

## National Intelligence and country development

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Memory Nguwi caught up with Professor Wendy Johnson to explore the impact of IQ on country development. Wendy Johnson is Professor of Differential Development at the University of Edinburgh in the United Kingdom. She researches interplay between genetic and environmental influences on personal characteristics, especially cognitive abilities, and life outcomes involving health and well-being

### **MN: What is your understanding of IQ?**

WJ: 'IQ' is a term that gets thrown around by both professional and lay people in many different ways. Technically, it refers to a single score on some kind of cognitive ability test that has been standardised to a scale on which the mean is 100 and the standard deviation is 15, and which may carry varying levels of validity and stability in individuals over time.

### **MN: Is there a relationship between level of education and IQ ?**

WJ: Yes, to the extent that IQ refers to relatively stable general cognitive ability, those who have higher IQ tend to achieve more highly in school and to be more likely to stay on to attain higher levels of education. At the same time, doing well in school and staying in school But people often use the term to refer to intelligence, or overall general cognitive ability, itself, and some people, in using the term 'intelligence' refer to something innate, highly genetically 'determined', and fixed at birth. The existence of such a 'something' is their assumption, not an established fact.

### **MN: IQ impacts positively which important life outcomes?**

WJ: To the extent that 'IQ' reflects relatively stable general cognitive ability, it is positively associated (to varying degrees) with just about all life outcomes, from both mental and physical health and longevity to law-abidingness, to educational attainment and occupational success, to marital stability, to life satisfaction. This does not mean that everyone with 'high IQ' in this sense thrives in these ways, far from it, but it does mean there's the general tendency for this. longer enables attaining higher scores on the kinds of cognitive ability tests used to create IQ scores. The relation is bi-directional. MN: What is the relationship between national IQ and national outcomes like economic development?

WJ: Countries that have populations that, overall on average, score relatively highly on cognitive ability tests used to create IQ scores tend to have relatively strong economies that are industrialised and with good communication and transportation links, technologically innovative, relatively politically stable, and democratic.

MN: Meta analytics studies have shown that general mental ability or IQ significantly predicts job performance. How can organisations leverage on this to select the best people for the job? WJ:

Administering general cognitive ability tests as part of candidate interviews is one way to leverage selection of the ‘best people for the job’. JU NE 2019| ISSUE 01 15 2019 | ISSUE 01 Employers can tap into a lot of the same kind of information though by collecting information on school performance and scores on academic aptitude tests. Employers should not disregard previous work track records and other personal characteristics involving personality and interest in the particular job though.

WJ: As I understand the term, it refers to failure to achieve on the job according to some assessment of ‘potential’. Whether this is real or not depends of course on the validity of the assessment of ‘potential’. But assuming any ability assessment was valid, ‘derailment’ can occur because of failure to adapt personally to changing work conditions, loss of interest in progression on the part of the employee for whatever reason, personality clash with individual managers, or any of myriad other possibilities. Sometimes responsibility for it can be attributed to employee ‘problems’ of various sorts, but sometimes employers hold responsibility, as when management approaches change or are relatively ineffective, or involve prejudices that block an employee’s advancement or hamper the employee’s effectiveness of the job.

MN: You and Professor Hunt did a lot of work on IQ. What are the major “take aways” from your studies that will benefit organisations and society at large WJ: This is a very fraught problem. All that ‘IQ research’ hasn’t taught us how best to help societies/nations that didn’t evolve them during the 1800s develop strong, stable governments and economies, with well-educated populations ready to engage effectively in the 21st-century global economy. We can do better in helping organisations within societies because they have the ability to work to select and only deal with ‘the best and brightest’ within those societies, and the research has taught us a lot about how to test for those. We’ve also learned something about how best to educate to develop modern cognitive skills, but we have a \*long\* ways to go to understand how to do this consistently on large scale. It’s also clear, however, that what we test when we test ‘IQ’ is more like (from birth) embeddedness in modern ‘western’ high-socioeconomic-status culture than it is the kind of innate, fixed ‘intelligence’ many people use the term ‘IQ’ to refer to.

MN: Given that general mental ability can’t be improved what advice would you give to organisations as they hire employees?

WJ: It’s not a given that general mental ability can’t be improved. But even if it can’t, \*all\* skills can be improved, especially where there is clear desire to improve them and willingness to work on doing so. At hiring, for jobs for which employers intend to invest considerable training, going for employee interest and willingness to dedicate effort and general cognitive ability is a good idea. For jobs for which employers expect new employees to be able to perform well from the beginning, existing skills are more important than general cognitive ability per se. The existing skills will reflect underlying general cognitive ability to some degree, of course.

MN: Robert J Stenberg in one of his presentation to the APA indicated that there is a possibility of having “smart fools”. How can a person be smart and a fool at the same time?

WJ: People of relatively stable high cognitive ability often end up investing much of it in becoming

expert in particular areas. This can mean that they have little exposure to many areas outside their areas of expertise. When they find themselves needing to perform in those areas, they're ignorant and naïve because of lack of exposure and experience, and this can lead them to do things that are extremely foolish for those circumstances. Even typical modern education itself can separate people from the cultural milieus of their birth, so that they end up ignorant of its knowledge heritage and acting foolishly within those milieus.

MN: In America it is estimated that billions of dollars are lost through leadership derailment. What are your views on leadership derailment?

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