

# The effect of the information gathered prior to the test of interest on the test of interest

Unbiased test statistic

Unbiased test statistic

Optimal

Contains partial information

Optimal

Contains partial informatoin

Contains all information

CONDITIONING UNNECESSARY FOR VALID INFERENCE

CONDITIONING UNNECESSARY BUT ALWAYS IMPROVES INFERENCE

Contains partial information

CONDITIONING UNNECESSARY FOR VALID INFERENCE

CONDITIONING UNNECESSARY BUT NEVER HURTS INFERENCE

Contains no information

CONDITIONING UNNECESSARY FOR VALID INFERENCE

CONDITIONING UNNECESSARY FOR VALID INFERENCE

User adds input to decide aspects of the test of interest based on prior analysis



Contains all information

CONDITIONING NECESSARY FOR VALID INFERENCE

CONDITIONING NECESSARY AND MIGHT IMPROVE INFERENCE

Contains partial information

CONDITIONING NECESSARY FOR VALID INFERENCE

CONDITIONING NECESSARY FOR VALID INFERENCE

Contains no information

CONDITIONING MIGHT BE NECESSARY FOR VALID INFERENCE

CONDITIONING MIGHT BE NECESSARY FOR VALID INFERENCE

Statistic from prior analysis

Statistic from prior analysis