

## **IQ differences between sexes**

**Globally, no IQ difference are measured between males and females.**

**But a clear imbalance emerges between the sexes at the high levels of intelligence that the most demanding jobs require.**

For instance, at the near-genius level (an IQ of 145), brilliant men outnumber brilliant women by 8 to one.

**In almost 110 years of Nobel Prize history, only two women have ever won the Prize for physics, only four have won the Prize for chemistry and why no women at all have ever won the coveted Fields Medal for mathematics in eight decades of trying** (1)

Males and females appear equally intelligent, on average. But on standardized intelligence tests, more males than females get off-the-chart test scores—in both directions. **The greater variance of males on intelligence tests is one of the best-established findings in psychometric literature. More males are mentally deficient, and more are freakishly brilliant.**

And even though men are overrepresented in some high-paying math and engineering fields, they are also overrepresented in many outcomes that are particularly undesirable and often deadly: more than 93 percent of U.S. prisoners are men, 93 percent of occupational fatalities are men, and more than 90 percent of fatal motorcycle fatalities are men (data available here). Greater male variability often comes at a huge cost.  
(2) (3)

**Seemingly, females suffer from a lack of self-confidence, that could explain their lack of performance in mathematics, physics or chemistry.**

**Bright girls—who were at the top of the heap when things went well were vulnerable to a loss of confidence and a loss in effectiveness when they ran into difficulty** (Licht, Linden, Brown, & Sexton, 1984; Licht & Shapiro, 1982). It is at the top of the ability distribution, that the gender difference in math emerges. Thus, it is possible that at least part of the emerging difference in math is a gender difference in coping with setbacks and confusion rather than a gender difference in math ability.

**Girls who believe that intellectual abilities are just gifts do not fare well in math, but that those who think they are qualities that can be developed often do just fine.**

If a big part of the problem is that women seem to lose their confidence in the face of obstacles, how can we give them more lasting confidence? Learning that intellectual skills could be acquired—rather than simply bestowed as a gift—led to gains in females' math achievement. In essence, the intervention implied: If you want these skills, you can work hard and try to develop them. Girls heard this message and appeared to heed it.

Viewing intellectual or mathematical abilities as a gift can create vulnerability in females. It makes them susceptible to a lowered sense of

belonging, to a loss of confidence, and to decrements in performance in the face of difficulty and in the presence of stereotypes. However, most important, we have also seen that sending a message that these abilities can be developed can alleviate the vulnerability.

Despite the "legends," most geniuses put in years of intensive, even obsessive, labor before their potential reached fruition and they made the contributions we know them for (Ericsson, Krampe, & Clemens, 1993; Hayes, 1989; Weisberg, 1999). In many cases, the geniuses-to-be did not even stand out from their peers when they were younger (Israel, 1998; Bloom, 1985) (4)

#### References

(1) <http://www.dailymail.co.uk/debate/article-1274952/Men-ARE-brainy-women-says-scientist-Professor-Richard-Lynn.html>

(2) <http://www.aei-ideas.org/2010/07/great-male-variability-it%E2%80%99s-a-fact-but-it-can-sometimes-be-deadly/>

(3) <http://www.psychologytoday.com/blog/the-how-and-why-sex-differences/201101/how-can-there-still-be-sex-difference-even-when-there-is>

(4) <https://www.stanford.edu/dept/psychology/cgi-bin/drupalm/system/files/cdweckmathgift.pdf>