**Method**

**Participants**

Participants consisted of 157 students who were recruited from Introductory Psychology classes through Missouri State University’s SONA system and were given class credit for their participation. Participants were tested in groups that ranged from one participant to 4 participants at a time in Pummel 207B.

**Procedure**

Participants were asked to read and sign a consent form before entering the lab space and taking a seat at a computer. Participants were then asked to take a one minute long typing test that can be found at [www.typingtest.com/test.jsp](http://www.typingtest.com/test.jsp). The students were asked to complete as much of the Aesop’s fables test as they could in one minute. After the minute participants were asked to alert the researcher who recorded the typing speed and errors that appear on the screen after completion of the test.

The researcher then opens up the QWERTY experiment, enters their typing speed, and their accuracy rate, and then students are asked to complete the rest of the experiment. Participants were then asked to record which hand they write with, and then asked to rate how pleasant or unpleasant they find words. Participants were asked to make this rating for 120 words.

The experiment consists of rating words on pleasantness. Originally a list of 240 words was compiled to offer a variety of real words and pseudowords that were typed with repeated keystrokes not paired together (RN), repeated keystrokes together (RY), and not repeated with different fingers (DN). Each participant was only asked to rate 120 of the 240 words to rule out the effect of fatigue on their judgments. Of the 120 words that participants rated, they were randomized and split between real words and pseudowords (60 real words and 60 pseudowords words). For clarification, a table of word examples is listed in the appendix in Table 1.

Participants were asked to use a self-assessment manikin (SAM; example attached) to rate their judgments. A SAM scale is a nine point visual emotional scale which will allow the students to rate their perceived pleasantness of a word.

After completing ratings of all 120 words, participants were allowed to exit the lab room. After completion of the experiment the researcher gave participants their class credit through the SONA system.

Proposed Analysis

I propose that the data be analyzed in three different analyses to compare and contrast the strengths and weaknesses of each of the methods. I first propose that a common repeated measures analysis of variance be run on the data with post-hoc paired-samples t-test to decipher any differences in how participants rated the three different types of words (RN, RY, DN). As participants rated all three types of words, a repeated measures ANOVA is appropriate for this data. Second, I propose that a nonparametric Quade test be run on the data with post hoc t-tests. The Quade test is the nonparametric version of a repeated measures test for multiple groups. Instead of running the data as is, the data is first ranked, and then given a Quade score, which can then be analyzed through a common ANOVA and t-tests. Third, I propose that an ordinal observations analysis be run on the data using Observation Oriented Modeling software. Observation Oriented Modeling, as described previously, is a new way to look at and analyzing data that focuses on participants at the individual level. The new ordinal analysis allows the researcher to designate a pattern that should theoretically be followed in the data, and then runs the data to see how well the actual observations match the theoretical pattern in an ordinal pattern. This is also a repeated measure analysis as it looks at how an individual rates one word compared to another in all combinations of comparisons.

|  |  |  |
| --- | --- | --- |
| Table 1  *Examples of word types.* | | |
| Word Type | Real words | Pseudowords |
| Repeated keystrokes not together | milk | tofe |
| Repeated keystrokes together | kin | poom |
| Not repeated with different fingers | mop | hok |