Dynamics of Single Motherhood

Partnership Trajectories in Early Parental Biography[1] (Extended Abstract)

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Motivation, Research Question(s) and Previous Work

Single parents[2] in Germany often have to deal with difficult economic circumstances-especially when young children are living in the household (DESTATIS 2009). Nuclear families, but also stepfamilies report less economic hardship (Kreyenfeld/Martin 2011) which puts the partnership formation of single parents with young children in the centre of attention. Especially women that give birth without cohabiting with a partner are single parents of very young care-dependent children. Little is known about this group so far. We investigate the partnership and household formation behavior of this group of single mothers from the date of first childbirth. When do they form a household? Which role does the father of the child play? Are some women more prone to move in with a man than others? What happens subsequently? Do the partners marry or will the woman repeatedly become a single-parent?

Until recently in Germany this group of single mothers from the beginning has not even been able to be quantified. New data of the German Family Panel shows that 15% of western German and 23% of eastern German women of the 1971-1973 birth cohorts give birth for the first time without cohabiting with a partner (Bastin et al. 2012: 14). This distinguishes these single mothers as a quantitatively relevant group in Germany.

International studies have shown that these single mothers differ in their partnership trajectories from those who become single mothers by a separating from the household partner any time *after* the birth of the child. On the one hand they form a cohabiting union more quickly (Ermisch/Francesconi 2000; Le Bourdais et al. 1995). On the other hand they are more likely to separate from this household partner (Desrosiers/Le Bourdais/Péron 1993: 221). Studies focusing on the determinants of partnership trajectories of mothers that do not co reside at birth find inconsistent results. Kalmijn and Monden (2010) find that a high income and a young age of the mother are associated with higher risks of forming a household with a partner. Similarly, Osborne (2005) shows that single mothers at first birth in the U.S. with a high income are more likely to have formed a household when the child reaches its first birthday. Bzostek (2009) on the other hand shows that single mothers of very small children in the U.S. more often form a household with a partner when they are living in a state with low welfare

[1] The full paper in German language is available from the author and will be published in Huinink et al. (2012).

[2] Defined as people living with children and without a partner in the household (Lengerer et al. 2007).

benefits for single mothers. One reason for the differing effects of economic determinants might be the start and destiny position of the investigated women. While Kalmijn and Monden (2010) cannot differentiate between single mothers with and without a partner in a separate household (so called "living apart together" (LAT) partners), Osborne (2005) examines whether women that report an LAT-partnership with the baby's father at the time of the birth, live with this man one year after. Bzostek moreover studies how quickly women that separated from the child's father move in with another partner. Also Carlson et al. (2004) indicate that women more often live with a partner one year after birth, when already at the time of birth a romantic relationship existed. Furthermore, descriptive research shows for Germany that partnership trajectories differ between women that are actually partnerless when giving birth and those who are "living apart together" at this point in time (Alt/Bender 1998).

Theory and Hypotheses

Search Theory

Most studies that focus on the determinants of partnership formation of single mothers refer to an adaptation of the economic search theory to the partner market as theoretical background (e.g. Ermisch/Wright 1991; Ermisch/Francesconi 2000; Bzostek 2009). This adaptation of search theory postulates that people want to increase their utility by establishing a partnership with a person of high quality traits. As time and resources are needed to gather information about the quality of potential partners the search for a partner is associated with costs. Thus, the minimally accepted quality of the partner's characteristics depends on how much the individual can invest into the search process. Relatively high costs will decrease - low costs increase the effort and duration spent while looking for a 'good match'. People under high pressure to find a partner have higher costs and therefore will be more likely to lower their demands to the partner's quality in order to be able to more quickly end the search process. Thus, women with high economic need for a partner's income or childcare function will tend to show shorter durations as single than less economically dependent women. Besides individual characteristics like education, macrostructural factors influence this economic need for a partner. In this regard, for the group of single mothers the structural compatibility of childrearing and employment is of particular importance. Eastern Germany still benefits from a high availability and acceptance of all-day childcare that dates back to the times of the GDR government, which fostered women's labor force participation. Western Germany on the other hand is known for a low acceptance and realisability of motherly labor force participation (Kreyenfeld/Geisler 2006). These considerations result in the following hypotheses: Less educated single

mothers as well as western German single mothers have fewer chances to achieve a (sufficient) household income and thus need to form a household with a partner more quickly **(Hypothesis 1a)**.

By postulating that people mate assortively, search theory implies that women with highly desired attributes have a bigger pool of interested partners, which also involves partners with highly desired attributes their selves. This leads to two aspects: Firstly, it means, that "high quality women" have higher returns from search which leads to longer search periods. Secondly, in case special needs apply, for example in the above described way, women with more desired attributes have better opportunities to increase the pool of relevant partners by lowering their minimal acceptance level than women with less desired attributes have. As stated, the group of single mothers, especially those with young children, can be considered as a group of high need for a partner altogether. As high search costs thereby apply to everybody in the group, it is assumed that high quality traits will more work as an attractiveness factor that *shortens the search process* than as an attractiveness factor that increases partnership quality (by extending the search process). Studies have shown, that besides empathetic and sympathetic characteristics and physical attractiveness men also value the socio-economic independence of a woman (Buss et al. 2001: 499; Skopek et al. 2009: 184). This leads to the competing hypotheses that highly educated single mothers more quickly move in together with a partner than their lower educated counterparts **(Hypothesis 1b)**.

Limitations of Search Theory

Search theory traditionally refers to the search for a household partner. Also this study investigates the duration until moving in with a partner. However, search theory does not make a difference between women that are actually single and those that have a partner outside of the household. Studies show that partnered persons are only restrictively available for the partner market (Stauder 2006) and thus, only limitedly can be considered as searching for a partner. In any case, people that have a partner who lives in another household are positioned on another step in the partnership formation process than are unpartnered women. Thus, for single mothers that have an LAT partner at the time of birth not the question of finding a partner, but of institutionalizing the existing partnership stands in the foreground. Hence, additional theoretical considerations referring to the partnership status have to be made. These lead to assumed differences in the timing and determinants of household formation of partnerless and LAT-partnered single mothers.

A baby demands a lot of energy. For partnerless women this should impede searching for a household partner especially in the first months after birth. For women in LAT-

partnership this new demand should advice the partners to quickly pool their households (**Hypotheses 2**). Implicitly this hypothesis says that women with LAT-partners mostly form households with the babies' fathers, partnerless women with other men.

As we assume that also for the LAT-partnered persons forming a household is associated with economic advantages, similar assumptions as above regarding the effect of economic need on the timing of forming a household should apply. However, the question arises why these couples have not been moving in together *before* the birth of the child. High job mobility is one of the main reasons why couples do not share a household (Chen/Rosenthal 2008: 530). As especially highly educated persons face the demand of job mobility (Schneider et al. 2001: 146) it can be assumed that for them this structural burden is more often a reason for separate households at time of birth than for lower educated women. This would lead to longer periods in single mother households for highly educated women in LAT-partnerships at birth compared to lower educated women **(Hypotheses 3a).**

Furthermore, social transfers might be a reason why couples do not move in together before the birth of a child. In Germany the eligibility for welfare benefits is depending on the income and assets of household partners, while the financial situation of partners that live apart are not taken into account. Thus, lowly educated women, who receive welfare benefits more often, should be more likely to avoid moving in with a partner **(Hypotheses 3b).**

Data, Methods and Results

Based on the first wave of the German Family panel pairfam (Huinink et al. 2011) and the eastern German subsample DemoDiff (Kreyenfeld et al.: 2011) we investigate the partnership trajectories of 343 women that gave birth without cohabiting with a partner. We only consider women that had their first child at least five years before the interview, which leads to an overrepresentation of young and minor educated women in the sample. Table AI gives an overview of the sample distribution. The duration until the next following household formation was examined by applying descriptive and multivariate event history analyses. Further transitions were detected by explorative descriptive frequency analysis of partnership sequences.

Transition into a joint household

Figure 1 shows cumulative incidence functions[3] of transitioning from single parenthood to the next on the birth following joint household with a partner. Transitions are shown separately for partnerless women and women "living apart together"

[3] For more information on this method see Gooley et al. 1999.

at the time of first childbirth and differentiated by the biological relationship of the household partner to the child.

The graphs show that five years after first birth both groups of women that start their fertility biography as a single mother have ever formed a coresidential partnership in similar shares (at birth partnerless: 52%; LAT: 61%). But as hypothesized women in LAT partnerships at first birth move in much more often with the father of the child, and move in together much more often in the first year than in the following ones. Partnerless women at birth actually form households rarely in the first twelve months and (surprisingly even with the baby's father) much more often afterwards (H2).

Figure 1a: Cumulative incidence functions of women following a non-coresident birth by biological relationship of the household partner; partnerless at 1st birth

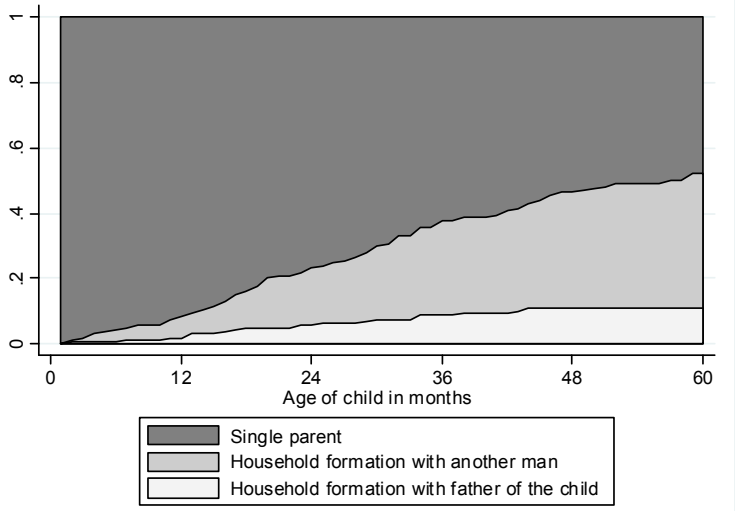
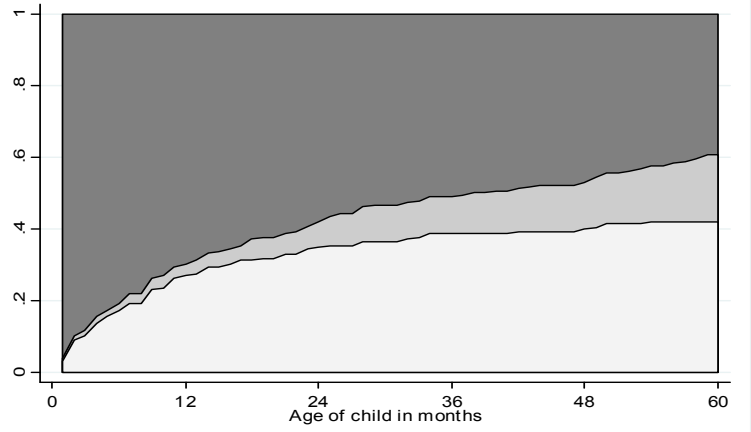


Figure 1b: Cumulative incidence functions of women following a non-coresident birth by biological relationship of the household partner; LAT-partnered at 1st birth



In order to investigate determinants of the duration of single motherhood we apply piecewise constant exponential models separately for single mothers at first birth with and without LAT partner (Table 1).

Table 1: Determinants of forming a coresidential partnership, hazard ratios

	Partnerless at 1. birth (N=159)		LAT at 1. birth (N=184)	
Age of child				
0- under 1 years old	1		1	
1- under 2 years old	2,12	**	0,54	*
2- under 3 years old	2,54	***	0,39	***
3- under 4 years old	1,97	*	0,24	***
4- under 5 years old	1,54		0,55	**
Region				
Western Germany	1		1	
Eastern Germany	0,99		1,04	
Educational attainment				
Low	0,50	*	1,31	
Middel	0,65		1,46	
High	1		1	
Age at 1. birth				
16- under 20 years old	1		1	
20- under 25 years old	1,12		0,53	**
25 and above	0,74		0,58	*
No. of (further [a]) partnerships until 1. birth				
None	1		1	
At least one	1,80	*	1,78	***
City size				
Small	1,29		0,80	
Middle	1,01		1,18	
Big	1		1	
Birth cohort				
1971-1973	1		1	
1981-1983	1,10		0,64	*
Partnership with father *before* 1. birth				
No	1		-	
Yes	0,97		-	
prob>chi^2		*		***

*** p<0,01 ** p<0,05 *p<0,10

[a] For partnerless women at first birth: Number of partnerships before first birth; for LAT-partnered women at first birth: Number of partnerships excluding the partnership that is ongoing at birth.
Source: pairfam/DemoDiff wave 1 (2008/2009/2010).

Regarding the economic determinants we do not find suggestion that eastern and western German women differ in their transition rates. But we see slightly significant effects of educational attainment pointing in opposing directions for partnerless and LAT-partnered mothers. While highly educated at birth partnerless women move in with a partner more quickly the opposite is (insignificantly) true for their counterparts that "live apart together" at first birth. That at birth partnerless women with low education move in less quickly than highly educated ones supports our assumption that everyone in the group is under high pressure to find a partner and thus education

works as an attractiveness factor that *accelerates* the search for a partner. Within the group of women that already have an LAT-partner economic independence actually enables them to freely decide whether to move in "just because of the birth" or to wait for better conditions of moving in together or a better match (H1a). Another explanation might be high demands of job mobility which hinders these highly educated women to share one household with their partners (H3a). The negative effect of age is compatible with both lines of argumentation, as mothers in their twenties or older are more likely to be economic independent, but also more likely to meet job mobility demands. Anyhow, we do not find support for the welfare benefits hypothesis (H3b). As off wave two, the employment biography of the respondent might bring more clarification on the effect of employment on the partnering behavior of these mothers.

Further partnership transitions

While these results only refer to the first transition out of single parenthood we also descriptively and exploratively analyzed further transitions like repeating episodes of single motherhood (Table 2). Most importantly the figures show that although partnerless single mothers at birth start cohabiting later and less often they get separated of a household partner in the first five years after birth more often than their counterparts "living apart together" at birth (row 2). On the other hand, referring to formations and separation of *partnerships* instead of *households* it becomes clear that women starting their fertility biography while "living apart together" more often experience partnership separations and early parental trajectories with multiple partners than initially partnerless women (rows 3 and 5).

Table 2: Frequency of occurrence of respective partnership transitions following a non-coresident first birth, percentages

		Partnerless at first birth		`Living apart together` at first birth[a]	
		West	East	West	East
1	Ever married to om / father	18,3 / 3,7	7,8 / 7,8	4,6 / 28,7	5,0 / 17,5
2	Separation from resident partner	8,5	7,8	6,9	6,3
3	Ever partnership dissolution	19,5	18,2	47,1	42,5
4	More than one resident partner	0,0	5,2	4,6	2,5
5	More than one partner	9,8	9,0	34,5	38,8
6	More than two partners	0,0	0,0	4,6	5,0
7	Living arrangement at child's 5th birthday				
	partnerless	43,0	44,0	13,8	8,8
	LAT with om/ father	11,0 / 2,4	4,0 / 1,3	2,3 / 16,1	11,3 / 19,0
	unmarried coresidence with om/ father	18,3 / 3,7	27,3 / 6,5	11,5 / 12,6	13,8 / 21,3
	Married to om/ father	18,3/ 3,7	7,8 / 7,8	1,1 / 27,6	5,0 / 16,5
	Total (N=)	82	77	87	80

om=other man

[a]= Only women in LAT-partnerships with the father of the child.

Source: pairfam/DemoDiff wave 1 (2008/2009/2010).

Conclusions

This study investigated the partnership transitions of women within the first five years after their non-coresiding first childbirth. Especially the timing and determinants of first household formation of these single mothers was of concern. We showed, that studies analyzing the partnership trajectories of women that start their fertility biography as a single mother should differentiate between actually partnerless women and women with a partner in a separate household. Within both groups around half of the women ever move in with a partner when the child turned five years old. But, they show different durations until and also different determinants of leaving single motherhood. The distinct effects of educational attainment suggest that less educated single mothers have fewer chances to *find* a partner (and move in together with him). If a partnership already exists at the time of the birth on the other hand, highly educated mothers show lower transition rates into a household union than their lower educated counterparts, suggesting that they have fewer economic needs for a household partner, or higher structural burdens due to job mobility. Furthermore, we show that considering trajectories holistically and across households is advisable. While our first analyses show that children born by women in LAT-partnerships have higher chances to quickly move in with their father, further investigations show that these children also might experience more partnerships (and partnership separations) of their mothers within their early childhood altogether. In which way also partners that do not change the household composition influence the mother's and children's social and economic well-being is not known so far and needs to be investigated in future research.

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Appendix

Table AI: Sample distribution by partnership status at first childbirth, column percentages

	Partnership status at 1st childbirth			
	Living alone[a]			*Coresiding*
	No partner	LAT	Total	*Total,row percentages*
Region				
Western Germany	51,6	51,6	51,6	*63,3*
Eastern Germany	48,4	48,4	48,4	*36,7*
Educational Attainment				
Low	23,3	25,5	24,5	*17,1*
Middle	64,2	59,8	61,8	*53,7*
High	12,6	14,7	13.7	*29,2*
Age at 1st birth				
16- below 20	35,2	41,9	38,8	*10,9*
20- below 25	37,1	34,2	35,6	*33,5*
25 and above	27,7	23,9	25,7	*55,6*
Number of partnerships until 1st birth				
None	46,5	-	21,6	-
One	35,9	62,5	50,2	*50,9*
Two and more	17,6	37,5	28,2	*49,1*
Partnership with father of 1st child before/at 1st birth[b]				
yes	38,4	90,8	98,4	
no	61,6	9,2	1,6	
Size of city of residence				
Small	34,6	37,0	35,0	*32,7*
Middle	31,5	27,2	29,2	*33,5*
Big	34,0	35,9	35,9	*33,9*
Birth cohort				
1971-1973	68,6	66,3	67,4	*85,2*
1981-1983	31,5	33,7	32,7	*14,8*
Case numbers				
Persons	159	184	343	*1261*
Events (household formations)				
With father of the child	17	78	95	-
With other man	66	34	100	-

[a] = Sample of analyses

[b] For unpartnered women at first childbirth: Partnership that ended before childbirth. For women in non-coresiding (LAT) and coresiding partnerships: Partnership that was still ongoing at time of first birth.

Source: pairfam/DemoDiff, wave 1 (2008/2009/2010)