, Kravdal 1994).

On the other hand remaining in education for a longer period of time can encourage to realise interests or lifestyles that compete with parenthood (Kohler et al. 2002). In addition, being enrolled in education for a longer period of time usually results in obtaining higher level degrees. It has been proven that highly educated women are often driving the trend of having children later in their lives (Kohler et al. 2002, Sobotka 2004). Higher education is related with further professional career developments because it might enable women to pursue better occupations and focus on their careers (the detailed relation between professional career and motherhood is mentioned in the next section).

Enrolment in tertiary education has been increasing among women in Poland. In 2012, 24% women aged 25 or more and 19.4 men in this age had tertiary education (Bukowski 2010). National studies indicate that enrolment in education might interfere with fertility plans of Polish women and also that – as in other countries with low fertility levels – women with tertiary education tend to have children later in their lives than women with lower levels of education (Matysiak 2009). Given the changes in the educational careers of Polish women and the influence that the period of education might have on the timing of fertility, in this study, two main aspects of education are taken into consideration – being enrolled in education and the impact of the level of education attained by the mother.

## EMPLOYMENT

The relation between employment and the decision about motherhood has been a subject of studies of economists as well as demographers and sociologists. Economic studies that concentrate on the tempo of fertility focus on the dynamics of direct costs and opportunity costs of having children (Cigno 1991, Happel et al. 1984, Walker et al. 1995). The main conclusion of economic analyses of the birth timing is that the birth of a child impacts the mother's earnings in two ways. Primarily, child birth reduces her labour market participations – a woman has to withdraw from work to take care of the baby<sup>3</sup>. Secondly, it impacts her career development and “*slows down the growth of her marketable human capital*” (Cigno 1991). These explanations have several implications. One may be that when resources are scarce (and they usually are for young couples who have only started their experience on

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<sup>3</sup> Many economic studies take into account also the impact of different forms of childcare. Explanation of interdependencies between purchased child care and fertility can be found in e.g. Ermisch 2003.

the labour market), people might delay childbearing until they can afford it. Another implication would be that if woman's wage rises with work experience, she faces a conflict between the decision to continue working and earn more or to pause work and give birth. In the latter case she risks delaying the increase of her wages. Many income studies of mothers indeed show that motherhood postponement provides considerable earnings returns, especially for higher educated women or those in professional occupations (Begall and Mills 2013; Miller 2011, Van Bavel 2010). Moreover, economic theories also imply that when women think about childbearing, they consider not only specifically the amount of their wages. They also account for other work-related aspects such as accumulating work experience (Kravdal 1994) or attaining more stable positions in the workplace (Happel et al. 1984). In several empirical studies, women mention that conscious career planning was their main motivation for motherhood postponement, as they anticipated that they will have better chances of career advancement if they delay childbirth (thorough review in e.g. Gustafsson 2003).

According to my knowledge, few studies focus on the impact of female employment on fertility postponement in Poland. Kotowska and colleagues (2009) describe the decline in economic stability of women on the labour market in Poland and hypothesise that women fear risking their employment prospects and tend to postpone motherhood until they establish a better position in the labour market. Some results of Matysiak and Vignoli (2009) prove this assumption – they found out that Polish women who just entered employment are more likely to delay motherhood to obtain more human capital and secure a stable position. Nonetheless, the impact of female labour force participation on the timing of birth might be twofold. On one hand, conditions for combining childcare and professional occupation are very difficult in Poland (Matysiak 2009), which might discourage working women from pursuing motherhood. On the other hand, households mostly rely on two incomes, therefore having a secure position can be perceived by women as a precondition to become a mother mostly because of these financial reasons (Matysiak 2009, Mynarska 2011).

In this context, it seems important to compare career developments of women who gave first birth earlier to women who enter motherhood later. In this study, depicting entire paths of professional careers of the mothers allows me to show the dynamics of employment of these two groups of women, accounting for both the periods of employment and unemployment.

#### PARTNERSHIP

Having a supportive partner is crucial for childbearing decisions (Philipov et al. 2006, Testa 2007). Many previous studies have shown that women in stable relationships are more likely to have children than single women. A lack of a partner, a lack of financial and emotional support that a stable partner provides strongly

impacts women's childbearing choices. Delaying entering a stable union has a direct influence on the timing of the first birth (Corijn and Klijzing 2001) and experiencing a union dissolution can force the postponement of childbearing plans until finding another partner. Moreover, marriage is considered to be a more stable form of a union than cohabitation (see e.g. Heuveline and Timberlake 2004, Liefbroer and Dourleijn 2006) and evidence exists that married women have a higher tendency to have a child (Baizán et al. 2003, Kemkes-Grottenthaler 2003).

Poland underwent a rapid change in family formation patterns over the past two decades – Poles enter stable unions later – the mean age at entering marriage rose from 22.4 in 1993 to 25.5 in 2010 for women and from 24.7 to 27.9 for men respectively (computations based on Eurostat data, 2013). More and more people choose cohabitation as the form of their first stable relationship nowadays (Matysiak and Mynarska 2010). Nevertheless, marriage is still the prevailing form of family in Poland and the majority of children are born in marriages (Matysiak and Mynarska 2014).

Looking at the histories of union formation enables discovering the circumstances in which *younger* mothers and *older* mothers enter relationships. It unveils the differences in the life paths between women in terms of the timing of union formation and the stability of unions. In this exploratory study I look for differences in the patterns of lives of mothers in Poland accounting for the timing of entering stable unions, experiencing cohabitation and union dissolution and for the length of the relationship in which the first child was born.

To sum up, previous research has shown that educational, professional and conjugal careers interact with the decision about the timing of birth. In this study, benefiting from a holistic perspective offered by the life course approach, I aim at showing how experiences of these three careers crisscross over the life course. I employ sequence analysis to identify the key differences between lives of *younger* mothers and *older* mothers in Poland in terms of schooling, employment and partnership histories.

## DATA

In this study I drew information about women's education, union history, and employment from two databases. For *older* mothers I used a sample from the survey "*The spread of new demographic events: childlessness and late fertility*" which was conducted within the FAMWELL project in 2011<sup>4</sup>. The survey aimed at a better understanding of causes of new patterns of family formation in Poland and covered women born between 1965 and 1974 who were either *older* mothers (i.e. who

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<sup>4</sup> More information about the project available at <http://kolegia.sgh.waw.pl/pl/KAE/struktura/ISiD/projekty/famwell>

gave birth to their first child after turning 35) or who were childless (i.e. who had not given birth to a child at the moment of the interview). 755 *older* mothers and 604 childless women were interviewed. Only *older* mothers from the survey were included in this analysis. The FAMWELL Survey was conducted in urban areas only due to the fact that childlessness and late motherhood are much less spread across rural regions and reaching these women in villages would be much more time and money intensive. Nonetheless, the survey provides important information about the phenomenon of late motherhood in Poland.

For *younger* mothers I used information from the Generations and Gender Survey (GGS-PL) organised in Poland in 2011 by the Institute of Statistics and Demography of Warsaw School of Economics. Data collection was performed by Central Statistical Office<sup>5</sup>. In this survey, 20,000 Polish inhabitants aged 18 to 79 were questioned. I extracted a sample of women born between 1965 and 1974 (the same birth cohorts as for *older* mothers), who gave birth to their first child before the age of 30<sup>6</sup>. The sample was then narrowed to urban population to match the sample of *older* mothers<sup>7</sup>.

Although the surveys were conducted separately, they were based on the same core questionnaire and questions regarding education, employment and partnerships were the same. Both surveys were also conducted using address based sampling. These joint characteristics create favourable conditions for comparing the results from both surveys. After eliminating observations with incomplete life trajectories, I obtained a sample of 659 *younger* mothers and 511 *older* mothers.

## METHOD: SEQUENCE ANALYSIS

To study lives of mothers in Poland, I applied sequence analysis. It is a method of exploring ordered data while focusing on consecutive elements. A *sequence* in this method is an ordered sample of units (e.g. – events, steps in traditional dances, chromosomes in DNA) (Abbott 1990). Separate elements of sequences are called *states* and the focus is on the *trajectories* of *transitions* between states in the life course of an individual. To create sequences of states one treats individual life as a chain of discrete time units (Billari 2001) and assigns a number or a letter to each time unit. For example, if a person was first single (S) for two years, then

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<sup>5</sup> For detailed description of the GGS-PL Survey, please see Kotowska and Jóźwiak (2011).

<sup>6</sup> To exclude very specific cases of teenage mothers, I excluded women who gave birth before turning 18 years old.

<sup>7</sup> GGS-PL also contains information about women who gave birth after turning 35 years old however because this group constitutes a small share of the total population of mothers, the sample from GGS-PL was too small to include in the analysis – namely there were 32 *older* mothers in GGS-PL. The FAMWELL Survey gave me a unique opportunity to study the phenomenon of late motherhood on a greater sample of mothers.

cohabiting (C) for consecutive two years, and then was married (M) for two years, such sequence could be described as SSCMM. To build sequences of states in lives of Polish women, I merged information about the three dimensions of a subject's life mentioned above, i.e. education, unions' history, and employment into three-dimensional states.

Regarding education, one could be either "in education" or could have "finished education". Unfortunately, the surveys do not provide full histories of education process. Therefore, as a moment marking the end of education, the date of obtaining the highest degree is used. However, a woman could have experienced a break in education; she could have finished secondary education and applied for studies a couple of years later. In this case, she would have obtained a degree later in her life. With my data I cannot control for this mechanism and I need to treat these women as being "in education" until achieving the highest degree.

Regarding employment, one could be either "working" or "not working". This career was monitored from the moment a woman began her first job till the moment of the survey interview. Periods of not working were all periods when a woman was not employed; it means that during this time she could have been either unemployed or inactive. Notably, episodes of maternity or parental leave are coded as being in employment.

Regarding unions, the surveys contain information on previous relationships of the respondents that involved at least three months of cohabitation. I first introduced three statuses – "single", "cohabiting" and "married" – but in preliminary analyses, cohabitation was observed in both samples with similar relatively low frequencies – 16.5% of *younger* mothers and 19.0% of *older* mothers have experienced cohabitation before first childbirth and on average the period of cohabitation lasted less than 1 year for both groups. Consequently, I decided to merge statuses of cohabitation and marriage into one – "in union". In addition, 5.2% of *younger* mothers and 17.8% of *older* mothers experienced union dissolution before first childbirth, which might have had an impact on the timing of the childbirth. I thus included another status – "separated" to observe how union dissolutions interact with other events in mothers' lives. To summarize, a woman who never was in a union would be "single" and a woman who was cohabiting or married would be "in union" and a woman who was in a union but has separated from it and did not enter a new relationship would be "separated"<sup>8</sup>. However, as the aim of this article is to look at the life experiences before the first childbirth, I control for separations only before the first childbirth.

Below in Table 1 you can find a detailed set of statuses (i.e. variations of each career) and the detailed table of all the states created from merging the statuses is in the appendix. By merging these three dimensions related to each career, 12 unique

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<sup>8</sup> Please note that a woman who entered a new union after a union dissolution would be described as "in union".



states were obtained; each state includes a status related to educational career, a status related to professional career and a status related to union histories. For instance, a woman could be in education, working and single (this state would be called EdWrkS), or she could have finished education, be working and be in a union (this state would be called FinEdWrkU).

I focus on the period between 15<sup>th</sup> and 40<sup>th</sup> birthday for my analyses. This way I obtained 25 years split into 300 months of observation that served as the basic time unit for sequence analysis. Women in the sample were between 35 and 46 years old – for those who were younger than 40, missing months were blanked (in *younger* mothers sample 38.7%, in *older* mothers sample 15.5%). I assigned each month a state from the universe described above.

Table 1. Division of statuses in each career analyzed

Career	Statuses
Education	In education (Ed) Finished education (FinEd)
Employment	Working (Wrk) Not working (NoWrk)
Unions	Single (S) In Union (U) Separated (Sep)

## RESULTS

First of all, 15.6% of *younger* mothers and 26.7% of *older* mothers follow the same sequences in terms of the order of events in the sequences (i.e. they follow the most common sequence). The second most common sequence is different between the data sets and in general, both datasets have low concentration of sequences – 31.1% of *younger* mothers and 29.9% of *older* mothers follow unique sequences.

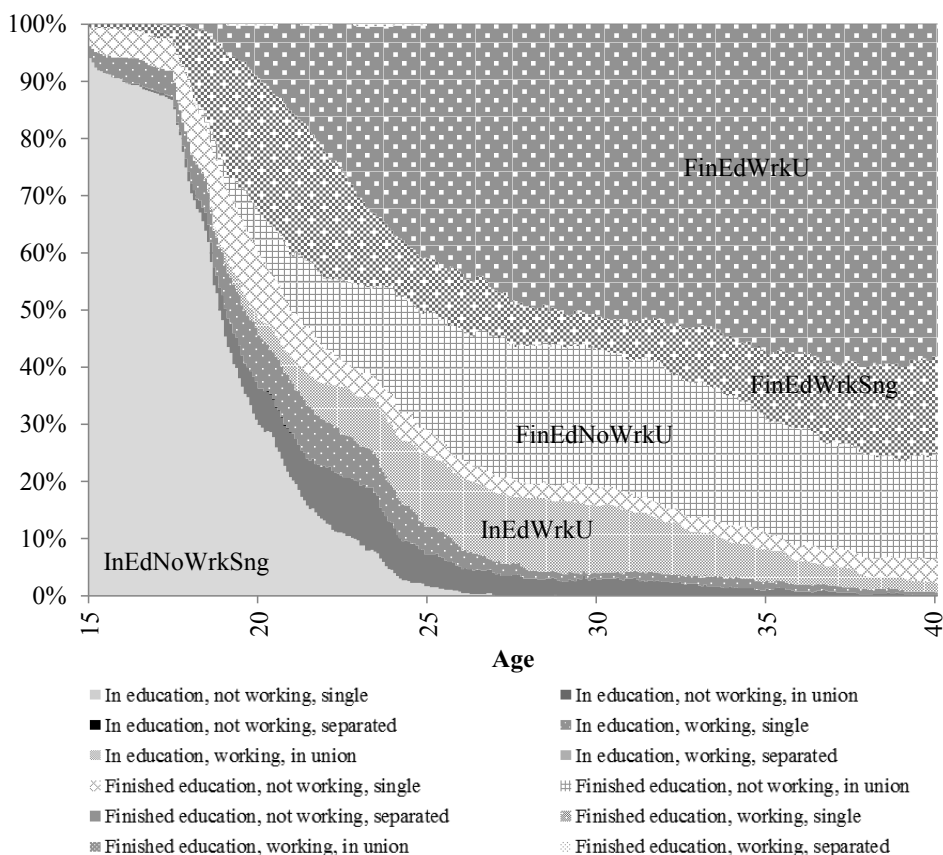
To show the dynamics and the differences in the timing of the paths of lives of mothers in the two data sets, I plotted all the sequences of states in two graphs below, showing the distribution of states among respondents at each month of observation. The results visible on the graphs are then supported by several descriptive statistics computed after drawing conclusions from the life paths.

Table 2. Description of the most common sequences

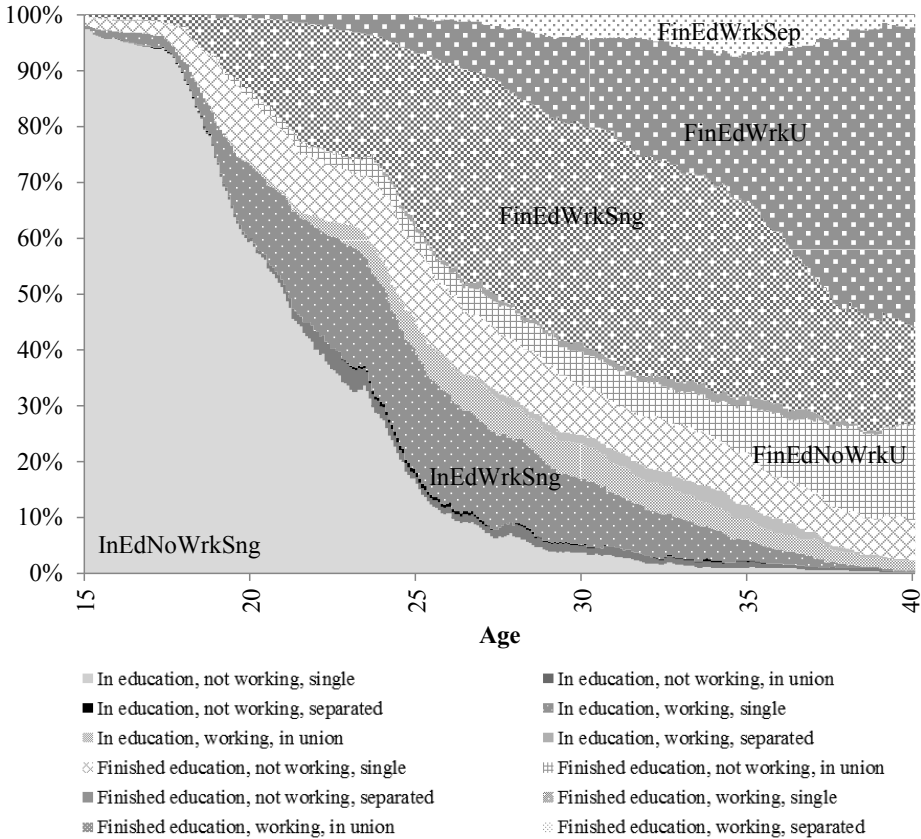
<p><b>Most common sequence:</b>  <i>Young mothers and Older mothers</i></p>	<p>In Education, Not Working, Single → Finished Education, Not Working, Single → Finished Education, Working, Single → Finished Education, Working, In Union</p>
<p><b>Second most common sequence:</b>  <i>Younger mothers</i></p>	<p>In Education, Not Working, Single → Finished Education, Not Working, Single → Finished Education, Working, Single → Finished Education, Working, In Union → Finished Education, Not Working, In Union → Finished education, Working, In Union</p>
<p><b>Second most common sequence:</b>  <i>Older mothers</i></p>	<p>In Education, Not Working, Single → In Education, Working, Single → Finished Education, Working, Single → Finished Education, Working, In Union</p>

Source: Own calculations in STATA.

Graph 1. Distribution of states across the life course in the *younger* mothers sample



Graph 2. Distribution of states across the life course in the *older* mothers sample



The first visible difference between the two groups is the difference in the length of the period of schooling. One can see from the graphs that by the age of 20, 51.6% of *younger* mothers have already finished education compared to 26.8% of *older* mothers. On average, *older* mothers spend 2.8 years more in education than *younger* mothers; however there is also a large group of *older* mothers who stay in education for a markedly longer period of time – 1/4 of the *older* mothers sample finished education after the age of 30. In addition, among *younger* mothers 28.5% of women obtained any level of tertiary education compared to 51.3% among *older* mothers.

Regarding employment, *younger* mothers and *older* mothers spent the same amount of time in employment, nonetheless, the patterns of entering the labour market and further experiences are different. *Younger* mothers begin working earlier than *older* mothers – at the age of 20, 44.9% of *younger* mothers remain in the states

indicating employment – compared to 26.4% of *older* mothers and the median age at entering first employment is lower for the former group of mothers. After the age of 25, higher percentages of women in employment are observed among *older* mothers – at the age of 30, respectively 70.0% and 78.5% of *younger* mothers and *older* mothers are working. Noticeably, after the age of 35, the percentage of working women among *older* mothers starts to slightly decrease again as they enter motherhood. What is more, *older* mothers work on average 12.9 years before the first childbirth compared to 2.9 years on average in the case of *younger* mothers.

Moreover, “finished education, not working, in union” state constitutes a clearly visible share of life sequences of *younger* mothers. Let me describe this state as “being a housewife”. At the age of 25, 21.1% of *younger* mothers are housewives but very few *older* mothers (3.3%). In fact, throughout the entire period of their adult lives, there are more housewives among *younger* mothers than among *older* mothers, even after the age of 35 that is when the latter group starts bearing children.

The biggest differences among *younger* mothers and *older* mothers can be observed in partnership histories. *Older* mothers enter stable unions considerably later – from the age of 25, the graph showing lives of *younger* mothers is clearly dominated by states indicating being in a union but these states are barely visible in the graph of *older* mothers. By the age of 25, only 16.8% of *older* mothers are in union and already 80.6% of *younger* mothers are in union. In fact, the median age at entering first union is considerably higher for the *older* mothers (34 years old compared to 21 years old for *younger* mothers). Forming a union later in life results in spending less time in a union over the entire period of observation – *younger* mothers spend on average 15.8 years out of 25 years of observation in unions and *older* mothers – 6.4 years.

Noteworthy, the average time span between entering the union with the father of the first child and the birth of the first child was 1.3 years among *younger* mothers and 4.9 years among *older* mothers. While among *younger* mothers, 75% of first births falls within the first 3 years of the union, among *older* mothers it is markedly less – 41.5%. Additionally, 16% of *older* mothers gave birth for the first time only after the 10th marriage anniversary (0.1% of *younger* mothers respectively). Furthermore, while only a small percentage of *younger* mothers experienced union dissolution and short spells of separation before the first childbirth (5.4%), the frequency of separation was notably higher among *older* mothers. 17.8% of them experienced union dissolution before having first children and the average spell of separation years before they entered next unions lasted for 5.8 years.

*Motherhood after the age of 35 in Poland*

Table 3. Distribution of states among women at given ages

Percentage of women who finished education at the age of:						
	15	20	25	30	35	40
<i>Older mothers</i>	1.9	26.8	55.4	75.2	87.7	97.3
<i>Younger mothers</i>	3.8	51.6	75.6	83.9	91.5	97.4
Percentage of women working at the age of:						
	15	20	25	30	35	40
<i>Older mothers</i>	0.8	26.4	64.8	78.5	77.3	74.8
<i>Younger mothers</i>	2.6	44.9	67.7	70.0	76.2	76.9
Percentage of women in union at the age of:						
	15	20	25	30	35	40
<i>Older mothers</i>	0.2	3.3	16.8	29.5	40.9	72.52
<i>Younger mothers</i>	0.00	26.9	80.6	90.0	83.9	78.6
Percentage of “housewives” at the age of:						
	15	20	25	30	35	40
<i>Older mothers</i>	0.2	1.6	3.3	6.3	9.2	16.9
<i>Younger mothers</i>	0.0	7.6	21.1	24.1	19.6	18.7

Source: Own calculations in STATA.

Table 4. Additional variables for descriptive analysis

Additional variables	Values (standard errors):	
	<i>Younger mothers</i>	<i>Older mothers</i>
Percentage of women who obtained any level of tertiary education	28.5%	51.3%
	(0.02)	(0.02)
Percentage of women who experienced cohabitation before first childbirth	16.5%	19.2%
	(0.02)	(0.02)
Percentage of women who experienced union dissolution before first childbirth	5.2%	17.8%
	(0.01)	(0.02)
Mean period of time between forming a union with the father of the first child and the first childbirth (in years)	1.3	4.9
	(0.08)	(0.26)

Table 4 continued

Additional variables	Values (standard errors):	
	<i>Younger</i> mothers	<i>Older</i> mothers
Mean period of time spent in employment before the first childbirth (in years)	2.9	12.9
	(0.11)	(0.11)
Median age at finishing education	19	24
Median age at entering first employment	20	21
Median age at entering first union	21	34
Average time spent in education (in years)	7.6	10.4
Average time spent in employment (in years)	14.6	14.0
Average time spent in union (in years)	15.8	6.4
Average time spent separated before the first childbirth (in years)	0.11	5.8

Source: Own calculations in STATA.

## DISCUSSION AND CONCLUSIONS

The main aim of this study was to compare the life paths of women who became mothers after the age of 35 with lives of *younger* mothers who gave birth before reaching the age of 30. The results indicate visible differences between *older* mothers and *younger* mothers. Before discussing in detail the differences between the two groups of mothers, I would like to mention subtle similarities that were observed. The same most common sequence was identified in both samples in terms of the order of the events in the sequence. The sequence of first finishing education then finding a job and then entering a stable union was common for almost one sixth of *younger* mothers and one fourth of *older* mothers. However, in general the concentration of both data sets is low and many mothers follow unique sequences. This highlights the complexity of the life paths of mothers. Further analyses showed also that there are large differences in the timing of respective events in the sequences between *younger* mothers and *older* mothers that I discuss below.

First of all, *older* mothers spend more time in education – they remain in education on average almost 3 years longer. Continuing education might have contributed to the postponement of first childbirth, which would be in accordance with previous research (Blossfeld and Huinink 1991, Hoem 1986). Furthermore, 25% of the *older* mothers finished education early, but another 25% stayed in education up until the age of 30. This is a sign of the diversification of life paths among this group. This phenomenon was more closely analyzed in my master thesis, where distinct groups

of women with high and low levels of education were characterized (Rybińska 2013).

Secondly, *older* mothers and *younger* mothers, overall, spend a similar amount of time working. Although the general time spent in employment does not vary between two groups, the periods of more intense labour market involvement are different. *Younger* mothers start working before *older* mothers do which is due to the longer period of education experienced by the latter. However, before the childbirth, they work for a shorter period of time than *older* mothers (on average 2.9 years compared to on average 12.9 years for *older* mothers). These results clearly indicate that postponement of childbearing to older ages is not only related with a prolonged education and later entry to the labour market, but also with a markedly longer employment spell before a child is born.

Additionally, I have also observed different pattern of the labour market exit after the first childbirth. I noticed a marked discrepancy in the frequency of the state that can be described as “being a housewife” (i.e. the state “finished education, not working, in union”). The percentage of women in this state among *older* mothers remains lower than among *younger* mothers through the entire period of their adult lives, even after *older* mothers have their first children. It seems that in the *older* sample fewer mothers drop out from the labour market after the childbirth<sup>9</sup>. This could mean that in fact motherhood postponement to late ages enables women to stay on the labour market after the childbirth. It might thus have a positive impact on a woman’s employment career.

What remains unknown is why *older* mothers stay on the labour market after the child is born? It might reflect their individual preferences – if they value employment highly they would be more willing to continue working. On the other hand, having worked more before the childbirth, they could have reached more stable positions and because of this stability they might find it easier to combine work and childcare. Maybe they have also better positions in bargaining flexible working time or they earn more and can afford full time childcare arrangements for their newborn? Surveys that control for various circumstances of the exit from the labour market after having children could shed more light on the possible answers to why *older* mothers are more attached to the labour market after the childbirth.

Thirdly, the most visible differences appeared in the comparison of union histories. First, as there were only few, and short, instances of entering cohabitation before marriage, I cannot form any conclusion on the impact of cohabitation on the timing of first childbirth. But altogether, *older* mothers spend considerably less time in union and it usually stems from the fact that they enter stable unions markedly later, usually after turning 30 years old. This might support results from previous

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<sup>9</sup> One might hypothesise that some of the *older* mothers are still on maternity or parental leaves and might drop out of the labour market after the leave ends. However, at the end of the period of observation, only 7.6% of them were still benefiting from such work leaves.

research (Corijn and Klijzing 2001) – delaying forming stable union might have had an impact on the delay of motherhood. Union formation postponement may have been a manifestation of individual preferences of these women – they might have wanted to focus more on their education and professional career, but they could have also encountered difficulties in finding a suitable partner they would have liked to form a family with. Moreover, *older* mothers experienced union dissolutions markedly more often than *younger* mothers and such disruption of union stability could have had a negative impact on the timing of fertility.

What is more, although *younger* mothers had their first children soon after forming a stable union, the link between union formation and first childbirth is more complex in the case of *older* mothers. Some of them had children shortly after entering a stable union, but some experienced the transition to motherhood markedly later – even 10 years after forming the union. It is possible that other life circumstances such as economic hardship or a disease of another family member hindered family formation. Maybe they have been forced to postpone childbirth due to general health issues or more specifically – fecundity constraints? Due to high refusal rates and incomplete histories of using medical assistance in infertility treatments in both surveys, I was not able to control for these problems. However, it is also possible that this postponement of childbearing while being in a union is voluntary. Possibly these women preferred to stay in a stable union but without children for some time? If this is the case entering a stable union might not be so closely linked with the decision about motherhood for some of the *older* mothers. Nevertheless, this variety of patterns discovered by using sequence analysis calls for more attention as it shows again the diversity of the life paths of *older* mothers.

To summarize, in this study – using sequence analysis I was able to discover the differences in the paths of lives of *younger* and *older* mothers in Poland and to show complex relations between the timing of fertility and three crucial careers – educational, professional and conjugal providing an important insight into the dynamics of lives of women in Poland. This exploratory technique provides me not only with a general picture of motherhood postponement, but also gave me the possibility to look closer into the developments of the life courses of Polish mothers showing the richness of their life experiences. Most importantly, the results show that older motherhood goes hand in hand with prolonged education, late union formation and a long interval between entering a union and motherhood. Older mothers are on average better educated than those having children before age 30; they usually have a long employment experience before childbirth (often initiated before finishing their education) and also a higher frequency of union dissolution.

This study did not, however, cover several significant aspects of women's lives. The history of partner's education and his work career or longitudinal information about the relationship quality is missing from both surveys. Including complete educational histories, questions about the periods and the context of unemployment



as well as of being inactive or full information on reproductive health would enable broader analysis of the lives of *older* mothers. The analysis of the life course of the mother and the father would additionally shed light on the role of partner's life experiences in the process of childbearing. These are very ambitious future goals that would require both more qualitative and quantitative research. Nonetheless, I hope that these results provided an inspirational introduction and possible future directions for studying late motherhood in Poland.

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APPENDIX

Table 5. Full list of all states created during sequence construction

State description	Abbreviation
In education, not working, single	EdNoWrkS
In education, not working, in union	EdNoWrkU
In education, not working, separated	EdNoWrkSep
In education, working, single	EdWrkS
In education, working, in union	EdWrkU
In education, working, separated	EdWrkSep
Finished education, not working, single	FinEdNoWrkS
Finished education, not working, in union	FinEdNoWrkU
Finished education, not working, separated	FinEdNoWrkSep
Finished education, working, single	FinEdWrkS
Finished education, working, in union	FinEdWrkU
Finished education, working, separated	FinEdWrkSep

Source: Own calculations.

## MOTHERHOOD AFTER THE AGE OF 35 IN POLAND

### ABSTRACT

Postponing motherhood is a widespread phenomenon across developed countries, however only few studies look into very late motherhood in post-socialist countries using individual level data. In this study, I look at the context of the first childbirth in Poland in the midst of the political transformation of 1989. Employing sequence analysis I reconstructed life trajectories of women who experienced the transition to adulthood during the late 1980's and the early 1990's and have just completed their fertility histories. Individual data from the 2011 GGS-PL and the 2011 FAMWELL Survey were used. Comparing paths of mothers' lives, I searched for differences in educational, professional and conjugal careers between women who gave birth before the age of 30 and after the age of 35. The results show how various life careers crisscross over the life course leading women to late motherhood.

**Keywords:** late motherhood, motherhood postponement, fertility in Poland, sequence analysis