

# Grandparent-grandchild relationships and grandchildren's well-being after parental divorce in Flanders, Belgium. Does lineage matter?

# Maaike Jappens<sup>1</sup> and Jan Van Bavel<sup>2,1</sup>

<sup>1</sup> Interface Demography, Vrije Universiteit Brussel. <sup>2</sup> Center for Sociological Research, Catholic University of Leuven (KU Leuven)

Address correspondence to: Jan Van Bavel, Center for Sociological Research, KU Leuven, Parkstraat 45, Box 3601, 3000 Leuven, Belgium. Email: jan.vanbavel@kuleuven.be

#### **Abstract**

Grandparents can play a supportive role when parents are divorced, but we know little about how important they actually are for the well-being of grandchildren. Existing studies do not distinguish between grandparental lineages. But a parental divorce usually has different consequences for relationships with grandparents on each side of the family, especially contacts with paternal grandparents getting hampered. And evolutionary perspectives suggest that maternal grandparents are more beneficial to grandchildren's well-being than paternal grandparents. Using a sample of grandchildren with divorced parents from the study 'Divorce in Flanders', we study whether the quality of relationships with maternal and paternal grandparents associate with grandchildren's subjective well-being. Our results indicate that, although relationships with maternal grandparents tend to be closer than those with paternal grandparents, the strength of relationships with maternal as well as paternal grandparents is positively associated with the well-being of grandchildren with divorced parents. This suggests that not only maternal grandparents, but also grandparents on the father's side of the family may play a beneficial role for their grandchildren in the often difficult times after a parental divorce.

**Key words:** divorce, separation, intergenerational relations, child well-being, grandparent, grandchild



#### 1. Introduction

Increased longevity and lower fertility imply that the life courses of grandchildren and grandparents now often overlap for several decades and that grandparents potentially have more time to spend on each grandchild (Arber & Timonen 2012). At the same time, grandparents and grandchildren have witnessed widespread increases of divorce rates. Parental divorce may entail the risk that extended family relations, including those between grandparents and grandchildren, are weakened or even severed (Attias-Donfut & Segalen 2007; Timonen, Doyle & O'Dwyer 2009). But as grandparents are often considered as latent resources activated in times of family crisis, divorce may also enhance the importance of grandparents for the support and well-being of their grandchildren (Bengtson 2001; Johnson 1998; Thompson 1999).

Remarkably few studies have examined how important grandparents actually are for the well-being of grandchildren after the divorce of their parents, but the results generally do suggest that grandparents may help grandchildren to cope better with the divorce of their parents. It has been found that grandparental involvement and strong grandchild-grandparent relationships are positively associated to grandchildren's well-being and development, especially for children whose parents are not living together (anymore) (Attar-Schwarz et al. 2009; Henderson et al. 2009; Jappens & Van Bavel 2019; Lussier et al. 2002; Ruiz & Silverstein 2007).

A limitation in the literature on grandparent influences on grandchild outcomes is the lack of distinction between grandparent lineages. Evolutionary theoretical perspectives suggest that the presence of matrilineal kin would be more beneficial to grandchildren's well-being than patrilineal kin and historical studies on child mortality have been consistent with this prediction (Sear & Coall 2011). This limitation seems even more compelling in the case of divorced families, as a parental divorce generally has different consequences for the relationships between grandchildren and their paternal compared to maternal grandparents. It is particularly the group of paternal grandparents that has been reported to have less frequent contacts and weaker relationships with grandchildren following the parental break-up (Doyle, O'Dywer & Timonen 2010; Jappens & Van Bavel 2016; Oppelaar & Dykstra 2004).

In this paper, we will explore whether paternal as well as maternal grandparents play a positive role and buffer the impact of a parental divorce on their grandchildren. More specifically, we ask whether the quality of both relationships with maternal and paternal grandparents associate with the subjective well-being of grandchildren with divorced parents. We consider the quality of relationships with all four grandparents separately, and study two indicators of the grandchildren's subjective well-being: life satisfaction and self-esteem. We use a sample of grandchildren with divorced parents from the large-scale representative study 'Divorce in Flanders' (DiF; Mortelmans et al. 2011).

Flanders is the northern and Dutch-speaking region of Belgium. With 2.2 to 3 divorces per 1000 persons during the last decade, Belgium is one of the countries with the highest divorce rates in Europe (Eurostat 2017). The majority of children live with their mother after a parental divorce. But, stimulated by recent policy changes, shared physical custody arrangements have been on the rise more than in neighbouring countries, with children living about half of the time with each parent. About one fifth of Flemish children with di-

vorced parents now live about equal time with the mother and the father (Sodermans 2013). As to intergenerational family relations, like in most other Northern and Central European regions, coresidence between older parents and adult children in Flanders is quite low when compared to Southern and Eastern Europe (Jappens & Van Bavel 2012). But older parents and children tend to live nearby and have frequent contact, and it is common for parents to give their adult children help in kind (Dykstra & Fokkema 2010). Over half of all grandparents in Belgium provides childcare to grandchildren, often on a regular basis (Glaser et al. 2013).

With our dataset, we are able to look at divorce-related factors such as residence arrangements that may be associated to grandchildren's subjective well-being as well as to their relationships with grandparents from both lineages. By focusing on positive indicators of subjective well-being, our research responds to the calls to focus on children and adolescent's own account of their lives and on positive outcomes, rather than merely concentrating on the presence or absence of problems (Ben-Arieh 2008).

Euler (2011: 182) has criticized sociological studies about grandparent-grandchild relationships for being gender-blind too often and for not paying attention to the specific lineage, with "all four categories of grandparents lumped into one category." Our contribution overcomes that important limitation. Earlier studies focused on the closest grandparent, or only considered the relationship with the maternal grandmother. In this study, we go beyond that by looking at relationships with both maternal and paternal grandmothers as well as grandfathers. Moreover, our study integrates insights from sociological and evolutionary perspectives to grandparenthood. These perspectives have largely existed side by side with little or no integration, while their combination could lead to a better foundation of our understanding of grandparenting (Coall & Hertwig 2010; Coall et al. 2016). Before presenting our analyses, we review the literature on the role that grandparents may play for the well-being of grandchildren in divorced families, and on the differences that are usually found between the strength of relationships with maternal and paternal grandparents. Subsequently, we review evolutionary theory which predicts that the impact of grandparent relationships on grandchildren's well-being will vary by lineage.

## 2. Background

This study investigates the quality of the relationships between grandchildren and their grandparents. This represents emotional closeness or the affectual dimension of intergenerational family solidarity (Bengtson & Roberts 1991). Of all dimensions of intergenerational relationships, this quality has been shown to be the most strongly interwoven with family members' well-being (Merz, Schuengel & Schulze 2009). According to Euler (2011), grandchildren's rating of closeness to a grandparent is one of the best indicators of grandparental investment, also from an evolutionary perspective. Grandparental investments refer to all resources, including care and time, that grandparents provide to benefit their grandchildren's fitness and the opportunity costs that come with it (Coall & Hertwig 2011). When investments in children are done sensitively and responsively, they forge emotional bonds (Euler 2011).

The well-being of grandchildren refers to their optimal psychological functioning and experience (Ryan & Deci 2001). In this paper, we concentrate on grandchildren's life satisfaction and self-esteem. Both are indicators for different components of subjective well-being that may be correlated but should be measured separately (Diener 2012). Life satisfaction is the evaluative component of subjective well-being and involves the cognitive evaluation of one's life (Diener 2012). Self-esteem represents the affective component of subjective well-being, which involves longer-term moods and emotions, and refers to one's sense of self-acceptance or self-worth (Rosenberg 1965).

# 2.1 Grandparents and grandchildren's well-being in divorced families

Numerous studies have shown the importance of parent—child relationships for children's and adolescent's well-being (Steinberg 2001). Yet, from a family systems perspective, we must move beyond the parent—child relationship and gain a broader view of the whole family in order to understand the functioning of children. Considering the family as a self-regulating and hierarchically organized system composed of mutually interdependent subsystems, an individual family member's well-being is conceptualized as the result of experiences and relationships across multiple levels of the family system (Cox & Paley 1997). Grandparents, as important members of family systems, are thus likely to play a prominent role in grandchildren's well-being.

Moreover, grandparents act as a "backup system" within families. According to the 'latent function hypothesis', grandparents are latent resources who usually play a minor role in their grandchildren's lives in terms of support, except in times of crisis (Cherlin & Furstenberg 1986; Johnson 1998; Silverstein, Giarusso & Bengtson 2003). That is why grandparents have also been called the "Family National Guard" (Hagestad 1985), waiting on the sidelines, until there is a substantial disruption in family functioning that prompts them to step in. A divorce in the parent generation often creates considerable turmoil in families. This makes a typical situation where family systems adapt themselves and grandparents might be activated, thus recalibrating family contributions to the well-being of grandchildren.

In this paper, we focus on grandchildren whose parents have divorced, and on the role that relationships with all of their grandparents can play for their well-being. Much research has made clear that a parental divorce and its aftermath can have a major and often negative impact on children's well-being (Amato 2000; Bernardi et al. 2013). Yet, it is also argued that in the difficult times following the parental break-up, grandparents can be an important source of support and stability for their grandchildren, and that their compensatory effect can reduce the risk of negative consequences for children (Silverstein et al. 2003; Jappens & Van Bavel 2019). Although grandchild-grandparent relationships may be hampered or even lost when parents divorce, a considerable number of grandparents provide their divorcing children and grandchildren with advice, practical support, and emotional and financial help (Ferguson 2004; Timonen et al. 2009), and grandchildren often view grandparents as key people who they can confide to and with whom they can find peace and attention after their parents' divorce (Robinson, Scanlan & Butler 2009).

Relatively few empirical studies have directly linked grandparent-grandchild relationship to grandchildren's well-being. Dunifon and Bajracharya (2012) found no association while other studies found grandparental involvement with grandchildren or the quality of their relationships to be positively related to grandchild well-being (Coall & Hertwig 2010; Griggs et al. 2010; Moorman & Stokes 2014; Sear & Coall 2011). A small number of studies have supported the concept of grandparents as latent resources that are mobilized in case of urgency (i.e. the "Family National Guard"). Results from a study based on 'Divorce in Flanders'-data showed that the strength of grandchild-grandparent relationships was positively associated with grandchildren's subjective well-being, and that having a very good relationship with a grandparent mattered even more for grandchildren whose parents were divorced when compared to those with married parents (Jappens & Van Bavel 2019). Henderson and colleagues (2009) investigated relationships with maternal grandmothers and found that the relationship quality was positively related to adolescents' psychological functioning, especially among those from divorced families. Others (Ruiz & Silverstein 2007; Attar-Schwarz et al. 2009) found the same for associations between grandparental involvement and emotional difficulties with grandchildren in single-parent and stepfamilies as opposed to those living with both biological parents. An important limitation of these earlier studies is that they focus on the closest or most involved grandparent, or only consider the relationship with the maternal grandmother. In this study, we aim to go beyond that.

# 2.2 Lineage differences in grandchild-grandparent relationships

Grandparent–grandchild relationships, like other kin relations in Western societies, tend to be characterised by a 'matrifocal bias': those on the maternal side of the family, and especially relationships with maternal grandmothers, are often stronger than those on the paternal side (Chan & Elder 2000; Uhlenberg & Hammill 1998). As an explanation for this bias, social scientists refer to kinkeeping theory, which states that in Western cultures women are the traditional kinkeepers maintaining family ties (Rosenthal 1985). Hence, grandmothers have closer relationships with their grandchildren than grandfathers and, as parents often act as gatekeepers between grandchildren and grandparents, the relationships on the mothers' side of the family are stronger (Chan & Elder 2000; Monserud 2008).

Evolutionary scientists attribute this bias to sex-specific reproductive strategies and paternity uncertainty. The paternity uncertainty hypothesis is based on the idea that fathers cannot be completely certain that their children are genetically of their own. Because maternal grandparents, and most of all the grandmothers, can be more certain about their genetic relatedness, they would be inclined to invest more in their grandchildren than paternal grandparents (Euler & Weitzel 1996; Pollet, Nettle & Nelissen 2006). From a biological perspective, sex specific reproductive strategies entail that mothers provide more parental investment (including pregnancy and lactation) than fathers. Therefore, maternal grandparents are expected to invest most, as they invest in their daughters and their daughters' children (Euler & Weitzel 1996; Huber & Breedlove 2007).

After parental divorce, the matrifocal bias in grandparent relations has been found to be often reinforced. Most studies report less frequent contacts and weaker relationships between grandparents and grandchildren following parental divorce when compared to married families. Yet, these differences tend to be particularly strong for paternal grandparents, which is also the group most at risk of losing all contact (Doyle et al. 2010; Oppelaar & Dykstra 2004; Jappens & Van Bavel 2016). When parents are divorced, paternal grandparents can no longer count on the mother-kinkeeper to stay in touch with grandchildren (Hagestad 1985). Post-divorce residence arrangements of grandchildren also play a major role in the different impact on ties with maternal compared to paternal grandparents. While arrangements of shared residence are on the rise, children usually still reside with the divorced mother. This mother-residence leaves the grandparents on the father's side fewer chances to develop close relationships with their grandchildren, while the maternal grandparents will provide much of the mother's increased need for support in the care for the children (Jappens & Van Bavel 2016; Westphal, Poortman & van der Lippe 2015).

# 2.3 Grandparents & grandchildren's well-being: Does lineage matter?

From the research reviewed in the previous section, we know that relationships with maternal grandparents tend to be closer than those with paternal grandparents, especially when parents are divorced. And in an earlier section, we concluded that strong grandparent-grandchild relationships are positively associated with grandchild well-being and that they can play a significant role in buffering the impact of a parental divorce on grandchildren. Next, evolutionary theory suggests that the impact of grandparent relationships on grandchildren's well-being also varies by lineage, and that close relationships with maternal grandparents are more beneficial to grandchildren than good relationships with paternal grandparents (Euler 2011; Sear & Coall 2011). Humans are conceived as cooperative breeders, engaging extended family (and above all grandmothers) to manage child care and thus fostering fertility and child survival (Hrdy 2009; Sear 2016). But maternal and paternal grandparents in natural fertility populations had divergent reproductive interests. In contrast to an own daughter, a daughter-in-law is replaceable in principle. Therefore, the paternal grandparents' main fitness interest is to exploit the maternal resources of their daughter-in-law and increase the number of new-born grandchildren. The maternal grandparents' main interest is to assure their daughter's maternal resources and wellbeing, which also improves the survival chances of the grandchildren (Euler 2011; Mace & Sear 2005). Studies based on historical evidence from populations with high fertility and child mortality, show indeed that the presence of maternal grandparents tends to improve child survival more consistently than the presence of paternal grandparents (Sear & Mace 2008; Sear & Coall 2011).

In contemporary societies, with low fertility and child mortality, the beneficial effects of grandparents may not be found in the number of surviving children but rather in outcomes such as child development and well-being (Coall & Hertwig 2010; Sear & Coall 2011). To date, only very few studies have differentiated between different types of grandparents when examining the association between grandparent relationships and grand-

children's well-being. Tanskanen and Danielsbacka (2012) studied emotional and behavioural problems using cross-sectional data of 11 to 16-year old adolescents in England and Wales. They found that problem behaviour was inversely associated with involvement of the maternal grandmother as well as grandfather, whereas there was no association with paternal grandparents' involvement. In a cross-sectional study of 380 adolescents (mean age of almost 14 years old) and their grandfathers in Cape Town, South Africa, Wild (2016) found that the involvement of paternal grandfathers was not correlated with adolescents' well-being, but that more involvement of maternal grandfathers was significantly associated with fewer emotional problems. Lussier and colleagues (2002) used a small cross-sectional sample of 5-year old children from a stable community in England and found that closeness to maternal grandparents was linked to lower levels of adjustment problems among grandchildren with married as well as with divorced parents. For the closeness to paternal grandparents, in contrast, they found no proof of an association with grandchild adjustment. Tanskanen (2017) did a cross-sectional study of grandparental investment (measured by parent-grandparent contact frequency) and the development of 3year old children living with both biological parents in England. He found that contacts between mothers and maternal grandparents were associated with better grandchild development. There were no statistical associations for contacts with paternal grandmothers, and grandchildren whose fathers had daily contact with the paternal grandfathers had lower test scores than those who did not have contact at all.

Based on the evolutionary argument about the differential interests of maternal and paternal grandparents and their impact on the wellbeing of grandchildren, and supported by suggestive evidence from a limited number of earlier studies, we formulate the following hypothesis: the quality of relationships with maternal grandparents is expected to be positively associated with the subjective well-being of grandchildren with divorced parents, whereas relationships with paternal grandparents are not expected to be associated with grandchildren's well-being. When testing this hypothesis, we control for the grandchildren's post-divorce residence arrangement, but also for other factors like the parent-child relationships, parents' repartnering, and interparental conflicts that have been shown to be related to children's well-being as well as to grandchild-grandparent relationships in divorced families.

# 3. Method

# 3.1 Data and sample

We use data from the multi-actor survey 'Divorce in Flanders' (DiF) (Mortelmans et al. 2011). In this survey, married and divorced anchor respondents and a child were interviewed in 2009 or 2010. Marriages contracted in Flanders between 1971 and 2008 between men and women with the Belgian nationality who were never married before were selected from the National Register. Marriages that had ended in divorce were oversampled. Both (ex-)partners of this reference marriage were invited for a computer assisted personal interview, 42.2% of them participated, 53.7% of marriages initially selected was represent-

ed by at least one participating partner. In total, 6470 (ex-)partners participated; 1811 were married and 4659 were divorced.

For each reference marriage, a common reference child of both (ex-)partners was randomly selected. All questions about children referred to this child. Reference children older than 10 years and living with one or both parents, 2225 in total, were also invited for an interview. According to the Belgian law, permission from both parents was required to approach children below the age of 18 years (about half of the selected children), which was obtained for 57.3% of minor children with divorced parents and 87.4% of those with married parents. Finally, responses from 1257 children (73.2% of those contacted) were collected; 379 with married parents and 878 with divorced parents. Nonresponse analyses showed that participating children did not significantly differ from nonparticipating children with respect to age, sex, parent's education and the level of parental conflicts, but parents of participating children did report a slightly better relationship with the selected child than those of nonparticipating children. In what follows, grandchild refers to the selected child from the reference marriage, parent, mother, and father refer to the reference marriage in the middle generation, and grandparents to the parents of the respondents in the reference marriage.

For our study, we selected grandchildren aged 10 to 25 years with divorced parents, living with at least one parent. We imposed the upper age boundary of 25 years, as from this age on half of the children in Flanders have left the parental home. Relationships with maternal grandmother (MGM), maternal grandfather (MGF), paternal grandmother (PGM) and paternal grandfather (PGF) are each modelled separately. We selected four different samples of grandchildren with the respective grandparent still alive and excluded grandchildren who had missing values on the variables used in our analyses. This resulted in the following sample sizes: 577 for the relationship with MGM, 435 for MGF, 534 PGM and 389 PGF.

Our analytical sample merges information given by the grandchildren with the data provided by one or both participating parents. For a majority of grandchildren, we had information from both parents, for others only information from one participating parent was available. Life satisfaction, self-esteem, quality of relationships with parents and grandparents and parental conflict were reported by the grandchildren themselves; sociodemographic variables were derived from the parent interviews.

#### 3.2 Measures

Well-being. Grandchildren's life satisfaction was measured by asking them "All things considered, how satisfied or dissatisfied are you with your life as a whole nowadays?", with answers ranging from 0 (extremely dissatisfied) to 10 (extremely satisfied). Self-esteem was measured with the Rosenberg Self-Esteem Scale (Rosenberg 1965) consisting of 10 items to be rated on a five-point scale. Respondents indicated the extent to which they agreed or not with expressions like "I certainly feel useless at times" and "I am able to do things as well as most other people". Cronbach's alpha was .87. We used principal components analysis to create a component with higher scores representing higher levels of self-esteem.

Table 1: Descriptive statistics of variables used in the analysis of each grandparent-sample: Means (M) and Standard Deviations (SD)

		. ,						
	Maternal		Maternal		Paternal		Paternal	
	grandmother		grandfather		grandmother		grandfather	
	(N=57	77)	(N=435)		(N=534)		(N=3	89)
Variable (Range)	M	S.D.	M	S.D.	M	S.D.	M	S.D.
Life satisfaction (0 − 10)	7.97	1.55	7.96	1.58	7.97	1.56	7.98	1.55
Self-esteem (-4.13 – 2.12)	-0.03	1.06	-0.05	1.06	-0.05	1.08	-0.03	1.04
Relationship grandparent								
Not good	0.17		0.23		0.30		0.29	
Good	0.47		0.43		0.41		0.44	
Very good	0.36		0.34		0.28		0.27	
Other grandparent alive	0.65		0.87		0.63		0.87	
Age (10 – 25)	16.82	3.88	16.44	3.85	16.79	3.78	16.40	3.65
Girl	0.48		0.50		0.49		0.48	
Education parents								
Low	0.08		0.09		0.08		0.09	
Medium	0.44		0.40		0.41		0.42	
High	0.47		0.51		0.51		0.49	
Relationship mother								
Not good	0.11		0.11		0.12		0.11	
Good	0.42		0.42		0.42		0.40	
Very good	0.47		0.48		0.46		0.49	
Relationship father								
Not good	0.34		0.31		0.31		0.32	
Good	0.42		0.44		0.44		0.41	
Very good	0.24		0.25		0.25		0.27	
Residence arrangement								
With mother	0.62		0.59		0.59		0.59	
Shared residence	0.23		0.25		0.25		0.24	
With father	0.09		0.10		0.09		0.10	
Other	0.06		0.06		0.07		0.07	
New partner mother	0.50		0.50		0.49		0.49	
New partner father	0.62		0.64		0.61		0.65	
Parental conflict								
Occasionally	0.62		0.60		0.62		0.66	
Frequent	0.27		0.29		0.27		0.25	
No contact	0.04		0.04		0.04		0.03	
No information	0.07		0.07		0.07		0.06	
Years since divorce (1 – 24)	9.01	4.78	8.96	4.76	8.99	4.82	8.81	4.65

Relationships with grandparents. Grandchild–grandparent relationship quality was assessed by first asking grandchildren whether they had contact with each of the grandparents alive. If yes, they were asked to rate "how good or bad the relationship is" on a five-point scale from very bad to very good. As the answers were skewed (with the majority of grandchildren indicating to have at least a good relationship), we constructed 3 categories: "no good relationship (very bad, bad, neither bad nor good, no contact)", "good relationship" and "very good relationship". As shown in Table 1, for paternal grandparents, more grandchildren indicated not to have a good relationship while very good relationships are less common when compared to maternal grandparents. These figures are in line with the 'matrifocal bias' in grandparent relationships discussed in the background chapter. Comparison with grandchildren from intact families in the DiF-sample (not in table, available

by the corresponding author upon request) showed that this bias is more prominent in these divorced families.

Control variables. We control for different demographic characteristics of the grand-children and their parents that can be related to both grandparent relationships and grandchild well-being (Dunifon & Bajracharya 2012). To measure the quality of the grand-child-mother and grandchild-father relationship, children were asked "How good or bad is your relationship with your mother/father?" They could answer both questions on a five-point scale. We created 3 categories: "no good relationship (very bad, bad, neither bad nor good, no contact)", "good relationship" or "very good relationship". Other control variables included the age and sex of the grandchild, the number of years passed since the parental divorce, a variable indicating whether the other maternal/paternal grandparent was still alive, and the educational level of the highest educated parent. Each participating parent was asked about the own education as well as that of the (ex-)spouse. We selected the highest level of education of both parents and reduced the initial 22 categories to 3: "low" level of education if no qualification or degrees up to lower secondary school, "medium" for upper secondary schooling, and "high" for tertiary education.

We also control for aspects of the post-divorce family situation that may either negatively affect or protect children's well-being, and that also may be associated to grandchildgrandparent relationships in divorced families (Jappens & Van Bavel 2019). To know grandchildren's residence arrangement, divorced parents were asked whether the selected child lived with the mother and/or the father. If children lived with both divorced parents at least some of the time, they had to indicate on a calendar which days and nights on a monthly basis they spent with whom. From this information, we coded into 4 categories: "with mother", "shared residence (minimum 33% of time with each parent)", "with father", "another or no fixed arrangement". The divorced parents indicated whether or not they were living with a new partner in the household. If one parent did not participate in the survey, we used the answer of the participating parent to the question "Is (name exspouse) living with a new partner at the moment?", creating a dummy variable for the mother as well as the father. To measure the level of parental conflict, children had to indicate on a scale from 1 (never) to 7 (daily) how often the following situations had occurred in the past 12 months: 'blame each other', 'yell or scream at each other', 'use physical violence', 'throw or break things deliberately', 'don't talk to each other for a while'. A separate answering option was provided for children whose parents were no longer in touch. Based on the highest score over the 5 conflict situations, we coded into 4 categories: "no or occasional conflict", "frequent conflict (at least once a month)", "no contact" and "no information (missing answer on one of the 5 conflict situations)". Table 1 presents the descriptive statistics of all variables in the four grandparent-samples.

### 3.3 Analytic strategy

To test how relationships with different grandparents are associated with the well-being of grandchildren in divorced families, we run ordinary least squares regressions to model grandchildren's life satisfaction and self-esteem. We do this separately for each grandparent sample. We run a baseline model only including the quality of the relationship with

the grandparent, and a full model including all described control variables. Table 2 shows the results for grandchildren's life satisfaction, Table 3 for grandchildren's self-esteem.

Table 2: Linear regression analyses of grandchildren's life satisfaction

	Maternal		Maternal		Paternal		Paternal	
	grandmother (N=577)		grandfather		grandmother		grandfather	
				(N=435)		(N=534)		39)
	В	S.E.	В	S.E.	В	S.E.	В	S.E.
a)Baseline model								
Intercept	7.85***	0.09	7.82***	0.11	7.98***	0.10	7.94***	0.12
Relation with grandparent (ref.=good)								
Not good	-0.40*	0.18	-0.34°	0.19	-0.34*	0.16	-0.40*	0.18
Very good	0.52***	0.14	0.66***	0.17	0.32°	0.16	0.55**	0.19
Adjusted R Square	0.	.04	(	0.06	(	0.02	0	.05
b)Full model								
Intercept	8.36***	0.39	8.14***	0.50	8.24***	0.40	8.12***	0.50
Relation with grandparent (ref.=good)								
Not good	-0.38*	0.17	-0.36°	0.19	-0.19	0.17	-0.27	0.19
Very good	0.27°	0.14	0.27	0.18	0.14	0.16	0.39*	0.19
Age	-0.01	0.02	-0.01	0.02	-0.01	0.02	-0.01	0.02
Girl	-0.40**	0.12	-0.35*	0.15	-0.36**	0.13	-0.20	0.15
Other grandparent alive	-0.05	0.13	0.05	0.22	-0.09	0.14	-0.06	0.22
Educational level parents (ref.=high)								
Low	-0.08	0.23	-0.13	0.27	-0.23	0.24	-0.41	0.28
Medium	-0.19	0.13	-0.28°	0.16	-0.21	0.14	-0.18	0.16
Relationship with mother (ref.=good)								
Not good	-0.60**	0.22	-0.72**	0.26	-0.64**	0.22	-0.55*	0.26
Very good	0.42**	0.14	0.28°	0.16	0.53***	0.14	0.57**	0.17
Relationship with father (ref.=good)								
Not good	-0.17	0.15	-0.14	0.18	-0.09	0.17	-0.19	0.20
Very good	0.54**	0.16	0.69***	0.19	0.64***	0.17	0.50*	0.19
Residence arrangement (ref.=with								
mother)								
Shared residence	0.06	0.16	0.12	0.19	0.05	0.16	-0.08	0.20
With father	0.31	0.24	0.32	0.27	0.38	0.25	0.08	0.29
Other	0.12	0.25	0.13	0.31	0.15	0.26	0.29	0.30
Years since divorce	-0.01	0.02	0.02	0.02	0.00	0.02	0.00	0.02
Mother lives with new partner	-0.03	0.13	-0.14	0.15	-0.13	0.14	-0.14	0.15
Father lives with new partner	-0.08	0.13	-0.12	0.16	-0.04	0.14	-0.02	0.16
Conflict between parents								
(ref.=occasionally)								
Frequent	-0.52*	0.14	-0.18	0.17	-0.30°	0.15	-0.36*	0.18
No contact	0.38	0.33	0.51	0.39	0.45	0.34	0.88*	0.44
No information	-0.23	0.25	-0.12	0.28	0.03	0.26	0.17	0.31
Adjusted R Square	0.14		0.1	2	0.12		0.13	<u> </u>

∘*p*<0.10, \**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001

Table 3: Linear regression analyses of grandchildren's self-esteem

	Maternal		Maternal		Paternal		Paternal		
	grandmother		grandfather		grandmother		grandfa	grandfather	
	(N=57	7)	(N=43)	35)	(N=534)		(N=389)		
	В	S.E.	В	S.E.	В	S.E.	В	S.E.	
a)Baseline model									
Intercept	-0.13*	0.06	-0.21**	0.08	-0.03	0.07	-0.19*	0.08	
Relation with grandparent (ref.=good)									
Not good	-0.16	0.12	-0.14	0.13	-0.18	0.11	0.12	0.12	
Very good	0.36***	0.10	0.56***	0.11	0.13	0.11	0.45***	0.13	
Adjusted R Square	0.03		0.07		0.01		0	.03	
b)Full model									
Intercept	-0.75**	0.26	-0.80*	0.33	-0.55*	0.27	-0.64°	0.33	
Relation with grandparent (ref.=good)	0.75	0.20	0.00	0.55	0.55	0.27	0.01	0.55	
Not good	-0.12	0.12	-0.20	0.13	-0.12	0.11	0.17	0.12	
Very good	0.24*	0.09	0.34**	0.12	0.07	0.11	0.43**	0.13	
Age	0.05***	0.01	0.04**	0.02	0.04**	0.01	0.04*	0.02	
Girl	-0.36***	0.08	-0.37***		-0.40***	0.09	-0.31**	0.10	
Other grandparent alive	-0.06	0.09	-0.04	0.14	0.02	0.09	0.01	0.14	
Educational level parents (ref.=high)	0.00	0.05	0.0.	0.1.	0.02	0.05	0.01	0.1.	
Low	-0.20	0.16	-0.08	0.18	-0.09	0.17	-0.07	0.18	
Medium	-0.29**	0.09	-0.22*	0.10	-0.23*	0.09	-0.23*	0.10	
Relationship with mother (ref.=good)	0.25	0.05	0.22	0.10	0.23	0.05	0.25	0.10	
Not good	-0.45**	0.14	-0.22	0.17	-0.36*	0.15	-0.48**	0.17	
Very good	0.29**	0.09	0.29**	0.11	0.33**	0.10	0.35**	0.11	
Relationship with father (ref.=good)									
Not good ,	-0.02	0.10	0.00	0.12	0.00	0.12	-0.04	0.13	
Very good	0.38**	0.11	0.37**	0.12	0.40***	0.11	0.25*	0.13	
Residence arrangement (ref.=with									
mother)									
Shared residence	0.00	0.11	0.12	0.12	-0.03	0.11	-0.07	0.13	
With father	0.15	0.16	0.17	0.18	0.16	0.17	0.06	0.19	
Other	0.03	0.17	0.10	0.20	0.06	0.18	0.20	0.20	
Years since divorce	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	
Mother lives with new partner	-0.09	0.09	-0.12	0.10	-0.09	0.09	-0.11	0.10	
Father lives with new partner	-0.02	0.09	0.05	0.10	-0.08	0.09	-0.01	0.11	
Conflict between parents									
(ref.=occasionally)									
Frequent	-0.37***	0.10	-0.26*	0.11	-0.36**	0.10	-0.39**	0.12	
No contact	0.19	0.22	0.45°	0.26	0.26	0.23	0.04	0.29	
No information	0.07	0.17	0.09	0.19	-0.04	0.18	0.09	0.20	
Adjusted R Square	0	.18	0.17		0.14		0.16		
0 10 4 0 05 44 0 01 444 0 0									

<sup>•</sup>p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

#### 4. Results

Looking at grandchildren's life satisfaction (Table 2), in line with our expectations, we found a significant association with the quality of relationships with maternal grandparents. The baseline model showed that grandchildren having a very good relationship with both maternal grandparents reported significantly higher levels of life satisfaction than those having a good relationship, whereas those lacking a good relationship reported significantly lower life satisfaction. After inclusion of the control variables, the results still show that grandchildren who do not have a good relationship with the maternal grandmother and grandfather reported significantly lower life satisfaction than the reference group. Those having a very good relationship with the maternal grandmother reported significantly more life satisfaction.

For the relationship with the paternal grandmother, we saw in the baseline model that grandchildren having a very good relationship with PGM reported significantly more life satisfaction, whereas those who indicated not to have a good relationship reported significantly less life satisfaction than the reference group having a good relationship. But once including control variables, especially the relationship with the parents, effects are small and insignificant. For the relationship with the paternal grandfather however, against our expectations, we did find a significant association with the life satisfaction of grandchildren with divorced parents. Grandchildren having a very good relationship with the grandfather reported significantly more life satisfaction than those having only a good relationship.

As shown in Table 3, the relationships that grandchildren in divorced families have with maternal grandparents as well as the paternal grandfather are also associated with their self-esteem. Grandchildren having a very good relationship with the maternal grandmother and grandfather, reported more self-esteem than the reference categories having a good relationship with MGM and MGF. We did not find a significant association between grandchildren's self-esteem and the quality of the relationship with their paternal grandmother, neither in the model with the control variables nor in the model without them. Grandchildren having a very good relationship with the paternal grandfather however, contrary to what we expected, did report significantly more self-esteem than those having a good relationship.

We conducted a series of tests to check the robustness of our results. First, we included the following additional control variables in our analysis: whether the grandparent lives in the household, the time the grandchild usually has to travel to the grandparent, and the frequency of face-to-face contact with the grandparent. This did not substantially alter the results. Next, as grandparent relationships may change with grandchildren's age, we did tests using samples of younger (10-18) and a sample of older (14-25) grandchildren. The results of these tests are very similar to the results for our full samples of grandchildren.

We also fitted our models with extended samples, including grandchildren with divorced as well as with married parents and controlling for the parental marital status (see Appendix A). Here too, we found very similar results, i.e. significant associations between grandchildren's life satisfaction and self-esteem on the one hand and the quality of the relations they have with their maternal grandparents as well as their paternal grandfather on the other hand.

Additionally, we looked at the match between the sex of grandparents and grandchildren. Based on an argument about sex chromosome relatedness, it has been predicted that paternal grandmothers invest more in granddaughters whereas paternal grandfathers favour grandsons (Fox et al. 2009; Tanskanen 2017), even though this has not been supported by evidence in modern societies. We tested interactions between the sex of the grandchild and the quality of grandparent relationships. The results showed no significant differences in the association with well-being between boys and girls, except when concerning the relationship with the paternal grandmother. Lacking a good relationship with the PGM seemed to be associated to lower life satisfaction and self-esteem among girls but not among boys. Compared to a good relationship with the PGM, having a very good relationship with the PGM was associated to higher levels of self-esteem among boys and not girls. These test results do not specifically confirm the sex chromosome hypothesis. We did not find significant associations between grandchildren's well-being and their relationship with their PGM in the full models in Tables 2 and 3, but the fact that we did find positive associations between the relationship with the PGM and the well-being of grandsons as well as granddaughters does also run counter to our hypotheses based on differential reproductive interests, i.e. that only relationships with the grandparents on the mother's side of the family would be positively associated with the grandchildren's well-being.

#### 5. Discussion

When parents divorce, grandparents can play an important and supportive role in the lives of their grandchildren. On the other hand, it has also been shown that a parental break-up may put grandchild-grandparent ties under pressure, and that especially the relationships on the father's side of the family get hampered or sometimes even totally lost. Yet, our study showed that grandchildren in divorced families can benefit from close relationships with paternal as well as maternal grandparents.

Using data provided by grandchildren and their divorced parents in the multi-actor survey Divorce in Flanders, we studied the association between the quality of grandchild-grandparent relationships and grandchildren's life satisfaction and self-esteem. We examined whether the lineage of the grandparent plays a role in this association, as the evolutionary idea of cooperative breeders and different reproductive interests suggests that maternal grandparents are more beneficial to grandchildren's well-being than paternal.

Our data showed that lineage does matter for grandchild-grandparent relationships among grandchildren with divorced parents: relationships with the maternal grandparents, and especially those with the maternal grandmother, are closer than the relationships on the paternal side of the family. But the role of lineage in the association between grandparent relationship quality and grandchild well-being was not obvious. We found that the strength of relationships with maternal as well as paternal grandparents is positively associated with grandchildren's subjective well-being. These results are in line with some previous studies that found a beneficial role of having a close or involved grandparent for grandchildren of separated parents (Henderson et al. 2009; Jappens & Van Bavel 2019; Ruiz & Silverstein 2007; Attar-Schwarz et al. 2009). But our results do not confirm

our hypothesis based on the evolutionary idea of different reproductive interests of matrilineal and patrilineal grandparents, and on the previous studies that found associations between grandchildren's well-being and involvement from maternal grandparents, but not from paternal (Lussier et al. 2002; Tanskanen & Danielsbacka 2012; Tanskanen 2017; Wild 2016).

In contrast to the studies mentioned (except for Lussier et al. 2012), our research focused on grandchildren in divorced families. One could argue that the differential association with close relationships with maternal and paternal grandparents gets blurred when parents separate, but tests also including grandchildren with married parents (see Appendix A) revealed the same patterns. From our results, it also seems that close relationships with grandfathers are at least as much correlated with grandchildren's well-being than those with grandmothers do. This finding is in line with the statement by Sear and Coall (2011) that grandfathers in contemporary low-fertility societies, in contrast to historical high-fertility populations, can have an equal or even greater impact on grandchildren than grandmothers. It is suggested that this may partly be due to the presence of other family members, as for example in single-parent families, which are usually single motherfamilies, the grandfather may assume the role of the father figure, in this way overshadowing the role of the grandmother (Coall et al. 2016). In our samples of grandchildren with divorced parents, the majority lived indeed with the mother, but our models were also controlled for this residence arrangement of the grandchild, and for the quality of the relationship with the mother and the father. Future research could shed more light on the differential impact of grandmothers and grandfathers and possible explanations.

This study has a number of limitations. First, the cross-sectional nature of our data does not allow firm statements on causal effects. Based on theory and previous research we expect that relationships with grandparents affect grandchildren's well-being but it may also be that higher well-being allows grandchildren to develop better relationships with grandparents, suggesting a reverse causal order. Second, both our indicators of wellbeing and the quality of relationships with grandparents are based on self-reports by grandchildren. This offers valuable information on how grandchildren see their family resources and how this is related to their subjective well-being, but common-method variance may also lead to an overestimation of the association between both measures (Podsakoff et al. 2003). Third, the quality of a grandchild's relationships with grandparents was measured by a single item, which is less reliable than multi-item measures. Fourth, we only asked about the quality of a grandchild's relationships with grandparents at the time of the interview while family relationships may change when grandchildren grow older. We do not know how close grandchildren were to their grandparents at the time of their parents' divorce, when they may be needed most. Sixth, although parents serve as gatekeepers and the quality of parent-grandparent relationships will be associated to the quality of grandchild-grandparent relationships, we were not able to account for the parentgrandparent relationships. Seventh, data were collected in a region with one of the highest divorce rates in Europe. As the adverse consequences of an event or circumstance may diminish as it becomes more common, it is possible that, when compared to other regions, findings from this sample underestimate the severity of the consequences of divorce for children, and by extension the role of relationships with grandparents.

Lastly, the procedure of selecting respondents, and especially the parental permission that was required for minor children, may have led to a selective non-response. Non-response analyses showed that parents of participating children did not significantly differ from those of nonparticipating children with respect to their educational level and parental conflicts, but they had slightly better relationships with their children. Also, parents may want to protect children who emotionally suffer from the divorce by refusing interviewers to contact them, and participating grandchildren might differ on our outcome variables from grandchildren who did not participate in the survey. Respondents in the Divorce in Flanders sample indeed score their life satisfaction slightly higher than a sample of adolescents with divorced parents in another Flemish study (Sodermans 2013).

Despite these limitations, our findings clearly point out that grandparents may be an important resource for their grandchildren in difficult times such as a parental divorce, and that grandchildren may not only benefit from close relationships with maternal grandparents, but also those on the paternal side of the family. The role of grandparents deserves more attention in future research, especially considering the growth of the grandparent generation and of the number of divorced or separated families. It is also important for parents, practitioners as well as policy makers to be aware of the role that grandparents can play in the well-being of their grandchildren. Grandparents are now largely neglected in divorce policies, and grandchild–grandparent contact often gets hampered or sometimes even totally lost when parents divorce, especially on the side of the father (Jappens & Van Bavel 2016). Yet, this study suggests that strong relationships with maternal as well as paternal grandparents play a beneficial role for grandchildren with divorced parents.

#### References

Amato, P.R. (2000). The consequences of divorce for adults and children. *Journal of Mar-* riage and the Family, 62, 4, 1269-1287.

https://doi.org/10.1111/j.1741-3737.2000.01269.x

Arber, S. & Timonen, V. (Eds.). (2012). Contemporary grandparenting. Changing family relationships in global contexts. Bristol: Policy Press.

Attar-Schwartz, S., Tan, J.P., Buchanan, A., Flouri, E., & Griggs, J. (2009). Grandparenting and adolescent adjustment in two-parent biological, lone-parent, and step-families. *Journal of Family Psychology*, 23, 1, 67-75.

https://doi.org/10.1037/a0014383

Attias-Donfut, C., & Segalen, M. (2007). Grands-Parents. *La famille à travers les generations* [Grandparents: The family across generations]. Paris: Odile Jacob.

Ben-Arieh, A. (2008). The child indicators movement: Past, present, and future. *Child Indicators Research*, 1, 1, 3-16.

https://doi.org/10.1007/s12187-007-9003-1

Bengtson, V.L., & Roberts, R.E.L. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and the Family*, 53, 4, 856-870.

https://doi.org/10.2307/352993

- Bengtson, V.L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, 63, 1, 1-16. https://doi.org/10.1111/j.1741-3737.2001.00001.x
- Bernardi, F., Härkönen, J., Boertien, D., Andersson, R., Bastaits, K., & Mortelmans, D. (2013). Effects of family forms dynamics on children's well-being and life chances: literature review. *Families and Societies Working Paper Series*, 4, 2013. http://www.familiesandsocieties.eu/wp-

content/uploads/2014/12/WP04BernardiEtal2013.pdf

- Chan, C.G., & Elder, G.H. (2000). Matrilineal advantage in grandchild–grandparent relations. *The Gerontologist*, 40, 2, 179-190. https://doi.org/10.1093/geront/40.2.179
- Cherlin, A.J., & Furstenberg, F.F. (1986). *The new American grandparent: A place in the family, a life apart.* New York: Basic Books.
- Coall, D.A., & Hertwig, R. (2010). Grandparental investment: Past, present, and future. *Behavioral and Brain Sciences*, 33, 1, 1-19. https://doi.org/10.1017/S0140525X09991105
- Coall, D.A., & Hertwig, R. (2011). Grandparental investment: A relic of the past or a resource for the future? *Current Directions in Psychological Science*, 20, 2, 93-98. https://doi.org/10.1177/0963721411403269
- Coall, D.A., Hilbrand, S., Sear, R., & Hertwig, R. (2016). A new niche? The theory of grandfather involvement. In: Buchanan, A. & Rotkirch, A. (Eds.), *Grandfathers*. London: Palgrave Macmillan, 21-44.
- Cox, M.J., & Paley, B. (1997). Families as systems. Annual Review of Psychology, 48, 243-267.
  - https://doi.org/10.1146/annurev.psych.48.1.243
- Diener, E. (2012). New findings and future directions for subjective well-being research. *American Psychologist*, 67, 8, 590-597. https://doi.org/10.1037/a0029541
- Doyle, M., O'Dywer, C., & Timonen, V. (2010). "How can you just cut off a whole side of the family and say move on?" The reshaping of paternal grandparent-grandchild relationships following divorce or separation in the middle generation. *Family Relations*, 59, 5, 587-598.
  - https://doi.org/10.1111/j.1741-3729.2010.00625.x
- Dunifon, R. & Bajracharya, A. (2012). The role of grandparents in the lives of youth. *Journal of Family Issues*, 33, 9, 1168-1194.
  - https://doi.org/10.1177/0192513X12444271
- Dykstra, P., & Fokkema, T. (2011). Relationships between parents and their adult children: A West European typology of late-life families. *Ageing and Society*, 31, 4, 545-569. https://doi.org/10.1017/S0144686X10001108
- Euler, H.A. (2011). Grandparents and extended kin. In: Salmon, C. & Shackelford, T.K. (Eds.), *The Oxford handbook of evolutionary family psychology*. New York: Oxford University Press, 181-207
- Euler, H.A. & Weitzel, B. (1996). Discriminative grandparental solicitude as reproductive strategy. *Human Nature*, 7, 1, 39-59. https://doi.org/10.1007/BF02733489

- Eurostat. (2017). Marriage and Divorce Statistics.
  - http://ec.europa.eu/eurostat/statistics-
  - explained/index.php/Marriage\_and\_divorce\_statistics. [retrieved December 1, 2017].
- Ferguson, N. (2004). Grandparenting in divorced families. Bristol: Policy Press.
- Fox, M., Sear, R., Beise, J., Ragsdale, G., Voland, E. & Knapp, L.A. (2009). Grandma plays favourites: X-chromosome relatedness and sex-specific childhood mortality. *Proceedings of the Royal Society of London B: Biological Sciences*, 277, 1681, 567-573. https://doi.org/10.1098/rspb.2009.1660
- Glaser, K., Ribé Montserrat, E., Waginger, U., Price, D., Stuchbury, R., & Tinker, A. (2013). Grandparenting in Europe: family policy and grandparents' role in providing child-care. London: Grandparents Plus.
- Griggs, J., Tan, J.P., Buchanan, A., Attar-Schwartz, S. & Flouri, E. (2010). 'They've always been there for me': Grandparental involvement and child well-being. *Children & Society*, 24, 3, 200-214.
  - https://doi.org/10.1111/j.1099-0860.2009.00215.x
- Hagestad, G.O. (1985). Continuity and connectedness. In: Bengtson, V.L. & Robertson, J.F. (Eds.), *Grandparenthood*. Beverly Hills: Sage, 31-48.
- Henderson, C.E., Hayslip, B., Sanders, L.M. & Louden, L. (2009). Grandmother-grandchild relationship quality predicts psychological adjustment among youth from divorced families. *Journal of Family Issues*, 30, 9, 1245-1264. https://doi.org/10.1177/0192513X09334913
- Hrdy, S.B. (2009). Mothers and others. Cambridge: Harvard University Press.
- Huber, B.R. & Breedlove, W.L. (2007). Evolutionary theory, kinship, and childbirth in cross-cultural perspective. *Cross-Cultural Research*, 41, 2, 196-219. https://doi.org/10.1177/1069397106298261
- Jappens, M., & Van Bavel, J. (2012). Regional family norms and child care by grandparents in Europe. *Demographic research*, 27, 4, 85-120. https://doi.org/10.4054/DemRes.2012.27.4
- Jappens, M. & Van Bavel, J. (2016). Parental divorce, residence arrangements and contact between grandchildren and grandparents. *Journal of Marriage and Family*, 78, 2, 451-467.
  - https://doi.org/10.1111/jomf.12275
- Jappens, M. & Van Bavel, J. (2019). Relationships with grandparents and grandchildren's well-being after parental divorce. *European Sociological Review*. https://doi.org/10.1093/esr/jcz033
- Johnson, C.L. (1998). Effects of adult children's divorce on grandparenthood. In Szinovácz, M.E. (Ed.), *Handbook on grandparenting*. Westport: Greenwood, 184-199.
- Kemp, C.L. (2005). Dimensions of grandparent-adult grandchild relationships: From family ties to intergenerational friendships. Canadian Journal on Aging/La Revue canadienne du vieillissement, 24, 2, 161-177.
  - https://doi.org/10.1353/cja.2005.0066
- Lussier, G., Deater-Deckard, K., Dunn, J. & Davies, L. (2002). Support across two generations: Children's closeness to grandparents following parental divorce and remarriage. *Journal of Family Psychology*, 16, 3, 363-376. https://doi.org/10.1037/0893-3200.16.3.363

- Mace, R. & Sear, R. (2005). Are humans cooperative breeders? In: Voland, E., Chasiotis, A. & Schiefenhoevel, W. (Eds.), *Grandmotherhood the Evolutionary Significance of the Second Half of Female Life*. Piscataway: Rutgers University Press, 143-159.
- Merz, E.M., Schuengel, C., & Schulze, H.J. (2009). Intergenerational relations across 4 years: Well-being is affected by quality, not by support exchange. *The Gerontologist*, 49, 4, 536-548.
  - https://doi.org/10.1093/geront/gnp043
- Monserud, M.A. (2008). Intergenerational relationships and affectual solidarity between grandparents and young adults. *Journal of Marriage and Family*, 70, 1, 182-195. https://doi.org/10.1111/j.1741-3737.2007.00470.x
- Moorman, S.M. & Stokes, J.E. (2014). Solidarity in the grandparent–adult grandchild relationship and trajectories of depressive symptoms. *The Gerontologist*, 56, 3, 408-420. https://doi.org/10.1093/geront/gnu056
- Mortelmans, D., Pasteels, I., Bracke, P., Matthijs, K., Van Bavel, J. & Van Peer, C. (2011). *Scheiding in Vlaanderen* [Divorce in Flanders]. Leuven: Acco.
- Oppelaar, J. & Dykstra, P. A. (2004). Contacts between grandparents and grandchildren. *The Netherlands journal of social sciences*, 40, 2, 91-113. http://hdl.handle.net/1765/18220
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. & Podsakoff, N.P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 5, 879-903. https://doi.org/10.1037/0021-9010.88.5.879
- Pollet, T.V., Nettle, D. & Nelissen, M. (2006). Contact frequencies between grandparents and grandchildren in a modern society: Estimates of the impact of paternity uncertainty. *Journal of Cultural and Evolutionary Psychology*, 4, 3-4, 203-213. https://doi.org/10.1556/JCEP.4.2006.3–4.1
- Ryan, R.M., & Deci, E.L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166. https://doi.org/10.1146/annurev.psych.52.1.141
- Ruiz, S.A., & Silverstein, M. (2007). Relationships with grandparents and the emotional well-being of late adolescent and young adult grandchildren. *Journal of Social Issues*, 63, 4, 793-808.
  - https://doi.org/10.1111/j.1540-4560.2007.00537.x
- Robinson, M., Scanlan, L. & Butler, I. (2009). 'It feels normal that other people are split up but not your mum and dad': Divorce through the eyes of children. In Bentley, G. & Mace, R. (Eds.), Substitute parents. Biological and social perspectives on alloparenting in human societies. New York: Berghahn Books, 325-40.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton: Princeton University Press.
- Rosenthal, C.J. (1985). Kinkeeping in the familial division of labor. *Journal of Marriage and the Family*, 47, 4, 965-974.
  - https://doi.org/10.2307/352340
- Sear, R. (2016). Beyond the nuclear family: an evolutionary perspective on parenting. *Current Opinion in Psychology*, 7, 98-103. https://doi.org/10.1016/j.copsyc.2015.08.013

- Sear, R. & Coall, D. (2011). How much does family matter? Cooperative breeding and the demographic transition. *Population and development review*, 37, 1, 81-112. https://doi.org/10.1111/j.1728-4457.2011.00379.x
- Sear, R. & Mace, R. (2008). Who keeps children alive? A review of the effects of kin on child survival. *Evolution and human behavior*, 29, 1, 1-18. https://doi.org/10.1016/j.evolhumbehav.2007.10.001
- Silverstein, M., Giarrusso, R. & Bengtson, V.L. (2003). Grandparents and grandchildren in family systems: a social-developmental perspective. In: Bengtson, V.L. & Lowenstein, A. (Eds), *Global Aging and Challenges to Families*. New York: de Gruyter, 75-103.
- Sodermans, A.K. (2013). Parenting apart together. Studies on joint physical custody arrangements in Flanders [Ph. D thesis]. Leuven: Centre for Sociological Research.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, 11, 1, 1-19. https://doi.org/10.1111/1532-7795.00001
- Tanskanen, O.T. & Danielsbacka, M. (2012). Beneficial effects of grandparental involvement vary by lineage in the UK. *Personality and individual Differences*, 53, 8, 985-988. https://doi.org/10.1016/j.paid.2012.07.019
- Tanskanen, A.O. (2017). Intergenerational relations and child development in England. *Anthropological Review*, 80, 1, 127-139. https://doi.org/10.1515/anre-2017-0007
- Thompson, P. (1999). The role of grandparents when parents part or die: some reflections on the mythical decline of the extended family. *Ageing and Society*, 19, 4, 471-503. https://doi.org/10.1017/S0144686X99007461
- Timonen, V., Doyle, M. & O'Dwyer, C. (2009). The role of grandparents in divorced and separated families. Dublin: Family Support Agency.
- Uhlenberg, P. & Hammill, B. (1998). Frequency of grandparent contact with grandchild sets: Six factors that make a difference. *The Gerontologist*, 38, 3, 276-285. https://doi.org/10.1093/geront/38.3.276
- Westphal, S.K., Poortman, A.-R. & van der Lippe, T. (2015). What about the grandparents? Children's postdivorce residence arrangements and contact with grandparents. *Journal of Marriage and Family*, 77, 2, 424-440. https://doi.org/10.1111/jomf.12173
- Wild, L. (2016). Grandfather Involvement and Adolescent Well-Being in South Africa. In: Buchanan, A. & Rotkirch, A. (Eds.), *Grandfathers*. London: Palgrave Macmillan, 249-266.

# Appendix

Test analyses on sample of grandchildren with divorced and married parents

 ${\it Table A.1:} \ {\it Linear regression analyses of grandchildren's life satisfaction, sample including grandchildren with divorced and married parents}$ 

	Maternal grandmother (N=894)		Maternal grandfather (N=661)		Paternal grandmother (N=822)		Patern grandfa (N=59	ther	
Variable	В	S.E.	В	S.E.	В	S.E.	В	S.E.	
Intercept	8.46***	0.27	8.47*** 0.34		8.47*** 0.28		8.40***	0.34	
Divorced parents	-0.09	0.11	-0.09	0.12	-0.06	0.11	-0.11	0.13	
Relation with grandparent (ref.=good)									
Not good	-0.41**	0.14	-0.23	0.15	-0.21	0.13	-0.23	0.14	
Very good	0.25*	0.11	0.41***	0.13	0.12	0.12	0.25°	0.14	
Age	-0.02	0.01	-0.02	0.01	-0.02°	0.01	-0.02	0.02	
Girl	-0.28**	0.09	-0.27*	0.11	-0.22*	0.10	-0.13	0.11	
Other grandparent alive	-0.04	0.10	-0.03	0.17	-0.04	0.10	0.02	0.16	
Educational level parents (ref.=high)									
Low	-0.25	0.19	-0.01	0.21	-0.21	0.20	-0.22	0.23	
Medium	-0.12	0.10	-0.14	0.12	-0.16	0.10	-0.17	0.12	
Relationship with mother (ref.=good)									
Not good	-0.58**	0.17	-0.55*	0.20	-0.62***	0.17	-0.66***	0.21	
Very good	0.41***	0.11	0.27*	0.12	0.46***	0.11	0.49***	0.12	
Relationship with father (ref.=good)									
Not good	-0.34**	0.12	-0.23°	0.14	-0.25°	0.13	-0.31*	0.15	
Very good	0.35**	0.12	0.45***	0.14	0.45***	0.12	0.33*	0.14	
Adjusted R Square	0	.13	C	0.12		0.12		0.14	

<sup>°</sup>p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

*Table A.2*: Linear regression analyses of grandchildren's self-esteem, sample including grandchildren with divorced and married parents

	Maternal grandmother		Maternal grandfather		Paternal grandmother		Patern grandfat	
	(N=894)		(N=661)		(N=822)		(N=594)	
Variable	В	S.E.	В	S.E.	В	S.E.	В	S.E.
Intercept	-0.54**	0.18	-0.43°	0.23	-0.53**	0.19	-0.43°	0.23
Divorced parents	0.03	0.07	0.03	0.08	-0.04	0.08	-0.13	0.09
Relation with grandparent (ref.=good)								
Not good	-0.10	0.09	-0.22*	0.10	-0.13	0.09	0.13	0.10
Very good	0.21**	0.07	0.30**	0.09	0.02	0.08	0.37***	0.10
Age	0.04***	0.01	0.03**	0.01	0.04***	0.01	0.03**	0.01
Girl	-0.37***	0.06	-0.41***	0.07	-0.40***	0.07	-0.31***	0.08
Other grandparent alive	-0.11	0.07	-0.11	0.12	0.07	0.07	-0.04	0.11
Educational level parents (ref.=high)								
Low	-0.23*	0.13	-0.06	0.14	-0.07	0.14	0.01	0.15
Medium	-0.21**	0.07	-0.19*	0.08	-0.20**	0.07	-0.21**	0.08
Relationship with mother (ref.=good)								
Not good	-0.44***	0.12	-0.26°	0.13	-0.33**	0.12	-0.50***	0.14
Very good	0.24**	0.07	0.22**	0.08	0.29***	0.07	0.30***	0.08
Relationship with father (ref.=good)								
Not good	-0.05	0.08	0.03	0.09	0.00	0.09	-0.08	0.10
Very good	0.29***	0.08 *	0.34***	0.09	0.31***	0.08	0.20*	0.09
Adjusted R Square	0.	.15	0	.15	(	0.12	0.	.13

<sup>•</sup>p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

# Information in German

#### **Deutscher Titel**

Großeltern-Enkelkind-Beziehungen und kindliches Wohlbefinden nach elterlicher Scheidung in Flandern, Belgien. Welche Bedeutung kommt der Abstammungslinie (mütterlicherseits/väterlicherseits) zu?

#### Zusammenfassung

Wenn Eltern geschieden sind, können Großeltern für ihre Enkelkinder eine wichtige, unterstützende Rolle haben. Wenig ist jedoch bekannt über die Bedeutung dieser intergenerationellen Beziehungen für das Wohlbefinden der Enkelkinder. Bestehende Studien differenzieren nicht nach Abstammungslinie, obwohl zu erwarten ist, dass eine elterliche Scheidung unterschiedliche Folgen für die Beziehungen zu den Großeltern mütterlicherseits und väterlicherseits hat. Häufig erschwert eine Scheidung insbesondere den Kontakt zu den Großeltern väterlicherseits. Aus evolutionärer Sicht sollten Großeltern mütterlicherseits für das Wohlbefinden der Enkelkinder von größerer Bedeutung sein als Großeltern väterlicherseits. Anhand einer Stichprobe von Enkeln mit geschiedenen Eltern aus der Studie "Divorce in Flanders" wird untersucht, ob die Qualität der Beziehungen zu Großeltern mütterlicher und väterlicherseits mit dem subjektiven Wohlbefinden der Enkelkinder zusammenhängt. Die Ergebnisse deuten darauf hin, dass, obwohl die Beziehungen zu den Großeltern mütterlicherseits tendenziell enger sind als die zu den Großeltern väterlicherseits, eine enge Beziehung in beiden Abstammungslinien positiv mit dem kindlichen Wohlbefinden zusammenhängt. Dies deutet darauf hin, dass nicht nur die Großeltern mütterlicherseits, sondern auch die Großeltern väterlicherseits der Familie in den oft schwierigen Zeiten nach einer Scheidung der Eltern eine positive Rolle für ihre Enkelkinder spielen können.

**Schlagwörter:** Scheidung, Trennung, intergenerationelle Beziehungen, kindliches Wohlbefinden, Großeltern, Enkelkind

JFR – Journal of Family Research, 2020, vol. 32, no. 1, pp. 1–24.

doi: 10.20377/jfr-158

Submitted: September 12, 2018 Accepted: May 31, 2019

Published online: January 13, 2020



This work is licensed under a **Creative Commons Attribution 4.0 International License**.