Two thirds of children aged nine to eleven draw a man when asked to draw a scientist.

Gender bias and stereotyping begins at an early age

Girls in Grade 4 are less confident in their maths abilities

Despite having similar average performance in NAPLAN numeracy 2015, fewer girls achieved at the highest level

Attitudes to STEM subjects affect performance

Participation in key Year 12 STEM subjects shows a clear gender imbalance

Fifteen year old girls are less confident in applying maths concepts to real-world problems

International maths tests reveal no innate gender differences: sometimes boys do better, and sometimes girls do better

Australia loses female talent at every stage of the STEM pipeline despite no innate cognitive gender differences

Achievement and retention of women in STEM is related to:

- Engagement
- Confidence
- Bias

Australia's performance
Female graduates are scarce in many STEM disciplines

% of domestic completing graduates who were female (2015)

- Bachelor
- Postgraduate

Information Technology
- Male: 13%
- Female: 26%

Engineering
- Male: 14%
- Female: 21%

Physics and Astronomy
- Male: 22%
- Female: 19%

Maths
- Male: 33%
- Female: 35%

Earth Sciences
- Male: 36%
- Female: 48%

Chemistry
- Male: 42%
- Female: 42%

Agriculture and Environment
- Male: 51%
- Female: 54%

Biology
- Male: 59%
- Female: 57%

Non-STEM
- Male: 65%
- Female: 61%

For more detail including references, visit http://www.chiefscientist.gov.au/category/science-and-research/occasional-paper-series/

Datasheet prepared by Dr Roslyn Prinsley, Dr Philippa Smith, Dr Krisztian Baranyai and Matthew Ladewig