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Why childless men and women give up the desire for a child

We investigate why childless men and women who initially wanted to have children voluntarily give up the desire for a child and decide–or at least accept –to remain permanently childless. In our analysis we use a sample of childless respondents from the first four waves of the German Family Panel (pairfam) and three waves of a complementary sample of eastern German respondents (DemoDiff). Although increasing rates of childlessness and decreasing fertility in the western world have been studied extensively ,the question why childless individuals give up the desire for a child has rarely attracted attention in demographic research.

State of the art

According to studies on childless persons or couples (e.g. Berrington, 2004; Callan, 1984; Carmichael & Whittaker, 2007; González & Jurado-Guerrero, 2006; Heaton, Jacobson, & Holland, 1999; Houseknecht, 1979; Keizer, Dykstra, & Jansen, 2008; Nave-Herz, 1988; Safer, 1996; Tanturri & Mencarini, 2008; Veevers, 1973) one can differentiate between three types of childless individuals. The first and relatively small group consists of men or women who are unable to have a child because of medical or biological reasons ("involuntarily childless"). Among the second type are men and women who very early in the life course consciously decide not to become a mother or a father ("early articulators", "childfree", "childless by choice", "voluntarily lifelong childless"). The third – and largest – group consists of individuals who initially wanted to have children but postponed family formation and ultimately remained childless. They assume that the necessary prerequisites for childbirth are not met at a given point in time or that opportunity costs are still too high because they want to achieve other life goals (e.g. occupational career) before they start a family ("postponer", "childless by circumstances", "voluntarily temporary childless").Some of the postponers may eventually no longer be able to have a child for biological reasons. As the fertile period of women is limited and fecundity decreases with age, postponing may then result in involuntary childlessness. There is another subgroup of postponers, however, who change their mind in later life and voluntarily give up their desire for children.

While there are many studies on the determinants of the desire for children, the intention to have a child, and the link between intention and fertility, research on the stability or instability of desires and intentions for children over the life course is still rare. Based on two waves of the German Family Survey conducted in 1988 and 1995,Heiland et al. (2008) show that the ideal (or desired) number of children is rather instable. About one tenth of childless women aged 26-35 who expressed a wish for children in wave 1 no longer wished to have children in wave 2. While a random effects model showed negative effects of income and age, in a fixed effects model none of the factors that were assumed to weaken childless women's desire for children proved to be significant. Gray et al. (2013) use data from the panel study "Household, Income and Labour Dynamics in Australia" from 2001-2010. They employ fixed effects models and find that the adjustment of childbearing desires of childless men and women from one panel wave to another was strongly affected by age and relationship status. Short-term events like illness and unemployment had a much smaller impact. Liefbroer (2008)analyzed panel data from the Netherlands with a random-slope multi-level model and found that childless men and women and people without a partner reduce planned family size as they grow older. Using data from several waves of the British Household Panel Survey and employing multinomial regression models, Iacovou and Tavares (2011)report that for women the chance to decrease the intention to have children depends on partnership status, employment, and agreement with their partner. Furthermore, in contrast to Liefbroer but in accordance with Berrington (2004), they find a higher likelihood of young women changing intentions and only little evidence for an impact of the "biological clock". However, in their statistical models Iacovou and Tavares did not differentiate between women with and without children. According to Buhr and Kuhnt (2012),who analyze the first two waves of the German Family Panel (pairfam) with multinomial logistic regression models ,about five percent of childless men and women who expected to have children in wave 1 or were unsure do not expect to have any children one year later. Partnership status proved to be very important: For persons without a partner or who had separated between the waves the odds to reduce the expected number of children were much higher than for persons living with a partner.

All in all, existing studies on the stability and instability of the desire for children and childbearing intentions still do not give a satisfying answer to the question why childless men and women permanently give up their desire to have children. The studies use different concepts of desire and intentions and do not always differentiate between gender and parity. In this paper we try to gain a better insight into the factors that influence childless individuals or couples in voluntarily deciding against having children later in their life course.

Theoretical considerations and hypotheses

There are at least two possible types of explanation why postponers might at last abandon their desire to have children. The first explanation builds on the assumption that childless individuals or couples might get used to a lifestyle without children because they are gainfully engaged in non-family life areas (e.g. career, partnership, social networks)contributing to their subjective well-being in a satisfactory way. They are apprehensive that children might negatively impact highly valued routines in their lives or could interfere too much with other interests. This leads them to give up their desire for children (Carmichael & Whittaker, 2007; Heaton, et al., 1999; Nave-Herz, 1988: 43 ff.; Rindfuss, Bumpass, & St. John, 1980: 432). In other words: Welfare gains from other life domains might substitute welfare gains that children could provide. Since a stable partnership, for instance, is a strong source of emotional closeness, it may substitute the relationship to a child We call this the "adaptation hypothesis".

H1 ("adaptation hypothesis"):The chance that childless men and women give up the desire for a child is higher if engaging in other life domains (work, leisure) is particularly important to them; if they anticipate particularly strong unpleasant consequences of parenthood for other life areas; and if they live in a long-lasting partnership.

Second, according to the psychological theory of developmental regulation (Brandtstädter, 2009; Heckhausen, Wrosch, & Fleeson, 2001), one can assume that if childless men and women are or become aware of severe obstacles regarding the realization of family plans ,they will either reinforce their activities to achieve the goal to have a child, or they will renounce the goal and give up the desire for a child. As a stable partnership is seen as one of the most important preconditions for family formation, the second alternative is more likely if a person does not enter into a promising partnership. It is also well known that the fecundity of women deteriorates quite considerably after age 35 and men's fertility also declines with age (Nieschlag & te Velde, 2010). Thus, the likelihood of failure in regard to having a child increases and/or waiting times until conception may be prolonged. This might also have a discouraging effect. We can further assume that a desire which at least once has been transformed into an intention, i.e. a concrete time schedule for the realization of the desire, is more stable over the life course than a "pure" desire without intention. These considerations bring us to a "frustration hypothesis" and a "persistence hypothesis".

H2 ("frustration hypothesis"): The chance that childless men and women give up the desire for a child is higher for persons who do not live in a union or have been without a partner for a longer period of time and who are approaching the end of their fertile period.

H3 ("persistency hypothesis"):Individuals who have a desire for children but did not translate it into a concrete intention to have a child in the foreseeable future will be more ready to give up their desire in case of adverse circumstances.

Data and methods

To test our hypotheses 1 to 3 we use data from waves 1 to 4 of the German Family Panel (pairfam) and waves 1to 3 of the complementary study for eastern Germany "DemoDiff". The German Family Panel pairfam ("Panel Analysis of Intimate Relationships and Family Dynamics") was launched in 2008 and is a multidisciplinary, longitudinal study with annual waves for researching partnership and family dynamics in Germany (Huinink et al., 2011). The first wave was conducted in 2008/2009 with a nationwide random sample of over 12,000 participants from three birth cohorts (1971-73, 1981-83, 1991-93).Due to panel mortality the number of participants has declined to about 7,000 in wave 4 (for further information about the sampling procedure, the response rates and the instruments see www. pairfam.de). DemoDiff is a complementary study to the German Family Panel, initiated and funded by

the Max Planck Institute for Demographic Research (MPIDR) and utilizing a largely identical set of instruments. The first DemoDiff survey wave was realized one year after the start of the pairfam study between fall 2009 and spring 2010 with an initial sample of 1,489 randomly selected eastern German anchor respondents. In the following two years two further survey waves were conducted. The second survey of 2010/11 includes instruments of both the second and the third wave of pairfam. The third DemoDiff wave from 2011/2012 is synchronized with the fourth wave of pairfam. The sample for the following analysis is restricted to fertile, heterosexual respondents of the two older birth cohorts who participated in at least three waves including the last one and were childless and not pregnant during the observation period (N=1,540).

In pairfam (and DemoDiff respectively) there are several concepts to capture the desire and intention for children: the ideal family size, the realistically expected family size and the intention to give birth to a child in the next two years. In our analysis we use the expected number of children, which actually is a hybrid concept between desire and intention (Buhr & Kuhnt, 2012). The relevant question in pairfam is: "*When you think realistically about having children: how many children do you think you will have?"*We generated a binary variable "desire", which was allocated the value 1 (= desire) when the answer categories "one child", "two children", "three children" and "four or more children" were chosen. The categories "no children", "not sure" and "not thought about that" were coded as 0 (= no desire).

To analyze why childless people give up their desire for children, we employ two methods: multinomial logistic regression and fixed effects logit models. For the *multinomial logistic regression models* we observed the sequences of expecting and not expecting to have children over the panel waves and condensed them into four types: (1) "permanent desire" = expecting to have a child in all waves; (2) "permanent no desire" = not expecting to have a child in all waves; (3) "give up desire" = expecting to have a child in wave 1 and not expecting to have a child in at least the last two consecutive waves; (4)"switching" = changing between expecting and not expecting to have a child.[1]We estimate separate models for the two birth cohorts and use permanent desire as the base category. We include the following independent variables: sex; birth cohort (1971-1973; 1981-1983); partnership status (no partner in all waves; same partner in all waves; other);relationship duration in wave 1 (<5 years; >5 years);importance of engagement in other life areas (rating of the importance of the life goal "pursuing my hobbies and personal interests", 0-15 points; measured in wave 1); employment status (employed in all waves; not employed in at least one wave); anticipation of negative consequences ("How strongly do you worry that you will be able to afford less with children?" and "How strongly do you worry that that children will limit your personal freedom?", 5-pointscale from 1 "not at all" to 5 "very strongly", measured in wave 1); intending or planning a child in the next two years in wave 1 (categories "yes, definitely" and "yes, perhaps") as an indicator for the strength of the desire for children. The control variables are: living in East or West Germany and level of education (low, medium, high).

The dependent variable for the *fixed effects logit model* is defined in the following way: 0 means that the respondent has a desire for children, 1 means that the respondent has no desire. The independent variables are:[2] employment status (0=not employed, 1=employed); partnership status (0=no partner, 1=partner); importance of life goal "pursuing hobbies and interests" (scale 1-15); worries to be able to afford less with children (scale 1-5); worries that children limit personal freedom (scale 1-5). Since the questions on worries were not asked in all waves, the fixed effects logit model is restricted to three waves (1, 2, 4) or two waves (1, 4) for the DemoDiff cases.

[1]The definition of the types and the number of cases is shown in table 1 and 2 in the appendix. A similar approach was chosen by Heaton and colleagues (1999) based on two waves (1988 and 1994) from the National Survey of Families and Households in the USA. They differentiated between childless persons who expressed an intention to have children in wave 1 and 2 ("postponers"), persons who did not intend to have children in both waves ("consistently childless") and persons who intended to have children in wave 1 and did not intend to have children in wave 2 ("switch to childless") and compared these groups to "intentional parents" and "switch to parents". However, as the authors had no information about intentions during the time between the two waves they could not allow for changes of intentions during the observation period. For example, it is possible that the group defined as "consistently childless" did in fact intend to have children in some of the years prior to the second wave. In pairfam information on intentions and desires is collected in each year so that we can also observe stability and instability in the short run.

[2] In contrast to the multinomial logistic regression, it is not possible to estimate the effect of time constant variables.

Results

According to the fixed effects logit model (see table 3 in the appendix), partnership status, the importance of the life goal “pursuing hobbies and interests” and the anticipation of negative consequences of the birth of a child affect the change from desire to no desire. Employment status does not exert a significant effect. Thus, this model supports the adaptation hypothesis and the frustration hypothesis. However, with this model it is not possible to differentiate between temporary and permanent changes of the desire to have children.

According to the multinomial logistic regression (see table 4 in the appendix), childless respondents belonging to the older birth cohort (1971-73) have a much higher chance than younger respondents to either expect to have no children in all waves, to have given up the desire in the last two consecutive waves or to switch. There is also an interaction effect between birth cohort and gender: older woman have a higher chance than younger women to have permanently no desire and – albeit to a lesser and not significant extent– to give up the desire. This offers support for the frustration hypothesis(H2).

However, the results for partnership status partially point in another direction. On the one hand, men and women in both birth cohorts without a partner have a higher chance to permanently have no desire or to give up their desire for children. On the other hand, older men and women who live in along-lasting partnership also have a much higher chance to permanently have no desire or to give up their desire. The last result is more in accordance with the adaptation hypothesis (H1).The adaptation hypothesis is further supported by the effects of the variables indicating the importance of other life goals and the anticipated negative consequences of parenthood: individuals of both cohorts who rate the life goal “pursuing hobbies and personal interests” as important have a higher chance to permanently have no desire or to switch. Anticipating negative consequences for personal finances increases the chance to permanently have no desire in both cohorts and the chance to give up the desire in the older cohort. Finally, respondents who fear that children would limit their personal freedom have a higher chance to permanently have no desire, to give up the desire (only younger cohort) or to switch.

The persistency hypothesis (H3) is only tested for the subgroup of respondents who expect to have children in wave 1, because the follow-on question about planning the first birth is only asked in this case. The results (see table 5 in the appendix) support the persistency hypothesis: childless respondents who did *not* plan to have a child in the next two years in wave 1 have a higher chance to give up the desire (and to switch) than those who had a concrete plan to have a child.

Conclusion

All in all, our findings already provide some additional insights into how the process of giving up the desire for children might work. According to our data there is more evidence for the adaptation hypothesis than for the frustration hypothesis. Moreover, there is evidence that individuals who had planned to have a child are less inclined to give up this intention two years later than those who did not plan the timing of the birth. However, this analysis could give only a preliminary answer to the question why men and women give up their desire to have children. Therefore, we will have to extend our analysis in several aspects. First, our observation period is still rather short. As desires and intentions tend to be unstable (Buhr & Kuhnt, 2012; Heiland, et al., 2008), it is certainly possible that some persons who gave up their desire in wave 3 and 4 will change their opinion again in wave 5. Thus it is necessary to lengthen the observation period. Second, we found evidence in our data that giving up the desire to have children also depends on general attitudes towards children or the meaning of children for a fulfilled life. These attitudes can overlap with the effects of other variables. Therefore, these processes have to be analyzed in more detail. Third, we assume that – besides the biological limits of fecundity – perceptions about the “right” age to have children may play a role in giving up the desire to have children. One can argue that individuals might feel too old to start a family and raise children according to their own or societal age norms. They might seek to avoid social disapproval or anticipate potential disadvantages of their children growing up with “old” parents. Therefore, the relevance of age norms should also be analyzed in more detail. Fourth, the decision to have or not to have children is made by couples. However, we did not include information about the partner in our analysis. Thus it is also important to broaden the present analysis with a dyadic perspective.

Appendix

1. References

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2. Tables

Table 1: Definition of the sequence types

	Expectation to have a child?			
	Wave 1	Wave 2	Wave 3	Wave 4
"Permanent desire"	Yes	Yes	Yes	Yes
	Yes	Yes	-	Yes
	Yes	-	Yes	Yes
"Permanent no desire"	No	No	No	No
	No	No	-	No
	No	-	No	No
"Give up desire"	Yes	Yes	No	No
	Yes	No	No	No
	Yes	No	-	No
	Yes	-	No	No
"Switching"	Yes	No	Yes	No
	Yes	No	Yes	Yes
	Yes	No	No	Yes
	Yes	No	-	Yes
	Yes	Yes	Yes	No
	Yes	Yes	No	Yes
	Yes	Yes	-	No
	Yes	-	Yes	No
	Yes	-	No	Yes
	No	Yes	Yes	No
	No	Yes	Yes	Yes
	No	Yes	No	Yes
	No	Yes	No	No
	No	Yes	-	Yes
	No	No	Yes	Yes
	No	No	Yes	No
	No	No	No	Yes
	No	-	Yes	No
	No	-	Yes	Yes
	No	-	No	Yes

Data source: pairfam, release 4.0, DemoDiff, release 3.0.

Table 2: Number of cases of the different types by birth cohort

	Birth cohort 1981-1983	Birth cohort 1971-1973	Total
"Permanent desire"	727	92	819
"Permanent no desire"	67	113	180
"Give up desire"	67	31	98
"Switching"	310	106	416
N	1,171	342	1,513

Data source: pairfam, release 4.0, DemoDiff, release 3.0.

Table 3: Results of the fixed-effects logit model

	No desire
Partner	0.56**
Employed	1.39
Importance life goal “pursuing hobbies and interests”	1.15*
Worries “to be able to afford less with children”	1.13+
Worries that “children will limit personal freedom”	1.16*
N of observations	1158
N of groups	419
LR Chi2 (df) Sign	27.72 (5) 0.0000

Results of conditional fixed effects logistic regression; odds ratio; *** < 0.001, **<0.01, * <0.05,; + < 0.10
Data source: pairfam, release 4.0, DemoDiff, release 3.0

Table 4: Results of the multinomial logistic regression I

	Birth cohort 1981-1983			Birth cohort 1971-1973		
	Permanent no desire	Give up desire	Switching	Permanent no desire	Give up desire	Switching
Women	ns	ns	ns	4.07***	2.14+	ns
Partnership status (ref. change)						
No partner wave 1-4	2.92**	3.17***	1.43*	1.95+	4.97*	ns
Same partner w1-4, rel. dur. < 5 yrs.	-	-	-	ns	ns	ns
Same partner w 1-4, rel. dur. > 5 yrs.	-	-	-	2.96*	4.47+	ns
Cohort 1981-83: same partner w1-4	0.27**	0.31**	0.44***	-	-	-
Employed wave 1-4	ns	0.55*	ns	ns	ns	ns
Importance “hobbies and interests” w1	1.33**	ns	1.20**	1.39**	ns	1.23+
Worries “afford less with children” w1	1.61**	ns	ns	1.49*	1.40+	ns
Worries “children limit personal freedom” w1	1.55**	1.24+	1.16*	1.37*	ns	1.51**
Living in East Germany	ns	0.61+	ns	ns	ns	ns
Education (ref: medium)						
Low	ns	ns	ns	ns	ns	ns
Higher	ns	ns	ns	0.47*	ns	ns
N	1150			330		
LR Chi2 (df) Sign	191.41(30)0.000			92.49(33) 0.000		
Pseudo R2	0.0862			0.1075		

Results of multinomial logistic regression; base category: permanent desire; odds ratios; *** < 0.001, **<0.01, * <0.05,; + < 0.10; ns = effect not significant
Data source: pairfam, release 4.0, DemoDiff, release 3.0

Table 5: Results of the multinomial logistic regression II

	Birth cohort 1981-1983		Birth cohort 1971-1973	
	Give up desire	Switching	Give up desire	Switching
Women	ns	ns	3.50*	ns
Partnership status (ref. change)				
No partner wave 1-4	2.82**	1.41+	3.42+	ns
Same partner w1-4, rel. dur. < 5 yrs.	ns	ns	ns	ns
Same partner w 1-4, rel. dur. > 5 yrs.	ns	ns	5.01*	ns
Cohort 1981-83: same partner w1-4	0.31**	0.41***	-	-
Employed wave 1-4	0.57*	ns	ns	ns
Importance "hobbies and interests" w1	ns	1.12+	ns	ns
Worries "afford less with children" w1	ns	ns	1.49+	ns
Worries "children limit personal freedom" w1	1.26+	ns	ns	1.74**
Plans to have child in next two years	0.44*	0.61**	0.26**	0.50+
Living in East Germany	ns	ns	ns	ns
Education (ref: medium)				
Low	ns	ns	ns	ns
Higher	ns	ns	ns	ns
N	1036		195	
LR Chi2 (df) Sign	122.88(22)0.000		44.56(24)0.0066	
Pseudo R2	0.0766		0.1124	