No evidence that becoming a grandparent benefits well-being: What does this mean for theories of grandparenting?

Paula Sheppard
Christiaan Monden

Abstract

A large body of literature suggests that becoming a grandparent has beneficial consequences for subjective well-being, improved mental health, and happiness. These findings are, however, based on studies that compare grandparents to non-grandparents which is problematic because many unobserved characteristics are unaccounted for. This is especially important when studying self-reported measures of well-being given their subjective nature – people have different internal concepts about how happy they are. We tested whether becoming a first-time grandparent is associated with increased subjective well-being and found very little convincing evidence across fifteen countries in Europe, nor when we replicated these tests in the UK, or in the USA. We used fixed effects models with longitudinal data which allows well-being to be compared, within the individual, before and after the grandparent event. This design means that any unobserved heterogeneity between people is controlled for. We discuss what these findings mean for social and evolutionary theories of grandparenting.

1 Introduction

Active grandparenting is associated with benefits to both the grandchildren and the grandparents. Empirical studies repeatedly show that having grandchildren, and especially spending time with them, is associated with increased well-being and happiness (Arpino et al. 2018; Danielsbacka and Tanskanen 2016; Tanskanen and Danielsbacka 2012). But this body of research largely focusses on active grandparenting and ignores the impact of the life transition itself: little is known about how *becoming* a grandparent affects well-being. Here we study how individuals are affected by the change in status to grandparenthood for the first time.

The literature on becoming a grandparent in relation to happiness, or other measures of emotional well-being, is surprisingly scant. So far there have been only a few small-scale studies that focus on the transition itself, and while they suggest there might be a positive effect of the change in status, whether the

transition to grandparenthood is associated with positive well-being outcomes has yet to be tested in a large representative sample. The bulk of the current quantitative literature focusses on active grandchild care, or is about grandparents who fill custodial, parenting roles for children. Important though these types of questions are, they leave unanswered how the life course transition itself affects people.

We contribute to this literature by investigating if becoming a grandparent for the first time has an impact on one's subjective well-being, life satisfaction, and subjective life expectancy. We use longitudinal data from three large, nationally representative datasets, and we estimate fixed effects models in which we compare people's well-being as a new grandparent to their earlier well-being before the arrival of the grandchild. This within-individual design adds significantly to the current literature which almost exclusively compares grandparents to non-grandparents.

Evolutionary theories of grandparenting predict that grandparenthood should be a rewarding time of life. Humans are "cooperative breeders" in that a mother can (and usually does) produce numerous offspring which are still dependent – an infant might be suckling while a weaned toddler and another young child still also need feeding and attention. In other words, human birth intervals are short and mothers require help from others to successfully raise children.

2 Data and Methods

Data

We used data from three large longitudinal surveys on ageing, from three geographical regions.

Survey of Health, Ageing, and Retirement in Europe (SHARE)

SHARE data are collected every two years from the over-50 population of Europe. We used data from waves four, five and six from release six, collected every two years from 2011 to 2015 from 15 countries across Europe: Austria, Belgium, Czechia, Denmark, Estonia, France, Germany, Greece, Italy, the Netherlands, Portugal, Slovenia, Spain, Sweden, Switzerland, and Israel. For statistical power, we pooled the data from these countries. Although we are not specifically interested in country differences in the relationship between grandparenting and well-being, we also conducted analyses separately, by country, to explore if our findings are driven by any obvious country differences.

Our analytical sample comprises 13,506 respondents at risk of becoming a grandparent over the study period (i.e. they did not enter the survey with grandchildren already), of which 3,511 (26%) transitioned to grandparent status at some point in between the three waves.

English Longitudinal Study of Ageing (ELSA)

ELSA is a a nationally representative sample of over-50-year-old respondents from England, UK. Participants have been surveyed every two years since 2002. We use data from ll waves and our sample comprises 4,749 individuals (53% women) at risk of becoming a grandparent.

Health and Retirement Study (HRS)

HRS is a a nationally representative sample of over-50-year-old respondents from The United States of America. Participants have been surveyed annually since 1992. We use data from waves five to twelve (earlier data on some of our variables of interest were not available prior to wave five). This sample comprises 4,726 people at risk of becoming a grandparent (54% women).

Variables

We used four measures of subjective well-being:

- Depressive symptoms

  - Euro-D scale (SHARE)
  - CESD scale (ELSA and HRS)

- Life satisfaction (SHARE only)

- Subjective life expectancy

The Euro-D scale ranges from 0 to 13 with higher values denoting more depressive symptoms. CESD is similar but ranges from 0 to 8. Life satisfaction ranges from 0 to 10 with high values denoting more satisfaction. Subjective life expectancy is measured as a percentage chance of survival for the next 10 to 15 years (0 to 100). All models control for the following time-varying variables: self-reported health, wealth, age, marital status, and employment status.

Statistical analyses

We used fixed effects linear regression models for all analyses. Fixed effects compare, in this case subjective well-being, *within* individuals, *across* time. As such, they take into account unobserved heterogeneity that can confound relationships when using cross-sectional data (i.e. comparing across individuals). All analyses were carried out using Stata v.13.

3   Results

Descriptive statistics for all variables will be given in the talk but due to space limits, are not shown here. Table 1 gives beta coefficients for fixed effects models testing the association between becoming a first-time grandparent and each

Table 1: Results of fixed effects and random effects models, with Hausman tests for comparison, for all models

	Fixed Effects	**Random Effects**	**Hausman**	**N**
SHARE				
Women				
Euro-D score	-0.12* (0.05)	-0.15***(0.04)	261.61***	7,714
Subjective life expectancy	1.25 (0.73)	3.82*** (0.52)	366.57***	7,031
Life satisfaction	-0.02 (0.04)	0.03 (0.03)	477.69***	7,174
Men				
Euro-D score	-0.02 (0.05)	-0.06 (0.04)	212.92***	6,241
Subjective life expectancy	0.68 (0.82)	3.08***(0.58)	381.26***	6,152
Life satisfaction	0.01 (0.03)	-0.01 (0.03)	399.17***	6,249
ELSA				
Women				
CESD score	-0.01 (0.06)	-0.07 (0.04)	254.48***	2,527
Subjective life expectancy	1.78**(0.63)	3.04***(0.50)	175.87***	2,524
Men				
CESD score	-0.05 (0.05)	-0.08* (0.04)	260.82***	2,222
Subjective life expectancy	1.38*(0.68)	2.26***(0.55)	211.58***	2,218
HRS				
Women				
CESD score	-0.06 (0.05)	-0.07* (0.06)	243.67***	2,557
Subjective life expectancy	-0.49 (0.72)	-0.24 (0.60)	275.31***	2,527
Men				
CESD score	-0.05 (0.04)	-0.09* (0.04)	197.98***	2,169
Subjective life expectancy	-0.74 (0.78)	-1.09 (0.65)	208.19***	2,141

***=p<0.001, **=p<0.01, *=p<0.05

All models control for wealth, health, age, marital status, and employment status.

measure of subjective well-being. The second column gives results for random effects models, for comparison. The Hausman tests confirm that fixed effects models were appropriate for these analyses.

There are two main points that these results reveal:

1. Overall there are very few significant associations from the fixed effects models (with the exception of subjective life expectancy in the ELSA data only; we discuss this later).

2. There are many more in the random effects models, and where they are not statistically significant, the effect sizes are often bigger.

4   Discussion

Given that the literature on active grandparenting tends to find positive associations with health and well-being, we might expect that becoming a first-time grandparent would also show beneficial outcomes. Yet our results show little support for this. These largely null findings are almost certainly due to the improved methods that using longitudinal data allows. Along these lines, a recent paper by Ates (2017) also found no evidence for an impact of changes in grandparental childcare on self-reported health with fixed effects models, but did with random effects models, suggesting that some previous cross-sectional findings might indeed be spurious.These results will be further discussed in light of the theoretical implications.