

Does it Hurt to Care? Caregiver Well-being in Europe

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## Abstract

This paper analyzes a multi-national sample of men and women, comparing self-reported well-being of individuals who provide dependent care to those who do not provide care. We apply data that pairs individual-level data from the 2004 European Social Survey (ESS) for respondents in 22 nations ( $n=32,677$ ) with country-level measures of attitudinal preference for family-centered caregiving and economic development (GDP). Applying multi-level modeling, our paper identifies two main relationships: (1) caregiving responsibilities have differential effects by gender and the type of care provided; (2) female caregivers in countries with cultural expectations for family-centered caregiving report worse well-being. Our results demonstrate that caregivers, in particular female, are significantly disadvantaged in well-being. These findings are important in the context of Europe's delayed fertility and aging population.

Keywords: aging, care, caregiving, health, sandwich generation, well-being

## Running Head: Caregiver well-being in Europe

Many European countries are experiencing a second demographic transition characterized by delayed fertility and increasing life expectancy (Lesthaeghe, 1995), resulting in an aging population. Europe currently has 19 of the world's 20 "oldest" countries and projections show that by 2030, as much as 25% of the European Union population will be over the age of 65 (Lutz 2006). This shift in population structure introduces new challenges for families to provide dependent care, as the number of families vulnerable to providing child and elder care increases. While many countries have developed welfare states that provide resources for elder and childcare, others have strong preferences for these types of care to be provided primarily by one's family. Thus, approaches to caring for an aging population vary tremendously by nation. While most previous research has focused on caregiving within specific nations or by welfare state regimes (Hoffman et al. 2012; ), understanding caregiving within a broader cultural context is necessary considering the increasing diversity . What is more, providing dependent care has important consequences for individual well-being which may be affected by cultural preferences for family-centered care. Thus, this paper aims to address the need for understanding caregiver well-being within a multi-level context.

At the individual-level, caregiving has divergent effects on caregiver well-being. While some studies show that caregiving is beneficial to caregiver well-being (Beach, Schulz, Yee, & Jackson, 2000), the bulk of the evidence demonstrates that caregiving deteriorates well-being. For example, the presence of a young child in the home is associated with greater psychological

distress (Bird, 1997). Similarly, those who provide care (particularly women) for disabled family members report more distress and worse health (Marks, 1998; Raina et al., 2005), and have a higher mortality risk (Schulz & Beach, 1999). Providing elder care is also associated with negative health outcomes (Marks, 1996). Collectively, this research suggests that caregivers generally experience a well-being disadvantage, especially when there is strain associated with the caregiving role. One group that may be particularly vulnerable to this strain is the “sandwich” generation, who provide care for both a child and an aging relative. Indeed, the “sandwiching” of caregivers between two dependent populations, which predominantly affects women, is associated with greater stress, depression and deteriorated well-being (Spillman & Pezzin, 2000). Taken together, this research suggests that the type of care provided has differential effects on well-being.

What remains unclear, however, is whether the effect of dependents on well-being varies by gender and whether cultural preferences for family-centered care mediate these effects. As European populations continue to age and the elderly make up a larger share of the European population (Gamyu et al. 2007), the number of individuals providing dependent care will continue to increase. Indeed, in many European families children provide informal care for their elderly parents as a substitute for formal care (Eric, 2009). Thus, European families may face pernicious dependent care challenges as the number of families who must provide dependent care for their elderly, and perhaps simultaneously care for children, increases. What is more, cultural attitudes about who should provide care may limit the availability of care options. Specifically, countries where families are expected to provide care may have few market or government care options, and, as a result, families with limited caregiving ability become

responsible for providing dependent care. These cultural influences may have serious well-being consequences above and beyond individual-level characteristics.

We address these relationships by applying a multi-level data set for respondents in 22 countries to investigate how cultural preferences for family centered caregiving structure caregiver well-being. In this study, we use the word "caregiver" to denote someone who is providing care to a dependent, whether a child, elderly person, or disabled individual within their home. This study contributes to existing literature by: (a) comparing caregiver well-being by the dependent group for whom they are caring— child under five, child six to seventeen, spouse over 65, parent over 65, another adult over 65, sandwiched household (adult 65 and child under 18 present), and disabled partner; (b) examining gender differences in caregiver well-being by dependent group; (c) investigating caregiver well-being within a broader cultural context of family-centered caregiving preferences. The results of our study indicate that caregivers report worse well-being than those who do not provide care but these relationships vary by gender, dependent care group and family-centered caregiver attitudes.

## Background

### *Defining and Measuring Well-being*

Scholars have widely discussed the measurement of subjective well-being. Diener (2002) defined subjective well-being as the affective and cognitive evaluation of one's own life. Accordingly, subjective well-being can encompass a variety of measures including: "life satisfaction (global judgments of one's life), satisfaction with important domains (e.g. work satisfaction), positive

affect (experiencing many pleasant emotions and moods) and low levels of negative affect (experiencing few unpleasant emotions and moods),” (Diener 2002, p.34). In many large cross-national data sets, subjective well-being is measured through a single-item response. While some studies have shown this measure to be accurate (Diener et al., 2002; Eid & Diener, 1999), others found that single item well-being measures are subject to response bias, often influenced by preceding events (Huppert et al., 2009; Schwarz & Strack, 1999). In response to these biases, the European Social Survey data collects multiple measures of well-being to provide a more expansive and accurate measure (Huppert et al., 2009). What is more, Huppert et al. (2009) argued for the importance of differentiating between “feeling” and “doing” when measuring subjective well-being. We build directly on this research by applying an overall well-being measure that includes emotional and physical well-being.

### *Empirical Findings on Caregiver Well-being*

*Child care.* A vast literature has documented that women provide the majority of the childcare and housework (Batalova & Cohen, 2002; Berk, 1985; Bianchi, 2000; Coltrane, 2000; Fuwa, 2004; Ruppanner, 2010). Although the economic consequences of providing childcare are well-documented, fewer studies have investigated the relationship between providing childcare and caregivers’ health and well-being (see Horowitz, 1985 for exceptions; Piña & Bengtson, 1993; Sayer, 2005). For example, Piña and Bengtson (1993) found that women who spend more time in housework and childcare report higher levels of stress and depression. In addition, Sayer (2005) found that women who spend more time in childcare and housework spend less time in leisure

which may have important consequences for health and well-being. Taken together, these studies suggest that providing dependent care may have important consequences for the well-being of those providing childcare. What is more, men may also experience a well-being penalty associated with providing dependent care for children, a relationship further explored in this study. From these studies, we expect that mothers and fathers providing dependent care will report lower well-being.

*Elder care.* As populations age, examining dependent care patterns for elders is increasingly important. Dependent care for aging family members is often either outsourced to the market or performed by a spouse or child (Pickard, Wittenberg, Comas-Herrera, Davies, & Darton, 2000). For those who provide eldercare within the home, women are more likely providers than men with wives and daughters accounting for the majority of the care (Chesley & Poppie, 2009; Spiess & Schneider, 2003). Providing eldercare has important consequences for caregivers' well-being. On one hand, caregiving can be rewarding for the caregiver (Walker & Allen, 1991), and improve the caregiver's relationships with the elder receiving care (Hinrichsen, Hernandez, & Pollack, 1992). Similarly, elderly dependents can provide help in the home for the caregiver's family, especially when children are present (Ingersoll-Dayton, Neal, & Hammer, 2001). On the other hand, those who provide dependent care for an elder family member report greater pressure balancing work and family demands (Walker & Allen, 1991). Caregivers who experience mental or emotional strain, such as that caused by the conflicting demands of work and caregiving, are likely to have negative health consequences (Schulz & Beach, 1999). Taken together, these studies suggest that certain older adults may contribute to the well-being of the family. This

suggests that differentiating familial relationships for the adults over 65 may illustrate divergent relationships for caregiver well-being. Our models explicitly address these relationships by identifying whether the adult over 65 is a spouse, parent or other adult and by modeling these relationships by gender. As these studies indicate, providing care for an aging dependent can have mixed consequences.

*Sandwiched care.* Sandwiched caregivers are those who are simultaneously caring for elderly adults and children in the home. The increase in female labor force participation has compounded the responsibilities of the “sandwich” generation, as women are juggling dependent care and work demands (Spillman & Pezzin, 2000). Indeed, the number of individuals aged 45 to 54 providing dependent care for the elderly, both those with and without minor children, has increased in recent decades suggesting that the age group with the most work and family demands are increasingly responsible for dependent care for the elderly (Spillman & Pezzin, 2000). As this new care group continues to grow, it is crucial to understand how sandwiched care responsibilities are associated with the well-being of the caregiver. We directly address this question and expect to find that providing “sandwiched” care is associated with lower well-being especially for women.

*Disabled care.* Women are also predominantly responsible for providing care for disabled family members. Specifically, children (often daughters, daughters-in-law and granddaughters) serve as the primary caregivers for disabled women, whereas wives are the primary caregivers for their



disabled husbands (Katz, Kabeto, & Langa, 2000). In one study, mothers were the primary caregivers for their disabled children, and experienced worst physical and psychological health associated with increased caregiving demands (Raina et al., 2005). Moreover, mothers who provide care for disabled children report more distress and lower health, whereas among fathers, distress and health are unrelated to providing care for disabled children (Marks, 1998). In this respect, providing dependent care for a disabled family member has negative consequences for the caregiver's well-being that vary by gender.

### *The role of gender*

The previous literature review reveals important gender differences in caregiving. First, women are more often caregivers than men. Women often perform care work in order to “do gender” within familial relationships (Berk, 1985; West & Zimmerman, 1987). By doing-gender, women enact cultural scripts about gender appropriate behavior within familial relationships. Specifically, women are socialized into roles emphasizing nurturing and kin-keeping (Graham 1983), which explains in part why women are disproportionately responsible for caregiving. What is more, providing housework and childcare holds symbolic meaning within heterosexual unions as a reflection of women's love and devotion to the family (Berk 1991). In this respect, caregiving has complex cultural meaning for those providing the care.

Second, there may be gender differences in the health and well-being effects of caregiving. While a vast literature disentangles the cultural underpinnings of care work, the question remains as to whether caregiving is positively or negatively associated with various

aspects of well-being, particularly in Europe. Some studies take gendered and role perspectives on caregiver health, arguing that women experience role strain and conflict between work and home obligations like dependent care (Pavalko and Woodbury 2000). For example, research for an American sample shows that women who care for a spouse with a long-term cognitive or physical disability report more physical health problems over time (Gaynor 2007). Similarly, women who provide care for elderly parents are more likely to have lower levels of health (Wakabayashi & Donato, 2006) and increased depression (Schulz, O'Brien, Bookwala, & Fleissner, 1995). Finally, mothers who have more strain associated with caregiving report greater psychological distress (Avison, Ali, & Walters, 2007). Nevertheless, these findings from U.S. studies may not be generalizable to the European context, where family and gender norms, and the institutional contexts, differ. Hence, while previous research documents negative outcomes for female caregivers, an explicit understanding of whether the impact of caregiving on well-being varies for males and females in Europe is needed. In this respect, large cross-sectional survey data like the ESS complement the qualitative data and the smaller sample survey data on caregiving (Tarlow et al., 2004). For these reasons, we explicitly model gender differences in reports of well-being for caregivers to better understand how the type of caregiving provided may contribute to the well-being of male and female caregivers.

### *Caregiving in Cultural Context*

In the European context, few studies have examined caregiver well-being on a multi-national scale. The study by Wahrendorf et al. (2006) is a notable exception, using data on 10 European

countries to examine two psychological measures of caregiver well-being, and finding that providing care is associated with lower psychological well-being. However, countries apply different approaches to the care of dependent populations that often serve as fundamental underpinnings to welfare state policy. For example, Scandinavian countries have more policies supportive of family caregiving, such as guaranteed childcare coverage (Gornick et al. 1997), and elder care subsidies. In the Scandinavian context, dependent care is considered a social issue that should be addressed collectively through expansive government intervention. Although there has been increasing marketization recently even among Scandinavian welfare states (Szebehely 2005), they remain much more supportive of child and elder care than do more conservative welfare states that focus on family-centered caregiving, and often reflect broader support for traditional divisions of labor. For example, Turkey reflects traditional approaches to gender and family which includes a strong emphasis on women's responsibility for caregiving. Finally, many of the liberal welfare states, such as the United States and Great Britain, provide few institutional supports for dependent caregiving (Gornick et al. 1997), focusing instead on market-driven interventions, which reflects strong ideological support for individualistic approaches to care.

This variation in institutional approaches to caregiving may also reflect broader cultural differences in expectations and norms surrounding dependent care which may directly influence caregiver well-being. In other words, there are likely also variations between countries in their populations' views on caregiving. In this study, we focus on family-centered caregiving preferences, which we expect to deteriorate caregiver well-being. Family-centered caregiving reflects attitudinal support for the expectation that children should provide dependent care for an

aging parent. We expect that strong preferences for family-centered caregiving make all families, even those who are unable to care for additional family members, vulnerable to providing care. This burden may decrease caregiver well-being with more severe penalty for female caregivers who disproportionately shoulder care responsibilities. Our models directly test these relationships.

### *Summary of Research Questions*

In sum, studies provide mixed evidence about the well-being of caregivers. Most have documented a negative effect of caregiving on health and well-being, but the results vary by characteristics of both the care provider and the dependent for which they provide care. We build upon this and other research by using a large 22-nation European dataset to compare well-being by the dependent group for which the caregiver is providing care (child under 5, child 6 to 17, spouse 65 or older, parent 65 or older, other adult 65 or older, sandwiched care and disabled partner). Based on the previous literature, we hypothesize that: (1) caregivers will report lower levels of well-being compared to those who do not provide dependent care; (2) the effect on well-being will differ by the type of dependents present in the home; (3) female caregivers will fare worse than male caregivers overall and by dependent population; and, (4) caregivers in family-centered caregiving countries will report worse well-being, an effect magnified for female caregivers.

## Method

### *Data and Sample*

This study utilizes individual-level data from the 2004 European Social Survey (ESS) for 22 nations. The ESS is an academically-led general composite social survey of European nations, and is designed to be representative of all persons ages 15 and over residing in private households in each country. The sample is selected based on strict random probability methods at each stage of the survey design, and all respondents are interviewed face-to-face. The 2004 ESS is the module on family, work and well-being. Our sample includes data from the following countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, and United Kingdom. These individual-level data were then matched with country-level measures for family centered care preferences and gross domestic product. Three countries were excluded from our sample: Estonia (missing on the income measure), Iceland and Ukraine (missing on the family-centered caregiver measure).

The family centered caregiver measure is from the Eurobarometer report on Health and Long-term Care (2007) in the European Union. We focus on responses to the following question:

“Imagine an elderly father or mother who lives alone and can no longer manage to live without regular help because of her or his physical or mental health condition? In your opinion, what would be the best option for people in this situation?”

We coded family-centered caregiving to reflect the percent of respondents in each country who responded that the dependent should live with his/her child. Two ESS countries were excluded from the Eurobarometer - Switzerland and Norway. Consequently, we imputed a family centered caregiver score for these two countries.<sup>i</sup> We ran the models without these two imputed countries and found equivalent results. In addition to attitudinal support for family-centered

caregiving, we also control for the confounding effect of economic development through per capita gross domestic product (in 2004 US dollars). Our sample is restricted to those complete on all our well-being ( $n=32,605$ ) and country-level measures.

### *Dependent Measure*

*Well-being.* Respondents provided self-reports on well-being over the past two weeks for the following four statements: (1) I have felt cheerful and in good spirits; (2) I have felt calm and relaxed; (3) I have felt active and vigorous; (4) I have woken up feeling fresh and rested. Responses are on a six-point scale ranging from 6, or, “all of the time” to zero, or, “at no time.” We compute a well-being measure, which is the mean of the previous four items (Cronbach’s  $\alpha = 0.82$ ), with higher values reflecting reports of greater well-being. Respondents were included in the overall well-being measure if they reported two or more scores on the four well-being measures. We also investigated our dependent measure as a factor score which produced equivalent results. For simplicity, we present the results for mean well-being.

### *Independent Measures*

*Providing dependent care.* The main independent measures of interest are the respondents’ reports of providing dependent care and the household composition of dependents in the household. Respondents reported whether they were “currently providing care for a small child, someone ill, someone disabled or the elderly in the home.” This measure is dichotomously coded (1= respondent is providing dependent care in the household).

A limitation of the survey is that it does not ask for whom the respondent is providing dependent care. Yet we are able to assess whether dependents are present in the home by measuring household composition. Specifically, respondents reported the presence of a disabled partner in the home, which we coded dichotomously (1=*disabled partner present*). Using the household roster, we code indicators for five dependent populations present in the home: child ages 5 and under, child ages 6 to 15, spouse ages 65 and older, parent ages 65 and older and other adult ages 65 or over. Given its multi-national focus, we use the 2004 United Nations Development Report (UNDR) as our reference for global demographic definitions and coding. Following the UNDR, we established age 65 as the cut-off for the dependent adult population. To measure the “sandwich” households, we collapsed the child and adult over 65 measures into single dichotomous measures; then, we multiplied these terms.

It is important to note that based on these measures, we cannot state with absolute certainty that the caregivers are providing dependent care for the dependent populations present in the home. Thus, we can only speak to associations between self-identifying as a caregiver and the presence of dependents in the home, but not to the effect of providing care for those populations. While some individuals may identify as caregivers, but do not provide care for the dependents in the home, most respondents probably provide some dependent care for the dependent populations, especially when the care required is substantial (e.g., for young children). Ultimately, this limitation should be recognized and the results should be interpreted within this context.

*Employment status.* Respondents were asked to report on their current main activity. These measures were coded into six dichotomous measures: employed in paid work, unemployed, student, disabled, retired, and housewife/househusband. For the analyses, “employed in paid work” is the reference group.

*Socio-demographic controls.* We also control for age, gender, marital status, religiosity, and socioeconomic status. Respondents reported their age and gender which was dichotomously coded with one representing being female. Respondents reported their current marital status that we recoded into five dichotomous measures: married (reference group), separated, divorced, widowed, and never married. Religiosity was measured through the following question: “Regardless of whether you belong to a particular religion, how religious would you say you are?” Responses are on a 10-point scale ranging from “not at all religious” to “very religious.” Higher values represent higher self-reported religiosity.

To capture socioeconomic status, we apply two measures: household income and education. Respondents were asked to rank their total household income relative to others in their country on an alphabetic scale through the following question: “Using this card, if you add up the income from all sources, which letter describes your household's total net income? If you don't know the exact figure, please give an estimate. Use the part of the card that you know best: weekly, monthly or annual income.” The ESS team converted the alphabetic scale to a numeric scale ranging from 1 to 12. Higher values represent greater household income relative to others in the same country. Those missing data or who refused the question were excluded from the



analysis. For education, respondents reported their highest completed education level on a categorical scale, which we recoded into four dichotomous categories: no primary, basic, secondary (completed high school, some college) and tertiary (college or higher). In analyses, we compare those with tertiary education to all others.

### *Analytic Plan*

To address the nesting of individuals within countries, we analyzed the data using hierarchical linear modeling (HLM 6.08). The data are weighted using the design weights provided by ESS to account for sampling design. The analytical procedure is as follows: first, we describe the sample (Tables 1 & 2); second, we use HLM to compare the well-being of caregivers to that of those who do not provide care, without controls, to establish a caregiver effect (Table 3, model 1); next, we assess which type of dependents are associated with lower well-being net of controls (Table 3, model 2) and we include gender interaction terms by caregiver status to assess differential gender effects net of controls (Table 3, model 3); finally, we test whether family centered caregiver attitudes affect dependent caregiver's well-being (Table 4, model 1) and whether these relationships are robust net of individual controls (Table 4, model 2). The results are presented in detail below.

### *Results*

Table 1 provides a descriptive overview of mean well-being, family-centered caregiving attitudes, and GDP by country. For the overall sample, respondents in Denmark report the highest well-being and those in Turkey the lowest. For caregivers, respondents in Norway report

the highest and those in Turkey the lowest well-being. In half of the countries, caregivers report worse well-being than the general population, indicating that caregiving has varying effects by country. Turning to the country-level measures, respondents in Turkey are most likely, and those in Sweden least likely, to support family-centered caregiving. Indeed, respondents in post-communist and traditional welfare states are most likely and those in the Scandinavia least likely to support family-centered care. The per capital GDP is highest in Luxemburg and lowest in Turkey. Collectively, the descriptive statistics indicate that Turkey reports the lowest well-being, strongest family-centered caregiving preference and lowest GDP.<sup>ii</sup>

Table 2 provides a description of the sample. Approximately 25% percent of respondents report providing dependent care within their household, and two-thirds of those are females. The household composition measures reflect who lives in the home and may provide some insight into the types of dependent care provided by the respondent. With regard to children in the home, 13% of the sample report having a child under 5 years of age, and 23% report having a child ages 6 to 15 in the home. It is important to note that these categories are not mutually exclusive. Having an older adult in the home is also not uncommon; 15% of respondents report living with an adult age 65 or older. Yet only 1% of the sample make-up the “sandwich generation,” those with both an adult age 65 or older and a child present in the home. Only 2% report having a disabled partner in the home. These descriptive statistics indicate that a large portion of the sample is providing dependent care either to children or an adult age 65 or older in the home, but few to both groups concurrently.

TABLE 1 ABOUT HERE

*Does Caregiving Matter for Well-being?*

Table 3 tests our first hypothesis that those providing dependent care report lower levels of overall well-being (Model 1). We estimate a caregiver effect without controls to assess whether caregivers report significantly different well-being across countries; our results support this claim. We then estimate whether this caregiver effect is explained by the presence of specific dependents in the home and individual controls (Model 2). Supporting our first hypothesis, we find that caregivers report a net negative well-being effect. The presence of specific dependents makes caregivers more vulnerable to deteriorated well-being than others. Specifically, the presence of a child (under 5 or 6 to 15) is negatively associated with well-being as is the presence of a disabled partner. By contrast, the presence of a spouse aged 65 or older is positively associated with self-reports of well-being. The question remains, however, do these relationships vary by gender?

While Model 2 demonstrates that women report worse well-being than men overall, caregiver status may interact with gender to determine health. Model 3 introduces gender interaction terms for caregiver status which reveal striking results. While the association between caregiving and well-being does not vary by gender, we find that dependents have differential effects by caregiver gender. First, the presence of spouse over 65 benefits men's (0.13) but has almost no effect for wives' ( $0.13 - 0.11 = 0.01$ ) well-being. This indicates that wives enhance husbands' but husbands do not effect wives' well-being. What is more, for women, the spouse effect is minor compared to the large negative gender penalty (-0.16) in well-being. Second, male respondents living in a sandwiched household report better (0.16) but female respondents worse ( $0.16 - 0.28 = -0.12$ ) well-being. In other words, men in homes with

children benefit from the presence of an adult 65 older but women are hurt by this sandwiched care. Finally, the negative effect of having a disabled partner is only significant for women's (-0.32) but not men's well-being. Collectively, these findings indicate women experience a well-being penalty associated with specific dependents in the home - a spouse 65 plus, a disabled partner and a sandwiched household. By contrast, men benefit from the presence of a spouse or adult over 65 in the home. Interestingly, the presence of children has equivalent negative effects on men and women's well-being. In sum, our results support our hypotheses that dependent type and gender have distinct effects on well-being.

## TABLE 2 ABOUT HERE

### *Does Country-Context Matter for Caregiver Well-Being?*

We hypothesized that cultural support for family centered caregiving would have detrimental effects on caregiver well-being. Table 3 directly tests these relationships and controls for the confounding effect of GDP. We estimate the effect of family centered caregiving and GDP on the model intercept, gender slope, caregiver slope and female x caregiver slope. Model 1 estimates the multi-level effects without the full-set of controls; model 2 introduces the full-set of controls (table 2 model 3). Consistent across these models, we find female caregivers report significantly worse well-being in countries with stronger attitudinal support for family centered caregiving. In other words, living in a country that emphasizes family centered caregiving harms female caregivers exclusively. What is more, female caregivers in more economically developed countries report worse well-being. Economic development may provide families with additional resources to outsource dependent care, and thus, those who remain primary caregivers may

already have lower well-being reflecting a selection effect or female caregivers may experience a subsequent well-being disadvantage associated with their caregiver status. Disentangling this causal relationship is beyond the scope of this study, but our results indicate a well-being disadvantage for female caregivers in more economically developed countries net of individual-level economic resources. To estimate whether Turkey, an outlier, is driving these effects, we estimated the models excluding Turkey. Our results are consistent indicating the robustness of our effects.

### Discussion

This study evaluated well-being for a multi-national sample of caregivers and non-caregivers in Europe. Using the 2004 European Social Survey, we answer questions about how caregivers' well-being compares to that of those who do not provide dependent care, and about gender differences in the relationship between caregiving and well-being. The results of this study are quite provocative as they reveal that caregivers report worse well-being, a result affected by the types of dependents in the home and gender. Four broad conclusions speak to our hypotheses: (1) caregivers report lower levels of well-being compared to those who do not provide dependent care; (2) the effect on well-being differs by the type of dependents present in the home; (3) female caregivers fare worse than do male caregivers overall and by types of dependents; (4) cultural support for family centered caregiving disadvantages female caregivers. These findings indicate that caregiving has serious implications for caregivers' well-being, especially that of women, which may have far-reaching consequences as the number of individuals providing dependent care in the home continues to increase in Europe.

Our results support the argument that caregivers have lower levels of well-being than non-caregivers. Indeed, we find that caregiver well-being varies by both individual-level attributes and by the group for which care is being provided. More importantly, however, we find that these relationships vary by gender. Specifically, sandwiched female caregivers—those which have both a child and an adult age 65 or older in the home—and those with a disabled partner in the home report lower levels of well-being. By contrast, men in sandwiched households and with a spouse 65 or older report *better* well-being. These gender effects likely reflect unequal divisions of care for dependents in the home. Specifically, the presence of a dependent over 65 may lighten the domestic load for men, especially in sandwiched households, which may contribute to men's better overall well-being. By contrast, sandwiching women between dependent populations only worsens their overall well-being. Indeed, previous research documents women's disproportionate responsibility for sandwiched care (Spillman & Pezzin, 2000). Our study builds on this research and demonstrates that "sandwiched" women living with both minor and elder dependents experience lower levels of well-being. In the European context of delayed fertility and aging populations, the number of women who will be vulnerable to providing sandwiched dependent care will continue to increase. The results of this study suggest that the consequences of providing this sandwiched care may be far-reaching with particularly pernicious effects on women's well-being.

What is more, living in a country with strong cultural support for family centered caregiving is detrimental to female caregivers' well-being net of individual-level characteristics. These findings are consistent with recent research. For example, one study found negative effects of caregiving among females in Turkey (Akpınar et al. 2011). This suggests that family centered

caregiving norms encourage women to assume caregiving responsibilities at the expense of their health. This could function through two processes. First, family-centered caregiving countries may have few market or government options to outsource care. Thus, families who cannot support an additional dependent, and would outsource this care, may assume greater caregiving responsibilities at the expense of female caregivers' health who likely assume the majority of this care. By contrast, in countries where family-centered caregiving is not expected, these dependents are cared for by another entity and thus do not deteriorate female caregivers' health. Second, providing care in a country with strong expectations for family centered care may deteriorate female caregiver well-being. For example, family-centered caregiving may reflect strong preferences for intensive caregiving for all family members. This increased strain may harm female caregiver well-being with no consequence for male caregivers. As we apply cross-sectional data, we are unable to assess these causal relationships but our results hint that family centered caregiving may truly reflect female provided caregiving.

Ultimately, this study contributes the following conclusions: caregivers report lower well-being; women experience a well-being disadvantage by dependent care type and family centered caregiver culture. The demographic transitions of delayed marriage and fertility, and longer life expectancy typical in most European countries imply that the number of families at-risk for providing dependent care for children and the elderly may be higher today than ever before, and will continue to increase. For this reason, this study is a step toward understanding how dependent care is associated with well-being for this multi-national sample is especially pertinent.

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**Table 1: Descriptive Overview of Dependent Variables and Macro-Level Measures**

Country	n	Mean Well Being (Entire Sample)	Mean Well Being (Caregivers)	Family Centered Caregiving	GDP
Austria	1267	4.07	4.09	17.00	\$30,000
Belgium	1369	4.10	4.05	17.00	\$29,100
Czech Republic	1947	3.89	3.97	36.00	\$15,700
Denmark	1285	4.39	4.24	7.00	\$31,000
Finland	1837	4.01	4.01	7.00	\$27,400
France	1506	4.03	4.00	18.00	\$27,600
Germany	2169	4.05	3.86	25.00	\$27,600
Greece	1605	3.81	3.96	49.00	\$20,000
Hungary	1297	3.80	3.82	36.00	\$13,900
Ireland	1746	4.39	4.33	19.00	\$29,600
Luxemburg	984	4.29	4.14	21.00	\$55,100
Netherlands	1627	4.06	3.96	4.00	\$28,600
Norway	1706	4.31	4.41	6.37	\$37,800
Poland	1404	3.95	4.01	59.00	\$11,100
Portugal	1201	3.80	3.85	44.00	\$18,000
Slovakia	928	3.99	3.73	47.00	\$13,300
Slovenia	1094	3.99	4.03	29.00	\$19,000
Spain	1028	4.18	4.21	39.00	\$22,000
Sweden	1795	4.18	4.07	4.00	\$26,800
Switzerland	1676	4.30	4.32	16.37	\$32,700
Turkey	1657	3.60	3.41	74.00	\$6,700
UK	1477	3.75	3.58	20.00	\$27,700

2004 ESS data. N=32,605 individuals nested in 22 countries.

Note: Family Centered Caregiving is from the Eurobarometer. GDP is from the CIA World Factbook

Table 2: Descriptive Overview of Dependent and Independent Variables

Variable	Mean	Standard Deviation	Minimum	Maximum
Well-Being	4.036	1.08	1	6
<i>Providing Dependent Care</i>				
Respondent provides dependent care	0.25	0.43	0	1
Female respondent provides dependent care	0.15	0.36	0	1
Child under 5 present	0.13	0.33	0	1
Child 6 to 15 present	0.23	0.42	0	1
Spouse 65 to 74 present	0.08	0.27	0	1
Parent 65 to 74 present	0.02	0.13	0	1
Other adult 65 to 74 present	0.004	0.07	0	1
Spouse 75 plus present	0.04	0.18	0	1
Parent 75 plus present	0.02	0.12	0	1
Other adult 75 plus present	0.01	0.08	0	1
Sandwich Household	0.01	0.11	0	1
Partner disabled	0.02	0.13	0	1
<i>Job Market Status</i>				
Employed in paid work	0.51	0.49	0	1
Unemployed	0.05	0.22	0	1
Student	0.08	0.26	0	1
Disabled	0.02	0.14	0	1
Retired	0.21	0.40	0	1
Housewife/househusband	0.11	0.31	0	1
Other	0.01	0.10	0	1
<i>Marital Status</i>				
Married	0.55	0.50	0	1
Separated	0.02	0.13	0	1
Divorced	0.08	0.27	0	1
Widowed	0.09	0.29	0	1
Never Married	0.26	0.44	0	1
<i>Socioeconomic Status</i>				
Relative Household Income	6.08	2.62	1	12
No primary education	0.05	0.21	0	1
Basic education	0.35	0.48	0	1
Secondary education	0.40	0.49	0	1
Tertiary education	0.20	0.40	0	1
<i>Religion</i>				
Self-reported religiosity	4.92	2.98	0	10
<i>Demographic Characteristics</i>				
Age	47.90	17.74	14	100
Female	0.53	0.50	0	1



**Table 3: HLM Results for Self-Reports of Overall Well-Being for Men and Women in 22 nations**

	Model 1		Model 2		Model 3	
Intercept	4.073	***	4.255	***	4.251	***
Female	---		-0.170	***	-0.161	***
<i>Providing Dependent Care</i>						
Caregiver	-0.068	**	-0.056	*	-0.062	
Child under 5 present	---		-0.078	***	-0.101	***
Child 6 to 15 present	---		-0.053	***	-0.058	**
Spouse 65 to 74 present	---		0.103	***	0.151	***
Parent 65 to 74 present	---		0.059		0.001	
Other adult 65 to 74 present	---		0.009		0.085	
Spouse 75 plus present	---		-0.053		0.043	
Parent 75 plus present	---		-0.069		-0.120	
Other adult 75 plus present	---		0.111		0.182	*
Sandwiched household	---		-0.005		0.156	*
Partner disabled	---		-0.146	***	0.032	
<i>Gender Effects for Providing Dependent Care</i>						
Female x Caregiver	---		---		0.013	
Female x child under 5 present	---		---		0.042	
Female x child 6 to 15 present	---		---		0.007	
Female x spouse 65 to 74 present	---		---		-0.086	*
Female x parent 65 to 74 present	---		---		0.117	
Female x other adult 65 to 74 present	---		---		-0.178	
Female x spouse 75 plus present	---		---		-0.159	**
Female x parent 75 plus present	---		---		0.102	
Female x other adult 75 plus present	---		---		-0.178	
Female x sandwiched household	---		---		-0.278	**
Female x partner disabled	---		---		-0.318	***
VARIANCE COMPONENTS						
Level-1 R	0.966		0.921		1.056	
Intercept	0.045	***	0.027	***	0.027	***
Caregiver Slope	0.010	***	0.010	***	0.012	***
Female x Caregiver Slope	---		---		0.010	**

\*\*\* p<0.001; \*\* p< 0.010; \* p<0.050 2004 ESS data. N=32,605 individuals nested in 22 countries. Note: Model 1 has no individual level controls. Models 2 and 3 control for employment, marital status, education, household income, religiosity and age.

**Table 4. Hierarchical Linear Model for Well-Being and Country-Level Estimates**

	Model 1		Model 2	
	Coeff.		Coeff.	
<i>Intercept</i>				
Intercept	4.176	***	4.252	***
Family centered caregiving	-0.003		-0.003	
GDP (per \$1,000 increase)	0.009	**	0.005	
<i>Female</i>				
Intercept	-0.210	***	-0.165	***
Family centered caregiving	-0.001		-0.001	
GDP (per \$1,000 increase)	0.002		0.002	
<i>Caregiver</i>				
Intercept	-0.062	*	-0.056	
Family centered caregiving	0.003		0.004	
GDP (per \$1,000 increase)	0.001		0.002	
<i>Female x Caregiver</i>				
Intercept	0.027		0.002	
Family centered caregiving	-0.006	**	-0.006	*
GDP (per \$1,000 increase)	-0.011	***	-0.011	*
VARIANCE COMPONENTS				
Level-1 R	0.957		1.056	
Intercept	0.014	***	0.014	***
Caregiver Slope	0.007	*	0.007	**
Female x Caregiver Slope	0.006		0.006	

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$  (two-tailed tests). 2004 ESS data.  $N=32,605$  individuals nested in 22 countries. Model 1 includes no individual-level controls. Models 2 and 3 control for employment, marital status, education, household income, religiosity and age.

<sup>i</sup> Initially, we were interested in comparing attitudes towards elder and childcare. Thus, we aggregated an attitudinal measure reflecting preference for mothers to provide childcare for school aged children from the 2002 International Social Survey Programme. However, we found this measure to be highly correlated with the family centered caregiver measure ( $\alpha = 0.90$ ). Thus, to avoid colinearity, we excluded the childcare measure but used the childcare measure to impute values for two countries available in the ISSP but missing in the Eurobarometer - Switzerland and Norway. Specifically, we averaged three Eurobarometer family centered care values for countries closest to

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Switzerland and Norway's childcare measure. We then ran our models with these imputed countries and without and found our results to be robust.

<sup>ii</sup> Given its outlier status, we model our HLM effects with a sample that includes and excludes Turkey. The results are equivalent.