

Experimental Design

Psychology

The three designs, and the trade-off each makes.

How participants are allocated to conditions.

Design	Strength	Weakness
Independent groups	No order effects	Participant variables confound
Repeated measures	Controls participant variables	Order and practice effects
Matched pairs	Both, partly	Time-consuming; matching is imperfect

Counterbalancing controls order effects in repeated measures: half do A then B, half do B then A.