Review of: "The Intelligence of Nations. National IQs. Update 2023."

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Potential competing interests: No potential competing interests to declare.

Thank you for sending me this manuscript for review. I read it with interest.

The manuscript (The Intelligence of Nations. National IQs. Update 2023) covers an interesting topic. It has one main message: national level intelligence matters and it presents a new summary of the findings.

However, I see several opportunities for improvement. The manuscript reads like a shorter journalistic work. It should gain substance with more information.

Notes in detail:

Abstract:

”significant” as statistical significance (p£.05). But the author wants to say something else, something like ”important” or similar.

Introduction (or similar):

”Already thousands of years ago, people noticed that ethnic groups differ from each other in their cognitive abilities” – add more information and reference.

”did not begin until the 1970s” – the earliest student assessment studies are from the 1960s:

Lee, J.-W., & Barro, R. J. (1997). *Schooling quality in a cross-section of countries*. New York.

Generally: When studying students, one must justify when generalizing their findings to an entire nation (adults).

”The book was bitterly attacked from all sides. The accusations ranged from “Measuring national intelligence is meaningless!” to the inevitable screaming of “Racism! Racism!”.” – Add quotes and references.

”Early on, some researchers recognized the fruitfulness of Lynn’s approach” – more details and add references.

”the line of research established by Lynn has demonstrated in an unprecedented way that intelligence is by far the most important variable in humans.” – 5 to 10 evidences and references. You can't just claim something without backing it up.

”Student achievement tests are not the same as psychometric intelligence tests, but of course student achievement

depends to a large extent on intelligence." – 5 to 10 evidences and references. You can't just claim something without backing it up.

For example:

Kaufman, S. B., Reynolds, M. R., Liu, X., Kaufman, A. S. & McGrew, K. S. (2012). Are cognitive *g* and academic achievement *g* one and the same *g*? An exploration on the Woodcock-Johnson and Kaufman tests. *Intelligence*, *40*(2), 123–138.

Pokropek, A., Marks, G. N. & Borgonovi, F. (2021). How much do students' scores in PISA reflect general intelligence and how much do they reflect specific abilities? *Journal of Educational Psychology*. https://doi.org/10.1037/edu0000687

Rindermann, H. & Baumeister, A. E. E. (2015). Validating the interpretations of PISA and TIMSS tasks: A rating study. *International Journal of Testing, 15*(1), 1–22.

Data sources: There is a further study combining student assessment and psychometric intelligence tests:

Lim, S. S., Updike, R. L., Kaldjian, A. S., Barber, R. M., Cowling, K., York, H., Friedman, J., Xu, R., Whisnant, J. L., Taylor, H. J., Leever, A. T., Roman, Y., Bryant, M. F., Dieleman, J., Gakidou, E., & Murray, C. J. L. (2018). Measuring human capital: A systematic analysis of 195 countries and territories, 1990–2016. *The Lancet*, *392*(10154), 1217–1234.

"Heiner Rindermann (2018)" is missing in the reference list.

About Cuba: The by Cuba measured and reported results are certainly too high. Also see:

Krämer, W. & Leciejewski, K. (2021). Statistik im Sozialismus: Amtliche Daten zwischen Realität und Ideologie und ihre Medienrezeption. *AStA Wirtschafts- und Sozialstatistisches Archiv*, *15*(2), 73–91.

At this point it is necessary to discuss whether a blind combination (Angrist; Gust; Lim) or whether a selective and corrective combination (Rindermann) is better.

"The nonsensical values" – a justification for sensible versus not sensible is necessary.

Results (or similar):

Subdivide the manuscript with chapters and chapter headings.

Table 1: Correlations with a point, not a comma. Correlations without a leading zero: "Do not use a zero before a decimal when the statistic cannot be greater than 1 (proportion, correlation, level of statistical significance)." So no leading zero for correlations and *p*-values and standardized betas. See: https://apastyle.apa.org/instructional-aids/numbers-statistics-guide.pdf

Table 1: In several studies there are countries with measured data and those with estimated. That should be mentioned.

"Psychometric intelligence tests and the international student assessment studies essentially measure the same latent

variable, namely intelligence.” – Not everything that is highly correlated with each other is the same. Example: height and weight. A theoretical justification is needed. How do you define intelligence?

”For this, we use the median” – median of what? I do not understand.

Discussion (or similar):

”known as the Flynn effect, was first noticed in advanced” – add references.

References

”Lynn, R. and Becker, D. (2019).” is at the wrong position.