

Unpaid work and conformity: why care?

Marina Della Giusta and Sarah Jewell*

We study the supply of unpaid eldercare (in particular caring for parents) in the UK, focusing on both the division of care and caring tasks by gender and the effect of conformity to social norms in relation to caring. We then investigate the effect of the amount of care on the well-being of caregivers and whether agreeing with the care norm enhances their well-being. Our results suggest that the eldercare reform neglects important aspects underlying the distribution of care hours and care tasks between caregivers and may potentially worsen intrahousehold inequality in earnings and well-being, in particular, between men and women.

Key words: Care, Unpaid work, Social norms, Life satisfaction
JEL classifications: D01, D13, J22, Z13

1. Introduction

Eldercare is becoming an important policy issue in advanced economies as a result of demographic and socio-economic changes. It is estimated that by 2030, one-quarter of the population will be over 65 in both Europe and the USA (OECD, 2011). Care policies are changing the situation both of caregivers and care recipients. In many countries the state is becoming more involved in the regulation, provision and financing of eldercare. Current trends, recently reviewed in a special section of the *European Journal of Ageing* ('Comparative Contexts of Care: Findings from the Survey of Health, Ageing and Retirement in Europe', March 2012), show an increase in the privatisation and informalisation of eldercare. There are more for-profit providers and more individualisation and monetisation of the provision, as well as different patterns of care provision across different ethnic groups. These trends in turn have an impact on the quality of care provision, where monitoring is notoriously difficult and has limited scope for increasing productivity (Folbre, 2001; Himmelweit, 2005). They also impact on the quality of life of both care recipients and caregivers, with mounting evidence that care-giving can be a very stressful job (Kim and Antonopoulos, 2011). A recent review carried out for the European Commission by Kuronen *et al.* (2010), as well as Simonazzi (2009), observes that European Union (EU) countries are becoming more similar in their social care systems and are moving towards home care, private provision of professional formal care and cash transfers in care for older people. The

Manuscript received 10 December 2012; final version received 22 June 2014.

Address for correspondence: Marina Della Giusta, Department of Economics, University of Reading, PO Box 217, Whiteknights, Reading, Berkshire RG6 6AH, UK; email: m.dellagiusta@reading.ac.uk

* University of Reading.

new funding measures are thus pushing for care-giving to the elderly to occur through family networks. Whilst there is a wealth of research looking at support services, private informal care for elderly parents by their children is a significant and much less studied phenomenon (Kuronen *et al.*, 2010; Dykstra and Komter, 2012). Bettio and Plantenga (2004) show that across Europe the share of women involved in unpaid care work in 1996 varied between 60% and 86%. Looking at care of one's own elderly parents, the EUROFAMCARE Consortium (2006) found that 50% of carers of the elderly were adult children of the cared-for old person, living in the same household or building and having less than average disposable income because of caring. There are big differences across countries: Dykstra and Komter (2012) report that more than 48% of those aged 55+ live with adult children in Ireland, parts of Spain, Italy, Hungary and Poland, but less than 15% of those aged 55+ do so in Norway, Sweden, Finland, Denmark, Germany, Belgium, France, Great Britain and the Netherlands.

The literature has so far concentrated on analysing the effects on caregivers' labour supply and earnings. It has been noted that the relational nature of caring makes for limited productivity increases relative to paid work as there is little scope for labour-saving technology in care. This means that the opportunity cost of care time increases with the increased productivity of paid employment (Himmelweit, 2005). The evidence on caregivers' labour supply is mixed. Studies in the USA show that participation in the labour market is generally similar, though the hours supplied are unsurprisingly connected with the amount of care provided (Lilly *et al.*, 2007). Controlling for caregiving intensity, however, Lilly *et al.* (2010) find that in Canada the effect of being a caregiver is mostly on labour market participation rather than on hours supplied or wages. Clearly the decision to provide unpaid care is made jointly with the decision to provide paid hours in the labour market. Graves (2010) finds that in the USA, care for elderly parents has a negative effect on daughters' labour supply and that the use of market care has a positive and significant effect on hours of paid work. Heitmueller (2007) and Heitmueller and Michaud (2006) find a similar effect in the UK, with those who co-reside with the cared-for significantly less likely to participate in the labour force and more likely to earn significantly lower wages. Caring work can be quite stressful, especially for those who do it for extended hours: MacDonald *et al.* (2005), in a review of a large body of empirical evidence for Canada, show that the intensity and combination of hours of market and non-market work are related to stress and poor health. They also find that women's greater hours of unpaid work contribute to them experiencing overall more stress than men. Furthermore, the hours spent on eldercare and housework appears to be more stressful than those spent on childcare.

An important factor in the decision to care for one's own elderly parents are social norms: the EUROFAMCARE study finds that emotional bonds and a sense of duty are very important to determine the decision to care. The Eurobarometer 2004 finds that 50% of respondents on average across the EU15 agree that they should care for their elderly parents; the proportion agreeing is higher in the EU25. As found in the MULTILINKS project, family norms in different countries are predictive of intergenerational support behaviour and serve as a source of information for policy makers (Dykstra and Komter, 2012). Social norms and values have long featured in explanations of individual and group behaviour by economists, from the early work on social norms and conformity by Akerlof (1980) and Jones (1984) to the more recent contributions by Akerlof and Kranton (2002, 2005) and Corneo and Jeanne (2010). A key feature of caring is that social and personal norms determine how care is to

happen and who is responsible for it (Himmelweit, 2005). There is evidence in the pattern of social norms across different societies that women are expected to provide care and, at the same time, to feel fulfilled in doing so (Seguino, 2007). The extent to which this expectation is complied with will obviously, in part, be specific for individuals. However evidence from experimental economics suggests that gender does play a role and although women are not necessarily more altruistic than men, they are more likely to be affected by social clues on appropriate behaviour (Croson and Gneezy, 2009). Social norms may also determine, at least partly, how different caring activities are divided between caregivers according to their gender. There is evidence in time use surveys of the differences in the types of domestic tasks performed by women and men (Kan and Gershuny, 2010). In this paper we address three issues. We firstly look at the extent to which complying with a family norm of caring for one's elderly parents provides well-being to carers. We then check which tasks female and male carers perform when caring for their own elderly parents. Finally we assess the effect of different types of caring and of agreeing with social norms on carers' utility, attempting to isolate both the potential direct effects of caring and the warm-glow effects from feeling like one is doing one's duty.

We focus on the UK, which presents a particularly interesting case for two sets of reasons: firstly, because policies for eldercare have been irregular and changing in the UK while informal care remains an important resource (Daly, 2001). Bettio and Plantenga (2004) classify the UK as having a low index of public pensions schemes and high availability of residential care for the elderly. Although studies using the SHARE database always find that in Northern Europe there is more choice for the care of one's elderly parents, as Blackman (2000) points out in the UK there is very selective gatekeeping for access to formal care services for the elderly, so care of one's parents remains very significant. Secondly, the UK is interesting when looking at social norms as, in spite of having a large market-based care provision, the Eurobarometer finds in the UK that over 50% agree that children should care for their elderly parents.¹

In the remainder of the paper we investigate the supply of unpaid care for elderly parents in a sample panel drawn from the British Household Panel Survey (BHPS). We begin with a description of the data and methodologies used, which is followed by a discussion of the factors affecting supply. Next we focus on the degree to which respondents agree they should give care to their elderly parents. We then assess the extent to which complying with the care norm increases both care supply and the life satisfaction of caregivers, looking also at the different caring tasks performed by women and men.

2. Data and variables

We use data from the BHPS (for details see <https://www.iser.essex.ac.uk/bhps>), a longitudinal study of approximately 5,500 households and more than 10,000 individuals containing annual data on social and economic variables at the individual and household level from 1991 to 2008, whereupon it was subsumed into a larger survey, Understanding Society.

We focus specifically on care for parents/parents-in-law since the care social norm question specifically relates to caring for parents or parents-in-law. However, the BHPS

¹ In the full sample we use for this paper overall, 42% agree or strongly agree with that adult children should care for parents, with an increase across time from 37% in 1992 to 46% in 2008.

has no data on the demand for care (i.e. whether an individual has a parent/parent-in-law in need of care), so we make use of the questions asked in 2001/02 and 2006. Firstly, respondents are asked whether they have a living mother or father (outside the household) and, if so, their age. To create our sample we made use of respondents to the 2006 wave (who comprise 50% of those who responded to the BHPS at some point between 1992 and 2008) who answered questions about whether they had a living parent along with the questions about household members. Since these questions about whether they had living parents and questions about these living parents were also asked in 2001 for original BHPS respondents and in 2002 for other sample members and then again in 2006, it was possible, on the basis of the information, to work out for the 2006 respondents whether they had a known living parent in each wave they responded to from 1992 (where the social norm question about caring for parents was first asked). For those with a spouse/partner living in the household, it was also possible to match this information from spouse/partners to work out if they had a living parent-in-law and their age, given the question about caring for parents considers parents and parent-in-laws together.

We note, due to the construction of our sample, that in some waves it may not be possible to identify whether an individual had a living parent/parent-in-law—either in the waves prior to 2001/02 if they did not have one during the waves 2001/02 and 2006 (7% of 2006 respondents did not) or if the parent/parent-in-law died between 2001/02 and 2006, since it is not possible to identify when (6% of 2006 respondents had a parent/parent-in-law alive in 2001/02 but none alive by 2006). Secondly, in some cases the age of the oldest parent was not reported. Therefore, we lose a few observations when we can not clearly identify in a wave if they had a living parent/parent-in-law or their age. For robustness checks we also run our analysis using only the waves 2001 to 2006 since in waves prior to 2001 we could only identify if they had a living parent/parent-in-law for those individuals who responded to the 2001/2 and 2006 questions about living parents, but our conclusions are unchanged.

Our main analysis makes use of the 2006 respondents who had a living parent between 2001 and 2006 and covers the period between 1992 and 2006. We restrict our sample to those of working age (adults aged 16–64). Using those under 65 years of age was also motivated by the fact that individuals older than 65 are much less likely to have living parents.² Approximately 80–86% of the 2006 respondents had a living parent during this period. In the remainder of the paper the term ‘parent’ is used to denote both parent and parent-in-law.

We further focus only on those with parents aged 70+, as the majority (81%) in our sample who care for a parent care for one that is in this age group and, secondly, MULTILINKS results show that parents only become net recipients of care after that age (Saraceno and Keck, 2008; Dykstra and Komter, 2012). Our subsample, for analysis, of those who have a parent aged 70+ at some point during 1992 and 2006, and who responded to the 2006 wave, comprises 5,413 individuals (2,908 women and 2,505 men) having a parent aged 70+, leading to 39,879 person-years (21,515 women and 18,364 men).

Individuals were asked in each wave of the BHPS, ‘Is there anyone living with you who is sick, handicapped or elderly whom you look after or give special help to (for

² If we make use of the questions in the 2001 and 2006 surveys that asked whether the respondents had a mother and father alive outside the household, along with information on household members, we find that of those in the 65+ group only 3% have a living parent, with this rising to 42% in the 50–64 age group, 88% in the 35–49 age group and 98–99% for those under 35.

example, a sick or handicapped (or elderly) relative/ husband/ wife/ friend, etc.?)' And 'Do you provide some regular service or help for any sick, handicapped or elderly person not living with you?' We are therefore able to split caring into co-resident and non-resident care. Further, since individuals are asked how they are related to the cared-for and the BHPS household level person identifier is provided for co-residents cared for, we can identify whether they care for a parent. As already mentioned, we focus specifically on care for parents since the care social norm question specifically relates to caring for parents. Individuals who care were also asked in intervals how many hours they provided care for, which was grouped into less than 10 hours, 10–19 hours, 20–34 hours and 35+ hours.

Focusing on our sample of individuals who have a living parent aged 70+, between 16% and 23% (across our sample period) of these respondents were caring for a sick, disabled or elderly parent (on average across this sample period 20% of women and 14% of men) between 1992 and 2006.

Table 1 examines employment, hours worked, hours spent caring and agreement with the care norm by non-carers and carers (split into co-resident and non-resident) for those with a parent(s) aged 70+. The majority who care for parents do so for a parent living outside the household (87% of women and 84% of men).

For both women and men, those who care for parents, especially inside the household, are less likely to be in employment than those who do not care. As would be expected, those who care for a co-resident are less likely to work but those women who do work, work longer hours and both genders have lower wages compared with non-carers, especially co-resident carers. **Table 1** suggests decisions about employment and opportunity costs are different according to whether the care is inside or outside the household, which is reflected in the distribution of the number of hours spent caring. Firstly, it is evident that women on average undertake longer hours of care and the distribution of hours spent caring is very different depending on whether the care is for a co-resident or for a parent living outside the household. For example, in our main sample of respondents with living parents aged 70+, for those living outside the household 66% of women and 83% of men do less than 10 hours of care compared with 23% and 48% of those living in the household. At the other extreme, for co-resident carers, 43% of women and 24% of men care full-time (35+ hours) compared with only 6% of women and 3% of men caring outside the household. As we will see below, gender differences in caring behaviour can be partly explained by the difference in the types of caring activities typically performed by women and men and **Table 1** suggests it is important to examine the decision to care for parents separately by gender.

To construct a proxy for the care norm, we use responses to the question, 'Do you personally agree or disagree with the following statement? "Adult children have an obligation to look after their elderly parents"', present in the even-year waves of the survey starting from 1992, with answers chosen from 'strongly agree', 'agree', 'neither agree nor disagree' (we refer to this as 'neutral'), 'disagree' and 'strongly disagree'. For the odd-year waves we used the response from the previous wave. Overall, approximately 42% of all the 2006 respondents agree or strongly agree with this statement, 30% are neutral and 28% disagree or strongly disagree. For those 2006 respondents without a living parent this changes to 36% agreeing, 29% neutral and 35% disagreeing, so attitudes do vary according to whether an individual has a living parent.

Table 1 also examines agreement with the care norm for our sample with parents aged 70+. Men are more likely to agree or strongly agree than women with the statement

Table 1. *Employment status, hours spent caring and agreement with care norm by care for parent status: respondents with parents aged 70+*

	Full sample					
	Women			Men		
	Non-carer	Co-resident care	Non-resident care	Non-carer	Co-resident care	Non-resident care
Observations	17,180	571	3,764	15,822	409	2,133
Labour market status						
Employed	73.1	55.3*	68.5*	87.7	74.6*	80.3*
Average hours worked	32.5	34.2*	31*	45.9	43.5*	45.7
Average hourly wage (£)	9.6	7.7*	9.1*	13.3	10.5*	13
Hours spent caring (%)^a						
Under 10 hours		23.3	66.26		47.87	82.7
10–19 hours		20.25	20.73		18.05	11.3
20–34 hours		13.8	7.23		9.77	3.55
35+ hours		42.65	5.78		24.31	2.46
Total		100	100		100	100
Agreement with care norm^b						
Agree strongly	5.49	11.5	7.7	6.97	21.2	9.6
Neutral	27.77	25.2	26.68	28.98	22.4	22.85
Disagree	30.52	24	27.03	22.5	13.2	18.83
Disagree strongly	5.4	5.4	4.48	3.3	1.95	2.13

^aThe distribution of hours spent caring is significantly different by caring type for both genders (χ^2 test p -values of 0.000 for both genders) and the distribution of hours spent caring is significantly different by gender (χ^2 test p -values of 0.000).

^bThe distribution of agreement with social norm is significantly different by caring type (χ^2 test p -values of 0.000 for both genders) and the distribution of agreement with the social norm is significantly different by gender (χ^2 test p -values of 0.000).

*Significantly different to non-carers at least at the 5% level.

Agreement with the care norm is obtained from responses to the question, ‘Do you personally agree or disagree with the following statement?’ ‘Adult children have an obligation to look after their elderly parents.’”

Notes: The number of observations refers to person-years.

Average hours worked and wage (actual) are for the sample in the labour market only.

Wage rates are adjusted for inflation using the consumer price index.

and women are more likely to disagree or strongly disagree (which is also true of the full 2006 respondent sample). As expected, agreement is more likely among those who care for their parents, especially those who care for a parent inside the household. It is possible that an individual's attitude to care provision changes after they start caring for their parents, because of a habituation effect, which lessens the burden of caring with time and experience and returns individual well-being close to its set point (Frederick and Loewenstein, 1999), and an *ex post* validation of one's choices, which strengthens the positive emotional rewards (for a discussion of these in the case of attitudes to mothers returning to employment see Himmelweit and Sigala, 2004). Tables A2 and A3 in the Appendix examine attitudes one year before and one year after an individual started providing care for parents for the first time for the respondents we observe starting to care. On average there is no large change in attitudes and we observe only a slight increase in the proportion of those who strongly agree (more so for men) and are neutral, and a slight decrease in the proportion of those who agree, disagree and strongly disagree. If we examine specifically the change in categories (see Table A3 in the Appendix), the biggest movement is in the 'strongly disagree' category and the least movement in the 'agree' category. The majority of those who change their category move into the nearest one. Therefore, given there is some change in agreement with the care norm as a result of individuals caring, in the regressions examining the decision to care we utilise lagged responses (which means we will lose one years' worth of data per individual) for this question to ensure the responses were collected prior to the questions about caring.

3. The probability of caring for parents

Using our sample of working age individuals with living parents aged 70+, we begin by modelling the probability of caring for parents. We utilise probit models with standard errors clustered at the individual level (as we have repeat observations over some individuals), given the choice is binary. Models are run separately by gender as we expect systematic differences by gender, as suggested by Table 1, and this is confirmed by Chow tests of differences across genders across all our models (run for results in Tables 2 and 4 and Table A4 in the Appendix).

Full details of the variables used are provided in Table A1 in the Appendix. Besides lagged values for the agreement with the social care norm, we include socio-demographic characteristics such as age, ethnicity, religion, presence of children and whether living with a partner or spouse. We also control for the geographic region and for the survey wave. We include additional household monthly income³ (i.e. beyond the individual's income, since an individual's earning ability may be affected by any caring responsibilities), weighted by the size of the household, as well as whether they own their own home, have a mortgage or rent (which is a proxy for wealth). We cannot directly control for labour market status as this may be jointly determined with the decision to care. As noted, past research has tended to examine the effect of caring on employment status, which implies a direction of care hours affecting labour market status, rather than the other way round, although it is not unreasonable to assume that individuals with more time may be able to undertake more caring responsibilities. In order to control for the opportunity cost of caring, we include a predicted wage. Since those not employed do not report a wage rate and since the wage rate may be related to whether or not an individual is a caregiver (e.g., caregivers might accept a lower

³ Both income and wage rates were adjusted for inflation using the consumer price index (CPI).

Table 2. *Probit of caring for parents: respondents with living parents aged 70+, marginal effects*

	Women	Men
Age group (ref: 35–49)		
16–34	–0.013 (0.019)	–0.016 (0.017)
50–64	0.044*** (0.014)	0.012 (0.011)
White	0.090*** (0.031)	0.053* (0.028)
Religion (ref: no religion)		
Christian	0.021* (0.012)	0.011 (0.011)
Catholic	0.021 (0.022)	0.013 (0.018)
Other religion	0.057* (0.032)	0.053* (0.029)
Live with partner/spouse	–0.089*** (0.022)	–0.087*** (0.024)
Log (additional monthly household income)	0.009*** (0.003)	0.005 (0.003)
Age of youngest child (ref: no children in household)		
Aged 0–2	–0.063*** (0.019)	–0.022 (0.017)
Aged 3–4	–0.056*** (0.018)	–0.031* (0.016)
Aged 5–11	–0.012 (0.015)	–0.019 (0.013)
Aged 12–15	–0.015 (0.014)	–0.007 (0.012)
Housing tenure (ref: mortgage)		
Own home	0.044*** (0.015)	0.034*** (0.013)
Rent	–0.019 (0.016)	0.01 (0.016)
Agreement with care norm (ref: neutral) at $t - 1$		
Strongly agree	0.064** (0.025)	0.073*** (0.021)
Agree	0.014 (0.012)	0.042*** (0.010)
Disagree	–0.026** (0.011)	0.007 (0.011)
Strongly disagree	–0.014 (0.020)	–0.018 (0.021)
Log (predicted wage)	–0.050*** (0.017)	–0.039** (0.019)
Age of oldest parent	0.012*** (0.001)	0.010*** (0.001)
Observations	19,556	16,508
N care for parent	3,957	2,314
Log likelihood	–8,972	–6,093
Pseudo r^2	0.089	0.089

The number of observations refers to person-years.

Reported coefficients are marginal effects with other variables held at their mean.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

includes controls for wave and region

Agreement with the care norm is obtained from responses to the question, ‘Do you personally agree or disagree with the following statement? “Adult children have an obligation to look after their elderly parents.”’

Table 3. *Activities undertaken for parents for respondents caring for parents aged 70+*

	Women (%)	Men (%)
Give them lifts in your car	<i>65.12</i>	<i>62.73</i>
Shop for them	<i>77.83</i>	<i>62.73</i>
Provide or cook meals	<i>48.22</i>	<i>23.64</i>
Help with personal needs	<i>22.48</i>	<i>9.09</i>
Wash, iron or clean	<i>46.05</i>	<i>14.24</i>
Deal with personal affairs	<i>58.60</i>	<i>48.18</i>
Decorate, garden or repairs	<i>42.17</i>	<i>63.33</i>
Financial help	<i>9.61</i>	<i>12.73</i>
Anything else	<i>3.10</i>	<i>3.64</i>
Observations	645	330

Notes: The number of observations refers to 2001 and 2006 respondents who care for parents. Multiple responses are possible.

Figures in italics are not significantly differently by gender.

wage job that is part-time or more flexible), we use ‘predicted’ wage rates (see Table A1 in the Appendix for further details). We include a further explanatory variable of the age of their oldest parent to allow for the fact older parents may be more likely to need care.

Table 2 reports the marginal effects of the probit model estimation of the probability of caring for parents. The age of the oldest parent positively affects the probability of caring for a parent for both genders, which reflects that older parents are more likely to require care. Even controlling for the age of the parent, older women (aged 50–64) are more likely to care for parents, with age having no effect for men. The presence of young children in the household reduces the odds of caring for parents for women, presumably because they are time constrained and have other responsibilities. Both women and men who live with a partner or spouse are less likely to care. Women with higher additional household income are more likely to provide care, perhaps because of a better financial position, with no impact of income for men, perhaps reflecting the expectation that they should not care, regardless of income. Individuals who own their home, compared with those with a mortgage, are more likely to care for parents. A higher predicted wage reduces the probability of caring for parents for both genders, suggesting that the opportunity cost of caring in wage terms indeed matters.

Social norms have a significant but asymmetric effect on the probability of caring for parents for women and men. Agreeing (and strongly agreeing for men) that adult children should care for parents increases the probability of caring for parents for both genders, but disagreeing reduces the probability of caring for parents for women. The effect of conforming to the norm on care provision has to be interpreted, of course, in conjunction with the information on the amount of care time women and men tend to supply and on the type of caring tasks they perform.

In order to ascertain whether the determinants of care supply vary by whether the care is inside or outside the household, we also run a multinomial logit⁴ (see Table A4 in the Appendix) for the decisions of no care, co-resident care and non-resident care.

⁴ We use a multinomial logit as a multinomial probit struggles to converge and both a Small–Hsiao test and Hausman test suggests the independence of irrelevant alternatives assumption has not been violated.

Table 4. Fixed effects (within group estimator) regressions: dependent variable—life satisfaction

	Care for parent dummy		Care type		Care hours	
	Women	Men	Women	Men	Women	Men
Age group (ref: 35–49)						
16–24	0.060* (0.033)	0.055 (0.033)	0.060* (0.033)	0.054 (0.033)	0.061* (0.033)	0.054 (0.033)
25–34	0.048** (0.019)	0.044** (0.020)	0.048** (0.019)	0.044** (0.020)	0.048** (0.019)	0.043** (0.020)
50–64	0.011 (0.021)	0.091*** (0.021)	0.011 (0.021)	0.091*** (0.021)	0.011 (0.021)	0.092*** (0.021)
Higher qualifications	-0.004 (0.035)	-0.090** (0.040)	-0.004 (0.035)	-0.090** (0.040)	-0.004 (0.035)	-0.090** (0.040)
No qualifications	0.013 (0.039)	-0.029 (0.040)	0.012 (0.039)	-0.028 (0.040)	0.014 (0.039)	-0.029 (0.040)
Live with partner/spouse	0.224*** (0.017)	0.225*** (0.020)	0.222*** (0.017)	0.227*** (0.020)	0.223*** (0.017)	0.225*** (0.020)
Log (monthly household income)	0.029*** (0.007)	0.034*** (0.007)	0.029*** (0.007)	0.033*** (0.007)	0.029*** (0.007)	0.034*** (0.007)
Age of youngest child (ref: no children in household)						
Aged 0–2	0.038* (0.022)	0.015 (0.022)	0.038* (0.022)	0.015 (0.022)	0.039* (0.022)	0.015 (0.022)
Aged 3–4	-0.028 (0.023)	-0.016 (0.024)	-0.028 (0.023)	-0.016 (0.024)	-0.028 (0.023)	-0.016 (0.024)
Aged 5–11	0.008 (0.019)	0.003 (0.020)	0.008 (0.019)	0.003 (0.020)	0.008 (0.019)	0.003 (0.020)
Aged 12–15	-0.029 (0.019)	-0.036* (0.021)	-0.03 (0.019)	-0.036* (0.021)	-0.028 (0.020)	-0.036* (0.021)
Part-time employed	0.003 (0.014)	0.024 (0.023)	0.003 (0.014)	0.024 (0.023)	0.003 (0.014)	0.025 (0.023)
Retired	0.028 (0.026)	0.025 (0.032)	0.028 (0.026)	0.025 (0.032)	0.029 (0.026)	0.027 (0.032)
Family care	-0.108*** (0.019)	-0.164*** (0.064)	-0.107*** (0.019)	-0.166*** (0.064)	-0.107*** (0.019)	-0.161** (0.064)
Unemployed	-0.270*** (0.019)	-0.340*** (0.064)	-0.270*** (0.019)	-0.340*** (0.064)	-0.272*** (0.019)	-0.339*** (0.064)

Table 4. Continued

	Care for parent dummy		Care type		Care hours	
	Women	Men	Women	Men	Women	Men
Long-term sick/disabled	-0.450***	-0.669***	-0.449***	-0.669***	-0.448***	-0.666***
Full-time education	0.084***	0.111***	0.084***	0.112***	0.083***	0.111***
	(0.024)	(0.026)	(0.024)	(0.026)	(0.024)	(0.026)
Care for parent	-0.069**	0.05				
	(0.027)	(0.034)				
Care for parent in household			-0.205***	0.130**		
			(0.050)	(0.050)		
Care for parent outside household			-0.043	0.032		
			(0.027)	(0.035)		
Care hours (ref: no care hours)						
Under 10 hours						
10–19 hours					-0.055*	0.057
					(0.029)	(0.035)
20–34 hours					-0.059	0.025
					(0.037)	(0.053)
Over 35 hours					-0.154***	0.012
					(0.051)	(0.082)
					-0.171***	0.058
					(0.051)	(0.079)
Whether care for parent*agreement with care norm						
Care for parent* strongly agree	0.140***	-0.009	0.139***	-0.016	0.151***	-0.006
	(0.054)	(0.058)	(0.053)	(0.058)	(0.054)	(0.059)
Care for parent*agree	0.108***	-0.034	0.102***	-0.031	0.107***	-0.037
	(0.034)	(0.040)	(0.033)	(0.040)	(0.034)	(0.041)
Care for parent*disagree	0.015	-0.048	0.006	-0.045	0.017	-0.055
	(0.036)	(0.049)	(0.036)	(0.049)	(0.036)	(0.049)
Care for parent*strongly disagree	0.002	0.04	-0.002	0.042	0.006	0.039
	(0.064)	(0.105)	(0.064)	(0.105)	(0.064)	(0.106)
Observations	68,465	58,113	68,465	58,113	68,429	58,078
Number of individuals	11,297	10,058	11,297	10,058	11,297	10,058
r ²	0.013	0.021	0.013	0.021	0.013	0.021

Notes: Standard errors in brackets. ***p < 0.01, **p < 0.05, *p < 0.1. Also includes wave dummies.

Agreement with the care norm is obtained from responses to the question, 'Do you personally agree or disagree with the following statement? "Adult children have an obligation to look after their elderly parents."' The number of observations refers to person-years.

Noteworthy, we found that the effect of religious affiliation is more important for the supply of non-resident care and that living with a spouse/partner makes co-resident care more likely and non-resident care less likely. Greater additional income increases the probability of co-resident care and decreases the probability of non-resident care, for both genders, with owning own home only increasing the probability of non-resident care. The opportunity cost (predicted wage) only negatively impacts the probability of non-resident care for women and co-resident care for men. The effect of care norms is still important: strongly agreeing (and agreeing for men) with the norm makes non-resident care more likely and, for men, strongly agreeing increases the probability of co-resident care, but norms have no impact for co-resident care for women. Disagreeing with the norm also makes women less likely to provide non-resident care to parents. Choices are thus strongly affected by social norms (including religious ones).

In 2001 and 2006, those with a living mother or father (who don't live with them) were asked a further series of questions about the relationship with their parents, which included any activities they help them with. Table 3 reports for those caring for a parent aged 70+ the task individuals undertake, with a split by gender. Clear differences by gender emerge. Women are more likely than men to help with shopping, housework (cooking, washing, ironing and cleaning), personal needs and personal affairs, whilst men are more likely than women to do manual jobs (decorating, gardening and repairs) and provide financial help. This confirms the findings of Kan and Gershuny (2010): routine tasks are overwhelmingly done by women whilst men engage in special tasks. In other words, it is not just the amount of care provided that differs between women and men, but also the kind of care they provide, reinforcing the earlier results suggesting that gender norms matter as well as family ones.

4. Care, conformity and life satisfaction

The burgeoning theoretical and empirical literature on social norms suggests that conformity to norms affects not just decisions in areas as disparate as education, employment, marriage formation and dissolution, housework distribution and childbearing, but also the resulting levels of utility (Kaplou and Shavell, 2007; Akerlof and Kranton, 2002, 2005; Corneo and Jeanne, 2009, 2010; Bertrand *et al.*, 2013). Choices thus provide wealth as well as moral utility or 'warm glow' from satisfying altruistic preferences (Levitt and List, 2007; Andreoni, 1990). In this section we attempt to capture both the effects on life satisfaction of caring for one's parents and of agreeing with the social norm that one ought to do so. We introduce an interaction term between caring and agreeing with the norm with the intention of capturing the mitigating effect provided by warm glow (the increase in personal self-esteem from knowing that one is acting according to his or her moral principles) on the burden of caring. We expect that the first term on caring for one's parents will measure the net effect on utility from the loss of leisure time and performing unpleasant tasks net of positive relational rewards, whilst the second interaction term will capture the satisfaction from conforming to the social norm on caring.

Our dependent variable for this part of the analysis is overall life satisfaction, a proxy for utility, based on answers to the question, 'How satisfied or dissatisfied are you with your life overall?' on a seven-point scale, with 1 for being not satisfied at all and 7 for being completely satisfied, which was first asked in the 1996 wave. Due to the inclusion of comprehensive health questions asked in the 2001 wave, the BHPS omitted this question in that year, so we exclude year 2001 from our life satisfaction analysis.

For this part of the analysis we include both caregivers (for parents) and non-caregivers, so using the full BHPS working age sample for 1996–2008 (1996 was the first year the life satisfaction question was asked), since we are interested in comparing caring and non-caring respondents. For our life satisfaction model we use a sample size of 11,297 women and 10,058 men (leading to 68,465 and 58,113 person-years, respectively).

Although the responses to the life satisfaction question are discrete, we treat the variable as continuous in order to exploit the panel nature of the data. Past research has shown that the results differ little between the cases where a similar variable is treated as continuous or as an ordered discrete variable and that conversely controlling for fixed effects is very important (Ferrer-i-Carbonell and Frijters, 2004; Clark *et al.*, 2008; Vendrik, 2013). Fixed effects are used to control unobserved attributes, such as personality traits, that are increasingly accepted as playing an important role in an individual's life satisfaction and determining its set point. We make use of a within-group estimator to remove the individual unobserved effect.⁵ We examine the models with an indicator variable for whether or not a respondent provided care for his/her parent and further split by whether this care was co-resident or non-resident as well as the number of hours of care, to examine whether it is also the type of care and intensity that may affect life satisfaction. Other controls include age, whether or not the respondent lives with a partner or spouse, the age of the youngest child, qualifications, employment status and the total household income (the latter is to account for the fact that caring may reduce overall income and hence life satisfaction).

As reported in Table 4, caring for parents seems to have a significant (negative) effect on life satisfaction only for women, particularly for those supplying a large number of care hours. This could be both a reflection of the hours spent caring (women tend to do longer hours) and of the different caring tasks that women engage in. Generally, caring for parents has no impact on life satisfaction for men, but men who care for parents in the household have higher life satisfaction. This result could be explained by the combination of the small proportion of men who care (see Table 1), the fact that they do so for relatively few hours and also that they do the relatively more pleasant activities. Alternatively, we may be observing potential reverse causality, with relatively happier men being the ones who are also willing to undertake care. Conforming to the care norm has a positive effect for women who care for parents: utility is higher for women who care for parents and agree or strongly agree that adult children should care for parents. Of course this could be either because the individuals derive utility from doing what they feel is right or because individuals with higher life satisfaction are more likely to agree with a social norm. When we run this robustness check we still find that there is an effect on life satisfaction from agreeing with the care norm, thus excluding the possibility that the causality runs from life satisfaction to conformism. Warm glow does occur and it has a mitigating effect.

5. Conclusions

Our paper finds that in our representative sample of UK households, significant amounts of unpaid caring for elderly parents are performed. Women are overwhelmingly

⁵ A Hausman test shows that a fixed-effects approach is preferred to a random-effects approach for both genders.

responsible for this provision, both inside and outside the household, and do relatively less pleasant tasks than men. We find that an important role is played by social norms in both the decision to supply care, the amounts supplied and the effect on caregivers and that agreeing with the norm that adult children should care for their parents significantly reduces the burden of caring. Our results indicate that social and gender norms are important and should be explicitly considered by policy makers. Financial and demographic considerations have been at the heart of eldercare reforms; however care provision needs to consider also the factors motivating unpaid care provision within households, which remains a key part of the provision. Our results show that the supply of unpaid eldercare and the life satisfaction of caregivers are to a significant extent affected by a social norm stating that adult children should care for parents, in turn underpinned by gender norms establishing who should be in charge of the care (mostly women) and what tasks should be performed by women and men. This suggests that although there may be a strong demand for eldercare services provided by the market, the pressure towards cash-for-care provision may not be the right solution in all situations and that policies towards flexible employment accompanied by support to caregivers at home may be more appropriate for both those needing care and those who care for them. The difference between caring for a co-resident and non-resident parent is also important and needs to be taken into account in policy formulation. From a gender perspective, it is apparent that the effect of care norms on women and men is not symmetric and this should be taken into account for equity purposes when designing the relevant policies. It is easy to see why the current reforms proposed for eldercare cause worries, given that their projected effects were considered at the household level, rather than estimated for the individuals who directly supply care within households (Himmelweit, 2005). Our results prove further that a gender-disaggregated analysis is essential to understand the likely evolution of this sector.

Bibliography

- Akerlof, G. 1980. A theory of social custom—of which unemployment may be one consequence, *Quarterly Journal of Economics*, vol. 94, no. 4, 749–75
- Akerlof, G. A. and Kranton, R. E. 2002. Identity and schooling: some lessons for the economics of education, *Journal of Economic Literature*, vol. 40, 1167–201
- Akerlof, G. A. and Kranton, R. E. 2005. Social divisions within schools: how school policies can affect students' identities and educational choices, pp. 188–213 in Barrett, C. B. (ed.), *The Social Economics of Poverty*, London, Routledge
- Andreoni, J. 1990. Impure altruism and donations to public goods: a theory of warm-glow giving, *Economic Journal*, vol. 100, no. 401, 464–77
- Bertrand, M., Pan, J. and Kamenica, E. 2013. 'Gender Identity and Relative Income within Households', NBER Working Paper no. 19023
- Bettio, F. and Plantenga, J. 2004. Comparing care regimes in Europe, *Feminist Economics*, vol. 10, no. 1, 85–113
- Blackman, T. 2000. Defining responsibility for care: approaches to the care of older people in six European countries, *International Journal of Social Welfare*, vol. 9, no. 3, 181–90
- Clark, A. E., Diener, E., Georgellis, Y. and Lucas, R. E. 2008. Lags and leads in life satisfaction: a test of the baseline hypothesis, *Economic Journal*, vol. 118, no. 529, F222–43
- Corneo, G. and Jeanne, O. 2010. Symbolic values, occupational choice, and economic development, *European Economic Review*, vol. 54, no. 2, 237–51
- Crosno, R. and Gneezy, U. 2009. Gender differences in preferences *Journal of Economic Literature*, vol. 47, no. 2, 448–74
- Daly, G. 2001. Citizenship and public accountability: older people and community care, *Journal of Education & Ageing*, vol. 16, no. 1, 55–75
- Dykstra, P. A. and Komter, A. E. 2012. Generational interdependencies in families: the MULTILINKS research programme, *Demographic Research*, vol. 27, 487–506

- EUROFAMCARE Consortium. 2006. *Services for Supporting Family Carers of Elderly People in Europe: Characteristics, Coverage and Usage: Summary of Main Findings from EUROFAMCARE*, written and edited by J. Triantafyllou and E. Mestheneos, Hamburg, EUROFAMCARE
- Ferrer-i-Carbonell, A. and Frijters, P. 2004. How important is methodology for the estimates of the determinants of happiness? *Economic Journal*, vol. 114, 641–59
- Folbre, N. 2001. *The Invisible Heart: Economics and Family Values*, New York, Free Press
- Frederick, S. and Loewenstein, G. 1999. Hedonic adaptation, in Kahneman, D. Diener, E. and Schwartz, N. (eds), *Scientific Perspectives on Enjoyment, Suffering, and Well-Being*, New York, Russell Sage Foundation
- Graves, J. 2010. Care Provision to Elderly Parents and Women's Hours Worked in the Labor Market, AEA 2011 Annual Meeting Paper, <https://www.aeaweb.org/aea/2011conference/program/meetingpapers.php> [date last accessed: 5 November 2014]
- Heitmueller, A. 2007. The chicken or the egg? Endogeneity in labour market participation of informal carers in England, *Journal of Health Economics*, vol. 26, no. 3, 536–59
- Heitmueller, A. and Michaud, P. 2006. 'Informal Care and Employment in England: Evidence from the British Household Panel Survey', IZA Discussion Paper no. 2010, Institute for the Study of Labor (IZA)
- Himmelweit, S. 2005. Caring: the need for an economic strategy, *Public Policy Research*, vol. 12, no. 5, 168–73
- Himmelweit, S. and Sigala, M. 2004. Choice and the relationship between identities and behaviour for mothers with pre-school children: some implications for policy from a UK study, *Journal of Social Policy*, vol. 33, no. 3, 455–78
- Jones, S. R.G. 1984. *The Economics of Conformism*, Oxford, Basil Blackwell
- Kan, M. and Gershuny, J. 2010. Gender segregation and bargaining in domestic labour, ch. 7 in Scott, J., Crompton, R. and Lyonette, C. (eds), *Gender Inequalities in the 21st Century*, Cheltenham, Edward Elgar
- Kaplow, L. and Shavell, S. 2007. Moral rules, the moral sentiments and behavior: toward a theory of an optimal moral system, *Journal of Political Economy*, vol. 115, 494–514
- Kim, K. and Antonopoulos, R. 2011. 'Unpaid and Paid Care: The Effects of Child Care and Elder Care on the Standard of Living', Working Paper no. 691, Levy Economics Institute of Bard College
- Kuronen, M., Jokinen, K. and Kröger, T. 2010. 'Social Care and Social Services', Existential Field Working Report no. 6, Family Research Centre & Department of Social Sciences and Philosophy/Social Work, University of Jyväskylä
- Levitt, S. D. and List, J. A. 2007. What do laboratory experiments measuring social preferences reveal about the real world? *Journal of Economic Perspectives*, vol. 21, no. 2, 153–74
- Lilly, M. B., Larporte, A. and Coyte, P. C. 2007. Labor market work and home care's unpaid caregivers: a systematic review of labor force participation rates, predictors of labor market withdrawal, and hours of work, *Milbank Quarterly*, vol. 85, no. 4, 641–90
- Lilly, M. B., Larporte, A. and Coyte, P. C. 2010. Do they care too much to work? The influence of caregiving intensity on the labor force participation of unpaid caregivers in Canada, *Journal of Health Economics*, vol. 29, 895–903
- MacDonald, M., Phipps, S. and Lethbridge, L. 2005. Taking its toll: the influence of paid and unpaid work on women's wellbeing, *Feminist Economics*, vol. 11, no. 1, 63–94
- OECD. 2011. *Society at a Glance: Social Indicators*, http://www.oecd-ilibrary.org/social-issues-migration-health/society-at-a-glance-2011_soc_glance-2011-en [date last accessed: 5 November 2014]
- Saraceno, C. and Keck, W. 2008. The institutional framework of intergenerational family obligations in Europe: A conceptual and methodological overview. The first deliverable of WP1 of the MULTILINKS project funded by the European Commission under the 7th framework programme, http://www.multilinks-project.eu/wp-content/uploads/2009/04/Report_Saraceno_Keck_Nov081.pdf [date last accessed: 5 November 2014]
- Seguino, S. 2007. Plus ça change? Evidence on global trends in gender norms and stereotypes, *Feminist Economics*, vol. 13, no. 2, 1–28
- Simonazzi, A. 2009. Care regimes and national employment models, *Cambridge Journal of Economics*, vol. 33, no. 2, 211–32
- Vendrik, M. 2013. 'Adaption, anticipation, and social interaction in happiness: an integrated error-correction approach, *Journal of Public Economics*, vol. 105, 131–49

Appendix

Table A1. Description of variables

Variable name	Variable codes	Variable definition and how created
Care for parent	1 if care for parent, 0 otherwise	Firstly, it was identified if the respondent cared for any individual based on the response to the questions, 'Is there anyone living with you who is sick, handicapped or elderly whom you look after or give special help to (e.g. a sick or handicapped (or elderly) relative/husband/wife/friend, etc.)?' and 'Do you provide some regular service or help for any sick, handicapped or elderly person not living with you?' Secondly, or parent-in-law was identified: respondents were asked for the relation for non-resident dependents and for co-residents the household person number was provided, from which the relationship could be identified through the egoalt records
Care for co-resident parent	1 if care for co-resident parent, 0 otherwise	Created as above but focusing only on co-resident care
Care for parent living outside household	1 if care for parent living outside household, 0 otherwise	Created as above but focusing only on non-resident care
Number of hours spent caring	Hours spent caring for parents split into under 10 hours, 10–19 hours, 20–34 hours and 35+ hours	Obtained from the question, 'In total, how many hours do you spend each week looking after or helping (him/her/them)?' Categories combined into fewer categories than the original BHPS categories
Employment status	Categories of employed, retired, family care, full-time education and sick/disabled	Obtained from the current economic activity variable <i>jbstat</i>
Hours worked	Total hours worked including usual hours (employed and self-employed), overtime and second job	Obtained from summation of variables <i>jbhrs</i> , <i>jslhrs</i> , <i>jb0t</i> and <i>jb2hrs</i>

Table A1. Continued

Variable name	Variable codes	Variable definition and how created
Hourly wage		We calculate the hourly wage rate by multiplying the reported monthly pay by 1.2/52 to convert into weekly pay and then dividing this by usual hours worked per week and adjusting the wage rates for inflation using the CPI
Predicted wage		We have estimated wage models separately for men and women, using the observed wage rates of all in employment between 1992 and 2008 and used the coefficients to calculate the predicted wages for all individuals in our sample, including those not in employment. The following explanatory variables were included in the wage equations: age, age squared, ethnicity, qualifications, social occupational classification (we use the most recent standard occupational classification group in our predictions for those not in employment), job tenure (weeks in current job, with 0 for those not in employment), job tenure squared as well as region and the wave controls
Agreement with the social care norm	Responses of strongly agree, agree, neutral (neither agree/disagree), disagree and strongly disagree	Respondents were asked in even-year waves, 'Do you personally agree or disagree with the following statement? "Adult children have an obligation to look after their elderly parents"', with answers chosen from 'strongly agree', 'agree', 'neither agree nor disagree' (we refer to this as 'neutral'), 'disagree' and 'strongly disagree'; for the odd-year waves we used the response from the previous wave
Age group	16–24, 25–34, 35–49 and 50–64 years	
Ethnicity (white)	1 if ethnicity is white, 0 otherwise	

Table A1. Continued

Variable name	Variable codes	Variable definition and how created
Religion	Categories of no religion, Christian, Catholic and other religion	Obtained from responses to the question, 'Do you regard yourself as belonging to any particular religion? If yes, which?' The waves for which this question was not asked were populated with previous responses
Live with partner/spouse	1 if live with a partner or spouse, 0 otherwise	Obtained from the variable <i>spinnhh</i> (whether living with a spouse/partner)
Log of additional monthly household income		Is equal to total monthly household income (<i>fishmm</i>) minus the respondent's total monthly income (<i>firm</i>). Income was adjusted for inflation using the CPI and household size (with adults weight 1 and children 0.5)
Age of the youngest child	Grouped into ages 0–2, 3–4, 5–11 and 12–15 years	As defined in the BHPS
Housing tenure	Categories of own home, have mortgage and rent	Obtained from the housing tenure variable <i>tenure</i>
Whether has a parent alive	1 if parent alive, 0 otherwise	In wave 2001/02 and 2006 respondents were about relatives who were alive and lived outside the household which included mother and father. Parents living in the household were identified through the BHPS relationship to other household member files
Age of eldest parent		In waves 2001/02 and 2006, respondents were asked, 'How old is your mother/father?' for living parents not in the household. Parents' ages are available from within the BHPS for those parents living in the household. The age of the eldest parent was then used in the case of both living parents
Log monthly household income		Total monthly household income (<i>fishmm</i>), adjusted for inflation using the CPI and household size (with adults weight 1 and children 0.5)
Qualifications	Higher qualifications: 1 if has first or higher degree, 0 otherwise No qualifications: 1 if has no qualifications, 0 otherwise	Information obtained from highest level of education variable (<i>qfedhi</i>)

Table A2. Attitudes to caring for parents before and after starting to care for parents aged 70+ (percentage of the sample)

	Wave before		Wave after	
	Men	Women	Men	Women
Agree strongly	8.85	5.79	9.99	6.47
Agree	44.95	33.73	43.47	33.65
Neutral	23.61	25.72	25.65	26.58
Disagree	20.2	28.88	19.18	28.36
Disagree strongly	2.38	5.88	1.7	4.94
Total	100	100	100	100
Number of observations	881	1,174	881	1,174

Notes: Attitudes are responses to the question, ‘Do you personally agree or disagree with the following statement? “Adult children have an obligation to look after their elderly parents.”’

Sample includes only those who we observe starting to care for parents and for whom we observe attitudes before and after they started to care for parents.

Since the care norm question was only asked in the even-year waves, and in the sample the answer for the odd-year waves was copied from the previous year, then depending on whether an individual started caring in a year they reported the care norm will determine whether the response before or after is the same as the year they start care. That is why we used one year before and one year after to obtain a measure of potential change in attitudes: the two responses would not have been set to be the same in the sample.

The number of observations refers to person-years.

Table A3. *Cross tabulation of attitudes to caring for parents before and after starting to care for parents aged 70+*

Previous year/year after	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Observations
Women							
Strongly agree	52.94	26.47	10.29	7.35	2.94	100	68
Agree	6.06	58.84	16.67	16.41	2.02	100	396
Neutral	2.65	19.87	50.66	24.17	2.65	100	302
Disagree	0.59	21.83	23.01	48.97	5.6	100	339
Strongly disagree	8.7	14.49	11.59	34.78	30.43	100	69
Men							
Strongly agree	52.56	37.18	5.13	3.85	1.28	100	78
Agree	10.35	64.14	13.89	10.61	1.01	100	396
Neutral	0.96	29.33	51.92	16.35	1.44	100	208
Disagree	1.12	20.22	30.34	46.63	1.69	100	178
Strongly disagree	9.52	14.29	23.81	33.33	19.05	100	21

Notes: See notes to Table A2.

The number of observations refers to individuals who we observe before and after they start to care for parents and not person-years as in Table A2.

Table A4. Multinomial logit of caring for parents: respondents with living parents aged 70+, marginal effects

	Women			Men		
	Non-carer	Co-resident	Non-resident	Non-carer	Co-resident	Non-resident
Age group (ref: 35–49)						
16–24	0.084*** (0.003)	-0.079*** (0.003)	-0.005*** (0.001)	0.046*** (0.003)	-0.040*** (0.003)	-0.006*** (0.001)
25–34	0.049*** (0.003)	-0.045*** (0.003)	-0.004*** (0.001)	0.035*** (0.002)	-0.030*** (0.002)	-0.005*** (0.001)
50–64	-0.018*** (0.004)	0.015*** (0.004)	0.003* (0.001)	-0.015*** (0.003)	0.013*** (0.003)	0.002* (0.001)
White	-0.026*** (0.009)	0.028*** (0.009)	-0.003 (0.003)	-0.01 (0.007)	0.018*** (0.006)	-0.007** (0.003)
Religion (ref: no religion)						
Christian	-0.009** (0.004)	0.007** (0.003)	0.002** (0.001)	-0.001 (0.003)	-0.001 (0.002)	0.001 (0.001)
Catholic	-0.004 (0.006)	-0.001 (0.005)	0.005** (0.002)	-0.001 (0.004)	-0.003 (0.004)	0.003** (0.001)
Other religion	-0.004 (0.007)	-0.002 (0.006)	0.006** (0.003)	-0.007 (0.007)	0.005 (0.006)	0.002 (0.002)
Live with partner/spouse	0.001 (0.005)	0.026*** (0.004)	-0.026*** (0.003)	0.008* (0.005)	0.023*** (0.003)	-0.032*** (0.004)
Log (additional monthly household income)	-0.002** (0.001)	-0.001 (0.001)	0.003*** (0.000)	-0.001 (0.001)	-0.002*** (0.001)	0.003*** (0.000)
Number of children aged 0–2	0.031*** (0.005)	-0.031*** (0.005)	0.001 (0.001)	0.009** (0.004)	-0.009*** (0.003)	-0.001 (0.002)
Number of children aged 3–4	0.013*** (0.004)	-0.015*** (0.004)	0.001 (0.001)	0.011*** (0.003)	-0.008*** (0.003)	-0.002 (0.002)
Number of children aged 5–11	0.002 (0.002)	-0.002 (0.002)	0.001 (0.001)	0.005*** (0.002)	-0.005*** (0.002)	-0.001 (0.001)
Number of children aged 12–15	-0.001 (0.003)	0.003 (0.002)	-0.002* (0.001)	0.002 (0.002)	0.001 (0.002)	-0.003* (0.001)

Table A4. *Continued*

	Women		Men	
	Non-carer	Co-resident	Non-resident	Non-carer
Housing tenure (ref: mortgage)				
Own home	-0.007* (0.004)	0.003 (0.004)	0.004*** (0.001)	0.006** (0.003)
Rent	-0.001 (0.004)	-0.002 (0.004)	0.003** (0.001)	0.005 (0.003)
Agreement with care norm (ref: neutral) at $t - 1$				
Strongly agree	-0.028***	0.023***	0.005**	0.018***
Agree	-0.013***	0.012***	0.001	0.011***
Disagree	0.010***	-0.009***	-0.001	0.001
Strongly disagree	0.010** (0.005)	-0.009* (0.005)	-0.001 (0.002)	-0.007* (0.004)
Predicted wage	-0.002 (0.005)	0.003 (0.005)	-0.001 (0.001)	0.016*** (0.004)
Observations	81,105	81,105	81,105	68,254
N care for parent	-26,948	-26,948	1,077	3,765
Log likelihood	0.092	0.092	-26,948	-17,149
Pseudo r^2			0.092	0.118

The number of observations refers to person-years.

Reported coefficients are marginal effects with other variables held at their mean.

Includes controls for wave and region.