From Jewish Verbal and General Intelligence to Jewish Achievement: A Doubly Right Wing Issue

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Ashkenazim Jews (AJ) comprise roughly 30% of Nobel Prize winners, 'elite institute' faculty, etc. Mean intelligence quotients (IQ) fail explaining this, because AJ are only 2.2% of the US population; the maximum possible would be 13% high achievement and needing IQs above 165. The growing anti-Semitic right wing supports conspiracy theories with this. However, standard deviations (SD) depend on means. An AJ-SD of 17 is still lower than the coefficient of variation suggests, but lifts the right wing of the AJ-IQ distribution sufficiently to account for high achievement. We do not assume threshold IQs or smart fractions. Alternative mechanisms such as intellectual AJ culture or ethnocentrism must be regarded as included through their IQ-dependence. Anti-Semitism is thus opposed in its own domain of discourse; it is an anti-intelligence position inconsistent with eugenics. We discuss the relevance for 'social sciences' as sciences and that human intelligence co-evolved for (self-)deception.

Keywords: Ashkenazim; Intelligence; Macro Evolution; Smart Fraction Theory; Anti-Semitism; Public Understanding of Science

Introduction

Ashkenazi(m) Jews (AJ) comprise about 30% of the subpopulations that are selected by *commonly accepted* (or *socially evolved*) measures of "high achievement" (Lynn, 2011),¹ such as all Nobel Prize winners since 1950 (29%), US 'elite institute' faculty (30%), the 'wealthiest Americans' (23%), or film directors that won Oscars (38%). We show that this can be explained by intelligence quotients (IQ) and within proper scientific method, which starts with the first and second moments of the statistics, namely mean and standard deviation (SD), and normal distributions (ND). *Ad hoc* assumptions about special social mechanisms or differently shaped distributions are unnecessary. We assume no 'smart fractions' or any intelligence thresholds for certain achievements.

IQ values are usually calculated by normalizing mean and SD to be 100 and 15 for countries of northwest Europe, the 'Greenwich standard'. IQ is so strongly correlated with the general intelligence factor g that "The IQ obtained from such tests, therefore, is a quite good, though slightly diluted, stand-in for g." (Jensen, 1998)² The mean $\langle g \rangle$ for AJ is up to one SD above the US mean (Cochran, Hardy, & Harpending, 2006; Lynn, & Vanhanen, 2006).^{3,4} The AJ population is so low and data therefore so few that the AJ SD is not reliably known. Even the relatively large National Longitudinal Survey of Youth 1997 included only 8984 people, with an over representation of Blacks for example

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and participation diminishing over time, so it has at most about N = 180 AJ. The SD of the sample mean (the standard error) is SD/ \sqrt{N} , about 1.1. The sample SD varies even more; its 95% confidence interval runs here from 13.2 to 17.4 if assuming a true SD of 15.

IQ is positively correlated with personal and collective achievement (Gottfredson, 1998).⁵ A host of research has shown strong correlations with measures of "success" such as the wealth of nations (Lynn & Vanhanen, 2002; Lynn, 2006; Jones, & Schneider, 2006; Gottfredson, 1997).^{67,89} Verbal IQ subtests measure abilities such as abstract and common sense reasoning, language comprehension, short-term auditory memory, and word knowledge. Visualizing and mentally rotating structures "in front of the mind's eye" is facilitated by spatial-visual IQ. For most ethnicities, both types of IQ are comparable and need not be considered separately. However, Amerindians and North East Asians (EA) have a significantly higher visual than verbal IQ (Lynn, 1991).¹⁰ The importance of verbal IQ is recognized for example through smart fraction theory (SFT), which was put forward under the pseudonym "La Griffe du Lion" on the World Wide Web; see for example (Weiss, 2009).¹¹ The 'smart fraction' f_s is the fraction of the population with an IQ above some threshold Q_0 . *Per capita* gross domestic product *G* of market economies is proportional to f_s . SFT initially overestimated the *G* of Hong Kong, Japan, South Korea, and Taiwan, but using verbal IQ instead of *g*, SFT predicts also the EA economies correctly, and the correlation between *G* and f_s is remarkably tight for all polities (La Griffe du Lion, 2004).¹² Verbal and visual IQs are significantly different also for AJ.





The AJ mean *visual* IQ is only about 107.5 (Lynn, 2004),¹³ but the mean *verbal* IQ of AJ is about 122; some studies report it as high as 125.6 (Levinson, 1958).¹⁴ Nevertheless, our calculations conservatively assume the average between AJ visual and verbal IQ means, namely $\langle g \rangle = 115$ only, as is consistent with the widely accepted magnitude of enhancement mentioned above, namely about

one SD. If we had focused stronger on verbal IQ, our main conclusion would obviously be only yet more secure, namely: AJ achievement can be fully accounted for by AJ intelligence.

Let us fist show the main problem, namely that an AJ mean around 115 alone can *not* reproduce the magnitude of Jewish achievement if assuming an SD of 15. This is because ethnic Jews comprise at most 2.2% of the US population, and AJ comprise 80% of ethnic Jews, next to mainly Sephardic Jews in the US. We use 2015 data, so the gentile ratios *p* of the US population are 4.7, 62.6, 16.4, and 12.2 per cent for EA, Caucasian Whites (CW), Hispanics (H), and Blacks (B), respectively. CW includes Middle Eastern ethnicities, for which we have found no sufficiently reliable data. Such uncertainties are negligible relative to the large relevant differences we will discuss. Mean IQ values were interpolated from a variety of publications. We use $\langle g \rangle$ equal to 107 and 104 for EA and CW, respectively. The contributions of the subpopulations with lower mean IQ turned out to be negligible for all results and will not be shown. Separating the CW majority into females (CWF) and males (CWM) renders the plots more discernable and facilitates discussing the importance of SD. That male means and SD are larger by about 3.7 and 2 points, respectively, was shown for example by (Lynn, Irwing, & Cammock, 2002)¹⁵ and recently again for Chinese youth (Liu, & Lynn, 2015).¹⁶ The ND are $f = (100 p) \exp\left[-(g - \langle g \rangle)^2/(2\Delta^2)\right]/\sqrt{2\pi\Delta^2}$. The factor of 100 fits them into the same plot as the presentees of A Lin the total, both error shown areas as in Figure 1.

percentage of AJ in the total; both are shown versus g in Figure 1.



Figure 1: On the left are the scaled probability density functions *f* for the relevant US sub-populations. The grey curves rising to the right show the percentage of AJ in the total. They are labelled by AJ's SD. $\Delta = 15$ barely reaches 13%. $\Delta = 16$ reaches 30% far too late. The curve with squares is due to $\langle g \rangle = 114$ and $\Delta = 17$.

Assuming the AJ SD to be 15, the maximum proportion of Jews is 12.9% and obtains at 165 (see lowest grey curve in Figure 1). Integrating over g from 165 up, only 12.8% of people with a g of 165 and higher would be ethnic Jews. The AJ fraction would be far below even just 15%, *regardless of the range* of g considered.

Assuming $SD_{AJ} = 16$ instead, the AJ contribution can exceed 30%. However, 30% is only reached beyond 182, this being the threshold, henceforward labeled $g_{30\%}$, which depends on the assumed AJ SD. The total 2015 US population of $3.2*10^8$ has less than 300 people beyond this $g_{30\%}$. Therefore, it is impossible that such high IQ is necessary for "sufficiently great achievements" such as lecturing in elite institutions or being a high earning CEO. Far more than 300 people are included in all those measures of high achievement. The naïve model fails to reproduce a high Jewish achievement of 30%, or even just 20%. The anti-Semitic far right presents such in support for conspiracy theories.

Reproducing Jewish Achievement

The SD generally increases together with the mean. A high mean with a low SD is unnaturally sharp. One expects the *relative* SD, called coefficient of variation $c_v = SD/mean \sim 0.15$, to be comparable between sub-populations. The empirical data confirm this. For example, the smallest mean accompanies the lowest SD, namely $SD_B = 13.5$. Complications are well understood; for example the AE SD is small due to the low EA genetic variability. A very conservative, low assumption would be that the AJ SD is only as large as the SD of CWM, namely only 16.5. Nevertheless, the AJ achievement ratio of 30% is then already reproducible. The threshold $g_{30\%}$ becomes 166. There are about 21 thousand people with *g* of 166 or above.

AJ especially tried to avoid miscegenation; mixed children usually counted as gentiles. Nevertheless, starting from a mere 350 person bottleneck about 700 years ago (Carmi, Hui, Kochav, et al., 2014),¹⁷ the population recovery came about partially through inter-marriage with CW elites, resulting in today's AJ. Mixing diversifies the gene-pool, and recent strong evolutionary change also increases variability in spite of strong selection (because of insufficient co-evolution of alleles). One must therefore expect the AJ SD to be higher. An AJ SD of 17 is still 0.3 lower than the coefficient of variation suggests. The threshold $g_{30\%}$ becomes 159. There are more than 100 thousand people above that threshold, more than necessary to allow for the empirical numbers of high achievers.

Conclusions and Discussion

We showed that a proper consideration of the standard deviation (SD) of the intelligence of Ashkenazim Jews (AJ) is sufficient to reproduce their high achievement. This main direct conclusion is consistent with all the diverse research around the strong correlation between IQ and achievement. It supports previous conclusions about that IQ is more important than 'secondary cultural values' that promote success (Lynn, & Kanazawa, 2008; Lynn, 2011).^{18,1} Our results and method reject even more

fundamentally not the reality but the relevance of any mechanisms that are proposed as alternatives to IQ, such as positive discrimination, immigration of especially Jewish high achievers into the US, or intellectual Jewish culture. The success of normal modeling implies that such mechanisms are already accounted for and included as secondary effects of high IQ. Ethnocentrism is increasingly discussed (Dutton, Madison, & Lynn, 2016).¹⁹ However, 'negative ethnocentrism' is positively correlated with religiosity (Shinert, & Ford, 1958)²⁰ and thus negatively correlated with intelligence (Dhont, & Hodson, 2014),²¹ and "Jews scored low in religiosity yet high in in-group favoritism" (Dunkel, & Dutton, 2016).²² 'Positive ethnocentrism' is simply a smart strategy. It is consistent with our results instead of being a competing alternative. This is highly relevant generally and practically when confronting anti-Semitism. Our results oppose anti-Semitism in the domain of discourse where it resides, which is usually where people favor ethnocentrism and aim via eugenic practices at higher intelligence. They can no longer oppose Jewish high achievement without contradicting themselves. Our research shows that they oppose secondary correlates of intelligence and therefore effectively support an anti-intelligence position (anti-intellectualism) that undermines several of their own, central arguments.

The empirical data are not sufficient to support deviations from a first order scientific approach such as the skewed distributions that usually emerge from numerical simulations of evolving equilibriums. It is an important general result that Jewish high achievement is reproduced with the simple normal models that are comprehensible to a wide audience. A further interesting result is that this is achieved with the same SD correction that is known and popular in right wing audiences when discussing male dominance in mathematics for example. Assuming that the average AJ g is only 114, the SD of 17 is still sufficient (see the grey curve with squares in Figure 1). The $g_{30\%}$ threshold is then 163; there are 43 thousand people above it. SD are as significant as means. This is important for the public understanding of science and is still underappreciated also among professionals, see (Vongehr, Tang, & Meng, 2012)²³ and references therein.

No assumptions about the intelligence that may be necessary for certain achievements have been employed. Therefore, we could be tempted to claim a further *result* (not input), namely that measures of high achievement select the 'smart fraction' above $g_{30\%} = 160$. However, we cannot conclude such. Our arguments about thresholds are rigorous because they follow strictly from that the *total* population does simply not have enough people above higher thresholds $g_{30\%}$. Even if *everybody* with such high IQ also had high achievement, it would still not provide sufficiently many people. The rigorous main conclusion is that uncontrived values and models *can* easily reproduce the empirical observations. We cannot conclude anything more about ratios between sub-populations above lower thresholds. Such is no longer rigorous, because it depends on how many people with a certain IQ and cultural background chose lifestyles that lead them to be included in measures of high achievement. Physics students have the highest average g of all university majors, yet it is only about 133, almost two SD lower than our lowest $g_{30\%}$. The majority of intelligent people never appear in measures of high achievement. Intelligence may facilitate "wisdom" and quietists that abstain from achievement rat-races; intelligent people are effectively "discriminated against" in many ways. Our conclusions are not impacted by any such issues.

If we insist on that the issue is "about 'social achievement' and Jews and all of that," we fall into postmodern paralysis and "social science" rather serves to obscure inconvenient truths. This work emphasizes the importance of proper scientific method similar to (Lynn, & Vanhanen, 2012).²⁴ Society is a complex system, but complex system physics is done routinely. The underlying nature of emergent parameters' symmetries is irrelevant. The main issue of this work can be said to be merely how a few parameters depend statistically on each other given that we already know that they are strongly correlated and how they relate mathematically to each other. The issue of AJ high achievement is thus reduced to an undergrad math exercise. It has only one deep difficulty, namely that most of us cannot personally accept that IQ strongly correlates with parameters that are very important to us personally and that we perhaps all hope and feel to be far less constrained. It is important to recognize that humans evolved to deceive themselves in such ways. We desire to be in control and strongly hold on to the feeling of being far less constrained. Social systems are the naturally selecting environment of social animals. There are positive feedback loops resulting in extreme religions, and oscillations between opposing ideologies being in power. A successful reproductive strategy is to "go along with whatever" and simply get your family through. Human intelligence did not evolve for science and philosophy making the world a better place. Our intelligence assures that we "go along with whatever" effectively, inter-subjectively as well as inside each brain, inside each society of mind (Minsky, 1986)²⁵ and its 'Neural Darwinism' (Edelman, 1989).²⁶ Especially verbal intelligence serves rationalization and upholding cognitive dissonance. Humans are expert automatons at making themselves believe what they desire to believe for whatever reasons, personally and socially, deception and self-deception (denial) come together. High IQ and avowing to science changes little about this. The intelligent succeed in making others believe in their minds' constructs that then often clash with the evolved reality, leading to unintended consequences and in turn to further denial. One of Pascal's wisdoms is that we must appreciate the perspective of those whose mind we want to change, acknowledging the truths they deny less. Many intellectuals deny that AJ have been caught up in, for example, promoting ideologies with unintended consequences. They feel that such is anti-Semitism pushing the "myth of the deceptive Jew." What actually happens here is an unconscious supporting of a globally adhered to ideology about that high IQ and intellectual praxis are entirely good and beneficial rather than being, from a system theoretical point of view, obviously just as problematic as with most other parameters that are adjusted to certain means and deviations and that are at times even rapidly *down*-regulated by natural selection. 'New enlightenment' slowly reveals: Social functioning needs denial and deception; our intelligence evolved for that; and this is therefore also what is most strongly denied, especially by intelligent humans. Artificial intelligence (AI) will soon leave human intelligence behind. The obvious correlation between IQ and effective deception as well as the predominance of self-deception in human animals makes AI a globally existential threat. Such and all the suffering already caused by our denial of much of the little that constitutes proper science in the "social sciences" is the true relevance of IQ research today.

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References Alphabetically

Carmi, S., Hui, K. Y., Kochav, E., Liu, X., et al. (2014). Sequencing an Ashkenazi reference panel supports population-targeted personal genomics and illuminates Jewish and European origins. *Nature Communications, 5:4835*, 1-9. Cochran, G., Hardy, J., & Harpending, H. (2006). Natural History of Ashkenazi Intelligence. *J. of Biosocial Science, 38*, 659-693.

Dhont, K., & Hodson, G. (2014). Does low cognitive ability predict greater prejudice? Current Directions in Psychological Science, 23, 454-459.

Dunkel, C. S., & Dutton, E. (2016). Religiosity as a predictor of in-group favoritism within and between religious groups. *Personality and Individual Differences*, *98*, 311–314.

Dutton, E., Madison, G., & Lynn, R. (2016). Demographic, economic, and genetic factors related to national differences in ethnocentric attitudes. *Personality and Individual Differences*, 101, 137–143.

Edelman, G. (1989). Neural Darwinism: The Theory of Neuronal Group Selection. Basic Books.

Gottfredson, L. S. (1997). Mainstream Science on Intelligence: An Editorial With 52 Signatories, History, and Bibliography. *Intelligence*, 24(1), 13-23.

Gottfredson, L. S. (1998). The General Intelligence Factor. Scientific American Presents, 9, 24-29.

Jensen, A. R. (1998). The g Factor: The science of mental ability. Page 89, Westport, CT: Praeger Publishers.

Jones, G., & Schneider, W. J. (2006). Intelligence, Human Capital, and Economic Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach. J. Economic Growth, 11, 71-93.

La Griffe du Lion. (2004). Smart Fraction Theory II: Why Asians Lag. <<http://www.lagriffedulion.f2s.com/sft2.htm>> retrieved on 2016-01-01.

Levinson, B. M. (1958) Cultural pressure and WAIS scatter in a traditional Jewish setting. J. of Genetic Psychology, 93, 277-286.

Liu, J., & Lynn, R. (2015). Chinese sex differences in intelligence: Some new evidence. *Personality and Individual Differences*, 75, 90-93.

Lynn, R. (1991). Race differences in intelligence: A global perspective. Mankind Quarterly, 31, 255-296.

Lynn, R., & Vanhanen, T. (2002). IQ & the Wealth of Nations. Westport, CT: Praeger Publishers.

Lynn, R., Irwing, P., & Cammock, T. (2002). Sex differences in general knowledge. Intelligence, 30, 27-40.

Lynn, R. (2004). The Intelligence of American Jews. Personality and Individual Differences, 36, 201-206.

Lynn, R. (2006). Race Differences in Intelligence: An Evolutionary Analysis. Washington Summit Publishers.

Lynn, R., & Vanhanen, T. (2006). IQ and Global Inequity. Washington Summit Publishers.

Lynn, R., & Vanhanen, T. (2012). Intelligence: A unifying construct for the social sciences. London: Ulster Institute for Social Research.

Lynn, R., & Kanazawa, S. (2008). How to explain high Jewish achievement: The role of intelligence and values. *Personality* and *Individual Differences*, 44, 801-808.

Lynn, R. (2011). *The Chosen People: A Study of Jewish Intelligence and Achievements*. Augusta, GA: Washington Summit Publishers.

Minsky, M. (1989). The Society of Mind. New York: Simon & Schuster.

Shinert, G., & Ford, C. (1958). The relation of ethnocentric attitudes to intensity of religious practice. *J. of Educational Sociology*, *32*, 157–162.

Vongehr, S., Tang, S.C., & Meng, X.K. (2012). Promoting Statistics of Distributions in Nanoscience. J. Phys. Chem. C, 116, 18533-18537.

Weiss, V. (2009). National IQ Means Transformed from Programme for International Student Assessment (PISA) Scores, and their Underlying Gene Frequencies. *The Journal of Social, Political and Economic Studies* 34(1), 71-94.

References in Order of Appearance

- ² Jensen, Arthur R.: "The g Factor: The science of mental ability." Page 89, Praeger Publishers (Westport, CT 1998)
- ³ Cochran, Gregory; Hardy, Jason; Harpending, Henry: "Natural History of Ashkenazi Intelligence." J. of Biosocial Science **38**(5), 659-693 (2006)
- ⁴ Lynn, Richard H.; Vanhanen, Tatu: "IQ and Global Inequity." Washington Summit Publishers (Augusta GA 2006)

⁵ Gottfredson, Linda S.: "The General Intelligence Factor." Scientific American Presents 9, 24-29 (1998)

⁶ Lynn, Richard, Vanhanen, Tatu: "IQ & the Wealth of Nations." Praeger Publishers (Westport, CT 2002)

- ⁷ Lynn, Richard: "Race Differences in Intelligence: An Evolutionary Analysis." Washington Summit Publishers (2006)
- ⁸ Jones, Garett; Schneider, W. Joel: "Intelligence, Human Capital, and Economic Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach." Journal of Economic Growth, **11**(1), 71-93 (2006)

⁹ Gottfredson, Linda S.: "Mainstream Science on Intelligence: An Editorial With 52 Signatories, History, and Bibliography." Intelligence **24**(1), 13-23 (1997)

¹⁰ Lynn, Richard: "Race differences in intelligence: A global perspective." Mankind Quarterly **31**(3), 255-296 (1991)

¹¹ Weiss, Volkmar: "National IQ Means Transformed from Programme for International Student Assessment (PISA) Scores, and their Underlying Gene Frequencies." The Journal of Social, Political and Economic Studies **34**(1), 71-94 (2009)

¹² La Griffe du Lion: "Smart Fraction Theory II: Why Asians Lag" http://www.lagriffedulion.f2s.com/sft2.htm retrieved on 2016-01-01 (2004)

¹³ Lynn, Richard: "The Intelligence of American Jews" Personality and Individual Differences **36**(1), 201-206 (2004)

¹⁴ Levinson, B. M.: "Cultural pressure and WAIS scatter in a traditional Jewish setting." J. of Genetic Psychology **93**: 277-286 (1958)

¹⁵ Lynn, Richard; Irwing, P.; Cammock, T.: "Sex differences in general knowledge." Intelligence **30**, 27-40 (2002)

¹⁶ Liu, Jianghong; Lynn, Richard: "Chinese sex differences in intelligence: Some new evidence." Personality and Individual Differences **75**, 90-93 (2015)

¹⁷ Carmi, S.; Hui, K.Y.; Kochav, E.; Liu, X.; et al.: "Sequencing an Ashkenazi reference panel supports population-targeted personal genomics and illuminates Jewish and European origins," Nature Communications 5:4835, 1-9 (2014)
¹⁸ Lynn, Richard; Kanazawa, Satoshi: "How to explain high Jewish achievement: The role of intelligence and values"

¹⁸ Lynn, Richard; Kanazawa, Satoshi: "How to explain high Jewish achievement: The role of intelligence and values" Personality and Individual Differences **44**, 801-808 (2008)

¹⁹ Dutton, Edward; Madison, Guy; Lynn, Richard: "Demographic, economic, and genetic factors related to national differences in ethnocentric attitudes." Personality and Individual Differences **101**, 137–143 (2016)

²⁰ Shinert, G; Ford, C.: "The relation of ethnocentric attitudes to intensity of religious practice." Journal of Educational Sociology **32**, 157–162 (1958)

²¹ Dhont, K.; Hodson, G.: "Does low cognitive ability predict greater prejudice?" Current Directions in Psychological Science **23**, 454–459 (2014)

²² Dunkel, Curtis. S.; Dutton, E.: "Religiosity as a predictor of in-group favoritism within and between religious groups." Personality and Individual Differences **98**, 311–314 (2016)

²³ Vongehr, S.; Tang, S.C.; Meng, X.K.: "Promoting Statistics of Distributions in Nanoscience." J. Phys. Chem. C 116, 18533-18537 (2012)

²⁴ Lynn, R.; Vanhanen, T.: "Intelligence: A unifying construct for the social sciences." London: Ulster Institute for Social Research (2012)

²⁵ Minsky, Marvin: "The Society of Mind." Simon & Schuster (New York 1986)

²⁶ Edelman, Gerald: "Neural Darwinism: The Theory of Neuronal Group Selection." Basic Books (1989)

¹ Lynn, Richard: "The Chosen People: A Study of Jewish Intelligence and Achievements" Augusta, GA: Washington Summit Publishers (2011)