# ORIGINAL INVESTIGATION

# Norwegian sandwiches

On the prevalence and consequences of family and work role squeezes over the life course

Svein Olav Daatland · Marijke Veenstra · Ivar A. Lima

Published online: 21 September 2010 © Springer-Verlag 2010

Abstract Population ageing changes profoundly the current balance between generations. Governments are responding with policies to promote later retirement and family care, but these ideals may come in conflict in mid-life when family obligations can be hard to reconcile with employment. Yet we know little about the prevalence of being "sandwiched", and even less about the consequences. This article maps out the prevalence of different forms of family and work sandwiching for the Norwegian population, and explores adaptive strategies and psycho-social outcomes. The analyses are based on data from the NorLAG and LOGG studies (n = 15 109, age 18–84). Preliminary findings indicate that 75-80% of the population are located in-between younger and older family generations in midlife, the great majority are at the same time in paid work, but comparatively few (8-9% aged 35-45) have both children and parents in need at the same time, and fewer still (3%) are then also caregivers to older parents. Although few in proportion of their age group, they add up to a considerable number of persons. Women are more likely to reduce work in response to family needs than men. Implications of family and work sandwiching for health and well-being are analysed.

**Keywords** Multiple roles · Family and work · Generations · Life-course · Subjective well-being

Communicated by Hans-Werner Wahl.

#### Introduction and research questions

Population ageing changes profoundly the current balance between generations in developed countries. Governments are responding by policies to promote active ageing (i.e. later retirement) and intergenerational solidarity (i.e. family care), but these goals may be hard to reconcile when they are brought together in mid-life. Work must then be balanced against family obligations to parents or children, in some cases to both. Growing employment rates among women have changed the distribution of time between work, family and leisure and thereby challenged traditional gender roles. In sum, these developments may have increased the risk for conflicting family and work obligations in mid-life.

Research about the implications of work and family conflicts has traditionally focused on how to enable younger women to combine motherhood and a working career. Supportive policies have in some countries helped women, and indeed parents of both sexes, to combine employment and family life. The so-called woman-friendly Scandinavian welfare state is a case in point, as it is said to allow both high employment and high fertility (Leira 1993; Siim and Bochurst 2005). The demographic transition has, however, produced concerns about the reconciliation of work and family obligations later in life, including responsibilities both up (parents) and down (children) generations (Evandrou et al. 2002; Grundy and Henretta 2006; Spitze et al. 1994). We know less about these mid-life configurations, which is why the present article focuses on the following research questions: (1) To what extent, when and how, are people caught ("sandwiched") in-between family and employment? (2) How do they adjust their labour-market attachment under these circumstances, and (3) What are the implications for subjective well-being? The questions are

S. O. Daatland (⊠) · M. Veenstra · I. A. Lima Norwegian Social Research (NOVA), P.O. Box 3223, Elisenberg, 0208 Oslo, Norway e-mail: sod@nova.no

explored with reference to the Norwegian case, but may have more general relevance as this country was early in the demographic transition and in including women into the labour market, and is therefore pointing towards a plausible future scenario for many other countries.

#### **Earlier studies**

Elaine Brody (1981) suggested "woman-in-the-middle" as a metaphor for the modern, middle-aged woman. She is not only in the middle of her own life; she is also located inbetween generations, and then often sandwiched between demands from both sides. Many women are also caught inbetween contrasting ideals, between the career women and the family person. Middle-aged men are located in the middle too, but in a more technical sense, because the family expects less from men, and men are likely to feel less obligated towards the family. Men are therefore not squeezed between the two worlds in the same way as women are, according to Brody.

Brody, and later on Phillips et al. (2002), was mainly interested in the consequences of family and work role conflict, not how common or uncommon the phenomenon is. They therefore used case studies and small-sized samples of women in this form of predicament. Larger surveys have later found that the classical in-the-middle position between parents and children in need of support, is in actual fact not very common, and is likely to be a short intermezzo for those concerned (Pierret 2006; Künemund 2006). Older parents tend to come in need when children are already grown-up and self-sufficient, and they (parents) are normally in good health and a source of support more than a burden when own children are small and in need of supervision, for example from their grandparents.

The prevalence and implications of various family and work role configurations are likely to vary between countries because demographies are different and so also are employment rates, workers' rights, and gender roles. Ursula Henz (2004) for example finds that family carers are likely to be recruited among non-workers in the UK, and when recruited, they are likely to quit or reduce work if and when they become carers. Similar patterns were found for the Netherlands, but not for the USA, where employment and caregiving were found to be positively related, perhaps in order to compensate for high costs for nursing care in this country.

The findings illustrate the potentially different character of multiple family and work roles. Most studies assume the relationship to be negative, concludes Henz (2004). This is given a theoretical formulation in the role strain hypothesis (Goode 1960), and is phrased more generally in common sense simply as a time squeeze. A negative relationship is also implied in Brody's concept and descriptions of women-in-the-middle.

The relationship between work and family need not, however, be one of conflict, and may in contrast be a source of enrichment or comfort (Greenhaus and Powell 2005). The positive aspects of multiple roles are emphasised in the role enhancement hypothesis (Marks and McDermid 1996) and by role accumulation theory (Sieber 1974; Thoits 1983). The benefits of multiple roles are assumed to buffer the stresses of combining them. Positive experiences in one domain may spill over on the other (Staines 1980), like when you take the spirit from a good day at work back home with you. Multiple roles (Marks 1977), and more complex selves (Linville 1987), thus help you manage daily troubles better. Gender studies have tended to support the latter position; the work-place may for example serve as a haven away from home. Ageing studies, in contrast, have tended to focus on the stresses of caregiving and multiple roles.

One could argue that the perceived stress of a role or a role combination lies not in the role obligations themselves, but in the extent to which they are expected or not. When roles are regulated according to age, role transitions may be on or off time, and become a source of stress if one is not accommodating to the norm (Neugarten and Hagestad 1976). If so, persons who become family carers earlier or later than usual, may come to experience more conflict between family and work than those that are on time. The present study does not include the information needed to explore this hypothesis, but some indication might be found in future studies by comparing cohorts and countries under the assumption that age norms may have become less strict over time, and may be less strict where family norms are weaker and gender roles more equal.

As for empirical findings, a recent Norwegian study on a sample of caring workers aged 45–66 years found about half of them reporting problems in combining employment and care for older parents, while 20% had been absent from work for a shorter or longer period for this reason. Only few did, however, leave work (retired) in response to the perceived squeeze, but women (daughters) were more inclined to reduce their working-hours than men (sons) were (Gautun 2008).

Harald Künemund (2006) moved the research in this area a step forward when he distinguished different levels of sandwiching, starting with the broadest possible definition which only took the generational position into account, i.e. to be located between (living) parent(s) and child(ren). This group was then stepwise narrowed down with additional criteria, first by accepting only those who provide care to a parent, and next only those who provide care to both parents and children. The final step included only the active workers among them. These definitions provided very different versions and prevalences of the sandwich phenomenon. Three out of four of the German population aged 40–50 were found to be located in-between older and younger generations, but the prevalence declined rapidly beyond this age. The proportion that also provided care to an older parent peaked at 12% around 50, while only 3–4% provided care to both children and parents at the same time, and even fewer were then also in paid employment. Charles Pierret (2006) did a similar exercise based on a large US study, and calculated the prevalence for "working carers" to be between 1% and one-third of US women aged 45–56 according to different definitions, but the findings are in the Pierret study biased by the inclusion of both social and financial support as "care".

## Approach

This article adopts a similar procedure as that suggested by Künemund, and here employed on a large national sample of the Norwegian population. This allows us to map out how frequent or infrequent various types of sandwiching are at different ages. We then include all the different forms of in-between positions (sandwiching): those between older and younger generations, between family and work, and a combination of the two. The study also includes family obligations both up and down generations, and assesses the interrelationships of family obligations with employment and subjective well-being. The respondents were not asked specifically to state their perceptions about how these circumstances influenced their lives. As such it uses an *indirect* approach to studying the implications of sandwiching.

#### Methods and measurements

## The study

The data are selected from the joint NorLAG and LOGG studies with a large national sample (n = 15,109) aged 18–84. The Norwegian Life-course, Ageing and Generations Study (NorLAG) had its first wave of data collection in 2002–2003. The second wave was carried out in 2007–2008, jointly with the first wave of the Norwegian Generations and Gender Study (GGS). This joint effort is the Life-Course, Generations and Gender Study (LOGG) and is the basis for the findings in this paper.

Response rates were 60% for the telephone interview, and 71% for the postal questionnaire follow-up, a total response rate of 42% for the respondents that answered both. The data file also includes individual and contextual data from public registries. The findings reported here refer partly to the interview, and partly to the postal questionnaire, and thus to samples with response rates between 42 and 60%. More details about the design and sample are available in Lagerström et al. (2009).

The study includes detailed data about family roles and relationships, which allow us to construct different levels of family and work obligations, including sandwich positions between generations and between family and employment. Parents and children of the respondents are not interviewed themselves. Data about them are collected through the respondents.

## In-between generations

The in-between generations variable refers to respondents who have both child(ren) (including stepchildren in the household) and parent(s) alive (not including parents-inlaw or step-parents).

## Children in need

Children are defined as in need if they are minor (0–9 years) and/or have a chronic health problem. The variable "minor or ill children" includes therefore children, including step-children, between 0 and 9 years or children with a longstanding illness (any age), who are living in the household. Longstanding illness is reported by the respondents and includes both physical and mental illness. Respondents (parents) are not asked if they help these children; we simply assume that this is the case. A broader definition of needs includes children up to the age of 18 living in the household under the assumption that the responsibility for older school children is also potentially time consuming and possibly difficult to combine with (full) employment.

## Parents in need

Whether or not older parents are a source of support or distress is an empirical question. They may be neither or both, and they may be so whether they are in poor health or not. In this article we simply assume that older parents in need represent an obligation that may be hard to combine with work, in particular if one is involved in caregiving to parents. The respondent has a "parent in need" if (s)he has answered yes on one of the following questions: parent in need of help with "daily tasks" (i.e. IADL) or "personal care" (i.e. ADL), and/or have a parent in institutional (residential) care.

A more narrow definition of sandwich includes only respondents that help parents in need on a regular basis (i.e. parental care). In this study parental care implies that the respondent has provided regular (at least monthly) personal care or practical help to a parent in need during the last year.

The data allow us to include or exclude parents in institutional care, some of which are reported to be helped by the respondent, others not. The majority (60%) of the institutionalised parents are in nursing homes, 10% live in residential homes, and 30% in so-called care housing with 24-h services. Having a parent in a nursing home may be a relief for adult children, and may make it easier for them to concentrate on their own things, including their job, but not always so. Frail institutionalised parents may be a source of concern and demand frequent visits. They may therefore occupy both time and (mental) energy just as frail parents living at home do. And naturally, there may also be pleasures involved in all these relationships, even when needs and obligations are considerable, but this article focuses on the potential burdens of the relationships, not on their benefits.

## Employment status

Employment status is in these analyses an outcome variable, as we are interested in how people adjust work to needs among family members. Work is defined as having (paid) employment as one's main occupation, and then split between full-time and part-time employment (self-reported). Whether or not the observed employment status represents an adaptation to needs among family members cannot be observed directly as we have only cross-sectional data and are not able to track possible changes in employment status over time.

## Subjective well-being

Several dimensions of subjective well-being are included to assess associations with different family and work role positions, be they positive or negative.

Emotional well-being is measured by PANAS, the Positive and Negative Affect Scales (Watson et al. 1988). The original version consists of 20 items inquiring about to what extent the person has experienced specific emotions during the last 2 weeks, such as being alert, enthusiastic, distressed, scared, etc. The present study uses a 12-item version, with six items for each dimension. Responses on single items are measured on a five-point Likert scale, and aggregated into mean scores for positive and negative affect ranging from 1 (low) to 5 (high). We used mean imputations for respondents who were missing on one item for each scale, 181 respondents on the positive scale, and 124 on the negative. The scales are reliable with a Cronbach's alpha = 0.84 for the positive affect scale with imputed values, and 0.82 for the negative affect scale. The two scales represent distinct dimensions of emotional well-being, in this case with an inter-scale correlation close to zero (-0.05).

The cognitive (judgmental) component of well-being is measured by the Pavot et al. (1991) Satisfaction with life scale, and refers to global life satisfaction (with life as a whole). The scale consists of five items, with a five-point Likert scale ranging from strongly agree to strongly disagree. The summary score ranges from 5 (low) to 25 (high). Self-rated general health is included as a fourth dimension of well-being, based on a single question, and measured along a five-point Likert scale ranging from poor to excellent.

PANAS and the Satisfaction with Life Scale are included in the postal questionnaire, whereas all the other variables are derived from the telephone interview in combination with data from the public registers.

## Results

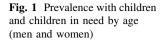
Levels and prevalences of sandwiching

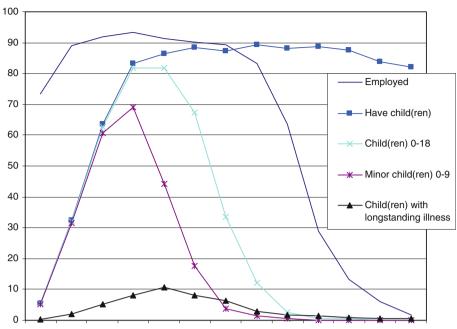
We start the results sections by mapping out the prevalence of simple relationships to children and parents before we bring them together in more complex configurations. What is the prevalence of having children (and parents) with varying degrees of needs in different age groups? What is the prevalence of more complex configurations, with both parents and children in need, and being in paid employment? The second part of the results section focuses on how people handle these situations, while the final section analyses the implications of being sandwiched for health and well-being.

#### Single relationships: children

Close to 90% of the population aged 40 and over have children. The proportion with minor children (below ten) peaks when parents are between 35 and 40 (69%), but is considerable from the late twenties through the forties (Fig. 1). Between 20 and 70% have minor children between these ages, with a slightly younger profile for women (mothers) than men (fathers).

If we include parents to older children (18 and younger), the period with parental responsibilities that may conflict with work is extended another 10 years, until age 50–55. Time may be short for these parents and families, especially since the great majority of both fathers (95%) and mothers (90%) are then also in paid work. Some will be on parental leave or on sickness absence, but the high employment rate suggests in any case that most Norwegian parents are able to juggle work and family obligations when their children are young, although quite a few women





18-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80+

(mothers) do so on a part-time job. While less than 5% of men between the ages of 30 and 50 have a part-time job, this is the case for 25-30% of their age peers among women. More about the gender differences follows later.

Only few have children with a chronic (longstanding) health problem. This prevalence peaks around 11% of the population aged 40–44 (i.e. nearly 13% of *parents* of this age). When the prevalence of children with a chronic health condition declines beyond age 45 (for parents), this is probably because some of these children move out of the parental home and then out of the criteria for being included in the category as here defined. If also chronically ill children *outside* the parental household had been included, the total number would be slightly higher. The peak prevalence (13% among parents aged 40–44) may be a reasonable estimate also for the prevalence at higher ages.

## Single relationships: parents

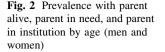
Parents are a source of support for most of children's lives, but when children turn 40 and older, a growing number will have parents in need of help, peaking close to 25% of the population aged 50–59 (Fig. 2). As half of the cohort has lost both their parents by the time they reach 55, about half of the parents are then "in need" as defined here. Approximately 90% are still employed around this age (55), but employment rates then start to drop to between 50 and 60% in the early 60s, with around 5% point higher rates among men than women. Part-time work is more frequent among older workers, in particular among older

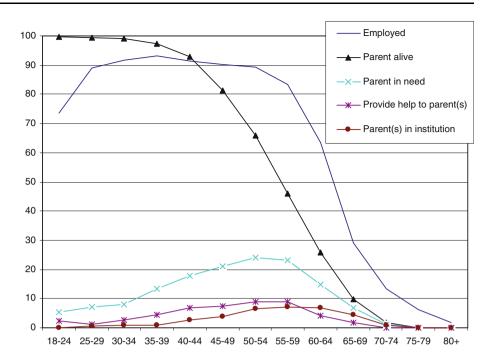
women, as part time rates increase from one-third among employed women aged 30–55 to one in two of the employed women in the early 60s.

When adult children are closing up on age 60 (and parents are 80-85 and over), the prevalence with parents in need declines. Around 15% in the early 60s have a parent in need, coming down to 7% of the population aged 65-69. However, the majority of parents are then in need of help, and quite a few have moved into institutional care. The proportion with a parent in institutional care peaks between age 50 and 65 (7%). Around 40% with parents in need indicate that they themselves provide regular help to this parent, implying that 9-10% of the population aged 50-59 are involved in parental care as here defined, somewhat more often among women (daughters) than men (sons). The median frequency of personal care provision to older parents is four times a month, the mean frequency is eight times, implying that the majority provides such care only weekly or so, while some have a heavy care load-one in six provided personal care to parents 15 times or more each month. Practical help is usually provided on a less frequent basis. The median frequency is four times a month (i.e. weekly), the mean frequency close to six.

#### More complex family configurations

Of central interest for this article are the more complex family configurations, when both children, parents and work are included among the sandwich criteria. We shall then concentrate on persons that are located in-between younger and older generations, thus they have both





children and parents alive. Some of them may also have grandchildren and grandparents, but we simplify the presentation of family configurations by considering only the closest generations over (parents) and under (children) the respondent. Figure 3 illustrates that the "in-between position" is the most common family configuration from the late 20s to the early 50s, including around 80% of the population at the highest (between 35 and 45). The younger have not yet got children, and are thus in a "parents only" configuration. The older have lost their parents, and have themselves moved up as the oldest generation with children (and possibly grandchildren) below them in a "children only" configuration. A smaller number have neither children nor parents alive and end their lives as generational singles ("one generation"). This is the case for around 16–18% of the age group 75–84, of which around 60% are also without a partner. The comparatively high frequency in this category is partly due to them belonging to cohorts when many did not form their own families.

The first step in the mapping out of the more complex sandwich configurations starts with the in-between generations group. This defines 60–80% of the middle-aged population (35–55) as sandwiched in the simplest sense, i.e. as having both children and parents alive. Only few of them are sandwiched in a more real sense, i.e. between work and family generations in need.

The second step therefore narrows the definition down by first including only persons of the in-between generation that are in paid work, while the third step includes respondents with *either* a child *or* a parent in need. The final step narrows the definition further down and includes

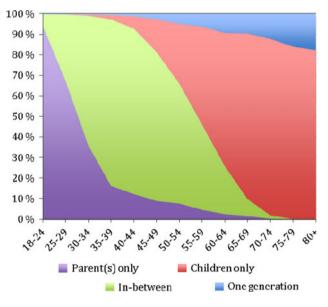
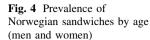
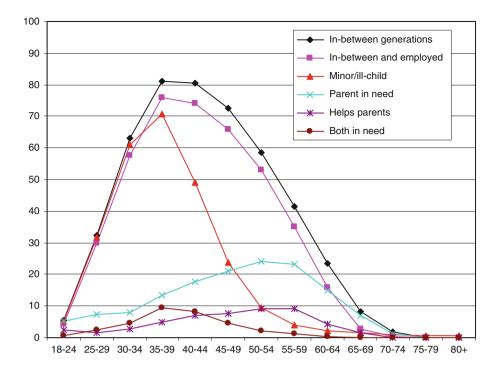


Fig. 3 Prevalence of generational configurations by age (men and women)

only those with *both* children and parents in need. This definition can be narrowed down even further by including only the care providers (i.e. provide regular help to older parents)—see Fig. 4 for details.

Figure 4 illustrates that a substantial majority (around 80%) of the population is located in-between generations between the ages of 35 and 45, and most of them—around 95% of men and 90% of women—are at the same time in paid work. Employment rates drop to around 50 towards the mid-60s, 5–7% points lower for women then for men. The two sexes differ, however, in that whereas nearly all





men work full time, this is the case for only two out of three mid-life women.

The majority have *minor children* when they themselves are between 30 and 45. From around this age on, the proportion with *older parents in need* starts to increase and peaks around 24% in the 50s, of which one in three (9% of the age group) are caregivers (i.e. help parents regularly). Between 8 and 9% of the 35–45 year old have both minor/ ill children *and* parents in need at the same time, and one in three of them (3% of the age group) are caregivers to older parents. The prevalence of double and triple sandwiching peaks between 35 and 45, with a lower prevalence before and after.

Multiple sandwiching between family and work thus concerns a comparatively small proportion of the relevant age group, but the small proportion represent a quite large number of persons. The 3% aged 35–45 who are caregivers to older parents when they at the same time have minor children and are employed adds up to around 20,000 persons. Another 10,000–15,000 can be added if we include those between 45 and 55, in total 30,000–35,000 persons (2%) of this age bracket (age 35–55). These numbers refer to persons in a sandwich position at one particular time (point prevalence), quite a few more will sooner or later be located in a sandwich position during their adult years (life-time prevalence).

The Norwegian findings are rather similar to those of Künemund (2006) for Germany, when the different definitions of sandwich positions are taken into consideration. To be sandwiched between family and work is possibly more frequent, but less problematic, in Scandinavia, because employment rates are higher, services are more accessible, and intergenerational ideals are more independent.

#### Employment status

Having outlined the prevalence of different types and degrees of sandwiching, this section concentrates on how people handle these circumstances. One may adjust both family-wise and work-wise. This article concentrates on work-wise adjustments, more precisely whether sandwiching tends to push or pull people out of work, or have them adapt by taking a part-time job. Of particular interest are the gender differences: Do women and men handle work–family squeezes differently? Do women adjust work to family obligations while men don't, as found in some earlier studies, and as would be assumed on the basis of traditional gender roles?

We analyse the current employment statuses and not actual adjustments. As we do not have longitudinal data, and are thus not able to observe directly if and how people react to changes in needs among family members, we have to infer such adaptations indirectly as a more or less probable interpretation of the cross-sectional observations.

For this purpose we have run two multiple logistic regressions, first for employment rates (being employed or not), and second for part-time work (proportion of workers on part-time). The analyses are run separately for women and men in order to assess whether they are likely to handle work–family squeezes differently.

The analyses are run for the age group 30–64 years only, as they represent the great majority that are located

in-between generations. Employment rates are only slightly higher for men (89%) than women (84%) in this age bracket. The variation between genders is far larger for part-time employment, as only 6% of the economically active men work part-time, compared to 34% of the economically active women of this age group.

Four types and degrees of sandwiching are included in the model, separating persons with only children in need (29%), from persons with only parents in need (28%), and persons with both children and parents in need (5%). Persons with only parents in need are additionally split in two, separating caregivers (2%) from non-caregivers (26%) to these parents. Persons with neither children nor parents in need (39%) constitute the reference group.

The results of the analyses are given in Table 1A and B.

The regressions suggest that dependent children (i.e. below ten and/or chronically ill) make a difference for employment for both women (mothers) and men (fathers), but in different directions. Mothers of dependent children are less often employed than other women, and if employed, they more often work part-time. In contrast, fathers to these children are seemingly more often employed, and when employed, they tend to be *less* often on part-time relative to other men, perhaps in an effort to compensate for lower income among partners who are not employed or on part-time. Note that findings for men (fathers) are not significantly different from men with neither children nor parents in need, but they are clearly in contrast to those of women (mothers).

**Table 1** Multivariate logistic regression of (A) employment rates and (B) proportion in part-time work on various sandwich criteria and controls for age (30–64 years), education, health and civil status (odds ratios)

	Employed	l	Working part-time							
	Men	Women	Men	Women						
In-between generations	1.196	1.131	.846	1.127						
No child/parent in need (reference)										
Only child(ren) in need	1.129	.529***	.677	2.271***						
Only parent(s) in need	1.407*	1.30*	.793	1.242*						
- and caregiver	.931	1.86	.578	2.184**						
Both in need	1.129	.602*	.686	2.280***						
Age (30–64)	.921***	.943***	1.042***1.038***							
Primary education (reference)										
Secondary	1.531***	1.869***	.580**	.776*						
High	3.693***	3.212***	.856	.467***						
Married/partner	2.455***	1.592**	.930	1.739***						
Good self-rated health	4.646***	.646*** 4.306***		.248*** .490***						
Nagelkerke $R^2$	.30	.24	.12	.10						
N	4,772	5,001	4,266	4,211						

\*  $P \le 0.05$ , \*\*  $P \le 0.01$ , \*\*\*  $P \le 0.001$ 

Needs among older parents do not, however, seem to affect the employment status of their adult children negatively. Both sons and daughters of older parents in need tend to be employed, even more so than other men and women, but daughters tend to work part-time more often, and in particular so if they are caregivers.

Women with both children and parents in need tend to accommodate to work in the same manner as women (mothers) with dependent children only.

To have an older parent in need seems quite possible to combine with employment for both sons and daughters in Norway, but the female caregivers among them tend to be more often on part-time. Fifty-one per cent of caregiving daughters are on part-time, only 34% of women in general.

Not surprisingly, good health is the strongest predictor of full time employment for both men and women, followed by high levels of education. Note also that the married (or cohabiting) are more often employed than the single, but married women tend to work part-time.

As these data are cross-sectional, they do not allow us to identify adaptive behaviours directly. The observed patterns are, however, hardly produced by a selection (recruitment) of part-time workers to parenthood or to family caregiving. They are more likely the results of adjustment to family obligations. This interpretation is supported by the responses to an open question about the reasons for working part-time. The main reason for men was related to personal disability (42%), only 3% indicated care of children as a reason for having a part-time job. One in five women (21%) indicated disability as the main reason for being in part-time work, 23% indicated care for children as the reason, and thus as an adaptive response. Family (elder) care was hardly mentioned as a reason for being on part-time.

## Subjective well-being

The final section analyses the consequences of being in a sandwich position for health and subjective well-being. We have run a series of multiple regressions of subjective well-being, including health, on the various sandwich positions, with controls for age, education, and civil status. The results are presented in Table 2 and briefly summarised below.

To have parents and or children in need seems to be a source of concern (negative affect) for both men and women, and is negatively affecting also other aspects of well-being, but not consistently so, and less than factors such as education, employment, age and civil status. The findings are thus not in clear support of any of the theories, although the strong positive effect of employment on wellbeing indicates that the job may indeed help you manage

**Table 2** OLS regression of subjective well-being (positive–negative affect, life satisfaction, subjective health) on various sandwich criteria and controls for age (30–64), education, civil status, health and employment status (standardised coefficients)

	Negative affect		Positive affect		Life satisfaction		General health	
	Men	Women	Men	Women	Men	Women	Men	Women
In-between generations	058*	025	.048*	.023	.065**	.042*	.062***	.029
No child/parent in need (ret	ference)							
Only child(ren) in need	.078**	.048	059*	015*	040	.020	012	005
Only parent(s) in need	.091***	.050*	021*	.014*	081***	016	009	007
<ul> <li>and caregiver</li> </ul>	.045**	.005	006	.002	026	020	031*	017
Both in need	.054**	.057**	.003	008	034	049**	047**	032*
Age (30–64)	163***	115***	096***	075***	.025	.015	123***	106***
Primary education (reference	ce)							
Secondary	028	022	.008	.073**	003	.030	.087***	.084***
High	.007	048*	.137***	.207***	022	.051*	.219***	.190***
Married/partner	032	053***	.033	.007	.252***	.262***	.003	.036**
Good self-rated health	109***	$108^{***}$	.073***	.095***	.192***	.200***		
Not paid work (reference)								
Full-time employed	055*	057*	.076***	.056*	.098***	.125***	.333***	.437***
Part-time employed	.011	053*	.018	033	.016	.099***	.077***	.252***
Adjusted $R^2$	.04	.03	.05	.07	.13	.15	.19	.18
Ν	3,290	3,957	3,289	3,951	3,267	3,916	4,825	5,062

\*  $P \le 0.05$ , \*\*  $P \le 0.01$ , \*\*\*  $P \le 0.001$ 

family troubles (or joys) better as suggested by the role enhancement theory.

Note also that a location in-between generations, i.e. in a family line with both older and younger generations, seems to be beneficial, and seemingly more so for men than women, as these men have lower scores on negative affect than other men, and higher scores on positive affect, life satisfaction, and health. Family life seems in this sense to be more beneficial for men than women within this age bracket (30–64), whereas marriage, or more generally: a partner, seems to protect global life satisfaction, but not necessarily the emotional well-being for both men and women.

Age is negatively associated to both positive and negative affect. Global life satisfaction is, however, stable across age groups, while self-reported health declines with age, and would probably have done so even more if also older age groups had been included. High education comes out as a resource for well-being for both men and women, in particular for positive affect and general health, and so also for employment, and then mainly full-time employment. The full-time employed have the higher scores on all dimensions of well-being.

#### Summary and discussion

This paper has mapped out the prevalence of sandwiching between family generations in mid-life, how people adjust under these circumstances, and what the implications for employment and well-being are. These questions are explored for the Norwegian case, but may have more general relevance, as this country is among the early in the demographic transition, with high employment rates for women, and therefore possibly a future scenario for other countries.

Between 75 and 80% of the Norwegian population aged 35-50 is located in-between older and younger family generations in the sense that they have both children and parents alive. Most of them have the responsibility for minor children early in this period, and a substantial minority (close to 25%) come to have older parents in need when they reach the 50s, but comparably few have both children and parents in need at the same time. This prevalence peaks around 8-9% between age 35 and 45, and fewer still are sandwiched in the sense that they also provide care (practical help or personal care) to parents on a regular basis. The prevalence then drops to around 3% of this age group. The great majority are then in paid employment be they sandwiched or not, but a substantial proportion of women (30-40%) work parttime. Although the prevalence is comparatively small, it translates into a considerable number of persons. The 3% aged 35-45 with minor children, parental care and employment at the same time adds up to 20,000 persons. Another 10,000-15,000 can be added if we included the 45-55 age group, and more still if broader sandwich

definitions were employed and life-time prevalences (sooner or later) counted.

Mothers and fathers seem to adjust their work status differently to having dependent children. Mothers are less often employed than other women, and when employed, they more often work part-time. Fathers to dependent children do not reduce their employment, on the contrary, they tend to have equally or higher employment rates than other men, and are more often on full time, perhaps in an effort to compensate for lower income among their parttime working partners.

Needs among older parents do not seem to affect the employment status of their children negatively, on the contrary, respondents with parents in need are more often employed, but women (daughters) are more likely to work part time. Caregivers are equally likely to be active workers as non-caregivers, but caregiving daughters are more often on part-time, indicating that family care can be difficult to combine with ordinary, full-time employment. When the majority seems to cope reasonably well with their family commitments, this is at least partly because quite a few women (mothers, daughters) reduce their working hours in order to handle the conflicting demands.

The findings are in some contrast to SHARE data as analysed by Bolin et al. (2007), who found caregiving to reduce both the employment rate, and the number of hours worked, in most of the SHARE countries, and to do so for both women (daughters) and men (sons). When caregiving to older parents may have less impact on employment in the Norwegian setting, this might be explained by an easier access to public services, or more generally by a stronger norm of independence between adult generations. Help and exchanges are found to be frequent among older parents and adult children in Scandinavia, but to be less intensive than in central and southern Europe (Kohli and Albertini 2008), and therefore perhaps easier to combine with other commitments. In addition, older people are in Scandinavia found to be reluctant to ask their children for help. They are more likely to turn to the public services, and are in general not expecting adult children to adjust employment to the needs among older parents (Daatland 1990; Daatland et al. 2009).

And yet, family and work may be hard to reconcile also under the Norwegian welfare regime, as indicated by the lower employment rates among mothers to minor children, and the higher rates of part-time employment among mothers and female caregivers (daughters) to older parents. Needs among family members are also a source of concern (negative affect) and lower subjective well-being, although not consistently so across all dimensions of well-being. The strong positive effect of employment on well-being, in particular full-time employment, does, however, indicate that a job is more likely a resource than a problem in the management of family troubles (and joys). If we transform these conclusions into policy implications, they suggest that women have still the major role in the handling of family obligations. Family and work conflicts are in this sense primarily a risk for well-being and equal opportunities among women.

Family and work conflicts may be alleviated from both sides. Work may be adjusted to family obligations, while caregiving may be shared between families and services. Some countries have already generous parental leave arrangements for mothers and fathers of small children. Less support is available for family carers to older people. Family care tends to be taken for granted, as a natural obligation that does not deserve any special recognition or support. More flexible working hours, respite care, caregiver leave and financial support would make it easier to take on family responsibilities and combine them with other dreams and commitments. Support for family carers may also help them cope, but the strong positive association between employment and well-being speaks for supportive measures that allow carers to combine care and employment over supports that "help" them retreat to full-time family care. Financial support to family carers (cash-for-care) tends to stimulate the latter, while more generous service levels may help realise the former and is moreover in better correspondence to preferences among future elders. A pure family care model is hardly sustainable for an ageing population, and will work against both active ageing (i.e. later retirement), equal opportunities and well-being in later life.

Among the limitations of the study is the lack of questions that directly assess the personal perceptions of stress or mastery in a sandwich position. We have had to employ a more indirect approach and on this basis interpreted behaviours and motivations. Another limitation is the use of cross-sectional data only. We are thus not able to disentangle causes and effects, i.e. whether women have adjusted their work to family needs, or have become family carers because they work part-time. Both may be the case, but we suggest that the first is the more probable explanation, to be explored more closely with longitudinal data in future waves of the study.

And finally, an indirect approach is likely to underestimate the possible negative outcomes of family–work conflicts relative to a more direct exploration of perceptions among people in such predicaments. Both approaches have their virtues, and the best solution would be to combine them.

#### References

- Bolin K, Lindgren B, Lundborg P (2007) Your next of kin or your own career? Caring and working among the 50+ of Europe. J Health Econ 27:718–738
- Brody EM (1981) 'Women in the middle' and family help to older people. Gerontologist 21(5):471–480

- Daatland SO (1990) What are families for? On family solidarity and preferences for help. Ageing Soc 1:1–15
- Daatland SO, Slagsvold B, Lima IA (2009) Population ageing, intergenerational solidarity and the family-welfare state balance: a comparative exploration. In: How generations and gender shape demographic change. UNECE, Geneva, (pp 127–138) (http://www.unece.org/pau)
- Evandrou M, Glaser K, Henz U (2002) Multiple role occupancy in midlife: balancing work and family life in Britain. Gerontologist 42(6):781–789
- Gautun H (2008) Arbeidstakere og omsorg for gamle foreldre-den nye tidsklemma. Fafo, rapport, Oslo, p 40
- Goode W (1960) A theory of role strain. Am Sociol Rev 25:483–496
- Greenhaus JH, Powell GN (2005) When work and family are allies: a theory of work-family enrichment. Acad Manag Rev 31:72–92
- Grundy E, Henretta J (2006) Between elderly parents and adult children: a new look at the intergenerational care provided by the 'sandwich generation'. Ageing Soc 26:707–722
- Henz U (2004) The effects of informal care on paid-work participation in Great Britain: a lifecourse perspective. Ageing Soc 24:851–880
- Kohli M, Albertini M (2008) The family as a source of support for adult children's own family projects: European varieties. In: Saraceno C (ed) Families, ageing and social policy: intergenerational solidarity in European welfare states. Edward Elgar Publishing, Cheltenham, pp 35–58
- Künemund H (2006) Changing welfare states and the 'sandwich generation': increasing burden for the next generation? Int J Ageing Later Life 1(2):11–30
- Lagerström B et al (2009) Livsløp, generasjon og kjønn (LOGG 2007). Dokumentasjonsrapport. Statistisk sentralbyrå, Notater, Oslo
- Leira A (1993) The 'woman-friendly' welfare state? The case of Norway and Sweden. In: Lewis J (ed) Women and social policies in Europe. Work, family and the state. Edward Elgar Publishing, Aldershot

- Linville PW (1987) Self-complexity as a cognitive buffer against stress-related illness and depression. J Pers Soc Psychol 52:663–676
- Marks SR (1977) Multiple roles and role strain: some notes on human energy, time and commitment. Am Sociol Rev 39:567–578
- Marks SR, McDermid SM (1996) Multiple roles and the self: a theory of role balance. J Marriage Fam 58(2):417–432
- Neugarten B, Hagestad G (1976) Age and the life course. In: Binstock RH, Shanas E (eds) Handbook of ageing and the social sciences. Van Nostrand Reinhold Company, New York, pp 35–55
- Pavot W, Diener E, Colvin CR, Sandvik E (1991) Further validation of the satisfaction with life scale: evidence for the cross-method convergence of well-being. J Pers Assess 57:149–161
- Phillips J, Bernard M, Crittenden M (2002) Juggling work and care. The experience of working carers for older adults. Policy Press and Joseph Rowntree Foundation, Bristol
- Pierret CR (2006) The 'sandwich generation': women caring for parents and children. Mon Labour Rev 129(9):3–9
- Sieber SD (1974) Toward a theory of role accumulation. Am Sociol Rev 39(4):567–578
- Siim B, Bochurst A (2005) The women-friendly welfare states revisited. In: Kildal N, Kuhnle S (eds) Normative foundations of the welfare state. The Nordic experience. Routledge, London, pp 97–111
- Spitze G, Logan JR, Joseph G, Lee E (1994) Middle generations' roles and the well-being of men and women. J Gerontol Soc Sci 49(3):S107–S116
- Staines GL (1980) Spillover versus compensation: a review of the literature on the relationship between work and non-work. Hum Relat 33:111–129
- Thoits PA (1983) Multiple identities and psychological well-being. A reformulation of the social isolation hypothesis. Am Sociol Rev 48:174–187
- Watson D, Clark LA, Tellegen A (1988) Development and validation of brief measures of positive and negative affect: the PANAS Scales. J Pers Soc Psychol 54:1063–1070