The Impact of Union Dissolution and Divorce on Adolescents’ and Adults’ Relationships with their Parents

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Abstract: Using data of the German Family Panel pairfam, this article examines whether relationship-related transitions among adolescents and adults – separations with or without subsequent new relationships and transitions from being single to a relationship – impact different aspects of their relationship with their parents (contact frequency, intimacy, and conflict). Several competing hypotheses are tested. The resource hypothesis, following a supply-side argumentation, posits that relationships generate resources (i.e. social capital) that facilitate exchange with parents; relationship breakup implies resource deprivation and produces strain, which adversely affects the parent-child relationship (spillover hypothesis). According to the demand-based compensation hypothesis, horizontal relationships and vertical intergenerational relations are substitutively associated with each other; hence, exchanges between generations should be strongest when children are not involved in romantic relationships. The analyses yield evidence in line with both the compensation hypothesis (particularly among adolescents) and the spillover hypothesis (among adults). The effects are largely gender neutral.

Keywords: Intergenerational relations · Solidarity · Life course · Union dissolution and divorce

1 Introduction

Separation and divorce are critical events within the life course with especially serious individual consequences for those affected. Extensive empirical literature documents the many economic (cf. for Germany and Europe: Andreß 1999; Andreß et al. 2006; Andreß et al. 2003; for the USA: Holden/Smock 1991) as well as health and psycho-social consequences (cf. for an overview: Beelmann/Schmidt-Denter 2003; Kopp et al. 2010) of marital instability. More recent studies show that the consequences of the dissolution of non-marital relationships frequently lead to similarly negative consequences as those of a divorce (Avellar/Smock 2005).
This article, however, focuses on the social consequences of union dissolution. One of the most thoroughly documented findings in this context are the diverse negative effects of divorce on parents’ relationship with their children (Amato 2000, 2010; Amato/Booth 1996; Amato et al. 1995; Booth/Amato 1994). In this field of research, which is characterised by a strong longitudinal empirical tradition, it is, however, striking that the consequences of a separation or divorce in the offspring generation on relationships with parents is rarely examined; the relevant overviews (Amato 2000, 2010) completely ignore this issue.

This issue is, however, an important and largely open-ended research question. On one hand, we can assume – based on the above-mentioned research on the consequences of union dissolution – that material losses, stress and strain spread to an individual's relationship with their parents and reduce its quality. Generally speaking, this perspective assumes that a relationship provides specific resources (social capital) from which parent-child relationships also profit and thus the loss of which consequently impairs them. On the other hand – and this can be related to concepts of family or kinship solidarity (Bengtson 2001; Nauck/Arránz Becker 2013) – one central characteristic of families is to stick together in calamities and “hard times” and thus attenuate crises (compensation). According to this perspective, relationships and intergenerational relations compete with each other, thus we could even anticipate positive effects of a separation or divorce on intergenerational relationships with parents.

These questions have been largely ignored in past research on the consequences of separation and divorce. There are, however, some relevant findings from a different line of research studying intergenerational relationships (cf. Deindl et al. 2014; Szydlik 2000). This research considers romantic relationships as a part of the structural framework of intergenerational exchange. However, the relevant studies of this research tradition – unlike the studies cited above – are almost all cross-sectional studies as will be illustrated in detail in the section on the state of research. This leads to serious problems with regard to interpretability of the findings, since it is unclear, for example, whether the compared groups are comparable at all or can be made comparable by means of controlling for all relevant third variables (“unobserved heterogeneity”).

This leads directly to the objectives of this article. The central objective will be (1) to examine the effects of union dissolution among adolescents and adults (with or without immediate subsequent relationships) on relationships with their parents, (2) while taking the moderating influence of age and gender of the children as well as the gender of the parent into consideration. And finally the study (3) will determine the role of potential explanatory mechanisms for the ascertained effects. Since the theoretical points outlined above (and discussed in further detail in the next section) can basically be applied to any type of relationship, in this article I will examine marital as well as non-marital relationships. I will also analyse transitions to a new relationship, since the general theoretical arguments can equally be applied to entry into and exit from relationships; this leads to a more general question concerning the effects of relationship transitions. I will focus my attention on a within-subject
longitudinal approach, which allows for stronger causal inference than most previous studies.

2 Theoretical background, state of research and hypotheses

2.1 Theoretical considerations

Before deriving the hypotheses, I will first specify the construct of intergenerational relations. Intergenerational relations – a term here not referring to social, but to familial generations (cf. Mannheim 1928) – are understood as individual exchange relationships within families (Szydlik 2000). Familial intergenerational relations are also very significant because they are an expressive counterpart of “public,” instrumental barter relations (e.g. trade). Frequently, the maxim of *quid pro quo* (“something for something”) does not apply to the (nuclear) family – in particular not to parents and children; exchange in families is rather generalised, i.e. the manner and time of “repayment” remain undetermined (cf. Hennig 2014). In some cases openly expressed expectations of reciprocity are even negatively sanctioned (Clark/Mills 1979), which, however, does not mean that reciprocity is entirely absent in family exchange (Leopold/Raab 2011). Instead, the resources exchanged within families are diverse: ranging from money and services to affection and love (Hill 1992).

The empirical literature on intergenerational relationships usually refers back to a series of theoretically and conceptually seminal studies by the group of Vern Bengtson and Merrill Silverstein (cf. Bengtson/Roberts 1991; Bengtson 2001; Silverstein et al. 1997). These studies established theoretically derived and empirically tested dimensions of the construct of intergenerational solidarity. Among the six (Bengtson 2001) – or with the addition of conflict (Silverstein et al. 2010), seven – dimensions, three primary aspects can be distinguished. In addition to structural solidarity, which refers to opportunity structures (e.g. family structure) and is in fact a fundamental prerequisite for intergenerational exchange, there are (1) associative solidarity, in particular contact frequency, (2) affective solidarity (e.g. emotional closeness) as well as (3) functional solidarity, including practical, non-material and material support (cf. Szydlik 2000). The latter will be excluded in this article due to lacking data (for details see the methodology section).

The main objective of the article is, however, not to describe familial exchanges, but to test explanatory hypotheses on the influence of relationship transitions in the offspring generation on selected aspects of the relationship to their parents (associative and affective solidarity as well as conflicts). For the purpose of generating the hypotheses this article will refer to exchange theory. In doing so it is useful to theoretically differentiate between two perspectives: the supply side and the demand side (cf. Szydlik 1995).

From the supply perspective, we can expect that the exchange between the generations is more intense the more resources – time, money, affection and suchlike – are available to the family members and can be “invested” into the relationships. In this view, resources are basically the “opportunity structure” (Szydlik 1995) of
intergenerational relations. Based on diverse findings on negative consequences of union dissolution (Amato 2000; Beelmann/Schmidt-Denter 2003) we might (somewhat naively) assume that due to the associated loss of material and psychosocial resources, a separation from a partner reduces emotional closeness to the parents. Conversely, this reasoning implies that the existence of a (marital) partner in the offspring generation improves the availability of resources, thus strengthening the intergenerational exchange (referred to in the following as the “resource hypothesis”).

It is, however, possible that familial exchanges are frequently demand-oriented. From the demand perspective, we could assume that intergenerational exchange intensifies with increasing demand – in other words in the course of resource deprivation. A partner relationship, as mentioned above, usually creates access to the partner’s social capital and, not least, to their social support, and additionally ties up time resources. Hence, we can assume that intergenerational exchange tends to lessen with the existence of a relationship, but intensifies after the loss of these resources due to separation. In this respect, according to the demand-based argument, the intragenational relationship and the vertical intergenerational relationship have a substitutive association with each other (“compensation hypothesis”).

We must nonetheless take into consideration here that family relationships have no purely instrumental character, but rather possess a strong expressive component. This means that interpersonal communication plays a special role in familial exchange (Arránz Becker 2008). This, however, makes family relationships highly susceptible to “malfunctions.” For example, we can anticipate that although strain resulting from a separation can be cushioned to a certain extent by social support from parents and other family members, but it can nonetheless lead to a transfer of conflicts (“spillover hypothesis”) and thereby disturb the intergenerational exchange.

2.2 Differentiations: Moderator effects of gender and age

The strength of the effects of the relationship status of children on their relationship to their parents might systematically vary according to different social characteristics. First of all, the gender of parent and child seems to be important. Earlier studies show that relationships to mothers tend to be closer than those to fathers and that daughters on average report closer relationships to their parents than sons (Szydlik 1995). Thus we could assume that the impact of union dissolutions (or relationship transitions in general) vary in intensity (or even reverse their effect) according to the genders of the parents and children involved.

From a theoretical perspective, the “kin-keeper” hypothesis appears at first glance quite plausible in this case (cf. Szydlik 1995). According to this hypothesis, sons more often profit from a relationship than daughters because, in line with prevailing gender roles, the female partner frequently keeps and maintains contact with the outside world, including that to parents and family (Hagestad 1986). Since from this perspective parent-daughter relationships are considered more normatively controlled and therefore less sensitive to external stimuli and opportunity structures (cf. Esser 2000), a separation can be expected to have a more negative
effect on the relationship to the parents for sons than for daughters. We could make a similar argument in the case of father relationships, which are also assumed to be more affected by relationship transitions of the children. On the other hand, we could also argue that in parent-child relationships involving women there is potentially more closeness “at stake,” so that potential deteriorations in relationships following a separation in the offspring generation may be particularly pronounced. In previous studies, neither of these two arguments has been confirmed empirically. According to Szydlik (1995), the effects of relationship status are only significant in the case of mother-child relationships, but not with regard to relationships with the father. In addition, Berger and Fend (2005) report that the “married” status of the child facilitates closeness in daughter-mother relationships, but significantly impairs the son-mother relationship (Szydlik 1995 replicates this negative effect). It is possible that contacts with the wife’s family of origin become more intense among married couples. Further clarification would, however, require that we take in-law relationships into consideration. In other studies the effects are only significant among selected gender combinations of the parent-child dyad (Kaufman/Uhlenberg 1998; Sarkisian/Gerstel 2008) and the authors have interpreted this as a gendered effect pattern in the past. This interpretation is, however, not justified in most of the studies because they usually do not test the effect differences between subgroups (e.g. through interaction effects), but merely report separate models for the different dyads. Therefore, the common practice of calculating separate models for the two genders results in an overemphasis of gender differences. Due to the unclear underlying mechanisms, in the present article no explicit moderator hypotheses concerning gender are formulated.

A second moderator effect that is relevant with regard to the sample studied in this article is age. We know from developmental psychology that intergenerational relations change systematically with the transition to adulthood and the related developmental tasks such as detachment from the parental home and individuation (Walper 2003). Employment and partnering processes in adolescence facilitate autonomy from the parents (Masche 2008) and require repeated re-negotiations of the parent-child relationship (cf. Youniss 1982). In adolescence, intensified parental monitoring of children’s romantic relationships is to be assumed, including both reactance against new relationships as well as support in cases of separation. This monitoring may gradually recede following the transition to adulthood. As a result, the greater parental involvement may reinforce compensation effects among adolescents. In addition, developmental transitions in adolescence, which surely also include relationship-related transitions, are sometimes accompanied by disputes with parents during the course of which the parent-child relationships transform towards greater emancipation and being “on par” (Aquilino 1997; Masche 2008). Overall, shifts in the parent-child relationships after relationship-related transitions are expected to be more pronounced among adolescents than among adults (“development hypothesis”).

Ultimately, the extent of the effects of union dissolution could increase with the relationship’s degree of institutionalisation since this also increases separation costs. None of the studies discussed has ever examined this aspect in detail. Al-
though Szydlik (1995) controls for multiple indicators for “living apart together” as well as non-marital and marital cohabitation (reference group: single) in his analyses, no systematic differential effect pattern can be identified from the findings, because the differences in the coefficients are not tested for significance. This article will explore moderator effects of relationship status. Finally, we can assume that the existence of siblings may also influence the extent of consequences of union dissolution. No studies have been conducted on this question, hence it will be explored in the present article.

2.3 Potential explanatory mechanisms

Earlier studies shed little light on possible explanatory mechanisms for the found effects. From a theoretical perspective, it would seem desirable to control not only for a general time indicator (e.g. age) and opportunity structures (e.g. indicated by cohabitation) but in particular for those (time-varying) factors that correlate with the demand for intergenerational exchange. Two groups of variables seem to be relevant here: on the one hand, the available human and social capital (e.g. income and social contacts), and on the other hand, indicators of mental states that represent subjective manifestations of these objectively available types of capital (e.g. general satisfaction and self-esteem). If the resource hypothesis is correct, we can anticipate that negative resource effects in the case of separation can be “explained” by an increasing demand for support, for example a decrease in general satisfaction (mediation hypothesis). If, instead, the compensation hypothesis is correct, the effects of relationship transitions, controlling for capital and mental state, should not change much; rather, we can presume that potential impairments (e.g. to the mental state) may be buffered by the parents’ attention or that unfavourable changes may not impinge upon the relationship to the parents.

2.4 Previous research

Some, but by no means all US studies confirm the compensation hypothesis. In what is probably the best known of them, Sarkisian and Gerstel (2008) conclude that marriage is a “greedy institution.” Compared to never married or divorced people, they found significantly less solidarity on average among married people with regard to a variety of dimensions (structural, associative, affective and functional). Spitze et al. (1994) also found empirical evidence for the compensation hypothesis. According to their analyses, divorce has a positive effect on the frequency of personal and telephone contacts as well as on functional solidarity (babysitting and other forms of support) for daughters, but not sons. Other studies provide weak evidence for the compensation hypothesis, a positive effect of being single (compared to being married) on affective solidarity (White/Rogers 1997) is reported as well as weak negative effects of cohabitation (Masche 2008) and marriage (Bucx et al. 2012) on individual aspects of functional solidarity. Despite the rather mixed, cross-sectional-based evidence, Swartz (2009: 204) concludes in her overview that
“Marriage in the younger generation [...] is associated with weakened intergenerational family integration.”

Two of the most detailed and convincing longitudinal studies so far (Aquilino 1997; Kaufman/Uhlenberg 1998) lead, however, to opposing conclusions. Kaufman and Uhlenberg (1998) use multinomial logistical regressions to analyse the direction of changes (improvement vs. deterioration vs. no change) between two different points in time five years apart. They report that the relationships of daughters with their parents improve upon marriage, while separation has positive effects both on an improvement and on a deterioration in the relationship between daughters and parents. Among sons, by contrast, marriage makes deterioration of their relationship with their parents less likely. This renders the findings at least partially compatible with the resource hypothesis, but the parent-child relationship is measured only using one single, rather vague question, with response categories differing across the waves. Aquilino (1997) estimates effects of a child’s relationship status at the second point in time with regard to four aspects of intergenerational relationships – emotional closeness, shared activities, support of the parents by the child as well as conflicts due to parental control behaviour –, whereby different aspects of the parent-child relationship are controlled for at the first point in time measured. Compared with the reference group of singles, the relationship statuses of cohabitation and marriage have positive effects on emotional closeness and shared activities and marriage has a negative effect on conflicts, while the coefficients for the indicator for separation or divorce were insignificant for all dependent variables.

The findings as a whole therefore support the resource hypothesis, but the chosen analytical approach is suboptimal because it is based on comparisons between different respondents and thus the effect estimates, even in longitudinal studies, can be biased by unobserved heterogeneity. Some other studies also tend to confirm the resource hypothesis. For example, Belsky and colleagues (2003) report a rise in affective solidarity among married compared to unmarried sons and daughters with partners, while the presence of a partner in itself shows no effects. In their cross-sectional study, Kalmijn and de Vries (2009) find a positive effect of marriage (reference: single) on contact frequency with fathers (but not with mothers). Finally, Willson et al. (2006) report stronger negative feelings towards mothers among their unmarried children than their married children.

Some other studies result in mixed findings that partly confirm both the resource and the compensation hypotheses. Another study by Kalmijn (2012) using sophisticated panel analyses with a broader focus on changes in social embeddedness over the life course is based on data from the Swiss Household Panel. The author comes to the conclusion that both a transition into a relationship (according to the resource hypothesis) as well as a separation (according to the compensation hypothesis) – controlling for age effects – are accompanied by intensified contacts with and support from family members. However, the dependent variable is a general question on the entire family network which was taken from the network module of the questionnaire so that the findings cannot be easily transferred to the relationship with the parents. An older study of SOEP data by Szydlik (1995) also partly supports the needs perspective. On the one hand, marital and non-marital cohabitation
(compared to being single) has negative effects on the quality of relationships with parents; but on the other hand a separation from a partner is associated with a weaker relationship with parents, which, again, would rather support the resource or spillover hypotheses. Some older studies also rather indicate deterioration than improvement in the parent-child relationship as a consequence of a separation in the offspring generation (cf. the overview in Spitze et al. 1994).

Finally, it has to be mentioned that several studies do not show any family status effect. For example, some studies do not find effects of the status “married” on affective closeness (Booth/Amato 1994; Dykstra 1997) and functional solidarity (Dykstra 1997; Fingerman et al. 2009) and Silverstein et al. (1997) and van Gaalen et al. (2010) only report merely weak and inconsistent effects.

One major problem of most existing studies lies in their cross-sectional perspective. Comparisons between groups with different family statuses in a cross-sectional study do not take into account that, for example, a possible self-selection in certain relationship and family arrangements depending on third variables that simultaneously influence relationships with parents (unobserved heterogeneity) can lead to a bias when estimating the causal effect of the living arrangement or of the relationship status. As a consequence, it can be assumed that among the group of the married, respondents who have comparatively good relationships with their parents are over-represented. Similarly, we can assume a negative selection into separation or divorces with regard to the relationship with parents so that among separated and divorced, ceteris paribus, people with poorer relationships with their parents may be over-represented. There are, however, hardly any studies on this issue. In total, the described selection processes could contribute to the fact that comparisons between singles and married people in cross-sectional studies are more frequently – though perhaps incorrectly – in favour of the resource hypothesis. In contrast, comparisons between married and divorced people can lead to a confirmation of the compensation hypothesis if not all relevant third variables are controlled for that determine this selection process. If, as is the case in many of the described studies, there is no further differentiation between different relationship types or transitions, but merely a dichotomous status (e.g. marriage or relationship) that is controlled for, then the estimates can theoretically be biased in both directions, depending on which process dominates in the specific case or in the actual sample. For this reason, longitudinal analyses that control for (self) selection are necessary for more conclusive research on this topic. Therefore, in the present article fixed effects panel regression models are used (see methodology section).

### 2.5 Summary of the goals and hypotheses of this article

The primary objective of the analyses is to determine the effects of union dissolution and relationship transitions (change of partner as well as the transition from being single to a new relationship) on relationships with parents, which is operationalised by means of three dimensions: contact frequency, emotional closeness and conflict potential. Two competing hypotheses are tested with the following anticipated effects:
1. Resource or spillover hypothesis:
   (a) According to both hypotheses, separation leads to the deterioration of a parent-child relationship.
   (b) The resource hypothesis also predicts an improvement in a parent-child relationship on transition into a new relationship.

2. According to the compensation hypothesis,
   (a) an improvement in a parent-child relationship is expected in the case of separation, but
   (b) a negative change in the case of a new relationship.

3. The development hypothesis assumes that compensation effects of relationship transitions are more pronounced among adolescents than among adults.

3 Methodology

3.1 Data basis and sample

The analyses in this article are based on data from the first four waves of the German Family Panel pairfam (Nauck et al. 2013). The pairfam study is a multi-actor panel survey of the current relationship and family-related behaviour of the population in Germany; conceptual information about this study can be found in Huinink et al. (2011). The sample of the primary respondents – the so-called anchors – consists of an adolescent cohort (birth years 1991-1993) and two adult cohorts (birth years 1971-1973 and 1981-1983) with a disproportionate sampling design. Because it is an analysis of parent-child relationships, this article focuses on dyads and not individuals. In the following, repeated measurements for all relevant variables are analysed on the basis of the anchors’ responses in each wave. Based on N = 12,402 anchors in the first wave, an unbalanced episode data set with all available measurement points for each anchor across the four waves with N = 36,371 person-years was generated, in which the anchors provided repeated assessments about their relationship with one or both (living) parents. For details about the survey and the sample development, cf. Arránz Becker et al. (2012).

3.2 Analysis strategy

As described in the research overview, most previous studies on the research question examined in the present article are based on cross-sectional designs. Most of them use one or more dummy variables to operationalise the relationship or family status. As shown above, the resulting estimates in these studies may be biased both through unobserved heterogeneity (i.e. third variables causally influence both the relationship status and the intergenerational solidarity) and through reverse causality or endogeneity (intergenerational relations affect relationship-related transitions). A similar approach can also be pursued using longitudinal data, whereby dependence over time has to be accounted for by correcting the standard errors or by modelling the multi-level structure (Giesselmann/Windzio 2012). Unfortunately,
however, these so-called random effects (RE) panel regressions, confound variance within and between individuals, i.e. it is unclear whether the resulting differences between different relationship statuses are caused by systematic differences between respondents or, rather, by shifts over time within persons (i.e. the difference in average intergenerational solidarity before and after a transition within the same individual) (Brüderl 2010).

One possibility for improving causal inference is to eliminate the variance between respondents, i.e. using regressions with respondent fixed effects (FE), which are used in this article. This approach keeps all (time invariant) differences between people constant, regardless whether they are due to observed or unobserved factors, and only variables containing within-variations (i.e. intra-individual changes) are included in the analysis (Allison 2009; Brüderl 2010). Yet, controlling for relationship status via a dummy variable (0: no partner; 1: partner), even when using an FE model, is not sufficient since it confounds changes within respondents caused by the transition from being single to a relationship (0 → 1) and vice versa from a relationship to being single (1 → 0). Therefore, both transitions were considered using separate indicators: a transition from a relationship to being single changes the separation indicator to 1 and it remains at 1 until a new relationship begins (in this case, the indicator changes to 0) or until the observation period ends. The reverse transition from being single to a new relationship is captured using a counter variable that increases by 1 with each new relationship. Since this variable can only rise and only changes to this variable are included in the FE model, this effectively partials out an entry into a new relationship from the separation effect. Moreover, it should be noted that a change of partner between two waves, when the status of single is not observed following a separation, represents a combination of an intermediate separation event and a new relationship and therefore should not automatically be contained in the reference category (no transition). Therefore a third indicator was controlled for, which measures such “seamless” transitions from one to another partner.

This has some consequences for the data preparation of the analysis sample. Since the focal events in the FE regressions are union dissolutions, only those respondents are taken into account who were at all exposed to the risk of separation within the first four waves, i.e. who were observed in at least one intimate relationship during one wave. This reduces the sample by 3,340 respondents to \( N = 9,062 \). The FE analyses that are based on changes or differences include all cases in which a respondent is observed in at least two waves (\( N = 23,390 \) episodes).

Nonetheless, it must be noted that each anchor was asked to assess their relationship to their mother and father (if the parent is still living). Therefore the data was first reshaped into a long-long format, in which each parent- and time-specific assessment of each intergenerational relationship is represented by its own observation in the data set. This doubles the original gross case number (to \( N = 46,780 \) person-years, without missing values). To prevent (downward) biased estimates of the standard errors as a result of this clustering, standard errors were adjusted using the ID of the anchor variables as a cluster variable (Williams 2000). One of the advantages of the long-long format is that – unlike most of the earlier studies – we can
actually test differential gender-specific effects using interaction effects between the relevant covariates (e.g. the three transitions) and the gender of the child or of the parent. In further moderator analyses interaction effects were computed with cohorts to test for effect heterogeneity between adolescents and adults.

One unique feature of the FE models is that they implicitly also control for all time invariant characteristics of the respondents’ parent. Since only time-varying variables can be controlled for in the models (because time invariant variables cannot change over time and thus have no within-subject variance), the FE model specifications are comparatively simple. The additional analyses of mediating mechanisms control for additional time-varying indicators measuring available capital and mental states and ascertain changes in the relevant effects of the transitions.

### 3.3 Indicators

With regard to the dependent variables, three aspects of intergenerational solidarity1 were taken into account (for more information cf. Wilhelm et al. 2013):

1. **Associative solidarity** was operationalised using the following question2 on contact frequency: “How often are you in contact with your mother (with your father), adding up all visits, letters, phone calls etc.?.” The response categories were 1 = daily, 2 = several times per week, 3 = once a week, 4 = 1-3 times per month, 5 = several times per year, 6 = less often, 7 = never.3 Since the intervals are certainly not equidistant, the characteristics were recoded as contacts per year (assigned values: 0, 2, 4, 24, 52, 150, 365). Comparative analyses with the original coding produced very similar results to those reported here.

2. **Affective solidarity** was measured using two intimacy indicators: “How often do you tell your mother (father) what you are thinking?” and “How often do you share secrets and private feelings with these persons?” whereby separate assessments were requested for both the mother and the father (response categories: 1 = never to 5 = always).4 Cronbach’s alpha is \( \alpha = 0.77 \) (mothers) and \( \alpha = 0.78 \) (fathers).

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1 Although pairfam also contains questions about further dimensions of solidarity (e.g. functional solidarity), these were not included in this analysis because they were only surveyed every two years in an additional in-depth module on intergenerational relationships so that the chosen analytical approach would not have been possible.

2 From wave 2 onwards, the question regarding the indicators measuring the three dimensions were amended slightly: instead of speaking of “biological mother”/“biological father,” they only refer to “mother”/“father,” thus including adoptive parents (cf. the pairfam code books). The relationships with new partners of parents or step-parents surveyed separately since wave 2 were not analysed in this article since relationships with stepparents cannot readily be compared with biological intergenerational relationships, for example because of their shorter duration (Steinbach 2010).

3 The response “was never in contact” of the indicator measuring contact frequency in the first wave was coded at the same value as the response “never.”

4 If there is no contact with the respective parent at the time of the interview, the information about intimacy and conflicts are coded as missing (“does not apply”) due to filters; these episodes are not included in the corresponding analyses as well as cases in which the respective parent is deceased.
3. **Intergenerational conflicts** were recorded using two items: “How often are you and your mother (father) annoyed or angry with each other?” and “How often do you and your mother (father) disagree and quarrel?” (response categories: 1 = never to 5 = always). Cronbach’s alpha is satisfactory, $\alpha = 0.80$ (mothers) and $\alpha = 0.78$ (fathers). The questions about affective solidarity and conflicts were adapted from the Network Relationship Inventory by Furman and Buhrmester (1985).

The analyses are conducted separately for the three dimensions of solidarity. Since these only correlate slightly with each other (all $|r| < 0.30$), we cannot assume one-dimensionality, which is confirmed by earlier research (Bengtson/Roberts 1991), therefore adding them to one sum score is not advisable in this case. Additionally, *co-residence of the respective parent and the child* as an aspect of structural solidarity was recorded as a covariate (0 = no, 1 = yes). For this purpose, we first used information from the so-called household grid to determine whether the respective parent lives in the same household as the anchor. Additionally, the co-residence variable was coded as 1 (otherwise: 0) when the respondents answered the question about the travel-time distance (“How much time do you need to get to your mother’s/to your father’s dwelling?”) with “We live in the same house.”

The relationship status of the respondents was examined as central independent variable. For the fixed effects longitudinal analyses three event indicators were coded to measure the possible transitions (for more details cf. the section on the analysis strategy): transition from being single to a relationship (in the following: “new relationship”), transition from a relationship to being single (“separation”) as well as transition from one relationship to a different relationship (“change of partner”). Table 1 lists the frequencies of the transitions.

A number of further covariates were also taken into account. In addition to the gender of the parent and of the child, the *birth cohort* and the anchor’s *number of siblings* (taken from wave 1) were used as further time invariant moderator variables. The following variables were included as time-varying covariates: *age* of the anchors, their current *relationship status* – operationalised using three dummy variables (reference: single): separate households (living apart together, LAT), cohabitation and marriage, *parenthood status* (0 = no children, 1 = child/ren) as well as the *serial number of the current partner*, which was generated using the relationship biography data.

Additional analyses also examined potential mechanisms with the following time-changing covariates: *health* (“How would you describe your general health in the past 4 weeks?” with 5 response categories ranging from 1 = poor to 5 = very good), the needs-weighted monthly *net household income*, *general satisfaction* (indicator: “Now I would like to ask about your general satisfaction with life. All in all, how satisfied are you with your life at the moment?” with responses ranging from 0 = very dissatisfied to 10 = very satisfied), *satisfaction with social contacts* (“How satisfied are you with the following domains of your life? Friends, social contacts”) and *self-esteem* (three items, e.g. “All in all, I am pleased with myself” with five response categories ranging from 1 = not at all” to 5 = “absolutely,” Cronbach’s $\alpha = .73$). Due to the overall small number of missing values (usually <1 percent, cf.
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**Tab. 1:** Description of the sample, descriptive statistics

<table>
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<th>Time constant characteristics&lt;sup&gt;1&lt;/sup&gt;</th>
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<td>Number of siblings of anchor (W1)</td>
<td>0</td>
<td>17</td>
<td>9003</td>
<td>1.52</td>
<td>(1.44)</td>
</tr>
</tbody>
</table>

**Intergenerational relationships**

(dependent variables)

| Relationship with mother                  |      |      |      |        |        |
| Contact frequency (per year)              | 0    | 365  | 21913| 218.97 | (142.57) |
| Intimacy                                  | 1    | 5<sup>4</sup> | 21366| 2.93   | (0.99) |
| Conflict                                  | 1    | 5<sup>4</sup> | 21380| 2.35   | (0.81) |
| Co-residence                              | 0    | 1    | 21913| 0.37   | (0.48) |

| Relationship with father                  |      |      |      |        |        |
| Contact frequency (per year)              | 0    | 365  | 19724| 173.31<sup>3</sup> | (148.62) |
| Intimacy                                  | 1    | 5<sup>4</sup> | 18251| 2.37<sup><sup>3</sup></sup> | (0.90) |
| Conflict                                  | 1    | 5<sup>4</sup> | 18207| 2.25<sup><sup>3</sup></sup> | (0.82) |
| Co-residence                              | 0    | 1    | 19724| 0.28<sup><sup>3</sup></sup> | (0.45) |

**Time varying characteristics**

(independent variables)

| Age                                       | 14   | 41   | 23390| 28.65 | (8.27) |
| Has partner                               | 0    | 1    | 23351| 0.84  |        |
| Relationship status (ref. single)         |      |      |      |        |        |
| LAT (living apart together)               | 0    | 1    | 23351| 0.25  |        |
| Cohabitation                              | 0    | 1    | 23351| 0.18  |        |
| Marriage                                  | 0    | 1    | 23351| 0.41  |        |
| Parenthood                                | 0    | 1    | 23390| 0.46  |        |
| Number of partners                        | 0    | 13   | 22547| 2.12  | (1.30) |
| Net monthly household income (needs-weighted) | 0    | 28284| 23390| 1588.62 | (874.31) |
| Health status                             | 1    | 5<sup>5</sup> | 23370| 3.75  | (0.99) |
| General life satisfaction                 | 0    | 10<sup>5</sup> | 23373| 7.70  | (1.64) |
| Satisfaction with social contacts         | 0    | 10<sup>5</sup> | 23376| 7.87  | (1.96) |
| Self-esteem                               | 1    | 5<sup>7</sup> | 23302| 3.98  | (0.83) |

**Events**

<sup>2</sup> Figures refer to the simple FE episode data set with N = 23,390 person-years; <sup>3</sup> Mean comparisons (relationship with mother minus relationship with father) significant with p < 0.001 (basis: FE model); <sup>4</sup> Responses: 1=never, 5=always; <sup>5</sup> Responses: 1=poor, 5=very good; <sup>6</sup> Responses: 0=very dissatisfied 10=very satisfied; <sup>7</sup> Responses: 1=not at all 5=absolutely

<table>
<thead>
<tr>
<th>Events&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Change of partner</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>New relationship</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<sup>1</sup> Figures refer to the FE (fixed effects) data set with N = 6,588 respondents; <sup>2</sup> Figures refer to the simple FE episode data set with N = 23,390 person-years; <sup>3</sup> Mean comparisons (relationship with mother minus relationship with father) significant with p < 0.001 (basis: FE model); <sup>4</sup> Responses: 1=never, 5=always; <sup>5</sup> Responses: 1=poor, 5=very good; <sup>6</sup> Responses: 0=very dissatisfied 10=very satisfied; <sup>7</sup> Responses: 1=not at all 5=absolutely

Source: Data of the German Family Panel, waves 1 to 4, own calculations
the case numbers in Table 1) episodes with missing values were excluded from the analysis. Only missing values in household income (making up approx. 25 percent) were imputed (regression-based).

Table 1 shows descriptive statistics for all variables included into the analysis.

4 Results

In the analyses reported below fixed effects panel regressions are estimated for each of the three dependent variables, showing effects of relationship transitions using three dummy variables while at the same time controlling for time-constant unobserved heterogeneity.

The analyses were conducted separately for adolescents and the two adult cohorts, since there were significant cohort differences for some effects (details can be found in the section below on moderator effects). Table 2 shows the results of the fixed effects models.

With regard to contact frequency with parents, the effect of separation was positive among adults (cf. model 4) – at least in the relationships of daughters to which the conditional main effect \( b = 9.994 \) here refers – which supports the compensation hypothesis (i.e. limited time budget). The negative significant interaction effect “son x separation” \( b = -16.191 \) reveals that the separation effect is significantly weaker among sons than among daughters; additional analyses of sons illustrate (not shown in the table) that the effect is not significant here. By contrast, both a change of partner with an immediate subsequent relationship and a transition from being single into a relationship show no effects on the contact frequency with the parents.

With regard to intimacy, the FE models do show significant effects. In line with the compensation hypothesis, which suggests an increasing need for support after a separation, union dissolutions – both with and without an immediate subsequent relationship – intensify emotional bonds between adolescent respondents and their parents (cf. model 2), while among adults (model 4) only the positive effect of separation is significant. A transition from being single into a relationship, by contrast, decreases the intimacy of the relationship of adolescents with their parents, which also confirms the compensation hypothesis. The latter is, however, only true for relationships with mothers, to which the significant main effect “new relationship” here refers. By contrast, a new relationship has no influence on the relationships with fathers since the negative main effect of a separation for the relationships with mothers \( b = 0.077 \) and the positive interaction effect “father x new relationship” \( b = 0.082 \) neutralise one another.\(^6\)

\(^5\) Since the effects between the two adult cohorts did not differ significantly, they were combined.

\(^6\) An additional model (not shown) with a reversed coding of the gender of the parent shows that the effect on the relationship with the father is not significant.
### Tab. 2: Fixed effects models on the influence of relationship status on the relationship with the mother and the father, separated according to adolescent and adult cohorts (with robust standard errors)

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Adolescents (born 1991-93)</th>
<th>Adults (born 1971-83)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A) Contact (B) Intimacy (C) Conflict</td>
<td>(A) Contact (B) Intimacy (C) Conflict</td>
</tr>
<tr>
<td></td>
<td>b (SE) b (SE) b (SE)</td>
<td>b (SE) b (SE) b (SE)</td>
</tr>
<tr>
<td>Relationship-related transitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separation</td>
<td>2.518** 0.088** 1 -0.026 9.994* 0.064* 1 0.059*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.26) (0.03) (0.02) (5.00) (0.03) (0.03)</td>
<td></td>
</tr>
<tr>
<td>Change of partner</td>
<td>-1.673 0.112** 1 -0.050 1 2.671 0.001 1 0.106*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.17) (0.04) (0.03) (9.00) (0.05) (0.05)</td>
<td></td>
</tr>
<tr>
<td>New relationship</td>
<td>-1.017 -0.077** 0.006 -5.474 0.029 -3.031</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.67) (0.03) (0.02) (5.83) (0.04) (0.04)</td>
<td></td>
</tr>
<tr>
<td>Interaction effects(2) with gender(3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father x separation</td>
<td>- - 0.054* - - -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Father x change of partner</td>
<td>- - - - - -</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father x new relationship</td>
<td>- 0.082** 0.006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Son x separation</td>
<td>- - - -16.191* - -</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-residence with parent</td>
<td>137.135** 0.019 0.161** 95.675** -0.082** 0.111**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.61) (0.05) (0.04) (5.19) (0.03) (0.03)</td>
<td></td>
</tr>
<tr>
<td>Life course transitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabitation</td>
<td>-6.673 0.053 -0.178** -18.393** 0.018 -0.024</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5.42) (0.05) (0.04) (3.25) (0.03) (0.02)</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>31.051 0.372* 0.029 -22.489** 0.019 -0.021</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(36.97) (0.04) (0.03) (4.38) (0.04) (0.03)</td>
<td></td>
</tr>
<tr>
<td>Parenthood</td>
<td>29.610* 0.017 -0.017 -18.401** -0.059* 0.002</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(12.60) (0.11) (0.11) (4.26) (0.03) (0.03)</td>
<td></td>
</tr>
<tr>
<td>Age (in years)</td>
<td>-6.991*** 0.089** -0.030** -4.112** 0.036** -0.040***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.19) (0.01) (0.01) (0.56) (0.00) (0.00)</td>
<td></td>
</tr>
<tr>
<td>N (episodes)</td>
<td>11588 11116 11105 29767 28194 28168</td>
<td></td>
</tr>
<tr>
<td>N (persons)</td>
<td>2375 2372 2373 6167 6059 6058</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>75.60 20.72 10.39 57.58 12.68 19.54</td>
<td></td>
</tr>
<tr>
<td>p (F)</td>
<td>0.00 0.00 0.00 0.00 0.00 0.00</td>
<td></td>
</tr>
<tr>
<td>R² (within)</td>
<td>0.25 0.04 0.02 0.08 0.01 0.01</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01. Notes: FE stands for fixed effects. Unstandardised regression coefficients are shown. ¹ Effect differs marginally between adolescents and adults (p < 0.1); ² To simplify the models, insignificant interaction effects are not estimated; ³ The main effects of the gender of parents and children are not estimated in the FE models since these variables are time constant.

Source: Data of the German Family Panel (unweighted), waves 1 to 4, own calculations
With regard to conflict intensity there is evidence among adults for increased conflict potential following a separation with or without a subsequent relationship (model 6), while among adolescents (model 3) the relationship with the father is burdened significantly stronger by separation (positive interaction effect father x separation: $b = 0.054$, $p < 0.05$) than with the mother (main effect separation: $b = -0.026$, n.s.). These findings thus support the spillover as well as the resource hypothesis, in particular among adults.

The control variables confirm previous findings in the literature: cohabitation of parent and child is an important structural prerequisite for contact and emotional bonds (Hank 2007) but also for conflicts (Aquilino 1997). Among adults the tendency to be in contact with the parents decreases (increases) with an increasing (a decreasing) degree of relationship institutionalisation (model 4), while the transition to parenthood is associated with increased contacts (models 1 and 4) as well as with a decrease in intimacy among adults (model 5) (cf. Masche 2008). Regardless of this, both intergenerational contact and conflict decrease over the waves, while intimacy tends to increase (in particular among adolescents).

### 4.1 Summary of findings from the moderator analyses

The interaction effects shown in Table 2 indicate that the gender of the parent apparently only plays a minor role in the effects of the modelled transitions. Similar findings emerge for gender of the child; only one single gender-specific effect can be identified. No significant effects with opposite signs can be found for the two genders in any of the models.

The moderator analyses of the birth cohorts appear more revealing with several significant effect differences (shown in Table 2). At least with regard to the dependent variable of intimacy, the effects are stronger among adolescents than among adults, supporting the development hypothesis. For the other two dependent variables, by contrast, some effects are stronger among adults, e.g. the positive effect of separation among daughters on contact frequency (model 4) as well as the positive effect of a change of partners on conflict (model 6). Overall, there is no uniform picture with regard to the development hypothesis.

In further analyses (not shown here), interaction effects between transitions and the relationship status as well as the presence or number of siblings were analysed but no significant moderator effects could be found.

### 4.2 Mediating mechanisms

At the beginning of the article, following the resource hypothesis, it was assumed that the anticipated decreased social capital after a separation (and potentially before entering a new relationship) would be manifested in a lower availability of resources. Therefore, additional resource and mental state indicators were added to the FE models shown in Table 2 to test potential mediating mechanisms. The respective covariates were each added individually as well as en bloc. As the analyses show (results not shown here), these covariates “explained” none of the effects.
None of the theoretically anticipated mediator variables thus proved to have explanatory power. Overall this pattern thus best supports the compensation hypothesis.

5 Summary and discussion

Against the background of existing findings of diverse negative material and psychosocial consequences of union dissolution (Amato 2000), this article investigated whether separation from an intimate partner also has negative effects on relationships with parents or whether in such cases intergenerational relations rather serve as a buffer offering an additional source of social support. This question can be related to a more general question: Is there a competing or substitutive negative association between horizontal romantic relationships (in this case in the offspring generation) and vertical intergenerational relations, or is there a positive correlation between their quality?

With regard to “harmonious” aspects of solidarity represented by the dimensions of contact and intimacy, findings clearly speak for the compensation hypothesis: The greater the demand, the more intense the intergenerational exchange with parents. Conversely, a transition into a relationship or its institutionalisation can lead to decreases in emotional closeness or reduced contacts with the parents. This conforms with the support function that is often attributed to family and relatives (Bengtson/Harootyan 1994). On the other hand, a separation can also result in an increase in conflict potential, which can theoretically be interpreted as a spillover effect. Altogether, this indicates that during partnerless phases the intensity of relationships with parents tends to increase both in a positive and a negative sense.

The greatest innovation compared with earlier studies is the analysis method used here. A rather methodical conclusion from the analyses is that the fixed effects regressions based on variance within respondents offer a different picture than earlier studies based on cross-sectional data. The differentiations introduced show that the effects of dichotomous indicators of the relationship status frequently reported in earlier studies are possibly primarily the result of separation than other relationship transitions since larger effects result from transitions into separation than from transitions into a relationship. In any case, there is a continued need for careful longitudinal studies that answer these questions in a more elaborate way than earlier research.

The moderator analyses of gender also greatly qualify earlier findings on possible gender-specific effects. While earlier studies suggested a variety of gender differences in the effects, in the present analyses hardly any interaction effects with either the gender of the parent or of the child could be ascertained. This again impressively demonstrates that separate analyses by gender, as most commonly reported in the literature, convey a biased picture with regard to the actual differences in gender-specific effects. If effects are significant in one case and not significant in another, this does not necessarily mean that the effects themselves differ significantly.
The differences in effects among adolescents and the adult cohorts seem far more illuminating. They may reflect a general development whereby during adolescence the parent-child relationship functions more as a stress buffer, while among adults it increasingly mirrors spillover of conflict, in this case as the consequence of a separation. This concurs with developmental psychology that ascribes interaction with parents great importance for handling developmental tasks in the transition to adulthood (Masche 2008).

Of course, this study also has its limitations. For example, the observation period in the analysed data is still too short to allow for more differentiated analyses of possible long-term development trajectories (e.g. using growth curve models). Furthermore, the FE models used offer no protection from bias in estimates due to endogeneity (cf. Brüderl 2010) resulting from, for example, reverse causality (inter-generational relations might causally affect relationship-related transitions). Indeed Masche (2008), for instance, shows that trust to one’s parents is associated with a significantly increased probability of marriage. This also appears plausible against the background of attachment theory (Bowlby 1975), according to which a stable parental attachment figure can be seen as the basis of lasting relationships (Hazan/ Shaver 1987). Nevertheless, within-estimators comparing the average level on the dependent measure before and after a transition within the same individual are often superior to conventional analyses based on variance within and between individuals (e.g., comparing married with unmarried individuals) with regard to causal inference, hence they ought to be employed more frequently in future research.

Overall the analyses demonstrate the great potential of the data from the German Family Panel for studying changes in family networks. This is well in line with the theoretical assumptions of life course research according to which the life courses of family members are closely interdependent (“linked lives,” cf. Elder 2009). In this case, the findings indicate that the potential solidarity of intergenerational relations can make an important contribution to handling developmental tasks during the transition to adulthood.

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References


Booth, A. Jan; Amato, Paul R. 1994: Parental marital quality, parental divorce and relations with parents. In: Journal of Marriage and Family 56, 21-34.


Wilhelm, Barbara et al. 2013: Scales Manual of the German Family Panel (Waves 1 to 4, release 4.0).


