**Supplement one**.

“The topic of the worldwide variation of intelligence has been of interest to scientists for quite some time,” Eppig observed, “but it wasn’t until recently when Richard Lynn and Tatu Vanhanen published empirical data on average IQ by nation that formal studies were possible” (Lynn and Vanhanen, 2001, 2002,

2006). Eppig described a series of studies that followed this work, attempting to explain global patterns of intelligence distribution (as determined by Lynn and Vanhanen6) by such factors as education and employment prospect (Barber,2005); climate (Templer and Arikawa, 2006); evolutionary novelty of environment, approximated as distance from Central Africa, where the human species is presumed to have originated (Kanazawa, 2008); and inbreeding depression studies (Saadat, 2008; Woodley, 2009). The study Eppig and coworkers conducted found the most robust association of them all: a strong inverse correlation between infectious disease burden (measured in disability-adjusted life-years, or DALYs) and IQ at the national level (Eppig et al., 2010).

The high metabolic demands of brain development and early childhood provide a plausible explanation for this effect, according to Eppig and coauthors(2010), who speculated that “a developing human will have difficulty building a brain and fighting off infectious diseases at the same time, as both are very metabolically

costly tasks.”7 Moreover, Eppig said, “if our hypothesis is correct, that

infectious disease is the primary driver of the worldwide distribution of human intelligence, then [this correlation should hold] . . . on other geographical scales, such as across the U.S. states.” To test this theory, they compared a measure ofaverage state IQ, determined from scores on a commonly used standardized test, with a measure of infectious diseases–related stress based on statewide CDC data.

In the comparator group, they used three measures of wealth (median household income, income per capita, and gross state product) and two measures of education (expenditure per student and percentage of teachers ranked as “highly qualified” by the U.S. Department of Education). In this comparison too, infectious

disease proved a far more important variable than education or wealth in predicting statewide IQ, Eppig stated, although education and wealth were found

to be more significant to IQ than in their cross-national analysis.

Eppig maintained that a key interpretation of this finding is that efforts to increase the average IQ of an area should be focused on reducing infectious disease, especially those infectious diseases like the NTDs that affect brain development during early childhood.

From

The Causes and Impacts of Neglected Tropical and Zoonotic Diseases: Opportunities for Integrated Intervention Strategies 2011 The National Academies Press freely downloadable at <http://www.nap.edu/catalog.php?record_id=13087>

The original paper (just for your interest)

<http://rspb.royalsocietypublishing.org/content/early/2010/06/29/rspb.2010.0973.full>

These findings are controversial. In fairness to the objectors here is a critique of the findings,

<http://blogs.discovermagazine.com/notrocketscience/2010/06/29/does-national-iq-depend-on-parasite-infections-er/#.UZrFjoKJTlQ>

As controversial as these findings are, they have already found their way into several government publications, so expect to see other secondary sources quoting the results as undisputed. In any case, these results are bound to lead to increased research on this subject.