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Does it take a village to raise a child? The buffering effect of relationships with relatives for parental life satisfaction

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Summary

Strong relationships with relatives may alleviate consequences of stressful experiences, but the evidence documenting such 'buffering effect' during parenthood is scarce. This paper investigated the buffering effect of relationships with relatives during parenthood in Switzerland. We tested if relationships with relatives (network size, frequency of contact, and availability of practical and emotional support) became stronger in response to parenthood, and if people who had stronger relationships with their relatives experienced more positive trajectories of life satisfaction during parenthood.

We used Swiss Household Panel data for years 2000-2011 and fixed effects regression models. Our results showed that the birth of the first child increased the frequency of mothers' contact with non-resident relatives, which is in line with buffering effect. However, contrary to our hypotheses, fathers of three children experienced erosion of relatives' network and decreased availability of emotional support.

We found mixed evidence that strong relationships with relatives improve parental life satisfaction. Parents with at least two children who had stronger relationships with relatives experienced more increase (and less decline) in life satisfaction during parenthood than those who had weaker relationships with relatives. However,

results concerning the first child is against our buffering effect hypothesis, with parents, especially mothers, experiencing higher level of satisfaction when the relatives network size, contact or support are low. Our additional analysis on this respect shows that this group is positively selected as to the pre-birth level of happiness. Our study suggests that support from relatives is a resource for parents having two or more children and that it improves the experience of parenthood even in relatively wealthy societies.

Does it take a village to raise a child? The buffering effect of relationships with relatives for parental life satisfaction.

Małgorzata Mikucka,[*] Ester Rizzi[†]

1. Introduction

The saying "it takes a village to raise a child" suggests that not all the burden of raising children needs to rest on parental shoulders. Cooperation and support of community, be it neighbors, relatives, or others, may make parenthood better, perhaps easier or less straining. This is relevant for contemporary developed societies, where fertility rates are predominantly low and the positive link between parenthood and life satisfaction is rarely found (e.g. Clark et al., 2008; Hansen, 2012; Pollmann-Schult, 2014). Parents, especially of young children, are tired, sleep deprived, and stressed (Evenson and Simon, 2005; Umberson et al., 2010), they experience financial strain (Stanca, 2012) and time pressures (Pollmann-Schult, 2014). Childcare, an activity only slightly more enjoyable than housework (Kahneman et al., 2004), is in conflict with parents' leisure, freedom, work demands, and romantic relationships (Angeles, 2010; Lyubomirsky and Boehm, 2010; Nomaguchi and Milkie, 2003; Twenge et al., 2003).

A plausible remedy for the burdens of parenthood is support from social networks. The 'buffering hypothesis' postulates that social support, from family or

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other sources, may alleviate the negative consequences of difficult experiences (Cohen, 1985; Thoits, 1982). Thus, people surrounded by a network available to provide support may derive more life satisfaction from parenthood than people who are socially isolated or cannot count on support from their networks. However, the role of social support for life satisfaction of parents remains underexplored. This effect should be particularly strong in Switzerland, where the state support for parenthood is low.

This paper contributes to filling this gap by examining if strong relationships with relatives act as a buffer which protects parental life satisfaction. In this paper we define strong relationships by referring to four criteria: network size, contact frequency, and availability of practical and emotional support. Throughout the paper, the term "strong relationships" refers to above median size of network of relatives, above median frequency of contact with relatives, or above median availability of practical or emotional support. We focus on two related aspects of buffering effect. First, we investigate if networks of relatives, frequency of contacts with relatives, or availability of their support increase in response to parenthood. In other words, we test if relationships with relatives become stronger after people have children. Second, we assess if people who declare stronger relationships with relatives experience more positive trajectories of life satisfaction during parenthood.

1.1. Parenthood and life satisfaction

Today parenthood is largely a choice, and is typically considered an important experience. However, the literature failed to document a consistently positive effect of parenthood on life satisfaction (for a review see: Hansen, 2012). Some analyses demonstrated that parents were less happy than childless people (e.g. Margolis and Myrskylä, 2011; Stanca, 2012), whereas others showed a positive (Aassve et al., 2012), or a null correlation (Qian and Knoester, 2015; for children under the age of six: Vanassche et al., 2013).

The results on parenthood and life satisfaction may be divergent because studies in this field were performed with various data and methods. In contrast,

studies analyzing changes of parental life satisfaction with panel data provided a rather consistent picture (Baetschmann et al., 2012; Clark et al., 2008; Clark and Georgellis, 2013; Frijters et al., 2011; Myrskylä and Margolis, 2014; Rizzi and Mikucka, 2015). They documented that first-time births, and, to a lesser extent, subsequent births, are periods of increased life satisfaction, especially for women. They are preceded by 'anticipation effect', which means that the increase of life satisfaction is observed already one or two years before the birth (Anusic et al., 2014; Clark et al., 2008; Frijters et al., 2011; Myrskylä and Margolis, 2014; Rizzi and Mikucka, 2015). Subsequently, after the birth, life satisfaction of parents gradually declines (Anusic et al., 2014; Clark et al., 2008; Clark and Georgellis, 2013; Frijters et al., 2011; Myrskylä and Margolis, 2014), which suggests that parenthood may be considered a difficult life event.

The trajectories of life satisfaction during parenthood differ across groups of parents. For example, Galatzer-Levy et al. (2011) showed that the well-being of majority of parents did not change in response to birth, 7% experienced a sustained decrease, and 4% experienced a strong increase. This may reflect personal preferences for parenthood (Kravdal, 2014), but also the ability to cope with its challenges. Indeed, married and older people typically derive more life satisfaction from parenthood than single and poorer people (Myrskylä and Margolis, 2014). Such people may be better prepared for the demands of parenthood, such as financial costs (Pollmann-Schult, 2014; Stanca, 2012) and constraints on parental time (Evenson and Simon, 2005; Pollmann-Schult, 2014). In this paper we investigate if good relationship with relatives is another factor which helps parents face the challenges of parenthood.

1.2. **Parenthood and the support from relatives**

Families provide support to parents of young children, mainly by offering childcare, housework, advice and information, as well as material and financial help (Bengtson, 2001; Chan, 2009; Chan and Ermisch, 2011; Coall and Hertwig, 2010; Hank and Buber, 2009). The literature showed that support from relatives activated in response to critical, difficult events (Eggebeen and Davey, 1998; Schoeni, 2002; Silverstein et al., 2006). Family relationships were more stable than friend-

ships or work and community networks (Wellman et al., 1997), and relationships with relatives were often strong, supportive and reciprocal (Munch et al., 1997). Thus, the network of relatives may prove an important source of support during difficult periods.

Part of the literature showed that transition to parenthood intensified the relationships with relatives. For example, analyses of US data documented that contacts of new parents with family members increased temporarily after the birth (Belsky and Rovine, 1984; Bost et al., 2002). In the same period, the non-family networks tended to decline, and networks of relatives temporarily dominated the social life of parents (e.g. relatives constituted 70% of networks of parents having 3-year old children Munch et al., 1997). However, some other studies showed that family networks were not affected by parenthood. For example, parenthood had no effect on relationships (including: contact frequency, network size, and support) with relatives in Switzerland (Kalmijn, 2012). Similarly, in a study using US data, the size of parental networks was stable during the period up to 24 months after the birth (Bost et al., 2002).

In this context important are gender differences. Support networks of men and women systematically differ, and relatives make a larger share of women's than of men's social networks (Moore, 1990). Also parenthood seems to affect women's networks more than men's – for example, having a child aged 3 or 4 limits the size of social networks of women and the frequency of their social contacts, but it has no effect on the size of social networks of men (Munch et al., 1997).

1.3. Buffering effect of support from relatives

Consistently with the 'buffering hypothesis' (Cohen, 1985; Thoits, 1982) relationships with relatives may alleviate the negative consequences of difficult events. Thus, they may also protect against the loss of life satisfaction often experienced during parenthood.

Only a handful of analyses documented that social support moderated the relationship between parenthood and life satisfaction. Some studies provided an

indirect evidence by showing that support of grandparents facilitated employment of mothers (especially those with lower earning potential, see: Dimova and Wolff, 2008; Gray, 2005), and that access to informal childcare increased the probability of entering parenthood (Hank and Kreyenfeld, 2003). Similarly, having at least one parent alive increased the chances of having a child (Del Boca, 2002)

The analysis by Bost et al. (2002) directly investigated the buffering effect of parental networks. They showed that parents with *larger* family networks, and those having *less frequent* contact with relatives reported higher adjustment (which comprised a positive attitude toward life, enjoying the company of others, and feeling able to initiate activities and carrying them through) than parents having smaller networks or more frequent contact with relatives. The discrepancy of the results between the network size and contact frequency may suggest that contact with relatives was endogenous to the need of support: parents who experienced problems or felt insecure might be more willing to search for frequent contact with relatives.

1.4. The Swiss context

Switzerland, a country with a fertility rate of 1.52 children per woman (OECD, 2010), stands out with low availability of childcare (e.g., 8.5% of three-year-old children were enrolled, vs. 68% in the European Union, see: OECD, 2010) and the spendings on childcare and preschool programs are the lowest of all the OECD countries (0.2% of GDP, OECD, 2010). Not surprisingly, childcare heavily burdens the households' budgets in Switzerland (about 50% vs. 11% which is the OECD average, OECD, 2010). Additionally, the 14-week-long maternity leave in Switzerland is one of the shortest in OECD countries, and the country does not offer paternity or parental leave at all (OECD, 2010), despite the media interest in the topic (Valarino and Bernardi, 2010). The main instrument for reconciliation of work and family life is women's part-time work (Levy et al., 2006; Widmer and Ritschard, 2009): 45.6 percent of women work less than 30 hours per week in the main job (OECD, 2010). Due to these conditions, Switzerland is an interesting case for studying buffering effect of family networks.

Parents in Switzerland are usually relatively old (only 1/3 of mothers have their first child under the age of 30, see: Valarino and Bernardi, 2010) and births out of wedlock are rare (Le Goff and Ryser, 2010), which suggests that most parents are economically well prepared for parenthood. However, as Switzerland does not provide strong welfare support for parenthood, relatives may play an important role in supporting parents (Hank and Buber, 2009; Jappens and Van Bavel, 2012; Lewis et al., 2008).

1.5. Current analysis

The goal of this study is to investigate the buffering effect of strong relationships with relatives for parental life satisfaction. We focus on two aspects of buffering mechanism. First, we investigate if relationships with relatives become stronger in response to parenthood.

Hypothesis 1. We expect that parenthood correlates with an increase of size of relatives' network, frequency of contact with relatives, availability of practical support, and/or availability of emotional support.

Theoretically, it is not clear in which stage of parenthood relationships with relatives should become stronger (Kalmijn, 2012). Previous studies suggested that relationships with relatives were strongest during the care-intense stages of parenthood (i.e. when the child was 3-4 years old: Munch et al., 1997), but this result might have been driven by erosion of non-family networks. In our analysis, we capture the changing strength of relationships with relatives during various stages of parenthood: from the birth, through the care-intense stages, and later, until children are 12 years old. Moreover, we recognize that the dynamics of relationships with relatives may be different for the first and subsequent children, thus we model separately the changes occurring when people have their first, second, and third child. This part of our analysis partly replicates the study by Kalmijn (2012), who found no evidence that relationships with relatives change during parenthood. Our work extends the scope of the analysis by differentiating between children of various parities, introducing detailed age groups, and allowing

for anticipation effects.

Second, we investigate if the strength of relationship with relatives moderates the correlation between parenthood and life satisfaction.

> Hypothesis 2. We expect that parents who have stronger relationships with relatives experience stronger increase (or lower decline) of life satisfaction during parenthood than parents who have weaker relationships with relatives.

We frame the problem in terms of changes experienced during parenthood, thus we can refer to previous studies investigating the dynamics of life satisfaction during parenthood (such as Baetschmann et al., 2012; Clark et al., 2008; Clark and Georgellis, 2013; Frijters et al., 2011; Myrskylä and Margolis, 2014; Rizzi and Mikucka, 2015). Relationships with relatives and availability of support may play different roles at different stages of parenthood and it is not clear when do the relationships with relatives play the most important role. Therefore, we follow the parents from the period before the childbirth up to the moment when the child is 12 years old.

2. Data and method

2.1. Data

We use data from the Swiss Household Panel (SHP), which observes social change, in particular the dynamics of changing living conditions, in the population of Switzerland. Data are collected annually using computer-assisted telephone interviewing (CATI). The survey started in 1999, with a refreshment sample initiated in 2004. Currently 14 waves are available. However, data on life satisfaction and relationships with relatives were recorded only during waves 2-12. This limits our analysis to period 2000-2011, i.e. 11 waves of observation for the main sample and 7 waves for the refreshment.

We limited our sample to women aged 25-50 years and men who were 25-60 years during the survey. This sample consisted of almost 11,000 people and 49,000 observations. Fifty-four percent of our sample were childless, 14% had a single child, 23% had two children, and 9% had three or more children. The intervals between births were typically short: among parents having at least two children, in 51% of cases the second birth occurred within two years after the first, and in 76% of cases – within 3 years. The intervals between second and third birth were typically longer: in 39% of cases third birth occurs within 2 years after the second, and in 76% of cases – within 4 years.

2.2. Measures

Life satisfaction is captured with the question: *"In general, how satisfied are you with your life if 0 means 'not at all satisfied' and 10 means 'completely statisfied'?".* The variable approximates a normal distribution, is negatively skewed, and peaks at the value of 8 which is both its overall mean and median.

Relationships with relatives. Because previous results showed that the stability on some aspects of relationships may coexist with the change of other aspects (Bost et al., 2002; Kalmijn, 2012), we analyze four various measures of the strength of relationships with relatives: size of the network, frequency of contact, availability of practical support, and availability of emotional support.

- Size of network is captured with the question *"With how many relatives living outside of your household are you on good terms and enjoy a close relationship?"*
- Frequency of contact is measured with the question *"How frequent are your contacts with these relatives? (If variable according to the person involved, talk about the relative with whom the contacts are more frequent. Include telephone contacts.)"* (The answers are expressed in number of contacts per month.)
- Practical support is captured with the question: *"If necessary, in your opinion, to what extent can these relatives or your children who do not live in your household provide you with practical help (this means concrete help or*

useful advice), 0 means 'not at all' and 10 'a great deal'? (Even people who do not need any help should consider possible ways in which they could get support. If some relatives can help a great deal and others not at all, indicate 'a great deal'. Practical help = e.g. doing the shopping for them when sick, taking them to the doctor or giving useful advice in case of problems or when looking for specific information.)"

- Emotional support is measured with the question: *"To what extent can these relatives or these children be available in case of need and show understanding, by talking with you for example, 0 means 'not at all' and 10 'a great deal'? (Even people who do not need any help should consider possible ways in which they could get support. If some relatives can help a great deal and others not at all, indicate 'a great deal.')"*

Note that these data do not allow us specify who are the relatives mentioned by respondents, in particular we do not know if they are respondent's parents, in-laws, sibling, or other people. It is likely that, if parents are alive, they are included among non-resident relatives, because co-residence with parents or parents-in-law is in Switzerland rare. For example, in wave 2 of SHP, only in 2,6% of households included persons other than partners and children.

The data on practical and emotional support are particularly suited for the analysis of buffering effect, because buffering mechanism is most consistently found when the measures of support refer to the availability of support rather than to support actually provided (Wethington and Kessler, 1986). Indeed, part of the support actually provided tends to remain unnoticed by the recipients (Bolger et al., 2000), whereas availability of support tends to be reported more accurately.

We use the information on relationships with relatives in two ways. First, in the analysis of how the relationships change in response to parenthood we use information on changes experienced by people over time, that is to say we model the within-individual variation of relationships with relatives. Second, in the analysis of the buffering effect of relationships with relatives we use time-invariant measures to capture differences between individuals. To this end, we divide re-

spondents into (time invariant) 'stronger relationships' and 'weaker relationships' groups: we classify respondents whose average (over all waves) relationships with relatives are equal to or higher than the median as 'stronger relationships', whereas the respondents whose average relationships with relatives are under the median enter the 'weaker relationships' categories. The median cut-off values are: 5.5 for network size, 4 for contact frequency, 7 for practical support, and 7.9 for emotional support. Note that such classification implies that people classified as having "weaker relationships" do not necessarily have weak relationships with relatives, but rather "less strong" ones.

Ages of children are coded with a set of dummy variables, marking the periods (years) from 3 years before the birth up to the child's age of 12 years old. The period 4 years or more before the birth serves as reference category. When considering life satisfaction as dependent variable, the reference category should not be in the years immediately before birth (for example, one or two years before), when happiness is already substantially high, due to anticipation effect i.e. the effect of unobserved variables relevant for birth, such as pregnancy, setting up a new household, or career improvement. Choosing such a reference category might exaggerate the adaptation processes that follows a birth.

When we consider as dependent variables the indicators of relationship with relatives (number of relatives, frequency of contact, practical and emotional support) some anticipation effects could also exist. For example, the career improvement of man can limit time availability and reduce contact with relatives (while increasing likelihood of a new birth because of more financial resources). Because a potential anticipation effect exists for all the dependent variables in our analysis we consistently keep the period 4 years or more before birth as reference category.

Control variables We control for factors whose changes are likely to affect subjective well-being and social networks of respondents. We account for the changes of parental age (linear and quadratic components), marital status (dichotomous categories for never married, married, and divorced or separated, plus variables

marking the year of marriage and the year of divorce, see: Clark et al., 2008), satisfaction with own health, household income (yearly net household income, equivalized using SKOS scale, expressed in thousands of Swiss francs, see: Guggisberg et al., 2013), and respondent's unemployment (Winkelmann and Winkelmann, 1998). We also include dummies for waves (waves 2-3; waves 4-6, waves 7-9 as a reference; and waves 10-12) to control for period effects such as changing economic conditions or policies. Moreover, in the analysis of parental life satisfaction, we account for support received from the partner, friends, neighbors, and colleagues. These variables are constructed as an average of emotional and practical support; if a respondent does not have a network of given type we re-code their values into lowest level of support.

Furthermore, in the supplementary analysis we include time invariant variables: educational level (dichotomous variables for primary, secondary, and tertiary education), household income (expressed in relation to the wave-specific median), cohort of birth (dichotomous variables for cohorts born 1950-59, 1960-69, and 1970 or later), being a parent, age at first birth (expressed in years), and migration status (four categories resulting from crossing the nationality [Swiss vs. other passport] with the language spoken at home [one of Swiss languages vs. other language]).

Table 1 presents details of sample size and distribution of the variables. The following Table 2 presents how frequently parents and childless men and women belong to the 'strong relationships' rather than to the 'weak relationships' groups.

2.3. Statistical method

This analysis rests on fixed effects models for panel data. Fixed effect models use the information on changes in the independent variables (in our case: aging of children) to predict changes in the dependent variable (in our case: relationships with relatives and life satisfaction). The focus on change rather than on the absolute levels of dependent variable restricts the variance available for estimation, but it accurately documents how the transition to parenthood and changing ages of children affect relationships with relatives and life satisfaction. Fixed effects mod-

Table 1: Sample characteristics

	Women						Men					
	mean	s.d.	min	max	N	N(id)	mean	s.d.	min	max	N	N(id)
Time-varying variables:												
size of network of relatives	7.20	6.61	0	200	17811	3682	6.93	6.71	0	200	18684	3824
freq. of contact with relat. (month)	8.51	9.62	0	396	17796	3679	5.74	7.03	0	120	18666	3818
practical support from relatives	7.31	2.65	0	10	17756	3659	6.55	2.80	0	10	18564	3807
emotional support from relatives	7.92	2.28	0	10	17737	3654	7.22	2.58	0	10	18540	3798
life satisfaction	7.96	1.42	0	10	17925	3725	7.88	1.39	0	10	18822	3875
age of child 1	11.94	6.63	0	32	14336	2501	13.47	7.81	0	39	15522	2563
age of child 2	10.12	5.88	0	29	10854	1761	11.42	6.98	0	36	11646	1802
age of child 3	7.17	3.95	0	23	3210	504	7.33	4.27	0	27	3171	513
single	0.24	0.43	0	1	22035	4916	0.25	0.43	0	1	27108	5996
divorced or separated	0.09	0.29	0	1	22002	4907	0.08	0.26	0	1	27075	5983
year of divorce	0.01	0.08	0	1	22035	4916	0.00	0.06	0	1	27108	5996
year of marriage	0.01	0.12	0	1	22035	4916	0.01	0.12	0	1	27108	5996
satisfaction with health	8.08	1.75	0	10	17920	3726	8.03	1.66	0	10	18818	3875
hh income equivalized (yearly, thousands)	50.15	49.43	-0	2581	22035	4916	52.97	52.29	-0	2581	27108	5996
unemployed	0.01	0.11	0	1	21999	4892	0.02	0.12	0	1	27076	5973
age	38.64	6.97	25	50	22035	4916	42.82	9.59	25	60	27108	5996
waves 2-3 (2000-02)	0.20	0.40	0	1	22035	4916	0.20	0.40	0	1	27108	5996
waves 4-6 (2002-05)	0.27	0.45	0	1	22035	4916	0.27	0.45	0	1	27108	5996
waves 7-9 (2005-08)	0.27	0.44	0	1	22035	4916	0.27	0.44	0	1	27108	5996
waves 10-12 (2008-11)	0.25	0.43	0	1	22035	4916	0.26	0.44	0	1	27108	5996
support from partner	7.71	2.82	0	10	16703	3608	7.99	2.77	0	10	17656	3739
support from friends	7.68	2.10	0	10	17815	3683	7.06	2.26	0	10	18633	3806
support from neighbours	4.73	3.46	0	10	17616	3641	4.13	3.23	0	10	18449	3742
support from colleagues	3.83	3.39	0	10	22035	4916	3.05	3.23	0	10	27108	5996
Time-invariant variables:												
large network of relatives	0.45	0.50	0	1		4916	0.39	0.49	0	1		5996
frequent contact with relatives	0.62	0.48	0	1		4916	0.42	0.49	0	1		5996
high practical support from relatives	0.55	0.50	0	1		4916	0.37	0.48	0	1		5996
high emotional support from relatives	0.50	0.50	0	1		4916	0.33	0.47	0	1		5996
secondary education	0.61	0.49	0	1		4916						
secondary education	0.20	0.40	0	1		4885						
tertiary education	0.19	0.39	0	1		4885						
household income (relative to median)	1.13	0.85	-0	21		4916						
born 1950 − 59	0.25	0.43	0	1		4916						
born 1960 − 69	0.38	0.49	0	1		4916						
born 1970+	0.37	0.48	0	1		4916						
ever a parent	0.61	0.49	0	1		4916						
age at 1st birth	28.21	4.74	0	48		2864						
Swiss passport and language	0.77	0.42	0	1		4916						
other passport and language	0.05	0.22	0	1		4916						
Swiss passport, other language	0.10	0.30	0	1		4916						
other passport, Swiss language	0.08	0.27	0	1		4916						

Source: SHP data, waves 2-12.

Table 2: Number of respondents in the 'strong relationships' and 'weak relationships' groups according to parental status.

	Network size		Contact frequency[a]		Practical support[b]		Emotional support[b]	
	large ≥ 5.5	small < 5.5	high ≥ 4	low < 4	high ≥ 7	low < 7	high ≥ 7.9	low < 7.9
Men:								
overall	2315 (39%)	3681 (61%)	2518 (42%)	3478 (58%)	2241 (37%)	3755 (63%)	1983 (33%)	4013 (67%)
childless	1204 (35%)	2229 (65%)	1411 (41%)	2022 (59%)	1354 (39%)	2079 (61%)	1204 (35%)	2229 (65%)
has a child aged 0	107 (52%)	99 (48%)	125 (61%)	81 (39%)	97 (47%)	109 (53%)	85 (41%)	121 (59%)
has a child aged 1-2	235 (51%)	224 (49%)	252 (55%)	207 (45%)	205 (45%)	254 (55%)	176 (38%)	283 (62%)
has a child aged 3-5	275 (46%)	319 (54%)	284 (48%)	310 (52%)	250 (42%)	344 (58%)	202 (34%)	392 (66%)
has a child aged 6-12	505 (44%)	636 (56%)	506 (44%)	635 (56%)	405 (35%)	736 (65%)	351 (31%)	790 (69%)
Women:								
overall	2208 (45%)	2708 (55%)	3059 (62%)	1857 (38%)	2692 (55%)	2224 (45%)	2478 (50%)	2438 (50%)
childless	882 (37%)	1533 (63%)	1379 (57%)	1036 (43%)	1331 (55%)	1084 (45%)	1216 (50%)	1199 (50%)
has a child aged 0	117 (55%)	96 (45%)	160 (75%)	53 (25%)	128 (60%)	85 (40%)	107 (50%)	106 (50%)
has a child aged 1-2	252 (54%)	219 (46%)	354 (75%)	117 (25%)	291 (62%)	180 (38%)	248 (53%)	223 (47%)
has a child aged 3-5	337 (55%)	278 (45%)	451 (73%)	164 (27%)	367 (60%)	248 (40%)	319 (52%)	296 (48%)
has a child aged 6-12	642 (53%)	569 (47%)	793 (65%)	418 (35%)	651 (54%)	560 (46%)	595 (49%)	616 (51%)

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
Source: SHP data, waves 2-12.
Note: Groups based on median values of network size, contact frequency, practical support, and emotional support.

els control for the time-invariant unobserved heterogeneity of individuals, such as genetic differences, personality traits, or the baseline level of happiness (Allison, 2009). Moreover, the possibility to control for individual fixed effects partly solves selection issues (Clarke et al., 2010).

Recognizing that the dynamics of both dependent variables may differ with the parity and with parent's gender, we estimate separate models for the first, second, and third child, and we stratify the analysis by gender. Estimating separate models for men and women was common in previous research on parenthood in connection with social networks (Kalmijn, 2012), but accounting for different parities is a novel aspect of our approach.

Age of child, age of parent, historical time Our goal is to estimate the dynamics of relationships and life satisfaction which is associated with parenthood. However, the changes associated with aging of the child are inevitably related to aging of the parent and progress of historical time. In this paper, to empirically distinguish between these three processes (time, aging of parents and aging of the child), we include a control group in the estimation sample, i.e. we include in the analysis not only the people who experience the transitions of interest, but

also the people who could, but who did not experience the specific transitions (as recommended by: Brüderl and Ludwig, 2014). A similar technique was used by Anusic et al. (2014), who controlled for age of parents by including in the analysis a comparison group of childless people identified by using a propensity score matching technique.

Thus, the sample consists of two groups. The first one includes people who experience the transition into parenthood or aging of a child. This group comprises parents whose children of specified parity are aged 12 or younger, as well as people who will in the future experience the birth of a child of specified parity. The second group is the control group and it consists of people who could, but who did not experience a given transition. In case of estimates for the first child, the control group consists of childless people, i.e. those who did not have a child during the survey. In the analysis for the second child the control group consists of childless people and those with only one child. In the analysis for the third child the control group consists of the childless, those with one child, and those with two children. We also limit the sample to women aged 25-50 years and men aged 25-60 years, to exclude respondents who are less likely to have children aged 12 or younger.

By restricting the sample to these two groups and by choosing the period four or more years before the birth as the reference category, we assume that parents observed 4 years before the birth and people who will not experience the birth are sufficiently similar to treat them as a single group. Thus, for interpretation of results, both the control group and the period four years before the birth serve as the reference category. Even though the coefficients estimated in this way use only the within-person variation, they may be interpreted as a difference between the trajectories experienced by parents and by the respective control group.

To control for the effect of historical time, the models also include the dummies for waves (see the section on control variables). To avoid estimation problems resulting from collinearity of waves with parental and children's age, we group together neighboring waves during which the average life satisfaction was relatively stable

(Brüderl and Ludwig, 2014).

2.3.1. Dynamics of relationships with relatives

To estimate the effect of parenthood on the relationships with relatives, we regress our dependent variables on a set of dichotomous variables marking the stage of parenthood. Our analysis covers the period preceding the birth (4 and more years before the birth; 3 years before; 2 years before; and 1 year before the birth), and we follow the parents up to the moment when their child is 12 years old. This observation span slightly exceeds the length of the panel (12 years). Thus, even though our model rests solely on the within-person variation over time, it combines information from various people to estimate the trajectories of relationships with relatives.

Formally, our model for the first child is described by Equation 1.

$$
\begin{aligned}
\text{Support}_{it} = {} & \beta_{BB3}BB_{3it} + \beta_{BB2}BB_{2it} + \beta_{BB1}BB_{1it} + \\
& + \beta_{Age0}Age_{0it} + \beta_{Age1}Age_{1it} + \cdots + \beta_{Age11}Age_{11it} + \beta_{Age12}Age_{12it} \\
& + \beta_{Birth2}Birth_{2it} + \beta_{Child2}Child_{2it} + \cdots + \beta_{Birth5}Birth_{5it} + \beta_{Child5}Child_{5it} + \\
& + B_K X_{it} + (\alpha_i + u_{it})
\end{aligned}
$$

(1)

In Equation 1, coefficients from β_{BB3} to β_{BB1} describe the dynamics of relationships with relatives in the period before the birth of the child (*'BB'* stands for *'before the birth'*). The coefficients from β_{Age0} to β_{Age12} describe how relationships change as the child gets older (from the age zero to the age twelve). The reference category is the period four or more years before the birth. The coefficients from β_{Birth2} to β_{Birth5} and from β_{Child2} to β_{Child5} control for the birth and presence of other children (in the case of the first child other children include: the second, third, fourth, and fifth child). X_{it} is a vector of control variables and B_K is a vector of respective β coefficients. Coefficient α_i refers to individual fixed effects (i.e the baseline level of relationships with relatives of a specific person), and coefficient

u_{it} is the error term.

2.3.2. Dynamics of life satisfaction of the 'strong relationships' and 'weak relationships' groups

To estimate the dynamics of life satisfaction of parents having strong and weak relationships with relatives, we use a fixed-effect model similar to the one presented in Equation 1 (see Equation 2).

$$
\begin{aligned}
LS_{it} = {} & \beta_{BB3}BB_{3it} + \beta_{BB2}BB_{2it} + \beta_{BB1}BB_{1it} + \\
& + \beta_{BB3s}BB_{3it}Sup + \beta_{BB2s}BB_{2it}Sup + \beta_{BB1s}BB_{1it}Sup + \\
& + \beta_{Age0}Age_{0it} + \beta_{Age1}Age_{1it} + \cdots + \beta_{Age12}Age_{12it} \\
& + \beta_{Age0s}Age_{0it}Sup + \beta_{Age1s}Age_{1it}Sup + \cdots + \beta_{Age12s}Age_{12it}Sup \\
& + \beta_{Birth2}Birth_{2it} + \beta_{Child2}Child_{2it} + \cdots + \beta_{Birth5}Birth_{5it} + \beta_{Child5}Child_{5it} + \\
& + \beta_{Birth2s}Birth_{2it}Sup + \beta_{Child2s}Child_{2it}Sup + \cdots + \\
& + \cdots + \beta_{Birth5s}Birth_{5it}Sup + \beta_{Child5s}Child_{5it}Sup + \\
& + B_K X_{it} + (\alpha_i + u_{it})
\end{aligned}
\tag{2}
$$

Equation 2 includes interaction terms between the 'strong relationships' dummies and the variables marking the stages of parenthood ($BB_{3it}Sup \cdots BB_{1it}Sup$ and $Age_{0it}Sup \cdots Age_{12it}Sup$). These interaction terms test if the dynamics of life satisfaction of parents with strong relationships with relatives differs from the one of parents who have weak relationships with relatives.

3. Results

3.1. Changes of relationships with relatives during parenthood

Table 4 (Appendix A) shows how relationships with relatives change for parents having their first child (as in Equation 1). Results for the second and third child are presented in Appendix A in Tables 5 and 6. For an easy overview, the coefficients

for all models are presented in Figures 1 and 2.

The results for control variables are consistent with previous studies. The number of relatives in women's networks decreases with women's age. Moreover, never married women and divorced people have smaller networks of relatives than married people. Availability of practical support increases with age. Divorce and separation increase the emotional support available to women but not to men. Furthermore, people more satisfied with their health declare higher availability of practical and emotional support from their relatives.
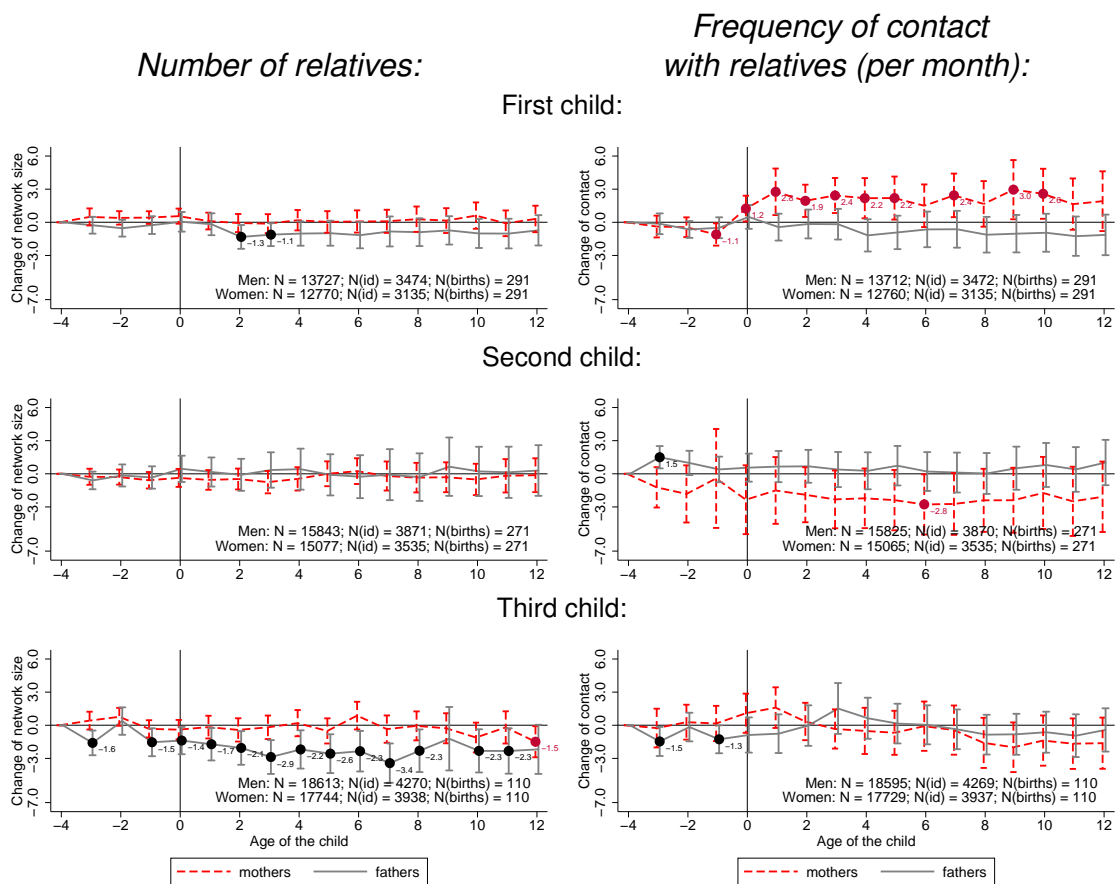
Figure 1: Predicted changes of the number of non-residing relatives with whom (prospective) parents are in good terms (left column) and the frequency of contact with non-residing relatives (right column). Separately for the first, second, and third child.

Source: SHP data, waves 2-12.
Note: Estimates as in Equation 1; separately for men and women and for the first, the second, and the third child. Reference category is the period 4 or more years before the birth. The graphs show predictions (β coefficients) with the confidence intervals (90%). Predictions statistically significantly different from zero are marked with dots. The labels show the exact value of the prediction.

Network size The left panel of Figure 1 shows the changes of number of relatives with whom respondents are on good terms. The size of network does not change systematically with the birth and aging of first and second child, but it decreases systematically among men having their third child. The effect is significant one year before the birth of the third child and reaches strongest (most negative) values when the third child is 7 years old: 3.4 persons less than among otherwise similar men having maximum two children.

Contact frequency The right panel of Figure 1 shows the results for the frequency of contact. Among women birth of the first child is associated with a statistically significant increase of frequency of contact with non-residing relatives. In the first year after the childbirth mothers meet their relatives on average 1.2 times per month more than in the period before the birth. Later on mothers meet their relatives about 2-3 times per month more than they did four years before the birth (e.g. 1.9 times more when the child is 2 years old; 3 times more when the child is 9 years old). Such an increase is consistent with the literature and is likely related to sharing with relatives the news on development of the child or relatives providing childcare. However, having second child decreases women's frequency of contact with non-residing relatives; this effect is statistically significant when the child is six years old.

Availability of practical support Practical support (left panel of Figure 2) does not systematically change with parenthood. At some stages the coefficients are statistically significant, but they do not form a consistent pattern.

Availability of emotional support Emotional support (right column of Figure 2) also changes little, with the exception of mothers and fathers having their third child, for whom the perceived availability of emotional support from relatives systematically decreases. When the third child is about 12 years old, parents report that the emotional support available to them is between 0.8 points (mothers) and 1 point (fathers) lower (on a scale from 0 to 10) than it was before the birth of the third child.
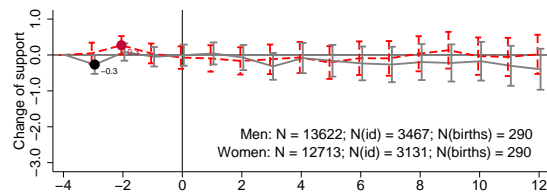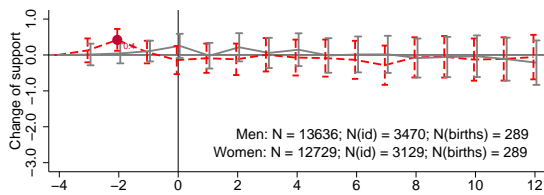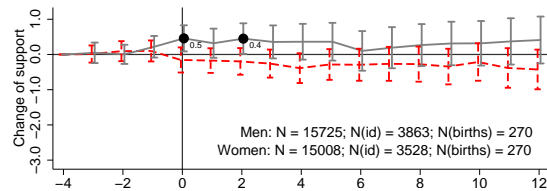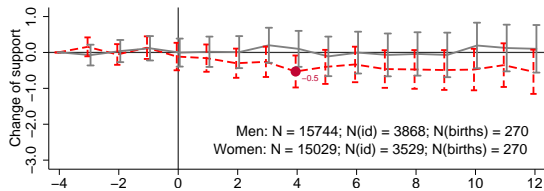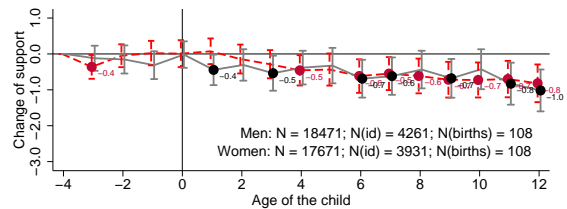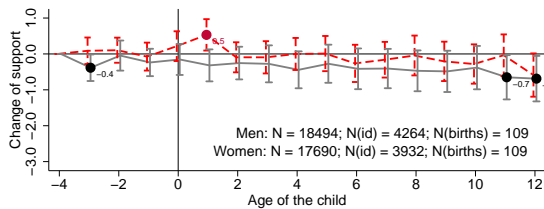
Figure 2: Predicted changes of the availability of practical (left column) and emotional (right column) support from non-residing relatives with whom (prospective) parents are in good terms.

Source: SHP data, waves 2-12.
Note: Estimates as in Equation 1; separately for men and women and for the first, the second, and the third child. Reference category is the period 4 or more years before the birth. The graphs show predictions (β coefficients) with the confidence intervals (90%). Predictions statistically significantly different from zero are marked with dots. The labels show the exact value of the prediction.

Summary The only aspect of relationships for which we observed an increase is the frequency of mothers' contact with their relatives. We found no evidence of increase of the size of the networks, nor of increased availability of practical or emotional support. Moreover, in contrast to our expectations, we found that parents with three children experience a decline of availability of emotional support from their relatives; moreover, fathers with three children declare having a smaller network of relatives. This result has not reported before by the literature.

3.2. Buffering effect of family support

We now turn to the second part of the analysis, i.e we investigate how the trajectories of life satisfaction differ between parents who belong to the 'strong relationships' rather than to the 'weak relationships' group. The results are presented in Figures 3-6; full results are reported in Tables 7-9 in Appendix B.

The effects of control variables are consistent with the literature. Life satisfaction correlated negatively with being single or experiencing a divorce (among men), widowhood (among women), and unemployment (among men). Positive correlates of life satisfaction included household income and satisfaction with own health. Support received from partner, friends, and neighbors correlated with life satisfaction positively, but the pattern was different for men and women. Men benefited only from the support provided by the partner. Among women, an important source of support were also friends, and – only in the analysis for the second child – neighbors.

Network size The buffering effect of size of the network of relatives is statistically significant for fathers having their second child (Figure 3, see the vertical lines). Consistently with the buffering mechanism, life satisfaction of fathers having a larger network of relatives increases more than the one of fathers having smaller network of relatives. The difference is significant when the child is 1 and 3 years old.

Contact frequency The results (Figure 4) are surprising and statistically significant for mothers having their first child: mothers staying in less frequent contact
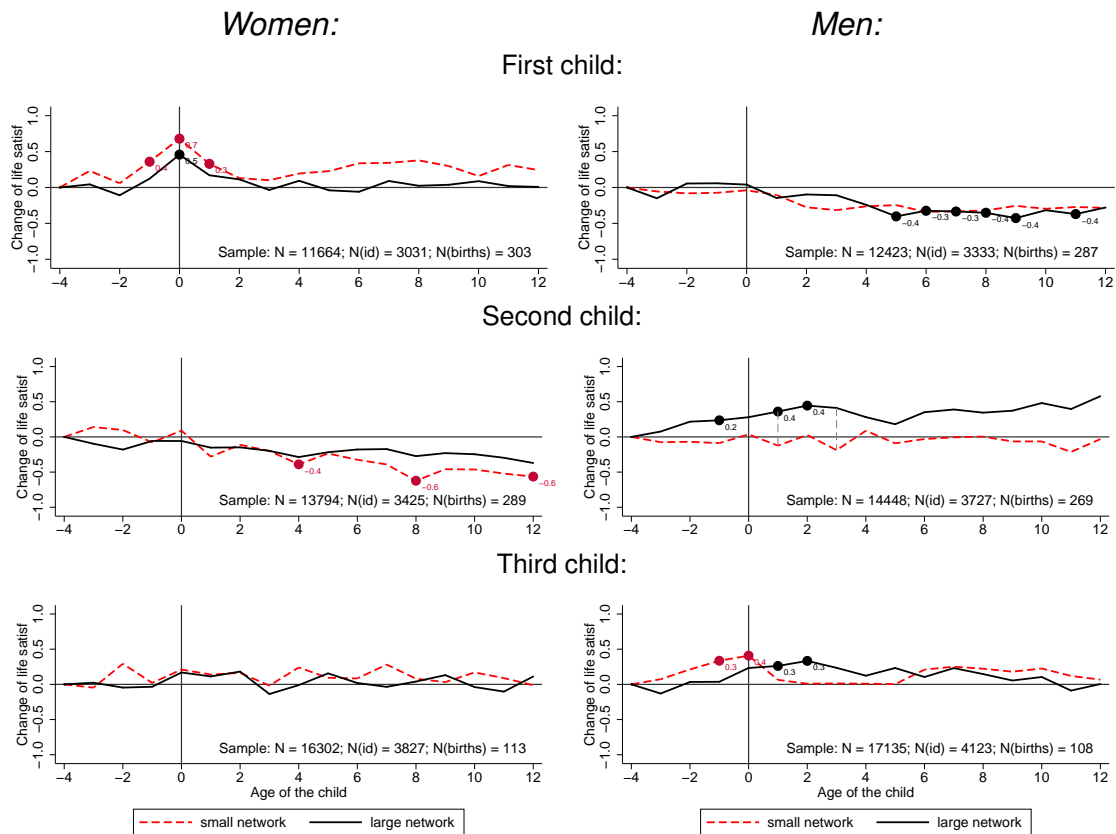
Figure 3: Changes of life satisfaction of (prospective) parents having large or small network of non-residing relatives. Separately for the first, second, and third child.

Source: SHP data, waves 2-12.

Note: Estimation as in Equation 2. Reference category is the period 4 years or more before the birth.

Network size is calculated for each individual as an average over the observation period. 'Large network' refers to median or larger network (≥ 5.5); 'small network' refers to network size below median (< 5.5).

The vertical lines connecting the two trajectories of life satisfaction indicate the periods when the difference between the 'strong relationships' and the 'weak relationships' group is statistically significant. Predictions different from zero that are statistically significant are marked with dots. The labels show the exact value of the predictions.

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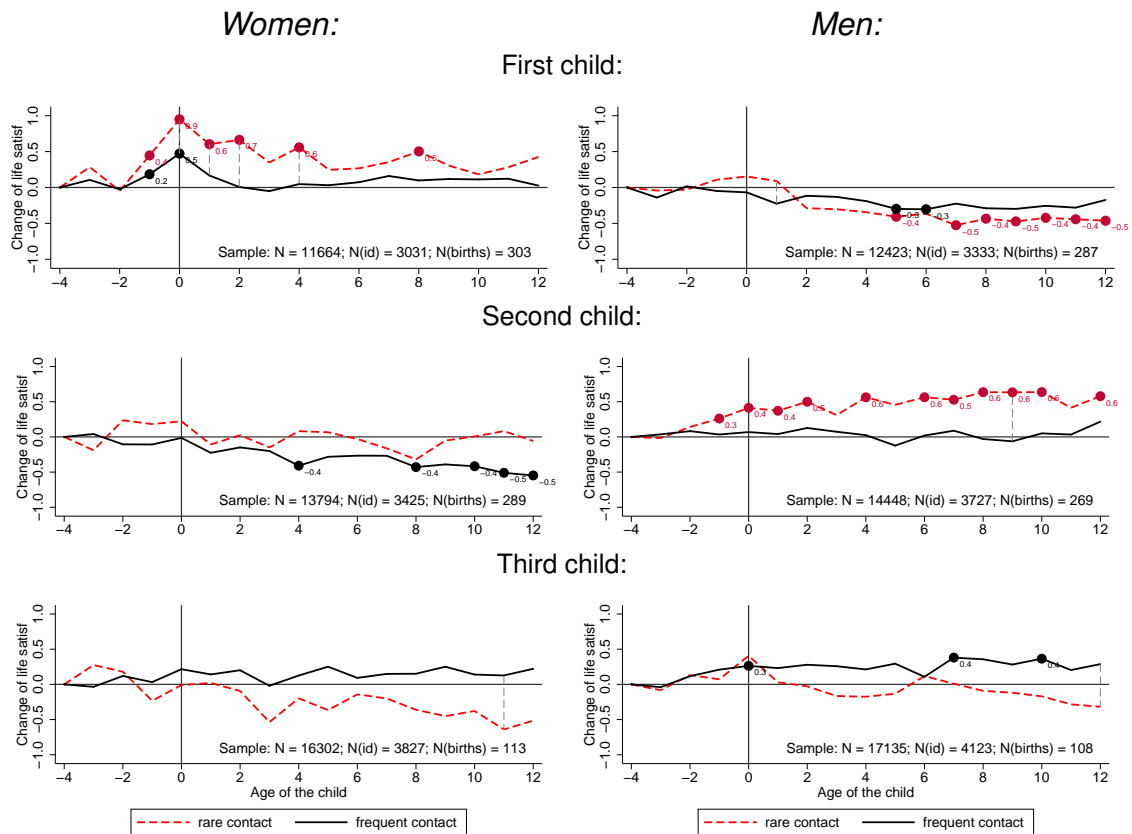
Figure 4: Changes of life satisfaction of (prospective) parents having frequent or rare contact with non-residing relatives. Separately for the first, second, and third child. Values refer to number of contacts per month.

Source: SHP data, waves 2-12.
Note: Estimation as in Equation 2. Reference category is the period 4 years or more before the birth.
Contact frequency is calculated for each individual as an average over the observation period. 'High contact frequency' refers to median or higher frequency of contact ($\geq$ 4 times per month); 'low contact frequency' refers to frequency of contact below median ($<$ 4 times per month). The vertical lines connecting the two trajectories of life satisfaction indicate the periods when the difference between the 'strong relationships' and the 'weak relationships' group is statistically significant. Predictions different from zero that are statistically significant are marked with dots. The labels show the exact value of the predictions.

with their relatives experience stronger increase of life satisfaction during parenthood than mothers staying in more frequent contact with relatives. The difference is statistically significant when the child is one, two and four years old (see the vertical lines in Figure 4). Similar effect occurs for men having their second child: life satisfaction of men who have a rare contact with their relatives increases more than of men who have more frequent contact with relatives. The difference is statistically significant when the first child is nine year old.

Rather weak effects in opposite direction, i.e. in line with buffering mechanism, occur for mothers and fathers having their third child.

Availability of practical support After their first birth, women with low availability of practical support from relatives experience a stronger increase of life satisfaction than women with higher availability of practical support (Figure 5). The difference is statistically significant when the first child is 2 or older (see vertical lines in Figure 5). The size of the difference between low and high support groups takes the values between 0.5 and 0.8 point (on a scale from 0 to 10).

A different pattern occurs for women having their second child and men having their third child. In these cases the trajectory of life satisfaction is more positive or less negative among parents having access to higher levels of practical support from relatives (statistically significant for women when the second child is 7 and for men when the third child is 8).

Availability of emotional support Again, after their first birth, women having access to lower levels of emotional support from relatives experience more positive trajectory of life satisfaction than women having access to higher emotional support (vertical lines in Figure 6). The difference between the two groups remains constant over time, at the level of about 0.4-0.6 point.

Differences occur also for men having their third child but they are in accordance with buffering hypothesis. The trajectories of life satisfaction are more positive among fathers having access to higher emotional support of relatives. The difference is statistically significant already before the third birth and later when the
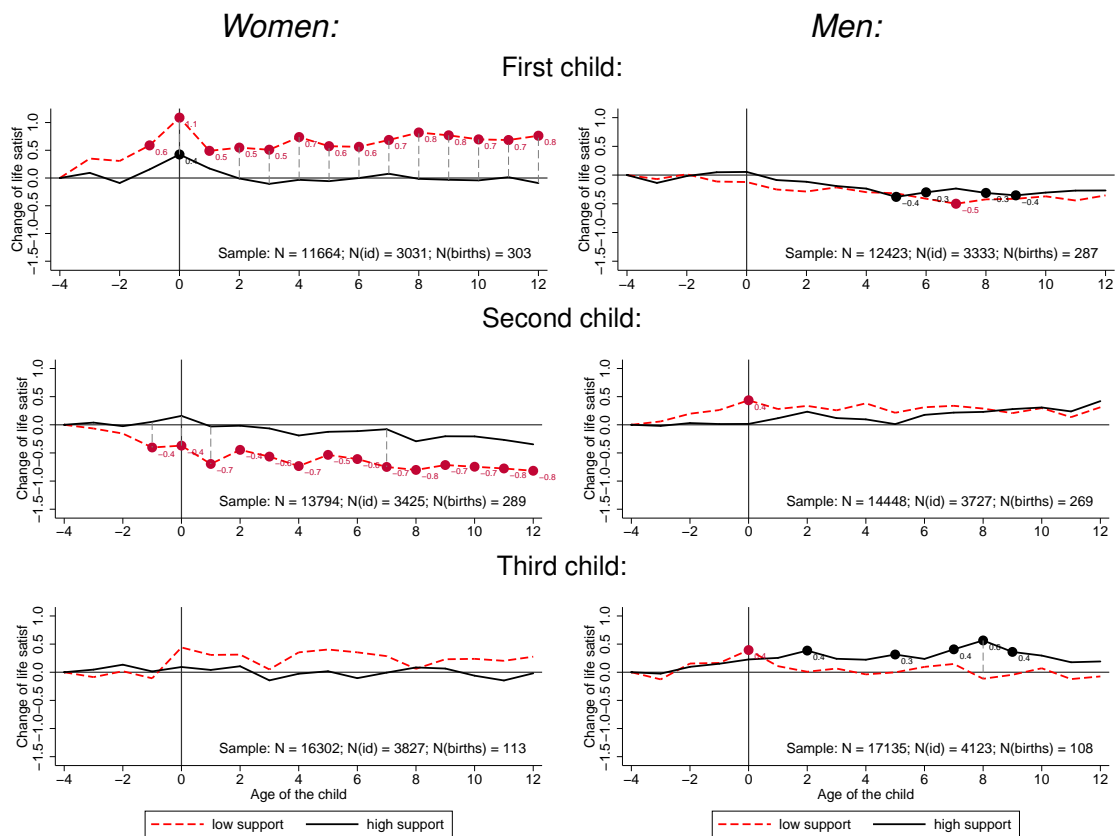
Figure 5: Change of life satisfaction of (prospective) parents receiving high and low practical support from relatives. Separately for the first, second, and third child.

Source: SHP data, waves 2-12.
Note: Estimation as in Equation 2. Reference category is the period 4 years or more before the birth.
Support is calculated for each individual as an average over the observation period. 'High support' refers to median or higher support (≥ 7); 'low support' refers to support below the median (< 7). The vertical lines connecting the two trajectories of life satisfaction indicate the periods when the difference between the 'strong relationships' and the 'weak relationships' group is statistically significant. Predictions different from zero that are statistically significant are marked with dots. The labels show the exact value of the predictions.
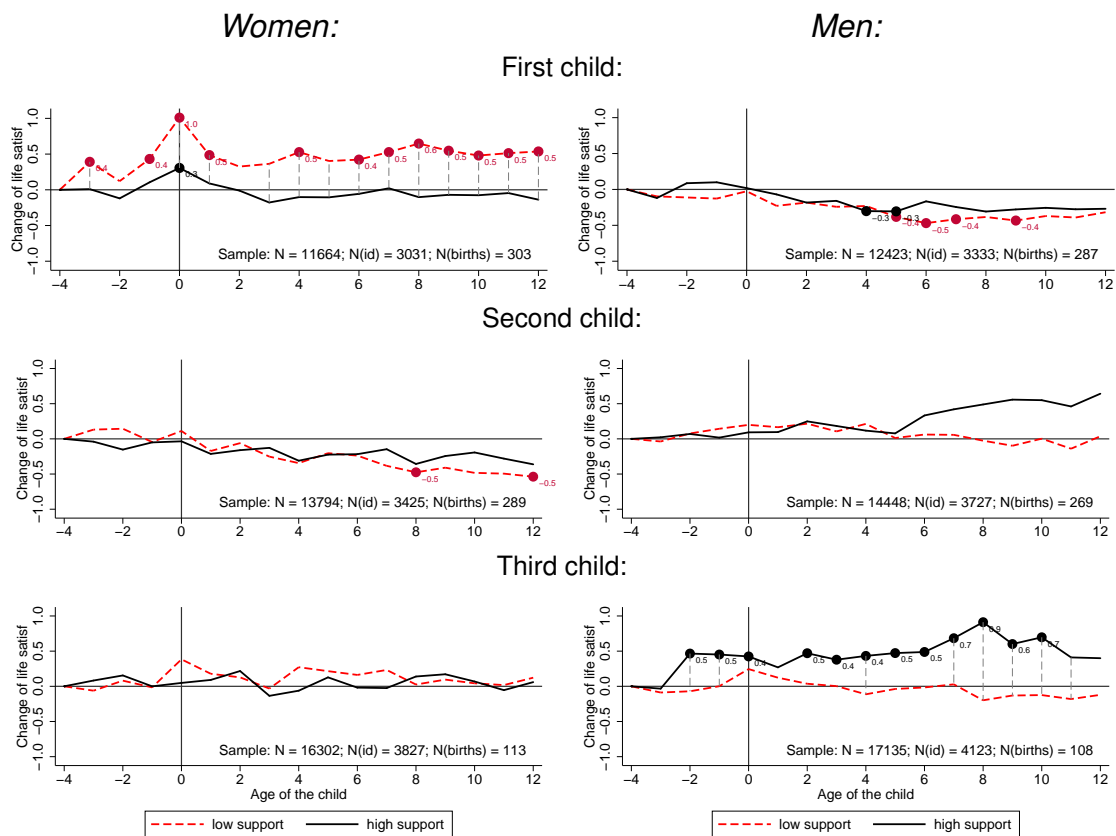
Figure 6: Predicted life satisfaction of (prospective) parents receiving high and low emotional support from relatives. Separately for the first, second, and third child.

Source: SHP data, waves 2-12.

Note: Estimation as in Equation 2. Reference category is the period 4 years or more before the birth.

Support is calculated for each individual as an average over the observation period. 'High support' refers to median or higher support (≥ 7.9); 'low support' refers to support below the median (< 7.9). The vertical lines connecting the two trajectories of life satisfaction indicate the periods when the difference between the 'strong relationships' and the 'weak relationships' group is statistically significant. Predictions different from zero that are statistically significant are marked with dots. The labels show the exact value of the predictions.

third child is 4, and 7 years old or older.

Summary Some of our results supported the buffering hypothesis, while others did not (see Table 3).

The results for second and third births for availability of practical and emotional support were partly consistent with buffering mechanism, in particular among mothers having second child for availability of practical support, and among men having the third child for availability of emotional support. In these cases, life satisfaction trajectories tended to be more positive among parents having better access to relatives' support than among parents having less access to relatives' support. These results suggest that availability of support from relatives may act as a resource for parents having two or more children, i.e. in cases when parenthood is usually more challenging.

Results for contact frequency tended to be opposite to predictions of buffering effect: mothers having the first child and fathers having the second child experienced more positive changes of life satisfaction if they had less frequent contact with their relatives. This is consistent with the work by Bost et al. (2002) and suggests that frequent contact with relatives may signify parental uncertainty or problems with childbearing.

The results on availability of practical and emotional support among women having their first child also contradicted the predictions of the buffering mechanism. Mothers who had better access to relatives' support experienced a smaller increase of life satisfaction after the birth of their first child than mothers having worse access to relatives' support. The difference between the two groups of mothers did not decrease as the child became older. Subsequent section further analyses these puzzling results.

3.3. **Additional analyses for first-time mothers**

The puzzling result for first-time mothers has not been reported by the literature before and the literature provides little clues about the possible explanations. We

Table 3: Synthesis of findings on buffering effect of family support during parenthood

Change in life satisfaction according to...	Women			Men		
	1st child	2nd child	3rd child	1st child	2nd child	3rd child
network size	–	–	–	–	some buffering effect	–
frequency of contact	unexpected effect	–	some buffering effect	–	unexpected effect	some buffering effect
availability of practical support	unexpected effect	**consistent buffering effect**	–	–	–	some buffering effect
availability of emotional support	unexpected effect	–	–	–	–	**consistent buffering effect**

formulate and test four possible explanations.

3.3.1. Endogeneity of relationships with relatives

Relationships with relatives may intensify in response to difficulties or problems experienced by the parents (as suggested by Bost et al., 2002). The literature showed that family help is provided in response to a crisis (Eggebeen and Davey, 1998; Silverstein et al., 2006). Such difficulties and problems experienced by parents may lower parental life satisfaction. Thus, it is possible that the higher life satisfaction of mothers with weaker relationships with relatives result from the fact that they experience less problems. To account for this possibility, we investigated the determinants of belonging to the 'strong relationships' group among women. 'Strong relationships' referred to above median size of the network of relatives, contact frequency, availability of practical support, or availability of emotional support from non-resident relatives. We defined the 'strong relationships' as a time invariant variable and regressed it on individual predictors using cross-sectional logistic models (see Table 10 in Appendix C).

Our results showed that the odds of belonging to the 'strong relationships' group are higher among women who are privileged in terms of education and income, mothers and prospective mothers, as well as women born in more recent cohorts. These results are not affected by including the migratory status in the model. This suggests that relationships with relatives should not be considered as coping

strategy of disadvantaged women, but rather as additional dimensions of social privilege.

3.3.2. Do strong relationships with relatives "suffocate" young mothers?

Second, it is possible that strong relationships with relatives are detrimental for life satisfaction of mothers, because they intervene in the life of young mothers too strongly. Such relationship may be "suffocating" and may decrease life satisfaction of young mothers. To inspect this hypothesis we conducted an additional analysis of buffering effect, in which we we divide first-time mothers into three rather than two groups: 'weak relationships', 'middle relationships', and 'very strong relationships' with relatives.[1] We tests if middle intensity of relationships is more conductive to parental life satisfaction than weak or very strong relationships.

The results are presented in section D (see Figure 8). We did not observe the hypothesized situation. For all covered aspects of relationships with relatives, life satisfaction was consistently most positive among women with least intense relationships and intermediate among women with medium intensity of relationships.

3.3.3. Different motivation for parenthood

It is possible that women with weaker relationships with relatives forecast that they will not be able to count on relatives' support and therefore they decide to have the child only if they are very strongly motivated. In other words, a consequence of weak relationships with relatives may be a stronger selection to parenthood on preferences. Thus, the life satisfaction trajectories of women with stronger relationships may be less positive because of their lower, on average, desire to become mothers.

This hypothesis did not find support in the data. Among women with large network of relatives and who eventually had their first child during the panel, 73% declared

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[1]As previously, the groups are defined as time-invariant. Low intensity of relationships is defined as under the 25th percentile, the middle intensity of relationships is defined as values between 25th and 75th percentile, and the very intense relationships with relatives are defined as the one above the 75th percentile. The 25th percentile takes the value of 5.5 for practical support, and 6.67 for emotional support. The 75th percentile takes the value of 8.56 for practical support, and 9 for emotional support.

that they were planning to have a child 2-4 years before the first birth, whereas among women with small network of relatives only 61% planned to have a child. The respective percentages for frequent and rare contact were 71% and 53%; for high and low availability of practical support they were 70% and 43%; and for high and low availability of emotional support they were 70% and 54%. Thus, as we found no evidence that mothers with less contact with relatives and support are more determined to have a child.

3.3.4. Initial life satisfaction

Finally, it is possible that life satisfaction of women who have strong relationships with relatives is high independently of parenthood. Thus, after the birth their life satisfaction cannot increase as much as life satisfaction of women who have weaker relationships with their relatives and thus are less happy ('ceiling effect'). To investigate this hypothesis we re-estimated the models of buffering effect by distinguishing women whose life satisfaction was under and above the median value before the birth of the child (see Figure 7).

Data confirmed the relationship between access to relatives' support and life satisfaction (for availability of practical support: $\mu_0 = 8.1$, $\mu_1 = 8.4$, $P(\mu_0 < \mu_1) = 0.0067$; for availability of emotional support: $\mu_0 = 8.1$, $\mu_1 = 8.5$, $P(\mu_0 < \mu_1) = 0.0000$).
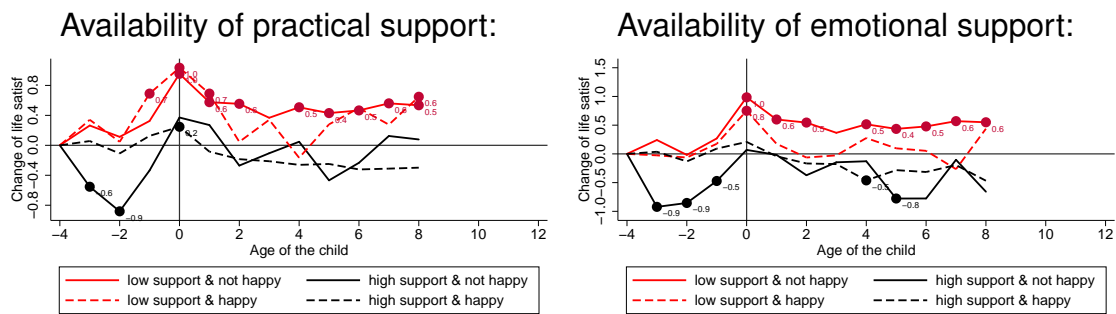
Figure 7: Predicted changes of life satisfaction of (prospective) first-time mothers belonging to the groups defined by (a) the pre-birth level of happiness and (b) the availability of relatives' support.

Source: SHP data, waves 2-12.
Note: Reference category is the period 4 or more years before the birth. The graphs show predictions (β coefficients); the predictions statistically significantly different from zero are marked with dots. The labels show the exact value of the prediction.

Two results stand out at Figure 7. First, mothers who have access to less support from their relatives and who had initially low life satisfaction experienced consis-

tently highest increase of life satisfaction compared to the period 2-3 years before the first birth. Second, women whose pre-birth life satisfaction was high and who have good access to relatives' support experienced relatively small changes of life satisfaction after the birth. These results suggest that differences in the initial level of life satisfaction partly explain the puzzling results obtained for buffering effect among first-time mothers. Women who have overall weaker relationships with relatives are on average less happy before the birth and for this reason they experience a stronger increase of life satisfaction following the birth.

4. Discussion

The goal of this analysis was to investigate the buffering effect of relationships with relatives on parental life satisfaction in Switzerland. We expected to observe two elements of buffering effect. First, we forecast that strength of relationships with relatives increased in response to parenthood. Second, we expected that stronger relationships with relatives would correlate with more positive trajectories of parental life satisfaction. In other words, we hypothesized that strong relationship with relatives would make parenthood easier and thus more satisfactory, especially in the Swiss context of low public support for parenthood.

Our results showed that birth of the first child positively correlated with frequency of contacts with non-resident relatives. The change was substantial (2-3 contacts fer month more) and long-term. Other measures of relationships with relatives (i.e. number of relatives with whom one is on good terms, and availability of practical and emotional support) did not increase neither in response to births, nor in later stages of parenthood. The "no change" result for network size and availability of support is consistent with previous studies showing that family networks are stable during parenthood (Bost et al., 2002; Kalmijn, 2012). However, contrary to Kalmijn (2012) for the same data, we observed a long-term increase of frequency of contact with relatives upon entering parenthood by women, which is consistent with work by Munch et al. (1997).

Furthermore, contrary to our expectations, relationships with relatives eroded

more among parents having three children than among persons having two children or less. Specifically, fathers having third child experienced consistently stronger erosion of network size and availability of emotional support than men having two children or less. Similar decline among mothers occurred for emotional support. This pattern may be explained by the lack of time of parents in larger families. For fathers, also strong career investments may limit their capability to invest in relationships with relatives. These results have not been reported in the literature before and they seem an interesting field for further investigations.

The second aspect of buffering effect investigated by this paper was the life satisfaction advantage of parents having stronger relationships with their relatives over parents whose relationships with relatives were weaker. We found some evidence of such 'buffering effect' among parents having their second and third child. However, we observed no life satisfaction advantage of strong relationships with relatives among parents having their first child. This suggests that relationships with relatives are more important in families having two or more children than in families with only one child. This is plausible, as demands of parenthood are likely higher at higher parity levels, when the financial costs and the constraints on parental time are greater.

Paradoxically, our results have shown that first-time mothers having access to less practical and emotional support experienced a stronger increase of life satisfaction during parenthood than mothers with better access to relatives' support. Our additional tests demonstrated that this result is partly driven by the fact that mothers with better access to relatives' support are more satisfied with their lives already before the first birth, thus their life satisfaction cannot increase much in response to the birth.

This research has limitations. First, the variables do not allow us to understand who are the non-resident relatives. In other words, we do not know if respondents refer to their relationship with their own parents, parents-in-law, sibling, or other relatives. We have no access to information if parents of respondents are alive, and how closely they reside. (Such information has been included in the 2013

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wave; however, as a considerable share of respondents in our sample did not participate in this wave, we do not use the information in the present analysis.) This is a shortcoming, because grandparents may provide more support during parenthood than other relatives. Second, we have no access to various types of information relevant for parental well-being, such as, for example, health of the child. Third, even though we use several measures of relationships with relatives, we are constrained to measures available in the data and we cannot account for potentially important aspects of relationships, such as emotional closeness, conflict, or distance of residence.

The take-home message from our study is that becoming a parent does not automatically strengthen the relationships with non-resident relatives. However, we found evidence that support from relatives is a resource for parents, especially those with two or more children. Life satisfaction of parents of two or three children increases more in response to parenthood if the parents have better access to support from their relatives. The importance of relatives for families with two children or more may be a signal of their frailty and point to the role of family policies.

These results pertains to an affluent society, where majority of parents are relatively old, have a stable economic situation, and are married. Even in such secure social conditions, where parents seem economically prepared for challenges of parenthood, relationships with relatives protect life satisfaction of parents. This may be related to the limited support for parenthood offered by the state in Switzerland; thus, generality of this conclusion should be verified by future research.

A Predictors of dynamics of relationships with relatives during parenthood

Table 4: Predictors of dynamics of relationships with relatives. First child.

	Women:				Men:			
	Size of network (1)	Contact frequency[a] (2)	Practical support[b] (3)	Emotional support[b] (4)	Size of network (5)	Contact frequency[a] (6)	Practical support[b] (7)	Emotional support[b] (8)
Age of the first child:								
4 years before birth				*reference category*				
3 years before birth	0.49	−0.38	0.13	0.05	−0.26	−0.13	0.01	−0.27
	(0.300)	(0.523)	(0.527)	(0.792)	(0.568)	(0.818)	(0.940)	(0.092)+
2 years before birth	0.40	−0.45	0.42	0.27	−0.53	−0.65	0.04	0.08
	(0.282)	(0.412)	(0.023)*	(0.080)+	(0.246)	(0.163)	(0.795)	(0.581)
1 year before birth	0.43	−1.10	0.08	0.04	−0.25	−0.49	0.11	−0.05
	(0.214)	(0.074)+	(0.672)	(0.799)	(0.605)	(0.392)	(0.534)	(0.760)
birth	0.56	1.24	−0.14	−0.07	0.05	0.48	0.25	−0.01
	(0.180)	(0.080)+	(0.551)	(0.709)	(0.931)	(0.460)	(0.212)	(0.978)
1 years old	0.11	2.76	−0.09	−0.10	−0.17	−0.43	−0.02	0.04
	(0.803)	(0.031)*	(0.716)	(0.667)	(0.774)	(0.557)	(0.926)	(0.820)
2 years old	−0.06	1.95	−0.12	−0.17	−1.32	−0.15	0.21	−0.07
	(0.897)	(0.028)*	(0.649)	(0.474)	(0.044)*	(0.848)	(0.369)	(0.734)
3 years old	−0.12	2.43	0.01	−0.12	−1.12	−0.17	0.06	−0.32
	(0.816)	(0.012)*	(0.985)	(0.629)	(0.077)+	(0.839)	(0.823)	(0.162)
4 years old	0.19	2.18	−0.07	−0.07	−1.02	−1.18	0.15	−0.09
	(0.734)	(0.048)*	(0.812)	(0.792)	(0.127)	(0.184)	(0.599)	(0.736)
5 years old	0.03	2.19	−0.09	−0.21	−0.99	−0.91	−0.01	−0.16
	(0.955)	(0.064)+	(0.781)	(0.448)	(0.152)	(0.320)	(0.962)	(0.546)
6 years old	0.08	1.50	−0.14	−0.09	−1.16	−0.64	0.01	−0.24
	(0.898)	(0.201)	(0.674)	(0.751)	(0.108)	(0.514)	(0.961)	(0.410)
7 years old	0.09	2.44	−0.29	−0.09	−0.83	−0.63	0.02	−0.27
	(0.887)	(0.042)*	(0.391)	(0.747)	(0.316)	(0.535)	(0.956)	(0.377)
8 years old	0.28	1.67	−0.07	0.03	−0.89	−1.12	−0.09	−0.20
	(0.684)	(0.184)	(0.844)	(0.911)	(0.243)	(0.252)	(0.795)	(0.517)
9 years old	0.16	2.96	−0.05	0.13	−0.73	−1.03	−0.06	−0.22
	(0.820)	(0.070)+	(0.884)	(0.670)	(0.349)	(0.319)	(0.867)	(0.478)
10 years old	0.61	2.58	−0.13	−0.03	−1.01	−0.95	−0.04	−0.17
	(0.402)	(0.061)+	(0.719)	(0.918)	(0.206)	(0.366)	(0.921)	(0.595)
11 years old	−0.09	1.65	−0.11	−0.06	−1.02	−1.26	−0.12	−0.30
	(0.898)	(0.243)	(0.762)	(0.864)	(0.212)	(0.246)	(0.749)	(0.372)
12 years old	0.30	1.91	−0.06	0.02	−0.73	−1.14	−0.21	−0.40
	(0.678)	(0.245)	(0.876)	(0.961)	(0.385)	(0.308)	(0.570)	(0.251)
Other children:								
birth of the 2nd child	−0.07	−0.78	−0.02	−0.14	0.49	−0.02	−0.07	0.24
	(0.848)	(0.226)	(0.890)	(0.380)	(0.332)	(0.973)	(0.676)	(0.123)
2nd child present	−0.13	0.43	−0.15	−0.01	−0.52	−0.19	0.12	−0.05
	(0.719)	(0.548)	(0.343)	(0.924)	(0.273)	(0.712)	(0.532)	(0.769)
birth of the 3rd child	−0.67	0.98	0.07	0.02	−0.95	−0.83	−0.04	0.21
	(0.141)	(0.316)	(0.750)	(0.935)	(0.140)	(0.274)	(0.884)	(0.380)
3rd child present	0.42	−0.72	−0.22	−0.22	−0.01	1.13	−0.05	−0.37
	(0.348)	(0.448)	(0.312)	(0.222)	(0.984)	(0.198)	(0.857)	(0.092)+
birth of the 4th child	0.25	1.90	0.26	0.43	0.02	−1.15	−0.74	−0.69
	(0.878)	(0.234)	(0.562)	(0.284)	(0.986)	(0.605)	(0.037)*	(0.028)*
4th child present	−0.02	0.04	−0.60	−0.35	−0.51	−1.87	0.65	0.51
	(0.990)	(0.980)	(0.117)	(0.305)	(0.521)	(0.204)	(0.110)	(0.047)*
Control variables:								
age	−0.12	−0.06	0.05	0.02	−0.03	−0.07	0.05	0.03
	(0.041)*	(0.559)	(0.040)*	(0.449)	(0.647)	(0.362)	(0.060)+	(0.156)
age^2	0.00	0.01	0.00	−0.00	−0.00	−0.00	0.00	−0.00
	(0.096)+	(0.015)*	(0.706)	(0.915)	(0.377)	(0.185)	(0.137)	(0.944)
married				*reference category*				
never married	−1.33	−0.05	−0.10	−0.02	−0.89	0.06	−0.17	0.03
	(0.000)***	(0.935)	(0.497)	(0.864)	(0.058)+	(0.902)	(0.283)	(0.826)
divorced or separated	−0.93	−1.22	0.30	0.43	−1.11	−0.36	−0.06	−0.26
	(0.030)*	(0.197)	(0.149)	(0.032)*	(0.004)*	(0.637)	(0.830)	(0.264)
widowed	−2.64	2.68	0.46	−0.23	6.77	−0.42	0.63	0.49
	(0.269)	(0.518)	(0.273)	(0.717)	(0.091)+	(0.837)	(0.175)	(0.126)
year of divorce	−1.33	−1.10	0.10	0.54	−1.33	−1.05	−0.44	0.03
	(0.003)*	(0.207)	(0.675)	(0.014)*	(0.003)*	(0.193)	(0.203)	(0.922)

year of marriage	−0.41	−0.37	−0.19	−0.23	−0.14	0.27	−0.06	−0.04
	(0.215)	(0.535)	(0.144)	(0.080)+	(0.686)	(0.537)	(0.712)	(0.788)
health satisfaction	0.07	0.19	0.03	0.06	0.00	−0.08	0.05	0.05
	(0.184)	(0.004)*	(0.054)+	(0.000)***	(0.928)	(0.133)	(0.012)*	(0.025)*
household income	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00	0.00	−0.00
	(0.286)	(0.673)	(0.081)+	(0.210)	(0.544)	(0.209)	(0.961)	(0.524)
unemployed	0.03	−0.94	−0.03	0.05	0.32	0.87	0.03	0.16
	(0.954)	(0.231)	(0.901)	(0.812)	(0.501)	(0.065)+	(0.896)	(0.445)
waves 2-3	−0.38	−0.11	0.07	0.10	0.12	−0.15	0.05	0.13
	(0.196)	(0.857)	(0.556)	(0.402)	(0.723)	(0.696)	(0.700)	(0.323)
waves 4-6	−0.27	0.05	0.07	0.03	0.18	0.24	0.06	0.03
	(0.131)	(0.870)	(0.387)	(0.704)	(0.390)	(0.285)	(0.487)	(0.739)
waves 7-9				*reference category*				
waves 10-12	−0.28	0.14	−0.09	−0.06	−0.29	0.24	−0.16	−0.14
	(0.192)	(0.726)	(0.235)	(0.387)	(0.157)	(0.301)	(0.051)+	(0.088)+
Adjusted R^2	0.008	0.005	0.002	0.004	0.006	0.004	0.002	0.001
N(id)	3135	3135	3129	3131	3474	3472	3470	3467
Observations	12770	12760	12729	12713	13727	13712	13636	13622

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
+ $p < 0.1$; * $p < 0.05$; *** $p < 0.000$; *p*-values in parentheses;

Source: SHP data, waves 2-12.
Note: Fixed-effect estimates clustered on standard errors. Sample consists of women aged 25-50 years and men aged 25-60 years, including parents having the first child under the age of 13 and childless people.

Table 5: Predictors of dynamics of relationships with relatives. Second child.

	Women:				Men:			
	Size of network (1)	Contact frequency[a] (2)	Practical support[b] (3)	Emotional support[b] (4)	Size of network (5)	Contact frequency[a] (6)	Practical support[b] (7)	Emotional support[b] (8)
Age of the second child:								
4 years before birth				*reference category*				
3 years before birth	−0.27	−1.23	0.16	0.01	−0.60	1.50	−0.07	0.05
	(0.543)	(0.269)	(0.330)	(0.929)	(0.219)	(0.015)*	(0.678)	(0.790)
2 years before birth	−0.30	−1.82	−0.06	0.09	−0.15	0.98	0.04	0.00
	(0.476)	(0.247)	(0.746)	(0.589)	(0.804)	(0.142)	(0.836)	(0.983)
1 year before birth	−0.59	−0.42	0.13	0.10	−0.33	0.40	0.12	0.22
	(0.196)	(0.877)	(0.485)	(0.579)	(0.586)	(0.574)	(0.574)	(0.241)
birth	−0.37	−2.35	−0.11	−0.16	0.45	0.56	−0.00	0.46
	(0.454)	(0.216)	(0.624)	(0.471)	(0.533)	(0.470)	(0.988)	(0.042)*
1 years old	−0.56	−1.51	−0.16	−0.17	0.16	0.66	0.02	0.32
	(0.306)	(0.411)	(0.494)	(0.415)	(0.839)	(0.446)	(0.941)	(0.205)
2 years old	−0.47	−1.90	−0.30	−0.20	−0.09	0.68	0.01	0.45
	(0.410)	(0.210)	(0.225)	(0.391)	(0.916)	(0.453)	(0.973)	(0.089)+
3 years old	−0.75	−2.32	−0.26	−0.26	0.34	0.39	0.20	0.36
	(0.221)	(0.145)	(0.310)	(0.284)	(0.726)	(0.689)	(0.501)	(0.211)
4 years old	−0.46	−2.22	−0.53	−0.39	0.42	0.27	0.10	0.36
	(0.472)	(0.177)	(0.050)+	(0.131)	(0.710)	(0.791)	(0.743)	(0.242)
5 years old	0.00	−2.38	−0.40	−0.28	−0.09	0.73	−0.11	0.36
	(1.000)	(0.151)	(0.163)	(0.283)	(0.934)	(0.500)	(0.744)	(0.267)
6 years old	0.24	−2.77	−0.33	−0.29	−0.26	0.21	−0.00	0.10
	(0.734)	(0.094)+	(0.266)	(0.292)	(0.825)	(0.848)	(0.990)	(0.766)
7 years old	−0.20	−2.73	−0.46	−0.27	−0.08	0.11	−0.07	0.19
	(0.801)	(0.109)	(0.147)	(0.364)	(0.956)	(0.919)	(0.849)	(0.588)
8 years old	−0.35	−2.40	−0.47	−0.27	−0.30	0.03	−0.04	0.27
	(0.670)	(0.167)	(0.148)	(0.367)	(0.817)	(0.981)	(0.910)	(0.460)
9 years old	−0.31	−2.39	−0.49	−0.34	0.64	0.50	−0.07	0.31
	(0.703)	(0.181)	(0.146)	(0.264)	(0.689)	(0.671)	(0.855)	(0.405)
10 years old	−0.51	−1.74	−0.48	−0.21	0.22	0.80	0.19	0.32
	(0.553)	(0.382)	(0.175)	(0.508)	(0.874)	(0.510)	(0.616)	(0.409)
11 years old	−0.18	−2.49	−0.35	−0.38	0.14	0.39	0.12	0.37
	(0.844)	(0.191)	(0.339)	(0.262)	(0.923)	(0.750)	(0.754)	(0.353)
12 years old	−0.13	−2.08	−0.54	−0.43	0.30	1.02	0.10	0.41
	(0.891)	(0.283)	(0.150)	(0.214)	(0.831)	(0.414)	(0.801)	(0.310)
birth of the 1st child	−0.01	2.41	0.34	−0.07	0.02	1.25	0.17	0.15
	(0.980)	(0.006)*	(0.203)	(0.682)	(0.976)	(0.149)	(0.445)	(0.479)
1st child present	0.16	−2.25	−0.49	0.02	1.03	−1.10	−0.37	−0.37
	(0.821)	(0.062)+	(0.168)	(0.944)	(0.216)	(0.296)	(0.204)	(0.191)
birth of the 3rd child	−0.67	1.32	0.13	0.01	−1.16	−0.57	−0.01	0.30
	(0.143)	(0.163)	(0.539)	(0.973)	(0.084)+	(0.459)	(0.973)	(0.203)
3rd child present	0.39	−0.62	−0.13	−0.18	−0.19	0.96	−0.02	−0.39
	(0.363)	(0.481)	(0.529)	(0.298)	(0.793)	(0.237)	(0.949)	(0.078)+
birth of the 4th child	0.08	1.79	0.04	0.32	−0.96	−0.97	−0.76	−0.69
	(0.962)	(0.252)	(0.924)	(0.415)	(0.503)	(0.676)	(0.024)*	(0.027)*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4th child present	0.83	−0.86	−0.50	−0.46	0.85	−1.63	0.85	0.51
	(0.545)	(0.609)	(0.187)	(0.162)	(0.557)	(0.243)	(0.039)*	(0.032)*
birth of the 5th child	0.50	0.10	0.13	−0.53	−2.96	1.50	−2.45	−3.43
	(0.687)	(0.926)	(0.611)	(0.090)+	(0.374)	(0.475)	(0.245)	(0.070)+
5th child present	0.97	−2.55	−0.49	−0.24	4.48	−4.02	1.85	2.84
	(0.594)	(0.205)	(0.557)	(0.807)	(0.158)	(0.265)	(0.436)	(0.153)
age	−0.13	−0.06	0.06	0.03	−0.00	−0.13	0.04	0.03
	(0.014)*	(0.564)	(0.009)*	(0.172)	(0.988)	(0.046)*	(0.144)	(0.177)
age^2	0.00	0.01	0.00	−0.00	−0.00	−0.00	0.00	0.00
	(0.132)	(0.072)+	(0.690)	(0.982)	(0.242)	(0.409)	(0.042)*	(0.367)
never married	−1.34	0.00	−0.00	0.03	−0.82	0.36	−0.12	0.11
	(0.000)***	(0.996)	(0.992)	(0.835)	(0.084)+	(0.489)	(0.481)	(0.461)
divorced or separated	−1.12	−1.13	0.16	0.25	−0.69	−0.00	−0.09	−0.10
	(0.003)*	(0.228)	(0.457)	(0.209)	(0.159)	(1.000)	(0.699)	(0.634)
widowed	−0.08	0.05	0.51	0.31	4.36	−0.66	0.64	0.28
	(0.937)	(0.989)	(0.411)	(0.617)	(0.177)	(0.685)	(0.136)	(0.397)
year of divorce	−1.26	−0.65	0.25	0.68	−0.09	−0.69	−0.32	0.08
	(0.002)*	(0.434)	(0.311)	(0.004)*	(0.917)	(0.363)	(0.289)	(0.747)
year of marriage	−0.43	−0.65	−0.11	−0.20	−0.06	0.50	−0.03	0.05
	(0.180)	(0.312)	(0.403)	(0.125)	(0.869)	(0.238)	(0.865)	(0.712)
health satisfaction	0.10	0.18	0.04	0.06	0.05	−0.07	0.04	0.04
	(0.035)*	(0.003)*	(0.018)*	(0.000)***	(0.292)	(0.189)	(0.040)*	(0.038)*
household income	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00
	(0.947)	(0.817)	(0.056)+	(0.241)	(0.443)	(0.465)	(0.984)	(0.270)
unemployed	−0.35	−0.23	−0.07	0.09	0.43	0.87	−0.02	0.12
	(0.435)	(0.762)	(0.736)	(0.663)	(0.332)	(0.047)*	(0.917)	(0.548)
waves 2-3	−0.46	−0.03	0.02	0.04	0.16	−0.48	−0.02	0.12
	(0.087)+	(0.956)	(0.855)	(0.682)	(0.632)	(0.164)	(0.858)	(0.336)
waves 4-6	−0.22	0.13	0.05	0.00	0.21	0.07	0.03	0.06
	(0.189)	(0.637)	(0.442)	(0.949)	(0.324)	(0.749)	(0.653)	(0.445)
waves 10-12	−0.17	0.06	−0.18	−0.13	−0.33	0.28	−0.13	−0.13
	(0.378)	(0.865)	(0.017)*	(0.066)+	(0.125)	(0.188)	(0.087)+	(0.090)+
Adjusted R^2	0.007	0.005	0.003	0.004	0.005	0.004	0.002	0.001
N(id)	3535	3535	3529	3528	3871	3870	3868	3863
Observations	15077	15065	15029	15008	15843	15825	15744	15725

^{a} times per month
^{b} on a scale from 0 – *not at all* to 10 – *a great deal*
$^+ p < 0.1$; $^* p < 0.05$; $^{***} p < 0.000$; *p*-values in parentheses;

Source: SHP data, waves 2-12.
Note: Fixed-effect estimates clustered on standard errors. Sample consists of women aged 25-50 years and men aged 25-60 years, including parents having the second child under the age of 13, persons with one child, and childless people.

Table 6: Predictors of dynamics of relationships with relatives. Third child.

	Women:				Men:			
	Size of network (1)	Contact frequency^a (2)	Practical support^b (3)	Emotional support^b (4)	Size of network (5)	Contact frequency^a (6)	Practical support^b (7)	Emotional support^b (8)
Age of the third child:								
4 years before birth				*reference category*				
3 years before birth	0.42	−0.25	0.09	−0.36	−1.59	−1.47	−0.38	−0.12
	(0.389)	(0.812)	(0.696)	(0.074)+	(0.019)*	(0.067)+	(0.087)+	(0.570)
2 years before birth	0.77	0.28	0.10	−0.05	0.38	−0.16	−0.05	−0.15
	(0.121)	(0.770)	(0.626)	(0.794)	(0.615)	(0.838)	(0.858)	(0.518)
1 year before birth	−0.32	0.16	−0.07	0.02	−1.54	−1.27	−0.24	−0.31
	(0.496)	(0.867)	(0.754)	(0.909)	(0.046)*	(0.099)+	(0.304)	(0.183)
birth	−0.40	1.09	0.22	0.01	−1.38	−0.88	−0.15	−0.02
	(0.458)	(0.313)	(0.390)	(0.974)	(0.066)+	(0.363)	(0.558)	(0.935)
1 years old	−0.17	1.60	0.53	0.07	−1.72	−0.76	−0.32	−0.44
	(0.791)	(0.154)	(0.045)*	(0.739)	(0.054)+	(0.474)	(0.239)	(0.086)+
2 years old	−0.42	0.34	−0.09	−0.14	−2.05	−0.03	−0.25	−0.31
	(0.511)	(0.739)	(0.712)	(0.562)	(0.027)*	(0.981)	(0.357)	(0.250)
3 years old	−0.19	−0.34	−0.09	−0.29	−2.88	1.52	−0.28	−0.54
	(0.775)	(0.756)	(0.729)	(0.230)	(0.002)*	(0.277)	(0.378)	(0.070)+
4 years old	0.19	−0.51	−0.00	−0.46	−2.19	0.64	−0.44	−0.38
	(0.791)	(0.689)	(0.996)	(0.075)+	(0.038)*	(0.573)	(0.157)	(0.181)
5 years old	−0.51	−0.68	0.01	−0.43	−2.57	0.15	−0.27	−0.33
	(0.460)	(0.574)	(0.973)	(0.110)	(0.016)*	(0.888)	(0.397)	(0.278)
6 years old	0.87	−0.08	−0.26	−0.62	−2.35	0.04	−0.41	−0.69
	(0.251)	(0.952)	(0.403)	(0.030)*	(0.035)*	(0.970)	(0.230)	(0.031)*
7 years old	−0.35	−0.44	−0.16	−0.55	−3.43	−0.37	−0.41	−0.62
	(0.644)	(0.747)	(0.593)	(0.050)*	(0.002)*	(0.738)	(0.221)	(0.051)+
8 years old	−0.05	−1.59	−0.04	−0.61	−2.31	−0.85	−0.47	−0.44
	(0.945)	(0.248)	(0.896)	(0.037)*	(0.049)*	(0.438)	(0.174)	(0.172)
9 years old	−0.27	−1.99	−0.21	−0.72	−1.22	−0.82	−0.49	−0.68

	(0.742)	(0.145)	(0.534)	(0.017)*	(0.486)	(0.469)	(0.165)	(0.038)*
10 years old	−1.11	−1.38	−0.28	−0.73	−2.32	−0.63	−0.38	−0.43
	(0.176)	(0.316)	(0.398)	(0.014)*	(0.051)+	(0.577)	(0.300)	(0.207)
11 years old	−0.19	−1.67	−0.04	−0.70	−2.33	−0.94	−0.65	−0.83
	(0.827)	(0.230)	(0.919)	(0.023)*	(0.063)+	(0.422)	(0.083)+	(0.020)*
12 years old	−1.49	−1.62	−0.59	−0.82	−2.18	−0.42	−0.69	−1.02
	(0.082)+	(0.249)	(0.108)	(0.010)*	(0.107)	(0.723)	(0.074)+	(0.004)*
birth of the 1st child	−0.05	2.36	0.33	−0.08	0.12	1.31	0.20	0.16
	(0.935)	(0.007)*	(0.205)	(0.676)	(0.867)	(0.130)	(0.390)	(0.444)
1st child present	0.33	−2.44	−0.58	−0.10	0.57	−1.40	−0.46	−0.35
	(0.611)	(0.016)*	(0.057)+	(0.644)	(0.436)	(0.133)	(0.069)+	(0.137)
birth of the 2nd child	−0.24	1.36	0.22	0.02	−0.06	0.61	−0.05	−0.01
	(0.691)	(0.151)	(0.441)	(0.949)	(0.932)	(0.507)	(0.859)	(0.982)
2nd child present	−0.75	−1.34	−0.70	−0.32	0.50	−1.29	0.10	−0.06
	(0.321)	(0.256)	(0.040)*	(0.293)	(0.483)	(0.198)	(0.748)	(0.849)
birth of the 4th child	−0.31	1.60	0.12	0.35	−0.84	−1.14	−0.68	−0.54
	(0.846)	(0.301)	(0.772)	(0.367)	(0.493)	(0.615)	(0.052)+	(0.083)+
4th child present	0.72	−0.01	−0.37	−0.31	0.94	−1.18	0.95	0.55
	(0.603)	(0.996)	(0.319)	(0.348)	(0.442)	(0.357)	(0.028)*	(0.023)*
birth of the 5th child	−0.09	−1.38	−0.15	−0.91	−2.18	0.09	−2.53	−3.49
	(0.968)	(0.411)	(0.796)	(0.174)	(0.281)	(0.974)	(0.235)	(0.051)+
5th child present	3.23	2.18	−0.25	0.26	3.05	−0.43	1.90	2.91
	(0.296)	(0.392)	(0.608)	(0.570)	(0.076)+	(0.858)	(0.389)	(0.092)+
age	−0.13	−0.09	0.06	0.04	−0.03	−0.15	0.06	0.04
	(0.021)*	(0.293)	(0.005)*	(0.059)+	(0.539)	(0.021)*	(0.017)*	(0.078)+
age^2	0.00	0.00	0.00	−0.00	−0.00	−0.00	0.00	0.00
	(0.319)	(0.247)	(0.705)	(0.721)	(0.130)	(0.771)	(0.007)*	(0.068)+
never married	−1.29	0.02	0.01	0.06	−0.84	0.39	−0.04	0.18
	(0.000)***	(0.976)	(0.927)	(0.636)	(0.071)+	(0.443)	(0.814)	(0.248)
divorced or separated	−1.07	−1.00	0.15	0.22	−0.76	0.10	−0.20	−0.06
	(0.002)*	(0.193)	(0.428)	(0.204)	(0.063)+	(0.851)	(0.319)	(0.756)
widowed	−1.68	−0.54	−0.07	−0.02	2.47	1.86	1.40	1.23
	(0.251)	(0.822)	(0.921)	(0.974)	(0.366)	(0.394)	(0.024)*	(0.058)+
year of divorce	−1.28	−0.86	0.10	0.41	−0.28	−0.28	−0.33	0.09
	(0.001)***	(0.231)	(0.664)	(0.075)+	(0.705)	(0.688)	(0.194)	(0.658)
year of marriage	−0.36	−0.63	−0.10	−0.16	−0.05	0.54	0.05	0.09
	(0.250)	(0.313)	(0.439)	(0.206)	(0.880)	(0.183)	(0.722)	(0.541)
health satisfaction	0.05	0.14	0.03	0.05	0.05	−0.09	0.03	0.02
	(0.240)	(0.008)*	(0.029)*	(0.000)***	(0.259)	(0.054)+	(0.162)	(0.180)
household income	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00
	(0.871)	(0.856)	(0.173)	(0.273)	(0.530)	(0.482)	(0.661)	(0.114)
unemployed	−0.14	−0.32	−0.01	0.09	0.26	0.81	−0.07	0.06
	(0.736)	(0.654)	(0.974)	(0.661)	(0.535)	(0.066)+	(0.730)	(0.770)
waves 2-3	−0.45	−0.22	0.06	0.07	−0.03	−0.51	0.03	0.14
	(0.125)	(0.622)	(0.575)	(0.490)	(0.924)	(0.111)	(0.806)	(0.217)
waves 4-6	−0.20	0.08	0.08	0.03	0.09	0.13	0.07	0.09
	(0.270)	(0.735)	(0.270)	(0.620)	(0.626)	(0.500)	(0.318)	(0.198)
waves 10-12	−0.25	−0.05	−0.17	−0.15	−0.26	0.41	−0.20	−0.12
	(0.182)	(0.866)	(0.012)*	(0.016)*	(0.167)	(0.031)*	(0.005)*	(0.098)+
Adjusted R^2	0.007	0.004	0.004	0.003	0.007	0.005	0.004	0.002
N(id)	3938	3937	3932	3931	4270	4269	4264	4261
Observations	17744	17729	17690	17671	18613	18595	18494	18471

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
+ $p < 0.1$; * $p < 0.05$; *** $p < 0.000$; *p*-values in parentheses;

Source: SHP data, waves 2-12.
Note: Fixed-effect estimates clustered on standard errors. Sample consists of women aged 25-50 years and men aged 25-60 years, including parents having the third child under the age of 13, persons with one or two children, and childless people.

B Predictors of dynamics of life satisfaction during parenthood among parents with stronger and weaker relationships with relatives

Table 7: Predictors of dynamics of life satisfaction. First child.

	Women:				Men:			
	Size of network (1)	Contact frequency[a] (2)	Practical support[b] (3)	Emotional support[b] (4)	Size of network (5)	Contact frequency[a] (6)	Practical support[b] (7)	Emotional support[b] (8)
Age of the first child:								
4 years before birth				reference category				
3 years before birth	0.23	0.28	0.35	0.39	−0.06	−0.04	−0.07	−0.10
	(0.121)	(0.225)	(0.239)	(0.059)+	(0.643)	(0.732)	(0.636)	(0.431)
3 years before birth x strong rel.	−0.19	−0.18	−0.26	−0.38	−0.10	−0.10	−0.07	−0.02
	(0.322)	(0.485)	(0.410)	(0.098)+	(0.571)	(0.558)	(0.709)	(0.896)
2 years before birth	0.06	−0.05	0.31	0.12	−0.08	−0.03	0.01	−0.11
	(0.663)	(0.827)	(0.205)	(0.504)	(0.428)	(0.804)	(0.927)	(0.343)
2 years before birth x strong rel.	−0.17	0.02	−0.40	−0.24	0.14	0.05	−0.03	0.20
	(0.361)	(0.929)	(0.127)	(0.249)	(0.362)	(0.770)	(0.857)	(0.196)
1 year before birth	0.36	0.45	0.59	0.43	−0.07	0.11	−0.11	−0.13
	(0.018)*	(0.047)*	(0.021)*	(0.015)*	(0.517)	(0.368)	(0.542)	(0.388)
1 year before birth x strong rel.	−0.24	−0.26	−0.43	−0.33	0.13	−0.16	0.16	0.23
	(0.206)	(0.281)	(0.108)	(0.104)	(0.426)	(0.340)	(0.420)	(0.194)
birth	0.68	0.95	1.09	1.01	−0.04	0.15	−0.12	−0.03
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.774)	(0.284)	(0.581)	(0.879)
birth x strong relationships	−0.22	−0.48	−0.66	−0.70	0.08	−0.22	0.18	0.04
	(0.288)	(0.035)*	(0.013)*	(0.002)*	(0.669)	(0.231)	(0.446)	(0.822)
1 years old	0.33	0.60	0.49	0.49	−0.10	0.09	−0.25	−0.23
	(0.089)+	(0.002)*	(0.036)*	(0.033)*	(0.507)	(0.572)	(0.227)	(0.127)
1 years old x strong relationships	−0.16	−0.44	−0.32	−0.40	−0.04	−0.32	0.16	0.16
	(0.460)	(0.046)*	(0.204)	(0.097)+	(0.824)	(0.096)+	(0.445)	(0.384)
2 years old	0.13	0.66	0.55	0.33	−0.28	−0.29	−0.29	−0.18
	(0.484)	(0.007)*	(0.020)*	(0.130)	(0.108)	(0.115)	(0.192)	(0.301)
2 years old x strong relationships	−0.02	−0.66	−0.56	−0.34	0.18	0.17	0.17	0.00
	(0.935)	(0.011)*	(0.028)*	(0.151)	(0.378)	(0.412)	(0.462)	(0.999)
3 years old	0.10	0.35	0.51	0.36	−0.32	−0.30	−0.21	−0.24
	(0.608)	(0.176)	(0.042)*	(0.115)	(0.101)	(0.143)	(0.365)	(0.224)
3 years old x strong relationships	−0.14	−0.40	−0.62	−0.54	0.21	0.17	0.02	0.08
	(0.571)	(0.152)	(0.025)*	(0.035)*	(0.353)	(0.462)	(0.925)	(0.711)
4 years old	0.19	0.56	0.74	0.53	−0.26	−0.34	−0.30	−0.23
	(0.376)	(0.023)*	(0.007)*	(0.027)*	(0.187)	(0.112)	(0.206)	(0.258)
4 years old x strong relationships	−0.10	−0.51	−0.77	−0.63	0.02	0.15	0.06	−0.07
	(0.696)	(0.060)+	(0.009)*	(0.019)*	(0.932)	(0.536)	(0.808)	(0.765)
5 years old	0.23	0.25	0.57	0.40	−0.25	−0.41	−0.32	−0.38
	(0.295)	(0.375)	(0.036)*	(0.103)	(0.244)	(0.082)+	(0.199)	(0.078)+
5 years old x strong relationships	−0.27	−0.21	−0.63	−0.51	−0.16	0.11	−0.06	0.08
	(0.295)	(0.472)	(0.032)*	(0.060)+	(0.527)	(0.680)	(0.820)	(0.759)
6 years old	0.34	0.27	0.56	0.42	−0.34	−0.37	−0.41	−0.47
	(0.135)	(0.338)	(0.040)*	(0.093)+	(0.106)	(0.121)	(0.100)	(0.033)*
6 years old x strong relationships	−0.40	−0.19	−0.56	−0.48	0.02	0.06	0.11	0.30
	(0.149)	(0.527)	(0.062)+	(0.095)+	(0.950)	(0.816)	(0.685)	(0.230)
7 years old	0.34	0.35	0.69	0.53	−0.33	−0.53	−0.50	−0.42
	(0.139)	(0.229)	(0.018)*	(0.044)*	(0.134)	(0.025)*	(0.055)+	(0.068)+
7 years old x strong relationships	−0.25	−0.19	−0.61	−0.51	−0.00	0.30	0.26	0.17
	(0.369)	(0.543)	(0.051)+	(0.085)+	(0.991)	(0.261)	(0.346)	(0.514)
8 years old	0.38	0.50	0.82	0.65	−0.32	−0.43	−0.42	−0.38
	(0.108)	(0.083)+	(0.004)*	(0.014)*	(0.160)	(0.084)+	(0.111)	(0.101)
8 years old x strong relationships	−0.35	−0.40	−0.83	−0.75	−0.03	0.14	0.11	0.08
	(0.203)	(0.192)	(0.007)*	(0.010)*	(0.901)	(0.603)	(0.696)	(0.772)
9 years old	0.30	0.31	0.77	0.55	−0.26	−0.47	−0.41	−0.43
	(0.212)	(0.295)	(0.008)*	(0.039)*	(0.277)	(0.059)+	(0.125)	(0.068)+
9 years old x strong relationships	−0.26	−0.19	−0.80	−0.62	−0.17	0.17	0.06	0.15
	(0.345)	(0.543)	(0.009)*	(0.033)*	(0.524)	(0.530)	(0.836)	(0.563)
10 years old	0.16	0.18	0.70	0.48	−0.30	−0.42	−0.37	−0.37
	(0.520)	(0.551)	(0.019)*	(0.080)+	(0.215)	(0.094)+	(0.171)	(0.121)
10 years old x strong relationships	−0.07	−0.07	−0.74	−0.56	−0.02	0.17	0.07	0.11
	(0.799)	(0.827)	(0.017)*	(0.059)+	(0.940)	(0.544)	(0.818)	(0.664)
11 years old	0.31	0.28	0.68	0.51	−0.27	−0.44	−0.44	−0.39
	(0.212)	(0.362)	(0.025)*	(0.065)+	(0.261)	(0.088)+	(0.105)	(0.106)
11 years old x strong relationships	−0.29	−0.16	−0.67	−0.56	−0.10	0.16	0.17	0.11
	(0.304)	(0.618)	(0.035)*	(0.061)+	(0.712)	(0.565)	(0.549)	(0.673)
12 years old	0.24	0.43	0.76	0.54	−0.28	−0.46	−0.35	−0.32

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(0.340)	(0.169)	(0.012)*	(0.056)+	(0.258)	(0.088)+	(0.211)	(0.207)
12 years old x strong relationships	−0.24	−0.40	−0.85	−0.67	0.01	0.29	0.09	0.05
	(0.409)	(0.209)	(0.006)*	(0.023)*	(0.984)	(0.321)	(0.773)	(0.863)
birth: 2nd child	0.20	0.11	−0.09	0.11	0.10	0.18	0.21	0.02
	(0.100)	(0.550)	(0.573)	(0.418)	(0.434)	(0.201)	(0.154)	(0.896)
birth: 2nd child x strong rel.	−0.08	0.08	0.33	0.07	−0.13	−0.23	−0.31	0.00
	(0.636)	(0.705)	(0.071)+	(0.664)	(0.450)	(0.190)	(0.091)+	(0.996)
2nd child present	−0.28	−0.14	−0.28	−0.23	−0.16	−0.09	−0.15	−0.00
	(0.036)*	(0.489)	(0.101)	(0.098)+	(0.176)	(0.500)	(0.293)	(0.987)
2nd child present x strong rel.	0.13	−0.10	0.07	0.01	0.27	0.13	0.25	0.01
	(0.469)	(0.648)	(0.716)	(0.949)	(0.102)	(0.439)	(0.151)	(0.973)
birth: 3rd child	0.18	0.41	0.60	0.37	0.21	0.52	0.43	0.31
	(0.414)	(0.235)	(0.049)*	(0.079)+	(0.360)	(0.094)+	(0.044)*	(0.066)+
birth: 3rd child x strong rel.	−0.02	−0.28	−0.57	−0.35	0.16	−0.30	−0.24	0.01
	(0.944)	(0.451)	(0.094)+	(0.193)	(0.565)	(0.375)	(0.342)	(0.980)
3rd child present	−0.09	−0.30	−0.35	−0.42	−0.44	−0.67	−0.49	−0.32
	(0.674)	(0.434)	(0.259)	(0.033)*	(0.099)+	(0.051)+	(0.036)*	(0.084)+
3rd child present x strong rel.	0.01	0.24	0.34	0.53	0.31	0.57	0.46	0.18
	(0.971)	(0.565)	(0.321)	(0.042)*	(0.315)	(0.118)	(0.090)+	(0.491)
birth: 4th child	−0.33	−1.91	−0.76	−0.43	−0.35	−0.27	−0.31	−0.18
	(0.532)	(0.010)*	(0.130)	(0.255)	(0.098)+	(0.210)	(0.144)	(0.271)
birth: 4th child x strong rel.	0.37	1.98	0.95	0.64	0.13	0.07	0.06	−0.50
	(0.525)	(0.010)*	(0.093)+	(0.167)	(0.691)	(0.829)	(0.869)	(0.235)
4th child present	−0.83	0.63	−0.12	−0.05	0.23	0.36	0.18	0.07
	(0.390)	(0.399)	(0.791)	(0.877)	(0.244)	(0.070)+	(0.343)	(0.657)
4th child present x strong rel.	0.75	−0.78	−0.02	−0.15	−0.07	−0.41	0.01	0.50
	(0.450)	(0.305)	(0.966)	(0.716)	(0.826)	(0.129)	(0.988)	(0.241)
age	−0.01	−0.01	−0.01	−0.01	−0.00	−0.01	−0.01	−0.00
	(0.604)	(0.617)	(0.599)	(0.609)	(0.712)	(0.673)	(0.670)	(0.700)
age^2	0.00	0.00	0.00	0.00	−0.00	−0.00	−0.00	−0.00
	(0.557)	(0.555)	(0.591)	(0.642)	(0.654)	(0.669)	(0.678)	(0.653)
never married	−0.06	−0.07	−0.08	−0.09	−0.23	−0.23	−0.23	−0.23
	(0.462)	(0.388)	(0.326)	(0.297)	(0.003)*	(0.002)*	(0.002)*	(0.002)*
divorced or separated	0.13	0.15	0.15	0.14	−0.07	−0.07	−0.07	−0.07
	(0.353)	(0.297)	(0.298)	(0.314)	(0.639)	(0.647)	(0.656)	(0.648)
year of divorce	−0.25	−0.25	−0.26	−0.26	−0.87	−0.87	−0.88	−0.88
	(0.222)	(0.224)	(0.217)	(0.212)	(0.001)***	(0.001)***	(0.001)***	(0.001)***
year of marriage	0.08	0.07	0.07	0.07	−0.04	−0.03	−0.04	−0.05
	(0.288)	(0.350)	(0.347)	(0.333)	(0.527)	(0.623)	(0.529)	(0.488)
widowed	−1.20	−1.12	−1.06	−1.04	−0.69	−0.69	−0.69	−0.71
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.139)	(0.131)	(0.131)	(0.110)
health satisfaction	0.15	0.15	0.15	0.15	0.13	0.13	0.13	0.13
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
household income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.038)*	(0.036)*	(0.039)*	(0.031)*	(0.022)*	(0.018)*	(0.019)*	(0.019)*
unemployed	−0.26	−0.26	−0.25	−0.26	−0.67	−0.66	−0.66	−0.66
	(0.094)+	(0.102)	(0.113)	(0.098)+	(0.000)***	(0.000)***	(0.000)***	(0.000)***
support from partner	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
support from neighbors	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
	(0.295)	(0.305)	(0.339)	(0.326)	(0.180)	(0.147)	(0.152)	(0.144)
support from colleages	−0.00	−0.00	−0.00	−0.00	0.00	0.00	0.00	0.00
	(0.257)	(0.252)	(0.245)	(0.260)	(0.607)	(0.634)	(0.638)	(0.669)
support from friends	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00
	(0.007)*	(0.006)*	(0.007)*	(0.005)*	(0.548)	(0.542)	(0.519)	(0.573)
waves 2-3	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.19
	(0.005)*	(0.005)*	(0.004)*	(0.003)*	(0.003)*	(0.004)*	(0.003)*	(0.003)*
waves 4-6	0.13	0.13	0.13	0.13	0.07	0.07	0.07	0.07
	(0.002)*	(0.002)*	(0.001)*	(0.001)*	(0.071)+	(0.082)+	(0.081)+	(0.076)+
waves 10-12	0.02	0.02	0.02	0.02	0.05	0.05	0.05	0.05
	(0.725)	(0.742)	(0.711)	(0.715)	(0.243)	(0.257)	(0.222)	(0.257)
Adjusted R^2	0.075	0.076	0.077	0.076	0.060	0.061	0.060	0.060
N(id)	3031	3031	3031	3031	3333	3333	3333	3333
Observations	11664	11664	11664	11664	12423	12423	12423	12423

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
+$p < 0.1$; *$p < 0.05$; ***$p < 0.000$; p-values in parentheses;

Source: SHP data, waves 2-12.
Note: Fixed-effect estimates clustered on standard errors. Sample consists of women aged 25-50 years and men aged 25-60 years, including parents having the first child under the age of 13 and childless people.

Table 8: Predictors of dynamics of life satisfaction. Second child.

	Women:				Men:			
	Size of network (1)	Contact frequency[a] (2)	Practical support[b] (3)	Emotional support[b] (4)	Size of network (5)	Contact frequency[a] (6)	Practical support[b] (7)	Emotional support[b] (8)
Age of the second child:								
4 years before birth			*reference category*					
3 years before birth	0.14	−0.19	−0.07	0.13	−0.07	−0.02	0.06	−0.04
	(0.349)	(0.350)	(0.696)	(0.431)	(0.553)	(0.903)	(0.737)	(0.785)
3 years before birth x strong rel.	−0.24	0.23	0.10	−0.17	0.15	0.05	−0.08	0.06
	(0.192)	(0.305)	(0.592)	(0.381)	(0.397)	(0.765)	(0.699)	(0.742)
2 years before birth	0.10	0.24	−0.16	0.14	−0.07	0.14	0.20	0.08
	(0.530)	(0.212)	(0.400)	(0.467)	(0.634)	(0.367)	(0.300)	(0.587)
2 years before birth x strong rel.	−0.28	−0.34	0.13	−0.30	0.29	−0.06	−0.17	−0.01
	(0.170)	(0.120)	(0.545)	(0.190)	(0.148)	(0.764)	(0.446)	(0.971)
1 year before birth	−0.08	0.18	−0.40	−0.04	−0.09	0.26	0.26	0.14
	(0.628)	(0.356)	(0.036)*	(0.806)	(0.615)	(0.095)+	(0.235)	(0.366)
1 year before birth x strong rel.	0.02	−0.29	0.46	−0.01	0.32	−0.23	−0.25	−0.13
	(0.925)	(0.202)	(0.041)*	(0.981)	(0.146)	(0.265)	(0.316)	(0.554)
birth	0.09	0.22	−0.37	0.11	0.04	0.41	0.44	0.20
	(0.578)	(0.319)	(0.061)+	(0.567)	(0.845)	(0.029)*	(0.082)+	(0.317)
birth x strong relationships	−0.15	−0.24	0.53	−0.15	0.24	−0.34	−0.42	−0.11
	(0.515)	(0.361)	(0.029)*	(0.547)	(0.344)	(0.166)	(0.145)	(0.681)
1 years old	−0.28	−0.11	−0.70	−0.17	−0.12	0.37	0.28	0.17
	(0.137)	(0.697)	(0.004)*	(0.379)	(0.525)	(0.094)+	(0.248)	(0.410)
1 years old x strong relationships	0.13	−0.12	0.67	−0.04	0.48	−0.33	−0.16	−0.07
	(0.623)	(0.704)	(0.021)*	(0.875)	(0.078)+	(0.240)	(0.584)	(0.807)
2 years old	−0.11	0.03	−0.45	−0.06	0.03	0.50	0.34	0.22
	(0.569)	(0.923)	(0.049)*	(0.782)	(0.894)	(0.028)*	(0.190)	(0.325)
2 years old x strong relationships	−0.04	−0.17	0.43	−0.10	0.42	−0.37	−0.10	0.03
	(0.896)	(0.571)	(0.140)	(0.734)	(0.189)	(0.238)	(0.763)	(0.923)
3 years old	−0.20	−0.15	−0.57	−0.25	−0.19	0.31	0.26	0.11
	(0.333)	(0.608)	(0.018)*	(0.295)	(0.394)	(0.200)	(0.331)	(0.640)
3 years old x strong relationships	0.00	−0.05	0.50	0.12	0.60	−0.24	−0.14	0.08
	(0.998)	(0.882)	(0.107)	(0.695)	(0.085)+	(0.489)	(0.707)	(0.835)
4 years old	−0.39	0.08	−0.73	−0.34	0.09	0.56	0.38	0.21
	(0.085)+	(0.780)	(0.004)*	(0.158)	(0.696)	(0.030)*	(0.165)	(0.370)
4 years old x strong relationships	0.10	−0.49	0.54	0.03	0.19	−0.54	−0.29	−0.10
	(0.749)	(0.159)	(0.102)	(0.919)	(0.579)	(0.126)	(0.443)	(0.794)
5 years old	−0.24	0.07	−0.53	−0.20	−0.09	0.46	0.21	0.01
	(0.323)	(0.826)	(0.041)*	(0.416)	(0.706)	(0.105)	(0.477)	(0.961)
5 years old x strong relationships	0.02	−0.35	0.41	−0.02	0.27	−0.58	−0.20	0.07
	(0.959)	(0.339)	(0.241)	(0.953)	(0.455)	(0.120)	(0.609)	(0.865)
6 years old	−0.32	−0.03	−0.61	−0.24	−0.03	0.56	0.31	0.06
	(0.194)	(0.925)	(0.025)*	(0.364)	(0.908)	(0.047)*	(0.305)	(0.814)
6 years old x strong relationships	0.15	−0.24	0.50	0.02	0.38	−0.54	−0.14	0.27
	(0.681)	(0.536)	(0.170)	(0.956)	(0.319)	(0.158)	(0.742)	(0.505)
7 years old	−0.39	−0.16	−0.75	−0.38	−0.01	0.53	0.34	0.06
	(0.137)	(0.631)	(0.009)*	(0.160)	(0.984)	(0.077)+	(0.276)	(0.832)
7 years old x strong relationships	0.22	−0.11	0.67	0.24	0.40	−0.44	−0.12	0.36
	(0.556)	(0.793)	(0.078)+	(0.536)	(0.324)	(0.278)	(0.779)	(0.401)
8 years old	−0.62	−0.32	−0.80	−0.48	0.00	0.64	0.29	−0.03
	(0.024)*	(0.359)	(0.006)*	(0.088)+	(0.987)	(0.034)*	(0.353)	(0.925)
8 years old x strong relationships	0.35	−0.11	0.51	0.12	0.34	−0.67	−0.06	0.51
	(0.362)	(0.792)	(0.192)	(0.764)	(0.408)	(0.109)	(0.893)	(0.252)
9 years old	−0.46	−0.05	−0.71	−0.41	−0.06	0.63	0.21	−0.10
	(0.117)	(0.884)	(0.019)*	(0.162)	(0.807)	(0.034)*	(0.510)	(0.717)
9 years old x strong relationships	0.23	−0.34	0.51	0.17	0.44	−0.70	0.07	0.66
	(0.568)	(0.431)	(0.211)	(0.687)	(0.293)	(0.098)+	(0.875)	(0.157)
10 years old	−0.46	0.01	−0.74	−0.48	−0.06	0.64	0.30	0.00
	(0.129)	(0.987)	(0.018)*	(0.112)	(0.812)	(0.038)*	(0.356)	(0.991)
10 years old x strong relationships	0.22	−0.42	0.54	0.29	0.54	−0.59	0.01	0.55
	(0.604)	(0.348)	(0.202)	(0.495)	(0.208)	(0.180)	(0.982)	(0.263)
11 years old	−0.52	0.08	−0.78	−0.49	−0.21	0.41	0.14	−0.14
	(0.107)	(0.834)	(0.015)*	(0.113)	(0.408)	(0.183)	(0.676)	(0.618)
11 years old x strong relationships	0.22	−0.59	0.51	0.21	0.61	−0.38	0.10	0.60
	(0.606)	(0.209)	(0.245)	(0.630)	(0.161)	(0.393)	(0.833)	(0.231)
12 years old	−0.56	−0.06	−0.82	−0.54	−0.03	0.58	0.31	0.04
	(0.090)+	(0.885)	(0.012)*	(0.087)+	(0.902)	(0.068)+	(0.338)	(0.894)
12 years old x strong relationships	0.19	−0.49	0.47	0.18	0.61	−0.36	0.11	0.60
	(0.662)	(0.304)	(0.287)	(0.695)	(0.162)	(0.422)	(0.822)	(0.232)
birth: 1st child	0.16	−0.12	0.55	0.18	−0.17	−0.16	−0.09	0.02
	(0.414)	(0.642)	(0.106)	(0.486)	(0.326)	(0.348)	(0.740)	(0.922)
birth: 1st child x strong rel.	−0.06	0.29	−0.52	−0.12	0.14	0.12	0.03	−0.19
	(0.803)	(0.320)	(0.147)	(0.686)	(0.554)	(0.597)	(0.926)	(0.447)
1st child present	0.13	0.49	−0.34	−0.04	−0.02	−0.07	0.11	−0.03
	(0.671)	(0.248)	(0.415)	(0.920)	(0.939)	(0.769)	(0.740)	(0.916)
1st child present x strong rel.	−0.28	−0.62	0.33	−0.00	0.28	0.27	−0.08	0.19
	(0.458)	(0.186)	(0.467)	(1.000)	(0.394)	(0.394)	(0.830)	(0.577)
birth: 3rd child	0.16	0.35	0.56	0.39	0.20	0.55	0.48	0.36
	(0.480)	(0.252)	(0.061)+	(0.071)+	(0.411)	(0.076)+	(0.031)*	(0.051)+
birth: 3rd child x strong rel.	0.01	−0.22	−0.52	−0.40	0.22	−0.30	−0.30	−0.04

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(0.968)	(0.509)	(0.120)	(0.144)	(0.444)	(0.382)	(0.263)	(0.868)
3rd child present	−0.06	−0.34	−0.27	−0.35	−0.49	−0.74	−0.60	−0.37
	(0.775)	(0.302)	(0.359)	(0.067)+	(0.064)+	(0.028)*	(0.009)*	(0.054)+
3rd child present x strong rel.	−0.04	0.30	0.26	0.46	0.36	0.62	0.63	0.20
	(0.890)	(0.391)	(0.431)	(0.066)+	(0.239)	(0.087)+	(0.018)*	(0.442)
birth: 4th child	−0.59	−2.06	−0.62	−0.36	−0.37	−0.14	−0.27	−0.14
	(0.387)	(0.010)*	(0.198)	(0.329)	(0.092)+	(0.536)	(0.264)	(0.429)
birth: 4th child x strong rel.	0.68	2.14	0.80	0.54	0.30	−0.14	0.00	−0.56
	(0.352)	(0.010)*	(0.142)	(0.240)	(0.330)	(0.662)	(0.989)	(0.157)
4th child present	−0.38	0.96	−0.27	−0.10	0.18	0.21	0.03	−0.06
	(0.594)	(0.015)*	(0.537)	(0.765)	(0.347)	(0.309)	(0.865)	(0.689)
4th child present x strong rel.	0.24	−1.13	0.20	−0.08	−0.14	−0.37	0.12	0.66
	(0.746)	(0.008)*	(0.678)	(0.839)	(0.618)	(0.166)	(0.684)	(0.094)+
birth: 5th child	0.65	0.79	0.51	−0.09	0.28	1.92	0.12	0.09
	(0.102)	(0.071)+	(0.089)+	(0.854)	(0.803)	(0.000)***	(0.914)	(0.937)
birth: 5th child x strong rel.	0.31	0.18	0.44	1.03		−3.14	1.78	1.89
	(0.436)	(0.687)	(0.159)	(0.033)*		(0.000)***	(0.030)*	(0.023)*
5th child present	0.73	0.58	0.58	−0.00	0.05	−1.94	−0.25	−0.26
	(0.072)+	(0.202)	(0.063)+	(0.993)	(0.977)	(0.000)***	(0.847)	(0.834)
5th child present x strong rel.	−2.28	−2.13	−2.59	−0.45	0.14	3.83		
	(0.010)*	(0.019)*	(0.016)*	(0.385)	(0.913)	(0.000)***		
age	−0.01	−0.01	−0.01	−0.01	0.01	0.01	0.01	0.01
	(0.453)	(0.494)	(0.500)	(0.498)	(0.637)	(0.641)	(0.558)	(0.546)
age^2	0.00	0.00	0.00	0.00	−0.00	−0.00	−0.00	−0.00
	(0.525)	(0.509)	(0.582)	(0.549)	(0.682)	(0.572)	(0.497)	(0.479)
never married	−0.09	−0.09	−0.10	−0.11	−0.22	−0.21	−0.22	−0.23
	(0.303)	(0.290)	(0.225)	(0.171)	(0.004)*	(0.005)*	(0.004)*	(0.002)*
divorced or separated	0.01	0.01	0.02	0.01	−0.08	−0.06	−0.07	−0.07
	(0.944)	(0.919)	(0.883)	(0.931)	(0.508)	(0.630)	(0.558)	(0.580)
year of divorce	−0.31	−0.30	−0.31	−0.31	−0.72	−0.71	−0.73	−0.72
	(0.163)	(0.172)	(0.160)	(0.166)	(0.003)*	(0.003)*	(0.003)*	(0.003)*
year of marriage	0.07	0.06	0.06	0.06	−0.06	−0.05	−0.05	−0.06
	(0.351)	(0.386)	(0.459)	(0.400)	(0.382)	(0.479)	(0.426)	(0.360)
widowed	−0.15	−0.11	−0.14	−0.11	−0.58	−0.54	−0.54	−0.59
	(0.694)	(0.771)	(0.691)	(0.747)	(0.112)	(0.160)	(0.156)	(0.103)
health satisfaction	0.15	0.15	0.15	0.15	0.13	0.13	0.13	0.13
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
household income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.012)*	(0.013)*	(0.014)*	(0.012)*	(0.029)*	(0.027)*	(0.031)*	(0.031)*
unemployed	−0.23	−0.23	−0.23	−0.23	−0.66	−0.65	−0.65	−0.66
	(0.128)	(0.123)	(0.128)	(0.122)	(0.000)***	(0.000)***	(0.000)***	(0.000)***
support from partner	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
support from neighbors	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.041)*	(0.034)*	(0.041)*	(0.042)*	(0.109)	(0.103)	(0.104)	(0.095)+
support from colleages	−0.00	−0.00	−0.00	−0.00	0.00	0.00	0.00	0.00
	(0.646)	(0.679)	(0.643)	(0.652)	(0.514)	(0.510)	(0.526)	(0.535)
support from friends	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
	(0.002)*	(0.002)*	(0.002)*	(0.001)*	(0.098)+	(0.089)+	(0.087)+	(0.103)
waves 2-3	0.22	0.22	0.22	0.22	0.24	0.23	0.23	0.24
	(0.001)***	(0.001)***	(0.001)***	(0.001)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
waves 4-6	0.12	0.12	0.12	0.12	0.09	0.09	0.09	0.09
	(0.002)*	(0.002)*	(0.002)*	(0.002)*	(0.014)*	(0.020)*	(0.017)*	(0.017)*
waves 10-12	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.02
	(0.664)	(0.693)	(0.724)	(0.735)	(0.689)	(0.690)	(0.594)	(0.631)
Adjusted R^2	0.077	0.079	0.078	0.078	0.061	0.061	0.060	0.060
N(id)	3425	3425	3425	3425	3727	3727	3727	3727
Observations	13794	13794	13794	13794	14448	14448	14448	14448

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
$^+ p < 0.1$; $^* p < 0.05$; $^{***} p < 0.000$; *p*-values in parentheses;

Source: SHP data, waves 2-12.
Note: Fixed-effect estimates clustered on standard errors. Sample consists of women aged 25-50 years and men aged 25-60 years, including parents having the second child under the age of 13, parents with one child and childless people.

Table 9: Predictors of dynamics of life satisfaction. Third child.

	Women:				Men:			
	Size of network	Contact frequency[a]	Practical support[b]	Emotional support[b]	Size of network	Contact frequency[a]	Practical support[b]	Emotional support[b]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age of the third child:								
4 years before birth				*reference category*				
3 years before birth	−0.05	0.28	−0.09	−0.06	0.07	−0.08	−0.13	−0.09
	(0.808)	(0.251)	(0.779)	(0.793)	(0.745)	(0.651)	(0.570)	(0.609)
3 years before birth x strong rel.	0.07	−0.31	0.13	0.14	−0.20	0.04	0.10	0.05
	(0.766)	(0.249)	(0.683)	(0.584)	(0.473)	(0.871)	(0.719)	(0.852)
2 years before birth	0.29	0.18	0.02	0.08	0.21	0.13	0.16	−0.07
	(0.111)	(0.486)	(0.940)	(0.721)	(0.272)	(0.443)	(0.406)	(0.640)
2 years before birth x strong rel.	−0.34	−0.06	0.12	0.07	−0.18	−0.02	−0.06	0.54
	(0.154)	(0.835)	(0.675)	(0.780)	(0.441)	(0.943)	(0.801)	(0.007)*
1 year before birth	0.02	−0.23	−0.11	−0.01	0.34	0.07	0.17	0.00
	(0.904)	(0.430)	(0.658)	(0.941)	(0.046)*	(0.680)	(0.381)	(0.992)
1 year before birth x strong rel.	−0.06	0.26	0.12	0.01	−0.30	0.14	−0.01	0.45
	(0.816)	(0.408)	(0.659)	(0.953)	(0.187)	(0.541)	(0.952)	(0.045)*
birth	0.21	−0.01	0.44	0.38	0.41	0.41	0.39	0.25
	(0.305)	(0.976)	(0.152)	(0.109)	(0.057)+	(0.102)	(0.065)+	(0.156)
birth x strong relationships	−0.04	0.23	−0.35	−0.34	−0.18	−0.14	−0.17	0.18
	(0.877)	(0.511)	(0.305)	(0.239)	(0.508)	(0.621)	(0.529)	(0.473)
1 years old	0.14	0.02	0.31	0.18	0.06	0.03	0.11	0.12
	(0.523)	(0.948)	(0.270)	(0.420)	(0.721)	(0.860)	(0.576)	(0.448)
1 years old x strong relationships	−0.03	0.12	−0.27	−0.09	0.20	0.20	0.15	0.15
	(0.924)	(0.724)	(0.407)	(0.760)	(0.410)	(0.385)	(0.561)	(0.550)
2 years old	0.16	−0.09	0.31	0.13	0.01	−0.03	0.01	0.04
	(0.477)	(0.820)	(0.340)	(0.614)	(0.971)	(0.884)	(0.970)	(0.852)
2 years old x strong relationships	0.02	0.29	−0.21	0.09	0.32	0.31	0.38	0.43
	(0.953)	(0.503)	(0.572)	(0.774)	(0.278)	(0.254)	(0.203)	(0.112)
3 years old	−0.02	−0.54	0.05	−0.03	0.01	−0.17	0.07	0.00
	(0.942)	(0.149)	(0.873)	(0.901)	(0.952)	(0.478)	(0.780)	(0.989)
3 years old x strong relationships	−0.12	0.52	−0.19	−0.10	0.22	0.42	0.17	0.38
	(0.699)	(0.203)	(0.586)	(0.744)	(0.445)	(0.144)	(0.558)	(0.191)
4 years old	0.24	−0.20	0.35	0.27	0.01	−0.18	−0.04	−0.11
	(0.279)	(0.586)	(0.253)	(0.268)	(0.970)	(0.450)	(0.872)	(0.575)
4 years old x strong relationships	−0.25	0.32	−0.38	−0.33	0.11	0.39	0.26	0.55
	(0.384)	(0.412)	(0.270)	(0.268)	(0.716)	(0.195)	(0.395)	(0.068)+
5 years old	0.09	−0.37	0.40	0.22	0.00	−0.13	−0.00	−0.04
	(0.701)	(0.327)	(0.201)	(0.390)	(0.990)	(0.600)	(0.995)	(0.857)
5 years old x strong relationships	0.06	0.62	−0.39	−0.09	0.23	0.43	0.32	0.51
	(0.838)	(0.130)	(0.278)	(0.779)	(0.495)	(0.177)	(0.320)	(0.107)
6 years old	0.08	−0.14	0.35	0.16	0.21	0.12	0.10	−0.02
	(0.729)	(0.705)	(0.266)	(0.524)	(0.447)	(0.606)	(0.688)	(0.938)
6 years old x strong relationships	−0.07	0.23	−0.46	−0.18	−0.10	−0.01	0.14	0.50
	(0.838)	(0.570)	(0.207)	(0.581)	(0.757)	(0.975)	(0.667)	(0.120)
7 years old	0.28	−0.20	0.29	0.23	0.25	0.01	0.15	0.03
	(0.278)	(0.611)	(0.379)	(0.375)	(0.329)	(0.964)	(0.554)	(0.890)
7 years old x strong relationships	−0.32	0.35	−0.29	−0.26	−0.02	0.37	0.26	0.66
	(0.339)	(0.418)	(0.432)	(0.444)	(0.951)	(0.234)	(0.424)	(0.041)*
8 years old	0.08	−0.36	0.06	0.03	0.22	−0.09	−0.12	−0.20
	(0.772)	(0.363)	(0.858)	(0.925)	(0.388)	(0.696)	(0.655)	(0.354)
8 years old x strong relationships	−0.04	0.51	0.02	0.11	−0.08	0.45	0.68	1.11
	(0.907)	(0.240)	(0.950)	(0.740)	(0.823)	(0.176)	(0.044)*	(0.001)***
9 years old	0.03	−0.45	0.23	0.10	0.18	−0.12	−0.04	−0.13
	(0.904)	(0.247)	(0.493)	(0.722)	(0.507)	(0.631)	(0.862)	(0.541)
9 years old x strong relationships	0.10	0.70	−0.17	0.08	−0.13	0.40	0.41	0.73
	(0.773)	(0.102)	(0.668)	(0.826)	(0.712)	(0.217)	(0.222)	(0.025)*
10 years old	0.17	−0.38	0.24	0.04	0.23	−0.17	0.07	−0.12
	(0.550)	(0.355)	(0.482)	(0.877)	(0.399)	(0.492)	(0.788)	(0.568)
10 years old x strong relationships	−0.21	0.52	−0.30	0.03	−0.12	0.54	0.23	0.82
	(0.559)	(0.249)	(0.449)	(0.943)	(0.725)	(0.105)	(0.508)	(0.014)*
11 years old	0.09	−0.64	0.20	0.02	0.12	−0.28	−0.12	−0.18
	(0.764)	(0.122)	(0.555)	(0.949)	(0.659)	(0.248)	(0.651)	(0.407)
11 years old x strong relationships	−0.19	0.77	−0.35	−0.07	−0.21	0.49	0.30	0.59
	(0.601)	(0.093)+	(0.383)	(0.843)	(0.550)	(0.145)	(0.389)	(0.085)+
12 years old	−0.01	−0.52	0.28	0.12	0.07	−0.32	−0.07	−0.12
	(0.970)	(0.229)	(0.444)	(0.675)	(0.807)	(0.210)	(0.789)	(0.586)
12 years old x strong relationships	0.12	0.74	−0.30	−0.06	−0.06	0.61	0.27	0.52
	(0.751)	(0.119)	(0.480)	(0.868)	(0.860)	(0.076)+	(0.451)	(0.137)
birth: 1st child	0.17	−0.13	0.55	0.17	−0.16	−0.16	−0.09	0.04
	(0.396)	(0.617)	(0.105)	(0.504)	(0.355)	(0.362)	(0.758)	(0.856)
birth: 1st child x strong rel.	−0.07	0.30	−0.52	−0.11	0.15	0.12	0.03	−0.20
	(0.766)	(0.299)	(0.147)	(0.697)	(0.548)	(0.600)	(0.934)	(0.436)
1st child present	−0.12	0.03	−0.61	−0.26	0.15	0.15	0.17	0.04
	(0.607)	(0.928)	(0.090)+	(0.368)	(0.426)	(0.431)	(0.572)	(0.864)
1st child present x strong rel.	−0.02	−0.18	0.61	0.24	0.02	0.04	−0.06	0.17
	(0.935)	(0.581)	(0.118)	(0.465)	(0.941)	(0.872)	(0.848)	(0.551)
birth: 2nd child	−0.01	−0.38	−0.05	−0.10	0.20	0.12	0.14	−0.04
	(0.968)	(0.158)	(0.848)	(0.665)	(0.491)	(0.564)	(0.516)	(0.815)
birth: 2nd child x strong rel.	0.22	0.58	0.23	0.34	−0.37	−0.26	−0.29	−0.03

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(0.388)	(0.055)+	(0.416)	(0.200)	(0.255)	(0.324)	(0.268)	(0.904)
2nd child present	0.37	0.68	−0.00	0.21	−0.33	−0.15	−0.24	−0.08
	(0.178)	(0.045)*	(0.995)	(0.480)	(0.286)	(0.526)	(0.314)	(0.716)
2nd child present x strong rel.	−0.76	−0.91	−0.10	−0.43	0.28	0.02	0.18	−0.05
	(0.023)*	(0.018)*	(0.769)	(0.219)	(0.440)	(0.943)	(0.554)	(0.869)
birth: 4th child	−0.09	−1.89	−0.31	−0.20	−0.47	−0.26	−0.36	−0.18
	(0.854)	(0.011)*	(0.533)	(0.563)	(0.029)*	(0.261)	(0.133)	(0.333)
birth: 4th child x strong rel.	0.25	2.12	0.60	0.56	0.42	0.07	0.30	−0.61
	(0.636)	(0.006)*	(0.266)	(0.187)	(0.170)	(0.833)	(0.418)	(0.158)
4th child present	−0.59	1.29	−0.19	−0.04	0.14	0.27	0.05	−0.03
	(0.294)	(0.001)*	(0.685)	(0.897)	(0.488)	(0.228)	(0.788)	(0.863)
4th child present x strong rel.	0.45	−1.58	−0.03	−0.28	−0.19	−0.54	−0.12	0.57
	(0.449)	(0.000)**	(0.960)	(0.465)	(0.487)	(0.057)+	(0.719)	(0.201)
birth: 5th child	0.67	0.80	0.70	0.03	0.48	1.94	0.33	0.35
	(0.229)	(0.177)	(0.064)+	(0.961)	(0.657)	(0.000)**	(0.754)	(0.745)
birth: 5th child x strong rel.	−0.12	−0.22	−0.20	0.85		−2.73	2.14	2.14
	(0.850)	(0.735)	(0.701)	(0.178)		(0.000)**	(0.003)*	(0.003)*
5th child present	0.08	−0.10	−0.11	−0.37	−0.09	−2.14	−0.72	−0.75
	(0.742)	(0.735)	(0.578)	(0.135)	(0.952)	(0.000)**	(0.429)	(0.437)
5th child present x strong rel.	−0.96	−0.85	−0.90	−0.22	−0.43	3.27		
	(0.011)*	(0.038)*	(0.029)*	(0.444)	(0.746)	(0.000)***		
age	−0.01	−0.01	−0.01	−0.01	−0.01	−0.01	−0.01	−0.00
	(0.302)	(0.314)	(0.316)	(0.301)	(0.579)	(0.622)	(0.648)	(0.655)
age^2	0.00	0.00	0.00	0.00	−0.00	−0.00	−0.00	−0.00
	(0.288)	(0.299)	(0.360)	(0.322)	(0.756)	(0.678)	(0.597)	(0.633)
never married	−0.08	−0.08	−0.09	−0.10	−0.19	−0.19	−0.19	−0.20
	(0.371)	(0.330)	(0.271)	(0.205)	(0.014)*	(0.016)*	(0.015)*	(0.010)*
divorced or separated	0.00	−0.00	0.00	−0.01	−0.05	−0.02	−0.03	−0.02
	(0.980)	(0.976)	(0.968)	(0.944)	(0.676)	(0.880)	(0.788)	(0.848)
year of divorce	−0.24	−0.25	−0.26	−0.26	−0.71	−0.69	−0.71	−0.70
	(0.219)	(0.205)	(0.188)	(0.185)	(0.003)*	(0.003)*	(0.002)*	(0.003)*
year of marriage	0.10	0.09	0.08	0.08	−0.03	−0.02	−0.03	−0.03
	(0.197)	(0.211)	(0.277)	(0.261)	(0.595)	(0.731)	(0.639)	(0.617)
widowed	−0.19	−0.22	−0.23	−0.21	−0.48	−0.48	−0.46	−0.49
	(0.470)	(0.391)	(0.343)	(0.367)	(0.092)+	(0.094)+	(0.103)	(0.078)+
health satisfaction	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)**	(0.000)***	(0.000)***
household income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.011)*	(0.012)*	(0.014)*	(0.011)*	(0.037)*	(0.041)*	(0.041)*	(0.034)*
unemployed	−0.23	−0.23	−0.23	−0.24	−0.71	−0.70	−0.70	−0.71
	(0.119)	(0.116)	(0.115)	(0.109)	(0.000)***	(0.000)***	(0.000)***	(0.000)***
support from partner	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)**	(0.000)***	(0.000)***
support from neighbors	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.073)+	(0.060)+	(0.073)+	(0.071)+	(0.061)+	(0.053)+	(0.057)+	(0.051)+
support from colleages	−0.00	−0.00	−0.00	−0.00	0.00	0.00	0.00	0.00
	(0.590)	(0.712)	(0.690)	(0.696)	(0.275)	(0.327)	(0.308)	(0.336)
support from friends	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
	(0.007)*	(0.012)*	(0.008)*	(0.008)*	(0.105)	(0.085)+	(0.085)+	(0.099)+
waves 2-3	0.20	0.19	0.20	0.20	0.16	0.16	0.16	0.16
	(0.001)*	(0.001)*	(0.001)*	(0.001)*	(0.003)*	(0.004)*	(0.004)*	(0.002)*
waves 4-6	0.10	0.10	0.10	0.10	0.06	0.05	0.05	0.06
	(0.007)*	(0.007)*	(0.007)*	(0.006)*	(0.089)+	(0.102)	(0.104)	(0.083)+
waves 10-12	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
	(0.288)	(0.310)	(0.293)	(0.294)	(0.237)	(0.239)	(0.163)	(0.173)
Adjusted R^2	0.075	0.076	0.075	0.075	0.061	0.061	0.061	0.062
N(id)	3827	3827	3827	3827	4123	4123	4123	4123
Observations	16302	16302	16302	16302	17135	17135	17135	17135

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
+$p < 0.1$; *$p < 0.05$; ***$p < 0.000$; p-values in parentheses;

Source: SHP data, waves 2-12.
Note: Fixed-effect estimates clustered on standard errors. Sample consists of women aged 25-50 years and men aged 25-60 years, including parents having the third child under the age of 13, parents with one or two children and childless people.

C Additional analysis - determinants of belonging to the 'strong relationships' group among women

To understand if belonging to the 'strong relationships' group may be for women a sign of need for support, we run a set of cross-sectional logistic models, regressing belonging to the 'strong relationships' group on individual predictors. This analysis is performed on the level of persons (and not person-years, as analyses presented in other sections), therefore we use only time-invariant predictors. The results estimated on the general sample of women and on the sample limited to mothers are presented in Table 10.

Table 10: Logistic regression of belonging to the 'strong relatonships' groups on time-invariant characteristics of individuals. Women only. Logistic regression; the table shows odds ratios.

	Large network ≥ 5.5		Frequent contact[a] ≥ 4		Practical support[b] ≥ 7		Emotional support[b] ≥ 7.9	
	women overall	mothers	women overall	mothers	women overall	mothers	overall	women
secondary educ. (ref: primary)	1.06 (0.424)	1.03 (0.803)	1.03 (0.735)	1.17 (0.153)	1.29 (0.001)***	1.37 (0.002)*	1.07 (0.346)	1.11 (0.283)
tertiary educ. (ref: primary)	0.94 (0.445)	1.01 (0.938)	1.05 (0.547)	1.00 (0.992)	1.29 (0.002)*	1.23 (0.082)+	1.05 (0.546)	0.96 (0.745)
household income	1.14 (0.001)***	1.13 (0.035)*	1.30 (0.000)***	1.16 (0.026)*	1.20 (0.000)***	1.09 (0.114)	1.17 (0.000)***	1.04 (0.404)
born 1950 − 59 (ref: born 1970+)	1.19 (0.027)*	1.33 (0.006)*	0.61 (0.000)***	0.49 (0.000)***	0.41 (0.000)***	0.36 (0.000)***	0.59 (0.000)***	0.60 (0.000)***
born 1960 − 69 (ref: born 1970+)	1.09 (0.232)	1.10 (0.297)	0.84 (0.017)*	0.74 (0.005)*	0.68 (0.000)***	0.59 (0.000)***	0.80 (0.002)*	0.78 (0.008)*
other passport and language (ref: Swiss)	1.38 (0.015)*	1.15 (0.393)	1.23 (0.140)	0.83 (0.306)	0.67 (0.002)*	0.53 (0.000)***	1.16 (0.244)	0.94 (0.733)
Swiss passport, other language (ref: Swiss)	1.07 (0.509)	1.04 (0.737)	1.39 (0.002)*	1.27 (0.095)+	1.08 (0.426)	1.03 (0.843)	1.23 (0.033)*	1.11 (0.417)
other passport, Swiss language (ref: Swiss)	0.50 (0.000)***	0.59 (0.001)***	0.33 (0.000)***	0.40 (0.000)***	0.30 (0.000)***	0.39 (0.000)***	0.39 (0.000)***	0.52 (0.000)***
ever a mother (ref: childless)	2.13 (0.000)***		2.12 (0.000)***		1.50 (0.000)***		1.30 (0.000)***	
age at 1st birth		0.98 (0.057)+		1.00 (0.856)		1.01 (0.322)		1.00 (0.999)
Observations	4885	2862	4885	2862	4885	2862	4885	2862
Pseudo R^2	0.033	0.008	0.046	0.025	0.045	0.038	0.022	0.011

[a] times per month
[b] on a scale from 0 – *not at all* to 10 – *a great deal*
+ $p < 0.1$; * $p < 0.05$; *** $p < 0.000$; p-values in parentheses;

Source: SHP data, waves 2-12.
Note: Cross-sectional estimation on a sample consisting of women born between years 1950 and 1986 (i.e. aged 25-50 during the survey) who are childless or whose first, second, or third child is 12 years old or younger. All predictors are defined as time-invariant. The analysis on the subgroup of mothers includes also prospective mothers.

Overall, the odds of belonging to the 'strong relationships' group are higher for women who are privileged in terms of education and income. Higher household income systematically correlates with higher probability of belonging to the 'strong relationships' group. Women with higher education have a higher probability of having access to high practical support than women with primary or vocational education.

Also mothers and prospective mothers, as well as younger women (i.e. born in more recent cohorts), have higher odds of belonging to the 'strong relationships' groups. These results are not affected by including the nationality and language groups in the model.

D Additional analysis – Do strong relationships with relatives "suffocate" young mothers?
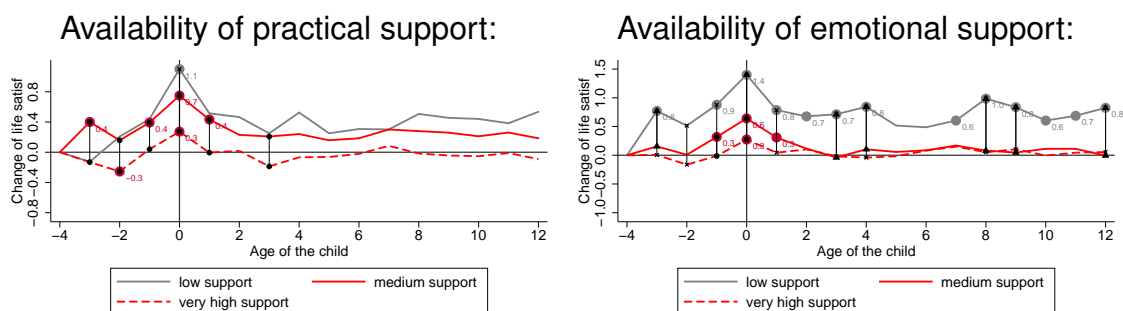
Figure 8: Predicted changes of life satisfaction of (prospective) first-time mothers belonging to the groups with low, medium, and very high contact with relatives and availability of suport.

Source: SHP data, waves 2-12.
Note: Estimates as in Equation 2 with three levels of support. Reference category is the period 4 or more years before the birth. The graphs show predictions (β coefficients); the predictions statistically significantly different from zero are marked with dots. The labels show the exact value of the prediction.

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