



# Needs or obligations? The influence of childcare infrastructure and support norms on grandparents' labour market participation

Journal of European Social Policy  
2023, Vol. 33(1) 17–33  
© The Author(s) 2022



Article reuse guidelines:  
[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)  
DOI: 10.1177/09589287221115668  
[journals.sagepub.com/home/esp](https://journals.sagepub.com/home/esp)



**Ariane Bertogg** 

University of Konstanz, Konstanz, Germany

## Abstract

This study investigates how institutional and normative characteristics affect grandparents' labour market participation. Previous studies indicate that providing regular grandchild care reduces labour market participation, and this linkage varies between European welfare states. Yet the underlying mechanisms remain unclear, and no study has systematically disentangled cultural from institutional influence when investigating grandparents' work–care reconciliation. Based on two mechanisms, needs and obligations, we investigate how (grandparental) support norms and childcare infrastructure jointly shape the labour market participation of active grandparents. We use six waves from the Survey of Health, Aging and Retirement in Europe (SHARE), investigating variation across 91 subnational regions in 18 countries. The results indicate that the regular provision of grandchild care increases the risk of exiting the labour market for both men and women. This linkage is stronger in contexts with stronger support norms, but also depends on the childcare infrastructure in contexts where norms are weaker.

## Keywords

grandparents, employment, retirement, childcare, gender, family policy, social norms, regional analysis, Europe

## Introduction

In recent years, public and academic interest in the question of how older workers reconcile paid employment and unpaid family care has grown. A large number of studies have already investigated under which circumstances the provision of elder care impacts on caregivers' employment (for an overview, see [Moussa, 2019](#)). Fewer studies have investigated how grandchild care impacts on employment

(exceptions are [Backhaus and Barslund, 2019](#); [Lumsdaine and Vermeer, 2015](#)).

Grandchild care as a potential 'threat' to employment is a relevant topic to study ([Hank et al., 2018](#)). Premature labour market exits increase the

---

### Corresponding author:

Ariane Bertogg, History and Sociology, University of Konstanz, Universitätsstraße 10, Konstanz 78457, Germany.

Email: [ariane.bertogg@uni-konstanz.de](mailto:ariane.bertogg@uni-konstanz.de)

risk of old-age poverty, a phenomenon which is particularly prevalent among women (Eurostat, 2021). Moreover, grandchild care constitutes a commitment of a long duration (Patterson and Margolis, 2019), and competes more strongly with employment than old age care, because its demands increase as further grandchildren arrive (Bordone et al., 2016; Hank et al., 2018). Third, in most European countries, maternal employment is on the rise (Eurostat, 2020). Grandparental childcare is increasingly sought after (Geurts et al., 2014; Hamilton and Suthersan, 2020). Together with increasing retirement ages for both men and women, new challenges for reconciling family and work arise in later life.

The provision of grandchild care is widespread in Europe, but its prevalence and intensity vary across countries (Bordone et al., 2016; Igel and Szydlik, 2011), as do the gendered patterns therein (Leopold and Skopek, 2014). In Southern Europe, the likelihood of being an actively caring grandparent is smaller than in Northern Europe, but the average number of hours spent looking after grandchildren is much higher (Igel and Szydlik, 2011). These country differences have been interpreted with the availability of a formal childcare infrastructure. The absence of publicly subsidized and affordable formal childcare creates needs for grandparental childcare (Chung et al., 2018; Yerkes and Javornik, 2018). A second interpretation for the country differences refers to different normative ideals around how childcare should be organized and to what degree family members should support each other (Hamilton and Suthersan, 2020; Jappens and Van Bavel, 2012). Stronger support norms in general, and grandparental childcare expectations in particular, reinforce individually perceived care obligations among grandparents. Both needs and obligations are plausible drivers behind grandparents' market participation exits. Yet only two studies investigate the labour market consequences of, respectively, grandparenthood (Van Bavel and De Winter 2013) and grandchild care (Backhaus and Barslund, 2019) in a comparative design. Both studies, however, do not explain the country variance with quantitative indicators for childcare policies or normative expectations.

Historically, normative ideas and welfare institutions have often co-developed and mutually influenced each other. There is ample research showing that the expansion of public childcare has weakened traditional gender norms (Andronescu and Carnes, 2015; Zoch and Schober, 2018) – and that the cultural legacies can both promote or hinder the expansion of public childcare (Grunow and Veltkamp, 2016; Lohmann and Zigel, 2015; Kremer, 2007). As welfare policies are often path-dependent (Seeleib-Kaiser, 2016), reforms tend to keep elements or political ideas referring to past normative ideals. Policy features may comprise explicit support obligations (Saraceno and Keck, 2010).

Nevertheless, the history of European welfare states has seen a number of sharp disruptions – or path departures – including gender and childcare policymaking (Pfau-Effinger, 2008; Michel and Mahon, 2002). With the dissolution of the USSR and the transition back to market economies, childcare infrastructure in many Central and Eastern European countries has eroded, while normative ideals have remained gender-egalitarian and a strong labour market attachment of mothers can be observed (Matysiak and Steinmetz, 2008; Szelewa and Polakowski, 2008). Recent developments include the orientation of German family policy towards Scandinavian models. However, slow cultural change hinders the usage of the new policy features (Ciccia and Bleijenbergh, 2014; Pfau-Effinger, 2005). This creates unique pathways among European welfare states with regard to normative obligations and childcare policies, which may in some cases stand 'at odds' with each other.

It is plausible to assume that the degree to which active grandparenthood affects labour market participation varies with *both* the institutional and normative characteristics. Particularly in contexts where norms and institutions are contradictory, normative obligations and childcare needs may exert conflicting forces, pulling grandparents in opposite directions. Such tensions are nevertheless useful for disentangling normative from institutional influence. Against this background, we ask: Does providing grandchild care affect labour market exits? How does

the effect vary across specific contexts with their childcare policies and social norms?

This article contributes to the literature in several ways: first, it sheds light on ‘new’ reconciliation issues in late life. Second, it aims at disentangling normative from institutional influence by looking at specific combinations of two types of support norms and two aspects of childcare infrastructure across 18 countries and 91 regions in Europe over a time-span of 13 years. In the following, we develop two theoretical mechanisms and subsequently test these complex interactions using refined quantitative measurement of norms, accounting for both temporal and spatial within-country variation.

## Theoretical background

### *Individual characteristics: instrumental and value rationality for grandchild care and employment*

The organization of paid employment and unpaid family work is often explained by reference to Household Economy Theory (Becker, 1965). It assumes that actors (households or couples) make informed decisions regarding the allocation of their members’ time to paid and unpaid work, weighing the costs and benefits in order to maximize the unit’s common economic utility. According to these considerations, individuals with lower economic resources have lower opportunity costs, and should be more ready to leave the labour market when there is a demand for unpaid care.

With regard to grandchild care, such decision-making can plausibly be extended beyond generational and household borders (Hank et al., 2018). Regular grandchild care enables adult children to pursue their professional careers (Jappens and Van Bavel, 2012). This might benefit the family overall. Thus, grandparents’ response to childcare needs of the middle generation by giving up employment could be a rational strategy pursued by families (Lumsdaine and Vermeer, 2015). The payoff of such a strategy should be particularly high when childcare is needed on a regular basis, for example, when formal childcare is not available, is unsubsidized or not flexible

enough to meet parents’ working hours (Yerkes and Javornik, 2018; Chung et al., 2018).

A second theoretical approach conceptualizes the provision of grandchild care as intergenerational solidarity. In this framework, grandchild care is defined as a time transfer provided to the next generation (Bengtson and Roberts, 1991). While intergenerational solidarity is often triggered by need, need is not a necessary precondition for support (Künemund and Rein, 1999). Rather, intergenerational support seems motivated by perceived obligations to support one’s family members (‘normative solidarity’, Bengtson and Roberts, 1991). The literature on grandparents’ motivations for providing childcare frequently mentions these individually perceived responsibilities (Bordone et al., 2016; Lee and Bauer, 2013). Such an internal norm and the resulting self-expectations can also be complied with by complementing existing childcare arrangements with sporadic childcare (Igel and Szydlik, 2011). Sporadic childcare threatens labour market participation to a much lesser degree, as it can better be organized around one’s own job schedule (Backhaus and Barlund, 2019). We will thus differentiate between regular and sporadic childcare and assume that *only regular provision of childcare increases the likelihood of exiting the labour market* (H1).

### *Contextual characteristics: institutional and normative influence on grandchild care and employment*

The societal context influences the organization of grandchild care and employment in at least two ways. First, the degree to which grandparents engage in regular or sporadic childcare depends on the *need* for it. Need is strongly defined by the (existence or lack of a) formal childcare infrastructure (Aassve et al., 2012; Igel and Szydlik, 2011). Public childcare has been on the rise, as it constitutes an important social investment strategy with the aim to increase educational chances and decrease gender inequalities in labour market participation (Neimanns, 2017; Saraceno, 2017). However, formal childcare provision sharply differs between European welfare

systems according to its availability, costs and flexibility. These features, too, shape the need for (additional) grandparental childcare (Yerkes and Javornik, 2018). In countries with a strong public childcare infrastructure, for example in Sweden or Slovenia, many children under the age of three are enrolled on a full-time basis. In the Netherlands, the enrolment rate is high, but most children are enrolled on a part-time basis. In some countries, for instance Italy, public childcare provision focuses on older children. Formal childcare for children under three is hardly available and grandmothers constitute a crucial source for childcare (Arpino et al., 2014; Chiuri, 2000). In countries relying predominantly on market-based childcare, such as the UK and Switzerland, childcare expenditures make a large part of parents' household budgets (Foerster and Verbist, 2012). Where such structural constraints challenge mothers' employment (Duncan, 2005), regular grandparental care is an attractive (and low-cost) alternative (Arpino et al., 2014). However, even in contexts where formal childcare is widely available and subsidized, additional grandparental childcare may be needed if formal childcare hours are not flexible enough, a prime example being Germany (Chung et al., 2018; Hank and Kreyenfeld, 2000). Different aspects of the formal childcare infrastructure thus create needs for grandparental childcare, which threatens grandparents' labour market participation.

The second theoretical explanation comprises *obligations*, derived from – more general or specific grandparental – support norms prevalent in a society. Several mechanisms can explain why moral obligations at a contextual level translate into supportive behaviour. One approach departs from the idea that social norms influence behaviour via social sanctions (Elster, 2009), whereby sanctions may be negative (punishment for non-conformity) or positive (reward or gain in social status for conformity). Individuals follow normative expectations in order to avoid negative consequences and experience rewards. Previous research indicates that (the avoidance of) sanctions indeed motivate family caregiving (Verbakel, 2018; Hamilton and Suthersan, 2020). For working mothers, for instance, using grandparental childcare can be a means of avoiding sanctions,

particularly in contexts where family-based childcare is normatively prescribed (Wheelock and Jones, 2002; Hamilton and Suthersan, 2020).

Interactionist approaches treat norms as the basis for negotiations between family members, which then serve for the construction and confirmation of one's identity. One of the most prominent examples is the idea of 'doing gender' (West and Zimmerman, 1987), which proposes that normatively promoted gender roles are enacted and negotiated in life course decisions, social relationships and everyday life practices. Similarly, support provision is a way of enacting family norms (Connidis and McMullin, 2002). A third theoretical idea is that social norms work through inherent self-expectations. The strength of perceived obligations may vary between individuals, and these may be enacted – or not (Cooney and Dykstra, 2011). A context with stronger norms may promote the enactment of such subjective norms, activating the potential of grandparental childcare even if need for childcare is not acute.

Few studies have investigated comparatively how family or other support norms moderate the influence of caregiving on employment participation (an exception being Naldini et al., 2016). We know, however, that norms also vary within countries, both spatially (Róžańska-Putek et al., 2009) and across time (Zoch and Schober, 2018), thus, an indicator of norms that is too static and broad (for example, measured by legal obligations) may not be informative. The spatial dimension is particularly essential because the 'channels' through which sanctions operate are rooted in everyday interactions within – locally bound – networks of personal relations with families, friends, neighbours and colleagues, which confirm moral obligations and identities (Duncan, 2005). The temporal dimension is important, too, as family and gender norms have undergone substantial change in most western countries in recent years (Inglehart et al., 2017).

Finally, we argue that these two mechanisms behind institutional and normative characteristics of a context – needs and obligations – do not operate independently from one another. The interesting question here is whether norms or institutions dominate this joint influence. Two types of interdependencies are conceivable. First, in contexts with

strong norms (and stronger obligations), grandparents may regularly look after their grandchildren in order to meet normative expectations or enact the individually perceived obligations. Consequentially, they should have a higher likelihood of leaving the labour market – *even* if the childcare infrastructure is well-developed (and need is small). The formal childcare infrastructure should only affect labour market decisions where norms are weak (H2), as only then, needs come into play. In such a constellation, *obligations dominate needs*.

Second, one could assume that normative obligations *only* play a role where the childcare infrastructure is strong (and need is small). In contexts with a weak childcare infrastructure, norms should play a minor role for grandparents' childcare and employment decisions, because the lack of infrastructure requires them to provide childcare. Where the childcare infrastructure is well-developed, however, families have a choice how to organize childcare. Stronger support norms in general, and grandparental care norm in particular, could motivate grandparents to enact subjectively perceived obligations and prioritize childcare over employment. In this scenario, we would observe diverse patterns of normative influence across different institutional contexts, which indicates that *needs dominate obligations* (H3).

### Gender-specific patterns of institutional and normative influence

Care and support norms do not come in isolation, however, but are linked to other sets of norms, particularly gender norms (Arber and Ginn, 1994; Rossi and Rossi, 1990). As a consequence, social norms promoting family work affect men and women differently. Previous research has shown how gender norms differently affect men's and women's well-being at the transition to parenthood (Preisner et al., 2020). Similarly, institutional characteristics influence older men's and women's employment and caregiving decisions differently (Bertogg et al., 2021). A gender-specific influence of institutional characteristics also applies to the provision of grandchild care (Igel and Szydlik, 2011). Less is

known about whether care norms also affect grandmothers' and grandfathers' labour market behaviour, and how this works in interaction with the political context, particularly the childcare infrastructure. On the one hand, one can assume that family obligations leading to intensive caregiving shape 'moral careers' which prompt individuals to focus on such activities – even if they stand at odds with other expectations (Goffman, 1959; Johnson and Best, 2012). On the other hand, we know that couples negotiate the division of paid employment and unpaid childcare not only in young and mid-adulthood, but also when becoming grandparents (Leopold and Skopek, 2014). Path-dependencies of accumulated labour market skills and income potentials are likely to play a role here. According to such expectations, grandfathers should be less motivated by care norms to care (intensively) but might only take up more time-intensive care at their own transition to retirement (see also Bertogg et al., 2021).

As our last hypothesis, we thus assume that the influence of normative contexts (obligations) and institutional characteristics (needs) differ between men and women. More specifically, it is to assume that for men, the provision of intensive grandchild care is more strongly driven by the institutional context, particularly, a lack of formal care provision and thus a *need* for grandparental childcare. For women, on the other hand, normative expectations may work more strongly than needs arising from institutional arrangements, as gender roles also inherently entail certain family roles. We can thus assume that for women, norms are a stronger driver of behaviour than institutions, whereas for men, institutions are a stronger driver of behaviour than norms. In other words, we expect to find *stronger support for H2 – obligations dominating needs – for women, and stronger support for H3 – needs dominated obligations – for men* (H4).

### Data and methods

The analyses are based on data from the Survey of Health, Ageing and Retirement in Europe (SHARE<sup>2</sup>) (Börsch-Supan, 2019; Börsch-Supan et al., 2013). We use the six panel waves (1, 2, 4, 5, 6, 7) collected



between 2004 and 2017. The third wave captured only retrospective information (SHARELIFE) and cannot be used in a panel analysis. SHARE is fielded regularly (2004, 2006, 2008, 2011, 2013, 2015, 2017), but omitting wave 3 (2008) results in a larger time gap. In order to account for these gaps, we control for wave fixed effects in all models.

Our analyses make use of the longitudinal structure of the data. Due to the complex design of the survey – including refreshment samples, countries which joined later, ended participation or paused for specific waves – panel data are not balanced. We use information from all respondents who participated at least twice in the survey, using 18 countries in which at least two subsequent panel waves were fielded and for which information was available on the selected childcare institution and (grandparental vs general) norm indicators (AT, BE, CH, CZ, DE, DK, EE, ES, FR, GR, HU, LU, IT, NL, PL, PT, SI and SE). Our analytical sample consists of biological and non-biological grandparents aged 50–68 years who live in a private household. The age range was chosen to represent a life span in which both grandparenthood and labour market exits are likely (Patterson and Margolis, 2019). We applied listwise deletion to person-year observations without valid observations on the explanatory variables. We also included respondents' (married or cohabiting) partners meeting the criteria, as far as they were surveyed, too. In total,  $n = 20,486$  respondents meet the criteria above and are observed in  $n = 64,706$  person-year observations (for a detailed description of the sample, see [Supplement Table A1](#) in the Appendix).

### Dependent variable

Our dependent variable is labour market exit which is operationalized as the transition to retirement or economic inactivity. For that purpose, we recoded the self-reported five-category variable on respondents' current job situation into a dichotomous variable. For every person-year a respondent is observed as being employed (including self-employment and part-time work), this variable takes on the value 0. For every person-year that a respondent is observed as being retired or economically inactive (including being

unemployed, a homemaker, or out of work due to illness or disability), the variable takes on the value 1.

### Explanatory variables: childcare, institutions, norms

Our main independent variable is the provision of grandchild care. It is assessed as a self-reported variable referring to provision of grandchild care to at least one (biological or non-biological) child in the past 12 months. We distinguish three groups: non-caregivers, sporadic caregivers (measured as less than weekly) and regular caregivers (measured as at least weekly).

At the contextual level, we use two measures of childcare infrastructure (see [Table 1](#)). *Public expenditures for formal childcare* were calculated according to [Hook and Paek \(2020\)](#). Annual public expenditures for early childhood education and care (ECEC), measured in €1000 and at constant price levels (OECD, 2019), were divided by the number of children aged 5 years or younger (Eurostat, 2019a). This indicator is a per-capita measure adjusting for the demographic structure of the country. The second indicator captures the *childcare coverage rates for children under the age of 3 years*. This indicator is available from [Eurostat \(2019b\)](#). Both indicators are fully time-varying and measured at the country level.

The first indicator pertaining to support norms is measured at the regional level (NUTS 1 or NUTS 2).<sup>1</sup> It represents a general norm of supporting others who need help. The measure is computed using the European Social Survey (ESS, [European Social Survey Cumulative File, 2020](#)).<sup>2</sup> We use data from Round 2 (collected in 2004) to Round 8 (collected in 2016). The item is part of the Human Values scale, which is introduced as follows 'Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you', followed by 21 items. We use the item 'It's very important to him to help the people around him. He wants to care for their wellbeing.' The original scale is dichotomized, with the value '1' indicating agreement ('Somewhat like me'–'Very much like me'). We then aggregated this agreement variable

**Table 1.** Contextual level indicators.

Indicator	Source	Description	Level	Years
ECEC expenditures	OECD	Expenditures on ECEC, per child under 5 years of age, in €1000 at constant prices	Country	2003, 2005, 2010, 2012, 2014, 2016
Coverage rate	Eurostat	Percentage of children under the age of 3 years in formal childcare	Country	2003, 2005, 2010, 2012, 2014, 2016
General support norm	ESS Rounds 2–8	% Agreement to statement: 'It is important to help people and care for others' well-being'	NUTS 1/2	2004 <sup>a</sup> , 2006 <sup>a</sup> , 2010, 2012, 2014, 2016
Grandparental care norm	Eurobarometer	% Agreement to statement: 'Grandparental childcare is among the best options'	Country	2009

<sup>a</sup>Lagged for ESS norm indicator are not possible for Rounds 2 and 3 because ESS and SHARE waves were collected in the same year.

across ESS rounds at the available NUTS-level using population weights. The second indicator comprises specific *grandparental support norms*. We used data from the Eurobarometer Flash survey with the topic 'Family life and the needs of an ageing population'. That survey was fielded in September 2008. The respondents were asked 'Childcare for pre-school children can be organized in different ways, sometimes combining several options, sometimes relying on only one option. In your opinion, what is the best way of organizing childcare for pre-school children?', followed by seven dichotomous items ranging from 'Public or private crèche/day care centre/nursery' to 'Other'. Respondents could agree to as many answers as they wished. For the purpose of this article, we aggregated the average agreement to the item 'Childcare by grandparents or other relatives', by country using population-based weights provided by Eurostat.

With the exception of the specific grandparental support norm from Eurobarometer, which is only available for 2008, all contextual-level indicators are time-varying. Where possible, we lagged them by 1 year to the respective SHARE wave. All indicators are centred at the grand mean.

### *Additional control variables*

Based on the literature we consider *demographic factors and opportunities and constraints* as relevant predictors of leaving the labour market and caring for grandchildren. A key demographic

characteristic is respondent's age at the time of the interview, which we grouped into five categories (50–54, 55–59, 60–64, 65–68 years) to allow for a non-linear relationship. We include five measures depicting the respondent's embedment into kinship networks: a dichotomous variable indicating whether one has at least one living parent (1 = yes), whether one has children and how far the nearest child lives away, and two continuous variables indicating the total number of grandchildren, and the age of the youngest grandchild. We also control for whether one has at least one daughter (1 = yes), because childcare is more likely to be provided to daughters than sons.

*Opportunities and constraints* for participating in the labour market arise from various sides. Functional health is computed as the sum of all self-reported mobility and activities of daily living (ADL) limitations. Economic needs may require individuals to work longer and delay retirement. We controlled for whether the person lived in a low-income household (calculated as whether the household income belongs to the bottom two quintiles of the respective country- and year-specific income distribution in SHARE), and – as a proxy for wealth – whether the person is a homeowner (1 = yes). We included a variable indicating partnership and partner's employment status (partner working; partner retired; partner inactive; no partner). Moreover, other care-receivers might compete for the time of a grandparent. We controlled for whether the respondent provided any type of informal care or practical

help to a third person. Finally, in order to account for period effects, we included wave fixed effects.

### Analytical strategy

In order to analyse transitions between being employed and retired/inactive, we used logistic fixed effects panel regression models. These models have the advantage of holding all (observed and unobserved) between-person heterogeneity constant (correcting for bias from non-observables) and allowing changes to be explained in the dependent variables with changes in the independent variables (Allison, 2009). Fixed effects models have the disadvantage, however, that only those respondents can be analysed who exhibit variation in the dependent variable over time. Thus, all persons who do not change employment status during their participation in the panel are automatically excluded from the statistical analysis.

About one third of our respondents are observed as employed at baseline (32.83%), of which about half (50.85% for men, 49.15% for women) exit the labour market during their participation in the panel. Conversely, of those respondents who were already observed inactive or retired at baseline, only 2% transition back into the labour market ( $n = 378$ ). In total,  $n = 4422$  respondents observed in  $n = 14,193$  valid person-years contribute to the statistical models. [Supplement Figures A1 and A2](#) in the Appendix provide an overview.

Our analyses encompassed several steps. First, we tested whether providing sporadic or regular grandchild care (as compared to no grandchild care) influences labour market exits. In the second step, we estimated separately the effects of the two childcare infrastructure indicators and the two norm indicators: as main effects, as two-way interactions with grandchild care. In the third step, we include three-way interaction terms between grandchild care (measured at the individual level), one of the childcare infrastructure measures (measured at the national level), and either the general support norm (measured at the regional level) or the grandparental support norm (measured again at the country level). In order not to overburden the models each of the four combinations of indicators is tested

separately. This allows us to investigate how providing regular grandchild care affects labour market participation differently for contexts with specific combinations of institutional and normative characteristics. All models were estimated separately by gender.

### Findings

[Table 2](#) presents the average marginal effects (AME) from the first set of models with grandchild care as a predictor of labour market exits. Providing regular grandchild care increases the exit risk by about 2% for both men and women. A pooled model for both sexes, with an interaction term between grandchild care and gender, revealed that the difference between men and women was not significant. As expected, sporadic childcare does not influence labour market exits. Thus, H1 can be confirmed.

### Grandchild care and labour market exits in context

In the next step, we examined whether the formal childcare infrastructure or support norms directly affect labour market exit, by including each norm and infrastructure indicator separately as a main effect, and whether they moderate the effect of providing grandparental childcare, by including two-way interaction terms. The findings are provided in [Supplement Table A5](#) in the Appendix. As a short summary, all these linkages were insignificant. This indicates that neither the childcare infrastructure context, nor grandparental or general support norms explain labour market exits. The insignificant two-way interaction terms suggest that norms or infrastructure alone do not moderate the grandchild care–employment nexus. These findings support our assumption that the effects of norms and institutions do not work in isolation, but jointly.

Therefore, in the last step, we investigate how combinations of childcare infrastructure and (grandparental childcare or general support) norms moderate the linkage between grandchild care and labour market exits, including three-way interaction terms (see [Table 3](#)). Such complex interaction



**Table 2.** Grandparenting and labour market exits.

	Men	Women
Not caring for grandchildren (ref.)		
Cares less than weekly ('sporadic')	0.009	0.004
Cares at least weekly ('regular')	0.022*	0.022*
Demographic factors		
Age groups: 50–54 years (ref.)		
55–59 years	–0.037	–0.070**
60–64 years	–0.021	–0.027
65–68 years	0.006	0.040
Has no living parents	0.015	–0.012
Age of youngest grandchild	–0.000	–0.001
Number of grandchildren	0.001	0.004
Has at least one daughter	–0.000	–0.004
Opportunities and constraints		
# Functional health limitations	0.005*	0.008**
Low household income	0.003	0.041*
Homeowner	–0.002	–0.004
Childless (ref.)		
Distance to nearest child: Max. 5 km	0.014	–0.020
Co-residing	0.008	–0.038
>5 km	0.024	–0.006
No information available	0.006	–0.035
Partner employed (ref.)		
Partner retired	0.045*	0.045**
Partner inactive	0.030*	0.035*
Has no partner	0.022	0.050
Partner employment information <i>n.a.</i>		
Provides informal care	0.000	0.003
Wave 1 (ref.)		
Wave 2	0.210*	0.216***
Wave 4	0.297	0.401**
Wave 5	0.306	0.450**
Wave 6	0.309	0.466**
Wave 7	0.310	0.475**
<i>n</i> (person-years)	6508	7685

Note: SHARE Release 7.0.0, grandparents aged 50–68 years, living in private household. Own calculations. Average Marginal Effects from Fixed Effects Logistic models.

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

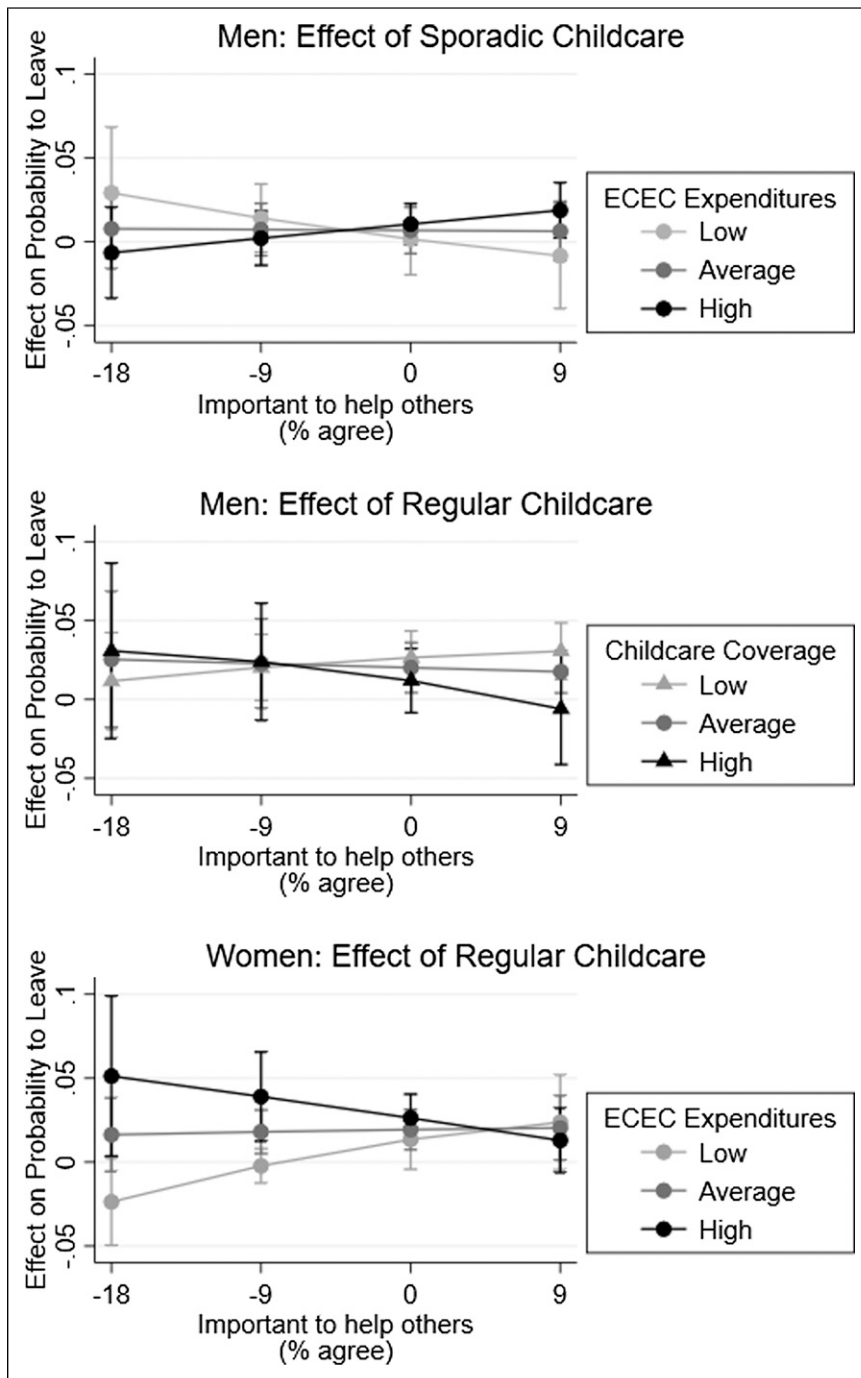
terms are not intuitive to interpret. For that reason, we present the significant three-way interactions using the AME of providing (regular or sporadic) grandchild care versus not providing grandchild care (Figure 1). The  $y$ -axis denotes the effect of

providing grandchild care on likelihood to exit the labour market (negative values indicating a lower, positive a higher likelihood for caregivers than for non-caregivers). The  $x$ -axis denotes the agreement to the support norm in the respective context, the

**Table 3.** Coefficients from three-way interactions between grandchild care, norms and institutions.

Childcare indicator	ECEC	ECEC	Coverage	Coverage
Norm indicator	General	Grand-parental	General	Grand-parental
<b>Men</b>				
Not caring for grandchildren (ref.)				
Sporadic: Less than weekly	0.134	0.207	0.166	0.172
Regular: regular	0.595***	0.541***	0.743***	0.866*
Expenditures for ECEC per child<5	0.089	0.086		
Coverage rate for children<3			0.007	0.004
Support norm (% agree)	0.024		0.020	
Grandparental support norm		n.a		n.a
Norm*childcare	-0.009	0.004	-0.001	0.004*
Childcare*sporadic	0.040	0.035	0.003	0.002
Childcare*regular	0.000	0.011	-0.011	-0.009
Norm*sporadic	-0.003	0.002	0.005	-0.004
Norm*regular	0.023	0.028*	0.033	0.033**
Norm*childcare*sporadic	0.008*	0.001	0.001	0.000
Norm*childcare*regular	-0.006	-0.002	-0.002*	-0.001
Control variables included	Yes	Yes	Yes	Yes
Wave dummies included	Yes	Yes	Yes	Yes
<i>n</i> (person-years)	6508	6302	6302	6242
<b>Women</b>				
Not caring for grandchildren (ref.)				
Sporadic: Less than weekly	0.007	-0.076	0.036	-0.111
Regular: regular	0.347***	0.262*	0.323***	0.188
Expenditures for ECEC per child<5	-0.095	-0.082		
Coverage rate for children<3			-0.017	-0.011
Support norm (% agree)	0.016		0.024	
Grandparental support norm		n.a		n.a
Norm*childcare	-0.003	-0.015	-0.001	0.004
Childcare*sporadic	0.037	0.002	0.005	0.001
Childcare*regular	0.026	0.021	0.010**	0.003
Norm*sporadic	-0.005	-0.043**	-0.001	-0.042**
Norm*regular	0.009	0.004	-0.002	0.006
Norm*childcare*sporadic	-0.001	0.001	0.000	0.000
Norm*childcare*regular	-0.010**	-0.003	-0.001	-0.001*
Control variables included	Yes	Yes	Yes	Yes
Wave dummies included	Yes	Yes	Yes	Yes
<i>n</i> (person-years)	7685	7341	7402	7268

Notes: ECEC = Public expenditures for formal childcare, per child under 5 years, in €1000, at constant prices (fully time-varying, country level) (OECD, 2019; Eurostat, 2019a). Coverage = Childcare coverage rate for children aged 0–2 years, in percent (fully time-varying, country level) (Eurostat, 2019b). ESS = Percentage agreement to support norm (time-varying, regional level, 91 NUTS regions). Eurobarometer = Percentage agreement that grandparental childcare is best (measured only 2009, country level). Contextual level indicators not available for Switzerland (Eurobarometer) and Luxembourg (Childcare coverage), hence the varying case numbers.



**Figure 1.** Average marginal effects of grandparenting by normative and policy characteristics. Source: SHARE Release 7.0.0, waves 1–2, 4–7, grandparents aged 50–68 years living in a private household. Norm Indicator: ESS rounds 2–8, agreement to statement ‘It is important to help others’, aggregated over 91 NUTS regions. Marginal Effects from Fixed Effects models including control variables. Separate three-way interactions. Significant interactions presented only. For coefficients of the interaction terms, see Table 3. The spikes represent the 95%-confidence intervals.

lines represent the slopes for three ideal-typical contexts with low, intermediate and high levels of formal childcare infrastructure.

Starting with grandfathers (the left panel in Figure 1) we find that providing sporadic grandchild care significantly increases the risk of leaving the labour market where the childcare infrastructure is well-developed (the black line) and where the general support is the norm is more pronounced (upward pointing slope, see also Table 3, first column, coefficient: 0.008\*). A reverse pattern of the normative influence seems to be at work for contexts with little formal childcare infrastructure (the light grey line in the first panel), but this effect is not statistically significant. With regard to our hypotheses, this finding for grandfathers lends support to H3 (needs dominating obligations) since the influence of support norms depends on the respective policy context. More specifically, this finding suggests that obligation-based considerations are only activated where the childcare policies provide formal care and thus enable families to *choose* their preferred work-care pattern. Moreover, this finding also lends support to our fourth hypothesis, according to which men's behaviour is more likely to be driven by needs than by obligations.

When looking at the childcare coverage rate – and thus the uptake of formal care – we find that regularly-providing grandfathers from countries with a low coverage rate (the light grey line in the middle panel) have an increased risk of exiting the labour market the stronger the general support norm. The inverse link applies to contexts with high childcare coverage: the stronger the norms, the less likely labour market exits. These differences are significant (coefficient  $-0.002^*$  in the third column). The slopes pointing in opposite directions for low- and high-childcare contexts suggest that the effect of the norms depends on the childcare infrastructure, as was expected from H3.

Are these findings robust when we use a specific grandparental support norm? Using the indicator from Eurobarometer (the second column in Table 2), we find that stronger norms increase regular caregiving grandfathers' labour market exits (0.028\* resp. 0.033\*). However, this linkage does not vary systematically across childcare (expenditures,

coverage) contexts, as there are no significant interaction terms. These findings support H2 (obligations dominating needs), as infrastructural contexts only play a minor role, and grandparental norms work very similarly across policy contexts.

Turning to grandmothers (the right panel in Figure 1), we find that the exit risks for regular grandchild care provision differ more strongly between the childcare infrastructure contexts where the support norm is weak. These differences converge the stronger the support norms. In other words: where support norms are substantial, caregiving grandmothers and non-caregiving grandmothers become more similar in their labour market exit risks. This holds for the interaction between the general support norm and expenditures for ECEC, as well as the specific grandparental support norm and childcare coverage (interaction terms  $-0.010^{**}$  resp.  $0.001^*$ , see the sixth and last columns in Table 3). Our finding lends support for H2 (obligations dominating needs). It also lends support to our fourth hypothesis, according to which women's behaviour would be more strongly determined by obligations and norms than men's.

Moreover, we find that for irregularly providing grandmothers, stronger grandparental support norms reduce the exit risk when holding the childcare policies constant at their means ( $-0.42^*$  and  $-0.43^*$ ). Since institutional characteristics are measured at the country level, these coefficients may reflect the effect of within-country variance (regional, and across cohorts) in support norms. It is surprising to find that irregular caregiving is protective of labour market participation among women in a traditional context. An interpretation could be that irregular caregiving is a means of conforming to norms in such contexts without jeopardizing one's economic activity. Since working grandmothers in highly traditional contexts are rather a minority group, this finding could be an expression of 'moral careers'.

## Discussion

The aim of this article is to investigate the normative and institutional conditions under which providing grandchild care leads to labour market exits. It builds

on findings from recent studies in the field (Van Bavel and De Winter 2013; Backhaus and Barslund, 2019), but extends on them by shifting the focus to specific contextual constellations of norms and policies. Drawing on a rich dataset, we employ the variance of 18 countries, 91 regional contexts and 13 years.

We find that regular grandchild care reduces labour market participation for men and women. For grandfathers, this effect is stronger the more pronounced the support norms are in a region – irrespective of the childcare infrastructure. For grandmothers, the effect of grandchild care on labour market exits depends on specific combinations of *both* norms and the childcare infrastructure. More precisely, grandmothers' labour market exits are increased by stronger support norms if they live in a context with little childcare infrastructure. Thus, for grandmothers, the degree to which normative obligations affect labour market exits depends on the welfare policy context, whereas for grandfathers, the effect of norms is mostly independent of the childcare infrastructure.

As with all empirical studies, this article comes with a number of limitations. First, we are unfortunately unable to measure grandparents' preferences and intrinsic motivations. Such unobserved heterogeneity can be held constant using fixed effects models, but it would be insightful to see how preferences or personalities play out differently in various contexts. Second, the causal linkage between employment and grandchild care is likely bidirectional. Our evidence may stem from simultaneous transitions into retirement and caregiving (Tanskanen et al., 2021) or from anticipation of care demands. More detailed information on the timing of these transitions would be desirable. Third, countries also vary with respect to their economies and the structure of the labour market. Part-time employment facilitates work–family balance for mothers (Ciccia and Bleijenbergh, 2014; Pfau-Effinger, 2005) and may also affect the need for grandparental childcare. Considering part-time regimes goes beyond the scope of this study, but we hold constant the state of the economy, by adjusting for GDP per capita.

Finally, quantifying norms at a contextual level remains difficult. Norms needed to be aggregated

from survey data. Few data sets provide a broad set of indicators available for a larger number of countries, regions and time points. We rely on two measures taking different approaches to capture obligations: the general support norm is broad and may also measure other obligations. Its strength is that it can be measured across time and 91 NUTS regions, which allows us to model societal change and regional heterogeneity. The grandparental support norm is more specific to our research question but lacks spatial and temporal variance. Hence, we have to triangulate the joint influence using the full factorial of all combinations.

Despite these limitations, the present article has the potential to contribute to the literature on work–care reconciliation in the second half of life and the culture–policy debate in several ways: first, by theorizing the mechanisms through which institutional and normative characteristics jointly affect behaviour, second by exploring new ways of quantifying social norms which go beyond static and national accounts, and third, by examining the institutional and the normative jointly.

The insights from this study have implications for future research and policymaking. We encourage future studies to apply multidimensional approaches combining normative and institutional measures when analysing contextual influence on the family–work nexus. For policymakers, the high prevalence and labour market risks of grandparental care even in contexts with an established childcare infrastructure indicate that parents might rely on grandparental care for other reasons than (un-)availability of formal childcare alone. Moreover, formal childcare will not enable reconciliation and gender-equal division of labour as long as cultural ideals impede its usage. This has consequences for welfare states, as maternal non-employment and early exits from the labour market bear risks for (pension) poverty and social security. Our findings suggest that grandchild care be recognized as another domain of work–family reconciliation in the second half of life.

### Acknowledgements

This work was supported by the Jos Berghman Welfare Studies Stipend and was partly written during my research



stay at KU Leuven in Belgium. I am indebted to Professor Wim van Oorschot, Professor Jan Van Bavel, Dr Wouter de Tavernier, and Dr Gianna Maria Eick for feedback on an earlier version of this manuscript. This article benefited from feedback after giving a presentation at the MZES colloquium in Mannheim. Finally, I thank my student researcher Lena-Sophia Schielke.

### Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### ORCID iD

Ariane Bertogg  <https://orcid.org/0000-0001-9959-618X>

### Supplemental Material

Supplementary material for this article is available on the online.

### Notes

1. [Supplement Table A3](#) in the Appendix details which NUTS-level is used in which country, the decision was made on level of detail and case numbers available data in both SHARE and ESS and case numbers (min. 30 per unit).
2. This paper uses data from SHARE Waves 1, 2, 4, 5, 6 and 7 (DOIs: 10.6103/SHARE.w1.700, 10.6103/SHARE.w2.700, 10.6103/SHARE.w4.700, 10.6103/SHARE.w5.700, 10.6103/SHARE.w6.700, 10.6103/SHARE.w7.700, see [Börsch-Supan et al. \(2013\)](#) for methodological details. The SHARE data collection has been funded by the European Commission, DG RTD through FP5 (QLK6-CT-2001-00,360), FP6 (SHARE-I3: RII-CT-2006-062,193, COMPARE: CIT5-CT-2005-028,857, SHARELIFE: CIT4-CT-2006-028,812), FP7 (SHARE-PREP: GA N°211,909, SHARE-LEAP: GA N°227,822, SHARE M4: GA N°261,982, DASISH: GA N°283,646) and Horizon 2020 (SHARE-DEV3: GA N°676,536, SHARE-COHESION: GA N°870,628,

SERISS: GA N°654,221, SSHOC: GA N°823,782, SHARE-COVID19: GA N°101,015,924) and by DG Employment, Social Affairs and Inclusion through VS 2015/0195, VS 2016/0135, VS 2018/0285, VS 2019/0332, and VS 2020/0313. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01\_AG09740-13S2, P01\_AG005842, P01\_AG08291, P30\_AG12815, R21\_AG025169, Y1-AG-4553-01, IAG\_BSR06-11, OGHA\_04-064, HHSN271201300071 C, RAG0525 27 A) and from various national funding sources is gratefully acknowledged (see [www.share-project.org](http://www.share-project.org)).

### References

- Aassve, A, Arpino, B and Goisis, A (2012) Grandparenting and mothers' labour force participation: a comparative analysis using the generations and gender survey. *Demographic Research* 27(3): 53–84. DOI: [10.4054/DemRes.2012.27.3](https://doi.org/10.4054/DemRes.2012.27.3).
- Allison, PD (2009) *Fixed Effects Regression Models*. Thousand Oaks, CA: Sage.
- Andronescu, CG and Carnes, ME (2015) Value coalitions and policy change: the impact of gendered patterns of work, religion and partisanship on childcare policy across German states. *Journal of European Social Policy* 25(2): 159–174.
- Arber, S and Ginn, J (1994) Gender differences in informal caring. *Health and Social Care in the Community* 3(1): 19–31.
- Arpino, B, Pronzato, CD and Tavares, LP (2014) The effect of grandparental support on mothers' labour market participation: an instrumental variable approach. *European Journal of Population* 30(4): 369–390. DOI: [10.1007/s10680-014-9319-8](https://doi.org/10.1007/s10680-014-9319-8).
- Backhaus, A and Barslund, M (2019) *The Effect of Grandchildren on Grandparental Labour Supply*. [https://netspar.nl/assets/uploads/P20190123\\_DP010\\_Backhaus.pdf](https://netspar.nl/assets/uploads/P20190123_DP010_Backhaus.pdf).
- Becker, GS (1965) A theory of the allocation of time. *The Economic Journal* 75(299): 493–517. DOI: [10.2307/2228949](https://doi.org/10.2307/2228949).
- Bengtson, VL and Roberts, REL (1991) Intergenerational solidarity in aging families: an example of formal theory construction. *Journal of Marriage and Family* 53(4): 856–870. DOI: [10.2307/352993](https://doi.org/10.2307/352993).

- Bertogg, A, Nazio, T and Strauß, S (2021) Work–family balance in the second half of life: caregivers’ decisions regarding retirement and working time reduction in Europe. *Social Policy and Administration* 55(3): 485–500. DOI: [10.1111/spol.12662](https://doi.org/10.1111/spol.12662).
- Bordone, V, Arpino, B and Aassve, A (2016) Patterns of grandparental child care across Europe: the role of the policy context and working mothers’ need. *Ageing and Society* 37(4): 845–873. DOI: [10.1017/s0144686x1600009x](https://doi.org/10.1017/s0144686x1600009x).
- Börsch-Supan, A (2019) *Survey of Health, Ageing and Retirement in Europe (SHARE), Release Version: 7.0.0. SHARE-ERIC. Data set*. Munich: Munich Center for the Economics of Aging.
- Börsch-Supan, A, Brandt, M, Hunkler, C, et al. (2013) Data resource profile: the Survey of Health, Ageing and Retirement in Europe (SHARE). *International Journal of Epidemiology* 42(4): 992–1001. DOI: [10.1093/ije/dyt088](https://doi.org/10.1093/ije/dyt088).
- Chiuri, MC (2000) Quality and demand of child care and female labour supply in Italy. *Labour Economics* 14(1): 97–118. DOI: [10.1111/1467-9914.00126](https://doi.org/10.1111/1467-9914.00126).
- Chung, H, Hrast, MF and Rakar, T (2018) The provision of care: whose responsibility and why? In: P Taylor-Gooby and B Leruth (eds) *Attitudes, Aspirations and Welfare*. London: Palgrave Macmillan, pp 183–214.
- Ciccia, R and Bleijenbergh, I (2014) After the male breadwinner model? Childcare services and the division of labor in European countries. *Social Politics* 21(1): 50–79. doi: [10.1093/sp/jxu002](https://doi.org/10.1093/sp/jxu002).
- Connidis, IA and McMullin, JA (2002) Ambivalence, family ties, and doing sociology. *Journal of Marriage and Family* 64: 594–601.
- Cooney, TM and Dykstra, PA (2011) Family obligations and support behaviour: a United States–Netherlands comparison. *Ageing and Society* 31(6): 1026–1050. DOI: [10.1017/s0144686x10001339](https://doi.org/10.1017/s0144686x10001339).
- Duncan, S (2005) Mothering, class and rationality. *The Sociological Review* 53(1): 50–76.
- Elster, J (2009) Norms. In: P Hedström and P Bearman (eds) *Analytical Sociology*. Oxford: Oxford University Press, pp. 195–217.
- European Social Survey Cumulative File, ESS 1-9 (2020) Data file edition 1.0. NSD – Norwegian Centre for Research Data, Norway – data archive and distributor of ESS data for ESS ERIC. DOI: [10.21338/NSD-ESS-CUMULATIVE](https://doi.org/10.21338/NSD-ESS-CUMULATIVE).
- Eurostat (2019a) *Population on 1 January by Age Group and Sex*. [https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo\\_pjangroup&lang=en](https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjangroup&lang=en)
- Eurostat (2019b) *Formal Child Care by Duration and Age Group*. <https://ec.europa.eu/eurostat/databrowser/view/tps00185/default/table?lang=en>
- Eurostat (2020) *Employment Rate of Adults by Sex, Age Groups, Educational Attainment Level, Number of Children and Age of Youngest Child (%) 2005–2019*. [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfst\\_hheredch](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfst_hheredch)
- Eurostat (2021) *Ageing Europe – Statistics on Pensions, Income and Expenditure*. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ageing\\_Europe\\_-\\_statistics\\_on\\_pensions,\\_income\\_and\\_expenditure&oldid=500271#The\\_risk\\_of\\_poverty\\_among\\_older\\_people](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ageing_Europe_-_statistics_on_pensions,_income_and_expenditure&oldid=500271#The_risk_of_poverty_among_older_people)
- Foerster, M and Verbist, G (2012) Money or kindergarten? Distributive effects of cash versus in-kind family transfers for young children. *OECD Social, Employment and Migration Working Papers* No 135. DOI: [10.1787/5k92vxbgpmnt-en](https://doi.org/10.1787/5k92vxbgpmnt-en).
- Geurts, T, van Tilburg, TG, Poortman, AR, et al. (2014) Childcare by grandparents: changes between 1992 and 2006. *Ageing and Society* 35(6): 1318–1334. DOI: [10.1017/S0144686X14000270](https://doi.org/10.1017/S0144686X14000270).
- Goffman, E (1959) The moral career of the mental patient. *Psychiatry* 22(2): 123–142.
- Grunow, D and Veltkamp, V (2016) Conceptual framework, comparative overview and methodology. Institutions as reference points for parents-to-be in European societies: a theoretical and analytical framework. In: D Grunow and M Evertsson (eds) *Couples’ Transitions to Parenthood. Analysing Gender and Work in Europe*. Cheltenham: Edward Elgar.
- Hamilton, M and Suthersan, B (2020) Gendered moral rationalities in later life: grandparents balancing paid work and care of grandchildren in Australia. *Ageing and Society* 41(7): 1651–1672. DOI: [10.1017/s0144686x19001855](https://doi.org/10.1017/s0144686x19001855).
- Hank, K and Kreyenfeld, MR (2000) *Does the Availability of Childcare Influence the Employment of Mothers? Findings from Western Germany*, Max Planck Institute for Demographic Research working papers. Rostock, Germany: MPIDR. <https://EconPapers.repec.org/RePEc:dem:wpaper:wp-2000-003>

- Hank, K, Cavrini, G, Di Gessa, G, et al. (2018) What do we know about grandparents? Insights from current quantitative data and identification of future data needs. *European Journal of Ageing* 15: 225–235. DOI: [10.1007/s10433-018-0468-1](https://doi.org/10.1007/s10433-018-0468-1).
- Hook, JL and Paek, E (2020) National family policies and mothers' employment: how earnings inequality shapes policy effects across and within countries. *American Sociological Review* 85(3): 381–416. DOI: [10.1177/0003122420922505](https://doi.org/10.1177/0003122420922505).
- Igel, C and Szydlik, M (2011) Grandchild care and welfare state arrangements in Europe. *Journal of European Social Policy* 21(3): 210–224. DOI: [10.1177/0958928711401766](https://doi.org/10.1177/0958928711401766).
- Inglehart, RF, Ponarin, E and Inglehart, RC (2017) Cultural change, slow and fast: the distinctive trajectory of norms governing gender equality and sexual orientation. *Social Forces* 95(4): 1313–1340. DOI: [10.1093/sf/sox008](https://doi.org/10.1093/sf/sox008).
- Jappens, M and Van Bavel, J (2012) Regional family cultures and child care by grandparents in Europe. *Demographic Research* 27: 85–120. DOI: [10.4054/DemRes.2012.27.4](https://doi.org/10.4054/DemRes.2012.27.4).
- Johnson, JL and Best, AL (2012) Radical normals: the moral career of straight parents as public advocates for their gay children. *Symbolic Interaction* 35(3): 321–339.
- Kremer, M (2007) *How Welfare States Care: Culture, Gender and Parenting in Europe*. Amsterdam: Amsterdam University Press.
- Künemund, H and Rein, M (1999) There is more to receiving than needing: theoretical arguments and empirical explorations of crowding in and crowding out. *Ageing and Society* 19(1): 93–121. DOI: [10.1017/s0144686x99007205](https://doi.org/10.1017/s0144686x99007205).
- Lee, J and Bauer, JW (2013) Motivations for providing and utilizing child care by grandmothers in South Korea. *Journal of Marriage and Family* 75(2): 381–402. DOI: [10.1111/jomf.12014](https://doi.org/10.1111/jomf.12014).
- Leopold, T and Skopek, J (2014) Gender and the division of labor in older couples: how European grandparents share market work and childcare. *Social Forces* 93(1): 63–91. DOI: [10.1093/sf/sou061](https://doi.org/10.1093/sf/sou061).
- Lohmann, H and Zagel, H (2015) Family policy in comparative perspective: the concepts and measurement of familization and defamilization. *Journal of European Social Policy* 26(1): 48–65.
- Lumsdaine, RL and Vermeer, SJ (2015) Retirement timing of women and the role of care responsibilities for grandchildren. *Demography* 52(2): 433–454. DOI: [10.1007/s13524-015-0382-5](https://doi.org/10.1007/s13524-015-0382-5).
- Matysiak, A and Steinmetz, S (2008) Finding their way? Female employment patterns in West Germany, East Germany, and Poland. *European Sociological Review* 24(3): 331–345. DOI: [10.1093/esr/jcn007](https://doi.org/10.1093/esr/jcn007).
- Michel, S and Mahon, R (2002) Introduction. Gender and welfare state restructuring: through the lens of child care. In: S Michel and R Mahon (eds) *Child Care Policy at the Crossroads: Gender and Welfare State Restructuring*. New York: Routledge, pp 1–30.
- Moussa, MM (2019) The relationship between elder caregiving and labour force participation in the context of policies addressing population ageing: a review of empirical studies published between 2006 and 2016. *Ageing and Society* 39(X): 1281–1310. doi: [10.1017/S0144686X18000053](https://doi.org/10.1017/S0144686X18000053).
- Naldini, M, Pavolini, E and Solera, C (2016) Female employment and elderly care: the role of care policies and culture in 21 European countries. *Work, Employment and Society* 40(3): 607–630. doi: [10.1177/0950017015625602](https://doi.org/10.1177/0950017015625602).
- Neimanns, E (2017) *Public Opinion and Social Investment: How Political–Institutional Context Shapes Support and Opposition towards Expanding Child-care*. PhD Thesis, University of Konstanz: Department of Politics and Public Administration.
- OECD (2019) *Social Expenditure: Aggregated Data*. Paris: OECD Social and Welfare Statistics.
- Patterson, SE and Margolis, R (2019) The demography of multigenerational caregiving: a critical aspect of the gendered life course. *Socius: Sociological Research for a Dynamic World* 5(1): 1–19. DOI: [10.1177/2378023119862737](https://doi.org/10.1177/2378023119862737).
- Pfau-Effinger, B (2005) Welfare state policies and the development of care arrangements. *European Societies* 7(2): 321–347. DOI: [10.1080/14616690500083592](https://doi.org/10.1080/14616690500083592).
- Pfau-Effinger, B (2008) Cultural change and path departure: the example of family policies in conservative welfare states. In: W van Oorschot, M Opielka and B Pfau-Effinger (eds) *Culture and Welfare State: The Value of Social Policy*. Cheltenham: Edward Elgar, pp 185–204.

- Preisner, K, Neuberger, F, Bertogg, A, et al. (2020) Closing the happiness gap: the decline of gendered parenthood norms and the increase in parental life satisfaction. *Gender and Society* 34(1): 31–55. DOI: [10.1177/0891243219869365](https://doi.org/10.1177/0891243219869365).
- Rossi, AS and Rossi, PH (1990) *Of Human Bonding: Parent–Child Relations across the Life Course*. New York: Aldine de Gruyter.
- Róžańska-Putek, J, Jappens, M, Willaert, D, et al. (2009) *Recoding the Regions of the European Social Survey into the NUTS 1 Regional Classification. Illustration: Regional Indicators of Intergenerational Solidarity*. Interface demography working paper 2009/6. Brussels: Vrije Universiteit Brussel. <http://interfacedemography.be/wp-content/uploads/2016/02/IDWP2009-6.pdf>
- Saraceno, C (2017) Family relationships and gender equality in the social investment discourse. In: A Hemerijck (ed) *The Uses of Social Investment*. Oxford: Oxford University Press, pp 58–65.
- Saraceno, C and Keck, W (2010) Can we identify intergenerational policy regimes in Europe? *European Societies* 12(5): 675–696. DOI: [10.1080/14616696.2010.483006](https://doi.org/10.1080/14616696.2010.483006).
- Seeleib-Kaiser, M (2016) The end of the conservative German welfare state model. *Journal of European Social Policy* 50(2): 219–240.
- Szelewa, D and Polakowski, MP (2008) Who cares? Changing patterns of childcare in central and Eastern Europe. *Journal of European Social Policy* 18(2): 115–131. DOI: [10.1177/0958928707087589](https://doi.org/10.1177/0958928707087589).
- Tanskanen, AO, Danielsbacka, M, Hamalainen, H, et al. (2021) Does transition to retirement promote grandchild care? Evidence from Europe. *Frontiers in Psychology* 12: 738117. DOI: [10.3389/fpsyg.2021.738117](https://doi.org/10.3389/fpsyg.2021.738117).
- Van Bavel, J and de Winter, T (2013) Becoming a grandparent and early retirement in Europe. *European Sociological Review* 29(6): 1295–1308. DOI: [10.1093/esr/jct0](https://doi.org/10.1093/esr/jct0).
- Verbakel, E (2018) How to understand informal caregiving patterns in Europe? The role of formal long-term care provisions and family care norms. *Scandinavian Journal of Public Health* 46(4): 436–447. DOI: [10.1177/1403494817726197](https://doi.org/10.1177/1403494817726197).
- West, C and Zimmerman, DH (1987) Doing gender. *Gender and Society* 1(2): 125–151.
- Wheelock, J. and Jones, K (2002). ‘Grandparents are the next best thing’: informal childcare for working parents in urban Britain. *Journal of Social Policy* 31(3): 441–463. DOI: [10.1017/S0047279402006657](https://doi.org/10.1017/S0047279402006657).
- Yerkes, MA and Javornik, J (2018) Creating capabilities: childcare policies in comparative perspective. *Journal of European Social Policy* 29(4): 529–544. DOI: [10.1177/0958928718808421](https://doi.org/10.1177/0958928718808421).
- Zoch, G and Schober, PS (2018) Public child-care expansion and changing gender ideologies of parents in Germany. *Journal of Marriage and Family* 80(4): 1020–1039. DOI: [10.1111/jomf.12486](https://doi.org/10.1111/jomf.12486).