



20 participants were asked to write text using two different keyboard layouts (A and B). Half of the participants started the task on the A layout and then the B and the other half of the participants started the task on the B layout and then the A. The number of words typed per minute was collected for each participant and layout. Choose the most appropriate procedure to decide which layout allow participants to type the fastest. Assumption normality and homogeneity are verified.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk

40 participants were randomized to two groups. One group received a drug to decrease hair loss and the other group received a placebo (a pill of sugar). At the end of the program, the percentage hair loss for each patient was recorded. Choose the most appropriate procedure to decide if there is a relationship between the use of the drug and the percentage of hair loss. Assumption normality and homogeneity are verified.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk

A study attempted to find out if the age of an animal had any relationship to their athletic ability. The researchers took the data of 104 cheetahs, calculating their age and running a test to measure their speed. Choose the most appropriate procedure to decide if the age has any relationship with the run speed.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk

20 participants were asked to type of their phone touchscreen in four different postures (sitting, lying down, standing and running). The number of words typed per minute was collected for each participant and postures. Choose the most appropriate procedure to decide which posture allow participants to type the fastest. Assumption normality and homogeneity are verified.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk

20 participants were asked to run as fast as possible using two different pairs of shoes. Their speed was collected for each pairs of shoes. Choose the most appropriate procedure to decide which shoes allow participants to run the fastest. Assumption normality is verified but not the assumption of homogeneity.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk

20 participants were asked to type of their phone touchscreen in four different postures (sitting, lying down, standing and running). They were asked to rate their comfort for each posture using a Likert Scale questionnaire. Choose the most appropriate procedure to decide which posture was most comfortable.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk

A study has gathered 10000 observations of computer performances (speed) in three different room of varying temperature (15, 25 and 35 degrees Celsius). Choose the most appropriate procedure to decide if the data follows a normal distribution.

Paired T-test
Unpaired T-test
One-Way Anova (between)
Repeated Anova (within)

Mann Whitney
Wilcoxon
Kruskal Wallis
Friedman

Linear regression
Kolmogorov-Smirnov
Shapiro-Wilk