

ARTICLE

Why care? How filial responsibility norms and relationship quality matter for subsequent provision of care to ageing parents

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Abstract

How to meet the demands of long-term care is a pressing issue in ageing societies. In most countries, care systems depend on the capability and willingness of family members to fill the gap between existing needs and formal service provision. Understanding the motivations of adult children to engage in parent care is, therefore, of central importance. The existing research literature offers different explanations, and here we concentrate on two key perspectives: normative and affectual commitments. Based on longitudinal data from two waves of the Norwegian Life Course, Ageing and Generation Study (2007 and 2017), we investigate to what extent adult children's previous attitudes towards filial responsibility norms and their perceived quality of the relationship to parents (in 2007) are associated with subsequent care-giving to ageing mothers and fathers (in 2017). The analyses show no evidence of a correlation between support of general filial responsibility norms and provision of help and care 10 years later. Perceived quality of the relationship, on the other hand, is associated with subsequent help and care-giving. The patterns are similar for daughters and sons. We conclude that within the context of a comprehensive welfare state, like the Norwegian, care-giving seems to be more of an individual choice than a societal prescription.

Keywords: intergenerational relationships; informal care-giving; gender; welfare regimes

Introduction

Understanding adult children's motivations for providing care to parents is of major relevance in ageing societies, as long-term care systems depend heavily, and increasingly, on informal helpers to fill the gap between needs and formal service provision. One explanation why adult offspring continue to provide a large bulk of care may be that norms about family responsibility towards older

generations remain firm in society. Alternatively, or in combination with such norms, is the importance of relationship quality and commitments within families that develop over time (Finch, 1989; Rossi and Rossi, 1990).

According to Gans and Silverstein (2006), filial responsibility may be interpreted as a social norm, reflecting a more *general* expectation regarding adult offspring's obligation to support parents in need of help and care. Another way of understanding children's responsibility is to look at it as a more *personally* felt duty or internal motivation (Stein *et al.*, 1998) associated with love and affection, rather than an external obligation (Stuifbergen *et al.*, 2010; Funk, 2015). In this study, we address both aspects. The normative dimension is here regarded as a general norm about what adult children ought to do for their parents, in line with Gans and Silverstein's (2006) definition of filial responsibility. The more affectual dimension, as pointed to by Funk (2015) and Stuifbergen *et al.* (2010), is assessed by adult daughters' and sons' perceived quality of the relationship to their parents. Both aspects are important when seeking to better understand why children continue to take part in care provision, even in countries with extensive formal services.

Norway, the country in which this study is conducted, is an example of a service-intensive welfare state, characterised by universal access to health and care services provided by the municipalities. Hence, older people are entitled to receive assistance from the public health and care services when needed (Patients' Rights Act, 1999: §2-1a; Daatland and Lowenstein, 2005). Correspondingly, adult children have no legal obligation to support parents in need of help. Nonetheless, estimates show that informal caring amounts to as much as approximately 40 per cent of the total eldercare provision in the country (Holmøy *et al.*, 2016), with daughters and sons being the most frequent providers (besides spouses) (Romøren, 2003; Dale *et al.*, 2008).

The research literature on informal care has repeatedly demonstrated a clear gender contrast, with daughters being considerably more involved than sons in caring for ageing parents (e.g. Haberkern *et al.*, 2015; Grigoryeva, 2017). Such difference seems less pronounced in welfare states characterised by extensive and universal care services (Schmid *et al.*, 2012). But even if gender contrasts in actual care provision are moderate, men and women may experience different obstacles to, and expectations of, care provision (e.g. Morgan *et al.*, 2016; Grigoryeva, 2017). Hence, the motivations for helping parents may not be the same for daughters and sons.

The main purpose of this study is to gain a better understanding of adult children's motivations for engaging in parent care by investigating the following question:

- Are filial responsibility norms and perceived relationship quality associated with subsequent provision of regular help and care to parents?

Since motivations for care-giving may differ between daughters and sons, we will explore whether the associations in question vary with adult children's gender. To do so, we use longitudinal data from two waves (2007 and 2017) of the Norwegian Life Course, Ageing and Generation Study (NorLAG).

Background

Motivations for care-giving

Research on intergenerational family relationships suggests different motivations for help provision and care-giving, such as normative and affective commitments (Leopold *et al.*, 2014). The two reflect the normative and affectual dimensions of the ‘intergenerational solidarity model’, which are assumed to predict a third dimension, functional solidarity, defined as (degree of) exchanges of help and support between family members (Bengtson and Roberts, 1991; Silverstein and Bengtson, 1997).

Normative commitments may be expressed as a moral imperative, or a *general* perception of responsibility norms as prescriptive in obliging family members to provide care to each other (Bengtson and Roberts, 1991). Such commitments are often culturally shared in a social context (Cooney and Dykstra, 2011). An example is the norm of filial responsibility, which ‘reflects a generalized expectation that children should support their older parents at times of need’ (Gans and Silverstein, 2006: 961). As an alternative, or in addition, to the normative dimension, is the more affective aspect expressed as *personally* felt commitments or motivations (Stein *et al.*, 1998; Stuifbergen *et al.*, 2010; Funk, 2015). The focus is then on internal motivations associated with love, affection and relationship quality rather than on external obligations (Stuifbergen *et al.*, 2010; Funk, 2015). Such perspective is in line with general individualisation theories emphasising that within family relationships today, the tie between adult children and their parents is largely ‘self-chosen’ rather than obligatory, with commitments based on relationship quality being more important than (general) obligations (Giddens, 1992: 96–98; Beck and Beck-Gernsheim, 2002).

Motivations for care-giving may also be based on exchange and reciprocity, which are not necessarily opposed to theories of normative and affective commitments. For instance, Silverstein *et al.* (2012) suggest that parents may socialise their children into a ‘moral capital’ of filial obligation to secure their help in the long term. According to Funk (2012), a good quality of the relationship between parents and children established early in life can provide the basis for care as a ‘return of love and affection’ when roles are reversed, and parents become in need of help. Furthermore, Finch and Mason (1993) argued that the distribution of care responsibilities is typically performed through ‘silent negotiations’ between family members whose role expectations towards one another evolve over time. The studies referred to here illustrate the importance of past experiences of long-standing family relationships in creating expectations of, and motivations for, subsequent care-giving – hereby supporting a longitudinal approach to studying care-giving motivations and actual provision of care.

The motivational processes related to care-giving are not necessarily the same for daughters and sons (Morgan *et al.*, 2016). Social norms seem to put more responsibility on women, while men are more likely to have ‘legitimate excuses’ from care provision (Björk, 2015). Several studies have shown that men often first become care-givers in the lack of a female (sister) alternative (Gerstel and Gallagher, 2001; Grigoryeva, 2017; Vergauwen and Mortelmans, 2021). Furthermore, for women, more than for men, certain tasks associated with care

are typically seen as a natural part of close family relationships, consistent with Gilligan's (1982: 17) descriptions of women as 'nurturer, caretaker and helpmate'. For instance, women are commonly involved in intimate and emotional care, while men tend to reserve their support to practical tasks (Haberkern *et al.*, 2015). Cross-gender taboos may also play a role, as it may be less acceptable for sons to provide more intimate types of care, especially to mothers (Arber and Ginn, 1995; Grigoryeva, 2017). According to Pillemer and Suitor (2006), similarity of gender was indeed a key factor for mothers when they named their preferred care-giver among their children. Also important was emotional closeness, and the mothers in their study typically expressed a closer tie to daughters than to sons, hereby contributing to discussions of the uniqueness of the mother-daughter bond (e.g. Chodorow, 1978).

The next issue is then whether and how adult sons' and daughters' motivations for care-giving are linked to actual care provision. Although the intergenerational solidarity model emphasises the interconnectedness of the various dimensions of family solidarity (Bengtson and Roberts, 1991), previous research has tended to address the normative and affectual aspects separately, as pointed to below in our review of relevant earlier research.

How filial responsibility norms and relationship quality are associated with help and care-giving

Starting with normative commitments, previous studies on associations between filial responsibility norms and actual support patterns have reached different conclusions. Some report on positive associations between the two (Ikkink *et al.*, 1999; Silverstein *et al.*, 2006; Stuifbergen *et al.*, 2008; Haberkern *et al.*, 2015), others have found no associations (e.g. Lee *et al.*, 1994; Eggebeen and Davey, 1998; Peek *et al.*, 1998; Chappell and Funk, 2012) or results are mixed across countries (Herlofson *et al.*, 2011). Some scholars argue that the association depends on the care-giver's gender, but conclusions differ regarding which gender is more likely to be influenced by such norms. For instance, Silverstein *et al.* (2006) and Haberkern *et al.* (2015) found that the correlation between filial responsibility norms and actual care-giving was stronger for daughters than for sons. Silverstein *et al.* (2006) based their analysis on a longitudinal sample from the United States of America (USA), whereas Haberkern *et al.* (2015) used cross-sectional data from parents aggregated to the country level in selected European nations.

The number of publications addressing affectual commitments is more restricted. However, in qualitative research, a history of a good and close relationship is often emphasised by informal care-givers, including adult children of both genders, when they account for their care-giving behaviour (Greenwood and Smith, 2019; Zarzycki *et al.*, 2022b). In a quantitative, longitudinal study, Pillemer and Suitor (2014) found a positive effect of emotional closeness as perceived by mothers and measured 7 years before actual receipt of support from children. In Norway, Gautun (2003) studied whether relationship quality throughout life, reported by adult children and measured retrospectively, was important for care-giving. She did not find any clear association between the two, which may be due to the relatively small, cross-sectional dataset.

Some studies have included both filial responsibility norms and relationship quality when analysing motivations for adult children's care-giving behaviour. In a Canadian study, Chappell and Funk (2012) found both dimensions to be positively associated with emotional support, but not with care-giving (*i.e.* assistance with (instrumental) activities of daily living). Stuifbergen *et al.* (2008), using Dutch data from adult children, showed that both filial responsibility norms and relationship quality were important for provision of different types of support, including practical help. However, relationship quality turned out to be the most powerful predictor. Cooney and Dykstra (2011) reached the same conclusion based on a sample of adult children in the USA. They performed an identical analysis using Dutch data, but unlike Stuifbergen *et al.* (2008), they found neither filial responsibility norms, nor relationship quality, to be associated with support to parents in their sample. Furthermore, in a cross-national study including four countries, Lowenstein and Daatland (2006) concluded that overall, norms seemed more important than the affectual character of the relationships, however, the results varied considerably across countries.

A reason for the inconsistencies in earlier research may be that study designs vary. First, several of the analyses conducted on the associations between adherence to filial norms, relationship quality and actual support were based on data from parents, not from children (Lee *et al.*, 1994; Eggebeen and Davey, 1998; Peek *et al.*, 1998; Pillemer and Sutor, 2014; Haberkern *et al.*, 2015). One study used measures of filial obligation norms aggregated to the country level to predict care-giving (Haberkern *et al.*, 2015). The results then reflect the distribution of cultural norms in the wider society, with the risk of making an ecological fallacy if interpreted as associations between individual motivations and behaviour. In order to study the relationship between motivations and care provision to parents, child-derived data are better suited, given that children are the actual care providers. Moreover, a considerable number of analyses have been based on cross-sectional data (*e.g.* Lowenstein and Daatland, 2006; Cooney and Dykstra, 2011; Chappell and Funk, 2012), with the possibility that correlations reflect an adjustment of attitudes to actual behaviour. Also, perceptions of previous relationship quality may be shaped by the present situation and reflect a retrospective bias. To study the extent to which different factors predict care-giving, longitudinal data that measure motivations at an earlier point in time (*i.e.* before actual care provision takes place) are more appropriate (Silverstein *et al.*, 2006). However, studies that follow care-givers and their motivations over time are sparse (Greenwood and Smith, 2019; Zarzycki and Morrison, 2021).

Another plausible reason for the diverging results is that contextual variations lead to contrasting conclusions in studies conducted in different countries (Lowenstein and Daatland, 2006). Zarzycki *et al.* (2022a) argue that research on motivations for care-giving in Western societies often find relationship quality to be essential, whereas in Asia, the concept of 'filial piety' is more central. Within Europe, cross-national differences in the importance of both filial responsibility norms and the more affectual dimension of the relationship for care provision are considerable (Lowenstein and Daatland, 2006). Type of welfare state regime may here be a critical factor inasmuch as families' care obligations differ markedly across Europe (*e.g.* Saraceno and Keck, 2010). This leads us to the context of the

present study, which is one where caring for adults is a public responsibility and, correspondingly, adult children are not legally obligated to provide support to their parents.

Care-giving in the Norwegian context

Solidarity between family generations in contemporary Norway takes place in a context where high levels of public services and financial transfers enable individual autonomy and lessen families' care-giving responsibilities. In Saraceno and Keck's (2010) framework, Norwegian eldercare policy is characterised by 'de-familialisation', meaning that families are relieved of the total responsibility for supporting dependent family members. In such a context, personal motives and perceptions of the relationship may become more important for care-giving behaviour than general norms and obligations.

A commonplace view used to be that extensive welfare states substitute for informal care and thereby pose a threat to the moral obligations of families (Wolfe, 1989). However, comparative research has revealed that in countries with more extensive care services, a larger share of the population is engaged in providing informal help and care than in countries where the main care responsibility lies within the family (Brandt, 2013; Brandt and Deindl, 2013; Verbakel, 2018). According to the European Social Survey, 40 per cent of the Norwegian sample reported spending 'any time looking after or giving help to family members, friends, neighbours or others because of long-term physical ill health or disability, long-term mental ill health or disability, or problems related to old age' (Verbakel, 2018: 438–439). The figure was among the highest of the countries represented in the survey. Intensive care-giving, on the other hand (>10 hours per week), was least common in Norway (3.8% compared to an average of 7%) (Verbakel, 2018: 440).

When formal services are responsible for the intensive care-giving tasks, adult children have more time to provide other types of support, such as practical help and emotional comfort, and then on a less-frequent basis than what is required for personal care, which often is a daily commitment. This line of argument is in accordance with Hagestad's (1996) description of a 'function filling' of the modern Norwegian family. Although not regarded as having the main responsibility for long-term help and care, the family constitutes a more flexible safety net that can be easily activated in times of need – a flexibility lacking in public care services (Hagestad, 1996: 55).

The welfare state may also contribute to the shaping of gender roles (e.g. Orloff, 1996). In Norway, the dual earner/dual carer model has received strong political support, resulting in high participation in the labour market among women and extensive involvement in childcare by men (Kitterød and Lappegård, 2012; Cools *et al.*, 2015). As for provision of care to older family members, Schmid *et al.* (2012) found evidence of smaller gender contrasts in welfare states characterised by extensive and universal care services than in those depending mainly on the family for eldercare. Even if differences in actual care-giving may be modest, informal gender norms and expectations towards women as care providers seem to still prevail in Norway. For example, Døhl *et al.* (2016) reported that men living in couple relationship tend to receive substantially less formal care than coupled women. Furthermore, a field experiment by Jakobsson *et al.* (2016) showed that care managers in Norwegian municipalities are

likely to allocate considerably more formal care to older women with sons than to those with daughters. This is despite the fact that they are not legally allowed to consider the availability of family members when assessing care needs and allocating care services (Ministry of Health and Care Services, 2006). Gender differences in expectations of care provision may also be reflected in the motivations for care-giving (Zarzycki *et al.*, 2022a), but not necessarily in the anticipated direction. For example, in Norway, women have been found to be less supportive of filial responsibility norms compared to men, but at the same time, they are more likely to provide frequent help to parents (Daatland and Herlofson, 2003).

As outlined above, the purpose of this study is to better understand adult children's motivations for care-giving. To do so, we will investigate how both support of filial responsibility norms and perceived relationship quality are associated with subsequent provision of regular help and care to parents. Since motivations for care-giving may differ between daughters and sons, we will explore whether the associations vary with adult children's gender.

Data and methods

Data source and study sample

To address how earlier filial responsibility norms and perceived relationship quality matter for providing regular help and care to parents, we use data from Waves 2 and 3 of the Norwegian Life Course, Ageing and Generation Study conducted in 2007 and 2017. Due to a large refreshment sample, the second wave is considered nationally representative. The sample was drawn from the National Population Register, which covers the entire population of Norway. Statistics Norway has been responsible for both sampling procedures and data collection. In the 2007 wave, 9,238 respondents (aged 40 years and older) participated (response rate 61%), of whom 5,711 were re-interviewed in 2017 (Veenstra *et al.*, 2021).

Participants with at least one parent still alive in 2017 are included in the present analyses (899 daughters and 840 sons). To study relationships between daughters/sons and their parents, we use parent–child dyads as units of analysis. This procedure makes it possible to control for the characteristics of both adult children and their parents, as well as for the characteristics of the relationship as perceived by the adult child. Consequently, respondents with both parents living are represented with two observations, resulting in a study sample consisting of 2,301 dyads (795 daughter–mother, 403 daughter–father, 738 son–mother and 365 son–father dyads) representing 1,739 respondents. Since respondents with two living parents are included twice, standard errors are corrected by using the clustering function of the Stata 14 program. A total of 108 dyad observations are excluded due to missing values on one or more of the variables included in the analyses, resulting in an analytical sample of 2,193 parent–child dyads.

Measurements

Dependent variables

The dependent variables, indicating whether respondents provided help with daily chores or personal care to their mother/father at least weekly or at least monthly in

2017, are coded as dichotomous variables. The variables are derived from several questions asked in a computer-assisted telephone interview: 'Have you in the past year regularly helped someone with personal care, like eating, getting out of bed, getting dressed, or going to the toilet (not including children)?' and 'Have you in the past year regularly provided practical help to people who you don't live with?' Examples of practical help include housework, gardening, transportation, shopping, *etc.* In follow-up questions on provision of personal care and practical help, respondents had to specify who they helped and how often. In addition, respondents with parents still living were asked about the help and care needs of their mother/father. If a need was reported, respondents received a follow-up question about whether they provided help to the parent, and if so, how often, thereby supplementing the questions on help and care provision described above. All information about help and care are combined into one variable indicating whether the respondent provided help or care at least monthly to the parent in question (= 1) or not (= 0) and another variable indicating at least weekly help or care. Since very few (less than 2%) provided help and care as often as daily, we did not include a measure of daily provision in our analyses.

Independent variables

The independent variables, filial responsibility norms and relationship quality, were both assessed in 2007, 10 years before the measurement of the outcome variable. *Filial responsibility norms* are based on a question about agreement with the following statement: 'Children should take responsibility for providing care to parents if parents are in need.' The response was given on a 0–10 scale, with 0 indicating 'strongly disagree' and 10 indicating 'strongly agree'. The question does not specifically address respondents' individual situation and is therefore also relevant in cases of no reported need. Adult children's perceived *relationship quality* was measured by the question: 'On a scale from 0 to 10, where 0 means 'not satisfied at all' and 10 means 'completely satisfied', how satisfied are you, overall, with the relationship to your mother/father?'

Control variables

The probability of providing care to parents has been shown to be related to numerous individual-, relational- and familial-level factors. On the individual level of the respondents, we control for age and age squared. Education is controlled for by including a dummy variable for the lowest educational level, *i.e.* primary school (= 1), and another dummy for the middle level (= 1), with higher education (college or university level) as reference category.

Adult children's own household and employment situation may represent competing roles and responsibilities. Employment may impede adult children, particularly daughters, from engaging in care-giving (Carmichael *et al.*, 2010). Previous research indicates that in Norway, paid work does not prevent care provision, however, care-giving daughters seem to be more inclined to work part-time (Daatland *et al.*, 2010). We include dummy variables indicating part-time work (= 1) and not employed (= 1), respectively, with full-time work representing the reference category. Living with a partner and/or children has been found to be negatively associated with care-giving (Leopold *et al.*, 2014), also in Norway (Lowenstein and Daatland, 2006). Adult children's family commitments are therefore controlled for by including

dummy variables representing whether respondents lived with a partner (= 1) or not (= 0) and whether they had children in the household (1 = children; 0 = no children).

In general, a parent's need for care is a key predictor of care-giving (Broese van Groenou and De Boer, 2016). In our analyses, we control for parental need for help or care by using a variable based on the following information. First, respondents were asked whether the parent was limited in her or his ability to carry out everyday activities because of a physical or mental health problem or a disability. If so, they received two follow-up questions about: (a) whether the parent needed help with daily activities such as housework, shopping and transport because of his or her limitations, and (b) whether the parent needed help with personal care. The answers are combined into a dichotomous variable with a value of 1 if the respondent answered 'yes' to any of the two follow-up questions and 0 if the parent was not limited or if the respondent answered 'no' to both questions about parents' needs. When care needs arise, the presence of potential care-givers is important, and within families, the spouse is often the preferred informal care-giver next to adult children (Romøren, 2003; Stafford and Kuh, 2018). Whether the parent lived alone or not is measured by a variable based on the question: 'Does your mother/father live alone?' (1 = 'yes'; 0 = 'no'). Furthermore, an adult child is more likely to provide care if the parent needing care is a mother, especially if the child is a daughter (e.g. Grigoryeva, 2017), and the parent's gender is therefore also included in the analyses. According to Grigoryeva (2017), having sisters reduces the probability of providing care. Hence, two variables indicating whether the respondents had sisters and brothers alive are included to control for other potential family care-givers. Finally, geographical distance is recognised as an important predictor of care-giving (Stafford and Kuh, 2018) and is here controlled for by including a dummy variable indicating a short distance to parents (within 50 kilometres (km) = 1). All control variables were measured in 2017.

Analyses

To estimate the probability of providing weekly and monthly care, we use linear probability models (LPM). LPM is preferred over non-linear models for reasons of interpretation (Wooldridge, 2014). For sensitivity purposes, we have also performed logistic regression analyses (findings available upon request). We have conducted both bivariate analyses of the association between the independent variables in focus and the dependent variables, and multivariate analyses including control variables that are introduced stepwise. Finally, the full model with all control variables is conducted separately for daughters and sons. Additionally, analyses including an interaction term between the children's gender and the independent variables have been conducted to explore differences between daughters and sons (available upon request).

Results

Descriptive statistics

Table 1 confirms that provision of help and care is slightly more prevalent among daughters (26.5% provide monthly and 15% weekly help and care) than among sons (23 and 12%, respectively). When studying care provision to mothers and

Table 1. Descriptive statistics

	All	Daughters	Sons	t-Test (daughters and sons)
<i>Mean values (SD) or percentages</i>				
Provision of monthly help or care (2017):	25.0	26.5	23.4	
To mother ¹	27.6	29.9	25.0	*
To father ²	19.8	20.1	19.5	
Provision of weekly help or care (2017):	13.5	14.9	11.9	*
To mother ¹	15.3	17.4	13.0	*
To father ²	9.8	10.0	9.6	
Filial responsibility norm (2007)	5.73 (2.80)	5.51 (2.83)	5.97 (2.75)	**
Relationship quality (2007)	8.05 (2.02)	7.93 (2.14)	8.17 (1.87)	**
Control variables (2017)				
Age	56.20 (4.94)	56.02 (4.87)	56.39 (5.01)	
Education:				
Lower	11.5	12.0	11.1	
Middle	43.5	37.5	50.0	**
Higher	45.0	50.5	38.9	**
Employment:				
Full-time	67.9	57.5	79.3	**
Part-time	17.2	25.0	8.7	**
Not working	14.9	17.6	12.0	**
Children in the household	39.5	36.1	43.3	**
Lives with a partner	78.6	75.4	82.1	**
Parent needs help or care	31.7	32.2	31.1	
Parent lives alone	45.6	45.3	45.9	
Parent is a mother	67.0	66.8	67.3	
Has sister(s) alive	69.4	68.1	70.8	
Has brother(s) alive	70.4	72.9	67.6	**
Geographical distance:				
Lives more than 50 km from parent	34.6	36.4	32.7	
Lives within 50 km of parent	65.4	63.6	67.3	
Number of observations (dyads)	2,193	1,145	1,048	

Notes: 1. Percentage of child–mother dyads only. 2. Percentage of child–father dyads only. SD: standard deviation. km: kilometres.

Source: The Norwegian Life Course, Ageing and Generation Study (NorLAG), Waves 2 and 3.

Significance levels: * $p < 0.05$, ** $p < 0.01$.

fathers separately, we find a significant gender difference for care to mothers: 30 per cent of the daughters provide monthly help or care, compared to 25 per cent of the sons. For weekly care to mothers, the figures are 17 and 13 per cent, respectively. For care to fathers, the shares are identical: 20 per cent of both daughters and sons provide help and care monthly and 10 per cent do so on a weekly basis. Sons have a higher mean score than daughters on both filial responsibility and perceived relationship quality (for the full distribution on these scales, see the online supplementary material). Two-thirds of the parents represented in the dyads are mothers, reflecting that children aged 50 years and older are more likely to have a mother still living than a father, due to the fact that women tend to enter parenthood earlier and live longer than men.

Bivariate and multivariate analyses

Tables 2 and 3 present the results of the analyses of help and care provision to parents in 2017 regressed on filial responsibility norms and relationship quality in 2007. The first models in both tables show bivariate associations between the two main predictors and the outcome variables, namely monthly (Table 2) and weekly (Table 3) help and care. The bivariate analyses are followed by a model including both predictors (Model 3) and a stepwise inclusion of the relevant control variables (Models 4 and 5) in both tables.

Our analyses do not show any evidence of an association between filial responsibility norms, as measured in 2007, and provision of help and care 10 years later (2017), neither in the bivariate nor in the multivariate models, and independent of the frequency (monthly and weekly provision). This finding supports the assumption that general filial responsibility norms have little impact on actual care-giving behaviour in a comprehensive welfare state like Norway. A perceived good quality of the relationship with the parent, on the other hand, is important – a finding that applies to both monthly and weekly provision of help and care (Model 2 in Tables 2 and 3). The pattern remains the same when including the other predictor (filial responsibility norms) in Model 3, as well as the control variables in Models 4 and 5. The full model (Model 5) shows that for each unit's increase on the 10-point relationship quality scale, as measured in 2007, the probability of providing help and care in 2017 rises with 1.4 percentage point for monthly (Table 2) and 1.1 percentage point for weekly provision (Table 3).

Daughters are somewhat more likely than sons to provide weekly help and care when the gender and the care needs of the parent are taken into account (Table 3, Model 5). For monthly provision on the other hand, we do not find any gender differences. The full models also show that lower-educated children are less likely to provide help and care compared to those with a high education. The remaining characteristics of the adult children in our sample, employment status, age and household structure, are not significantly associated with care-giving practices in the full models. The lacking importance of employment status is somewhat surprising given findings from earlier research.

Regarding parent characteristics, parental needs for help and care seem to be the most important predictor of care-giving. The probability of providing help and care is also higher if the parent lives alone. Another important factor is geographical

Table 2. Bivariate and multivariate linear regression of monthly help and care to parents in 2017

	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE
Filial responsibility norm ¹	−0.002	0.004			−0.003	0.004	−0.001	0.004	0.000	0.003
Relationship quality ¹			0.013**	0.005	0.013**	0.005	0.014**	0.005	0.014**	0.004
Female							0.030	0.022	0.035	0.020
Age ²							0.006	0.041	0.019	0.039
Age squared ²							−0.000	0.000	−0.000	0.000
Education (Ref. Higher):										
Lower							−0.085**	0.032	−0.100**	0.029
Middle							0.006	0.023	−0.033	0.022
Employment ² (Ref. Full-time):										
Part-time ²							0.018	0.029	0.015	0.026
Not working ²							0.018	0.032	0.017	0.029
Children in the household ²							−0.051*	0.023	−0.035	0.021
Lives with a partner ²							0.017	0.026	0.020	0.024
Parent needs help or care ²									0.233**	0.021
Parent lives alone ²									0.091**	0.020

Parent is a mother ²									0.027	0.015
Sister(s) ²									−0.034	0.021
Brother(s) ²									−0.065**	0.022
Lives within 50 km of parent ² (Ref. Distance >50 km)									0.249**	0.018
Constant	0.262**	0.024	0.145**	0.037	0.159**	0.042	−0.108	1.189	−0.544	1.138
Number of observations	2,193		2,193		2,193		2,193		2,193	
R ²	0.000		0.004		0.004		0.016		0.175	

Notes: 1. Measured in 2007. 2. Measured in 2017. R.SE: robust standard error. B: regression coefficient. Ref.: reference category. km: kilometres.
Source: The Norwegian Life Course, Ageing and Generation Study (NorLAG), Waves 2 and 3.
Significance levels: * $p < 0.05$, ** $p < 0.01$.

Table 3. Bivariate and multivariate linear regression of weekly help and care to parents in 2017

	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE
Filial responsibility norm ¹	0.001	0.003			0.000	0.003	0.002	0.003	0.003	0.003
Relationship quality ¹			0.011**	0.003	0.011**	0.003	0.010**	0.003	0.011**	0.003
Female							0.030	0.018	0.033*	0.016
Age ²							0.045	0.034	0.055	0.034
Age squared ²							−0.000	0.000	−0.000	0.000
Education (Ref. Higher):										
Lower							−0.044	0.025	−0.057*	0.023
Middle							0.014	0.018	−0.015	0.017
Employment ² (Ref. Full-time):										
Part-time ²							0.030	0.025	0.027	0.022
Not working ²							0.019	0.025	0.020	0.023
Children in the household ²							−0.021	0.018	−0.009	0.017
Lives with a partner ²							−0.003	0.020	−0.002	0.019
Parent needs help or care ²									0.199**	0.019
Parent lives alone ²									0.061**	0.015
Parent is a mother ²									0.013	0.011
Sister(s) ²									−0.017	0.017

Brother(s) ²									−0.034	0.017
Lives within 50 km of parent ² (Ref. Distance >50 km)									0.175**	0.013
Constant	0.130**	0.018	0.050*	0.024	0.049	0.028	−1.418	0.991	−1.753	0.991
Number of observations	2,193		2,193		2,193		2,193		2,193	
R ²	0.000		0.004		0.004		0.021		0.166	

Notes: 1. Measured in 2007. 2. Measured in 2017. R.SE: robust standard error. B: regression coefficient. Ref.: reference category. km: kilometres.
Source: The Norwegian Life Course, Ageing and Generation Study (NorLAG), Waves 2 and 3.
Significance levels: * $p < 0.05$, ** $p < 0.01$.

distance: living within 50 km of a parent means a 25 per cent higher likelihood of providing monthly care than if the parent lives further away. For weekly care the probability is 17.5 per cent higher. The gender of the parent does not seem to matter, and neither does having sisters. Having brothers, on the other hand, is associated with a lower likelihood of monthly (but not weekly) care-giving. We will return to these results below, when reporting findings from daughters and sons, respectively.

Table 4 presents the full models of monthly and weekly care conducted separately for daughters and sons to investigate whether motivations for care-giving are gendered. The analyses reveal a significant and positive association between daughters' perceived quality of the relationship with parents in 2007 and the probability of providing both monthly and weekly help and care 10 years later. For each unit's increase on the ten-point relationship quality scale, daughters' probability of providing help and care rises with 1.5 percentage point for monthly and 1.3 percentage point for weekly provision. For sons, the association is positive, but only significant for monthly provision, not weekly, with a percentage point increase of 1.4 for each unit's increase on the relationship quality scale. Additional analyses using an interaction term between gender and relationship quality reveal, however, no significant gender difference in how relationship quality matters for care-giving, neither when provided monthly nor weekly (not shown in the table).

Turning then to the characteristics of the respondents, there are only minor differences between daughters and sons. For daughters, we find a curvilinear association between age and weekly provision of help and care. The results also show that the finding reported in Tables 2 and 3 regarding the importance of education for care-giving only applies to daughters – lower-educated daughters are less likely to provide help and care compared to the higher-educated; for sons, educational level is not important. We also find that having own children in the household is negatively associated with monthly provision of help and care for daughters, but not for sons. In the analyses including the whole sample, parents' gender did not seem to matter for adult children's provision of help and care. When analysing daughters and sons separately, we note that this finding only applies to sons. For daughters, the likelihood of providing help and care to parents is in fact greater if the parent is a mother. Additional interaction analyses (not shown) confirm that this gender difference is statistically significant. The negative effect of having brothers (for monthly help and care-giving), on the other hand, which resulted as only significant for sons, did not differ significantly between sons and daughters.

Robustness assessment

In addition to the models presented in this paper, we have performed analyses with all control variables measured in 2007 instead of 2017, which did not change the results regarding the associations between the dependent and the independent variables. We have also conducted analyses using mixed models and hybrid models separating between- and within-individual effects over time using monthly care as the dependent variable, because of the more strict demand for comparable data across waves in such models. Additionally, analyses with the monthly measure of care were conducted using structural equation modelling to evaluate the effect of a latent construct of filial responsibility including a larger set of indicator variables

Table 4. Multivariate linear regression of monthly and weekly help and care to parents in 2017, separated by gender

	Monthly help and care ²				Weekly help and care ²			
	Daughters		Sons		Daughters		Sons	
	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE
Filial responsibility norm ¹	0.001	0.005	−0.001	0.005	0.004	0.004	0.001	0.004
Relationship quality ¹	0.015**	0.006	0.014*	0.006	0.013***	0.004	0.007	0.005
Age ²	0.074	0.049	−0.049	0.059	0.087*	0.040	0.027	0.056
Age squared ²	−0.001	0.000	0.000	0.001	−0.001*	0.000	−0.000	0.000
Education ² (Ref. Higher):								
Lower	−0.151***	0.034	−0.057	0.049	−0.074*	0.029	−0.043	0.038
Middle	−0.019	0.029	−0.055	0.031	−0.015	0.025	−0.014	0.024
Employment ² (Ref. Full-time):								
Part-time ²	0.017	0.031	0.026	0.047	0.018	0.027	0.052	0.042
Not working ²	0.070	0.036	−0.048	0.050	0.024	0.028	0.026	0.038
Children in the household ²	−0.063*	0.029	−0.010	0.031	−0.026	0.023	0.012	0.024
Lives with a partner ²	0.018	0.031	0.012	0.037	0.012	0.025	−0.027	0.030
Parent needs help or care ²	0.290***	0.029	0.176***	0.031	0.233***	0.026	0.163***	0.026
Parent lives alone ²	0.106***	0.027	0.069*	0.029	0.069**	0.022	0.051*	0.021
Parent is a mother ²	0.050*	0.021	0.007	0.021	0.034*	0.016	−0.007	0.015
Sister(s) ²	−0.037	0.029	−0.028	0.032	−0.038	0.024	0.009	0.023
Brother(s) ²	−0.040	0.030	−0.086**	0.031	−0.032	0.024	−0.035	0.024

(Continued)

Table 4. (Continued.)

	Monthly help and care ²				Weekly help and care ²			
	Daughters		Sons		Daughters		Sons	
	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE	<i>B</i>	R. SE
Lives within 50 km of parent ² (Ref. Distance >50 km)	0.226***	0.025	0.278***	0.026	0.185***	0.019	0.164***	0.018
Constant	−2.182	1.441	1.467	1.717	−2.694*	1.154	−0.848	1.609
Number of observations	1,145		1,048		1,145		1,048	
<i>R</i> ²	0.214		0.159		0.203		0.132	

Notes: 1. Measured in 2007. 2. Measured in 2017. R.SE: robust standard error. *B*: regression coefficient. Ref.: reference category. km: kilometres.

Source: The Norwegian Life Course, Ageing and Generation Study (NorLAG), Waves 2 and 3.

Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

and to evaluate indirect effects in the model. The results point in the same direction as the analyses presented here. This was also the case with the sensitivity tests using logistic regression instead of LPM. The original approach was chosen as it is the most parsimonious and the easiest to interpret.

Discussion and conclusion

Increasing population ageing has raised substantial concerns about the future of eldercare. These concerns relate not only to the possible lack of employees in future health-care services, but also to the capability and willingness of families to fill the gap between existing needs and formal service provision (Colombo *et al.*, 2011). The latter point is perhaps not totally unfounded – earlier research has in fact shown a trend towards less support for filial responsibility norms over time (Gans and Silverstein, 2006; Van den Broek *et al.*, 2015).

The aim of this paper was to examine whether adult children's care-giving behaviour is shaped by previous adherence to filial responsibility norms and/or perceived quality of the relationship with parents. The results reveal that relationship quality is positively associated with subsequent provision of help and care. Filial responsibility norms, on the other hand, are not related to care-giving. This finding might be somewhat surprising, but is in line with previous research, which has provided rather mixed results regarding the importance of such norms for actual care-giving behaviour. The absence of a correlation between filial responsibility norms and care-giving might be related to the 'cultural climate' in which intergenerational relationships are played out. A comprehensive welfare state, like the Norwegian, allows for more independent intergenerational relations. The results of this study indicate that in such a context, the quality of relationships is more important than responsibility norms for adult children's provision of help and care to parents.

The positive association between perceived relationship quality and monthly help and care-giving applied for both daughters and sons, whereas for weekly provision, it was significant only for daughters. Additional analyses of weekly care (with an interaction term between respondents' gender and relationship quality) did not reveal any significant gender difference, meaning that it could not be confirmed that relationship quality is more important for daughters than for sons. Hence, our results point rather in the direction of gender similarity in the motivations, than of contrasts. Consequently, any inequalities between daughters and sons in actual provision of help and care cannot be traced back to divergent motivations for care-giving. Yet, the gender composition of the dyad proved to make a difference. Although we did not find the motivations to be related to the adult child's gender, the results revealed that for daughters, but not for sons, the probability of providing help and care was higher if the parent was a mother, indicating gender norms that may originate in cross-sex taboos or same-sex preferences (Arber and Ginn, 1995; Pillemer and Suito, 2006).

In order to understand gender inequality in care-giving behaviour, it is not sufficient to address cultural norms about gender and care-giving – also demographic patterns should be considered (Herlofson and Hagestad, 2011; Hagestad and Dykstra, 2016). The fact that women tend to outlive their partner, and consequently live alone in old age, has received limited attention as a potential driver of gender

contrasts in family care-giving. Moreover, women are more likely than men to experience more years with disability and disease (e.g. Storeng *et al.*, 2018) and, consequently, are more inclined to need help and care. According to our analyses, parents' needs for care was in fact the most important predictor of adult children's care-giving. The described demographic patterns, in interaction with gender norms, may propel gender differences in care-giving behaviour. This means that the similarity between daughters' and sons' motivations found in our study may not necessarily result in a more equal distribution of care-giving obligations, as long as adult children are more likely to have a mother than a father with care needs.

The two motivations in focus of this study, filial responsibility norms and relationship quality, are treated as distinct explanations in the analyses. Although previous research has suggested that the two can be closely related, additional analyses revealed that the two measures were only weakly correlated. Perhaps qualitative in-depth data are more adequate in describing how different motivations are linked. For instance, previous qualitative research has shown that the obligation to care for parents can be framed as a personal choice focusing on internal motivations associated with love, affection or relationship quality rather than an external obligation (Stuifbergen *et al.*, 2010; Funk, 2015; Zarzycki *et al.*, 2022b). Whether one actually has a choice in the decision to provide care is important for whether care responsibilities are perceived as internally or externally motivated (Zarzycki *et al.*, 2022b). According to Stuifbergen *et al.* (2010: 264), 'obligations may be experienced as less pressing when they are felt to be one's "own"'. As argued above, the welfare state context may play a role in shaping motivations and the association with actual care-giving behaviour. In fact, Lowenstein and Daatland (2006) suggested that filial norms are more open to negotiations in Norway in contrast to countries where such norms seem to have a more prescriptive effect on care provision (*i.e.* Spain and Israel).

We have here emphasised the role of the Norwegian welfare state in relieving the family of the heaviest responsibilities, promoting care-giving more as a personal choice or a natural continuation of long-lasting family relationships than as a legal or cultural obligation. However, despite high levels of formal care services in Norway, the available services are not exhaustive, and there is still a substantial need for informal care that supplements formal support. Adult children's responsiveness to parents' needs, as noted above, may serve as evidence, which may, to some extent, challenge the idea of voluntariness in care-giving.

Throughout this article, we have argued that motivations to provide care are both contextual and relational, with motivations based on relationship quality being associated with more of a personal choice than filial responsibility norms. But to what extent care provision really is a personal choice is not indisputable. Funk and Kobayashi (2009) question the idea that choice and obligations to provide care are mutually exclusive, by arguing that the rhetoric of individualism and individual choices pervades the Western culture, in a way that care-giving based on love and affection is framed as a choice even though there are no socially (or personally) acceptable alternatives.

The recent trend in care service-intensive welfare states is characterised by de-institutionalisation and restrictions on formal service provision, thereby increasing the needs for informal help from families (Ulmanen and Szebehely, 2015; Van den

Broek *et al.*, 2019). Also in Norway, there is a shift towards de-institutionalisation, albeit, so far, less radical than in Sweden and Denmark (Daatland *et al.*, 2015). The growing number of people with care needs living outside care institutions has not been accompanied by an increase in formal home care for older people (Gautun and Grødem, 2015), which may strengthen the pressure on informal care-givers in Norway in the coming years. It has also been suggested that the availability of family care-givers is threatened from external demands, not least from active labour market policies promoting postponed retirement and an increase in work hours, especially among women (Moussa, 2019; Fischer and Müller, 2020). Although our analyses did not show any evidence of either full-time or part-time employment hampering care provision of daughters and sons (aged 50 years and older), this is an issue that should be further investigated in future research.

Strengths and limitations

The present study has the advantage of addressing both motivations for and provision of care-giving from the perspective of the adult children, the care providers, and not the perspective of the receivers of support, the parents. Another advantage is the access to longitudinal data. Compared to cross-sectional studies, analyses of longitudinal data provide the opportunity to measure the independent variables (here motivations) prior in time to the dependent variable (help and care-giving). Such an approach allows for considering how earlier established norms and perceptions of relationship matter for subsequent care-giving without a retrospective bias. Still, the method used in this paper does not allow for drawing causal conclusions. The distance in time between the two waves is relatively long, and the possibility that perceptions of obligations and relationship quality have been modified during this period cannot be ruled out. The lack of correlation between filial responsibility and subsequent care-giving could indicate fluctuating perceptions rather than an absence of association. For the purpose of foreseeing the potential for informal care-giving in the future, this study shows that filial responsibility norms are not reliable as a predictor. However, caution should be exercised in concluding that there is *no association* whatsoever between such norms and actual care-giving behaviour from the results of the present study.

Conclusion

This study indicates that filial responsibility norms are not important for subsequent provision of help and care. Consequently, future informal care cannot be predicted on the basis of support for such norms. A good quality of the parent–child relationship, on the other hand, is revealed as an important requisite for providing informal eldercare, indicating thereby the persistence of intergenerational family solidarity in Norwegian families. Instead of eroding intergenerational solidarity, a comprehensive welfare state seems to be a precondition for adult children's provision of help and care to ageing parents. Within such a context, care-giving appears as more of an individual choice than a societal expectation.

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Ethical standard. The NorLAG data collections have been conducted by Statistics Norway in line with existing rules in Act No. 54 of 16 June 1989 relating to official statistics and Statistics Norway. Study participation is based on informed consent.

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