In this experiment, we examined how different parts of typing affected how we feel about words. Participants were given a typing test and asked to indicate their dominant writing hand. They were then given words to rate for how pleasant they where (1 very unpleasant to 9 very pleasant).

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| --- | --- | --- |
| Hand | Word Speed | Ratings |
| Left | 49 | 5.6 |
| Left | 37 | 4.4 |
| Left | 36 | 5.6 |
| Right | 58 | 3.2 |
| Right | 32 | 6.8 |
| Left | 38 | 3.2 |
| Left | 46 | 4.8 |
| Right | 62 | 4.6 |
| Right | 47 | 5.0 |
| Right | 28 | 4.8 |

If we wanted to determine if handedness affected word ratings (i.e. is there a difference between left and right handers ratings for pleasantness of words), what is:

1. The independent variable:
   1. The levels of variable:
   2. The type of variable using the NOIR system:
2. The dependent variable:
   1. The type of variable using the NOIR system:
   2. Create a histogram of the dependent variable.
      1. What is the shape of the histogram?
3. What are some potential confounds to our study?
4. Create a graph that displays the results of the differences between left and right-handers on word ratings.
   1. Which group has the higher ratings for words?
5. We were also interested in how typing speed affected word ratings. Create a graph that shows that relationship.
6. For the ratings variable, calculate the following:
   1. Mean:
   2. Median:
   3. Mode:
   4. Interquartile range:
   5. *Biased* standard deviation
   6. *Biased* variance