

Case 17: Impact of Different Training Methods on Employee Performance

A multinational company wants to evaluate the effectiveness of three different training methods (Traditional Classroom, Online Self-Paced, and Blended Learning) on employee performance improvement percentages. The HR department collects performance improvement data (percentage increase in performance after training) from randomly selected employees who are randomly assigned to carry out one of these different training approaches. Is there a significant difference in the percentages of improvement in employee performance between the three training methods, and which method is most effective? ([download data](#))

Initial Questions

1. What are the research objectives?
2. What are the statistical questions?
3. What is the response variable, and what is the data type of the response variable?
4. What are the explanatory variables of interest?
5. Are there covariates?
6. What is the population of interest?
7. What is the subject, and what is the number of distinct subjects?
8. Are there subject-level data?
9. Are response variables dependent (repeated measures / clustered subjects)?
10. Are the subjects selected randomly?
11. Are the subjects randomly assigned to different groups?

Initial Thoughts