



Age at childbearing over two generations and grandchildren's cognitive achievement

Paula Fomby^{a,*}, Patrick M. Krueger^b, Nicole M. Wagner^b

^a Institute for Social Research, University of Michigan, 426 Thompson Street, Ann Arbor, MI 48104, USA

^b Department of Health and Behavioral Sciences, University of Colorado Denver, USA

Received 15 February 2013; received in revised form 15 July 2013; accepted 1 September 2013

Available online 21 October 2013

Abstract

We examine whether grandparents' and parents' ages at birth are associated with grandchildren's early cognitive achievement, and whether grandparents' or parents' socioeconomic status, health, and marital status mediate those associations. Our analysis is based on data from the Panel Study of Income Dynamics and its Child Development Supplement. A grandparent's age at the birth of their own children is robustly and positively associated with grandchildren's verbal achievement, but not with grandchildren's applied mathematics achievement, after controlling for parents' age at the grandchild's birth. The associations are similar in magnitude for grandmothers and grandfathers. A variety of indicators of social class in the grandparent and parent generations did not mediate this age effect. However, many of those indicators of grandparents' social class were directly or indirectly related to grandchildren's achievement.

© 2013 International Sociological Association Research Committee 28 on Social Stratification and Mobility. Published by Elsevier Ltd. All rights reserved.

Keywords: Childbearing age; Cognitive achievement; Multigenerational inequality; Grandparent involvement

1. Introduction

The family is the primary social institution through which resources are transferred from one generation to the next, making it one of the most powerful engines of social and economic inequality in the contemporary United States (McLanahan & Percheski, 2008). Resources transferred within families include *material assets* like income and wealth (Conley, 2009); components of *human capital* like educational attainment, labor force experience, and occupational status (Blau & Duncan, 1967); *social capital*, including kin networks,

friends, and formal contacts (Portes, 1998); and *cultural capital*, including the skills to negotiate complex social institutions (Lareau, 2011). These resources cohere and accumulate across multiple generations, resulting in socioeconomic advantage or disadvantage.

The majority of literature on the intergenerational transmission of socioeconomic advantage in families focuses on two-generation models, that is, from parents to children (Blau & Duncan, 1967; Bowles, Gintis, & Osborne, 2005; Musick & Mare, 2004; Sewell, Haller, & Portes, 1969). Two generation models rely—implicitly or explicitly—on the Markovian assumption that socioeconomic resources in a family are transferred directly to children through their parents and that any influence of prior generations operates only indirectly through what parents share with their children. Our research

* Corresponding author. Tel.: +1 734 763 3850.
E-mail address: pfomby@umich.edu (P. Fomby).

challenges this Markovian assumption by incorporating age at childbearing as a demographic event to evaluate the utility of three-generation models of status transmission. Specifically, we examine whether grandparents' and parents' ages at birth are associated with grandchildren's early cognitive development, and whether grandparents' and parents' socioeconomic status, health, and marital status explain those associations. Our analysis is based on data from the Panel Study of Income Dynamics (PSID), a longitudinal, nationally-representative study of families first interviewed in 1968 and followed to the present day. We include families in which at least one grandchild participated in the Child Development Supplement, a supplement to the PSID introduced in 1997 and designed to track the development of descendants of original PSID household heads from early childhood to early adulthood.

2. Background

A small body of empirically-based three-generation models of social stratification supports the assertion that the intergenerational transmission of status attainment is adequately explained by two-generation models. Using data from the Wisconsin Longitudinal Study, [Warren and Hauser \(1997\)](#) concluded that a grandparent's income, education, and occupational status had no direct effect on young adults grandchildren's status attainment after accounting for parents' characteristics. [Erola and Moisio \(2007\)](#) analyzed Finnish census data and concluded that accounting for grandparents' social class added "very little explanatory power" to the analysis of intergenerational social mobility (p. 169). Finally, [Cherlin and Furstenberg \(1992\)](#) drew on interviews with 510 grandparents in the National Children's Study to conclude that grandparents are valued kin, but their direct influence on grandchildren's well-being is minimal.

Each of these studies has been subject to criticisms regarding sample design and research methodology. Warren and Hauser's work was drawn from a sample of largely white, middle-class families residing in one region of the United States, and thus lacked population representativeness, particularly at the upper and lower ends of the socioeconomic spectrum where the intergenerational transmission of status has been observed to be the strongest. [Chan and Boliver \(2012\)](#) re-analyzed Finnish census data and concluded that Erola and Moisio overlooked significant improvement in model fit in models that allow for a direct grandparent/grandchild association in social class. Cherlin and Furstenberg's conclusions, while drawn from a nationally representative sample in the United States, were

based on interviews conducted with grandparents several years after parents and grandchildren were observed.

Beyond the methodological limitations of prior research, critics have argued that researchers potentially undervalue the influence of grandparents on grandchildren's status attainment by ignoring their indirect influence through parents' status attainment. When parents' characteristics fully mediate the relationship between grandparents' characteristics and grandchildren's outcomes, the evidence in favor of a Markovian process is taken as evidence against grandparents' influence. However, grandparents may be able to provide important resources to grandchildren, even if those benefits operate through parents. For example, grandparents' care to grandchildren may allow parents to maintain their socioeconomic status by continuing to work or to work longer hours than they would with other care arrangements, and grandparents' good health may free parents up to invest more time in their children.

2.1. Demography and multigenerational models of inequality

Demographers recognize that intergenerational social class reproduction and mobility work through fertility, mortality, and union formation. In order for intergenerational transfers to occur, the first generation must reproduce; in order to have any resources to transfer, the first generation also must survive long enough to accumulate something of value, and children must survive to receive it. Social demographers also recognize that legal mechanisms for the transfer of resources favor families related by marriage, blood relationships, or adoption. Corollary to these observations, a demographic model would predict that the timing and union context of childbirth, total achieved family size, and the onset of morbidity and mortality in one generation further constrain opportunities for the transmission of capital to the next. Rather than playing out anew in each pair of generations as a Markovian model would predict, demographic processes potentially have lasting consequences for successive generations if third- and higher-generation descendants stand to receive socioeconomic resources or contributions of time or instrumental or emotional support from a surviving ancestor. Indeed, three-generation mobility models posit non-Markovian transmission processes, such that grandparents' characteristics may influence grandchildren's status attainment, independent of a parent's characteristics. The motivation to engage in these transfers has become increasingly salient in late-demographic transition countries

Download English Version:

<https://daneshyari.com/en/article/998633>

Download Persian Version:

<https://daneshyari.com/article/998633>

[Daneshyari.com](https://daneshyari.com)