

### Case 29: Assessing Customer Satisfaction with Product Features (with Subject-Level Data)

A tech company launches a new software product with various features designed to enhance user experience. To gather feedback and improve future iterations, they conduct a survey asking randomly selected 30 users to rate each feature as either “dislike” or “like”, and Table 5.14 summarizes the feedback from the users and subject-level data is provided. ([download data](#))

TABLE 5.14: Product Features Feedback.

Feature	Dislike	Like
Feature 1	18	12
Feature 2	26	4
Feature 3	10	20

Determine if there is significant difference between these features according to the responses from the users.

**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**