

Kanazawa's bad science does not represent evolutionary psychology

In light of the recent furore surrounding Satoshi Kanazawa's Psychology Today blog post ["Why Are Black Women Less Physically Attractive Than Other Women?"], we feel compelled to state publicly that Kanazawa's research should not be taken as representative of the evolutionary behavioural science community. Kanazawa's blog post generated enormous media attention, including the BBC's flagship News at Ten programme. It also attracted considerable comment from the online community, much of which was highly critical of the discipline of evolutionary psychology which he claims to represent. As a result, Kanazawa's home institution, the London School of Economics, will be hosting a debate this week on 'Is evolutionary psychology racist?'. Yet a large number of scientists who apply an evolutionary approach to human behaviour consider Kanazawa's work to be of poor quality and have demonstrated this via their own academic critiques. He has repeatedly been criticised by other academics in his field of research for using poor quality data, inappropriate statistical methods and consistently failing to consider alternative explanations for his results.

We have previously pursued the usual scientific channels open to us to counteract what in our view is Kanazawa's poor quality science by reviewing and rejecting his papers from scientific journals, and by publishing critiques of his papers in the scientific literature. This has not stopped him from continuing to produce poor quality science and promoting it directly to the public. We have therefore taken the unusual step of making this statement to counteract the damage we believe he is doing to the perception of our discipline in the media and among the public. The principle of applying evolutionary theory to the study of human psychology and behaviour is sound, and there is a great deal of high-quality, nuanced, culturally-sensitive evolutionary research ongoing in the UK and elsewhere today (see for example the [European Human Behaviour and Evolution Association](#), which actively aims to promote rigour within the field).

Kanazawa's work has been criticised on scientific grounds numerous times in peer-reviewed journals: critics of his work have claimed that the work demonstrates a poor understanding of evolutionary theory, a disregard for data quality, and inappropriate interpretation of statistical techniques. To our knowledge, 24 critiques of his papers have been published, involving a total of 59 social and natural scientists who have criticised his work in print.

These critiques are from a wide range of academics with expertise sufficient to critique his work both theoretically and methodologically, including statisticians and epidemiologists. In addition, 35 psychologists, including many evolutionary psychologists, recently contributed to a critique that is shortly to be published in the peer-reviewed journal *American Psychologist*¹.

Many of these critiques completely undermine the work: the statistician Andrew Gelman, for example, has re-analysed the data Kanazawa used in 2007 to suggest that 'Beautiful

¹ Advance copy available at: http://www.larspenke.eu/pdfs/Penke_et_al_in_press_-_Kanazawa_commentary.pdf

people have more daughters' and has demonstrated that Kanazawa's conclusions are simply not supported by the data. Despite this, Kanazawa has not withdrawn the critiqued paper nor published a correction.

The peer review process is not perfect and appears to have failed when dealing with Kanazawa's poor quality work. Those of us who have reviewed his papers have had experiences where we have rejected papers of his for certain journals on scientific grounds, only to see the papers appear virtually unaltered in print in other journals, despite the detailed critiques of the papers given to Kanazawa by the reviewers and editors of the journals that rejected his papers.

Thus, not only is Kanazawa's work an example of poor science on theoretical and methodological grounds in our view, but we also believe it violates the central purpose of scientific discourse, because he rarely engages with his scientific critics. He rarely considers the criticisms of his work that have been published as well as those given to him during the peer review process: to our knowledge he has published counter-responses on only two occasions to critiques of his work (separate responses to two critiques of a paper published in 2001; and a response to one critique of a paper published in 2002). Since then, he has not published a full length response in the academic literature to any of the numerous critiques which have been published against his work, nor has he published corrections to the papers for which doubt has been cast on the conclusions.

On one point alone we agree with Kanazawa: we agree with his view that politically sensitive topics should not be taboo in science and that 'academic freedom must be paramount' (as he pointed out in a letter to the *THE* in 2006²). Academics who publish work that may be unpopular with some sections of the media or general public should not be condemned on those grounds. However, we are adamant that any work in science – politically sensitive or not – should at all times adhere to the principles of rigour and good scientific method. We believe that Kanazawa's work recurrently fails to meet these standards.

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² <http://www.timeshighereducation.co.uk/story.asp?storyCode=207191§ioncode=26>

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67. Dr Andrew Wells, Senior Lecturer in Psychology, London School of Economics, UK
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A list of papers critiquing Kanazawa's research:

1. Penke, L., Borsboom, D., Johnson, W., Kievit, R. A., Ploeger, A., & Wicherts, J. M. (in press). Evolutionary psychology and intelligence research cannot be integrated the way Kanazawa (2010) suggests. *American Psychologist*.*
2. Wicherts, J.W., Borsboom, D, Dolan, C.V. (2010) Why national IQs do not support evolutionary theories of intelligence. *Personality and Individual Differences* 48, 91-96
3. Gelman A. & Weakliem D. (2009). Of beauty, sex and power: statistical challenges in estimating small effects. *American Scientist* 97, 310–316.
4. Denny, K. (2009). On a dubious theory of cross-country differences in intelligence. *Journal of Evolutionary Psychology* 7: 341-346
5. Lawson, D.W., Jordan, F.M. & Magid, K. (2008). On sex and suicide bombing: an evaluation of Kanazawa's 'Evolutionary Psychological Imagination'. *Journal of Evolutionary Psychology* 6, 73-84.
6. Rickard I.J. (2008) Kanazawa's 'Generalized Trivers-Willard hypothesis' and the heritability of offspring sex ratio. *Journal of Evolutionary Psychology* 4, 255-260.
7. Denny, K. (2008) Big and tall parents do not have more sons. *Journal of Theoretical Biology* 250(4): 752-3
8. Denny, K. (2008) Beauty and intelligence may – or may not – be related. *Intelligence* 36(6): 616-618
9. Girotto, V. & Tentori, K. (2008) Is domain general thinking a domain specific adaptation? *Mind and Society* 7(2) 167-75
10. Gelman A. (2007). Letter to the editors regarding some papers of Dr. Satoshi Kanazawa. *Journal of Theoretical Biology* 245: 597-599.
11. Dickins, T.E., Sear, R. & Wells, A.J. (2007) Mind the gap(s)...in theory, method and data: Re-examining Kanazawa (2006) *British Journal of Health Psychology* 12: 167-178
12. Der, G. (2007). IQ and the health of nations: Some critical comments on Kanazawa (2006). *British Journal of Health Psychology* 12: 315-321
13. Alemayehu, D. & Sineshaw, T. (2007). A commentary on Satoshi Kanazawa's study of intelligence and health. *British Journal of Health Psychology* 12: 185-190.
14. Wilkinson, R.G. & Pickett K.E. (2007). Economic development and inequality affect IQ. A response to Kanazawa. *British Journal of Health Psychology* 12: 161-166.
15. Ellison, G.T.H. (2007). Health, wealth and IQ in sub-Saharan Africa: Challenges facing the Savanna Principle as an explanation for global inequalities in health. *British Journal of Health Psychology* 12: 191-227
16. Marks, D.F. (2007). Literacy not intelligence moderates the relationships between economic development, income inequality and health. *British Journal of Health Psychology* 12: 179-184
17. McDaniel, M.A. (2006) State preferences for the ACT versus SAT complicates inferences about SAT-derived state IQ estimates: A comment on Kanazawa (2006). *Intelligence* 34: 601-606

18. Borsboom, D., & Dolan, C. V. (2006). Why g is not an adaptation: A comment on Kanazawa (2004). *Psychological Review* 113, 433–437.
19. Miller, G.F. (2006). Asian creativity: A response to Satoshi Kanazawa. *Evolutionary Psychology* 4: 129-137.
20. Volscho, T.W. (2005) Money and sex, the illusory universal sex difference: comment on Kanazawa. *Sociological Quarterly* 46, 719-36
21. Freese, J. 2003. "Imaginary Imaginary Friends?: Television Viewing and Satisfaction with Friendships." *Evolution and Human Behavior* 24: 65-69.
22. Freese, J. and Powell, B. (2001) Making love out of nothing at all? Null findings and the Trivers-Willard hypothesis. *American Journal of Sociology* 106, 1776-89
23. Sanderson, S.K. (2001) Explaining monogamy and polygyny in human societies: Comment on Kanazawa and Still. *Social Forces* 80(1): 329-335
24. MacDonald, Kevin B. (2001) Theoretical Pluralism and Historical Complexity in the Development and Maintenance of Socially Imposed Monogamy: A Comment on Kanazawa and Still. *Social Forces* 80(1): 343-347

* this was originally co-authored by Jens B Asendorpf, Timothy C Bates, David M Buss, Daniel Cervone, Ian J Deary, Jaap J A Denissen, Conor V Dolan, Willem E Frankenhuis, Wolfgang Gaissmaier, Steven W Gangestad, David C Geary, Vittorio Girotto, Samuel D Gosling, Linda S Gottfredson, Rex E Jung, Matthew C Keller, Michelle Luciano, Richard McElreath, Geoffrey F Miller, Daniel Nettle, Aljoscha Neubauer, Steven Pinker, Richard D Roberts, Frank M Spinath, Marieke E Timmerman, Francis Tuerlinckx, Han L J van der Maas, Oliver Wilhelm, Alexander Weiss but their names were removed on demand of the editorial board