

# Family Complexity and Adult Children's Obligations: The Role of Divorce and Co-Residential History in Norms to Support Parents and Step-Parents

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## Abstract

Generally, adult children are perceived to have obligations to support their parents, but now that divorce and remarriage are common phenomena, the question arises to which parent-figures this norm applies. We derive hypotheses on normative obligations towards step-parents and biological parents and the role of co-residential history and divorce. From the perspective of remarriage as an 'incomplete institution', we argue that obligations towards step-parents are more ambiguous and therefore more conditional. We collected unique vignette data ( $N=4,783$ ) as part of a nationally representative Dutch panel study and predicted norms on adult children's obligations to provide socio-emotional and practical support using fixed-effects models. We found weaker norms to support step-parents. These are even weaker if there is no co-residential history and/or the step-parent divorced the child's biological parent, while only co-residence affects norms to support biological parents, and less so than for step-parents. The most 'disadvantaged' type of biological parent (divorced, non-residential) is still more advantaged than the most 'advantaged' step-parent (married, residential), emphasizing the importance of biology. Analysis of residual variance shows less consensus on obligations towards step-parents than biological parents. It seems that given the absence of clear norms of behaviour, normative obligations towards step-parents are more conditional.

## Introduction

Upward trends in divorce rates and remarriage have led to increasingly complex family structures in Western societies (Thomson, 2014). Spending one's entire youth in an intact family, made up by two biological parents, has become less self-evident. An increasing proportion of children see multiple parent-figures enter and leave

their lives and homes. Children may have experienced parental divorce at some point in their lives and may have been raised by only one of their biological parents and possibly a step-parent, while other parents may have faded to the background. Hence, parents vary in their significance in the upbringing of the child as well as in their current role. Yet, all parents potentially

become in need of help. In light of increasing pressure on welfare states, support from within families is seen as progressively important (Taylor-Gooby, 2004). This raises the question for which parents and to what extent children are expected to take responsibility. The present study aims to answer this question by examining norms about children's obligations towards step-parents and biological parents, focusing on diversity in the occurrence of divorce and co-residential history.

People predominantly agree that adult children should support their parents when they are in need (De Vries, Kalmijn and Liefbroer, 2009; Gans and Silverstein, 2006; Rossi and Rossi, 1990). The literature provides a number of labels for this phenomenon, such as 'filial obligations' (Coleman *et al.*, 2005) and—more broadly oriented—'kinship obligations' (Rossi and Rossi, 1990) or 'family obligations' (Ganong *et al.*, 1998), all more or less referring to 'culturally defined rules ... specifying which kin should have valid claims on each other' (Rossi and Rossi, 1990, pp. 155–156). It is important to understand these rules because they serve as guidelines for people's decisions and behaviours (Finch, 1989). Research on the inclusiveness of such norms indicates that adult children are perceived to have more obligations towards biological parents than towards step-parents in general (Rossi and Rossi, 1990). However, most research disregards today's diversity in parent-child relationships and looks primarily at the dichotomy of step-parents vs. biological parents.

By focusing on diversity in the occurrence of divorce, co-residential history, and biology, we not only provide a more accurate depiction of norms about family obligations in the current climate of family complexity but also gain more theoretical insight. First, increasingly complex family structures have fuelled important theoretical questions about the role of biology, divorce, and co-residence in expectations about adult parent-child ties (Arránz Becker *et al.*, 2013; Kalmijn, 2013). By testing the role of these different factors in people's evaluation of what children are expected to do for their parents, we shed new light on these questions. Secondly, cultural guidelines of behaviour in step-parent-stepchild relationships are either absent or not yet clearly developed (Cherlin, 1978, 2004; Ganong and Coleman, 2006b). Given this ambiguity, normative obligations towards step-parents might be more conditional, based on reciprocity, whereas obligations towards biological parents are more strongly based on an unconditional norm.

A small number of vignette studies in the United States have touched upon the role of reciprocity in normative obligations towards divorced parents and step-parents. People believe that children have more obligations

towards parents with whom they have regular contact and with whom they exchanged support in the past (Coleman *et al.*, 2005; Ganong and Coleman, 1998, 2006b; Ganong *et al.*, 1998). These studies suggest that reciprocity more strongly affects perceived obligations towards step-parents. Although their findings provide valuable insights, the design of these studies' vignettes does not allow systematic comparison of different types of parents (e.g. non-residential step-parents vs. non-residential biological parents). In addition, some findings are based on small, selective samples (Ganong and Coleman, 1998; Ganong *et al.*, 1998). In the present study, we improve upon earlier research by using a vignette approach in which we systematically vary biological relatedness, occurrence of divorce, and co-residential history to arrive at a diverse range of parent-child relationships. This diversity allows us to answer the question what the role of these conditions is in the obligations people believe that children have towards biological parents and towards step-parents.

We collected vignette data in The Netherlands as part of the nationally representative survey Longitudinal Internet studies for the Social Sciences (LISS, 2013). In terms of its demographic developments, The Netherlands can be considered a representative case for the Western context. Family structures have become more diverse. To illustrate, the share of 15-year olds who do not live with both biological parents in one household increased from 10.6 per cent in the 1940–1964 birth cohort to 24.9 per cent in the 1986–1993 birth cohort (van Poppel, Schenk and van Gaalen, 2013). At the same time, like many Western countries, the Dutch political climate has become more in favour of shifting the responsibility for citizens from the state to informal networks, the family in particular (De Klerk *et al.*, 2015). Since the early 2000s, governmental social expenditures have diminished, thereby discouraging the use of, more expensive, formal facilities. The question then arises whether this political appeal to the family matches citizens' norms concerning family responsibilities in an era of family complexity.

## Theory

In response to the question why adult children would be expected to support their parents, the literature provides a number of explanations, such as altruism based on kinship (Cheal, 1988), moral duty (Finch, 1989), or social exchange (Ganong and Coleman, 2006b). Generally, two main perspectives can be distinguished from these rationales (Ganong and Coleman, 2006b; Stein *et al.*, 1998). From the first perspective, the norm to support family is *unconditional* in the sense that it is based on expectations surrounding kinship itself.

In other words, people think children should support their parents for the sole reason that they are family, regardless of the parents' current and past behaviour. From the second perspective, the norm to assist family is based on norms of reciprocity. This implies a *conditional* norm; people think children have the obligation to support their parents because they expect them to have a history of continuous exchanges of, for example, support and affection (i.e. parents have supported their children and children should reciprocate that support).

These two approaches are not incompatible but rather complementary. For example, people might perceive a son to have obligations towards his uninvolved father, just because he is his father (unconditional norm). At the same time, if the son refrains from supporting his father, people might take a milder stance in judging him, given that the father did little to deserve his son's support (conditional norm). In the following section, the two approaches will serve as a framework to derive hypotheses on normative obligations in different parent-child relationships.

### Normative Obligations towards Parents

Many studies have adopted the idea of an *unconditional* norm; obligations to support parents are part of a generally defined set of customs that are considered appropriate within the institution of the family (Ganong and Coleman, 2006a; Rossi and Rossi, 1990). The idea that parents should be supported by their children has its traces in different facets of culture, such as religion (e.g. the Bible: 'Honor thy father and thy mother') and state regulations [e.g. Elternunterhalt in Germany (Schneidermann, 2014)]. Previous research confirms the existence of the social norm that adult children have the obligation to support their parents (De Vries *et al.*, 2009; Gans and Silverstein, 2006; Rossi and Rossi, 1990).

Yet, in his seminal work, Cherlin (1978) argues that, in contrast to the well-established institution of the traditional family, there are no clear guidelines or social norms on what appropriate behaviour is in steprelationships. In his view, norms and customs are developed in response to needs in first-marriage families, traditionally involving two parents and their children. With the notion of remarriage as an incomplete institution he reasons that in relationships formed by remarriage (step-parents, stepchildren, and stepsiblings) people face situations unknown to the 'traditional' family, for which no clear behavioural guidelines exist. In other words, the status of the relationship of a child to a step-parent is more ambiguous than the relationship to a biological

parent. In line with this idea, norms to support step-parents have been found to be weaker than norms to support biological parents (Coleman *et al.*, 2005; Ganong and Coleman, 1998, 2006a, 2006b; Ganong *et al.*, 1998; Rossi and Rossi, 1990). Accordingly, we start from the following hypothesis:

*Normative obligations towards biological parents are stronger than those towards step-parents (H1).*

In addition, if there is indeed more clarity about norms concerning obligations towards biological parents than towards step-parents, one would expect that there is more agreement between people on obligations towards biological parents. In other words, there is more consensus on what is appropriate in a relationship with a biological parent than in a relationship with a step-parent. In line with this expectation, one study showed that normative obligations as rated by respondents have a higher SD when the vignettes involve with step-parents than when they involve biological parents (Rossi and Rossi, 1990). Therefore, our hypothesis is:

*There is more consensus on normative obligations towards biological parents than on those towards step-parents (H2).*

### Normative Obligations towards Parents Altered by Divorce and Co-Residential History

In their work on social norms, Hechter and Opp (2001) emphasize that norms are not static rules, irrespective to context and circumstances. Rather, people apply their general set of norms *given* the conditions they are confronted with. Accordingly, we expect normative obligations towards parents to be conditional in the sense that they are altered by patterns of reciprocity. The norm of reciprocity (Gouldner, 1960) implies that in social relationships, each action requires some appropriate counteraction. As stated by Blau (1964, p. 366), 'Individuals who receive benefits from others are obligated . . . to reciprocate in some form, whether through expression of gratitude, approval, material rewards, services, or compliance.' Applied to normative family obligations, the norm of reciprocity could imply for instance that people think that the fact that a parent raised a child obligates this child to meet the needs of this parent at a later age. Conversely, the notion that a parent did not make the effort to take care of a child can foster the belief that the child is exempt from any obligation towards that parent. In the following, we use the perspective of reciprocity to reason how co-residential history and parental divorce might affect normative obligations.

### Co-residential history

The role a parent played during the child's youth might signal the extent to which the child 'owes' this parent (Ganong and Coleman, 1998, 2006b). In vignettes where parents were described as involved parents, children were perceived to have more obligations than when the parent was described as making little effort to keep in touch (Ganong and Coleman, 1998). This indicates that the more active the parent's role was, the stronger the child's obligations are perceived to be. Qualitative findings show that people interpret the parent's presence during childhood as an important indicator for the parent's salience in the child's life (Coleman *et al.*, 2005; Ganong and Coleman, 1998, 2006b; Ganong *et al.*, 1998). In practice, this could imply that the co-residential history of parents and children fosters a certain level of obligation. For biological parents, normative obligations towards a parent with whom a child lived during childhood (i.e. a residential parent) might be stronger than towards a parent with whom a child did not live (i.e. a non-residential parent). The same mechanism could apply to step-parents. A child could be seen to have more obligations towards a residential step-parent than towards a non-residential step-parent that either lived apart from the child when the child was young or was introduced later in the child's life (a 'late' step-parent). Therefore, our hypothesis is:

*Normative obligations towards residential parents are stronger than those towards non-residential parents (H3a).*

Although we expect co-residential history to play a role in the strength of normative obligations towards parents in general, it might more strongly determine normative obligations towards step-parents than towards biological parents. Given a less clear general norm of what obligations children have towards their step-parents (Cherlin, 1978), people can be expected to base their judgment more strongly on the specific context they are confronted with. In line with this expectation, Ganong and Coleman (2006b) have found that earlier support provided by the parent to the child affects a child's obligations towards a step-parent more strongly than obligations towards a divorced biological parent. This suggests that, in evaluating obligations towards step-parents, reciprocity may play a more prominent role. Applied to co-residential history, this could mean that in considering whether a child has obligations towards a parent, people might base their judgment more strongly on whether the child lived with that parent in the case of a step-parent than in the case of a biological parent. In other words, differences in normative obligations are stronger between

non-residential and residential *step-parents* than between non-residential and residential *biological parents*. Therefore, our hypothesis is:

*Co-residential history more strongly affects normative obligations towards step-parents than those towards biological parents (H3b).*

### Divorce

Given people's perceptions of divorce and its consequences, parental divorce could influence how people perceive a parent-child relationship and thereby the obligations the child has towards the parent. Children of divorce were presumably exposed to conflict and a radical change in their lives (Amato, 2000), and might therefore be perceived as having been hurt in the process. To illustrate, 43.5 per cent of the Dutch disapprove of divorce in the presence of young children against only 8.5 per cent in their absence (Liefbroer and Billari, 2010). Even if the child already reached adulthood at the time of divorce, people might, for example, believe that children of divorcees could face conflicting loyalties because they have to choose sides. This mechanism can also apply to the case of the divorce of a step-parent from a biological parent. These beliefs about divorce might cause people to invoke notions of reciprocity in evaluating children's obligations to parents. Therefore, children could be seen as having less to reciprocate to divorced parents than to non-divorced parents, even given equal co-residential history. Our hypothesis is:

*Normative obligations towards parents still together with one of the child's biological parents are stronger than those towards divorced parents (H4a).*

We expect the occurrence of divorce to more strongly determine normative obligations towards step-parents than towards biological parents. First, the perspective that norms surrounding steprelationships are subject to ambiguity (Cherlin, 1978) leads us to expect beliefs about obligations towards step-parents to be more strongly driven by whether a divorce took place. In other words, given the absence of a clear general norm, obligations might depend more strongly on reciprocity and would therefore be less 'forgiving' towards a step-parent's divorce than a biological parent's divorce. Consequently, the difference in obligations to support might be larger between a non-divorced step-parent and a divorced step-parent than between a non-divorced biological parent and a divorced parent.

Secondly, for beliefs about obligations towards step-parents, the occurrence of divorce might have an

influence via one additional mechanism. Namely, divorce between a step-parent and the child's biological parent breaks the link the child has with the step-parent via the biological parent. The existence of this link, through the marriage between the step-parent and a biological parent, might yield an indirect obligation towards the biological parent (Ganong and Coleman, 2006a; Schmeeckle *et al.*, 2006). By helping the step-parent in need, the child alleviates the situation of the step-parent's spouse, that is, one of the child's biological parents. Thus, the obligation the child is perceived to have towards the spouse of the step-parent might foster the obligation to help the step-parent. Once the step-parent divorces the biological parent, the tie is cut off and the indirect obligation disappears. Therefore, our hypothesis is:

*The occurrence of divorce more strongly affects normative obligations towards step-parents than those towards biological parents (H4b).*

## Data and Method

### Data

To test the hypotheses, we collected vignette data. Vignettes have been shown to be a good method to assess social norms about intergenerational relationships because they allow respondents to express what they think people *ought* to do, rather than what they would do themselves (Van der Pas, Van Tilburg and Knipscheer, 2005). The respondents judge short, detailed stories, which presumably yields a more reliable measurement of respondent's beliefs than general attitude statements are able to elicit. The stories are randomly assigned. This way, the vignette design combines the advantages of the random assignment used in experiments with the convenience and large scale of the survey design (Hox, Kreft and Hermkens, 1991).

The vignette data were collected as part of the Dutch LISS (see Scherpenzeel and Das, 2010). This ongoing survey started in October 2007. The panel was based on a true probability sample using Dutch register data. The sample was approached using a mixed-mode design and, if necessary, provided with a computer and Internet connection and is therefore more representative of the population than surveys that rely on direct internet samples (Scherpenzeel and Toepoel, 2012). The response rate on the household level was 47 per cent and consists of approximately 7,000 individuals, clustered in 4,500 households. When a household participates in the panel, basic respondent characteristics, such as gender and age, are registered. With monthly time intervals, all household

members more than or equal to 16 years old are asked to fill out questionnaires and are paid for each they complete.

The vignette module was conducted in 2013 and was completed by 4,926 respondents (6,417 panel members were asked to participate; response rate 76.8 per cent). The vignettes represented a range of family relationships of which we selected only those referring to support to parents. Consequently, we analysed a sample with only those individuals that were presented at least one of those vignettes ( $N = 4,783$ ). Table 1 shows the sample's demographics.

### Method

The respondents were presented short stories comprising two elements: the relationship between the child and the parent and the problem for which support was needed. In the description of the relationship, the respondent was provided with the nature of relationship—parent or step-parent—and some background (see first column of Table 2).

The description of the relationship was followed by the story about the problem the parent faced (Table 3). These situations—a fire, traffic accident, mental health problems, and sports injuries—are not typical for the problems older parents commonly encounter. The study was designed to make a comparison between obligations towards a diverse range of family members (children, parents, partner, family-in-law). These scenarios were selected with the idea that they clearly imply a crisis that could plausibly happen to anyone and in which support from others is essential.

The story had eight variations: four different types of situations, each featuring a version in which the parent was to blame for being in need of support and a version in which the parent was not to blame (see Table 3 for

**Table 1.** Sample demographics ( $N = 4,783$ )

Variable	P/Mean	SD	Minimum	Maximum
Female vs. male	0.53			
Education				
Lower	0.36			
Middle	0.33			
Higher	0.31			
Age	51.35	17.47	16	93
Ever divorced <sup>a</sup>	0.18			
Parents divorced <sup>b</sup>	0.11			
Children <sup>c</sup>	0.69			

<sup>a</sup> $N = 4,754$ : for 0.61 per cent of the respondents, this information is missing.

<sup>b</sup> $N = 4,713$ : for 1.46 per cent of the respondents, this information is missing.

<sup>c</sup>Respondent has biological, adoptive, and/or step children.

**Table 2.** Operationalization variables parent–child relations

Number	Vignette description <sup>a</sup>	Relation	Residential	Divorced
1	<i>Marjan's father is 55 years old and married</i>	Biological	Yes	No
2	<i>Marjan's father is 55 years old and recently divorced</i>	Biological	Yes	Yes
3	<i>Marjan's father is 55 years old. He divorced Marjan's mother early in Marjan's life. After the divorce, Marjan lived with her father until she started living independently</i>	Biological	Yes	Yes
4	<i>Marjan's father is 55 years old. He divorced Marjan's mother early in Marjan's life. After the divorce, Marjan lived with her mother until she started living independently</i>	Biological	No	Yes
5	<i>Marjan's stepfather is 55 years old and lived with Marjan when she was younger</i>	Step	Yes	No
6	<i>Marjan's stepfather is 55 years old. He never lived with Marjan when she was younger, but is still married to Marjan's mother</i>	Step	No	No
7	<i>Marjan's stepfather is 55 years old and lived with Marjan when she was younger. He is no longer together with Marjan's mother</i>	Step	Yes	Yes
8	<i>Marjan's stepfather is 55 years old. He never lived with Marjan. He is no longer together with Marjan's mother</i>	Step	No	Yes

<sup>a</sup>Displayed name and gender of the child and the parent are examples. Names (16 variations) and gender were systematically varied. Within respondents, a name never appeared in multiple vignettes to clearly distinguish the vignettes from one another.

**Table 3.** Stories as presented in the vignettes

Story <sup>a</sup>	Situation	Blame
<i>Marjan's father was, while cycling, hit by a car whose driver did not pay attention. As a result of this accident, Marjan's father must have back surgery and will not be able to do his day-to-day chores for at least half a year</i>	Traffic accident	No blame
<i>Despite numerous warnings from his family, Marjan's father never wears seat belts in his car. Recently, Marjan's father had a traffic accident in which he was seriously injured. As a result, he must have back surgery and will not be able to do his day-to-day chores for at least half a year</i>	Traffic accident	Blame
<i>Marjan's father has had serious mental problems for quite a long time. These problems mainly have to do with the experience of a traffic accident in which a dear friend was killed</i>	Mental problems	No blame
<i>Marjan's father has had serious mental problems for quite a long time. These problems have been exacerbated by the use of soft drugs. The father seems unable to kick this habit</i>	Mental problems	Blame
<i>Marjan's father has lost nearly everything in a fire. The father needs to wait a couple of weeks before everything is arranged with the insurance company and he receives payment</i>	Fire	No blame
<i>Marjan's father has lost nearly everything in a fire. He was not insured against fire</i>	Fire	Blame
<i>Marjan's father participated for the first time in an expedition to climb the Mont Blanc in France. Despite several months of training, Marjan's father fell during the climb. This turned out to be a serious accident which caused him to be unfit for work for the rest of his life. As a result, Marjan's father has difficulties making ends meet</i>	Climbing	No blame
<i>Marjan's father participated for the first time in an expedition to climb the Mont Blanc in France. His family doctor warned against this because of his poor physical condition. Unfortunately, Marjan's father fell during the climb and was seriously injured, making him unable to work for the rest of his life. As a result, Marjan's father has difficulties making ends meet</i>	Climbing	Blame

<sup>a</sup>Displayed name and gender of the child and the parent are examples. Names (16 variations) and gender were systematically varied. Within respondents, a name never appeared in multiple vignettes to clearly distinguish the vignettes from one another.

details). The different versions of the story were randomized over the different relationship descriptions.

The respondents were presented eight vignettes, each comprising a random selection of the population of possible vignettes. As the result of the selection of vignettes that consider obligations towards parents ( $N = 13,770$ ), the analysed sample has an average number of 2.88 ( $SD = 1.27$ ) vignettes per individual in a range of 1–8.

### Measures

To measure normative obligations, we used two questions that followed the story: ‘To what degree do you think [name] should help [his/her] [parent] by providing [.] (1) ‘[.] emotional support and visiting?’, (2) ‘[.] support with all kinds of practical matters?’. The questions could be answered on a scale from 0 (‘[Name] shouldn’t have to do this’) to 10 (‘[Name] should do this’). The higher the score on the scale, the stronger the child’s normative obligation. Respondents indicated obligations to provide financial support as well. Given that in the Western European context, the discussion surrounding children’s involvement in care for their parents revolves mainly around active participation rather than finances (Brandt, Haberkern and Szydlik, 2009), we focused on *socio-emotional* and *practical* support. We analysed these variables separately rather than combined in a scale because we consider the conceptual difference relevant in the context of parent–child relationships. For example, people might perceive practical support more as a duty that should be fulfilled, even in an indifferent relationship, while socio-emotional support might require an emotional bond.

We categorized parent types along three dimensions and constructed three dichotomous variables: steprelation, divorced, and residential (see last three columns of Table 2). We chose this approach over a typology because it allowed us to test the theoretical arguments more directly than the long list of comparisons that a typology would produce.

*Steprelation* indicates whether the vignette concerns support towards a step-parent or a biological parent (reference category).

*Divorced* indicates whether the vignette concerns support towards a parent who is currently married to a biological parent of the child. For biological parents, the variable was coded 0 for married parents and 1 for divorced parents. For step-parents, the variable was coded 0 for step-parents who are currently married to the child’s biological parent and 1 for step-parents who divorced the child’s biological parent.

*Residential* indicates whether the child lived with the parent during childhood. In the case of biological parents, the variable was coded 0 for parents who did not live with the child after divorce and 1 for parents with whom the child lived after divorce, parents who divorced after the child started living independently, and parents who never got divorced. In the case of step-parents, the variable was coded 0 for step-parents who never lived with the child and 1 for step-parents who lived with the child during childhood.

To test the hypotheses about differential effects of co-residence and divorce (*H3b* and *H4b*), we constructed interaction terms between the variables steprelation and residential, and between steprelation and divorced. This allowed us to test whether the differences between divorced parents and residential parents are larger among step-parents than among biological parents.

For exploratory purposes, we included the vignette child’s and the vignette parent’s gender and whether the parent was to blame. Table 4 shows the descriptive statistics for the variables included in the analyses. In addition, we explored in supplementary analyses whether respondents’ characteristics—age, divorce, parental divorce, and being a parent—affect their evaluation of obligations towards different types of parents.

### Analytical Strategy

The vignette data comprise two levels that are, strictly speaking, non-hierarchical: Each respondent rated multiple vignettes, and each vignette was rated by multiple respondents. However, to test our hypotheses about differences in mean levels of normative obligations between different types of parents, we are only interested in the variance between vignettes, that is, *within* individuals. Therefore, we estimated fixed-effects models in which the effects of vignette variables on (i) socio-emotional obligations and (ii) practical obligations are estimated

**Table 4.** Descriptive statistics vignettes ( $N = 13,770$ )

Variable	<i>M</i> /mean	<i>SD</i>	Minimum	Maximum
Socio-emotional support	6.21	2.64	0	10
Practical support	5.85	2.71	0	10
Step vs. biological parent	0.50			
Residential vs. non-residential	0.63			
Divorced vs. intact	0.62			
Female child	0.50			
Female parent	0.50			
Blame	0.50			

whilst cancelling out variance between respondents caused by unobserved heterogeneity.

The hypothesis that there is less consensus between people on norms concerning obligations towards step-parents (*H2*) concerns variance *between* individuals rather than *within*. The between-level variance was isolated from the within-level variance by compressing the data set to one case per respondent that is assigned the respondent-level mean of each variable in the model (between-level transformation). We analysed these data using variance function regression models (for an elaborate description, see [Western and Bloome \(2009\)](#)) in which the residual between-respondent variance of rated obligations was treated as a target for analysis. We followed two steps: (i) the squared residual was calculated from a linear regression model predicting normative obligations using the transformed data (i.e. the between regression estimator). (ii) The squared residuals (Step 1) served as the dependent variable in a gamma regression model (a generalized linear model to predict positive right-skewed variables) with a log link function. For this purpose, the gamma regression model provides no correct standard errors automatically. Therefore, a weighted linear regression model was fitted, in which the variances as estimated in the gamma regression served as the weights, and the residuals were updated accordingly. This step was iterated till convergence, meaning that the estimation of an updated gamma regression model no longer led to an improved fit in comparison to its predecessor.

This way to model residual variance has been used previously to explain within-group inequality for a variety of outcome variables, such as income inequality ([Western and Bloome, 2009](#)) and health disparities ([Zheng and Land, 2012](#)). In the context of the present study, a positive effect of a certain vignette trait means that there is more residual variance in the rating of vignettes with such a trait. Because it concerns variance in norms between people, it can be interpreted as less consensus.

## Results

### Descriptive Results

As shown in [Table 4](#), normative obligations to support parents are not particularly high—6.03 on average—given that a rating of 10 is the maximum of the scale. This corresponds with the finding that, in terms of filial obligations, the Dutch are reluctant to prescribe others how to behave ([Dykstra and Fokkema, 2012](#)). In line with [Rossi and Rossi \(1990\)](#), obligations to provide

socio-emotional support are slightly higher than obligations to provide practical support ( $t = 30.57$ ,  $P = <.001$ ).

[Figure 1a and b](#) shows the raw means of normative obligations to provide socio-emotional and practical support (respectively) per parent type, along with their 95 per cent confidence intervals. For both types of support, normative obligations towards biological parents are higher than those towards step-parents. Moreover, there seems to be less variation in the strength of obligations among different types of biological parents than among different types of step-parents. These differences give some interesting first insights, but to test our hypotheses, we turn to the estimates of the fixed-effects models.

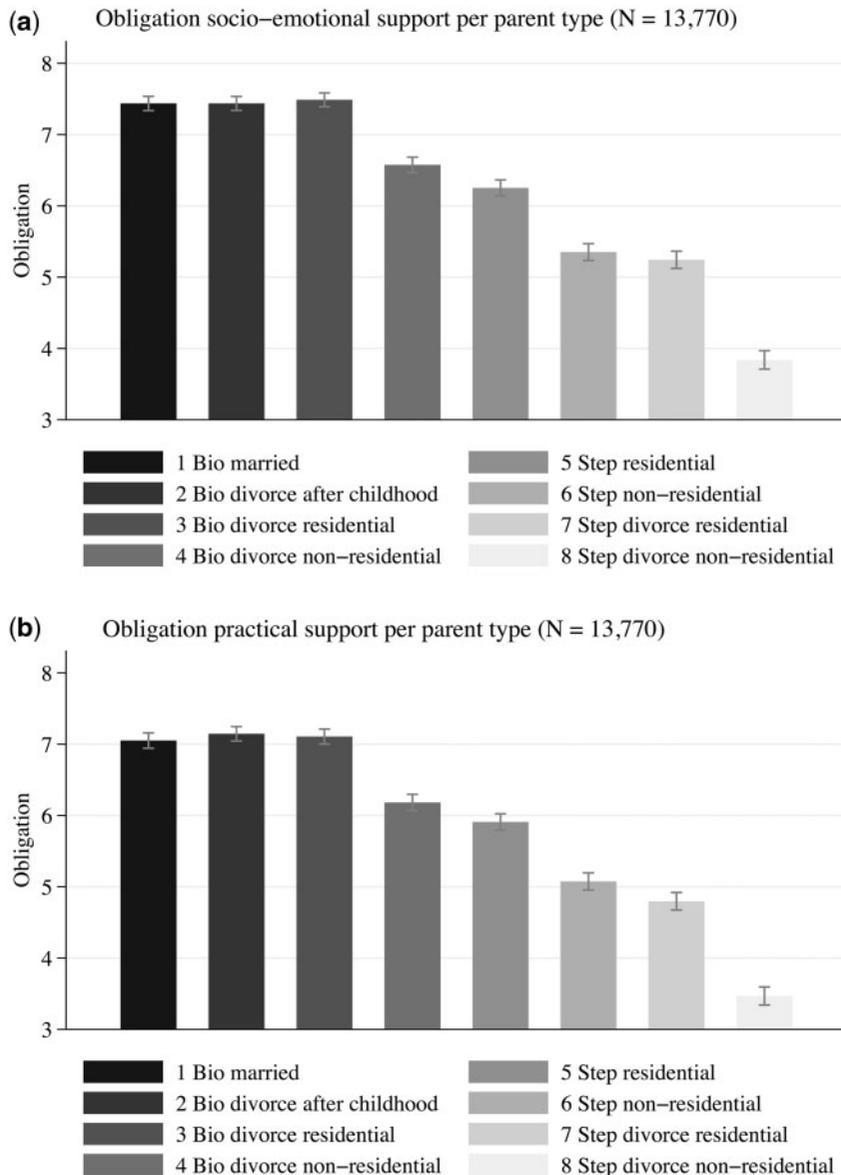
### Fixed-Effects Models

Since the estimates concerning socio-emotional support and practical support are highly comparable, we start with discussing the models explaining normative obligations to provide socio-emotional support ([Table 5](#)) and then confine ourselves to discussing the differences with practical support.

The baseline model (Model 0) shows that within individuals, the correlation between different ratings is 0.497. This indicates that, even though respondents were presented a variety of family situations and problems, their ratings are relatively stable.

Model 1 in which only the step-biological distinction is included clearly supports our first hypothesis: normative obligations to provide socio-emotional support are almost two points higher towards biological parents than towards step-parents, about 76 per cent of the SD in rating. The variable explains 21 per cent of the variance in obligations between vignettes within individuals.

Model 2 includes all variables with the exception of the interactions. Note that the effect of steprelation is hardly affected by the inclusion of the other variables, thereby confirming the randomization of the vignette characteristics. In support of *H4a*, an adult child's normative obligation to give socio-emotional support to a divorced parent is weaker than the obligation to support a parent who is together with a biological parent of the child. Furthermore, normative obligations towards parents with whom the child has a co-residential history are stronger than obligations towards parents with whom the child did not live after parental divorce, which supports *H3a*. Please be reminded that the interpretation of these two effects for biological parents does not perfectly mirror their interpretation for step-parents. Therefore, we now turn to the model that includes the



**Figure 1.** (a) Obligation socio-emotional support per parent type ( $N=13,770$ ). (b) Obligation practical support per parent type ( $N=13,770$ )

Note. Figure displays raw means.

interactions of the effects with the steprelation variable (Model 4).

We found a significant interaction effect between the variables divorced and steprelation but no main effect of divorced, which supports *H4b*. This implies that for the strength of normative obligations towards biological parents, it makes no difference whether the parent is divorced, while for obligations towards step-parents it

does. Towards a step-parent who is no longer together with the child's biological parent, the obligation to provide socio-emotional support is 1.277 lower than towards a married step-parent. Remarkably, this difference more or less equals the difference between a married step-parent and a married biological parent (the main effect of steprelation in Model 3). With respect to co-residential history, the results show that obligations

**Table 5.** Fixed-effects models of normative obligations to provide socio-emotional support ( $N = 13,770$ )

Variable	Model 0		Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE	B	SE
Step vs. biological			-1.974***	0.039	-1.992***	0.040	-1.010***	0.067	-1.344***	0.093
Divorced vs. intact					-0.673***	0.040	0.122*	0.061	0.083	0.064
Residential vs. non-residential					0.898***	0.040	1.015***	0.040	0.764***	0.063
Step*divorced							-1.360***	0.080	-1.360***	0.080
Step*residential									0.419***	0.081
Female parent					0.131***	0.037	0.131***	0.036	0.130***	0.036
Female child					-0.116***	0.035	-0.111***	0.034	-0.111***	0.034
Blame					-0.598***	0.035	-0.596***	0.034	-0.596***	0.034
Constant	6.208***	0.018	7.194***	0.025	7.317***	0.059	6.625***	0.071	6.877***	0.086
Intra-class correlation	0.497		0.528		0.546		0.551		0.552	
R <sup>2</sup> within			0.218		0.313		0.334		0.336	

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

**Table 6.** Fixed-effects models of normative obligations to provide practical support ( $N = 13,770$ )

Variable	Model 0		Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE	B	SE
Step vs. biological			-1.994***	0.041	-1.950***	0.042	-0.982***	0.070	-1.176***	0.097
Divorced vs. intact					-0.692***	0.042	0.153*	0.064	0.104	0.066
Residential vs. non-residential					0.885***	0.041	1.009***	0.041	0.864***	0.065
Step*divorced							-1.444***	0.084	-1.395***	0.085
Step*residential									0.243***	0.085
Female parent					0.127***	0.038	0.126***	0.038	0.126***	0.038
Female child					-0.163***	0.036	-0.158***	0.036	-0.158***	0.035
Blame					-0.688***	0.036	-0.686***	0.036	-0.686***	0.036
Constant	5.847***	0.019	6.842***	0.026	7.061***	0.062	6.327***	0.074	6.472***	0.090
Intra-class correlation	0.493		0.523		0.541		0.546		0.546	
R <sup>2</sup> within			0.207		0.303		0.326		0.326	

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

to provide socio-emotional support to biological parents with whom the child did not live after the divorce are 0.764 lower than the obligations towards a biological parent with whom the child lived throughout childhood. For obligations towards step-parents, co-residential history has significantly more impact: Towards step-parents with whom the child lived during childhood, obligations are  $0.764 + 0.419 = 1.183$  higher than towards step-parents with whom the child did not live.

With regard to the additional variables included, people think that sons have slightly higher normative obligations than daughters. Previous findings pointed in the same direction but were not always consistent (Coleman *et al.*, 2005; Ganong and Coleman, 2006b; Ganong *et al.*, 1998). Moreover, obligations are somewhat stronger towards mothers than towards fathers, in

line with previous studies (Ganong and Coleman, 2006b; Rossi and Rossi, 1990). Finally, normative obligations are lower when the parent is to blame for the crisis he/she is in.

The models predicting obligations to provide *practical* support (Table 6) show the same patterns and only seem to differ slightly in terms of the sizes of the effects. The differences in the coefficients of steprelation and blame are statistically significant (Wald test,  $P < 0.01$ ) but small.

In addition, we tested whether there are any structural differences in normative obligations towards fathers and mothers. For example, the notion of the mother as the 'kin-keeper' (Berger, Cancian and Meyer, 2012) suggests that relationships via the mother, in this case, between a child and its stepfather, might be

expected to be stronger than relationships via the father. Therefore, obligations towards stepfathers might be considered more normative than obligations towards a stepmother. We interacted the effects (Model 4) with the vignette parent's gender and found surprisingly similar results for fathers and mothers: The only significant difference shows that fathers seem to be 'punished' more strongly than mothers for being to blame for their need of help, as indicated by a stronger negative effect of the variable blame ( $-0.761$  vs.  $-0.573$ ,  $P = 0.002$ ).

### Variance Function Regression Models

Table 7 shows the estimates of the variance function regression models. To evaluate what vignette characteristics are associated with lower levels of consensus, we look at lambda ( $\lambda$ ). The coefficient should be interpreted as an effect on the variance: the larger  $\lambda$ , the more variance there is between individuals in rating of obligations, which can be interpreted as less consensus. The models support our second hypothesis: in terms of socio-emotional support as well as practical support, there is less consensus on obligations towards step-parents than on obligations towards biological parents. Vignettes concerning socio-emotional support towards step-parents have about 50 per cent ( $e^{0.405} = 1.499$ ) more residual variance than those concerning biological parents. With regard to practical support, the difference seems slightly smaller, 34 per cent ( $e^{0.291} = 1.338$ ) but still substantial. Furthermore, there seems to be more residual variance in the rating of both types of obligations if the parent is to blame (21 per cent) and in practical obligations towards a mother (27 per cent).

### Interaction Effects of Individual Characteristics

Building upon the finding that there is more variance in how respondents rate obligations towards step-parents, we explored whether *respondents'* characteristics affect

how they evaluate obligations towards different types of parents. We fitted fixed-effects models and estimated interactions with the variables steprelation, divorced, and residential to test whether their effects differ between respondents of different age-groups, with and without children, divorced and non-divorced, and between respondents who did and did not experience parental divorce (Table 8). Given the highly similar results for socio-emotional and practical obligations, we used a combined mean-scale ( $r = 0.87$ ,  $P < 0.001$ ). Unfortunately, data sparsity kept us from estimating three-way interactions to explore whether the differential effects of divorce and co-residence for step-parents and biological parents are affected by individual characteristics.

Overall, the results indicate that the differences in obligations between parent types are not driven by any particular type of respondent: the effects of the steprelation, divorce, and residential subsist for all sub-groups of respondents we consider, and we found no significant interaction effects of being divorced. However, for respondents who experienced parental divorce, biological relatedness and divorce seem to be more relevant factors in the obligations they think the vignette children have: the children of divorce seem to be less 'tolerant' towards step-parents and divorced parents. The same seems to hold for younger respondents: the results give some indication that younger respondents differentiate more strongly between different types of parents than older respondents. Finally, for respondents who are parents themselves, the fact that the parent in the vignette lived with the child carries a stronger obligation than for respondents without children.

### Discussion

In the present study, we examined norms concerning the obligations adult children have towards their parents

**Table 7.** Variance function regression for a regression model of normative obligations ( $N = 4,783$ )

Variable	Socio-emotional support		Practical support	
	$\lambda$	SE	$\lambda$	SE
Step vs. biological	0.405***	0.075	0.291***	0.071
Divorced vs. intact	0.057	0.076	-0.017	0.071
Residential vs. non-residential	-0.101	0.077	-0.032	0.073
Female child	0.017	0.072	0.117	0.067
Female parent	0.153	0.080	0.239**	0.074
Blame	0.193*	0.079	0.197**	0.072
Constant	0.933***	0.116	0.964***	0.111

Note: Analyses performed on between-transformed data (i.e. respondent-level means). Betas (effects of the respondent-level means) were part of the model estimates but were, given their irrelevance in terms of interpretation, omitted from the table.

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

**Table 8.** Fixed-effects models of normative obligations—interactions with respondent characteristics

Variable	Interactions age <sup>a</sup>		Interactions divorce <sup>b</sup>		Interactions parental divorce <sup>c</sup>		Interactions parental status <sup>d</sup>	
	B	SE	B	SE	B	SE	B	SE
Step vs. biological	-2.104***	0.084	-1.914***	0.042	-1.912***	0.041	-1.946***	0.069
Step*respondent of age 36–60 years	0.130	0.102						
Step*respondent of age >60 years	0.313**	0.106						
Step*respondent divorced			-0.145	0.103				
Step*respondent parents divorced					-0.263*	0.126		
Step*respondent has children							0.015	0.083
Divorced vs. intact	-0.860***	0.086	-0.669***	0.043	-0.651***	0.041	-0.748***	0.070
Divorced*respondent of age 36–60 years	0.121	0.104						
Divorced*respondent of age >60 years	0.345**	0.108						
Divorced*respondent divorced			-0.052	0.104				
Divorced*respondent parents divorced					-0.261*	0.128		
Divorced*respondent has children							0.095	0.084
Residential vs. non-residential	0.730***	0.083	0.859***	0.042	0.910***	0.041	0.725***	0.068
Residential*respondent of age 36–60 years	0.232*	0.102						
Residential*respondent of age >60 years	0.165	0.105						
Residential*respondent divorced			0.190	0.102				
Residential*respondent parents divorced					-0.131	0.120		
Residential*respondent has children							0.242***	0.082
Receiver female	0.130***	0.036	0.129***	0.036	0.125***	0.036	0.128***	0.036
Giver female	-0.137***	0.033	-0.136***	0.034	-0.133***	0.034	-0.140***	0.033
Receiver to blame	-0.643***	0.033	-0.641***	0.034	-0.647***	0.034	-0.643***	0.033
Constant	7.188***	0.057	7.180***	0.057	7.184***	0.058	7.187***	0.057
Intra-class correlation	0.556		0.553		0.554		0.554	
R <sup>2</sup> within	0.336		0.334		0.334		0.334	
N	13,770		13,678		13,565		13,770	

Note: Normative obligations as combined mean-scale of socio-emotional and practical obligations ( $r=0.87$ ,  $P<0.001$ ).

<sup>a</sup>Reference category: Respondent is less than 36 years old. For reasons of data sparsity, the variable was categorized. The age-distribution of the respondents is as follows: 20.49 per cent is below 36 years old, 44.18 per cent is between 36 and 60 years old, and 35.33 per cent is over 60 years old.

<sup>b</sup>Reference category: Respondent never divorced.

<sup>c</sup>Reference category: Respondent never experienced parental divorce.

<sup>d</sup>Reference category: Respondent has no children.

\* $P<0.05$ ; \*\* $P<0.01$ ; \*\*\* $P<0.001$ .

using vignette data that were collected as part of a Dutch, nationally representative panel study. We improved upon previous research by systematically comparing a diverse range of parent types and provided new theoretical insights into expectations of parent–child relationships. Our findings show that there is certainly not one, unconditional norm regarding the obligations children have towards their parents: people seem to make distinctions on the basis of the nature of the relationship (step or biological) and its history (divorce and co-residential history).

First, we found that normative obligations towards step-parents are weaker than towards biological parents, as in line with previous studies (Coleman *et al.*, 2005; Ganong and Coleman, 1998, 2006a, 2006b; Ganong *et al.*, 1998; Rossi and Rossi, 1990).

Secondly, in support of the idea of a norm of reciprocity, we found normative obligations to be dependent on co-residential history of the parent and the child and on the occurrence of divorce. Adult children have stronger obligations towards parents with whom they lived during childhood. This suggests that, in their judgment, people balance the parent's and the child's part, and having lived with a parent seems to increase a child's perceived responsibility.

Thirdly, and most importantly, we found that obligations towards step-parents are differentiated more strongly by co-residential history than obligations towards biological parents. This is in line with the expectations we derived from the idea of ambiguity surrounding steprelationships (Cherlin, 1978, 2004). Likewise, normative obligations are weaker towards a

step-parent who is no longer together with a child's biological parent. This finding is also in favour of the idea of divorce as the dissolution of an indirect tie: if a step-parent divorced the child's biological parent, the child no longer indirectly satisfies obligations towards his/her biological parent by supporting the step-parent. For biological parents, divorce does not seem to alter a child's obligations. This illustrates the importance of the direct, biological link: a biological parent will always be directly related to the child, regardless of the occurrence of divorce.

Taken together, our findings suggest that normative obligations towards step-parents are more conditional than those towards biological parents. The analysis of residual variance indicates that there is no clear, general norm when it comes to what children are expected to do for their step-parents, which makes normative obligations more strongly dependent on patterns of reciprocity and hence, more conditional. The finding that obligations towards the most 'disadvantaged' type of biological parent (divorced and non-residential) are stronger than towards the most 'advantaged' step-parent (still married and residential) emphasizes the importance of biology. However, the finding that children are perceived to have a lower obligation towards non-resident biological parents illustrates that, even towards biological parents, normative obligations are not fully unconditional.

Although this study adds to the literature in multiple ways, it also has some limitations. First, to make it feasible for respondents to evaluate multiple vignettes, the descriptions are brief, which might have introduced some bias in respondents' interpretations. For example, the meaning of 'step' might not be fully clear to everyone. We do not expect this to have affected our results in any systematic way. However, despite of the important advantages of the use of vignettes, further research would be necessary to verify whether the patterns we found in people's response to the stylized situations we presented them are generalizable to real-life situations. Secondly, in the light of population aging, a public concern is how societies should cope with the increasing demand for elderly care (United Nations Department of Economic and Social Affairs, 2015). For the purpose of comparison over different types of relationships, the parents to which our vignettes referred were of relatively young age and did not face the needs that older persons typically encounter. Obligations to meet parents' needs of age-related frailty might be stronger than the more crisis-based needs the vignettes refer to, but we have no reason to expect the *differences* we find between types of parents to change with parents' age. Still, to match

the public debate on elderly care more closely, future research should focus on obligations towards older parents.

There are several ways in which future research can amplify this study's findings. First, to get a better understanding of the importance of kinship in normative obligations, future research could build upon this study and examine whether our findings—less consensus and more conditional norms—apply to other non-blood related family as well, such as stepsiblings or adoptive parents. In addition, to see whether our findings are generalizable beyond the Dutch context, it would be interesting to try to replicate them in other countries. Furthermore, our finding that normative obligations for sons are stronger than for daughters shows that norms do not necessarily reflect behavioural reality, given that it is daughters that are found to provide most support (Brandt *et al.*, 2009). The study of normative obligations can be taken a step further by looking at their implications and by studying how they translate to behaviour. For example, norms imply sanctions and feelings of guilt if they are not complied to (Hechter and Opp, 2001). Future research could enrich the finding on weaker norms to support certain types of parents by looking whether the decision *not* to support them fosters lower levels of guilt and sanctioning.

To conclude, we come back to the concern whether an appeal upon the family to support older generations is sustainable in an era of family complexity. Our findings show that people do not perceive obligations towards parents as unconditional. This suggests that it should not be considered self-evident that parents will be supported by their children, certainly not in more complex family structures. At the same time, biological relatedness remains an important factor. Even in Dutch contemporary society, where step-parenthood has become a common phenomenon, norms concerning steprelationships have not yet become institutionalized.

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## References

- Amato, P. R. (2000). The consequences of divorce for adults and children. *Journal of Marriage and Family*, 62, 1269–1287.
- Arránz Becker, O. et al. (2013). What narrows the stepgap? Closeness between parents and adult (step)children in Germany. *Journal of Marriage and Family*, 75, 1130–1148.
- Berger, L. M., Cancian, M. and Meyer, D. R. (2012). Maternal re-partnering and new-partner fertility: associations with non-resident father investments in children. *Children and Youth Services Review*, 34, 426–436.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York: Wiley.
- Brandt, M., Haberkern, K. and Szydlik, M. (2009). Intergenerational help and care in Europe. *European Sociological Review*, 25, 585–601.
- Cheal, D. J. (1988). Theories of serial flow in intergenerational transfers. *The International Journal of Aging and Human Development*, 26, 261–273.
- Cherlin, A. J. (1978). Remarriage as an incomplete institution. *American Journal of Sociology*, 84, 634–650.
- Cherlin, A. J. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family*, 66, 848–861.
- Coleman, M. et al. (2005). Filial obligations in post-divorce stepfamilies. *Journal of Divorce and Remarriage*, 43, 1–27.
- De Klerk, M. et al. (2015). *Informele Hulp: Wie Doet Er Wat? Omvang, Aard En Kenmerken Van Mantelzorg En Vrijwilligerswerk in De Zorg En Ondersteuning in 2014*. Den Haag: SCP.
- De Vries, J., Kalmijn, M. and Liefbroer, A. C. (2009). Intergenerational transmission of kinship norms? Evidence from siblings in a multi-actor survey. *Social Science Research*, 38, 188–200.
- Dykstra, P. A. and Fokkema, T. (2012). Norms of filial obligation in the Netherlands. *Population*, 67, 97–122.
- Finch, J. (1989). *Family Obligations and Social Change*. Cambridge: Polity Press.
- Ganong, L. and Coleman, M. (1998). Attitudes regarding filial responsibilities to help elderly divorced parents and stepparents. *Journal of Aging Studies*, 12, 271–290.
- Ganong, L. and Coleman, M. (2006a). Obligations to stepparents acquired in later life: relationship quality and acuity of needs. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61, S80–S88.
- Ganong, L. and Coleman, M. (2006b). Patterns of exchange and intergenerational responsibilities after divorce and remarriage. *Journal of Aging Studies*, 20, 265–278.
- Ganong, L. et al. (1998). Attitudes regarding obligations to assist an older parent or stepparent following later-life remarriage. *Journal of Marriage and the Family*, 12, 595–610.
- Gans, D. and Silverstein, M. (2006). Norms of filial responsibility for aging parents across time and generations. *Journal of Marriage and Family*, 68, 961–976.
- Gouldner, A. W. (1960). The norm of reciprocity: a preliminary statement. *American Sociological Review*, 161–178.
- Hechter, M. and Opp, K.-D. (2001). *Social Norms*. New York: Russell Sage Foundation.
- Hox, J. J., Kreft, I. G. and Hermkens, P. L. (1991). The analysis of factorial surveys. *Sociological Methods and Research*, 19, 493–510.
- Kalmijn, M. (2013). Adult children's relationships with married parents, divorced parents, and stepparents: biology, marriage, or residence? *Journal of Marriage and Family*, 75, 1181–1193.
- Liefbroer, A. C. and Billari, F. C. (2010). Bringing norms back in: a theoretical and empirical discussion of their importance for understanding demographic behaviour. *Population, Space and Place*, 16, 287–305.
- Rossi, P. H. and Rossi, A. S. (1990). *Of Human Bonding: Parent-Child Relations across the Life Course*. New York: Aldine de Gruyter.
- Scherpenzeel, A. and Das, M. (2010). "True" longitudinal and probability-based internet panels: evidence from the Netherlands. In Das, M., Ester, P. and Kaczmirek, L. (Eds.), *Social and Behavioral Research and the Internet: Advances in Applied Methods and Research Strategies*. Boca Raton: Taylor & Francis, pp. 77–104.
- Scherpenzeel, A. and Toepoel, V. (2012). Recruiting a probability sample for an online panel: effects of contact mode, incentives, and information. *Public Opinion Quarterly*, 76, 470–490.
- Schmeeckle, M. et al. (2006). What makes someone family? Adult children's perceptions of current and former stepparents. *Journal of Marriage and Family*, 68, 595–610.
- Schniedermaann, C. (2014). Kinder müssen für ihre alten Eltern zahlen. *Die Zeit*. available from <<http://www.zeit.de/gesellschaft/2014-11/elternunterhalt-kind-eltern-altersversorgung/komplettansicht>>.
- Stein, C. H. et al. (1998). "Because they're my parents": an intergenerational study of felt obligation and parental caregiving. *Journal of Marriage and the Family*, 60, 611–622.
- Taylor-Gooby, P. (2004). *New Risks, New Welfare: The Transformation of the European Welfare State*. New York: Oxford University Press.
- Thomson, E. (2014). Family complexity in Europe. *The Annals of the American Academy of Political and Social Science*, 654, 245–258.
- United Nations Department of Economic and Social Affairs (2015). *Ageing Population 2015*. (ST/ESA/SER.A/390). United Nations.
- Van der Pas, S., Van Tilburg, T. and Knipscheer, K. C. (2005). Measuring older adults' filial responsibility expectations: exploring the application of a vignette technique and an item scale. *Educational and Psychological Measurement*, 65, 1026–1045.
- van Poppel, F., Schenk, N. and van Gaalen, R. (2013). Demographic transitions and changes in the living arrangements of children: the Netherlands 1850–2010. *Population Research and Policy Review*, 32, 243–260.
- Western, B. and Bloome, D. (2009). Variance function regressions for studying inequality. *Sociological Methodology*, 39, 293–326.

Zheng, H. and Land, K. C. (2012). Composition and decomposition in US gender-specific self-reported health disparities, 1984–2007. *Social Science Research*, 41, 477–488.

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