

When we use hypothesis testing

hypothesis test evaluates two mutually exclusive statements about a population to determine which statement is best supported by the sample data. When we say that a finding is statistically significant, it's thanks to a hypothesis test.

Hypothesis testing is useful in situations where we want to make inferences about a population or where we want to test a specific hypothesis or claim. For example, we might want to test if a new drug is effective in reducing blood pressure, if a new teaching method is more effective in improving student achievement, or if a new marketing strategy leads to higher sales.

there are situations where hypothesis testing may not be appropriate or necessary. For example, if we are simply describing data or examining relationships between variables, we may not need to test a specific hypothesis or make inferences about a population parameter. In these cases, descriptive statistics or correlation analysis may be more appropriate.

In general, hypothesis testing is used whenever there is a need to make a decision based on uncertain or incomplete information.