## Review of: "Facing the Facts About Test Score Gaps"

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Potential competing interests: No potential competing interests to declare.

Thank you for this contribution. It provides an easy-to-understand overview of genetic and environmental determinants of group-level differences in intelligence. It presents the research itself and also gives an insight into the political climate at universities, under which this research is severely hindered. Finally, the friendly and reserved tone with which this article was written should be mentioned. Comprehensibility and friendliness are exemplary!

For example, very good:

"One: the reader must balance the totality of evidence across these diverse, multiple lines of evidence. Two: the reader must be able to decouple their political/moral concerns about racism from their objective evaluation of the evidence on purely scientific grounds." (Connor, 2023)

"By including both admixture proportions and SIRE variables, admixture regression identifies the separate influences on cognitive ability of racial identity (captured by the SIRE identity variables) and genetic variation (captured by the admixture proportions determined from DNA)." (Connor, 2023)

"This enforced-ignorance counterstrategy is not logically coherent if one simultaneously claims that the environment-only theory is true. If the theory were true, then new research findings would tend to support it rather than reject it and thereby be "de-stigmatizing" by such criteria." (Connor, 2023)

Also very good: Starting each chapter with a synopsis.

But I still see room for improvement, which I want to outline here.

Major points:

1. "Race", "biogeographic ancestry" etc.

There are two problems here with how these concepts are used in general, especially by politics. In the US, Indians and Chinese, for example, form a racial group called "Asians". This has absolutely nothing to do with evolutionary history, correct taxonomy and scientifically meaningful categorization. This is nonsense!

Second, "Whites" are usually compared to "African Americans". But Whites are only a subgroup of the evolutionary group "Europeans-Indians" (also or formerly Caucasians, Caucasoid). If one were to use Romani people (Gypsies) or Indians from India from this group, the results of a comparison with African Americans would be completely different. Equally, if one were to take southern Italians instead of northern Italians as a comparison group.

This should definitely be mentioned and critically commented on. See:

Rindermann, H. (2022). Biological categorization within *Homo sapiens* and its consequences for differences in behavior – or not. *Human Evolution*, *37*(3-4), 139–179. https://doi.org/10.14673/HE2022341101

2. There are many more arguments for genes to be involved in cognitive ability differences between evolutionarily or geographically defined groups (e.g., genetic distances). For an overview see:

Fuerst, J. G. R., Shibaev, V. & Kirkegaard, E. O. W. (2023). A genetic hypothesis for American race/ethnic differences in mean g: A Reply to Warne (2021) with fifteen new empirical tests using the ABCD dataset. *Mankind Quarterly*, *63*(4), 527–600. https://doi.org/10.46469/mq.2023.63.4.2

Rindermann, H. (2018). *Cognitive capitalism: Human capital and the wellbeing of nations*. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781107279339

3. It should be emphasized that as long as all genetic explanations lack reproducible evidence for specific explanatory genes that encode intelligence and for the neurobiological mechanisms that drive from gene to intelligence, results for gene effects are only preliminary.

4. Worldwide patterns – patterns in many countries – are described by Richard Lynn:

Lynn, R. (2008). The global bell curve. Race, IQ, and inequality worldwide. Augusta: Washington Summit.

5. Africans in the US have better results than Africans in Africa. On the one hand, this contradicts racism (better in "white" America than in free and "black" Africa), and on the other hand it speaks for positive environmental and genetic effects.

Minor points:

1. Genetic analyzes are very, very fine in their results. You can tell people apart genetically almost at the village level. The distinction itself is less relevant, it is relevant whether this is accompanied by relevant psychological differences and whether there is an evolutionary cause for it. See:

Elhaik, E., Tatarinova, T., Chebotarev, D., Piras, I. S., Maria Calò, C., De Montis, A., … The Genographic Consortium. (2014). Geographic population structure analysis of worldwide human populations infers their biogeographical origins. *Nature Communications*, *5*(1), 3513. doi: 10.1038/ncomms4513

Rindermann (2022).

2. Regarding NAEP, White-Black-IQ differences are only about 10 IQ points.

Rindermann, H. & Pichelmann, S. (2015). Future cognitive ability: US IQ prediction until 2060 based on NAEP.*PLoS ONE*, *10*(10), e0138412.

3. The footnote style of citations is odd. 1. Readers do not see the authors in the manuscript. 2. Readers do not see the publication year, the seniority of the studies. 3. Readers have to keep scrolling back and forth. 4. The authors are not listed in alphabetical order – making them difficult to find.

Therefore, please change the style of references from footnotes to the more modern and appropriate style of APA!

4. Personal remark: In 2010, I was told that *James Flynn*, speaking personally to friends, assumed that the intelligence difference between whites and blacks was partly genetic.

5. "Empirically, across a wide range of studies, there is a substantial and highly significant negative regression coefficient linking cognitive ability test scores to African admixture proportions." "their estimated coefficients are often relatively small and sometimes statistically insignificant" – add numerical results (standardized beta).

6. Regarding Gould:

Carroll, J. B. (1995). Reflections on Stephen Jay Gould's *The mismeasure of man* (1981): A retrospective review. *Intelligence, 21*, 121-134.

Lewis, J. E., Degusta, D., Meyer, M. R., Monge, J. M., Mann, A. E. & Holloway, R. L. (2011). The mismeasure of science: Stephen Jay Gould versus Samuel George Morton on skulls and bias. *PLoS Biology*, *9*(6), e1001071.

Michael, J. S. (1988). A new look at Morton's craniological research. Current Anthropology, 29, 349-354.

According to these studies, it was not Samuel Morton who was a fraud, but Stephen J. Gould!

7. (I'm not entirely sure if that shouldn't be better listed under "Major points"...) Rinderman -> Rindermann (several times).I suggest copying names, not writing them. By copying, we never misspell names, not even Csikszentmihalyi!