Income and educational differences in grandparental childcare: evidence from English grandmothers and grandfathers

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Abstract

Grandparents are actively involved in grandchildren's lives, but there is little research concerning socio-economic differences in the content of the relationship. This study explores the socio-economic gradient in childcare provided by grandparents, touching on the intensity of care, the activities performed with grandchildren, and the motives driving this involvement, by grandparents' gender. We explore two dimensions of socio-economic status, education and family income, pertaining to different dimensions of grandparents' and grandchildren's relationship: child development versus parental childcare needs. Using the English Longitudinal Study of Ageing (ELSA 2016–2017, 2018-2019), logistic regression models show that intensive care is more common for grandfathers in the lowest income tercile. A high income decreases involvement in physical care activities (i.e., preparing meals); instead, the involvement is driven by motives to help children financially. A higher education is a good predictor of support with homework, driven by motives to "help grandchildren develop as people". Even though grandfathers show an involvement in grandchildren's upbringing, highly-educated grandmothers remain the most inclined to offer support. Overall, the study suggests that grandparents' involvement in grandchildren's lives could be among the mechanisms structuring the intergenerational transmission of inequality.

Introduction

Grandparents are actively involved in grandchildren's lives (Hank & Buber, 2009), and their childcare is known to complement the provision (or lack) of formal services in several European countries (Igel & Szydlik, 2011), helping adult children reconcile work and family (Bordone, Arpino, & Aassve, 2017). Framing grandparenting as parental need for support, several studies have noticed that grandparental childcare can fall on the shoulders of the most disadvantaged families. Grandparents of low-income families provide more hours of childcare, at the expense of their own well-being (McGarrigle, Timonen, & Layte, 2018), than their richer counterparts (Rutter & Evans, 2011), who can afford more hours of formal childcare.

While research shows that (lack of) income and childcare needs are strongly related, educational level is also an important stratifying factor; it captures human capital, cultural resources, and childrearing values (e.g. Dotti Sani & Treas, 2016). Many scholars have observed the existence of a positive educational gradient in the occurrence (yes/no) of grandparental childcare (e.g., Craig & Jenkins, 2016a), but not in terms of its intensity (Di Gessa, Glaser, Price, Ribe, & Tinker, 2016).

To grasp the full meaning of grandparental childcare for families, we need to look beyond the intensity of grandparental childcare and study the content of the relationship (e.g., activities carried out together). In this study, we hypothesize and explicitly test whether differences exist in the content of grandparents' time spent with grandchildren according to two measures of socio-economic status (SES): education and family income. Although intertwined, the two measures have different implications for social stratification, and they are likely to be differently related to grandparents' and grandchildren's shared time. Investigating education and income at the same time, we attempt to disentangle grandparents' cultural and material resources (see Gracia, 2015). Shedding light on the shared activities of grandparents and grandchildren, and the reasons driving this involvement, could further inform understanding how the family transmits advantages to children, and exploring the generational chain that structures inequality of opportunity.

Education captures grandparents' cultural resources and childrearing values, income relates to material resources to support the middle generation's (i.e., grandparents' children, mainly daughters) childcare/financial needs. Net of each other, grandparental education could be more strongly associated with activities and motives related to grandchildren's early development, a stepping-stone for their lifelong socio-economic success. Our argument fits the framework of the so-called "grandparent-effect" (for a review, see Anderson, Sheppard, & Monden, 2018), i.e., the direct and independent relation between grandparents' socio-economic resources and grandchildren's life outcomes. The intergenerational transmission of resources is also supposed to happen *via* grandparents' interaction with their grandchildren (even though evidence is mixed, see Bol & Kalmijn, 2016), in activities with developmental implications, such as support with schooling, leisure. Family income is likely to be related to situations of childcare needs, such as providing physical care to complement/substitute formal childcare hours. Low-income families might rely more heavily on grandparents for childcare, instead of purchasing additional childcare services on the market.

We also adopt a gender lens. Previous research has shown that women carry the lion's share of care duties; grandparenting is no exception (Di Gessa, Zaninotto, & Glaser, 2020). Nevertheless, research talks about "new grandfathers", i.e., older men engaging more in care duties, not only as helpers of the female partner (Coall, Hilbrand, Sear, & Hertwig, 2016). In this study, we explore the avenues of

the interaction between socio-economic status and gender in shaping grandparents' and grandchildren's time together.

We rely on the English Longitudinal Study of Ageing (ELSA) whose last two waves (8: 2016-2017; 9: 2018-2019) contain a special module on grandparenting. Grandparental care constitutes the main type of childcare used in the UK (Rutter & Evans, 2011). Over a third of English families rely on informal care, mainly provided by grandparents, against 20% of families in France and 0.1% in Denmark (OECD, 2011). Grandparents are a "reserve army" (Price, Ribe, & Di Gessa, 2018): working parents combine formal childcare services with family support from grandparents (Gray, 2005; Wheelock & Jones, 2002); for example, on top of the 15 free hours per week of early education entitlement (Rutter & Evans, 2011). The centrality of grandparents for families makes our research aim particularly interesting in the English welfare system.

Theoretical background

Literature review: the grandparenting gradient and the importance of the outcome considered

Literature on grandparental childcare is vast but scattered with respect to different operationalizations in terms of occurrence, frequency, and content of the grandparent-grandchild relationship.

In Europe, research has mostly focused on the need for grandparental childcare by the middle generation to support and ease this generation's work-family reconciliation (Bordone et al., 2017). Grandparents intervene to substitute the lack of formal childcare services in some countries or complement their opening hours in others (Igel & Szydlik, 2011). In this framework, grandparental childcare is often operationalized in terms of occurrence (yes/no) and intensity (Hank & Buber, 2009). For the former, many studies show a positive educational gradient in the probability of grandparents providing childcare in terms of occurrence (Craig & Jenkins, 2016a; Dunifon, Near, & Ziol-Guest, 2018; Igel & Szydlik, 2011; King & Elder, 1998; Lakomý & Kreidl, 2015; Luo, LaPierre, Hughes, & Waite, 2012; Zamberletti, Cavrini, & Tomassini, 2018). When considering instensity (usually measured as weekly commitment), higher education seems to be a protective factor against an intensive grandparental commitment in care duties in several European countries (Di Gessa et al., 2016). Income seems a better predictor of high childcare intensity. In the UK, low- and middleincome families tend to rely on more hours of grandparental childcare than high-income families, because of the reduced spending power for formal childcare (Rutter & Evans, 2011). In England, Di Gessa, Glaser, and Zaninotto (2022) showed that grandparents in the lowest wealth quartile are more likely to provide childcare 4-7 days per week than their richest counterparts. In Ireland, grandparents with primary-level education are more likely to provide childcare for more than 60 hours per month with consequences for their life quality; this study does not find an income effect (McGarrigle et al., 2018).

However, there is also a long tradition of research that has studied grandparenting embracing the idea of "involvement" or "shared time" with grandchildren, and its stratification. The focus is on the content of the grandparent-grandchild relationship, rather than on the driving force of middle generation's needs. In the US, research has taken the perspective of grandparents, identifying grandparenting styles, or types. Cherlin and Furstenberg (1986) observed the emergence of a new kind of relation between grandparents and grandchildren, based on love, affection, and companionship more than on authority and emotional distance as in the past, but found no socioeconomic differences in these types. Other studies, however, do mention these differences. For example, King and Elder (1998) notice that grandparents with higher levels of education engage more in activities they are more likely to be good at, by virtue of their higher level of competence, such as participating in leisure activities, mentoring, and teaching skills. Less educated grandparents are more likely to play the friend role with grandchildren. Mueller, Wilhelm, and Elder (2002) find that educational level is mainly related to being "influential" and "supportive"; while other styles (being passive, detached, and authority oriented) are better explained by other covariates, such as the number of grandchildren, or lineage. To our knowledge, no study has explored economic resources in relation to grandparenting styles.

More recent research explores activities performed with grandparents. In the US, grandparents' time with grandchildren focuses on shared meals, entertainment, and play (Dunifon et al., 2018, p. 765). Craig and Jenkins (2016a) explore how the range of activities performed differs between regular and non-regular-caring grandparents in Australia, the latter spending more time in leisure. These studies do not explicitly account for socio-economic differences in shared time and activities. Di Gessa, Glaser, and Zaninotto (2022) find a complex interconnection of educational level and wealth in determining the content and motives of grandparents-grandchildren interaction, which they explore in an aggregate form using English data. Most economically disadvantaged grandparents were more involved in "hands-on activities" than grandparents from the highest wealth quartile, while college education was significantly associated with helping grandchildren with homework. Regarding motives, higher education was positively associated with caregiving as "help for parents", "emotional help", and preference for family care; while grandparents belonging to the middle wealth quartiles (2nd and 3rd) were the most likely to provide grandchildcare as "economic help".

Our study follows up on the work of Di Gessa, Glaser, and Zaninotto (2022); it explores the whole range of activities and motives related to the grandparents-grandchildren relation taken singly. We

are explicitly interested in the socio-economic gradient of specific activitities and motives related to child development – homework and leisure – versus more practical activities and motives related to childcare needs – physical care and taking/collecting children to/from places, to help working parents.

The multifaceted nature of SES in grandparenting

The "grandparent-effect" is the (debated) direct and independent association between grandparents' and grandchildren's socio-economic resouces (for a review, see Anderson et al., 2018). The idea is that (grand)children from high SES families could be benefiting from an extended family environment (Jæger, 2012) where grandparental resources cumulate on top of, and beyond, parental resources in ensuring future success. How does this transmission of resources operate? Grandparents might offer financial support to their (grand)children during their lives, as well as bequeathing a legacy after their death. Or, grandparents' resources might be related to grandchildren's outcomes *via* the amount of quality time and activities with developmental implications (e.g., support with schooling, leisure activities), which grandparents of high socio-economic status share with their grandchildren.

Considerable evidence in the literature on parenting explains that socio-economic and cultural resources bring different parenting styles and logics of childrearing. Overall, highly educated parents (Craig, 2006; Guryan, Hurst, & Kearney, 2008) spend more time with their children than their lower educated counterparts, across institutional contexts (Dotti Sani & Treas, 2016). Upper class parents are the most aware of the importance of investing in children's development to ensure their future socio-economic success. They treat their children as a "developmental project" (Lareau, 2003), aiming to foster children's talents both directly, by spending time together (e.g. helping with homework, eliciting verbal interaction, and sharing of opinions, feelings, and thought), and indirectly, by being active in their schooling activities and engaging them in organized leisure activities (e.g. sports, music lessons, and visits to museums) (Gimenez-Nadal & Molina, 2013), rather than, for example, watching TV (Gracia, 2015). These mechanisms of resource-transmission could be analogously open to grandparents.

Educational level relates to cognitive skills, academic credentials, and a familiarity with the educational system, meaning confidence in its importance and benefits. It is associated with cultural capital (Sullivan, 2001; Van De Werfhorst & Hofstede, 2007) which is the familiarity with the dominant culture in society, expressed in cultural codes, tastes, modes of conduct: e.g. participation in "highbrow culture", attending cultural activities, reading habits, and use of an elaborate code of language (De Graaf, De Graaf, & Kraaykamp, 2006; Kraaykamp & van Eijck, 2010). Grandparents

have been parents themselves, most likely implementing certain parenting strategies related to their educational level. Like parents, grandparents with higher education levels could be more present in their grandchildren's lives to help them develop the talents needed for future success. Given this framework, we expect a *positive* educational gradient (highly educated more likely than lower educated grandparents), once controlled for income, in leisure (Hypothesis 1a) and homework activities (Hypothesis 1b). Similarly, we expect a *positive* educational gradient in the childcare motive "help grandchildren develop as people" (Hypothesis 2).

Grandparents' means are important for grandchildren's life chances; they can cover the direct and indirect cost of education, representing a buffer for uncertainty, and also involve a status dimension, with prestige and admiration. Grandparents' economic assets eventually translate into inheritance and family wealth once they die (Chan & Boliver, 2013; Hällsten & Pfeffer, 2017). The present study, however, focuses on shared time and activities, rather than transfers. We can therefore expect another mechanism at play for income, especially relevant for low-income families: grandparents step in to provide physical care, complementing or substituting hardly affordable public childcare hours (Gray, 2005; Wheelock & Jones, 2002). In England, three- and four-year-old children are offered 15 hours of free childcare per week (disadvantaged two-year-olds also qualify); working parents at the minimum wage can benefit from up to 30 hours (Lewis & West, 2017). One of the problems with the English childcare system lies in the affordability of extra hours of childcare needed beyond the free entitlement (Lewis & West, 2017); in this situation, grandparents step in with extra support, and help their children to work on a full-time basis and save money.

Given that intergenerational income persistence is relatively high in Britain (Gregg, Jonsson, Macmillan, & Mood, 2017), low-income grandparents are likely to have low-income children, more in need of support with work-family reconciliation, which would then lead to more physical care activities by low-income grandparents. Thus, once controlled for education, we expect a *negative* income gradient (high-income less likely than low-income grandparents) in physical care, such as preparing meals (usually not included in the public nursery free services) (Hypothesis 3a) and taking/collecting children to/from nursery, playgroup, or school (Hypothesis 3b). On this note, we can also expect a *negative* income gradient in motives related to helping parents go to work (Hypothesis 4a) and helping financially (Hypothesis 4b).

Gender and SES in grandparenting

In the present study, we compare grandmothers and grandfathers in their relationship with grandchildren, using the lens of social stratification. Distinguishing grandparents' gender is crucial,

as gender inequality in housework (Leopold & Skopek, 2014) and care duties persists in later life. Grandfathers have mainly been excluded from research because of their lesser involvement in childcare (Coall et al., 2016). However, grandparenthood is an important transition for men, an opportunity to make up for the time lost with their own children (Airey, Lain, Jandrić, & Loretto, 2020; Mann, 2007).

Literature on parenting can inform our theoretical background, keeping in mind that grandparents have been parents themselves, (still) embedded in certain societal logics characteristic of their socioeconomic background. Scholars have signalled the emergence of the so-called "new fathers" (Hook & Wolfe, 2012; McGill, 2014). As a response to women's increased labour market participation, men are more involved in their children's lives and hold more egalitarian relationships with their partners (Kan, Sullivan, & Gershuny, 2011). Contrary to mothers, fathers' involvement, and adherence to norms of intensive parenting, is polarized: these "new fathers" are mostly observed among highly-educated individuals (Gracia, 2014; Raley, Bianchi, & Wang, 2012), while it seems that lower educated men retreat from this role (for a review see Keizer, 2020). Despite increased paternal involvement, several studies affirm that mothers' resources predict parental care time, including that of fathers, too, meaning that mothers with higher educational credentials are able to foster their partners' involvement (England & Srivastava, 2013; Gimenez-Nadal & Molina, 2013; Gracia, 2015; Raley et al., 2012).

The gendered association between socio-economic status and activities with children is not clear-cut (see for a review Dotti Sani & Treas, 2016). Some studies find that fathers' contribution is more prominent over weekends (Hook & Wolfe, 2012) and in leisure rather than routine activities (Craig, 2006). But when adding educational level into the picture, highly educated fathers are more involved in more routine and developmental activities than their lower educated counterparts (Keizer, 2020). To the best of our knowledge, and as the reader might have noticed, studies on parenting mainly consider educational level, more related to childrearing values, than measures of economic circumstances such as income.

Turning to grandparents, research is limited, especially regarding men. Grandmothers are the most involved with grandchildren (Craig & Jenkins, 2016a; Hank & Buber, 2009; Leopold & Skopek, 2014), and they are more likely to perform physical care than grandfathers (Craig & Jenkins, 2016b; Di Gessa et al., 2020). A stream of research talks about "new grandfathers", i.e., older men engaging more in care duties, not only as helpers of the female partner (Coall, Hilbrand, Sear, & Hertwig, 2016). A few studies find that grandfathers' contribution is confined to leisure (Dunifon et al., 2018; Horsfall & Dempsey, 2015), while others find no gender differences (Di Gessa et al., 2020). For the

intersection with educational level, to the best of our knowledge, only Craig and Jenkins (2016a) provide evidence. The authors find that higher education was a good predictor of grandfathers' (but not grandmothers') involvement as regular carers "perhaps reflecting class differences in attitudes to men's family involvement in the elder generation" (p. 297). Yet, high-income predicted grandmothers' involvement as regular carers (but not grandfathers'). Activities with grandchildren were not considered in a stratification perspective in this study.

Against this background, several possible expectations regarding the direction of the educational and income gradient for grandparents by gender may emerge. For example, we might expect a positive educational gradient for both grandmothers and grandfathers when it comes to the developmental perspective: engaging in activities such as homework and leisure, driven by motives like seeing children as a developmental project. At the same time, the gradient could be present for grandmothers only, given that women's resources usually predict their and their partners' care time. But, the gradient could be present for grandfathers only: while women are traditional kinkeepers, equally involved in all activities, "new" highly-educated grandfathers could be willing to support grandchildren's development. From the physical care perspective, we could expect a larger negative income gradient for grandmothers, and no differences among grandfathers, who are less likely to be involved with routine activities. Given the wide range of possible mechanisms at play, we explore gender differences without formulating clear-cut hypotheses.

Materials and Method

Data

The present study employs the 8th (2016/2017) and 9th (2018/2019) wave of the English Longitudinal Study of Ageing (ELSA). ELSA is a panel study collecting information on several life domains (e.g., health, economic position, and quality of life) from a representative sample of the English population aged 50 and their partners, living in private residential accommodation (Banks et al., 2021). Data are collected every two years with computer assisted personal interviews (CAPI) in the participants' homes, and refreshment samples have been added periodically to the original sampling frame from the Health Survey for England (HSE) to ensure representativeness. More details of the survey's sampling frame, methodology, and questionnaires have been reported elsewhere (NatCen Social Research, 2020). We restrict our analysis to these two waves because they contain a section on grandparenting.

Sample

We select individuals between 50 and 80 years old by the time of the interview. After that age, the probability of providing childcare drops in our sample (70% of grandparents in the age group 50-60, 46% in the age group 71-80, and only 11% among the 80+). Out of 14,569 observations, we delete individuals who did not answer the survey questions in a personal interview but by proxy (736 observations). We then remove those either without grandchildren (4,878 observations) or not having grandchildren younger than 15 (1,335 observations), the most in need of support with care. At this point, we are left with 7,620 observations.

Among these observations, 74% of highly-educated grandparents declare having provided grandchild care in the last twelve months, against 70% of the middle-educated and 62% of the lower educated. These individuals enter the final analytical sample; we delete 2,327 observations of grandparents who do not provide childcare, and consequently, do not answer the grandparenting module with questions on childcare intensity, activities, and motives. Further, we delete 80 observations from missing data on the variables of interests. If after all these selection requirements an individual was still present twice in our analytical sample (having participated in both wave 8 and 9), we select the most recent wave; 1,882 "repeated" grandparents are eliminated. Our final analytical sample amounts to 3,331 observations (1,351 from grandfathers and 1,980 from grandmothers).

Variables

As dependent variables, we employ a set of *variables related to the characteristics of grandparental childcare*. If the grandparents have more than one grandchild, the questions refer to all grandchildren (see Di Gessa et al., 2020).

First, we measure *intensity* of grandparental childcare. Grandparents are asked whether they have provided care, in the last twelve months, to a grandchild without the parents being present (i) care during school terms – weekdays (ii) care during school terms – weekends (iii) care during school holidays (iv) care throughout the whole year (v) difficult to say. For (i), (iii), (iv), and (v), grandparents are asked how many days per week (4-5; 2-3; 1; less often). In the case of weekends (ii), they are asked whether care occurred every weekend; every other weekend; and less often. Moreover, they are asked how many hours per day. Our first intensity variable takes the value of (1) if the grandparent provides grandchild care at least once per week (or every weekend), irrespective of the period of the year (occasions i-v). Ideally, we wanted to test intensive care on each occasion separately, but a few occasions happened rarely, e.g., our sample includes only 55 observations for care every weekend. Therefore, we do not take the type of occasion into account. Still, intensive care

during school holidays and weekends can be equally relevant to care during school days; even more so, as parents keep on working during the summer when children are free of school. The same holds for weekends, for parents working non-standard hours.

Our second intensity variable takes the value of (1) if the grandparent provides grandchild care for a daily number of hours higher than average, irrespective of the period of the year. We choose different hourly threshold for different occasions to identify intensity: during school terms, grandparents spend on average fewer hours with grandchildren than during school holidays (children go to school in the first case and are free all day long in the second). The average hours therefore are: 5 for school terms; 11 for weekends and school holidays; 7 for care throughout the year and "difficult to say".

Second, respondents were asked to select from a list the *activities* they do with grandchildren, picking as many as applicable. As mentioned, our focus is on whether the grandparent spends time with grandchildren (i) helping with homework; and (ii) in leisure activities. A few activities relate to physical care: (iii) preparing meals; (iv) taking or collecting them from nursery, school and playgroup. We explore the remaining activities included in the ELSA questionnaire for comparison (e.g., in terms of effect size) referring to staying with grandchildren (v) overnight without parents; (vi) when they are ill; and (vii) just around in case of need. Each of the variables we create takes a value of (1) only if the grandparent declares to have performed that activity "frequently" (against "item not mentioned", "rarely", and "occasionally").

Third, respondents were asked to select from a list the *motives* for spending time with grandchildren. Central to our study are the following reasons: (i) "To help them develop as people"; (ii) "to help the parents go out to work"; (iii) "to help out financially". The remaining motives we explore for comparison are: (iv) "to give parents a break"; (v) "to give grandchild(ren) a break"; (vi) "so the parents can go out in the evening"; (vii) "the family prefers family care"; (viii) "it keeps me young and active"; (ix) "it makes me feel engaged with young people"; (x) "it is difficult for me to refuse".

The first main independent variable is the *level of education* of the grandparent, as provided by the Harmonized ELSA dataset (for further information, see Phillips et al. 2017, p. 69). The variable follows the RAND HRS categorization to provide a more simplified version of internationally comparable educational achievement: less than high school; high-school graduate; college and above. For those respondents with missing values on this variable ("Other"; "Missing"; "Don't know", N=250) we used information on the age they completed education: never went to school to 17 years old for the first group; 18 for the second group; and 19 or over for the third. Results do not change between samples with and without this imputation.

The second main independent variable is *total couple level income*, which combines individual and spouse resources from earnings, family capital income, income from employer or private/public pension and annuity, government transfers, and regular payments. The income variable is divided in terciles (average income per tercile: 14,000; 28,000; and 58,000 pounds), to minimize collinearity with the education variable in our models.

We add a set of *control variables*: age (50-80); whether in employment (no; less than 25 hours per week; 25 hours or more); whether with a partner; difficulty with activities of daily living (ADL, 0-5); number of grandchildren; age of the youngest grandchild; proximity of residence with the nearest grandchild (less than 15 minutes, 15 minutes - 1 hours, more than 1 hour); and a dummy variable for wave (8 or 9).

Method and analytical plan

We compute a set of single-level logistic regression models, one for each of the intensity of care, activity-, and motive-variables considered. The models are performed separately for men and women.

The results are interpreted in terms of average marginal effects (AMEs). We will thus show the size of the educational/income gradient, namely the average difference in probability of grandparental involvement (intensity, activities, and motives) between higher (college and above; highest income tercile) and lower (less than high school; lowest income tercile) SES grandparents. The gradient is presented separately for men and women.

We are aware that the AMEs are not very informative about the absolute level of involvement in childcare, and that results for the middle groups (high school graduate; medium income tercile) are not presented. Therefore, we provide descriptive statistics for all the educational layers in Table 1. In addition, full models for all SES groups are available in the online supplementary materials.

Results

Descriptive results

Table 1 shows descriptive statistics for the intensity, activities, and motives for grandchild care, by gender and educational level. Grandmothers are a larger group than grandfathers (N=1,980 vs 1,351). Highly-educated grandmothers are roughly one fourth (N= 796) more numerous than lower-educated grandmothers (N=565); college-educated grandfathers are twice as much their high school (graduate) counterparts (N=765 vs 306). Given that we selected only grandparents providing childcare, the size of these groups suggests a positive educational gradient in the occurrence of grandparental childcare.

	Grandmothers			Grandfathers		
	Less than HS	HS	College	Less than HS	HS	College
Dependent variables:						
Childcare: Weekly	41.77	36.83	36.93	40.20	32.50	32.16
Childcare: hours>average	35.75	39.42	40.70	30.72	36.43	35.03
Activities:						
Homework	11.15	14.70	17.71	8.50	9.29	7.97
Leisure	38.94	43.62	44.35	32.68	35.36	35.03
Preparing Meals	49.73	48.30	47.24	26.14	25.71	27.71
Taking/collecting to/from	25.31	27.95	29.27	24.84	21.79	21.83
Stay Overnight	17.70	18.74	17.84	15.36	12.50	10.33
Stay when Ill	4.07	5.65	5.65	5.88	4.29	2.61
Around in case of need	38.41	38.13	42.09	29.08	31.79	29.67
N. activities mentioned (0-7)	1.85	1.97	2.04	1.42	1.41	1.35
Motives:						
Development	27.08	36.51	52.51	35.62	45.00	48.89
Keeps me young	44.60	47.33	50.75	39.22	38.93	42.35
Engaged with young people	29.73	34.41	43.09	30.39	30.71	32.03
Can't refuse	15.93	17.93	16.71	18.30	16.43	15.03
Preferences for Family Care	24.07	28.11	28.02	18.30	18.57	19.48
Parents Work	63.19	64.30	64.95	65.69	64.64	62.88
Financial Help	28.67	30.86	34.92	25.16	33.57	29.41
Parents Break	57.52	61.39	67.59	58.82	59.64	67.06
Gr.child Break	26.37	29.40	30.78	20.92	28.93	26.27
Parents Evening	44.42	53.63	57.79	40.52	54.29	55.82
N. Reasons mentioned (0-10)	3.61	4.04	4.50	3.53	3.91	4.00
Family income:						
1st tercile	54.34	42.97	26.01	44.12	28.21	15.29
2nd tercile	31.33	31.34	30.90	36.93	39.29	35.29
3rd tercile	14.34	25.69	43.09	18.95	32.50	49.41
Control variables:						
Age (mean)	67.94	65.76	66.22	69.07	67.45	68.57
ADL (mean)	0.25	0.26	0.19	0.42	0.26	0.13
Age youngest gr.child (mean)	6.12	5.08	4.45	5.40	4.96	4.64
N. Gr.children (mean)	4.57	4.13	3.79	4.69	3.90	3.70
Partner	62.83	70.27	70.60	79.41	83.57	87.84
Employed: No	75.22	67.85	68.09	75.49	63.21	69.28
≤ 25 hours	15.40	15.51	17.34	7.52	10.71	13.46
>25 hours	9.38	16.64	14.57	16.99	26.07	17.25
Proximity: < 15 min	59.12	51.53	43.47	61.76	48.93	44.58
15min -1h	33.98	33.44	30.53	30.39	37.86	31.76
> 1 h	6.90	15.02	26.01	7.84	13.21	23.66
Wave 9	71.86	78.19	82.91	63.40	75.71	76.34
N	565	619	796	306	280	765

Table 1. Descriptive statistics by grandparental sex and educational level

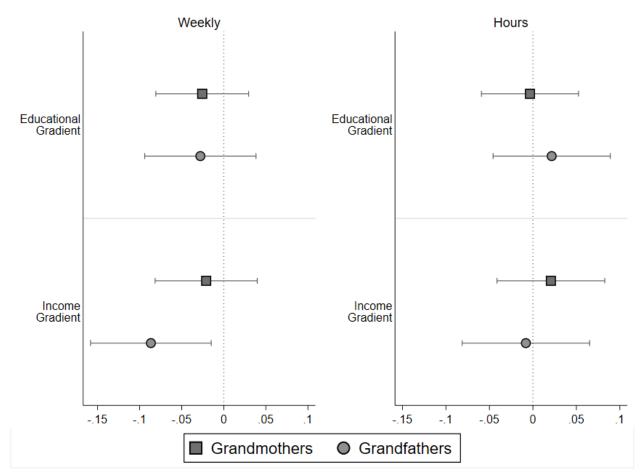
Educational level and income are of course correlated: 43% of highly educated grandmothers are in the highest income tercile, against 14% of lower educated grandmothers. Similar is the pattern for grandfathers. Highly-educated grandparents report on average fewer difficulties with ADL and have

younger grandchildren. They are more likely to have a partner (especially men), less likely to be in employment, and more often have children living more than one hour away.

Grandparental childcare intensity

In Figure 1, we explore the intensity of grandparental childcare and show whether grandparents from a certain SES are more likely to spend time with grandchildren weekly (left panel), and for more hours than average (right panel). On the top half of the picture, for each panel, Figure 1 reports AMEs for educational level, while reporting for income on the bottom half. We do not detect significant differences between educational layers among grandparents, for both measures of intensity. However, for income, we notice that grandfathers in the highest income tercile are the least likely (around 10 percentage points) to provide grandchild care weekly than the less advantaged counterparts. The variable measuring daily hours does not report a significant difference.

Figure 1. Difference in probability (AME) of looking after grandchildren intensively, between higher and lower SES (education; income) grandparents, by gender



Note: 95% CI. Logistic regression models with all control variables included. *Source:* ELSA data (2016–2017; 2018–2019)

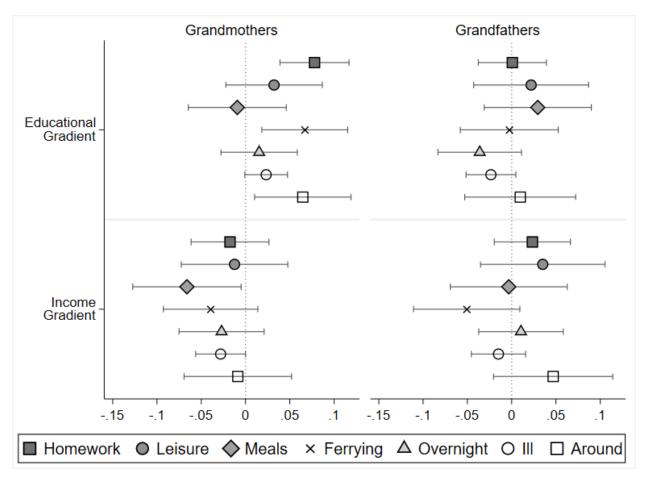
Grandparents' activities with grandchildren

Figure 2 shows the gradient in frequent participation in a set of activities with grandchildren. For educational level (upper half of the picture), refusing Hypothesis 1a, no educational gradient is found in leisure activities (*Leisure*). Highly educated grandmothers are more involved in homework related activities (*Homework*) (around 7 percentage points) than lower-educated grandmothers, as expected by our Hypothesis 1b. The gradient is present and of similar size for taking/collecting grandchild(ren) to/from nursery, playgroup, or school (*Ferrying*), and for being around in case of need (*Around*); highly educated grandmothers are also more committed when the grandchild(ren) is ill (*Ill*), but the gradient is very limited in size, and barely reaches statistical significance. No educational gradients are detected for grandfathers.

For income, grandmothers in the highest income tercile are less likely to prepare meals (*Meals*) (around 7 percentage points), confirming our Hypothesis 3a; however, they are not less likely to help

take/collect grandchild(ren) to/from nursery, playgroup, or school (*Ferrying*), as formulated in Hypothesis 3b. Contrary to the evidence for educational level, high-income grandmothers are less likely to help when the grandchild(ren) is ill (*Ill*) compared to their counterparts in the lowest income tercile, but the gradient is limited in size and hardly reaches statistical significance. We do not detect differences among grandfathers.

Figure 2. Difference in probability (AME) of spending time "frequently" with grandchildren in different activities, between higher and lower SES (education; income) grandparents, by gender.



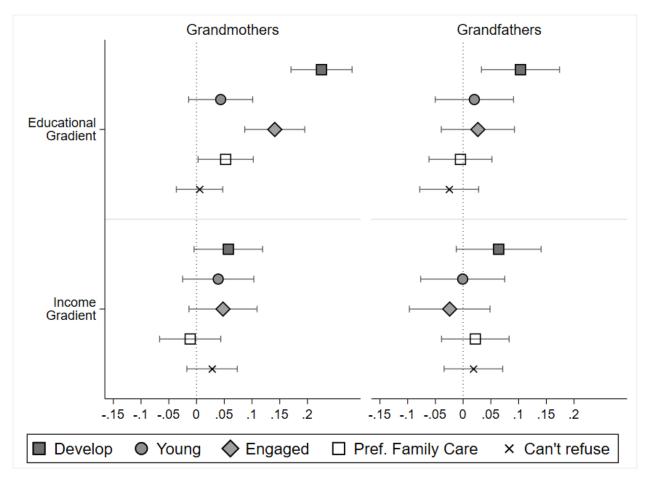
Note: 95% CI. Logistic regression models with all control variables included. *Source:* ELSA data (2016–2017; 2018–2019)

Grandparental childcare: motives

We divide motives for grandparenting into two groups to avoid overburdening the figures. In Figure 3, we gather the motives of a more "ideational" nature. In terms of education (top half of the figure), it shows that highly educated grandmothers are more than 20 percentage points more likely than the lower educated to provide childcare to "help grandchildren develop as people" (*Develop*), which confirms our Hypothesis 2. The same holds for grandfathers, even if more limited in size (around 10 percentage points). Highly educated grandmothers are also willing to spend time with grandchildren

to feel engaged with young people (*Engaged*) and are also more likely to prefer family care (*Family Care*, around 6 percentage points). These positive gradients could be highlighted for income as well, especially for grandmothers, but they do not reach statistical significance.

Figure 3. Difference in probability (AME) of spending time with grandchildren for first set of motives, between higher and lower SES (education; income) grandparents, by gender.



Note: 95 % CI. Logistic regression models with all control variables included. *Source:* ELSA data (2016–2017; 2018–2019)

Turning to more "practical" reasons, Figure 4 shoes that educational differences in grandparental childcare are present when it comes to supporting the middle generation's free time: highly educated grandmothers are more likely to provide childcare to enable adult children to take a break from family duties (*Par. Break*, around 6 percentage points) and go out in the evening (*Evening*, around 10 percentage points). For grandfathers, only support for parents going out in the evening (*Evening*, around 11 percentage points) is positive and statistically significant.

Turning to income, high-income grandmothers are more likely to stay with grandchildren to help parents financially (*Financial*), but not to help parents go to work (*Work*). This holds also for grandfathers; it is totally not in line with our Hypotheses 4a and 4b. Grandfathers, in turn, are more

likely to provide childcare to help adult children to take a break from family duties (*Par. Break*, around 11 percentage points) and go out in the evening (*Evening*, around 10 percentage points).

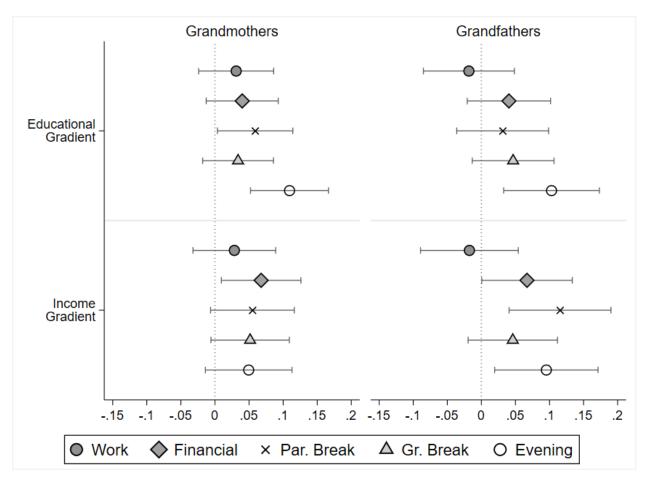


Figure 4. Difference in probability (AME) of spending time with grandchildren for second set of motives, between higher and lower SES (education; income) grandparents, by gender.

Note: 95 % CI. Logistic regression models with all control variables included. *Source:* ELSA data (2016–2017; 2018–2019)

Conclusion

The present study employed data from two waves of the ELSA survey to study how grandparents from different SES and gender spend time with grandchildren in England. In the theoretical framework, we maintained that family income could be a better predictor of childcare needs, while educational level could be associated with specific activities to foster grandchildren's talents, to provide them with the resources that enhance future life chances. We explored whether these associations are differently distributed across grandmothers and grandfathers.

Our sample comprises grandparents who declare having provided childcare in the last 12 months. Therefore, they are already selected in terms of gender and educational level: grandmothers are more numerous than grandfathers, and highly-educated individuals are overrepresented. This reflects previous studies finding greater involvement of grandmothers with childcare (Craig & Jenkins, 2016a; Hank & Buber, 2009; Leopold & Skopek, 2014) and a positive educational gradient in its occurrence (Craig & Jenkins, 2016a; King & Elder, 1998; Lakomý & Kreidl, 2015; Luo et al., 2012; Zamberletti et al., 2018). In our sample, for example, underrepresented groups (low-SES, men) are positively selected in involvement, and most likely very willing (for reasons ranging from values to need) to spend time with their grandchildren. Despite gender norms and childrearing values being unevenly distributed across social strata, this positive selection can explain the lack of evidence of wider and more clear-cut socio-economic differences in amount of shared time, activities, and motives.

In terms of intensity, previous research has shown that, generally, low-SES grandparents are more likely to show high rates of childcare (Di Gessa et al., 2022; McGarrigle et al., 2018). Research has either prioritized intensive childcare during school terms and throughout the year (i.e., care during holidays is in the category "less often than once a month" in Di Gessa et al., 2022), or set hourly threshold (e.g., 60 hours per month, McGarrigle et al., 2018). We proposed two novel operationalizations of intensity to further corroborate extant evidence: weekly care including school holiday, and above-average daily hours. Our study confirms that low family income is a better predictor of intensive grandparental commitment than educational level. Low-income grandfathers are more likely to provide childcare weekly than their counterparts, but the commitment does not result in above average hours of time in each grandparenting "session". We link this finding to childcare needs: low-income grandparents might have low-income children, less able to purchase childcare hours and who rely on the informal care of their parents.

Our results for activities draw a far more complex picture than we expected with our Hypotheses. We corroborate previous evidence that highly educated grandparents are more involved in activities with a development implication, which we measured with help with homework, than their lower educated counterparts (Di Gessa et al., 2022; King & Elder, 1998). This is true for grandmothers only. This evidence partially disconfirms our expectations: according to the grandparent-effect we delineated, a positive educational gradient was to be found for leisure activities as well, and not for activities related to physical care. Income has a different association with grandparenting for grandmothers: high-income grandmothers are less likely to prepare meals for grandchildren, for example. However, this result highlights that there is a greater propensity for grandmothers with higher education to support grandchildren in activities that could help their future life chances, surely in part by virtue of their acquired academic and cognitive skills.

As far as motives for sharing time are concerned, for highly educated grandparents, the time spent with grandchildren is mainly driven by the willingness to "help grandchildren develop as people". The size of the gradient represents 20 percentage points for grandmothers, exceeding all other childcare outcomes in this study. This result is of particular interest, confirming that highly educated grandparents do have an interest in children's future life chances, as the grandparent-effect predicts. Grandparents, both highly educated and high-income individuals, also indicate providing childcare in parents' free time. Moreover, our study finds that grandparents at the top of the income distribution are the most likely to spend time with grandchildren to help children financially, more than their less advantaged counterparts. This contradicts the study by Di Gessa, Glaser, and Zaninotto, (2022) who find that grandparents belonging to the second and the third wealth quartile are more likely than the highest quartile to be motivated by helping children financially. Our additional checks show that the difference between the two studies lies in the operationalization of economic resources. Di Gessa, Glaser, and Zaninotto (2022) use wealth, a more permanent measure of economic circumstances, often inherited over generations, and it is more relevant when identifying economic elites (Chan & Boliver, 2013). In this study, we use income that instead, relates to market salary (or pension), resources that can be mobilized by "average" grandparents to help the middle generation, even without cumulated wealth; research finds that some grandparents even work longer to support their children financially (Airey et al., 2020). We believe that these two complementary approaches to material circumstances (wealth, income) can enrich our understanding of the several shades of the social stratification of grandparenting.

Concerning gender, it is women who are differentiating their behaviours across socio-economic groups. Educational level is a good predictor of grandmothers' involvement in several activities with grandchildren, including helping with homework. Similarly, their willingness to support grandchildren's development (as motive for shared time) is the strongest in terms of effect size. Highly educated men do not seem to be at the forefront in a modern type of involvement with grandchildren. Their involvement appears to be only in intentions ("help grandchildren develop as people") rather than in actual activities. However, low- and mid-income men step-in for intensive childcare, reaching a probability like that of women (see Table A1, online supplementary material).

Our study presents some limitations that ought to be addressed. First, we could not distinguish in the broad specification of "leisure activities" between watching television and going to a theatre or museum, the latter being activities much more linked with cultural resources and investment in talent, plausibly more linked to highly educated grandparents. This might explain the lack of evidence on the relation between education and leisure. Second, we could not account for middle generation

characteristics, such as employment status, income, and marital status. Grandparents' educational level might not (only) measure childrearing values, but also, capture middle generation's labour market attachment, and thus their need for care support. As parents and children tend to share similar educational attainments (Breen & Jonsson, 2007), highly-educated grandparents are more likely to have highly-educated children, who, in turn, are more likely to be employed in high investment careers. This is even more so the case for women. This can be a serious bias when studying countries reporting a polarization of the female labour force by educational level, such as full-time employed versus lifelong homemaker (see Zanasi et al., 2022 for Italy). However, this seems less relevant in England, where most women are in employment despite their level of education (Roantree & Vira, 2017).

Finally, our results refer to one country alone, England. Family policies influence the provision and intensity of grandparental childcare (Bordone et al., 2017; Di Gessa et al., 2016), which could lead to differences in the size of the socio-economic gradient in relation to adult children's employment across Europe. Detailed investigation of possible country differences could be feasible using the SHARE survey, but it is complicated by the scarcity of grandparenting information, which is limited to occurrence and intensity in terms of days of the week. As of now, the ELSA survey is the most complete data source on grandparental childcare present in Europe. This is an interesting avenue for future research, perhaps by using country-specific surveys to increase the sample size.

Taken together, our results suggest that grandparenting can have very relevant, and different, implications, according to the perspective through which we approach it. It is driven by middle generation's childcare needs in more disadvantaged families, as burdensome hourly commitment: this can have negative consequences on grandparents' well-being; but also, it can complicate the work-family reconciliation for those families not able to afford public childcare, and not having available grandparents. In more advantaged families, grandparents are part of the generational chain that structures inequality of opportunity: an "extended-family environment" endorses children with various forms of capital (Jæger, 2012), and advantages them already from early age (Sadruddin et al., 2019), to secure their future socio-economic success (Gregg et al., 2017).

References

- Airey, L., Lain, D., Jandrić, J., & Loretto, W. (2021). A selfish generation? 'Baby boomers', values, and the provision of childcare for grandchildren. *The Sociological Review*, 69(4), 812–829.
- Anderson, L. R., Sheppard, P., & Monden, C. W. S. (2018). Grandparent effects on educational outcomes: A systematic review. *Sociological Science*, 5, 114–142.

- Banks, J., Batty, G.D., Breedvelt, J.J.F., Coughlin, K., Crawford, R., Marmot, M., Nazroo, J., Oldfield, Z., Steel, N., Steptoe, A., Wood, Martin., Zaninotto, P. (2021) English Longitudinal Study of Ageing: Waves 0-9, 1998-2019 [data collection]. 36th Edition. UK Data Service. SN: 5050, http://doi.org/10.5255/UKDA-SN-5050-23
- Bol, T., & Kalmijn, M. (2016). Grandparents' resources and grandchildren's schooling: Does grandparental involvement moderate the grandparent effect? *Social Science Research*, 55, 155– 170.
- Bordone, V., Arpino, B., & Aassve, A. (2017). Patterns of grandparental child care across Europe: the role of the policy context and working mothers' need. *Ageing and Society*, *37*, 845–873.
- Breen, R., & Jonsson, J. O. (2005). Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility. *Annual Review of Sociology*, 31(1), 223–243.
- Chan, T. W., & Boliver, V. (2013). The Grandparents Effect in Social Mobility: Evidence from British Birth Cohort Studies. *American Sociological Review*, 78(4), 662–678.
- Cherlin, A. J., & Furstenberg, F. F. J. (1986). *The New American Grandparent. A place in the family, a life apart* (Basic Book). New York.
- Coall, D. A., Hilbrand, S., Sear, R., & Hertwig, R. (2016). A New Niche? The Theory of Grandfather Involvement. In A. Buchanan & A. Rotkirch (Eds.), *Grandfathers: Global Perspectives* (pp. 21–44). London: Palgrave Macmillan Studies in Family and Intimate Life. Palgrave Macmillan.
- Craig, L. (2006). Parental education, time in paid work and time with children: An Australian timediary analysis. *British Journal of Sociology*, *57*(4), 553–575.
- Craig, L., & Jenkins, B. (2016a). Grandparental childcare in Australia: gender differences in the correlates of providing regular grandparental care while parents work. *Community, Work & Family*, 19(3), 281–301.
- Craig, L., & Jenkins, B. (2016b). The composition of parents' and grandparents' child-care time: Gender and generational patterns in activity, multi-tasking and co-presence. *Ageing and Society*, 36(4), 785–810.
- De Graaf, N. D., De Graaf, P. M., & Kraaykamp, G. (2006). Parental Cultural Capital and Educational Attainment in the Netherlands: A Refinement of the Cultural Capital Perspective. *Sociology of*

Education, 73(2), 92-111.

- Di Gessa, G., Glaser, K., Price, D., Ribe, E., & Tinker, A. (2016). What drives national differences in intensive grandparental childcare in Europe? *Journals of Gerontology: Social Sciences*, 71(1), 141–153.
- Di Gessa, G., Glaser, K., & Zaninotto, P. (2022). Is grandparental childcare socio-economically patterned? Evidence from the English longitudinal study of ageing. *European Journal of Ageing*, (0123456789).
- Di Gessa, G., Zaninotto, P., & Glaser, K. (2020). Looking after grandchildren: gender differences in 'when,' 'what,' and 'why': Evidence from the English Longitudinal Study of Ageing. *Demographic Research*, 43(53), 1465–1482.
- Dotti Sani, G. M., & Treas, J. (2016). Educational Gradients in Parents' Child-Care Time Across Countries, 1965–2012. *Journal of Marriage and Family*, 78(4), 1083–1096.
- Dunifon, R. E., Near, C. E., & Ziol-Guest, K. M. (2018). Backup Parents, Playmates, Friends: Grandparents' Time With Grandchildren. *Journal of Marriage and Family*, 80(3), 752–767.
- England, P., & Srivastava, A. (2013). Educational differences in US parents' time spent in child care: The role of culture and cross-spouse influence. *Social Science Research*, 42(4), 971–988.
- Gimenez-Nadal, J. I., & Molina, J. A. (2013). Parents' education as a determinant of educational childcare time. *Journal of Population Economics*, 26(2), 719–749.
- Gracia, P. (2014). Fathers' child care involvement and children's age in Spain: A time use study on differences by education and mothers' employment. *European Sociological Review*, *30*(2), 137–150.
- Gracia, P. (2015). Parent-child leisure activities and cultural capital in the United Kingdom: The gendered effects of education and social class. *Social Science Research*, *52*, 290–302.
- Gray, A. (2005). The changing availability of grandparents as carers and its implications for childcare policy in the UK. *Journal of Social Policy*, *34*(04), 557–577.
- Gregg, P., Jonsson, J. O., Macmillan, L., & Mood, C. (2017). The role of education for intergenerational income mobility: A comparison of the United States, Great Britain, and Sweden. Social Forces, 96(1), 121–152.

- Guryan, J., Hurst, E., & Kearney, M. (2008). Parental Education and Parental Time with Children. *Journal of Economic Perspectives*, 22(3), 23–46.
- Hällsten, M., & Pfeffer, F. T. (2017). Grand Advantage: Family Wealth and Grandchildren's Educational Achievement in Sweden. *American Sociological Review*, 82(2), 328–360.
- Hank, K., & Buber, I. (2009). Grandparents Caring for Their Grandchildren. *Journal of Family Issues*, 30(1), 53–73.
- Hook, J. L., & Wolfe, C. M. (2012). New fathers?: Residential fathers' time with children in four countries. *Journal of Family Issues*, *33*(4), 415–450.
- Horsfall, B., & Dempsey, D. (2015). Grandparents doing gender: Experiences of grandmothers and grandfathers caring for grandchildren in Australia. *Journal of Sociology*, *51*(4), 1070–1084.
- Igel, C., & Szydlik, M. (2011). Grandchild care and welfare state arrangements in Europe. *Journal of European Social Policy*, *21*(3), 210–224.
- Jæger, M. M. (2012). The Extended Family and Children's Educational Success. *American* Sociological Review, 77(6), 903–922.
- Kan, M. Y., Sullivan, O., & Gershuny, J. (2011). Gender Convergence in Domestic Work: Discerning the Effects of Interactional and Institutional Barriers from Large-scale Data. *Sociology*, 45(2), 234–251.
- Keizer, R. (2020). The Role of Fathers in the Intergenerational Transmission of (Dis)advantages:
 Linking Sociological Stratification Questions to Developmental Psychology Research. In H. E.
 Fitzgerald, K. Von Klitzing, N. J. Cabrera, & J. Scarano (Eds.), *Handbook of Fathers and Child Development* (pp. 47–64). Springer.
- King, V., & Elder, G. H. J. (1998). Education and Grandparenting Roles. *Research on Aging*, 20(4), 450–474.
- Kraaykamp, G., & van Eijck, K. (2010). The Intergenerational Reproduction of Cultural Capital: A Threefold Perspective. *Social Forces*, *89*(1), 209–231.
- Lakomý, M., & Kreidl, M. (2015). Full-time versus part-time employment: Does it influence frequency of grandparental childcare? *European Journal of Ageing*, *12*(4), 321–331.

- Lareau, A. (2003). *Unequal Childhoods: Class, Race, and Family Life*. Berkeley, Los Angeles: University of California Press.
- Leopold, T., & 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.
- Lewis, J., & West, A. (2017). Early Childhood Education and Care in England under Austerity: Continuity or Change in Political Ideas, Policy Goals, Availability, Affordability and Quality in a Childcare Market? *Journal of Social Policy*, 46(2), 331–348.
- Luo, Y., LaPierre, T. A., Hughes, M. E., & Waite, L. J. (2012). Grandparents providing care to grandchildren: A population-based study of continuity and change. *Journal of Family Issues*, 33(9), 1143–1167.
- Mann, R. (2007). Out of the shadows?: Grandfatherhood, age and masculinities. *Journal of Aging Studies*, *21*(4), 281–291.
- McGarrigle, C. A., Timonen, V., & Layte, R. (2018). Choice and Constraint in the Negotiation of the Grandparent Role: A Mixed-Methods Study. *Gerontology and Geriatric Medicine*, *4*, 1–12.
- McGill, B. S. (2014). Navigating New Norms of Involved Fatherhood: Employment, Fathering Attitudes, and Father Involvement. *Journal of Family Issues*, *35*(8), 1089–1106.
- Mueller, M. M., Wilhelm, B., & Elder, G. H. J. (2002). Variations in grandparenting. *Research on Aging*, 24(3), 360–388.
- NatCen Social Research (2020). ELSA User Guide to the Main Interview Datasets Waves 1 to 9. Retrieved from <u>https://www.elsa-</u> project.ac.uk/_files/ugd/540eba_1b12cb61558e4fde917160090c0952af.pdf
- OECD. (2011). Doing better for families. OECD Publishing.
- Phillips, D., Lin, Y., Wight, J., Chien, S. & Lee, J. (2017). Harmonized ELSA documentation. Version E.
- Price, D., Ribe, E., Di Gessa, G., & Glaser, K. (2018). Grandparental childcare: a reconceptualisation of family policy regimes. In V. Timonen (Ed.), *Grandparenting practices around the world* (pp. 43–62). Bristol: Policy Press.

- Raley, S., Bianchi, S. M., & Wang, W. (2012). When Do Fathers Care? Mothers' Economic Contribution and Fathers' Involvement in Child Care. *American Journal of Sociology*, 117(5), 1422–1459.
- Roantree, B., & Vira, K. (2017). The rise and rise of women's employment in the UK. *Institute of Fiscal Studies*, 1–14.
- Rutter, J., & Evans, B. (2011). Listening to grandparents. In *Informal Childcare Research Paper One*. Retrieved from http://www.familyandchildcaretrust.org/sites/default/files/files/2.1.11 Listening to grandparents.pdf
- Sadruddin, A. F., Ponguta, L. A., Zonderman, A. L., Wiley, K. S., Grimshaw, A., & Panter-Brick, C. (2019). How do grandparents influence child health and development? A systematic review. *Social Science & Medicine*, 239, 112476.
- Sullivan, A. (2001). Cultural capital and educational attainment. Sociology, 35(4), 893–912.
- Van De Werfhorst, H. G., & Hofstede, S. (2007). Cultural capital or relative risk aversion? Two mechanisms for educational inequality compared. *British Journal of Sociology*, 58(3), 391–415.
- Wheelock, J., & 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.
- Zanasi, F., Arpino, B., Pirani, E., & Bordone, V. (2022). Work histories and provision of grandparental childcare among Italian older women. *Genus*, 78(1).
- Zamberletti, J., Cavrini, G., & Tomassini, C. (2018). Grandparents providing childcare in Italy. *European Journal of Ageing*, *15*(3), 265–275.