

A conversation with James Flynn on October 17th, 2014

Participants

- James Flynn – Emeritus Professor of Political Studies and Psychology, University of Otago, New Zealand
- Jake Marcus – Research Analyst, GiveWell

Note: These notes were compiled by GiveWell and give an overview of the major points made by James Flynn.

Summary

GiveWell spoke with James Flynn about the tests used in iodine supplementation RCTs, the relationship between IQ and life outcomes, and the evidence that shows that the correlation between IQ and life outcomes is not spurious.

IQ and life outcomes

No one in the academic community studying IQ would claim that a gain of four IQ points would not have a significant impact on life outcomes. Academic literature on the relationship between IQ and life outcomes examines impacts on the following categories:

- **Education:** Most of the literature focuses on performance in formal education, including how difficult it is for an individual to graduate from high school. Whereas someone with an IQ of 76 may have difficulty in a formal educational setting without special assistance, someone with an IQ of 80 would likely be able to function independently.
- **Job performance:** An increase in IQ of four points would impact job performance, even for most menial jobs. As long as a job requires learning new skills, a four-point gain in IQ would be an advantage, since it would enable a person to learn skills more quickly. Teaching an employee with an IQ of 80 to be a file clerk would be easier than teaching an employee with an IQ of 76. For jobs that do not require many learned skills, like sweeping a floor, the difference in job performance between two people with a four point IQ difference would likely be less pronounced. However, the ability to learn new skills quickly not only applies to job skills, but also to everyday activities learned through socialization.
- **Intellectual disability:** People with an IQ less than 70 are usually considered to have an intellectual disability and may have difficulty functioning independently. If the IQ of a population were normally distributed with a mean of 100 and a standard deviation of 15, then a four-point increase in the IQ of the population would reduce the prevalence of intellectual disability from about 2.3% to 1.2%.

The impact of increases in IQ on quality of life might vary in different countries depending on the opportunities available. However, because IQ predicts a wide variety of positive outcomes (including job performance on a wide variety of jobs), it seems likely that an increase in IQ would be valuable.

Evidence that the correlation between IQ and life outcomes is not spurious

There is overwhelming evidence from a wide variety of experimental and observational studies that IQ has an independent effect on a wide range of life outcomes (an experimental study, for example, might randomly assign subjects to tasks with varying demands on cognition and then examine the differences in performance between low IQ and high IQ groups on the different tasks). Some researchers have tried to think of variables confounded with IQ that would explain different life outcomes, but there is always variation in outcomes that can only be explained by IQ differences. IQ is also mostly stable throughout one's life; possible confounders then have to both predict life outcomes and remain relatively stable throughout one's life.

Who else to talk to

Russell Poulter runs the Queen Mary Project in Dunedin, which has followed a cohort born within a short time frame at Dunedin hospitals throughout their lives. Russell Poulter's research may be informative about whether or not the IQ gains observed in iodine supplementation RCTs could be expected to be long-term.

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