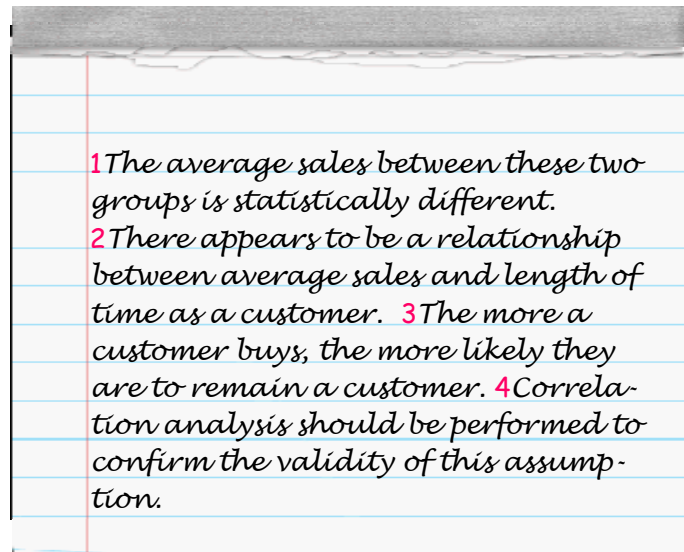


Get Your Terms Right

To the right is a single paragraph from a student research paper.

Let's look at how the choice of words may affect interpretation of the sentences individually and in sequence. [The red numbers denote each sentence.]



Interpretation:

- In **1**, the words *statistically different* tells an analyst that a test of differences, like a z-test, was done on customers who had been divided into groups (e.g., longer-term and shorter-term customers). [In analytical terms, the sentence says "the average sales of long-term customers is **not** equal to the average sales of short-term customers."]
- In **2**, the author interprets the same results as indicating a *relationship*. The word *relationship* means to an analyst that the actual sales and longevity of customers were examined using a test of relationship or association, like a correlation or regression. In other words, they weren't divided into groups. [In analytical terms, the sentence says "sales and longevity as a customer vary systematically."] So the first sentence describes one type of analysis and the second sentence another.
- Neither of the previous sentences told the reader the direction or nature of the difference or relationship that was found. In **3**, the author does, indicating that sales predict longevity. [In analytical terms, the sentence says "sales is a positive function of longevity."] The word *predicts* means that a technique was used to show cause and effect. *Predicts* is **not** used when the analyst simply observes that sales and longevity vary systematically.
- **4** Finally, the author recommends a specific analysis - a correlation analysis - be performed to prove the previous statement. The author already described results from analyzing sales and longevity that sound like correlation analysis. The data seems available so why wait until later?