

DIRECT EFFECT OF EDUCATION ON MORTALITY IN MEN:
INSIGHTS FROM A NATURAL EXPERIMENT

Marc Luy, Christian Wegner-Siegmundt and Paola Di Giulio

Wittgenstein Centre for Demography and Global Human Capital (IIASA, VID/ÖAW, WU)
Vienna Institute of Demography of the Austrian Academy of Sciences

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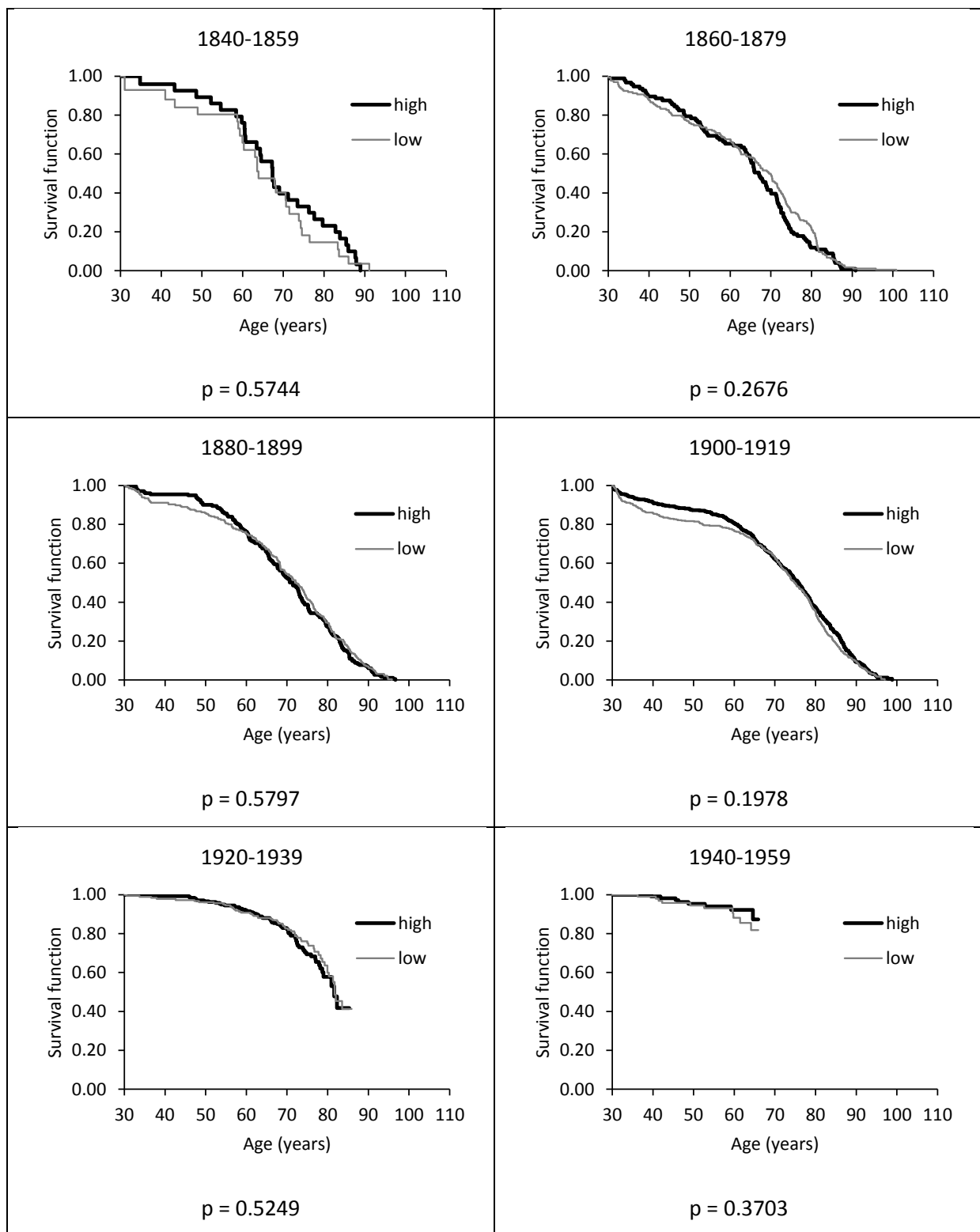
Summary

Education is the central element of a complex network that links many factors related to socioeconomic status (SES) with health and mortality. As a consequence of these complicated interactions it is still unclear whether and to what extent education per se has a direct effect on longevity and what causal mechanisms could be responsible for this relationship. Our study aims at getting better insights into these issues by analysing the association between education and mortality in 3,060 Catholic monks from western Germany who were born between 1840 and 1959. This natural experiment allows us to isolate the effect of education from most other characteristics of SES. To better assess the obtained results on education-specific mortality we compare the monks with a sample of 3,221 men of the German general population. Analyses are based on Kaplan-Meier product limit estimation and Cox proportional hazard regression modelling. We find that among male order members education does not have any significant impact on mortality (see Fig. 1) and that the survival of low as well as high educated monks is almost identical to that of worldly men with high education (Fig. 2). These findings provide evidence against the existence of a direct effect of education on mortality. Health behaviours—which appear to be not inevitably linked with educational attainment—and occupation-related risk factors are discussed as most likely causes for the differences in education-specific mortality between the monastic and the general population. Finally, our results reveal that the well-known education gradient in life expectancy is rather due to the high mortality of low educated individuals than to the low mortality of persons with high education.

Full paper is available on request.

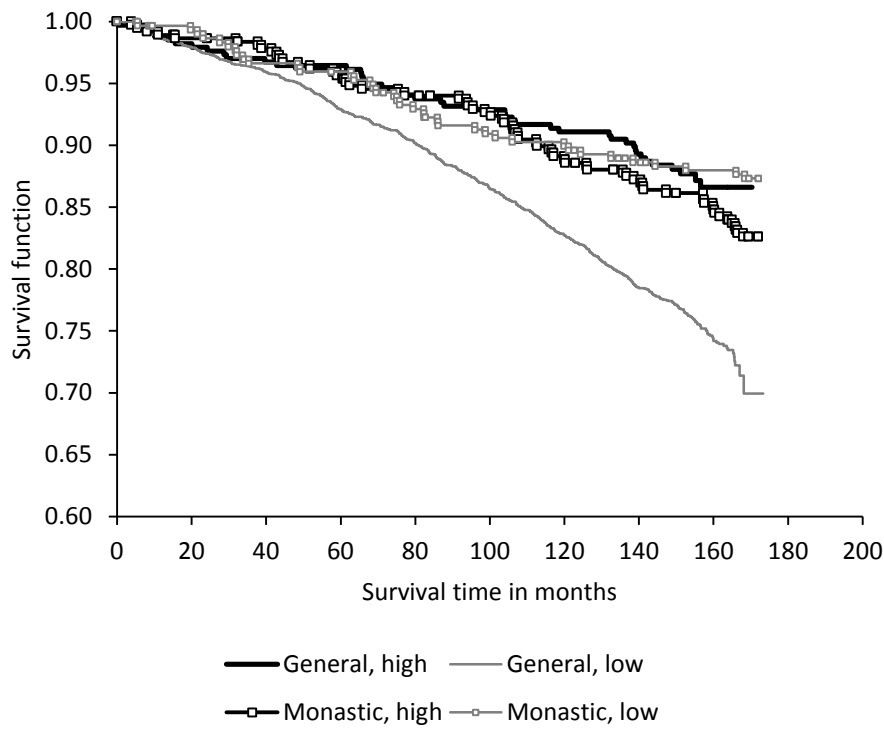
E-Mail: mail@marcluy.eu

Fig. 1: Kaplan-Meier survivorship curves for Catholic monks by education level, birth cohorts 1840-1959



Source: own data, own calculations

Fig. 2: Kaplan-Meier survivorship curves for Catholic monks and men of the general population by education level from 1984 to 1998, birth cohorts 1914-1952



Data: German Life Expectancy Survey (general population) and own (monastic population), own calculations