Attitudes to climate change risk among older people in England: the role of intergenerational relationships

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Abstract

Drawing on theoretical and empirical research on the association between parenthood and political preferences as well as on socio-demographic studies on the effects of grandparenthood, this paper explores heterogeneities in attitudes towards climate change risks across intergenerational relationships – in particular (grand)parenthood status and involvement in grandchild care. We hypothesise that intergenerational kin availability and exchanges with family members positively influence climate attitudes. We use data from the latest wave of the English Longitudinal Study of Ageing (ELSA, 2023/24), where respondents are asked for their level of agreement with six statements on climate change risks (N = 6,670). Multinomial regression modelling was used to investigate how intergenerational relationships were associated with different levels of climate change concern, accounting for socio-demographic characteristics. Preliminary results show that grandparents who look after their grandchildren at least weekly report the highest levels of climate change concern, after controlling for age and educational attainment. Overall, this study highlights the importance of intergenerational ties in increasing climate concern, overcoming barriers to climate action and, thus, in handling the socio-ecological change of our time.

Keywords: Climate change; attitudes; intergenerational relationships; family stratification

Introduction

The ageing-climate change nexus will be among the defining relationships of the coming decades. Over the past 50 years, Europe has experienced a significant increase in temperatures as part of the climate change, defined as a transformative change in temperature and weather patterns over time, resulting in rising temperature and sea levels, water shortages, health risks, and higher poverty, among others (EEA 2024). While Europe's population is rapidly ageing, with the percentage of the population aged 65 and older projected to reach 27% by 2050, older people are among the most vulnerable to elevated temperatures and cold spells (Cicci et al. 2022; Ryti et al. 2016).

However, the public debate on combating climate change is often posed in terms of a generational conflict, where older groups are tagged as responsible for climate change

(having benefitted from their behaviours as winners) and the younger ones as those who will shoulder the costs (losers). Given the centrality that the family roles have in individual lives throughout the life course and especially at older ages, we can assume that intergenerational relationships exert a (positive) effect on attitudes to climate change risks. Family members are indeed known to influence health behaviours throughout the life course (Berkman et al. 2000; Umberson et al. 2010), particularly in later life. The theoretical social–behavioural explanations of the importance of the family for attitudes and behaviours focus on the instrumental and emotional support that family members provide to each other, complying with social norms of family obligations (Antonucci et al. 2007), providing material and emotional support, but also information. The role of close kin is also explained by the social control function of family members, which exerts pressures and control to promote positive behaviour and lifestyles (Umberson et al. 2010). Partners and children have for example been shown to exert a clear effect on precautionary behaviours and vaccination against COVID-19 (Arpino et al. 2023).

Similarly, it can be hypothesised that attitudes to climate change risk might also be affected by kin availability and the characteristics of such relationships. The presence of and interaction with younger family members may in particular encourage future-oriented thinking and a greater sense of responsibility toward the legacy left to future generations, which in turn could increase concern for environmental conditions. This paper thus aims to examine the role of intergenerational kin availability (e.g. having children and/or grandchildren) as well as frequency of their interactions (including engagement in grandchild care) on attitudes towards climate change risk. Understanding the role of intergenerational relationships in this respect is crucial to increase support for public policies that aim to address climate change in ageing societies. Our main research question is thus "Do people with (grand)children have more favourable attitudes towards climate change risk?".

Data and method

This paper uses data from the English Longitudinal Study of Ageing (ELSA), an ongoing multidisciplinary biennial survey of individuals aged 50 and over. In the first wave collected in 2002/03, around 12,000 respondents were recruited to provide a representative sample of the population aged 50 and over living in private households in England (household response rate was 70%). The sample is periodically refreshed to maintain its representativeness of all individuals aged 50 and over in England. More details of the survey's sampling frame, methodology, and questionnaires have been reported elsewhere (Steptoe et al., 2012).

Data were drawn from the 11th wave of the study, collected in 2023/24, based on about 6,000 individual interviews. Wave 11 was the first wave of ELSA to introduce a new module on attitudes and beliefs toward the seriousness, urgency, and preventability of climate change. Respondents were asked to indicate their agreement with six statements on climate change using a 5-point Likert scale (ranging from 1=strongly agree to 5=strongly disagree). The statements capture attitudes towards how "beyond control" or "too far in the future" climate change is, whether "people will be affected by climate change within the next 30 years", if "we will soon experience a major environmental disaster", on the extent they agree that the "environmental crisis has been greatly exaggerated", and whether they are prepared to pay more for environmental policies. These variables were

used to build five classes of climate attitudes obtained by Latent Class Analysis: very concerned, concerned, concerned but fatalistic, neutral and doubtful (as done by Di Gessa and Zaninotto in their work presented at the 1st International Conference of the Sustainable Ageing EAPS working group).

Multinomial regression models are used to investigate the extent to which intergenerational kin availability and relationships are associated with different attitudes towards climate change. As independent variables, we consider so far parenthood (=1 if respondent has children; =0 otherwise) and grandparenthood (=1 if having at least one grandchild; =0 otherwise) status, and involvement in grandchild care (at least weekly vs less often or never). Next steps of analyses will also consider other indicators of intergenerational solidarity, such as frequency of contacts between respondents and their adult children and activities done by grandparents with their grandchildren.

As controls, age (in groups: 50-59; 60-69; 70-79; 80+) and educational attainment have been included in all regression models. Following analyses will be carried out separately by gender and additionally control for respondents' marital status, health, and social engagement (e.g. volunteering).

Preliminary results and conclusion

Table 1 presents the distribution of five climate change attitudinal classes by (grand)parenthood status and involvement in grandchild care. In line with our expectations, descriptives show that grandparents who provide frequently care for their grandchildren (at least weekly) exhibit higher levels of concern than grandparents with no or little engagement in grandchild care provision. However, parents without grandchildren and childless individuals report the highest levels of climate concern, possibly hinting at structural differences that vary across these groups and may be at play. Among these, age is particularly likely to contribute to the explanation of these patterns, as younger individuals — more likely to be (grand)childless — generally demonstrate higher levels of climate concern.

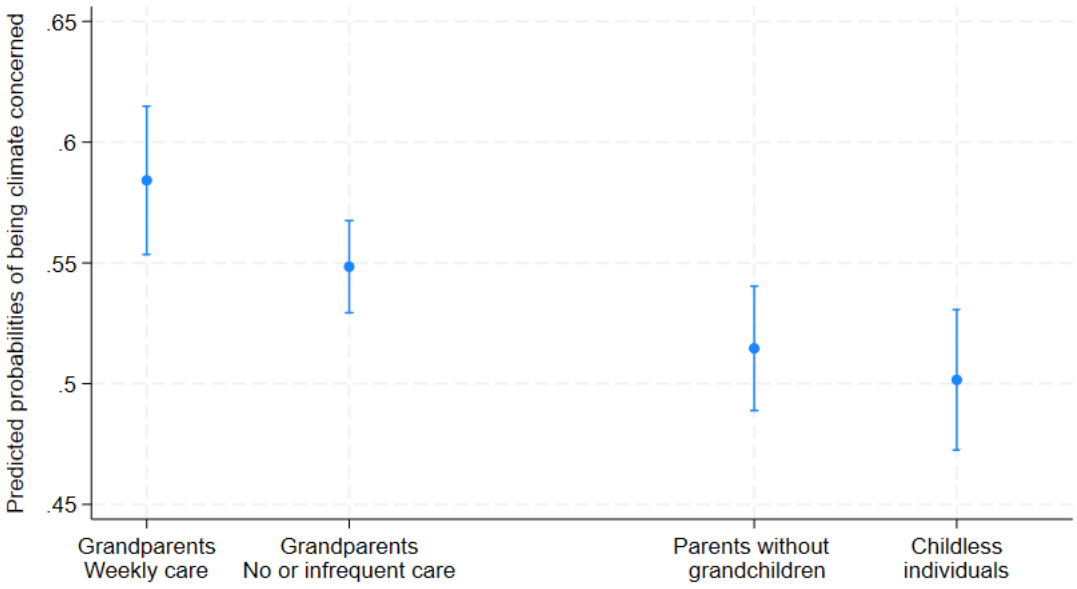
Table 1. Climate change attitudes (%) by (grand)parenthood status and frequency of involvement in grandchild care

	Very Concerned	Concerned	Concerned but fatalistic	Neutral	Doubtful
Grandparents: ≥weekly care	28.0	35.4	7.6	23.7	5.3
Grandparents: <weekly/no care	23.6	31.3	14.2	25.0	5.9
Parents without grandchildren	39.9	32.5	6.1	16.7	4.9
Childless individuals	34.1	29.7	11.0	19.6	5.5

Note: N= 6,670. Chi2 = 223.6390 Pr = 0.000. Source: own calculations on ELSA wave 11.

Therefore, we run a logistic regression model to examine the association between intergenerational relationships and the likelihood of being concerned or very concerned (=1; vs fatalistic/neutral/doubtful =0) about climate change, controlling for age and educational attainment. Figure 1 displays the predicted probabilities from this model.

Figure 1. Predicted probabilities with 95% confidence intervals of being concerned for climate change by (grand)parenthood status and frequency of involvement in grandchild care



Note: Logistic regression model controlling for age groups and education. N=6,667. Fatalistic+neutral+doubtful= reference category. Source: own calculations on ELSA wave 11.

Our expectations are confirmed in that grandparents involved in frequent grandchild care show the highest probability of being concerned about climate change, significantly different from their counterparts without grandchildren or childless individuals.

Furthermore, the presented preliminary analysis drew on a dummy variable scoring one for the pooled very concerned and concerned classes, and zero for the pooled fatalistic, neutral, and doubtful classes. However, further multinomial regression analyses will investigate the association between intergenerational ties and relationships with all five attitudinal classes as well as across the six statements regarding attitudes on climate change separately.

Overall, this study highlights the importance of intergenerational ties in increasing climate concern, overcoming barriers to climate action and, thus, in handling the socio-ecological change of our time.

References

Antonucci TC, Jackson JS, Biggs S (2007). Intergenerational relations: Theory, research, and policy. *Journal of Social Issues,* 63: 679–693.

Arpino B, Bordone V (2014). Does grandparenting pay off? The effect of child care on grandparents' cognitive functioning. *Journal of Marriage and Family,* 76(2): 337–351.

Arpino B, Bordone V, Di Gessa G (2023). COVID-19 precautionary behaviors and vaccine acceptance among older individuals: The role of close kin. *Proceedings of the National Academy of Sciences of the United States of America (PNAS),* 120(13): e2214382120.

Berkman LF, Glass T, Brissette I, Seeman TE (2000). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine,* 51: 843–857.

Bordone V, Arpino B (2022). Is there a rejuvenating effect of (grand)childcare? A longitudinal study on German data. *The Journals of Gerontology: Series B*, 77(2): 446–455.

Cicci KR, Maltby A, Clemens KK, Vicedo-Cabrera AM, Gunz AC, Lavigne É, Wilk P (2022). High temperatures and cardiovascular-related morbidity: A scoping review. *International Journal of Environmental Research and Public Health,* 19(18).

Coleman EA, Harring N, Jagers SC (2023). Policy attributes shape climate policy support. *Policy Studies Journal*, 51(2): 419–437.

Di Gessa G, Glaser K, Tinker A (2016). The health impact of intensive and nonintensive grandchild care in Europe: New evidence from SHARE. *The Journals of Gerontology: Series B*, 71(5): 867–879.

EEA (2024). European Climate Risk Assessment. EEA report 01/2024. Copenhagen: European Environment Agency.

Ryti NRI, Guo Y, Jaakkola JJK (2016). Global association of cold spells and adverse health effects: A systematic review and meta-analysis. *Environmental Health Perspectives, 124*(1): 12–22.

Steptoe A, Breeze E, Banks J, Nazroo J (2012). Cohort profile: The English Longitudinal Study of Ageing. *International Journal of Epidemiology*, *42*(6), 1640-1648.

Umberson D, Crosnoe R, Reczek C (2010). Social relationships and health behavior across the life course. *Annual Review of Sociology,* 36: 139–157.