Social classes of intelligence, economic growth and technological achievement: robust regression and outlier detection

ABSTRACT

A previous study has shown that the intellectual class, which is represented by the 95th percentile intelligence quotient (IQ) at a normal distribution, displayed the strongest impact upon economic growth. Meanwhile, those with average ability (50th percentile IQ) exhibited the second strongest impact, and followed by the non-intellectual class (5th percentile IQ). In addition, the researchers discovered that only the intellectual class was significant for technological progress. As such, this article re-analysed the dataset employed in prior study via robust regression. As a result, after eliminating several outliers, the levels of IQ for the intellectual class and the average ability group displayed equal impacts on economic growth, and the impacts were larger than that of non-intellectual. Furthermore, the IQ of the average ability group was significant for technological achievement, although not as strong as the intellectual class. Besides, the number of professional researchers employed in the research and development (R&D) sector did not reflect similar paramount effects as the impact of the average ability IQ in generating technological development. Thus, based on the conclusions drawn, this study suggests that the R&D sector should employ professionals who possess not only high academic qualifications, but also exceptional levels of cognitive skills, especially to spark new innovations.