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# Parental separation and intergenerational support

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#### Abstract

**Objective:** We investigate support between parents and adult children across families exposed and not exposed to parental separation in Germany, by examining multiple types of support (i.e., emotional, material, and instrumental), both directions of provision (i.e. giving and receiving), and exchanges with mothers and fathers.

**Background:** As parental separation may have implications for parent-child relationships and exchanges, with consequences for individuals' wellbeing, improving our understanding of the association between separation and support exchanges becomes paramount.

**Method:** Using data from the German Family Panel (*pairfam*, 2009-2016, N=4,340 respondents and 13,481 observations), we estimate a range of support exchanges between parents and children simultaneously using generalized linear regression models with correlated random terms across equations. Additionally, we assess whether these associations vary by the timing at which parental separation occurred and social background.

**Results:** Parental separation is negatively associated with support between parents and children. especially for fathers. However, no significant differences emerge between mothers who separated and mothers who did not in receiving material support from their children. The negative associations between parental separation and support between child and fathers are lower if parental separation occurs when the child is an adult. Further, when mothers are highly educated, separation has a less negative association with downward material support.

**Conclusion:** Overall. lower intergenerational assistance among families experiencing separation suggests increasing disadvantage for those already disadvantaged.

Key words: pairfam, Germany, material support, emotional support, instrumental support



#### 1. Introduction

Research on the extensive support between parents and adult children in contemporary societies has gained relevance in recent decades (Bengtson, 2001; Rossi & Rossi, 1990; Steinbach, 2012). The so-called solidarity perspective explains intergenerational support as reciprocal exchanges of resources rooted in long-term obligations of mutual support particularly salient in parent-child relationships (Antonucci & Jackson, 1990; Rossi & Rossi, 1991; Silverstein & Bengtson, 1997). Parents and children may use support provision as an exchange currency, expecting reciprocation to be immediate or over short time intervals (Leopold & Raab, 2013). However, parents' investments in children may also reflect long-term strategies to secure support from children later in life, for example in the form of elder care (Silverstein et al., 2002). Yet, evidence from Germany specifically suggest that, overall, children may expect more from parents than parents from children (Klaus, 2009), which translates in parents being net donors over the life course (Albertini et al., 2007; Kalmijn, 2019). With growing individualism, support exchanges increasingly respond to affection and individual concerns more than to norms and familial duty (Lye, 1996), and are continuously negotiated as interpersonal relationships develop (Swartz, 2009). Although shared values and interpersonal relationships play an important role for intergenerational exchange, evidence both in the U.S and in Germany suggests that the provision of support is ultimately contingent on individual needs and resources available to exchange (Leopold & Schneider, 2011; Silverstein et al., 2006).

In this study, we acknowledge that intergenerational support between parents and adult children might be affected by an event likely to alter relations within families and individual needs and resources: parental separation. The configurations of factors that sustain intergenerational exchanges are fragile and may be disrupted by changing family structures and relations over the life course. As family dynamics have become more complex and differentiated over time, generating a new context of family relationships and support structures that exacerbate social inequalities (e.g., McLanahan & Jacobsen, 2015 or Boertien et al., 2018 in relation to single parent families), parental separation potentially undermines parent-child relationships and exchanges in the long-term. In turn, this can have negative implications for individual's material and subjective wellbeing over the life course, and increase the reliance on the welfare state. Accordingly, improving our understanding of how parental separation underlies intergenerational support exchanges becomes paramount.

We focus on the German context and use data specifically collected for the study of family processes to empirically address associations between parental separation and intergenerational support. Our main empirical objective is to provide a thorough assessment of multiple and interdependent sources of intergenerational support between parents and adult children, comparing support exchanges across families exposed to parental union instability (i.e., biological or adoptive parents' relationship ended due to separation) and those not exposed to it (i.e., biological or adoptive parents' relationship is ongoing). Specifically, we predict group differences in support exchange for multiple types of support (i.e., emotional, material, and instrumental), directions of provision (i.e., giving and receiving), and gender of parents (i.e., mother and father) in a multivariate regression setting that conceives intergenerational support as sets of complex, interdependent behaviours. An additional aim of the study is to establish the heterogeneity in these predictions depending on the timing of separation in terms of child's age and by social background. Thus, our study can be considered a sophisticated description of potentially complex associations between parental separation and multiple and interdependent types of support between parents and adult children, improving our understanding of support exchanges as multidimensional processes.

#### 2. Previous research and theoretical framework

#### 2.1 Parental separation and intergenerational support

Parental separation is a relevant life transition with dramatic impacts on the lives of parents and children. It can affect family solidarity or intergenerational support in several ways. First, parental separation alters the opportunity structure of parent-child interactions, which influences the closeness of the relationship and the frequency of contact facilitating the exchange of support (Hornstra et al., 2020). Separation often relates to increased geographical distances between parents and adult children, worse parental health, and higher

engagement in paid work, which reduce the opportunity for parent-child interactions, particularly among separated fathers (Kaufmann & Uhlenberg, 1998; Thomas et al., 2018; White, 1992). Parent's remarriage and having children with the new partner amply reduce intergenerational interactions, too (Kalmijn, 2007; Meggiolaro & Ongaro, 2015), which in turn may affect intergenerational support. Opportunities for intergenerational interactions are arguably better with separated mothers: Compared to fathers, mothers often adopt the role of "kinkeepers" during marriage, hold the children's custody or coreside with them over longer periods upon separation, and display lower remarriage rates thereafter (Dykstra, 1997; Lin, 2008; Kalmijn, 2007; 2013).

Second, parental separation affects the capacities and expectations of parents and children to support Research from Europe and the U.S. shows that parental separation is associated with each other. disadvantage for parents as well as for children: Shifts in resources affect the need for support and often involve mutual losses across generations (Amato, 2010; Härkönen et al., 2017; McLanahan & Percheski, 2008). Parental separation is associated with deteriorating material and subjective wellbeing in the short term, resulting in average lower wellbeing later in life (Gruber, 2004; Keister, 2004). This affects separated parents' ability to invest resources in children immediately after separation, but also in the long run (Shapiro & Cooney, 2007). Family structure also matters for attitudes toward economic support of adult children: stepparents and remarried parents perceive weaker financial obligations to their children (Aquilino, 2005). In turn, children from separated parents may have lower expectations to receive support and, despite higher parental need for support, feel less obliged to support parents (Parrot & Bengtson, 1999). Moreover, individuals growing up in non-intact families accumulate fewer resources to support parents, as they are more likely to achieve lower levels of education, follow irregular employment trajectories, mimic non-normative family paths, and accrue less wealth and worse health over the life course (Lersch & Baxter, 2021; Macmillan & Copher, 2005; McLanahan, 2004; Shapiro & Cooney, 2007).

Third, the association between parental separation and intergenerational support may be endogenous, since separation of parents might not necessarily cause shifts in the conditions for intergenerational support, but may just be a consequence of pre-existing conditions of parent-child exchange. A troubled marriage could create conflict between parents and children, which may carry over after separation and affect support exchanges. In addition, parental divorce and lower support exchange between parents and adult children may be more common among families ascribing to less familialistic attitudes. Disadvantaged families are also often overrepresented among non-intact family structures (McLanahan & Percheski, 2008). However, parental separation may build on pre-existing disadvantages to amplify its impact on material wellbeing and health of separated parents, socio-economic and family outcomes of children, and parent-child relationships.

A large body of empirical research concerned with the increasing complexity of family life courses has examined the associations between parental family dynamics and parent-adult child relations and support. However, evidence is mixed. On the one hand, several studies show reduced intergenerational support exchanges between separated parents and their children (Daatland, 2007; Dykstra, 1997; Furstenberg et al., 1995; Kalmijn, 2013; Seltzer, 1994) and that, on average, separated parents have less close relationships and frequency of contact with their adult children than non-separated parents (Cooney & Uhlenberg, 1992). On the other hand, some prior research shows non-substantial and even opposite findings to the negative impact of parental separation on parent-child support, suggesting higher complexity of these associations than previously thought (Davey et al., 2007; Mureşan, 2017). The importance of closeness and relationship quality may differ depending on needs and resource availability, as well as depending on the strength of normative expectations. Previous research has shown that adult children increased support to their aging parents based on their needs even in cases of strained relationships earlier in life (Eggebeen & Davey, 1998; Silverstein et al., 2002). Similarly, the quality of parent-adult child relationships does not predict whether young people receive support; rather, support is contingent on the child's situation, often linked to progress in the transition to adulthood (McGarry & Schoeni, 1995; Ward & Spitze, 2007). The shift in needs and resources associated with parental separation may also play a different role for upward and downward support. Previous research across European countries has shown that parents who live alone (including separated and widow parents) have higher economic and health-related needs, and are more likely to receive support from their adult children (Deindl, 2011; Schmid, 2014). Parents who live in a partnership, instead, are more likely to be able to afford helping their children financially (Deindl, 2011; König, 2016), as well as to provide grandchild care (Igel & Szydlik, 2011).

Within the broader context of intergenerational solidarity (Bengtson & Roberts, 1991), here, we focus specifically on functional solidarity, that is, the help in the form of time, money, and support between family members of different generations. Functional solidarity refers specifically to the extent of intergenerational exchanges of resources and has multiple dimensions, including emotional (e.g., exchanging advice), material (e.g., financial help) and instrumental (e.g., help with household tasks) support. Previous research finds that while some types of support (e.g., instrumental) from parents to children and from children to parents are negatively affected by parental separation (Davey et al., 2007), others (e.g., emotional, material) are not (Mureşan, 2017). The bulk of these studies examine the different dimensions and directions of intergenerational support separately, which hinders our ability to understand the full picture of parent-child support exchange. This study offers a more comprehensive assessment of differences in parent-child support exchanges across families exposed and not exposed to parental separation, acknowledging interdependencies between the multiple dimensions and directions of support. In addition, differences in support by parents' gender seem to increase after separation. While transfers, contacts, and closeness between fathers and their adult children are often lower or less frequent if fathers separated, the associations between mother-children solidarity and mother's separation are rather mixed (Grundy, 2005; Kalmijn, 2007; 2013; Maes et al., 2020). Accordingly, we pay attention to differences between mothers and fathers.

Our empirical aim is to offer a sophisticated description of these associations, by prediciting differences across groups in multiple support exchanges within families exposed and not exposed to parental separation. The causal mechanisms we propose above theoretically justify these associations; however, we do not our aim at empirically establishing such associations, nor at assessing causal relationships that cannot actually be addressed with our research design. Instead, our focus is to assess a more comprehensive set of intergenerational support forms than in prior research, addressing the potential interdependencies across them; we develop this conceptually in the next section.

#### 2.2 Types of support, direction of support and gender of the parent

We frame our investigation within a life course perspective and emphasize the interconnectedness across the lives of parents and children overtime as well as across life domains, such as career or family. Activities and resources invested in one domain may be compatible or in competition, and supportive or substitutive with those in other domains. The idea of intergenerational support as currency exchange, where parents and children invest in each other's resources (e.g., time or money) that each have in relative surplus (Rossi & Rossi 1990), conceives intergenerational support as a set of interconnected exchange flows concerning multiple dimensions, including the recipient and type of support.

Several studies have looked at how parental separation is associated with different types of support (Cooney & Uhlenberg, 1992; Fingerman et al., 2009; 2015; Isengard et al., 2018; Swartz et al., 2011), including monetary and material transfers (Manzoni, 2016; Schoeni & Ross, 2008; Steinbach et al., 2020), instrumental support (Deindl & Brandt, 2011; Schenk et al., 2010; Steinbach et al., 2020), and emotional support (Fingerman et al., 2009; Hämäläinen et al., 2020). They also looked at support exchanges between parents and children in both directions (Deindl & Brandt, 2011), as well as at differences in support exchanges with children for mothers and fathers (Hornstra et al., 2020, Kalmjin, 2013; 2019). However, none of these studies addressed all these multiple aspects. In this study, we add to previous research by addressing interdependence of each dimension at a time, showing initial evidence on interdependencies.

Emotional, material, and instrumental support have been considered main sources of functional solidarity or exchange pinpointing parent-child relationships (Bengtson & Roberts, 1991; Fingerman et al., 2015). As different types of support may represent alternative ways of providing support, or may add up to each other, it is important to look at all of them simultaneously, and acknowledge their interdependence in our modelling strategy.

Concerning the directions of support, we examine both upward (from children to parents) and downward (from parents to children) support. Although we do not directly test for reciprocity, we acknowledge the role of reciprocal support in our estimation strategy that simultaneously assesses different types of support from parents to children, and *vice versa*.

With regard to gender of the parent, we consider mothers and fathers as separate but interdependent sources and recipients of support. In this way, we acknowledge that patterns of support for separated mothers and fathers differ and are interdependent (Kalmijn, 2007). In other words, support to married

parents may be directed to both parents, or resources from children addressed to mothers will affect the level of support to fathers; similarly, support from married parents may come from both parents, or resources transferred from mothers may affect resources transferred from fathers. While previous research has documented gender differences, our study is novel in addressing gender differences in the interdependent ways different types and flows of support act.

We address all these interdependences in our empirical strategy adopting a simultaneous equation estimation approach with correlated random terms across equations that accounts for shared unobserved factors underlying the different types and directions of support exchanges with mothers and fathers.

Arguably, the mechanisms mentioned above (i.e., exchange opportunity, needs and resources, and social selection) suggest that parent-child support exchanges should be lower among families exposed to parental separation. In the following, we discuss whether and how the expected negative association extends to a wider and complex set of support exchange forms that we study simultaneously. To this end, we draw from two major theoretical perspectives that acknowledge interdependences across life domains.

The first, to which we refer to as *accumulation theory*, helps explain why parental separation decreases the propensity of giving and receiving support, particularly among lower socio-economic positions. It draws from the cumulative advantage perspective (Merton, 1988; DiPrete & Eirich, 2006) and assumes that the previously documented negative effects of parental separation on the resources and wellbeing of parents and children, as well as on aspects associated to their relationships (e.g., closeness, frequency of contact), *spill over* on their ability and opportunities of exchanging support. Similar effects may be expected from a parental investments perspective, where separation negatively affects all forms of support exchange. Finally, social selection of family behaviour, where separation is more likely among the low SES, underlies lower support exchange overall. According to these perspectives, decreased resources and opportunities for exchange will outbalance increasing needs following parental separation and will result in reduced intergenerational support across all types and directions of support.

The second, to which we refer to as *substitution/compensation*, comes from life course informed research (Bernardi et al., 2019; Huinink & Kohli, 2014). It adds to previous literature on the effects of parental separation on parent-child relations by maintaining that not all support exchange activities between parents and adult children are affected by parental separation in the same direction, reflecting ambivalences in the relations and interactions between separated parents and adult children. According to this theory, increased need for support may outbalance decreased resources in some dimensions. Given limited resources, investments of time and resources in specific support activities can be seen to substitute or compensate for under-investments in other activities. For example, financial transfers can be substitutes for household help or talking about worries among separated parents and children who have little contact. Also, decreased contact and support with fathers as a result of parental separation might be compensated with strengthening interactions and exchanges with mothers.

#### 2.3 The role of timing of parental separation and of parental social background

We address heterogeneity in the timing of parental separation and socioeconomic background, acknowledging that support might be contingent on (i) child's age at parental separation and (ii) social position of parents.

Previous research has highlighted the importance of addressing the timing of parental divorce in children's lives (e.g., Shapiro & Cooney, 2007), given the different implications that traumatic events such as family disruption has at different stages of individuals' lives. Parental separation in childhood often disrupts parent-child relationships, particularly with fathers (Zill et al., 1993), and is associated with reduced investments in resources important for children's transition to adulthood. In fact, together with parents' socioeconomic status and early child investments, parental separation has been regarded as one major childhood feature with dramatic impact on personal development and socioeconomic achievement over the life course (Crosnoe & Elder, 2004). Stratification research has shown that parental separation in childhood puts individuals at an early disadvantage that accumulates over the life course (McLanahan, 2004). In contrast, many of the early-in-life disadvantages associated with parental separation in childhood are absent if parental separation occurs when children are adults. While the relationships between children and parents might still be affected, when parental separation occurs at later children's age, the reproduction and accumulation of disadvantage is reduced. For example, Lersch and Baxter (2021) find that parental

separation is associated with a significant reduction in adult children's net wealth only for children who experienced parental divorce before age 15.

Inequality among parents is important in explaining different solidarity patterns. Research has shown that intergenerational support highly depends on socioeconomic status (SES) and parents from higher SES are more likely to provide intergenerational transfers (Cobb-Clark, 2014; Schoeni & Ross, 2008; Wightman et al., 2012). The better is parents' own economic position, the more they can afford to offer their children financial support (Isengard et al., 2018; Schenk et al., 2010). Accordingly, family resources may partly buffer the effect of parental separation on material well-being of both parents and children, and moderate the effect of parental separation on intergenerational transfers. Yet, such effect may vary across types of support. As material support is most closely linked to socioeconomic status, it is likely to be particularly affected; emotional support, instead, is expected to be least affected.

#### 2.4 The German case

The understanding of functional solidarity is linked to multiple structures at different levels. Here, we are specifically interested in the meso level of unequal conditions within family structures. However, the macro level in which individuals are embedded plays a significant role as well. Germany is characterized by a conservative, but rather generous welfare state. Its family regime represents a special case resulting from its institutional path dependency, affecting intergenerational relations (Kohli, 1999). In Germany, family responsibilities between parents and adult children are legally enforced (Albertini et al., 2007; Saraceno & Keck, 2010). In terms of family obligations, the German family regime lays between Northern and Southern Europe (Albertini et al., 2007): Germans expect adults to care for themselves, but at the same time report that they support their family members in times of need (Szydlik, 2000). This may be linked to the acceptance of social norms, which increases personal obligation, but only becomes salient in times of need. The old-age and health care public support are rather developed and generous, which reduces need of support for the old age, in particular. Family services (public or private childcare), however, are scarce or expensive, which increases the need of material support from parents.

Looking at family structure, the total divorce rate in Germany has been characterized by a continuous upward trend since the 1960s, reaching a value of 42.5% in 2004 (Dorbritz, 2008). Possibly due to the conservative German welfare state model, characterized by strong support for the male breadwinner family, the economic consequences of divorce are more negative for women than for men; however, the German family law also includes rather extensive support regulations for economically dependent spouses and children, which cushions the most severe negative changes (Bröckel & Andreß, 2015). In the German context, which traditionally supported gendered roles within households and conferred women child custody, it can be expected a generally more negative role of separation for support with fathers than with mothers.

#### 3. Data and methods

#### 3.1 Data

For the analyses, we use the German Family Panel *pairfam* (v10.0, doi: 10.4232/pairfam.5678.10.0.0). *Pairfam* is a multi-disciplinary, longitudinal study of partnership and family dynamics in Germany (Huinink et al., 2011). It collects information from a nation-wide probability sample of three birth cohort groups (1971/73, 1981/83 and 1991/93), with more than 12,000 respondents in wave 1. The *pairfam* dataset offers unique opportunities for the analysis of intergenerational relationships as they develop over the course of multiple life phases and is particularly suitable for our research purposes as (i) it collects detailed information on major types of functional solidarity in greater detail than any other surveys, including items for every major kind of support and assistance provided to and received by living mothers and fathers of respondents; (ii) it collects information on the occurrence of parental separation each wave since study start for events since last wave and on pre-study separation at wave 6; and, (iii) it collects information on relevant common predictors of parental support and separation, including socio-demographic features of respondents and their parents, parent-respondent relations (i.e. affective, structural and associative

intergenerational solidarity), as well as other relevant covariates. Response rates and attrition in pairfam do not differ from those of other German large social surveys. The response rate in Wave 1 was 37 %, leading to 12,402 complete interviews. Frequency distributions are similar to those of the Mikrozensus 2008 (i.e. a compulsory survey for a one percent sample of the population). While attrition between Wave 1 and Wave 2 was 27%, it fell dramatically in subsequent waves (Brüderl et al., 2021; Müller & Castiglioni, 2015).

#### 3.2 Sample

We use as a baseline sample the 9,585 respondents who participated in wave 2, the first wave that collected information on intergenerational support items. We exclude 133 respondents with no (biological or adoptive) parents alive, since they cannot engage in parent-child support. We additionally exclude 286 respondents who did not live with the two biological or adoptive parents after childbirth, since by definition they were not exposed to parental separation. Since information on actual year of parental separation occurring before the study is collected in wave 6, we exclude 3,672 respondents who were not followed at wave 6.<sup>1</sup> Among the remaining respondents, we only consider observations from survey waves 2, 4, 6 and 8 (which collected information on support)<sup>2</sup>, who were age 18 or above, and not living with any of their parents (since we are interested in addressing support across independent households).<sup>3</sup> By doing so, we exclude 1,149 respondents who were observed living with their parents at all interviews. Respondents living with their parents are mostly born in the 1990's, and the proportion of them who have experienced parental separation is the same as in our sample. After all these exclusions, the sample consists of 13,481 observations from 4,340 respondents, of which 2,430 were women and 1,910 were men.<sup>4</sup>

#### 3.3 Measures

#### 3.3.1 Intergenerational support

For our dependent variables, we use over-time information on the type, extent, and direction of support flows between fathers/mothers and their offspring. This information refers to parent-child support activities related to three major dimensions of support –emotional, material, and instrumental– and both directions of support – provided to the mother and to the father (upward support) and received from the mother and from the father (downward support). These items were first introduced in the *pairfam* respondent's questionnaire in wave 2 and were repeated every other survey wave since then. The items are modified scales of measures used in other relevant studies in Germany and elsewhere (see Thönnissen et al., 2019). Respondents with a living (biological or adoptive) parents and with contact with them were asked to indicate the frequency of a given support activity, either provided to their parents or received from them within the last 12 months on a 5-point scale ranging from 1 (never) to 5 (very often). We use responses to six items on frequency of support (identical for support provided and received, and for mother and father), in both directions of support, and an additional item for downward support (childcare support from mother and from father) that were included in the questionnaires of waves 2, 4, 6 and 8.

We measure *emotional support* using two items (identical for support provided and received, and for mother and father) referring to advice regarding personal/parent's problems (*During the past 12 months, how often did you [give/receive] advice regarding personal problems*?) and talking about personal/parent's worries and troubles (*During the past 12 months, how often did you talk to the following persons [mother/father] about [their/your] worries and troubles*?). We build parent-specific indicators for upward and downward emotional support that take value 1 if any of the support activities occurred in any frequency during the last 12 months, and value 0 if they did not (i.e., never) occur during the last 12 months.

<sup>1</sup> We find no notable differences in the socio-demographic profiles among those who were and were not followed at wave 6 (see Table A1 in the <u>appendix</u>).

<sup>2</sup> Despite wave 10 also collected some information on intergenerational support, support for most original items have been not asked again and, for that reason, we disregard it.

<sup>3</sup> Ninety-nine respondents who expressed having no contact with their father or mother were not asked the questions on support exchange; we coded them as no support. The exclusion of these respondents from analysis does not change any of our analytical results.

<sup>4</sup> We find no significant differences in key socio-demographic and other model variables measured at Wave 1 between the original Pairfam sample and our analytical sample.

We measure material support using two items referring to financial help (During the past 12 months, how often did you give [your mother/father] financial support [if indicated in mother/father's household: money for room and board]?) and gifts (During the past 12 months, how often did you give to the following persons [mother/father] gifts of money or valuables (more than 100 Euros per gift)?). We build parent-specific indicators for upward and downward material support that take value 1 if any of the support activities occurred in any frequency during the last 12 months, and value 0 if they did not (i.e., never) occur during the last 12 months.

We measure *instrumental support* using two items referring to household help (*During the past 12 months, how often did you [give/receive]* help [to/from] *your [mother/father] with shopping, housework, or yardwork?*) and family care (*During the past 12 months, how often did you [give/receive] help [to/from] your [mother/father] for the purpose of nursing or taking care of family members?*). We build parent-specific indicators for upward and downward instrumental support that take value 1 if any of the support activities occurred in any frequency during the last 12 months, and value 0 if they did not (i.e., never) occur during the last 12 months. Additionally, we use a separate indicator of downward instrumental support about childcare help, which only applies to respondents with children under the age of 15 in the household. The question reads: *During the past 12 months, how often did you receive help from the following persons in taking care of your children?* We build parent-specific indicators for downward childcare support that take value 1 if the support activity occurred in any frequency during the last 12 months, and value 0 if it did not (i.e., never) occur during the last 12 months. *Lamonths, how often did you receive help from the following persons in taking care of your children?* We build parent-specific indicators for downward childcare support that take value 1 if the support activity occurred in any frequency during the last 12 months, and value 0 if it did not (i.e., never) occur during the last 12 months.

We dichotomize the information on support because the value zero of the original variables, indicating no support, is qualitatively distinct from the other values, indicating some frequency of support, in the ordinal scale. Modeling the original variable with ordinal or linear models on the ordinal scale would give equal weight to each value, which is an arbitrary assumption.

Table 1 shows the proportions of observations where respondents engage in intergenerational support. About 90% of respondents both provide and receive emotional support from parents. Parents provide more material support (60%) to children than they receive (40%). Instead, parents receive more instrumental support (60%) from children than they provide to them (40%). Respondents engage in support with mothers slightly more than with fathers. We mostly find no relevant differences by gender of the adult child (not shown in table). The only substantive difference we find is that adult sons give more instrumental support to fathers than adult daughters. Levels of non-response on support items are low: on average, non-response reaches around 2% for support with mothers and 4% with fathers, and it is slightly more common when parental separation was reported.

	Proportion	Ν		
Upward				
Adult child to mother				
Emotional support	0.94	12,443		
Material support	0.45	12,405		
Instrumental support	0.68	12,436		
Adult child to father				
Emotional support	0.86	10,440		
Material support	0.39	10,410		
Instrumental support	0.60	10,442		
Downward				
Mother to adult child				
Emotional support	0.92	12,442		
Material support	0.66	12,400		
Instrumental support	0.45	12,411		
Childcare support	0.76	6,646		
Father to adult child				
Emotional support	0.85	10,445		
Material support	0.65	10,411		
Instrumental support	0.41	10,416		
Childcare support	0.67	5,487		

*Table 1*: Descriptive statistics for all variables

Source: Pairfam (2009-2016, unweighted); authors' calculations. N shows the number of observations with non-missing information.

#### 3.3.2 Relationship status of the parents

We combine information on the occurrence and year of parental separation predating the study provided at wave 6 with information on the death status of each parent and the relationship status between the parents at each survey wave. We build a categorical variable with three categories: both (biological or adoptive) parents are (again<sup>5</sup>) married to each other, parents are separated, and one of the parents is dead.<sup>6</sup> In additional analyses, we disaggregate the category of separated parents into two-one for parental separations occurring when the respondent was age 0-17 and one for separations occurring when the respondent was age 18 or more- to capture whether parents separated during or after respondent's childhood.<sup>7</sup>

#### 3.3.3 Additional control variables

We account for covariates that are arguably associated with both (but do not necessarily mediate or are an indirect link between) parental marital status and intergenerational support in the multivariate models. These include period of observation (in four categories: ref. 2009/10; 2011/12; 2013/14; 2015/16), respondent's age (in years, centered at age 18), birth cohort (in three categories: ref. 1971/73; 1981/83; 1991/93), sex (binary: ref. men; women), migration background (in three categories: ref. no migration background; first generation migrant; second-generation migrant), years of education (centered at 8 years and rescaled by dividing by 4), number of siblings (in three categories: ref. none; 1; 2 or more), region of residence (binary: ref. West Germany; East Germany), type of area (binary: ref. rural; urban). In addition, we account for mother's and father's characteristics, including age in three categories (ref. less than 50, between 50 and 64, 65 or older) and years of education (centered at 8 years and rescaled by dividing by 4). Since we do not aim at testing underlying mechanisms, we do not include other economic resources or health status of parents or adult children among model covariates, as they are more likely to mediate the study associations. The levels of non-response in model covariates are trivial, with the highest level of non-response for father's education around 5%. Table A2 in the <u>appendix</u> displays summary statistics of model predictors.

#### 3.4 Analytical strategy

We use regression analysis as a predictive tool to offer a thorough assessment of the associations between parental separation and multiple, interdependent forms of support exchange between parents and adult children.<sup>8</sup> To this end, we estimate a series of generalized linear regression models with a logit link to predict the role of parental separation for support exchange outcomes. The model can be written as

$$logit\{y_{ij}^C\} = \beta x_{ij}^C + u_j$$

where *y* is a support outcome *C* for the observation *i* of individual *j*; *x* is the set of explanatory and control variables;  $\beta$  is the set of associated coefficients; and u is an individual-level random intercept.

We estimate up to 14 different support outcomes for each respondent's observation, resulting from possible permutations between four types of support (emotional, material, instrumental and childcare), two directions of support (upward and downward) and two parents (father and mother): mother as a recipient of emotional (1), material (2), and instrumental (3) support; mother as a source of emotional (4), material (5), instrumental (6) and childcare (7) support; father as a recipient of emotional (8), material (9), and instrumental (10) support; father as a source of emotional (11), material (12), instrumental (13) and childcare (14) support.

<sup>5</sup> We include among parents living together a few separated parents who reconciled before the study. Sensitivity analyses show no differences in results when we exclude respondents whose parents temporarily separated.

<sup>6</sup> The categories "parents are separated" or "one of the parents is dead" include both unpartnered or re-partnered (to another person who is not a parent) parents.

<sup>7</sup> In the first observation, 63.9% of our sample respondents reported that both parents were currently living together, 15.5% reported parents currently living separated (10.7% live separated since childhood, 4.8% live separated after childhood) and 20.6% reported to have only one parent alive (14% only mother alive, 4.6% only father alive).

<sup>8</sup> While one of the key advantages of longitudinal data is to exploit within-individual variation to make better causal assessments, we note that this is not feasible with our research design because most of the separations reported occurred previous to study start, and were collected retrospectively. We are also limited in the possibility of incorporating adequate indicators for key confounders and mediators; thus, we cannot and refrain from making causal statements.

By including random effects in the equations and estimating the associated variance-covariance structures, we can estimate the equations as a system, which enables the coefficients of parental separation to vary across equations while accounting for cross-equation correlations. Since the data demands for the estimation of all variances and covariances was too high, we assessed three estimation strategies with a reduced set of variances and covariances that assume interdependence between support with mother and father (i.e. the correlation across support with each parent is estimated), across support items (i.e. the correlation across emotional, material, and instrumental/childcare support outcomes is estimated), and across support flows (i.e. the correlation across each support direction is estimated). Results from these different strategies are largely similar in terms of the size and direction of the coefficients of parental separation. Accordingly, we only show results from the models that estimate the interdependence of support with mother and father, and comment on any difference with models using alternative strategies (results available in Table A3 in the appendix). We drop observations with no information in values of model covariates. We found no correlation between cases with missing values on model covariates and support exchange outcomes. Observations with available information in some outcome variables but missing information is some others (e.g., because one parent was dead or information was inconsistently reported across outcomes) are included in the analyses. We estimate three sets of model specifications:

- (i) Set 1 includes in each equation the relationship between parents and the set of sociodemographic and other confounder variables, as well as the random terms in the right-side of the equation. These models display the overall association between parental separation and intergenerational support for each exchange type, direction, and gender of parent. Results are presented in Table 2.
- (ii) Set 2 adds to set 1 an interaction term between parental separation and the timing of parental separation, distinguishing between when the respondent was above and below age 18. These models display the moderation of age at parental separation for the study associations and are presented in Table 3.
- (iii) Set 3 adds to set 1 an interaction term between parental separation and gender-specific parental education (in years). These models display the moderation of socio-economic background for the study associations and are presented in Table 4.

Our estimates of interest capture engagement in support exchange between respondents and their parents, comparing respondents with separated parents to those with not separated parents. For each support item, direction, and parental gender, we present estimates as average marginal effects. Unlike odds ratios or logit coefficients, average marginal effects can be compared with other estimates within and across models (Mood, 2010). We report the size and the statistical significance of the average marginal effects. Analyses are based on repeated (up to four) observations per respondent that relate to information collected every two years between 2009/10 (wave 2) and 2015/16 (wave 8), which eases the estimation of the above-proposed models. Preliminary regression analyses showed that there are no substantive overtime variations in support exchanges across individuals with separated and non-separated parents. This may be due to the fact that we observe a short time interval (up to 6 years) and most parental separations did not occur during the observation interval but before the survey start. For the sake of concision, the results presented in the next section do not address overtime variations (see Figure A1 in the <u>appendix</u> for a graphical representation of models addressing overtime variation).<sup>9</sup> To account for the non-independence of repeated observation of respondents, we present cluster-robust standard errors of model estimates.

<sup>9</sup> While repeated observations per individual make our data-demanding models feasible, the estimation of models with additional cross-time residual correlations were unfeasible. Results from simpler models only considering residual correlation across survey waves (but not across support dimensions) do lead to similar conclusions to the models presented in our results section, suggesting that overtime correlations might not be seriously affecting our analyses.

#### 4. Results

#### 4.1 Intergenerational support and parental separation

Table 2 shows the average marginal effects (i.e., probability differences in support exchange) for parents being separated, holding all other model variables at their average values. The average marginal effects reported in Table 2 can be interpreted as the percentage points (when multiplied by 100) difference in the dependent variable (support) between respondents with separated and with non-separated parents, or due to parental separation. Table 2 additionally reports Wald tests of statistical significance for gender differences across parents. The test establishes whether, for a specific type and direction of support, the differences in coefficients for mothers and fathers are statistically significant.

Parental separation decreases the probability of emotional support between respondents and fathers by 16 percentage points, for both upward and downward support. In contrast, we find no significant (substantively and statistically) differences in emotional support exchanges with mothers due to parental separation. Models with alternative estimation of the variance-covariance structures (see Table A3 in the <u>appendix</u>) display lower probability of upward and downward emotional support exchange with mothers due to separation. However, this difference is rather marginal: only 3 percentage points.

Material exchanges in the form of financial transfers or gifts are less common if parents separated. Parental separation decreases the probability of provision of material support from mothers to adult children by 9 percentage points, and from fathers by 17 percentage points. In turn, it decreases the probability of provision of material from children to separated fathers by 14 percentage points. Finally, we find no significant associations of parental separation with the provision of material support from adult children to mothers.

Instrumental exchange involving housework and care work also occurs less often when parents separated, especially exchanges with fathers. Parental separation decreases the probability of mothers' help to adult children by 7 percentage points, and of fathers' help by 19 percentage points. In turn, it decreases the probability of adult children help to mothers by 7 percentage points, and to fathers by 26 percentage points. Among respondents with children, parental separation decreases the probability of fathers' grandchildren care by 33 percentage points, while it only decreases the probability of mothers' grandchildren care by 7 percentage points.

	Emotional		Material		Instrumental		Childcare	
	AME	std.err.	AME	std.err.	AME	std.err.	AME	std.err.
Downward support Mother-adult child Father-adult child	-0.02 # -0.16***	(0.01) (0.02)	-0.09*** # -0.17***	(0.02) (0.02)	-0.07*** # -0.19***	(0.02) (0.02)	-0.07*** # -0.33***	(0.02) (0.02)
Upward support Adult child-mother Adult child-father	-0.01 # -0.16***	(0.01) (0.02)	-0.01 # -0.14***	(0.02) (0.02)	-0.07*** # -0.26***	(0.02) (0.02)		

*Table 2*: Multivariate associations of intergenerational support with separated parents (Average Marginal Effects)

*Source:* Pairfam (2009-2016, unweighted); authors' calculations. Note: Outcome variables are measures of exchange during the last 12 months by support type, direction and gender of the parent. Other variables in the model include: respondent's gender, age, birth cohort group, migration background, years of education, residence in urban area, residence in Eastern Germany, number of siblings, father's and mother's age at respondent's birth and years of education, whether the other parent is dead, and random term variances and covariance between mother- and father-specific support equations. The covariance between random terms is 3.05 and statistically significant at the 95 percent level. Sample size differs across support in the support of the parent; see Table 1 for details.

\* p<.05, \*\* p<.01, \*\*\* p<.001; # p<.05 of chi2 (Wald test) for statistical significance of coefficient difference between mothers and fathers for each type and direction of support.

Overall, our results suggest that, in line with accumulation theory, parental separation is largely associated with lower support exchange of any types between parents and adult children. However, the reported differences in support exchange with mothers and fathers are in all instances significant (significance tests shown in Table 2), meaning that support exchange between respondents and separated

mothers occurs more often than support exchange between respondents and separated fathers. We note that these results remain even after including measures for mother and father repartnered status not included in our original models (see Table A4 in the <u>appendix</u>). Results for estimated coefficients of additional model variables are not discussed here, but can be consulted in Tables A5-A7 in the <u>appendix</u>.

#### 4.2 Moderation of age at separation

We further assess whether age of the child at parental separation moderates the association between parental separation and intergenerational flows of support. Table 3 shows the average marginal effects for our variable of parental separation and for a variable that captures parental separation that occurred when the respondent was already an adult. The average marginal effects for the former can be interpreted as the average difference in support of parental separation in childhood relative to the absence of parental separation, and the result for the latter as the average difference of parental separation in adulthood relative to parental separation in childhood. Results indicate that age at separation matters for some of the associations of support exchange with fathers. In contrast, we do not find that age at separation matters for the associations of support exchange with mothers. We find higher emotional exchange with fathers who separated during respondent's adult age than with fathers who separated in respondent's childhood. Parental separation in childhood decreases the probability that fathers emotional support their children by 19 percentage points, while parental separation in adulthood decreases this probability by 13 percentage points (-0.19+0.06). With regard to material support, we find statistically significant differences by age at separation only for upward material support to fathers: the probability of support decreases by 18 percentage points if separation occurred in childhood, and only by 4 percentage points (-0.18+0.14) if separation occurred in adulthood. For instrumental support, the only statistically significant interaction of parental separation with age at separation relates to help and care provided from adult children to fathers: the probability of support decreases by 29 percentage points if separation occurred in childhood, and by 21 percentage points (-0.29+0.08) if separation occurred in adulthood.<sup>10</sup>

	Emotional		Material		Instrumental		Childcare	
	AME	std.err.	AME	std.err.	AME	std.err.	AME	std.err.
Parental separation								
Downward support								
Mother-adult child	-0.04**	(0.01)	-0.10***	(0.02)	-0.06***	(0.02)	-0.07***	(0.02)
Father-adult child	-0.20***	(0.02)	-0.20***	(0.03)	-0.21***	(0.02)	-0.34***	(0.03)
Upward support		. ,						. ,
Adult child-mother	-0.02	(0.01)	-0.01	(0.02)	-0.10***	(0.02)		
Adult child-father	-0.19***	(0.02)	-0.17***	(0.04)	-0.29***	(0.02)		
Parental separation at adu	lt age							
Downward support								
Mother-adult child	0.01	(0.02)	-0.00	(0.03)	-0.03	(0.03)	-0.00	(0.04)
Father-adult child	0.05**	(0.02)	0.01	(0.03)	0.07	(0.03)	0.04	(0.04)
Upward support								
Adult child-mother	-0.02	(0.02)	0.02	(0.03)	0.05	(0.04)		
Adult child-father	0.04*	(0.02)	0.10*	(0.04)	0.08*	(0.04)		

*Table 3:* Multivariate association of intergenerational support with parental separation and parental separation at child's adult age (Average Marginal Effects)

*Source:* Pairfam (2009-2016, unweighted); authors' calculations. Note: Outcome variables are measures of exchange during the last 12 months by support type, direction and gender of the parent. Other variables in the model include: respondent's gender, age, birth cohort group, migration background, years of education, residence in urban area, residence in Eastern Germany, number of siblings, father's and mother's age at respondent's birth and years of education, whether the other parent is dead, and random term variances and covariance between mother- and father-specific support equations. The covariance between random terms is 3.06 and statistically significant at the 95 percent level. Sample size differs across support items and gender of the parent; see Table 1 for details. \* p<.05, \*\* p<.01.

<sup>10</sup> In additional analyses, we find no significant differences across detailed childhood age groups (0-6, 7-12, 13-17). We find only one statistically significant coefficient: material support from children to separated fathers is higher if parental separation occurred between ages 13 and 17 (see Table A8 in the <u>appendix</u>).

#### 4.3 Moderation of social background

In a further set of analyses, we address interactions of parental separation and socioeconomic background, measured by years of education of each parent. Results in Table 4 show no statistically significant interactions for fathers and only one statistically significant interaction for mothers. Specifically, we find a lower probability of downward material support from mothers to adult children due to separation if mothers have spent more years in education. To ease estimation, we centered years of education at 8 years and rescaled it by dividing by 4. Results in Table 4 indicate that, on average, parental separation decreases the probability of material support from mothers by 13 percentage points among mothers with average years of education. Each unit increase in years of education (i.e., 4 more years of education than the average) is associated with higher material support to their adult children among separated mothers. For example, parental separation only decreases the probability of support by 8 percentage points (-0.13+0.05) for mothers with four additional years of education than the average.

We also replicated the analyses using a categorical operationalization of parental education (three CASMIN levels). Results (available upon request), confirm our findings, with the exception that differences in upward material support for fathers turn statistically insignificant and separated mothers with the highest education offer more instrumental support.

	Emotional		Material		Instrumental		Childcare	
	AME	std.err.	AME	std.err.	AME	std.err.	AME	std.err.
Parental separation								
Downward support								
Mother-adult child	-0.02	(0.02)	-0.13***	(0.03)	-0.10**	(0.03)	-0.08*	(0.04)
Father-adult child	-0.14***	(0.04)	-0.14***	(0.04)	-0.20***	(0.03)	-0.29***	(0.05)
Upward support								
Adult child-mother	-0.03	(0.02)	0.01	(0.03)	-0.07*	(0.04)		
Adult child-father	-0.14***	(0.04)	-0.11**	(0.03)	-0.21***	(0.04)		
Parental separation * pare	nt's years of edu	cation						
Downward support								
Mother-adult child	0.00	(0.02)	0.05*	(0.02)	0.02	(0.03)	0.01	(0.03)
Father-adult child	-0.02	(0.02)	-0.02	(0.02)	0.01	(0.02)	-0.03	(0.03)
Upward support								
Adult child-mother	0.02	(0.02)	-0.01	(0.02)	0.00	(0.03)		
Adult child-father	-0.01	(0.02)	-0.02	(0.02)	-0.05	(0.03)		

*Table 4*: Multivariate association of intergenerational support with separated parents: Interactions with parents' years of education (Average Marginal Effects).

*Source:* Pairfam (2009-2016, unweighted). Note: Outcome variables are measures of support exchange during the last 12 months. Other variables in the model include: respondent's gender, age, birth cohort group, migration background, years of education, residence in urban area, residence in Eastern Germany, number of siblings, father's and mother's age at respondent's birth and years of education, whether the other parent is dead, and random term variances and covariance between mother- and father-specific support equations. The covariance between random terms is 3.05 and statistically significant at the 95 percent level. Sample size differs across support items and gender of the parent; see Table 1 for details. \* p<.05, \*\* p<.01, \*\*\* p<.001

#### 5. Discussion

The increasing complexity of family dynamics has generated a new landscape of family relationships, which extends to support structures. In this study, we focused on Germany, where parental obligations to provide for their children last until they reach financial independence (Saraceno & Keck, 2010). Germany has been historically characterized by a conservative welfare regime, with a relatively generous public welfare provision. The retrenchement of the welfare state and the increasing role of the family as support system make it particularly important to understand how changes in family structure may affect intergenerational exchanges, and consequently individual well-being.

We addressed multiple dimensions of intergenerational support. Specifically, we examined how parental separation relates to intergenerational flows of support across generations, from parents to adult children as well as from adult children to parents, accounting for a range of support activities and considering exchanges with mothers and fathers. Our modelling strategy consisted of a series of generalized regression models and included correlated random terms to acknowledge the interdependence between these dimensions. A range of significant covariances across type-, direction- and parent-specific random terms suggests that diverse forms of support are correlated, and this needs to be accounted for when assessing multiple sources of support. Furthermore, we investigated how these associations may differ depending on the timing of parental separation and the extent to which social background buffers or expands the consequences of parental separation for intergenerational support.

Several interesting findings emerged. First, we show that when parents separated, support from parents to children as well as from children to parents is lower than when parents did not separate. The only exceptions are emotional support with mothers (any direction; though marginally significant in alternative model specifications – see Table A3 in the appendix) and material support to mothers, where we found no significant differences for separated and non-separated mothers. As the negative association holds for most dimensions and directions of support, results suggest that parental separation influences exchanges between parents and adult children in a wide set of dimensions of support. Result mostly support a spill over effect, where, due to the combination of restricted opportunity, expectations and resources for the exchange, all forms of support are largely undermined, rather than a substitution or compensation effect, where some forms of support might be enhanced, often at the expense of others. Given that parental separation is associated with a range of negative life outcomes and that the generosity of state insurance in Germany has declined in recent decades, our results suggest that in non-intact families the gap between support exchange and need of support might be substantial. Quantifying this gap and understanding whether these families have more uncovered needs or they do cover their needs elsewhere outside the family (e.g. in the market or state) is important; however, this would require information about needs and whether these might be covered elsewere, which is not available in our data.

Regarding the different associations of parental separation and exchanges with mothers and fathers, our results lend evidence to the fact that the exchange of support is more widespread with separated mothers than with separated fathers. This is in line with research showing decreased contact with fathers after divorce. In contrast, support exchanges between separated mothers and adult children are undermined to a lesser extent after divorce. This may possibly be due to their "kinkeeper" role during marriage, longer coresidence with children after separation, and lower likelihood to remarry and establish a new family (Kalmijn, 2007; 2013). Additionally, the larger reliance on support from others among separated women may be read in light of the relatively disadvantaged position of women in the conservative welfare system of Germany, which traditionally supported a male breadwinner family and discouraged women's careers.

We find that the associations are partly moderated by respondent's age at parental separation and social background. Parental separation is associated with lower support exchanges, but the association is stronger when parental separation occurs in childhood than in adulthood, in particular from children to their fathers. This result aligns with those of studies showing that parental separations earlier in life are negatively associated with intergenerational contact than parental separations later in life, particularly with fathers (Bulcroft & Bulcroft, 1991). We also find some evidence of less negative associations between parental separation and support exchange with higher social background, but limited to material support from mothers with more years of education. This suggests that the socio-economic position of mothers buffers some of the negative consequences of union dissolution for intergenerational relations; however, highly educated fathers might still be less likely to coreside with children after separation and more likely to break ties after building a new family.

Overall, our findings have significant implications for how family dynamics contribute to the reproduction of social inequalities. Research on social stratification of family behavior indicates that individuals from disadvantaged backgrounds are far more likely to be exposed to parental separation (McLanahan & Percheski, 2008). The fact that separation is associated with lower intergenerational assistance across a range of support dimensions and flows contributes to an accumulation of disadvantage, where earlier disadvantages aggravate over time. In the context of a retrenching welfare state, in which the family plays an increasing role as safety net, lower intergenerational assistance among families who experienced separation may translate in increasing disadvantage for those who traditionally were in disadvantage.

Our study is not without limitations. Notably, data constraints and related operational decisions, including transformations of the original support measures, sample restrictions, and panel attrition, may affect our results. By using binary indicators that capture whether support occurred (in any frequency)

during the twelve months prior to the interview, we ignored the fact that the support gap between those with separated and non-separated parents can be even greater if the former engage less *frequently* in support exchanges than the latter. We assessed the extent to which results vary using the original items and ordinal scales [1-Never; 5-Very often], and found largely similar results (available upon request) to those presented above, except that separated mothers do engage in emotional support with adult children as frequently as non-separated mothers. Next, our results could be affected by the exclusion of individuals living with their parents at the time of the survey, or the exclusion of respondents who did not answer wave 6, when information on age at parental separation is collected. Again, results (available upon request) from a sensitivity check including these respondents did not change our main conclusion. However, we found that including respondents living in the parental home rendered a positive association between material support from adult children to separated mothers, possibly explained as a financial contribution of adult children to the household they live in. Last, the replication of the analyses using longitudinal sample weights provided by pairfam, which correct for differential probability of attrition across observations, showed that attrition should not affect our results.

As our aim was to examine overall differences in levels of intergenerational support between separated parents and continuously married parents, we disregarded a number of typical predictors of intergenerational support, as these may (indirectly) explain or mediate the study associations. Further studies should expand on our research by addressing what explains these associations. Among others, the associations that we found can be explained through changes (or differences predating parental separation) in relationship quality (e.g., emotional closeness, frequency of contact, travel distance), resources and capabilities (e.g., respondent's and parent's employment, financial situation, general health and subjective wellbeing) or family structures (e.g., parental remarriage, step-siblings, children's family status).<sup>11</sup>

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#### Data availability statement

Data for the analysis (Pairfam, v10.1.0; doi: 10.4232/pairfam.5678.10.0.0) is available from the Gesis (<u>https://search.gesis.org/research\_data/ZA5678</u>).

#### References

- Albertini, M., Kohli, M., & Vogel, C. (2007). Intergenerational transfers of time and money in European families: common patterns—different regimes? *Journal of European Social Policy*, 17(4), 319-334. https://doi.org/10.1177/0958928707081068
- Amato P.R. (2010). Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family*, *72*(3), 650–666. https://doi.org/10.1111/j.1741-3737.2010.000
- Antonucci, T. C., & Jackson, J. S. (1990). The role of reciprocity in social support. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), Wiley series on personality processes. Social support: An interactional view (p. 173–198). John Wiley & Sons.

<sup>11</sup> Additional analyses show significant associations with some of these factors (i.e. parents need care, frequent contact, relationship closeness, and geographical distance between parents and respondents) with parental separation, which support the idea that these might be relevant factors underlying the associations that we have studies here (see Table A9).

- Aquilino, W. S. (2005). Impact of family structure on parental attitudes toward the economic support of adult children over the transition to adulthood. *Journal of Family Issues*, 26(2), 143-167. https://doi.org/10.1177/0192513X04265950
- Bengtson, V. L., & Roberts, R. E. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and 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: the burgess award lecture. *Journal of Marriage and Family*, 63(1), 1-16. https://doi.org/10.1111/j.1741-3737.2001.00001.x
- Bernardi, L., Huinink, J., & Settersten Jr, R. A. (2019). The life course cube: A tool for studying lives. Advances in Life Course Research, 41, 100258. https://doi.org/10.1016/j.alcr.2018.11.004
- Boertien, D., Bernardi, F., & Härkönen, J. (2018). Family Structure and Socioeconomic Inequality of Opportunity in Europe and the United States. Unequal Family Lives. Causes and Consequences in Europe and the Americas; Cahn, N., Carbone, L., DeRose, F., Wilcox, WB, Eds, 165-178. https://doi.org/10.1017/9781108235525
- Bröckel, M., & Andreß, H. J. (2015). The economic consequences of divorce in Germany: what has changed since the turn of the millennium? *Comparative Population Studies*, 40(3). https://doi.org/10.12765/CPoS-2015-04
- Brüderl, J., Schmiedeberg, C., Castiglioni, L., Arránz Becker, O., Buhr, P., Fuß, D., & Schumann, N. (2022).
  The German Family Panel: Study Design and Cumulated Field Report (Waves 1 to 13), Release 13.0.
  Pairfam Technical Paper No. 01. Bonn, Germany: German Research Foundation. https://doi.org/10.5282/ubm/epub.91983
- Bulcroft, K. A., & Bulcroft, R. A. (1991). The timing of divorce: Effects on parent-child relationships in later life. *Research on Aging*, *13*(2), 226-243. https://doi.org/10.1177/016402759113
- Cobb-Clark, D. A., & Gørgens, T. (2014). Parents' economic support of young-adult children: do socioeconomic circumstances matter? *Journal of Population Economics*, 27(2), 447-471. https://doi.org/10.1007/s00148-013-0484-6
- Cooney, T. M., & Uhlenberg, P. (1992). Support from parents over the life course: The adult child's perspective. *Social Forces*, 71(1), 63-84. https://doi.org/10.1093/sf/71.1.63
- Crosnoe, R., & Elder Jr, G. H. (2004). Family dynamics, supportive relationships, and educational resilience during adolescence. *Journal of Family Issues*, 25(5), 571-602. https://doi.org/10.1177/0192513X032583
- Daatland, S. O. (2007). Marital history and intergenerational solidarity: The impact of divorce and unmarried cohabitation. *Journal of Social Issues*, 63(4), 809-825. https://doi.org/10.1111/j.1540-4560.2007.00538.x
- Davey, A., Eggebeen, D. J., & Savla, J. (2007). Parental marital transitions and instrumental assistance between generations: A within-family longitudinal analysis. Advances in Life Course Research, 12, 221-242. https://doi.org/10.1016/S1040-2608(07)12008-6
- Deindl, C. (2011). Finanzielle Transfers zwischen Generationen in Europa. Springer-Verlag. https://doi:10.1007/978-3-531-92690-2\_5
- Deindl, C., & Brandt, M. (2011). Financial support and practical help between older parents and their middle-aged children in Europe. *Ageing & Society*, 31(4), 645-662. https://doi.org/10.1017/S0144686X10001212
- DiPrete, T. A., & Eirich, G. M. (2006). Cumulative advantage as a mechanism for inequality: A review of theoretical and empirical developments. *Annual Review of Sociology*, 32(1), 271-297. https://doi:10.1146/annurev.soc.32.061604.1231
- Dorbritz, J. (2008). Germany: Family diversity with low actual and desired fertility. *Demographic Research*, 19, 557-598. https://doi:10.4054/DemRes.2008.19.17
- Dykstra, P. A. (1997). The effects of divorce on intergenerational exchange in families. *The Netherlands Journal of Social Sciences*, 33, 77–93. https://doi.org/10.2307/2061683
- Eggebeen, D. J., & Davey, A. (1998). Do safety nets work? The role of anticipated help in times of need. *Journal of Marriage and Family*, 60(4), 939-950. https://doi.org/10.2307/353636
- Fingerman, K., Miller, L., Birditt, K., & Zarit, S. (2009). Giving to the good and the needy: Parental support of grown children. *Journal of Marriage and Family*, *71*(5), 1220-1233. https://doi.org/10.1111/j.1741-3737.2009.00665.x

- Fingerman, K. L., Kim, K., Davis, E. M., Furstenberg Jr, F. F., Birditt, K. S., & Zarit, S. H. (2015). "I'll give you the world": Socioeconomic differences in parental support of adult children. *Journal of Marriage* and Family, 77(4), 844-865. https://doi.org/10.1111/jomf.12204
- Furstenberg, F. F., Hoffman, S. D., & Shrestha, L. (1995). The effect of divorce on intergenerational transfers: new evidence. *Demography*, *32*(3), 319-333. https://doi.org/10.2307/2061683
- Gruber, J. (2004). Is making divorce easier bad for children? The long run implications of unilateral divorce. *Journal of Labor Economics*, 22(4):799–834 https://doi.org/10.1086/423155
- Grundy, E. (2005). Reciprocity in relationships: socio-economic and health influences on intergenerational exchanges between Third Age parents and their adult children in Great Britain. *The British Journal of Sociology*, 56(2), 233-255. https://doi.org/10.1111/j.1468-4446.2005.00057.x
- Hämäläinen, H., Tanskanen, A. O., Danielsbacka, M., & Arpino, B. (2020). Short-term reciprocity between adult children and parents: A within-person investigation of longitudinal data. *Advances in Life Course Research*, 44, 100337. https://doi.org/10.1016/j.alcr.2020.100337
- Härkönen, J., Bernardi, F., & Boertien, D. (2017). Family dynamics and child outcomes: An overview of research and open questions. *European Journal of Population*, 33(2), 163-184. https://doi.org/10.1007/s10680-017-9424-6
- Hornstra, M., Kalmijn, M., & Ivanova, K. (2020). Fatherhood in complex families: Ties between adult children, biological fathers, and stepfathers. *Journal of Marriage and Family*, 82(5), 1637-1654. https://doi.org/10.1111/jomf.12679
- Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M. (2011). Panel analysis of intimate relationships and family dynamics (pairfam): Conceptual framework and design. *Zeitschrift für Familienforschung*, 23(1), 77-101. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-376463
- Huinink, J., & Kohli, M. (2014). A life-course approach to fertility. *Demographic research*, 30, 1293-1326. https://doi:10.4054/DemRes.2014.30.45
- Igel, C., & Szydlik, M. (2011). Grandchild care and welfare state arrangements in Europe. Journal of European Social Policy, 21(3), 210-224. https://doi.org/10.1177/0958928711401766
- Isengard, B., König, R., & Szydlik, M. (2018). Money or space? Intergenerational transfers in a comparative perspective. *Housing Studies*, 33(2), 178-200. https://doi.org/10.1080/02673037.2017.1365823
- Lin, I. F. (2008). Consequences of parental divorce for adult children's support of their frail parents. *Journal* of Marriage and Family, 70(1), 113-128.
  - https://doi.org/10.1111/j.1741-3737.2007.00465.x
- Kalmijn, M. (2007). Gender differences in the effects of divorce, widowhood and remarriage on intergenerational support: Does marriage protect fathers? *Social Forces*, 85(3), 1079-1104. https://doi.org/10.1353/sof.2007.0043
- Kalmijn, M. (2013). Long-term effects of divorce on parent–child relationships: Within-family comparisons of fathers and mothers. *European Sociological Review*, 29(5), 888-898. https://doi.org/10.1093/esr/jcs066
- Kalmijn, M. (2019). The Effects of Ageing on Intergenerational Support Exchange: A New Look at the Hypothesis of Flow Reversal. *European Journal of Population*, 35(2), 263-284. https://doi.org/10.1007/s10680-018-9472-6
- Kaufman, G., & Uhlenberg, P. (1998). Effects of life course transitions on the quality of relationships between adult children and their parents. *Journal of Marriage and Family*, 60(4), 924-938. https://doi.org/10.2307/353635
- Keister, L. A. (2004). Race, family structure, and wealth: The effect of childhood family on adult asset ownership. *Sociological Perspectives*, 47(2), 161-187. https://doi.org/10.1525/sop.2004.47.2.161
- Klaus, D. (2009). Why do adult children support their parents? *Journal of Comparative Family Studies*, 40(2), 227-241. https://doi.org/10.3138/jcfs.40.2.227
- König, R. (2016). Bildung, Schicht und Generationensolidarität in Europa. Springer-Verlag. https://doi.org/10.1007/978-3-658-13217-0
- Leopold, T., & Schneider, T. (2011). Family events and the timing of intergenerational transfers. *Social Forces*, 90(2), 595-616. https://doi.org/10.1093/sf/sor030
- Leopold, T., & Raab, M. (2013). The temporal structure of intergenerational exchange: A within-family analysis of parent–child reciprocity. *Journal of Aging Studies*, 27(3), 252-263. https://doi.org/10.1016/j.jaging.2013.05.001
- Lersch, P. M., & Baxter, J. (2021). Parental separation during childhood and adult children's wealth. *Social Forces*, 99(3), 1176-1208. https://doi.org/10.1093/sf/soaa021

- Lye, D. N. (1996). Adult child-parent relationships. *Annual Review of Sociology*, 22(1), 79-102. https://doi.org/10.1146/annurev.soc.22.1.79
- Macmillan, R., & Copher, R. (2005). Families in the life course: Interdependency of roles, role configurations, and pathways. *Journal of Marriage and Family*, 67(4), 858–879. https://doi.org/10.1111/j.1741-3737.2005.00180.x
- Maes, M., Thielemans, G., & Tretyakova, E. (2020). Does Divorce Penalize Elderly Fathers in Receiving Help from Their Children? Evidence from Russia. In *Divorce in Europe* (pp. 167-182). Springer, Cham. https://doi.org/10.1007/978-3-030-25838-2\_8
- Manzoni, A. (2016). Conceptualizing and measuring youth independence multidimensionally in the United States. *Acta Sociologica*, *59*(4), 362-377. https://doi.org/10.1177/0001699316653797
- McGarry, K., & Schoeni, R. F. (1995). Transfer Behavior in the Health and Retirement Study: Measurement and the Redistribution of Resources within the Family. *The Journal of Human Resources*, 30, S184–S226. https://doi.org/10.2307/146283
- McLanahan, S., Jacobsen, W. (2015). Diverging Destinies Revisited. In: Amato, P., Booth, A., McHale, S., Van Hook, J. (Eds) Families in an Era of Increasing Inequality. National Symposium on Family Issues, vol 5. Springer, Cham. https://doi.org/10.1007/978-3-319-08308-7\_1
- McLanahan, S., & Percheski, C. (2008) Family structure and the reproduction of inequalities. *Annual Review* of Sociology, 34, 257–276. https://doi.org/10.1146/annurev.soc.34.040507.134549
- McLanahan, S. (2004). Diverging Destinies: How Children Are Faring Under the Second Demographic Transition. Demography 41(4), 607-627. https://doi:10.1353/dem.2004.0033
- Meggiolaro, S., & Ongaro, F. (2015). Non-resident parent-child contact after marital dissolution and parental repartnering: Evidence from Italy. *Demographic Research*, 33, 1137-1152. https://doi:10.4054/DemRes.2015.33.40
- Merton, R. K. (1988). The Matthew effect in science, II: Cumulative advantage and the symbolism of intellectual property. *isis*, 79(4), 606-623.
- Mood, C. (2010). Logistic regression: Why we cannot do what we think we can do, and what we can do about it. *European Sociological Review*, 26(1), 67-82. https://doi.org/10.1093/esr/jcp006
- Müller, B., & Castiglioni, L. (2015). Attrition im Beziehungs- und Familienpanel pairfam. In *Nonresponse* bias (pp. 383-408). Springer VS, Wiesbaden. https://doi:10.1007/978-3-658-10459-7\_12
- Mureșan, C. (2017). Parental Breakup and Long-Term Consequences on Support Behaviour to Aging Parents in Europe. *Revista de Asistență Socială*, (1), 93-105.
- Parrott, T. M., & Bengtson, V. L. (1999). The effects of earlier intergenerational affection, normative expectations, and family conflict on contemporary exchanges of help and support. *Research on Aging*, 21(1), 73-105. https://doi.org/10.1177/0164027599211004
- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. New York: A. de Gruyter.
- Rossi, A. S., & Rossi, P. H. (1991). Normative obligations and parent-child help exchange across the life course. In K. A. Pillemer & K. McCartney (Eds.), *Parent-child relations throughout life* (pp. 201–223). Lawrence Erlbaum Associates, Inc.
- Saraceno, C., & Keck, W. (2010). Can we identify intergenerational policy regimes in European Societies, 12(5), 675-696. https://doi.org/10.1080/14616696.2010.483006
- Schenk, N., Dykstra, P., & Maas, I. (2010). The role of European welfare states in intergenerational money transfers: a micro-level perspective. Ageing & Society, 30(8), 1315-1342. https://doi:10.1017/S0144686X10000401
- Schoeni, R. F., & Ross, K. E. (2005). Material Assistance from Families during the Transition to Adulthood. In R. A. Settersten, Jr., F. F. Furstenberg, Jr., & R. G. Rumbaut (Eds.), On the frontier of adulthood: Theory, research, and public policy (pp. 396–416). The University of Chicago Press. https://doi.org/10.7208/chicago/9780226748924.003.0012
- Schmid, T. (2014). Generation, Geschlecht und Wohlfahrtsstaat: Intergenerationelle Unterstützung in Europa. Springer-Verlag. https://doi.org/10.1007/978-3-658-04346-9
- Seltzer, J. A. (1994). Consequences of marital dissolution for children. *Annual Review of Sociology*, 20(1), 235-266. https://doi.org/10.1146/annurev.so.20.080194.001315
- Shapiro, A., & Cooney, T. M. (2007). Divorce and intergenerational relations across the life course. Advances in Life Course Research, 12, 191-219. https://doi.org/10.1016/S1040-2608(07)12007-4

- Silverstein, M., & Bengtson, V. L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in American families. *American Journal of Sociology*, 103(2), 429-60. https://doi.org/10.1086/231213
- Silverstein, M., Conroy, S. J., Wang, H., Giarrusso, R., & Bengtson, V. L. (2002). Reciprocity in parent-child relations over the adult life course. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57(1), S3-S13. https://doi.org/10.1093/geronb/57.1.S3
- Silverstein, M., Gans, D., & Yang, F. M. (2006). Intergenerational support to aging parents: The role of norms and needs. *Journal of Family Issues*, 27(8), 1068-1084. https://doi.org/10.1177/0192513X06288120
- Steinbach, A. (2012). Intergenerational relations across the life course. Advances in Life Course Research, 17(3), 93-9. https://doi.org/10.1016/j.alcr.2012.06.002
- Steinbach, A., Mahne, K., Klaus, D., & Hank, K. (2020). Stability and change in intergenerational family relations across two decades: Findings from the German ageing survey, 1996–2014. *The Journals of Gerontology: Series B*, 75(4), 899-906. https://doi.org/10.1093/geronb/gbz027
- Szydlik, M. (2000). Lebenslange Solidarität? Generationenbeziehungen zwischen erwachsenen Kindern und Eltern. Germany: VS Verlag für Sozialwissenschaften.
- Swartz, T. T. (2009). Intergenerational family relations in adulthood: Patterns, variations, and implications in the contemporary United States. Annual Review of Sociology, 35, 191-212. https://doi.org/10.1146/annurev.soc.34.040507.134615
- Swartz, T. T., Kim, M., Uno, M., Mortimer, J., & O'Brien, K. B. (2011). Safety nets and scaffolds: Parental support in the transition to adulthood. *Journal of Marriage and Family*, 73(2), 414-429. https://doi.org/10.1111/j.1741-3737.2010.00815.x
- Thomas, M. J., Mulder, C. H., & Cooke, T. J. (2018). Geographical distances between separated parents: A longitudinal analysis. *European Journal of Population*, 34(4), 463-489. https://doi.org/10.1007/s10680-017-9437-1
- Thönnissen, C., Wilhelm, B., Alt, P., Greischel, H., & Walper, S. (2019). Scales and Instruments Manual, pairfam waves 1 to 10 [Release 10.0]. Retrieved from https://www.pairfam.de/fileadmin/user\_upload/uploads/Neu\_10/Scales%20Manual%2C%20pairfam %20Release%2010.0.pdf
- Ward, R. A., & Spitze, G. D. (2007). Nestleaving and coresidence by young adult children: The role of family relations. *Research on Aging*, *29*(3), 257-277. https://doi.org/10.1177/0164027506298225
- White, L. (1992). The effect of parental divorce and remarriage on parental support for adult children. *Journal of Family Issues*, 13(2), 234-250. https://doi.org/10.1177/019251392013002007
- Wightman, P., Schoeni, R., & Robinson, K. (2012). Familial financial assistance to young adults. (National Poverty Center Working Paper Series No. 12-10). Retrieved from National Poverty Center website: http://npc.umich.edu/publications/u/2012-10%20NPC%20Working%20Paper.pdf
- Zill, N., Morrison, D. R., & Coiro, M. J. (1993). Long-term effects of parental divorce on parent-child relationships, adjustment, and achievement in young adulthood. *Journal of Family Psychology*, 7(1), 91. https://doi.org/10.1037/0893-3200.7.1.91

# Information in German

#### **Deutscher** Titel

Die Trennung der Eltern und generationenübergreifende Unterstützung

#### Zusammenfassung

**Fragestellung:** Wir untersuchen die gegenseitige Unterstützung zwischen Eltern und erwachsenen Kindern in Familien in Deutschland, welche durch eine elterliche Trennung betroffen sind oder nicht. Wir betrachten mehrere Unterstützungsarten (emotional, materiell und instrumentell), beide Richtungen der Unterstützung (d. h. Geben und Nehmen) sowie den Austausch mit Müttern und Vätern.

**Hintergrund:** Da die Trennung der Eltern Auswirkungen auf die Eltern-Kind-Beziehungen und deren Austausch haben kann, mit Folgen für das Wohlbefinden der Betroffenen, ist ein besseres Verständnis des Zusammenhangs zwischen Trennung und Unterstützungsbeziehungen von größter Bedeutung.

**Methode:** Wir verwenden Daten des Deutschen Familienpanels (pairfam. 2009-2016. N=4.340 Befragte und 13.481 Beobachtungen) und verwenden verallgemeinerte lineare Regressionsmodelle. bei denen wir für eine Korrelation der Störterme zwischen Gleichungen erlauben. Mit diesen Modellen schätzen wir eine Bandbreite des Ausmaßes von gegenseitigen Unterstützungen zwischen Eltern und Kindern. Darüber hinaus untersuchen wir, ob diese Unterstützungen vom Zeitpunkt abhängen, an dem die elterliche Scheidung stattgefunden hat, sowie von dem sozialen Hintergrund.

**Ergebnisse:** Die Trennung der Eltern geht mit einem niedrigeren Niveau von gegenseitiger Unterstützung zwischen Eltern und Kindern einher. Dies ist insbesondere für Väter der Fall. Für geschiedene Mütter und Mütter, welche keine materielle Unterstützung von ihren Kindern erhalten haben, ist der Unterschied nicht signifikant. Das Ausmaß der negativen Beziehung zwischen elterlicher Trennung und Unterstützung zwischen Kindern und Vätern ist geringer, wenn die Trennung erst stattfindet. nachdem die Kinder erwachsen sind. Weiter finden wir, dass für gut ausgebildete Mütter eine Trennung mit einer geringeren Reduktion in materieller Unterstützung assoziiert ist.

**Schlussfolgerung:** Insgesamt legen die Ergebnisse nahe, dass geringere generationenübergreifende Unterstützungen in Familien, die von einer Trennung betroffen sind, zu einer weiteren Benachteiligung einer sozialen Gruppe führen, die ohnehin schon benachteiligt ist.

Schlagwörter: pairfam, Deutschland, materielle Unterstützung, emotional Unterstützung, instrumentell support

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