PSYC 100 Lab:

Effectiveness of Recognition versus Free Recall in Memory Retrieval

Memory researchers have long been aware that "recognition" is a more sensitive measure for detecting what is in memory than "free recall." In this lab, you will compare the effectiveness of these two different forms of memory retrieval.

In free recall, you are asked to retrieve items from your memory without any cues. In recognition tasks (such as on a multiple-choice test), you are first presented with an item, and then you must decide whether that is something that is stored in your memory or not. One of the reasons that recognition performance is usually superior is that, in a recall task, you must search through your memory, find an item, and then decide if that is the item that you wished to retrieve. In a recognition task, the item is presented to you without you having to search for it, and all you must do is decide if the item is what you are looking for.

Let's see how these two strategies work for you.

Instructions for Conducting the Experiment

1. Go to the following link: https://www.youtube.com/watch?v=_q6jgTIQIx8&t=2s

2. When the YouTube page comes up, start the video and carefully follow the instructions of the presenter.

3. You will try to memorize a list of words, followed by two different memory retrieval tasks.

4. The recall task comes first. Please use a piece of paper to record your answers, and be sure to obey the rules that the presenter describes. In other words, do not pause or restart the video once you begin, and do not start recording your responses until the presenter gives you the signal.

5. The recognition task comes next. Again, follow the instructions and record your answers without looking back at the answers you gave on the recall task.

6. When you are finished with the memory tasks, tally your results by counting the number of words that you correctly identified in the recall task, and separately, the number of words that you correctly identified in the recognition task. You will need these numbers for writing your lab report.

Instructions for Writing the Lab Report

Use the following headings to organize your report:

Introduction

Under this heading, present just a bit of information about recognition versus free recall and state that you are attempting to replicate the results of previous research. You may look ahead in Chapter 7 of the textbook for background information on this.

USE YOUR OWN WORDS! This is a writing exercise, so do not simply copy down information from another source.

Also in this introduction, cite a journal article that you found that is related to memory recall, preferably recognition versus free recall, and cite the article in the text of the report by putting the author's names and the date of the article in parentheses. For example: (Smith & Jones, 2022). You should also list this article as a reference in proper APA Format at the end of your lab report.

The introduction should only be a few sentences long.

Procedure

In a few sentences describe what you did to collect data. A person who does not already know what you did should be able to accurately picture what happened by reading your description of the experimental procedure.

Results

Present your data in the form of a bar graph. The vertical Y axis should reflect the number of words recalled, and the two conditions (recognition vs. free recall) should be on the horizontal X axis at the base of the bars that you draw on your graph. You may draw your graph using Excel or any other electronic tool, or you can draw a graph by hand, scan it or take a picture of it, and paste the picture into a Microsoft Word document.

Do not *only* present a graph in your results section. You need to also clearly state in words what you found. How many words did you recall in each condition? Did you do better in one condition than in the other? Does it look as if the difference is large enough to be meaningful? In an actual experiment, we would have to perform a chi-square test to see if the difference between your conditions is statistically significant.

You are not required to perform any statistical tests in this lab, but if you know how to perform a chi-square test, by all means go ahead and I will be properly impressed!

Discussion

In a few sentences, provide a take-home message from your experiment. Did you find what you expected to find? If you are like most people, you should have done better in the "cued recall" condition. If you did *not* find what you expected, can you think of any explanations for why this happened? You may also use the discussion section to share any personal reactions or thoughts about the experiment