***Encoding Specificity***

# Introduction

# In this activity you will learn about a principle put forth by the psychologist Endel Tulving called encoding specificity. It states that memories are more easily retrieved if the conditions that exist at the time of retrieval match those at the time of encoding (i.e., at the time the memory was stored). Those “conditions” can include external factors like context (e.g., spatial location) and internal factors like emotional state.

# Description of Activity

This activity contains two parts. In the first encoding part of the activity, you will be given a list of words to remember. Unlike simple list learning with single words, this activity involves a stream of cue-word pairs. For example, you may be presented with “bed – REST”. In this pair the word on the left (“bed”) is the cue and the word on the right in upper case letters “REST” is the word you need to remember during the second recall portion of the experiment. You should try to remember the cue on the left and the target word on the right. You will also see pairs like “???? – BURN”. These are pairs include question marks on the left but do not have a cue word. These pairs serve as an important control condition when the results are analyzed later to detect whether there is an effect of the cue on your ability to recall the target word. During the second part of the activity, after you encode several cue-word pairs, you will be tested by being asked to type in the two letters missing when presented with, for example, “bed – R??T”.

# Cued Recall

# That you saw the cue word “bed” previously paired with “REST”, helps you recall “ES” when only presented with “R??T”, just two of the original four letters that were paired with the cue at encoding. Performance on cued recall trials like these are better on average than when the cue at encoding is replaced with a word that was never paired with “REST” at encoding (e.g., “jet” instead of “bed”) and also better than for a control condition (e.g., “???? – BURN”).

# Encoding Specificity in the Real World

The concept of encoding specificity is even more powerful when applied to real life situations. What happens if your professor schedules your exam for a different room from the lecture hall in which you listened to all the lectures? What if you are in a good mood during all your study sessions, but find yourself gloomy and sad come exam week? You can fine tune your ability to recall all types of information (i.e., not just visual) if you match the spatial and emotional retrieval cues so that they overlap with the to-be-retrieved memory.