

The cleverest country in Europe with hardly any Nobel Prizes in science?

The Nobel Prizes are announced yearly and over the years certain countries tend to dominate the committee's judgment of exceptional academic achievements.

Evidently a large national population promises a better likelihood of getting a Nobel Prize, so the "top 10" lists of countries which do best need to make allowance for population size. As a result, small nations do well. The Faroe Islands and St Lucia jointly rank first. This is because if you are that small a country, you just need to get the prize once, and you instantaneously top the list in which population size is taken into account.

Europe succeeds well in lists of this kind. Among the top ten countries on the international league table of most Nobel Prizes per capita are Switzerland, Austria, Denmark, Sweden, the UK, Norway, the Netherlands and Germany. Thereafter comes Israel, tailed by the USA in 12th position.

One European country is, however, inexplicably absent from the upper end of the table though one would think that the chart in some sense mirrored the quality of education in each country. The country in question does startlingly poorly in winning Nobel Prizes. This country, however, scores the highest of European countries in numerous measures of educational achievement, indicating it has one of the best – if not the very best – school systems. For instance, the Organisation for Economic Cooperation and Development (OECD) Programme for International Student Assessment (PISA), a triennial worldwide survey assessing educational systems, unfailingly places this nation above all its challengers in Europe.

Finland ranked 1st several times in the OECD's PISA international assessments in the 2000s. These surveys test reading comprehension, science literacy and Maths in half a million 15-year-olds in up to 65 countries in Europe, North America, and Asia. Repeatedly the results have placed Finland as the highest-ranked country outside Northeast Asia.

Educational experts have speculated on reasons for Finland's high performance in education. Popular suggestions are the fact that the country emphasizes equality and that education and teachers are highly esteemed. Another theory is genetic – that Finns have a high IQ due, perhaps, to a cold environment. A cold and foreseeable environment would have favoured intelligence genes because the environment was more cognitively challenging and those who could plan for the future would have been more likely to endure. A recently published study *'Solving the puzzle of why Finns have the highest IQ, but one of the lowest number of Nobel prizes in Europe'*, attempts to explain the Finnish paradox.

The authors of the study, Edward Dutton, Jan te Nijenhuis and Eka Roivainen, maintain that Finland is the best performing European country in PISA testing because it has the highest IQ. Finns also score high on the personal qualities which predict success in school exams such as 'conscientiousness' and 'agreeableness'.

New ideas, which lead to Nobel-worthy discoveries, require ultra-high performance. Nobel Prizes are predicted by exceptionally high IQ, but also by personality characteristics such as a resilient, non-conformist and risk-taking attitude. Finns have the highest IQ outside Northeast Asia, but the smallest range. They score low on psychoticism and extroversion. Psychoticism accompanies ingenuity in making unorthodox connections and thinking outside of conventional rules. Extroversion predicts creativity, as extroverts are more ready to oppose authority and promote themselves. While Finns can produce high results in exams, they tend to be conscientious as well as conservative. Those who are agreeable avoid challenging the system with new ideas.

In terms of Nobel Prizes per capita, Finland is at 22nd place, much lower down than its European neighbours. Japan is 30th despite having a high average intelligence quotient. Japan is also very high in 'agreeableness' and 'conscientiousness' and low in 'extroversion'. So it can be deduced that the key for success for nations seems to be how to balance creativity, boldness and nonconformity with essential intellect, diligence and geniality. (657)