The Value of Accepting the Null Hypothesis

Important Substantive Cases

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The Value of Accepting the Null Hypothesis (H_0)

case	description	H0	example
Equivalence Testing	Equivalence Of 2 Treatments Or Interventions	$\beta_1 = \beta_2$	The effect of Treatment A is indistinguishable from the effect of Treatment B (especially important if one treatment is much more expensive, or time consuming than another).
Equivalence Testing	Equivalence Of 2 Groups On An Outcome	$\bar{x_1} = \bar{x_2}$	Men and women are more similar than different *wrt* psychological processes (Hyde).
Retiring Interventions	There Is No Evidence That Intervention X Is Effective	$\beta_{intervention} = 0$	Evidence consistently suggests that a particular treatment has near zero effect.
Contextual Equivalence	Equivalence of a Predictor Across Contexts (Moderation)	$\beta_{interaction} = 0$	Warm and supportive parenting is equally beneficial across different contexts or countries.
Full Mediation	$x \rightarrow y$ Association Is Completely Mediated; No Direct Effect	$\beta_{xmy} \neq 0$; $\beta_{xy} = 0$	The relationship of the treatment and the outcome is completely mediated by mechanism m.
Theory Simplification	Removing An Association From A Theory	$\beta_x = 0$	There is no evidence that x is associated with y.