

### Contents lists available at ScienceDirect

# Intelligence

journal homepage: www.elsevier.com/locate/intell



# Correspondence

# A scientometric analysis of controversies in the field of intelligence research



### ABSTRACT

The field of intelligence research has seen more controversies than perhaps any other area of social science. Here we present a scientometric analysis of controversies involving intelligence researchers working in the democratic Western world since 1950. By consulting books and articles, conducting web searches, and contacting some of the individuals involved, we assembled a large database of controversies. Each entry in our database represents a controversy involving a particular individual in a particular year. We computed a measure of controversy by combining the number and severity of incidents, separately for each individual and each year. The individual-level distribution is highly skewed, with just a few individuals accounting for a disproportionate share of the controversy. When tracking the level of controversy over time, we find four relatively distinct 'eras', of which the most recent era—the 'LCI era'—may be the most significant to date.

#### 1. Introduction

The field of intelligence research has witnessed more controversies than perhaps any other area of social science. Scholars working in this field, or those merely interested in its findings, have found themselves denounced, defamed, protested, petitioned, punched, kicked, stalked, spat on, censored, fired from their jobs and stripped of their honorary titles. Notable controversies, such as those that followed the publication of Jensen's, 1969 article in the Harvard Educational Review or Herrnstein and Murray's, 1994 book The Bell Curve, have, among others, been covered extensively in previous works (Gottfredson, 2010; Hunt, 1998; Nyborg, 2011; Pearson, 1991; Rushton, 1987; Scarr, 1987). To date, however, there has been no systematic study of controversies in the field. The present article seeks to fill this void.

Understanding the frequency and severity of controversies in the field of intelligence research is not only of inherent scientific interest, but may also go some way to counteracting what has been termed the 'Gould Effect' (Woodley of Menie et al., 2018). This denotes the tendency for the 'controversialisation' of intelligence research to have harmful downstream consequences, such as derailing individual careers, skewing public perceptions, and discouraging researchers from pursuing fruitful lines of inquiry. Indeed, facts that are taken for granted by scholars in the field, such as that intelligence is substantially heritable, or that mean IQ scores differ between groups, remain highly controversial among non-experts (Warne et al., 2018; Winegard and Carl, 2019). And despite the accumulation of evidence in support of such facts, sensationalised public controversies involving intelligence researchers show no sign of abating (Haier, 2018; Quillette, 2018).

The next section of this paper outlines the methodology we used to assemble our database of controversies. The third section reports various descriptive statistics concerning the frequency and severity of controversies. The final section summarises our findings, mentions two

important limitations, and discusses why claims about human intelligence have proven, and continue to prove, so invidious. More specifically, this section explores the ideological motivations for opposing intelligence research by drawing on recent insights from moral and political psychology. We conclude by offering advice to intelligence researchers on how to deal with controversies.

## 2. Method

We assembled a database of controversies involving intelligence researchers¹ working in the democratic Western world since 1950.² Each entry in our database represents a controversy involving a particular individual in a particular year. For example, one entry reads: 'Arthur Jensen; 1971; protests at lecture at University of San Diego'. We collected the data by consulting germane books and articles, by conducting web searches, and—in some cases—by contacting the relevant persons themselves. Sources for each entry are provided in the accompanying data file, along with basic biographical data about each individual in the database.

Our strategy for data collection was somewhat opportunistic. We began by consulting several previous reviews of controversies in the field, namely Scarr (1987), Pearson (1991), Hunt (1998), Gottfredson (2010) and Nyborg (2011). We then looked through additional sources until we were satisfied that we had identified the vast majority of incidents. Of course, our database is unlikely to be exhaustive of the universe of controversies; some smaller, lesser-known incidents may have evaded our detection. But we are confident that ours is the most comprehensive assemblage of controversies to date. To qualify for inclusion, an incident had to be mentioned in a reliable source (such as an academic book or newspaper article), or had to be brought to our attention by a trusted correspondent (such as the person involved in the controversy him or herself). In addition, the incident had to involve

<sup>&</sup>lt;sup>1</sup> Not every person featured in our database is an intelligence researcher in the sense of an academic who has published books or articles about psychometric intelligence. For example, one (Larry Summers) is an economist and (former) senior university administrator. However, the vast majority of persons are intelligence researchers in the sense given above, and we decided not to exclude incidents just because the person concerned was not an intelligence researcher *per se*.

<sup>&</sup>lt;sup>2</sup> We decided to focus on the democratic Western world since 1950 so as to ensure the cultural comparability of cases, and due to limitations on data accessibility outside of this domain.

some kind of sanctions against the individual concerned. Public denouncements in the form of pejorative epithets or scurrilous allegations were sufficient to satisfy this criterion, although—as we will discuss—many of the incidents involved much more serious sanctions.

When assembling the database, we faced the issue of exactly how to define an incident. For example, following the release of *The Bell Curve*, numerous critical articles were published, many of which impugned the character of the book's author Charles Murray.3 And in principle, we could have defined each of these articles as a single incident. However, we decided against this approach, due to the sheer volume of material we would have had to consider. Indeed, books by researchers such as Hans Evsenck and Arthur Jensen spawned similarly vast quantities of vituperation and invective, and it would have been extremely difficult to track down every last attack. Rather, we defined incidents at the level of individual 'communications' from researchers, where by 'communication' we mean any scientific statement, article, book or lecture that provoked-either immediately or after a certain time period-some kind of sanctions against the person concerned. Hence the opprobrium to which Charles Murray was subjected following the publication of The Bell Curve was counted as a single incident in our database. Likewise, the protest that erupted at his lecture at Middlebury College in 2017 was also counted as a single incident. Note that critical commentaries in academic journals, even when moralistic in tone (e.g., Sternberg, 2005), were not sufficient to generate a controversy.

In addition to recording the year and the individual, we coded each incident on ten characteristics representing its severity. Each of these characteristics was simply coded as 'present' or 'absent' (i.e., 1 or 0), and the relevant characteristic was only coded as present if it was explicitly mentioned (or strongly implied) in one or more of the sources we consulted. The ten characteristics were as follows: 1) Whether the individual was publicly denounced; 2) whether the incident lasted for at least one week; 3) whether the incident lasted for at least one year; 4) whether there was a petition: 5) whether there was a protest: 6) whether there were threats; 7) whether there was a physical attack; 8) whether there was an investigation; 9) whether there were minor sanctions; and 10) whether there were major sanctions. 4 In addition, we specified that: every incident that fulfilled the conditions for 4), 5), 6) or 7) necessarily fulfilled the conditions for 1); every incident that fulfilled the conditions for 3) necessarily fulfilled the conditions for 2); every incident that fulfilled the conditions for 7) necessarily fulfilled the conditions for 6); and every incident that fulfilled the conditions for 10) necessarily fulfilled the conditions for 9). This coding scheme allowed us to assign a weight to each incident representing its severity on a scale from 1 to 10. (These weights were divided by 10 prior to analysis, so that the final weights varied between 0.1 and 1.)<sup>5</sup>

# 3. Results

In total, we identified 111 incidents involving 56 individuals. The earliest incident was in 1956, and the latest was in 2019. Table 1 displays incident-level and individual-level counts for each characteristic in our database. Of the 111 incidents: 47 lasted longer than one week, and 14 lasted longer than one year. Of the 56 individuals: 19 were subjected to at least one protest; 12 were subjected to threats; 7 were subjected to physical

Table 1
Incident-level and individual-level counts for each characteristic in our data-

Characteristic	Incidents	Individuals
Denouncements	103	54
Lasted for a week	47	37
Lasted for a year	14	12
Petition	20	19
Protest	43	18
Threats	23	12
Physical attack	9	7
Formal investigation	19	15
Minor sanctions	61	36
Major sanctions	24	22

Notes: The left-hand column corresponds to the number of incidents with each characteristic, while the right-hand column corresponds to the number of individuals that had at least one incident with each characteristic. The total number of incidents is 111, and the total number of individuals is 56.

attacks; 15 were subjected to formal investigations (e.g., by their universities); 36 were subjected to minor sanctions (e.g., cancellations of lectures); and 22 were subjected to major sanctions (e.g., revocation of titles). Of those subjected to major sanctions, 8 individuals lost full-time jobs or temporary positions. Note that the preceding figures should be considered lower bounds given that, as noted above, we only coded a particular characteristic as present if it was explicitly mentioned (or strongly implied) in one or more of the sources we consulted.

We compared controversies both between individuals and across time. Due to the issue mentioned above, namely of exactly how to define an incident, we decided to combine the number and severity of incidents into a single quantitative measure. Hence we computed the sum of severityweighted incidents separately for each individual, and for each year.<sup>7</sup> Interestingly, the distribution of summed severity-weighted incidents for individuals was highly skewed (skewness = 3.5; skewness test for normality: p < 0.001). The three most controversial researchers (Hans Eysenck, William Shockley and Arthur Jensen) accounted for 27% of all controversies, while the most controversial researcher (Arthur Jensen) accounted for 13% of all controversies. Fig. 1 plots a histogram of the sum of severity-weighted incidents, while Fig. 2 displays the values for all 56 individuals in a bar chart.8 It is noteworthy that, in exhibiting a high degree of skewness, the distribution of summed severity-weighted incidents resembles distributions of scholarly productivity (Ruiz-Castillo and Costas, 2018), which may suggest that similar socio-psychological processes underlie these two phenomena.

Fig. 3 plots the sum of severity-weighted incidents over time: each point corresponds to the value for a particular year, while the blue line represents a two-year moving average. (The picture was not substantially different when using a one-year or a three-year moving average, or when using the unweighted number of incidents; see Online Appendix). We regressed the sum of severity-weighted incidents against a linear term for year, but observed a very small coefficient, which was not statistically significant ( $\beta_{year} = 0.006$ , p = 0.54). Hence

 $<sup>^3</sup>$  His co-author, Richard Herrnstein, died shortly before the book was published.

<sup>&</sup>lt;sup>4</sup> 'Minor sanctions' comprised cancellations of lectures, official condemnations, defamatory statements, etc. 'Major sanctions' comprised cancellation of teaching, dismissal, revocation of titles, etc. 'Petitions' included calls for firing, and 'threats' included vandalism of personal property.

<sup>&</sup>lt;sup>5</sup> We decided to conceptualize 'controversy' in terms of the costs to the persons concerned. Yet we recognize that there are other possible approaches. For example, one could conceptualize 'controversy' in terms of the volume of media coverage, using data from newspaper and magazine archives.

<sup>&</sup>lt;sup>6</sup> These eight individuals were: Noah Carl, Frank Ellis, Gerhard Meisenberg, Bryan Pesta, Jason Richwine, Alessandro Sturmia, Larry Summers, and James Watson. In addition, three other individuals lost work at least in part because of a 'communication' related to psychometric intelligence (Christopher Brand, Toby Young and Thilo Sarrazin).

<sup>&</sup>lt;sup>7</sup> That is, we computed the sum of severity-weighted incidents =  $\Sigma w_i$ , where w denotes the weight for a given incident, and i indexes individuals or years.

<sup>&</sup>lt;sup>8</sup> A histogram showing the distribution of incidents by weight is provided in the Online Appendix.

 $<sup>^9</sup>$  We also regressed the average of severity-weighted incidents against a linear term for year, but again observed a very small coefficient, which was not statistically significant ( $\beta_{year} = -0.001$ , p = 0.36). See Online Appendix for a scatterplot.

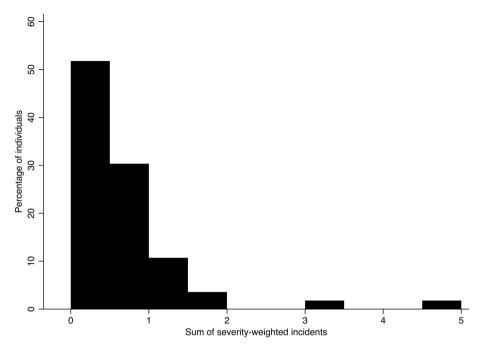


Fig. 1. Histogram showing the distribution of individuals by summed severity-weighted incidents.

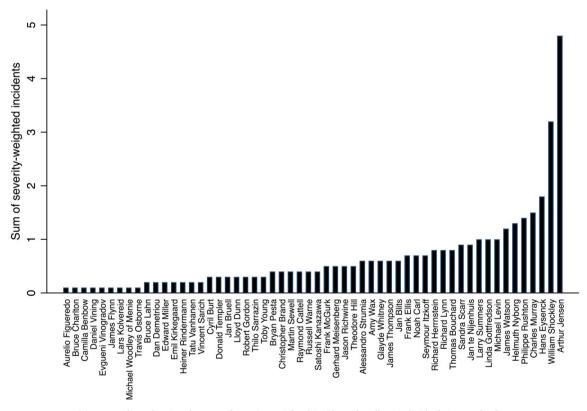


Fig. 2. Bar chart showing the sum of severity-weighted incidents for all 56 individuals in our database.

we found no evidence of a consistent upward or downward trend in the overall level of controversy involving intelligence researchers.

Rather, what Fig. 3 appears to show is that there have been four relatively distinct 'eras' of controversy: one during the 1970s; one during the late 1980s and early 1990s; one during the mid 2000s; and one centred on the year 2018, which is a substantial outlier in the data

(see upper right-hand corner). <sup>10</sup> The first era, which we term the 'Jensen era', covers many incidents involving the three most controversial researchers in our database, particularly a large number of

 $<sup>^{10}</sup>$  As an amusing aside, perhaps future researchers in this area might refer to Fig. 3 as the 'Nessie curve', given its resemblance to the fabled Scottish cryptid.

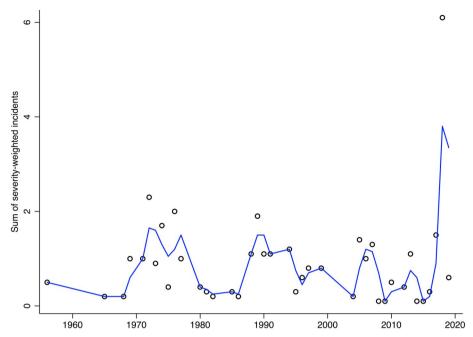


Fig. 3. Scatterplot showing the sum of severity-weighted incidents over time (the 'Nessie curve'). The blue line represents a two-year moving average. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

protests at public lectures given by those researchers. The second era, which we term the 'Rushton era' covers incidents involving a number of different individuals who published controversial research in the late 1980s, including J. Philippe Rushton, Linda Gottfredson and Michael Levin. And in fact, it may be partly in virtue of these prior incidents that The Bell Curve proved so invidious when it was published in 1994 (Winegard and Winegard, 2017). The third era, which we term the 'Watson era', covers incidents involving several individuals who made controversial comments in the mid 2000s, including James Watson, Frank Ellis and Larry Summers. The fourth era, which covers a number of incidents involving researchers who attended the London Conference on Intelligence (LCI) and subsequently came under sanctions for having done so (Woodley of Menie et al., 2018). Note that if we exclude the incidents for 2018 involving researchers who did not attend the LCI, the sum of severity-weighted incidents for that year (3) is still higher than any for any other year in our database. Hence the 'LCI era' may constitute the most significant spate of controversies, measured by the overall costs to the individuals involved, in the field of intelligence research to date.

We did not attempt to code each incident on the specific topic that had engendered controversy, due to the fact that in many cases no specific topic could be identified, while in other cases there were several topics that had caused controversy. However, our subjective impression from reading through relevant materials was that four topics accounted for nearly all the controversy (given in ascending order of preponderance): heritability of intelligence, sex differences in intelligence, dysgenics, and racial or population differences in intelligence.

## 4. Discussion

Most intelligence researchers have a sense that their field is never far from controversy. Here we have presented a scientometric analysis of controversies in the democratic Western world, going back to the 1950s. Despite the comparatively small number of researchers working in the field, we were able to identify 18 who had been subjected to at least one protest, 12 who had been subjected to threats, and 7 who had been subjected to physical attacks. We computed a measure of controversy by combining the number and severity of incidents, separately

for each individual and each year. The individual-level distribution was highly skewed, with just a few individuals (notably Arthur Jensen) accounting for a disproportionate share of controversies. When plotting the level of controversy over time, we found four relatively distinct 'eras': one during the 1970s (the 'Jensen era'); one during the late 1980s and early 1990s (the 'Rushton era'); one during the mid 2000s (the 'Watson era'); and one centred on the year 2018 (the 'LCI era'). The last of these coincided with a dramatic spike in the series, and may constitute the most significant spate of controversies in the field of intelligence research to date.

A concerning development from the most recent 'LCI era' of controversy is the presence of a number of hamartographic pseudo-biographies (attack pages) hosted on a website called Rationalwiki.org, which by virtue of conflation with Wikipedia.org and undue prominence in search results, have the potential to inflict serious reputational harm upon intelligence researchers. In considering RationalWiki, it is critical to note that the website was created as "a liberal response to Conservapedia" (Yan et al., 2017), 11 and that in its own words, "RationalWiki is not neutral" (RationalWiki, 2019a). Furthermore, RationalWiki's attack pages on intelligence researchers contain numerous factual errors (such as unwarranted imputations of political affinities, using terms like 'alt-right', 'eugenicist' etc.), coupled with unsubstantiated claims that those researchers are engaged in 'pseudoscience'. 12 Collectively, these pages demonstrate poor understanding of the relevant literature on the part of RationalWiki's contributors, as well as unchecked ideological bias. In fact, the existence of these pages is illustrative of the ease with which 'fake news' and other misinformation can spread online, creating yet more hazards for individuals who choose to grapple with controversial but important topics in the field of intelligence research. More broadly, these hazards of the internet may have been the major reason why the LCI era has been so severe relative to other, previous eras of controversy.

There are two important limitations to our analysis. First, our

 $<sup>^{11}</sup>$  Conservapedia, as its name implies, is a conservative-leaning Wiki-project.  $^{12}$  To take just one example, RationalWiki's attack page on the researcher Robert Plomin claims (as of 12/09/2019) that he "advocates an absolutist version of biological determinism and eugenics" (RationalWiki, 2019b).

strategy for data collection was somewhat opportunistic. Since there were no pre-existing databases of controversies from which to gather data, we simply looked through germane sources until we were satisfied that we had identified the vast majority of incidents. This means that some smaller, lesser-known incidents may have evaded our detection. Second, our weighting system for quantifying the severity of cases was somewhat subjective. We decided to code each incident on ten characteristics, which together encompassed most or all the major sanctions to which controversial intelligence researchers have been subjected. Ideally, we would have computed some measure of the total psychological or financial costs incurred by the individual involved. Yet this was obviously not possible given the available data. In evaluating our weighting system, one might object that two incidents with equal weights could be still be very different in terms of the magnitude of costs. For example, if an individual were fired in a single day without any prior investigation, the incident would only get a weight of '0.2'. While this kind of situation is possible in principle, we do not believe that there are sufficiently many such incidents to seriously undermine our measure of controversy. (As a matter of fact, all the incidents in our database that involved individuals losing their jobs had relatively high weights, 13 given that they typically lasted for a relatively long time or involved additional sanctions, such as petitions or protests.) Of course, any results pertaining to the distribution of controversy across individuals and over time will be sensitive to the exact weighting system used. As noted above, we have made our database publicly available, and we would encourage other researchers to test their own weighting

Why then do claims about human intelligence prove so invidious? In his book the Blank Slate, Pinker (2002) outlined four 'fears' that motivate opposition to the idea of human nature. Two of these 'fears' are relevant to understanding opposition to claims about human intelligence. The first is the 'fear of inequality': the fear that if individuals or groups differ in intelligence, then exploitation or oppression of those with lower intelligence must be justified. The second is the 'fear of imperfectability': the fear that if some individuals or groups have low intelligence, then efforts to improve their condition must be futile. To these two 'fears', a third may be added, namely the 'fear of unidimensionality'. This is the fear that if individuals or groups can be ranked on a single dimension of intelligence, then some of them must be intrinsically superior to others. Of course, all three of these 'fears' are based on fallacious reasoning, as has been pointed out in numerous previous works (Pinker, 2002; Meisenberg, 2007; Winegard et al., 2017; Carl, 2019; and see Woodley, 2010).

Notwithstanding their origins in fallacious reasoning, the three 'fears' that we have just outlined are surprisingly persistent. This is most likely because they reflect certain deep-rooted psychological tendencies, which have collectively been termed 'equalitarianism' (Winegard et al., 2018). Note that equalitarianism is so psychologically powerful that it can manifest in inconsistent demands for censorship. For example, 'liberals' are more likely to censor a given passage of text when it describes a low-status group as having an advantage in intelligence than when it describes a high-status group as having such an advantage (Winegard and Clark, 2019). Of course, equalitarian tendencies are more common in individuals on the political left, and it is that political faction from which all the most hostile criticisms of intelligence research have originated (Gould, 1981; Lewontin et al., 1984; Richardson, 2017; Saini, 2019).

It is worth remembering that widespread opposition to intelligence research has given rise not only to numerous controversies involving individual researchers, but also to pervasive misunderstandings and mischaracterisations of the field (Cofnas, 2016; Gottfredson, 1997;

Warne et al., 2018). Moreover, it has led to calls for prohibitions on whole sub-fields of research, specifically research into group differences in intelligence (Gillborn, 2016; Kourany, 2016; Rose, 2009). However, others have challenged these calls, arguing that there are benefits as well as risks from doing research on group differences, and that stifling debate around taboo topics can itself do active harm (Anomaly, 2017; Carl, 2018; Ceci and Williams, 2009; Flynn, 2018; Meisenberg, 2019).

What should intelligence researchers do when they find themselves embroiled in a controversy? While we do not have enough data to systematically analyse the different courses of action that one might take, we can offer the following statements by way of advice. First, always remain polite, and avoid engaging in ad hominem attacks, so as not to give one's detractors any further ammunition. Second, do not publicly apologise for making reasonable scientific assertions or expressing one's personal opinions in good faith. Indeed, this piece of advice is supported by two recent studies (Hanania, 2015; Sunstein, 2019). In the 2015 study by Hanania, subjects read a brief passage of text describing Larry Summers's controversial comments about the under-representation of women in STEM, and were then assigned to read either one of two further passages: one in which Summers was described as having stood firm, and one in which he was described as having apologised. Hanania found that subjects in the 'apology' condition were about 8 percentage points more likely to say that Summers should have faced negative consequences than those in the 'no apology' condition.

A third piece of advice is to consider taking legal action, in order to safeguard one's reputation or obtain compensation for improper treatment. In fact, a number of intelligence researchers have sought redress through legal channels over the years. In 1981, William Shockley sued the Atlanta Constitution newspaper for libel after a science writer compared one of Shockley's policy proposals to Nazi eugenics. Although Shockley won the suit, it took three years to go to trial, and resulted in him being awarded only one dollar in damages. Other intelligence researchers have had somewhat more success using legal channels. In 1991, Michael Levin successfully sued the City University of New York for violating his constitutional right to free expression, and secured permanent injunctive relief. In 1992, Linda Gottfredson and Jan Blits successfully challenged a ruling by the University of Delaware that would have prevented them from receiving additional research grants from the Pioneer Fund. Finally, in 2016 Helmuth Nyborg successfully sued the Danish Committees for Scientific Dishonesty, which had previously found him guilty of scientific misconduct: the early finding was reversed, and Nyborg was awarded \$25,000 in compensation. While intelligence researchers achieved at least some degree of success in all the preceding cases, one should always keep in mind that legal action may be costly, time-consuming, stressful and ultimately unsuccessful.

Overall, this paper has demonstrated just how many controversies there have been in the field of intelligence research, and has revealed the absence of any long-term trend in the overall level of controversy. Given the current trajectory of research in human intelligence and related fields, we can expect to see more published findings that are likely to generate controversy, particularly among those who don't understand what such findings mean or how to interpret them. Pre-empting controversies, and attempting to minimise their costs to the individuals involved, will be an important task for intelligence researchers in the future.

# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.intell.2019.101397.

## References

Anomaly, J. (2017). Race research and the ethics of belief. *Journal of Bioethical Inquiry*, 14(2), 287–297. https://doi.org/10.1007/s11673-017-9774-0.

 $<sup>^{13}</sup>$  Among the eight incidents that involved job losses, the minimum weight was 0.4 and the mean weight was 0.56. In the sample as a whole, the minimum weight was 0.1 and the mean weight was 0.33.

- Carl, N. (2018). How stifling debate around race, genes and IQ can do harm. Evolutionary Psychological Science, 4(2016), 399–407. https://doi.org/10.1007/s40806-018-0150.
- Carl, N. (2019). The fallacy of equating the Hereditarian hypothesis with racism. Psych, 1(1), 262–278. https://doi.org/10.3390/psych1010018.
- Ceci, S., & Williams, W. (2009). Darwin 200: Should scientists study race and IQ? YES: The scientific truth must be pursued: Article: Nature. Nature, 457, 788–789. https://doi.org/10.1038/457788a.
- Cofnas, N. (2016). Science is not always "self-correcting": Fact-value conflation and the study of intelligence. Foundations of Science, 21(3), 477–492. https://doi.org/10. 1007/s10699-015-9421-3.
- Flynn, J. R. (2018). Academic freedom and race: You ought not to believe what you think may be true. *Journal of Criminal Justice*, *59*, 127–131. https://doi.org/10.1016/j.icrimius 2017 05 010
- Gillborn, D. (2016). Softly, softly: Genetics, intelligence and the hidden racism of the new geneism. *Journal of Education Policy*, 31(4), 365–388. https://doi.org/10.1080/ 02680939.2016.1139189.
- Gottfredson, L. S. (1997). Mainstream science on intelligence: An editorial with 52 signatories, history, and bibliography. *Intelligence*, 24(1), 13–23.
- Gottfredson, L. S. (2010). Lessons in academic freedom as lived experience. Personality and Individual Differences, 49(4), 272–280. https://doi.org/10.1016/j.paid.2010.01. 001
- Gould, S. J. (1981). Mismeasure of man. New York: W. W. Norton & Company.
- Haier, R. (2018). Every schoolchild should read this book. Quillette. Available at: https://quillette.com/2018/12/20/every-schoolchild-should-read-this-book/.
- Hanania, R. (2015). Does apologizing work? An empirical test of the conventional wisdom. Social Science Research Networkhttps://doi.org/10.2139/ssrn.2654465.
- Herrnstein, R., & Murray, C. (1994). The bell curve: Intelligence and class structure in American life. New York: Free Press.
- Hunt, M. (1998). The new know-nothings: The political foes of the science of human nature. Piscataway, New Jersey: Transaction Publishers.
- Jensen, A. (1969). How much can we boost IQ and scholastic achievement. *Harvard Educational Review*, 39(1), 1–123. https://doi.org/10.17763/haer.39.1. 13u15956627424k7.
- Kourany, J. A. (2016). Should some knowledge be forbidden? The case of cognitive differences research. *Philosophy of Science*, 83(5), 779–790. https://doi.org/10.1086/687863.
- Lewontin, R. C., Rose, S., & Kamin, L. J. (1984). Not in our genes. New York: Pantheon Books.
- Meisenberg, G. (2007). In God's image: The natural history of intelligence and ethics. Brighton: Book Guild Publishing.
- Meisenberg, G. (2019). Should cognitive differences research be forbidden? *Psych, 1*(1), 306–319. https://doi.org/10.3390/psych1010021.
- Nyborg, H. (2011). The greatest collective scientific fraud of the 20th century: The demolition of differential psychology and eugenics. *Mankind Quarterly*, 51(3), 241–268.
   Pearson, R. (1991). Race, intelligence and Bias in academe. Washington, DC: Scott
- Townsend.

  Pinker, S. (2002). The blank slate: The modern denial of human nature. Penguin; London. Quillette (2018). Academics' mobbing of a young scholar must be denounced. Quillette.
- Available at: https://quillette.com/2018/12/07/academics-mobbing-of-a-young-scholar-must-be-denounced/.
- RationalWiki (2019a). RationalWiki:What is a RationalWiki article?, RationalWiki.org.

  Available at: http://archive.fo/5DHdo.

- RationalWiki (2019b). Robert Plomin, RationalWiki.org.
- Richardson, K. (2017). Genes, brains, and human potential: The science and ideology of intelligence. New York: Columbia University Press.
- Rose, S. (2009). Should scientists study race and IQ? NO: Science and society do not benefit. *Nature*, 457, 286–788. https://doi.org/10.1038/457786a.
- Ruiz-Castillo, J., & Costas, R. (2018). Individual and field citation distributions in 29 broad scientific fields. *Journal of Informetrics*, 12(3), 868–892. https://doi.org/10.1016/j.joi.2018.07.002.
- Rushton, J. P. (1987). Political correctness and the study of racial differences. *Journal of Social Distress and the Homeless*, 5(2), 213–229.
- Saini, A. (2019). Superior: The return of race science. Boston: Beacon Press.
- Scarr, S. (1987). Three cheers for behavior genetics: Winning the war and losing our identity. Behavior Genetics, 17(3), 219–228.
- Sternberg, R. J. (2005). There are no public-policy implications a reply to Rushton and Jensen (2005). Psychology, Public Policy, and Law, 11, 295–301.
- Sunstein, C. (2019). In politics, apologies are for losers. New York Times.
- Warne, R. T., Astle, M. C., & Hill, J. C. (2018). What do undergraduates learn about human intelligence? An analysis of introductory psychology textbooks. Archives of Scientific Psychology, 6(1), 32–50. https://doi.org/10.1037/arc0000038.
- Winegard, B., & Carl, N. (2019). Superior: The return of race science—A review. Quillette. Available at: https://quillette.com/2019/06/05/superior-the-return-of-race-science-a-review/.
- Winegard, B., & Clark, C. (2019). Ideology of censorship. ResearchGate.
- Winegard, B., Clark, C., Hasty, C. R., & Baumeister, R. (2018). Equalitarianism: A source of liberal bias. Social Science Research Network. https://doi.org/10.2139/ssrn. 3175680
- Winegard, B., & Winegard, B. (2017). Paranoid egalitarian meliorism: An account of Bias in the social sciences. In J. Crawford, & L. Jussim (Eds.). Politics of social psychology (pp. 193–209). New York: Psychology Press.
- Winegard, B., Winegard, B., & Boutwell, B. (2017). Human biological and psychological diversity. Evolutionary Psychological Science, 3(2), 159–180. https://doi.org/10.1007/ s40806-016-0081-5.
- Woodley, M. A. (2010). Are high-IQ individuals deficient in common sense? A critical examination of the "clever sillies" hypothesis. *Intelligence*, 38(5), 471–480. https://doi.org/10.1016/j.intell.2010.06.002.
- Woodley of Menie, M. A., Dutton, E., Figueredo, A.-J., Carl, N., Debes, F., Hertler, S., Irwing, P., ... Rindermann, H. (2018). Communicating intelligence research: Media misrepresentation, the Gould effect, and unexpected forces. *Intelligence*, 70, 84–87. https://doi.org/10.1016/j.intell.2018.04.002.
- Yan, H., Lavoie, A., & Das, S. (2017). didi The perils of classifying political orientation from text. In M. Poblet, P. Casanovas, & E. Plaza (Eds.). Linked democracy: artificial intelligence for democratic innovation Proceedings of the IJCAI 2017 workshop on linked democracy: Artificial intelligence for democrati innovation; Melbourne, (pp. 38-50).

Noah Carl<sup>a</sup>, Michael A. Woodley of Menie<sup>b,c,\*</sup>

a Independent Researcher, UK

<sup>b</sup> Center Leo Apostel for Interdisciplinary Studies, Vrije Universiteit Brussel, Brussels, Belgium

<sup>c</sup> Unz Foundation Junior Fellow, Palo Alto, CA, USA

E-mail address: Michael.Woodley@vub.ac.be (M.A. Woodley of Menie).

<sup>\*</sup> Corresponding author.