Using Adapted Alternating Treatments Designs to Determine What Works and What Works Better

McClurg, V. M., Skinner, C. H., Killion, J. B., Coleman, M. B.

Alternating Treatment Design
- A design meant to compare the effectiveness of two or more treatments.
- We need to know what works best.
- However, this design overlooks important threats to internal validity.

Alternating Treatment Design in Literature
- Researchers searched 5 school psychology journals for articles using alternating treatments to examine interpretations of the design:
- School Psychology Review
- Psychology in the Schools
- School Psychology Quarterly
- Journal of School Psychology
- Journal of Applied School Psychology

Alternating Treatment Designs

Inaccurate Conclusions

- Does not control for history, testing, or multiple treatment interference

Threats to Internal Validity
- History, Testing, Multiple Treatment Interference, Maturation, Instrumentation, Statistical Regression to the Mean, Mortality, Interactions

Solution: Adapted Alternating Treatments Design
- A no-treatment data series is applied during the alternating treatment phase to assess for all threats to internal validity, including spillover effects.
- This allows for the conclusion that both treatments were equally effective.

References


