# ORIGINAL INVESTIGATION

# Feeling the squeeze? The effects of combining work and informal caregiving on psychological well-being

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**Abstract** Does employment provide respite or add stress to caregivers? As a result of population aging and increasing female employment rates, growing numbers are facing the competing demands of paid work and caregiving. This study explores the effect of providing regular personal care by employment status on six dimensions of psychological well-being. We concentrate on partner and parent care recipients and differentiate between in-household and out-of-household caregiving. We use cross-sectional data from the Norwegian Life Course, Ageing and Generation study (n = 11,047, age 25–64). Results indicate that out-of-household caregiving has no significant relationship with men or women's well-being, irrespective of employment status. In-household caregiving, however, relates to lower psychological well-being, but only among women who do not work full-time. The advantages of fulltime employment to caregivers may be due to greater opportunity to achieve the full benefits that this role has to offer. There is little to suggest that combining work and caregiving harms well-being. In fact, a "double burden" seems to be experienced by women who combine extensive caregiving with limited employment.

**Keywords** Psychological well-being · Caregiving · Personal care · Employment · Norway

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# Introduction

Informal care plays an important role in the care services for older adults. It is estimated that on average about 80 percent of care for elders is provided by family members in Western countries (OECD 2005). In Norway, this estimate is about 50 percent, due to the comprehensive public sector (Rønning et al. 2009). Partners and adult childrendaughters in particular-represent the largest group of caregivers for older adults (Huber et al. 2009). An aging population combined with a policy of "aging in place" that supports older persons in their own homes is expected to increase the demand for informal care in Western countries (OECD 2011). Increasing budgetary restrictions may pull in the same direction. Many governments thus want to facilitate and promote informal care provided by family members—in particular, adult children (Huber et al. 2009). The pressure on adult children to provide care to aging parents may thus intensify in the future.

The plight of midlife caregivers raises concern for individuals confronted with multiple-role responsibilities. So far, research and debate around combining work and family have mainly focused on childcare; balancing work and eldercare have received little attention (Daatland et al. 2010; Gray and Hughes 2005). Yet, most carers of an older person are also in paid work (Huber et al. 2009). In Norway, 80-90 percent of 35-45 year olds who provide care for an older family member are in paid work (Daatland et al. 2010). For many female caregivers, employment is part-time (in Norway, 41 percent of employed women work part-time). Sustaining welfare state finances and services may require that more women work full-time in the future. This possibility, coupled with a growing need for informal care, may increase the number juggling work and eldercare. Moreover, greater gender equality in domestic roles may also mean that more *men* will have to balance between paid work and eldercare.

Understanding the well-being consequences of caregiving in the context of employment status is thus an increasingly important issue. Whether being in paid labor exacerbates or alleviates caregiver distress is still an open and under-researched issue, however. Academic discourse usually assumes that paid work adds stress to caregivers (e.g., Lilly et al. 2010), but so far there is little scientific basis for this claim. If the combination of paid work and caregiving is a "double burden" that harms health and well-being, then there could also be costs for society at large—for example, in terms of decreasing productivity and increasing work absence, disability, and health-care services. Also, very little known about whether part-time work has the same effects as full-time work.

There are a number of other gaps in the caregiving literature. For example, the majority of studies (i) utilize small, purposive samples of caregivers; (ii) do not include men; and (iii) do not differentiate between different kinds of caregiving—different care recipients; different chores; and different care intensities (regular/frequent versus irregular/infrequent). Another often overlooked factor that may influence patterns and effects of informal caregiving is co-residence. Co-resident carers may provide more intensive care and have higher normative obligations to provide care. At the same time, they receive less formal support and have less opportunity to "escape" from caregiving than nonresident carers (Tennstedt et al. 1993).

Furthermore, the existing literature on caregiving is largely based on the U.S. Because work-family impacts may vary according to institutional and cultural context, more non-U.S. research is necessary. Caregiver distress and workfamily conflict may be lower in countries where public support for care-intensive recipients is generous and readily available. To a large degree, this is the case in Norway. The Nordic countries are characterized by universal and relatively comprehensive public care services (Hvinden, 2010). Hence, intensive caregiving from family members is largely voluntary and generally combined with assistance from public care services. Caregivers may thus feel that support is available should they feel overwhelmed. Also, it is mainly the practical help and the emotional support that are informally provided. Personal care attention (e.g., help with dressing, bathing, and eating) are usually the responsibility of the public services in Norway. In addition, employee rights are more generous in Norway than in most other countries (Chung and Tijdens 2013), which may make it less burdensome to combine work and care. Even though there are no special arrangements to facilitate workers in their caring for a frail partner or parent, employee rights and arrangements that apply to all employees can make it easier to manage such a squeeze (Gautun and Hagen 2010).

In addition, most studies have been limited by their scope of dependent variables, thus missing the complexity of the psychological effects of caregiving. Studies tend to focus on only one or two aspects of psychological wellbeing, typically the measures of psychological distress. Psychological well-being can be conceptualized as comprising both a cognitive and an affective component (Diener et al. 1999). The cognitive component usually refers to life satisfaction, which is an overall assessment of one's quality of life compared to various standards, such as their earlier lives, expectations, and the expectations of significant others (ibid.). Caregiving may thus depress positive self-evaluations because it usually represents a disruption of the expected and desired life course. Caregiving may also require a significant commitment of time and energy and entail major changes to roles and the relationship, which in turn may lower life satisfaction. On the other hand, caregiving entails opportunities for belonging, helping others, and receiving favorable feedback, which may promote positive self-evaluations. Affective well-being is usually divided into positive and negative affects (cf. Hansen 2010). Positive affect refers to the expression of positive emotions such as joy and excitement. Happiness can be conceptualized as a global measure of positive affect (ibid.). Negative affect refers to unpleasant emotions such as sadness and fear. Depression is a mental health construct that refers to lowered mood, loss of interest, self-deprecation, and hopelessness (Bowling 2005). It can be conceived as a general measure of psychological distress or negative affect (Mirowsky and Ross 2003). Caregiving may increase psychological distress because it generates more daily problems, stress, and worries. The effect of caregiving on positive affect is less clear. Caregiving may deplete energy and vitality; yet many caregivers report that caregiving promotes feelings of fulfillment and pride (Toljamo et al. 2012). Loneliness is defined as an unwelcome feeling of lack or loss of companionship, support, and intimacy (Bowling 2005). Caregivers may be susceptible to loneliness because they are restricted from pursuing social activities, or because they actively withdraw from social contact in response to the care recipient's situation (Toljamo et al. 2012).

# The well-being consequences of caregiving

A voluminous multidisciplinary literature has accrued in relation to family caregiving and its consequences for caregivers over the recent decades (for a useful review, see Pinquart and Sörensen 2011). Two meta-studies of 228 (mostly the U.S.) papers examine relationships between caregiving and well-being (Pinquart and Sörensen 2003a, b). The studies show, first, that researchers typically do not distinguish different types of caregiving but rather combine all forms of assistance to persons in need of help because of poor health. Further, the studies show that caregiving is related to reduced subjective well-being and more depression and psychological distress. There is marked betweenstudy variability in these effects, which may reflect the fact that most studies are based on limited, nonrepresentative convenience samples. Moreover, caregiving typically has more adverse emotional impact on women, perhaps because women provide more care in general and more personal care especially (ibid.).

Our own previous research, employing the same dataset as used in the current paper, suggests that the effects of providing regular personal care vary depending on gender and whether the caregiver shares a household with the care recipient. Providing regular personal care to a *partner* is associated with adverse effects across psychological outcomes (life satisfaction, depression, and loneliness) both cross-sectionally and longitudinally and for men and women alike (Hansen and Slagsvold 2013). Providing such care to a *live-in parent* has the same adverse effects, but only among women. Providing regular personal care to an *out-of-household parent* is largely unrelated to well-being (Hansen et al. 2013).

Blending the caregiving role and the employment role

Different bodies of theoretical and empirical work offer conflicting views on whether being in paid work is beneficial or harmful to caregivers' well-being. According to role conflict theory (see Biddle 1986), conflicting expectations and demands that accompany different roles may lead to poorer physical and mental health. Indeed, employed caregivers report a number of ways in which caregiving responsibilities have negative impacts on their work, such as time lost from work, decreased productivity, missed career opportunities, unpaid leaves of absence, early retirement, and decreased lifetime earnings (Edlund 2007). Similarly, in a Norwegian study of working parental caregivers aged 45-66, 57 percent reported problems in combining employment and care for older parents during the previous year, with 20 percent absent from work for a certain period for this reason (Gautun and Hagen 2010). The most frequently reported effects of care obligations on their work were irregular attendance at work, poor concentration, and being prevented from participating actively in social and career-promoting activities. In a Canadian survey, virtually all employed caregivers state that the need to balance between work and eldercare have negatively affected their mental health-causing worries, anxiety, stress, and depressive symptoms. One in four also reports that the demands placed on them by the two roles mean that they have little time for themselves. Almost threequarters of the employed caregivers note that their working role has caused them challenges at home—for example, that their family and home life has suffered from a lack of time and/or energy (Duxbury et al. 2009).

Women have been found to be more likely than men to experience conflict between work and family care responsibilities (Fredriksen and Scharlach 1999). This difference may be a result of the unequal division of family responsibilities and sex role expectations and socialization (ibid.).

A different perspective argues that being involved in multiple roles can be beneficial to subjective well-being. This perspective is variously referred to as role enhancement, role accumulation, or social roles theory (Sieber 1974; Thoits 1983). Juggling work and caregiving roles may be beneficial because of positive spillover effects between roles. For example, adding the worker role may be beneficial because it provides financial resources, social support, and increased self-esteem and sense of competence, which may enhance well-being in the caregiver role (Barnett and Hyde 2001). Conversely, satisfying or rewarding aspects of the caregiver role, such as increased sense of mastery or self-esteem, could help one to offset the effects of stress at work. Furthermore, if strain is experienced in one role, this may be alleviated by success in another, or one role may offer respite from more stressful roles. For example, work may provide caregivers with respite from stress at home. Supportive evidence for the role-enhancement perspective comes from an emerging literature indicating that employment can be beneficial to the well-being of informal caregivers. The U.S. data show that employed caregivers tend to experience less caregiver strain and better mental health and well-being than their nonemployed counterparts (Coughlin 2010). The level of work involvement may also matter. In a U.S. study of 118 employed women, greater time in work was found to buffer women from the negative effects of caregiving stress: greater caregiver stress was associated with poorer physical health, greater depression, and less positive affect among women with a low number of working hours (<27 h/week) and not among women with a high number of working hours (>45 h/week) (Martire et al. 1997).

The current study addresses the aforementioned gaps in the caregiving literature in the following ways: it examines how work and caregiving interact to affect well-being; it utilizes a large Norwegian population sample that includes both caregiving and non-caregiving men and women; it provides contrasts between in-household (spousal or parental) and out-of-household (parental) caregiving; and it examines several positive and negative well-being indicators. It also focuses specifically on personal care, which, compared to practical and emotional support, is more intimate and comprehensive, and may impose greater individual costs (Borg and Hallberg 2006). The main objective is to explore the relationship between providing regular personal care and life satisfaction, happiness, positive affect, negative affect, depression, and loneliness, in the context of employment status and separately for men and women.

# Methods

### Data

This paper is based upon cross-sectional data from the Life-Course, Generations and Gender (LOGG) study, comprising a nationally representative population sample aged 18–84 (n = 15,109) (Slagsvold et al. 2012). Data were collected in 2007/8 through (computer-assisted) telephone interviews and postal questionnaires (combined response rate 43.2 percent). Data from public registries were added with the respondents' informed consent. LOGG is part of the international Generations and Gender Study. The paper uses the age group: 25–64 (n = 11,047).

#### Dependent variables

This study uses six well-established measures of psychological well-being. Unless otherwise noted, all items and scales range from 1 (low) to 5 (high). Life satisfaction is measured by Pavot et al.'s (1991) five-item Satisfaction With Life Scale (e.g., "I am satisfied with my life",  $\alpha = 0.76$ ). *Happiness* is measured with one item from the depression scale (see below) ("I felt happy"). Positive affect and negative affect are measured by a 12-item version of the Positive and Negative Affect Schedule (Watson et al. 1988), which comprises six positive emotions (excited, enthusiastic, alert, inspired, determined, interested;  $\alpha = 0.83$ ) and six negative emotions (worried, upset, scared, irritable, nervous, afraid;  $\alpha = 0.82$ ). Respondents were asked to indicate to what extent they have felt these emotions during the last two weeks. Depression is measured with the 20-item Center for Epidemiologic Studies Depression Scale (Radloff 1977). Respondents were asked to indicate on a four-point scale (0-3) how often they felt sad, depressed, "that my sleep was restless," "that my life has been a failure," etc., during the previous week  $(\alpha = 0.83)$ . Loneliness is measured by eight items from the de Jong-Gierveld and van Tilburg's (1999) Loneliness Scale (e.g., "I miss having a really close friend,"  $\alpha = 0.81$ ). All the above outcome measures are widely used and show good psychometric properties, including validity, internal consistency, and test-retest reliability (for a review, see Hansen 2010). We have tested for high intercorrelations between dependent variables, but no variables correlate over 0.60 (average |r| = 0.29).

#### Independent variables

Caregiving (provision of personal care) is measured by the question: "Have you during the past year given regular help with personal care to someone you do/do not live with. Help with, for example, eating, getting out of bed, dressing, or using the bathroom." We focus on those who have provided care to a partner or a resident or nonresident parent (or parent-in-law). Only few resident parental caregivers live with the care recipient full-time.

Information about gender, age, education, resident children (under age 18) and partnership status (0/1) is gathered from public registers. *Education* has three levels: low (primary), medium (secondary), and high (college/ university). Health is measured with the physical component of the 12-item Short Form Health Survey (SF-12) (Ware et al. 1996). Employed individuals are those who report that they participate in paid work for at least one hour per week. The split between full-time and part-time is based on a self-reported measure ("Is this full-time or parttime work?") rather than on reported work hours per week, because of the low response rate in the latter measure. When performing all the analyses using the latter measure and defining 1-20 h as part-time, the results are almost identical to those presented below. Average work hours (SD) among full-time and part-time employed men (age 25-64) are 43.0 (8.8) and 19.5 (8.3), respectively. Among women, these numbers are 39.6 (5.8) and 23.3 (7.4).

# Analytic strategy

All multivariate analyses use ordinary least squares (OLS) regressions for reasons of familiarity and ease of interpretation. Using OLS regression when the dependent variable is ordinal may be problematic, as it violates the assumption of interval level data. We thus performed all the analyses using an ordinal-probit model (ancillary analyses), and the results were almost identical to those using OLS regression. We use analyses of covariance (procedure General Linear Model in SPSS) to calculate adjusted means (presented in figures).

Caregivers are compared with all non-caregivers, irrespective of whether they have a partner or a living parent. We also performed all the analyses using dummies (e.g., *partner* caregiver) with specific reference groups (e.g., *partnered* non-caregivers), and the focal results (the effects of work-caregiving interactions) were almost identical to those using the three-level categorical variable (in-household caregiver, out-of-household caregiver, non-caregiver).

To increase analytic power, we have merged (i) parttime work and non-employment among men, because very few male caregivers work part-time (see Table 1); and (ii) partner caregiving and in-household parental caregiving

	Men					Women				
	Caregivers			Non-caregivers	Total	Caregivers			Non-caregivers	Total
	Partner	Parent in-hh	Parent in-hh Parent out-of-hh			Partner	Parent in-hh	Parent in-hh Parent out-of-hh		
Age	49.1 (11.7)	49.1 (11.7) 46.7 (11.5)	48.5 (8.5)	45.1 (11.1)	45.2 (11.1)	50.7 (10.5)	49.3 (8.4)	49.1 (8.7)	44.5 (11.0)	44.8 (10.9)
Low education (%)	16.7	34.6	13.6	15.6	15.7	28.3	22.9	20.7	15.8	16.2
High education (%)	30.6	30.8	32.2	34.6	34.5	35.8	41.1	37.9	43.7	43.5
Partnered (%)	100	57.7	84.7	75.5	75.9	100	58.9	81.7	73.4	73.8
Children in hh. (%)	65.8	45.1	63.6	53.0	53.4	46.3	51.8	59.4	56.8	56.8
Employed (%)										
Full-time	74.0	80.8	84.7	82.6	82.5	42.6	48.2	48.0	55.7	55.2
Part-time	6.8	0.0	4.2	5.5	5.5	35.2	26.8	38.0	27.8	28.3
Not working	19.2	19.2	11.0	11.9	12.0	22.2	25.0	14.0	16.5	16.5
Health	47.4 (9.6)	46.5 (11.2)	50.2 (9.6)	50.0 (9.3)	49.9 (9.3)	43.6 (13.2)	47.3 (9.9)	48.6 (9.9)	47.6 (11.1)	47.6 (11.1)
N (%)	73 (1.4)	26 (0.5)	118 (2.2)	5,175 (96.0)	5,392 (100.0)	54 (1.0)	56 (1.0)	229 (4.0)	5,316 (94.0)	5,655 (100.0)

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u c (merged into "in-household caregiving"), because (a) the effects of these two forms of caregiving on well-being are fairly similar, and (b) both forms of caregiving interact with employment status in a similar manner.

Analyses are run separately for men and women, with control for the potentially confounding influences of age, education, children, and partnership status (single vs. cohabiting/married). We also control for health, as some people may choose not to work or be prevented from working because of their health. These factors correlate with well-being (yet differently so according to outcome) and with caregiver status (see Table 1).

# Results

Table 1 describes the sample of caregivers and non-caregivers on sociodemographic variables and health. In the ages 25–64, 1.4 percent (n = 73) of men and 1.0 percent (n = 54) of women provide regular personal care to a partner. Half a percent of men (n = 26) and 1.0 percent of women (n = 56) provide regular personal care to a live-in parent, and 2.2 percent of men (n = 118) and 4.0 percent of women (n = 229) provide this care to a non-resident parent. Partner caregivers are generally somewhat older (p < 0.01) and lower educated (significant only among women; p < 0.05) than other groups. Resident parental caregivers are less often partnered than other men and women (p < 0.01). The likelihood of having resident children does not vary significantly between groups. Among women, partner caregivers and resident parental caregivers are more often not in paid work (p < 0.05), and nonresident parental caregivers more often work part-time (p < 0.05) than other women. Health status differences are only significant among women: female partner caregivers are in somewhat poorer physical health than other women (p < 0.05). No other differences are significant (p < 0.05).

In Table 2 (men) and Table 3 (women), six aspects of well-being (life satisfaction, happiness, positive affect, negative affect, depression, and loneliness) are regressed on employment status, caregiver status, and interactions between employment and caregiver status (and controls). Table 2 shows that, among men, being (full-time) employed relates to higher well-being. Caregiving, however, both in the home and outside of the home, is unrelated to men's well-being. These relationships are unaffected by employment status.

Table 3 shows that employment has similar effects on women's well-being as on men's. Furthermore, women's well-being is positively related to increasing work hours. Part-time employed women fare better than nonworking women but worse than full-time working women. Among women, providing regular personal care to a *nonresident* 

Table 2 Regressing indicators of well-being on caregiver status and interaction terms with controls for sociodemographic background variables

	Life satisfaction	Happiness	Positive affect	Negative affect	Depression	Loneliness		
Full-time employment <sup>a</sup>	0.22 (0.13)**	0.20 (0.10)**	0.13 (0.08)**	-0.13 (-0.08)**	-0.16 (-0.09)**	-0.22 (-0.12)**		
Caregiver status <sup>b</sup>								
In-hh caregiver	-0.06 (-0.02)	-0.07 (-0.02)	0.11 (0.03)	0.01 (0.00)	0.01 (0.00)	0.07 (0.02)		
Out-of-hh caregiver	0.01 (0.00)	0.13 (0.03)	0.04 (0.01)	0.01 (0.00)	0.01 (0.00)	-0.06 (-0.02)		
No significant interaction terms between caregiver status and employment status								
$\Delta R^{2c}$	0.03	0.02	0.02	0.02	0.02	0.03		
$R^2$	0.10	0.05	0.06	0.04	0.07	0.07		

Age 25–64. Unstandardized ( $\beta$ ) regression coefficients. Men (n = 5,392). All dependent variables range from 1–5, except happiness and depression (1–4)

\* p < 0.05, \*\* p < 0.01

Reference categories are "Not in paid work, part-time work

<sup>b</sup> Non-caregiver. Control for age, education, partner, children, and health. Presented main effects of caregiver status and employment status are calculated before including interaction terms in the model

<sup>c</sup> Variance explained by employment, caregiving, and interaction terms beyond the effect of controls

Table 3 Regressing indicators of well-being on caregiver status and interaction terms with controls for sociodemographic background variables

	Life satisfaction	Happiness	Positive affect	Negative affect	Depression	Loneliness		
Employment status <sup>a</sup>								
Part-time	-0.04 (-0.02)	-0.02 (-0.01)	-0.13 (-0.03)**	0.01 (0.01)	0.03 (0.02)*	0.05 (0.03)*		
Not in paid work	-0.26 (-0.12)**	-0.06 (-0.02)	-0.13 (-0.03)**	0.14 (0.07)**	0.16 (0.09)**	0.26 (0.14)**		
Caregiver status <sup>b</sup>								
In-hh caregiver	-0.11 (-0.03)*	-0.19 (-0.05)*	0.09 (0.02)	0.13 (0.04)*	0.15 (0.04)**	0.13 (0.03)*		
Out-of-hh caregiver	0.00 (0.00)	-0.02 (-0.01)	0.07 (0.01)	0.04 (0.01)	0.03 (0.01)	-0.00 (-0.00)		
Interactions <sup>c</sup>								
In-hh cg. × part-time	-0.36 (-0.04)**	-0.35 (-0.03)*	-0.21 (-0.01)	0.31 (0.03)*	0.29 (0.02)*	0.27 (0.03)*		
In-hh cg. $\times$ non-work	-0.20 (-0.02)*	-0.35 (-0.04)*	-0.04 (-0.00)	0.35 (0.03)*	0.22 (0.02)*	0.20 (0.03)*		
No significant interaction terms between out-of-household caregiving and employment status								
$\Delta R^{2d}$	0.04	0.03	0.02	0.02	0.04	0.04		
R <sup>2</sup>	0.12	0.06	0.07	0.04	0.09	0.09		

Age 25–64. Unstandardized ( $\beta$ ) regression coefficients. Women (n = 5,655). All dependent variables range from 1–5, except happiness and depression (1–4)

\* p < 0.05, \*\* p < 0.01

Reference categories are anot in paid work

<sup>b</sup> Non-caregiver

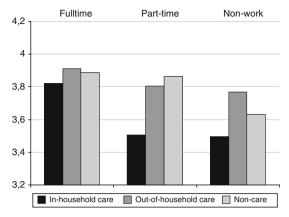
<sup>c</sup> Full-time, in-household caregiver. Control for age, education, partner, children, and health. Presented main effects of caregiver status and employment status are calculated before including interaction terms in the model. Variance explained by employment, caregiving, and interaction terms beyond the effect of controls

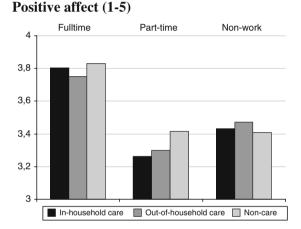
*parent* is unrelated to all aspects of well-being. Providing regular personal care to a *partner or a resident parent*, however, is associated with poorer life satisfaction and happiness, and more negative affect, depressive symptoms, and loneliness, yet it is unrelated to women's positive affect.

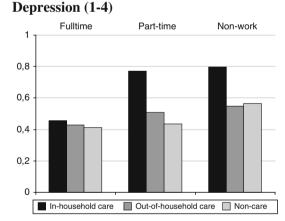
Furthermore, among women, no interaction term between *out-of-household caregiving* and employment status is significant. Caring for a *partner or resident parent*, however, has adverse psychological effects among women who do not work full-time. Adjusted levels of well-being by caregiving and employment status among women are presented in Fig. 1. As shown, women's well-being is rather stable by caregiver status among the full-time employed. Well-being is relatively low, however, among women who provide in-household personal care and at the same time are not employed full-time.

The relationships between working hours and wellbeing among resident female caregivers do not seem to be

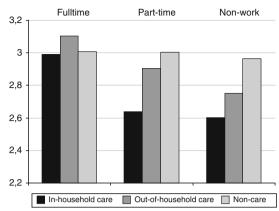
# Life satisfaction (1-5)



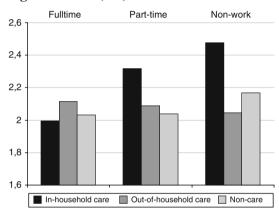


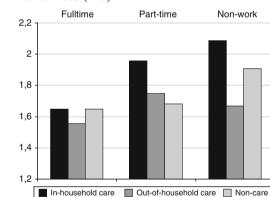


# Happiness (1-4)



# Negative affect (1-5)





# Loneliness (1-5)

Fig. 1 Mean levels of psychological well-being by caregiving and employment status, controlling for age, education, partner, children, and health. Women (n=5655)

explained by adaptations of working hours to caregiver burdens. Less than 5 percent of caregivers report that they work part-time or have quit work *because* of caregiving responsibilities (not shown). This is consistent with other analysis of the same data, which find no relationship between caregiving and the probability of being employed, work hours, and income (Kotsadam 2012; see also Jakobsson et al. 2013). We explored in an ancillary analysis the other reasons for not working full-time, and failed to find significant differences by caregiver status.

A different possible caveat is that caregivers who work full-time have less impaired care recipients, provide less care, are less often mainly or solely responsible for ensuring care, or receive more paid or public assistance with caregiving. Due to the lack of measurement of other factors, we could only explore whether full-time employed women provide less frequent care than other female caregivers. We find that female *partner* caregivers provide somewhat less frequent care (15.4 h/week) if they work full-time than if they work part-time (19.5 h) or do not work (17.6). However, female *parental* (resident or non-resident) caregivers provide similarly frequent care whether they are full-time or part-time employed, yet less frequent than their nonemployed counterparts. Overall, differences in the frequency of care between focal groups are not large, and caregiver-employment interaction effects are largely similar before and after control for frequency of care (not shown).

# Discussion

Although the consequences of combining work and caregiving are an increasing concern to researchers and policymakers, little research has examined how work and caregiving interact to affect well-being. This study explores the effect of providing regular personal care on multiple aspects of well-being by employment status. We use nationally representative data of Norwegians aged 25–64 and distinguish between in-household caregiving (to a partner, parent, or parent-in-law) and out-of-household caregiving (parent or parent-in-law). Among women, we compare three employment groups: not in paid work, parttime, and full-time. Among men, because few men work part-time, we merge the not employed and the part-time employed and compare them with the full-time employed.

*Out-of-household caregiving* is unrelated to men and women's well-being. This holds across employment status groups and all measures of well-being. The lack of interaction effects for the combination of caregiving and employment roles suggests that it is not a major problem for Norwegians' well-being to combine employment with providing personal care—perhaps the most challenging aspect of aged care—to a nonresident older parent.

In-household caregiving is associated with lower wellbeing among women but not among men. This gender difference is in line with the literature and suggests that even in a country ranking high on gender equality, women still take on more demanding caregiving responsibilities than do men. What is more, among women, in-household caregiving has different effects according to employment status. More specifically, the effects only emerge among women who work reduced hours or do not work outside of the home. Among full-time employed women, caregiver status is unrelated to any aspect of well-being. These findings are not accounted for by group differences in health or frequency of caregiving. It thus seems that assuming a demanding caregiving role decreases women's well-being, but not if they are full-time employed.

With some exceptions, the findings are fairly consistent across the different aspects of well-being. This demonstrates that employment and resident caregiving have broad-based impacts on people's lives. Findings also show that effects of caregiving employment *interactions* are quite stable across different dimensions of well-being. Yet significant effects appear to be very small and thus easy to treat as substantively insignificant. However, since about half of the variance in subjective well-being measures seems to be accounted for by genes and personality and only about 10–15 % of the variance typically can be explained by objective circumstances (for reviews, see Diener et al. 1999; Hansen 2010), the small significant effects of caregiving on well-being is nevertheless substantively interesting.

It should be acknowledged that, although providing personal care demonstrates few significant effects on global measures of well-being, it may affect more specific aspects of well-being-and differently so according to employment status. Indeed, a large literature shows that it is quite common for working caregivers to report work absenteeism and decreased productivity due to caregiving duties, and that the need to balance work and eldercare has caused them worries, anxiety, and stress (Duxbury et al. 2009; Edlund 2007; Gautun and Hagen 2010). Such implications may reflect the pressures of an employment structure not organized to facilitate employees' fulfillment of family-care responsibilities (Marks 1998). However, these stresses do not seem to affect global aspects of wellbeing, except among women who provide personal care in their home.

Why does full-time employment seem to benefit female resident caregivers? We do not know whether the negative emotional impact of caregiving is due to the care work itself or to the impact of having an ill or disabled family member (in the household). Regardless, a high level of work involvement seems to moderate these psychological effects. The advantages of full-time employment for women providing personal care in their home are consistent with a U.S. study showing that women working a greater number of hours are buffered from the adverse effects of caregiving stress (Martire et al. 1997). These findings may reflect that full-time employment provides greater opportunity to benefit from all that the role has to offer, including commitment and engagement, higher pay, and greater career prospects (Edlund 2007). Time spent away may also provide women with much-needed respite or distraction from the responsibilities of caregiving. An advantage of full-time over part-time work may also stem from the greater social and psychological resources it provides. However, the possible benefit of full-time work for caregivers needs to be confirmed in longitudinal studies.

Any comparison of the predictions of role conflict theory versus role enhancement theory obviously depends on the type of roles in questions and the level of involvement in those roles. The current study indicates that the combination of high work involvement and intensive caregiving has few implications for global well-being. Because working caregivers do not seem to experience a "squeeze" that decreases global well-being, there is little in this study to support the arguments of role conflict theory.

However, this notion comes with several caveats. The cross-sectional design does not allow conclusions about causal effects. Full-time employed caregivers may fare better due to role enhancement, but at the same time it can be a selection effect whereby the "happiest" caregivers stay in full-time jobs. Interpretive caution is also warranted because of the limited sample of carers. If the magnitude of a population effect is low to medium, then the effect may not be detectable in small samples due to large random sampling errors (Rosenthal 1991). In addition, as mentioned, we cannot rule out the possibility that full-time working caregivers have care recipients with lighter care needs or more often share the care responsibilities with family members or the public services than other caregivers. However, the fact that full-time work moderates the effect of resident caregiving on well-being even after controlling for frequency of care, supports that the beneficial effects of full-time employment are due to the greater amount of respite and resources gained.

The results may also be specific to the Nordic context, due to certain characteristics of the Nordic welfare system. The strain of working caregivers may be lower than in other countries because a wide range of supports are available to and affordable for overwhelmed caregivers; the most care-intensive recipients are usually taken care of by the state; and due to more worker-friendly conditions (Chung and Tijdens 2013; Gallie 2003). The results should nonetheless be of interest to researchers and decision makers in this field because they may shed light on the moderating role of different welfare and long-term care regimes on the psychological effects of caregiving. Also, the fact that our findings confirm those of the U.S. studies, showing that employed caregivers tend to experience better mental health and well-being than their non-employed counterparts (Coughlin 2010), may imply that our results have broader generalizability and applicability.

In conclusion, while lay and scholarly perspectives alike tend to depict the combination of paid work and caregiving responsibility as a "double burden," we find little empirical support for this claim. In fact, when we examine the most demanding form of caregiving—the provision of regular personal care—it seems to have little impact on global well-being, irrespective of employment status. The exception is that women who provide personal care in their own home report lower well-being than other women. What is more, this impact seems to disproportionately affect women who do not work outside of the home or who work part-time. Hence, a "double burden" seems to be experienced by women who combine demanding caregiving duties with low employment. Overall, the findings suggest that, at least in strong welfare states, combining employment with providing personal care to a family member is not a major problem for people's well-being.

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