

Some statisticians become dogmatic

6. Crud factor (cont.)

Numerical example, true and false theory track records hardly different
"Theory pot" randomly paired with "variables pot," zero verisimilitude,
yet appears corroborated

Always a trade-off between Type I and Type II errors
so not helpful that α can be set low

Distinguish statistical hypothesis from substantive theory. Books rarely do. Terrible!

Probability \times utility in technology. But no analogous rule when "gambling with truth"

Size of crud factor unknown but not negligible in life sciences. *Examples:* *g* factor,
MMPI, SVIB, CPI, teacher rating scales, Thurstone primary abilities

7. Pilot studies

2 questions: Effect exists? N needed for α ?

Some N easier to raise (e.g., questionnaires) leads to domain and theory bias

8. Bias favoring significant result in MS submissions

9. Bias favoring significant result by referees and editors

10. Detached validation claim for psychometric instruments

Example: Valid variance easily less than 1/2 of reliable. So how know
which region is causing correlation?

These 10 obfuscators work oppositely so net result unpredictable

"Box score" in soft psychology usually runs 2/3 to 4/5 favorable.

Not impressive but people think it is. Asymmetry of falsification
and support—modus tollens.

Can do binomial on box score

[Diagrams of strong, medium, feeble tests, distributions of theory + error tolerances]

Student delusion of testing theory with correlations on MMPI. Due to simplistic
operationism + verificationism + null hypothesis testing habit