

Delusions of gender: the real science behind sex differences

Cordelia Fine

Delusions of gender is sold as 'a vehement attack on the latest pseudo-scientific claims about the differences between the sexes', and Fine certainly delivers this promise. Her book systematically queries, dispels and explains how so many current and popular 'brain differences' between the sexes are false. 'There are sex differences in the brain... but when we follow the trail of contemporary science we discover a surprising number of gaps, assumptions, inconsistencies, poor methodologies, and leaps of faith' (p. xxvii).

Fine is an academic psychologist who has won accolades for her scientific writing. *Delusions of gender* was shortlisted for the 2010 John Llewellyn Rhys Prize, one of Britain's most prestigious literary awards. This book is witty and scholarly yet accessible to readers who already have a basic knowledge of scientific research. *Delusions of gender* follows the path that a number of other writers have travelled in the last five years, including Eliot's *Pink brain, blue brain* and the OECD's report *Understanding the brain: the birth of a learning science*. Each of these texts explain that masculine and feminine brains do not exist and that hardwired brain differences between male and females are neuromyths or forms of neurosexism, which 'reinforce cultural beliefs about gender' (p. xxviii). 'Neurosexism promotes damaging, limiting, potentially self-fulfilling stereotypes' (p. 174). Fine's book goes a step further than previous texts by broadening her arguments to include an analysis of gender in culture, from kindergarten to the 'glass workplace' (p. 54).

Fine's analysis of gender and neuroscience is rigorous and thorough. She explains how the majority of brain studies show no differences between male and female brains, yet the 5% that do show differences are the studies that get published and thrust into the media spotlight. Fine also demonstrates how easy it is for gender to become salient or 'primed' in a person's mind, and how this then affects the way we think and act. The latest neuro-imaging techniques are also called into question because there 'just isn't a simple one-to-one correspondence between brain regions and mental processes, which can make interpreting imaging data a difficult task' (p. 152).

There is a strong message to educators in *Delusions of gender*, 'there's an urgent need for editors, journalists and schools to develop far more sceptical attitudes towards claims made about sex differences in the brain' (p. 174). Fine attacks educational authors like Leonard Sax and Michael Gurian for their continued promotion of hard-wired brain differences in males and females. She shows that the studies they rely on for evidence are often misquoted or interpreted without appropriate academic caution.

For educators of girls in single-sex schools, Fine's text issues a warning about the dangers of using neuroscience in misleading ways, which may well promote neurosexism and stereotype girls. This book demonstrates that using neuroscientific claims, such as hard-wired or innate gender differences, as support for single-sex schools cannot be substantiated. *Delusions of gender* is a book that is worth reading because of its scholarship and interest to all those who educate girls.