

# Does family background affect the positive education-fertility gradient among Finnish men?

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## Introduction

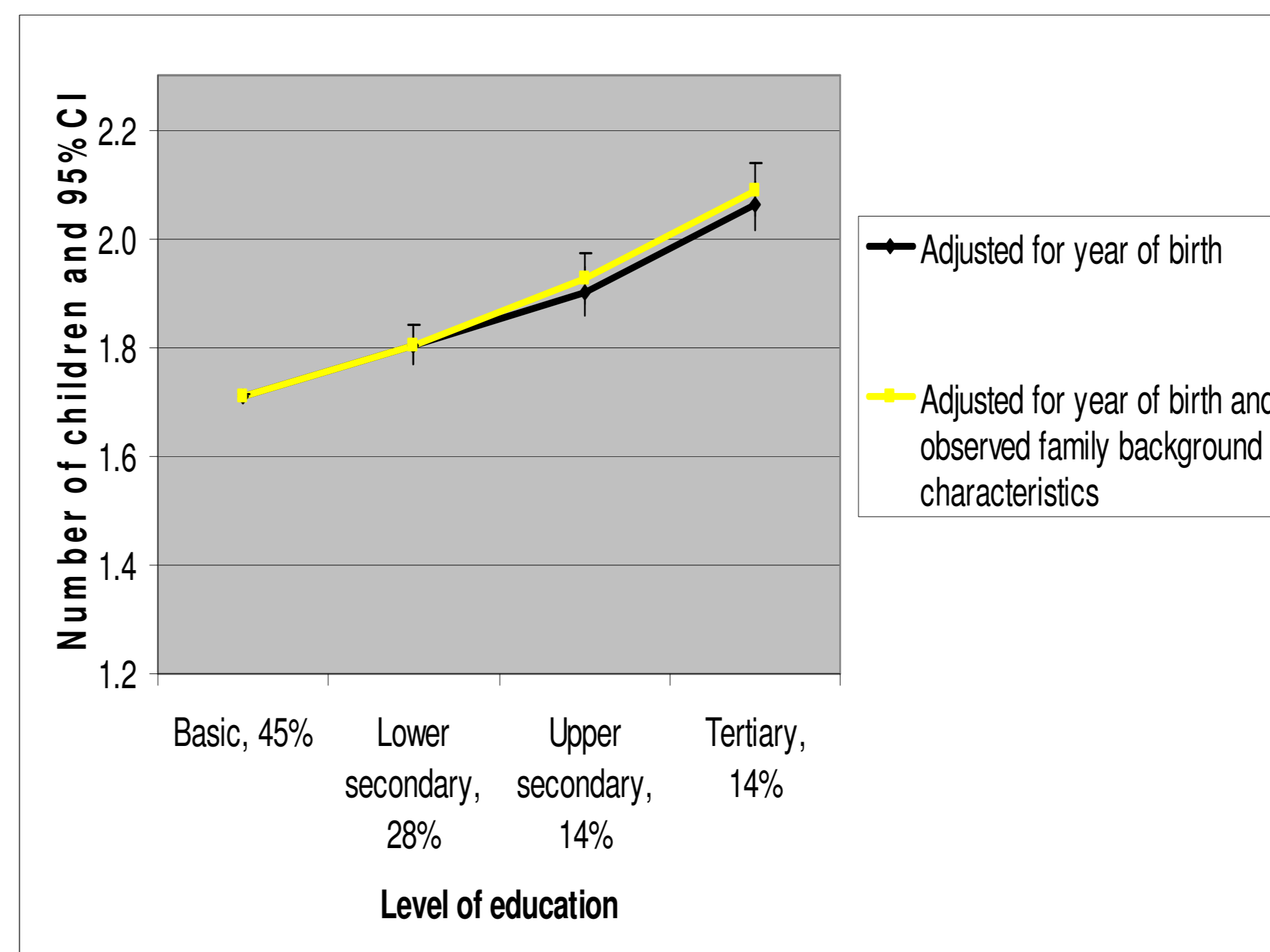
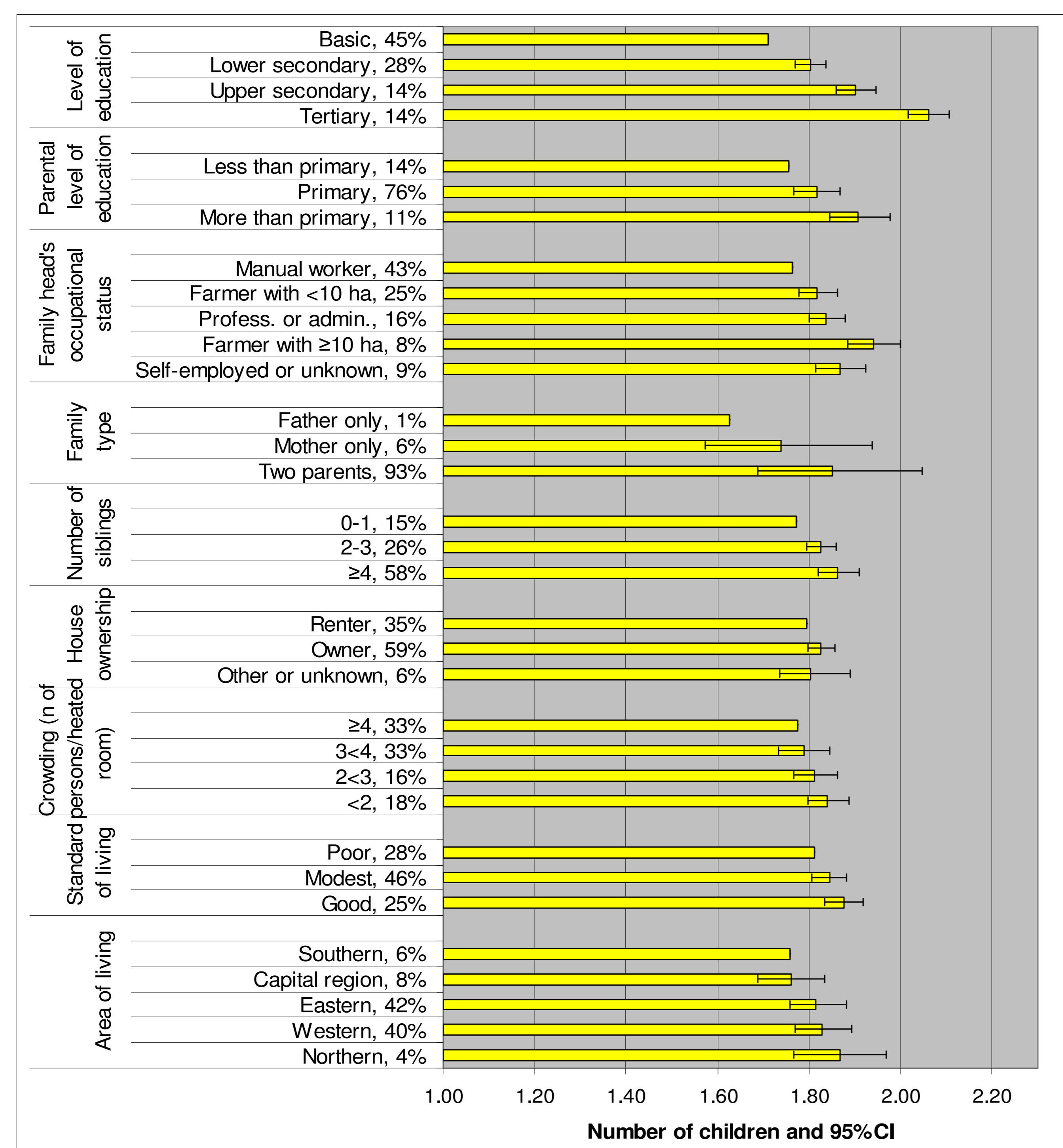
For men, higher level of education predicts a higher lifetime fertility in the Nordic countries (1,2,3). It is often hypothesized that higher level of education increases fertility because education increases attractiveness as a partner through improved labor market prospects (4). For women, a corresponding inverse educational gradient in fertility has been found, and this is partially explained by family background (5). For men the role of family background in explaining the positive education-fertility gradient is less well known (see however 1,6,7). For example, wealth or health characteristics that are influenced by family background and that are correlated with education may contribute to the education-fertility association. We studied whether observed or unobserved family background characteristics explain the educational gradient in men's completed fertility in Finland.

## Data and methods

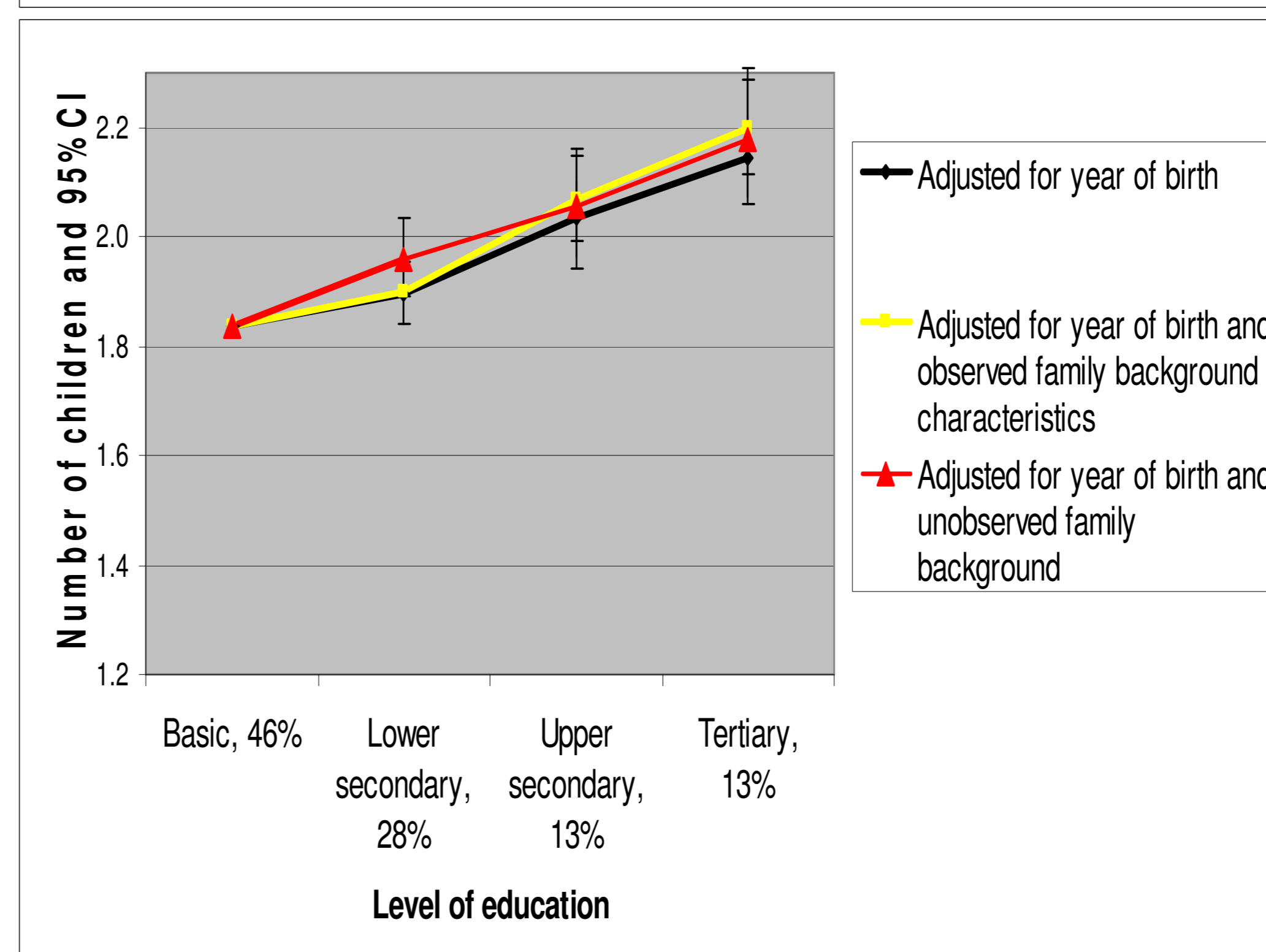
The data were based on a 10% sample of households drawn from the 1950 Finnish Census of Population. Information on persons who belonged to the sampled households had subsequently been linked to information from censuses from 1970 onwards. We study men born in 1940–1950 (N=37,098). The level of education was categorized as follows: basic (9 years or less), lower secondary (10–11 years), upper secondary (12 years), and tertiary (13 years or more) level of education. Measured background characteristics included measures on parental socio-economic position, family structure and living conditions. Poisson regression models with adjustments for measured and unmeasured family background (same-sex sibling fixed effects models) were employed. All results are shown as scaled to the birth year -adjusted fertility observed in the corresponding reference group.

## Results

**Figure 1.** Fertility by own level of education and observed family background characteristics among Finnish men, adjusted for year of birth: number of children with 95% confidence intervals, N=37,098.



**Figure 2.** The education-fertility gradient among all men adjusted for year of birth and observed family background: number of children with 95% confidence intervals, N=37,098.



**Figure 3.** The education-fertility gradient in the subsample of men adjusted for year of birth and observed and unobserved family background: number of children with 95% confidence intervals, N=16,702.

Men with higher own level of education had a larger number of children (Figure 1). Men from families of higher socioeconomic position or of higher parental education had more children. Those from two parent-families and with more siblings had more children. Living in owned and less crowded housing, with a higher standard of living and in less urban areas in childhood also predicted higher completed number of children.

Measured socio-demographic characteristics did not attenuate the education-fertility gradient (Fig 2). In the sub-sample of men used for sibling fixed effects modeling the educational differences in fertility were qualitatively similar to those found among all men. Controlling for unobserved family background did not attenuate the education-fertility gradient (Fig 3).

Additional analyses (not shown) suggested that the positive education-fertility gradient is driven by higher educated men having lower likelihood of remaining childless.

## Conclusions

Education is positively correlated with completed fertility in a Finnish male cohort born in 1940–50. Several socio-demographic family characteristics also predict completed fertility, mainly so that more advantageous background predicts higher fertility, but these factors do not explain the own education-fertility gradient. The results suggest that the positive education-fertility gradient among men could be causal.

### References

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