

Test Choice Practice

For each of the following, explain which test should be used to analyse the data. Write out your justifications in full. Work from recall as far as you can.

Success criteria:

- You choose the right test;
- You identify appropriate reasons, referencing difference/correlation; level of measurement; related/unrelated design.
- You clearly link each reason to the information given in the context.

1. Researchers are testing recall of words. One group is given words organised into meaningful categories. The other group is given words mixed in a random order.

2. Researchers are measuring relationships between attitudes using self-report questionnaires. One questionnaire measures political affiliation (low score = Left Wing; high score = Right Wing). The other measures attitudes to law and order (higher score = in favour of harsher prison sentencing and tougher policing).

3. Researchers are measuring reaction times. Participants are first tested as a baseline and then later tested again after consuming 50mg of caffeine.

4. Researchers are interested in whether men and women have different preferences for milk or plain chocolate.

5. Researchers are measuring reaction times so see if there is a relationship with the self-reported amount of coffee each participant drinks daily.

6. Researchers are measuring working memory span by asking PPs to recall word lists that are presented whilst the PPs are doing mental arithmetic. PPs are classified as 'high WM span' if they recall more than 5 words and 'low WM span' if they recall 4 words or fewer. Half of the PPs do the task whilst listening to instrumental music and half do the task while listening to music with lyrics.

7. Researchers have asked students to report how much revision they do in a typical week to see if this has a relationship with their test scores.

8. Researchers have used a self-report questionnaire to classify PPs in a mock-jury study as either R-processors or E-processors. They want to know if this shows a relationship with whether the PPs will convict the defendant.

9. Researchers have counted the frequency with which each animal subject in a learning experiment presses a button in order to obtain a food reinforcement. Half of the animals receive continuous reinforcement, the other half are on a fixed interval reinforcement schedule.

10. Researchers have given PPs a self-report measure of attitudes toward healthy eating (higher score = more positive attitude). After completing the survey, PPs are offered a bowl of M&Ms are told to eat as many as they want. The bowl is then weighed so that the researchers can calculate how many M&Ms each PP ate.