

What else can fingers tell us?

April 21 2017



Credit: National Research University Higher School of Economics

According to HSE researchers, men with a high 2D:4D ratio (i.e. those whose index finger is longer than their ring finger) tend to be better educated. These findings have been published in *Personality and Individual Differences*.

A number of studies conducted in recent decades at the intersection of biology and economics have shown that certain characteristics of the pre-natal period can have a strong impact on aspects of personality such as aggressiveness and appetite for risk, financial behaviour, academic performance and career choice.

Since intrauterine data is hard to collect, researchers often use anthropometrics, e.g. the 2D:4D ratios, as a proxy. While [finger length](#) is easy to measure, this approach does involve a certain degree of risk. While some researchers associate 2D:4D with perinatal testosterone (PT) exposure, some others argue that PT is not associated with finger length; in addition to this, finger length itself can change over a lifetime. Yet the importance of perinatal development prompts further empirical analyses of 2D:4D ratios to add correlations and test known quantitative associations on new data.

In Russia, researchers of the HSE International Research Laboratory for Institutional Analysis of Economic Reforms led by Maria Yudkevich and John Nye were among the first to focus on this subject. They have already established empirical associations for 2D:4D ratios with traits like academic performance, uptake of financial services, and employment (income, career choice).

The HSE researchers conducted a regression analysis using data from the 20th wave of RLMS-HSE, which also measured 2D:4D ratios of respondents from Moscow and the Moscow region. First, the HSE team analysed the differences in 2D:4D ratios for respondents with different levels of educational attainment. In particular, the research team was interested in the average 2D:4D values for respondents with university-level education (and above) as compared to those respondents without higher education. They then used the STATA 13 econometric package to build a regression model taking into account the level of education throughout the sample and obtained positive correlations between male

respondents' 2D:4D ratios and levels of education. Specifically, men with higher 2D: 4D ratios for either or both hands were found to be better educated. No such correlation was found for women.

The mechanism behind this established association may also involve aggression. A negative correlation between 2D:4D and male aggression has been established in literature, while some studies associate different levels of aggression with low academic performance, particularly in secondary school.

Admittedly, the study's limitation is that it fails to pinpoint the 2D:4D effect, as some other characteristics may have contributed to educational outcomes, such as student age, parental education and type of settlement where [respondents](#) finished secondary school— these parameters were only partially addressed in the study.

On the other hand, the authors successively fulfilled the research task of revealing a correlation between 2D:4D and [educational attainment](#), conditional on available additional predictors of [education](#). The authors' findings complement an earlier discovery of the link between 2D:4D and [academic performance](#) based on student data from Moscow, Manila and Spain.

More information: John V.C. Nye et al, 2D:4D and lifetime educational outcomes: Evidence from the Russian RMLS survey, *Personality and Individual Differences* (2017). [DOI: 10.1016/j.paid.2017.02.054](#)

Provided by National Research University Higher School of Economics

Citation: What else can fingers tell us? (2017, April 21) retrieved 11 July 2024 from

<https://phys.org/news/2017-04-fingers.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.