

Three research designs are presented and the influences of these various threats on each are discussed. (see Table 1, p. 8)

-The "One-Shot" Case Study

X O

The authors denigrate this as the least worthwhile design. The lack of control and lack of comparison except with "implicit common knowledge" lead to the "error of misplaced precision." This design also suffers from all of the threats to validity except those that involve multiple measurements.

-The One-Group Pretest-Posttest Design

O₁ X O₂

While this design is deemed better than doing nothing, the authors use it as an example of many of the threats to internal validity. Of all of the threats, only selection and mortality are controlled. As an interesting note, it is the feature of "experimental isolation" that allows the physical sciences to often gain control over the threat of history when using this design.

-The Static-Group Comparison

X - $\frac{O_1}{O_2}$

Here, one group experiences the treatment, and the other does not. The dotted line shows that no means are used to test whether the differences between groups ^{are} due to treatment. This design controls for all threats, except for selection and mortality.