

ARTICLE: Nationwide evidence that education disrupts the intergenerational transmission of disadvantage

HIGHLIGHT: A research team led by Signe Hald Andersen at the Rockwool Foundation Research Unit in Denmark and Leah Richmond-Rakerd at the University of Michigan reports that multiple different health and social disadvantages tend to cluster within a small, high-need segment of families; and that education disrupts parent-to-child intergenerational transmission. These findings are based on a study that used nationwide administrative-register data on three generations of families, totaling 2.1 million individuals.

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FINDINGS:

- 1) Using nationwide government administrative databases, we found that the same small segment of families appeared in multiple different health and social administrative registers – poor physical health, poor mental health, social-welfare dependency, criminal offending, and Child Protective Services involvement. Adults who appeared disproportionately in multiple different health and social services’ administrative registers (who were in the top 5% of the population in each register) tended to have parents who earlier appeared disproportionately in multiple different health and social service registers, and also tended to have children who appeared in protective-services records.
- 2) Education disrupted the transmission across generations of disadvantage, defined as in the top 5% of the population who appeared in multiple public-service registers: offspring of disadvantaged parents who completed secondary school were less likely to experience disadvantage themselves, and were also less likely to have children in protective-services records.
- 3) Education disrupted the transmission of disadvantage within generations: when we compared siblings who grew up in the same household, siblings who completed secondary school were at reduced risk for later-life disadvantage compared with their co-siblings who did not complete secondary school, despite shared family background.

WHY ARE THESE FINDINGS IMPORTANT? Despite overall improvements in health and living standards in the Western world, health and social disadvantages persist. Identifying how to disrupt the intergenerational cycle of disadvantage within a small, high-need segment of families could reduce health and social inequalities. Our findings suggest that supporting the education potential of our most vulnerable citizens might reduce the intergenerational transmission of multiple disadvantages within a high-need segment of families, and mitigate the economic costs associated with health- and social-service provision.

CAVEATS:

- 1) Our research is based on one nation with one type of welfare system, and needs to be replicated.
- 2) We used a 5% cutoff to define the high-need users in each health and social administrative register, which was a practical way to identify a segment of families in need of supports. However, such supports are also important for disadvantaged families who fall beneath the 5% cutoff.
- 3) Our study cannot confirm that low education is causally related to risk for disadvantage.
- 4) We focused on secondary-school completion because it is a salient predictor of health, social, and economic outcomes. However, post-secondary-education credentials may also be important to consider.

SUPPORTING DETAILS

Study populations: We used nationwide administrative data from Denmark. All Danish residents are assigned a unique personal number that identifies them in interactions with government and private institutions. These numbers enable the linkage of administrative databases at the individual level and within families. From these linked data, we studied a cohort of young adults (Generation 2, aged 22-42 years), their parents (Generation 1), and their children (Generation 3). Together, these three generations totaled 2.1 million individuals.

Measuring health and social disadvantages: We collected information in Generations 1 and 2 about their contact with four public-service sectors that are indicators of health and social disadvantage. We obtained information about (1) bed-nights spent in public hospitals for physical-health problems and (2) bed-nights spent in psychiatric hospitals for mental-health problems from data recorded by hospitals and collected by the Danish Health Board. (3) We obtained information about weeks spent on social-welfare benefits from data recorded by local governments and collected by Statistics Denmark and the Labor Market Board. (4) We obtained information about criminal convictions from data recorded by Statistics Denmark using information from the Criminal Justice System.

We defined a high-need group in each health and social administrative register as the 5% of the population who accounted for the most disproportionate share of events in that register.

Measuring Child Protective Services involvement: We measured whether the Generation-3 children of Generation-2 parents appeared in Child Protective Services records. We obtained information about protective-services involvement from data recorded by Danish local governments and collected by the Social Appeals Board. We obtained information about whether the child or family had received preventive services, the child was in foster care, or the child was involved in after-care programs for individuals over age 18 who have aged out of foster care.

Measuring education: We obtained information from Danish school records regarding whether Generation-2 individuals had completed secondary school (at least 12 years of education).

UNIVERSITIES / RESEARCH UNITS INVOLVED: Rockwool Foundation Research Unit, Denmark; University of Michigan, USA; Duke University, USA; King's College London, UK; University of Oslo, Norway.

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