A paired t-test found a significant effect of difficulty of the scrabbletask on average number of found words, t(48) = 10,48, *p* = 6.919e-14.

The easy task (M = 489.47, SD = 145.09, 95% CI = [447.34, 531.60]) had a higher score compared to the hard task (M = 345.77, SD = 97.93, 95% CI = [317.33, 374.21]). So there was a considerable difference between both conditions.

A picture containing screenshot

Description automatically generated

This plot shows the results of the experiment with the two difficulty conditions (easy and hard). The height of the dark gray bars corresponds with the average number of words the participants found. The error bars represent 95% within-subject Confidence Interval.

H0: The score is not positively influenced by taskswitching

H1: The score is positively influenced by taskswitching

Nieuw:

H0: The average number of words is not influenced by difficulty level.

H1: The average number of words is influenced by difficulty level

We have shown H0 to be false, as the average number of words is clearly correlated with difficulty level (as can be seen in the plot and the t-test scores).