

The Replication Crisis

Psychology

What was found, why it happened, and what has changed.

The causes and the reforms.

Causes

Publication bias toward positive results

p-hacking — analysing until significant

HARKing — hypothesising after results are known

Small, underpowered samples

No incentive to replicate

Flexible analysis choices

Reforms

Pre-registration of hypotheses and analysis

Registered reports — accepted before results

Open data and materials

Larger samples, power analysis

Multi-lab replication projects

Effect sizes reported, not just p

Priming and ego-depletion effects fared particularly badly. The reforms have improved practice substantially since 2015.