DRM fMRI Instructions

Study Phase:
In this experiment, you are going to see words presented in short lists. Each list will have 16 words in it, and the words will be presented in front of you on the projector one-at-a-time. The 16 words in each list will be related to one another. The words will be related in one of two ways.

For SOME lists, the words will be related by their meaning. For example, you might study a list of words like tiger, circus, jungle, lion. The words don’t mean the same thing, but they are all connected somehow in their general meaning. While you watch the words go by, we want you to think carefully about how the words are related in their meaning. Think about how each word is related to all the other words.

In other lists, the words will be related by their SOUND. That is, they will RHYME. When you see lists that rhyme, we want you to think hard about how the words sound alike. Say the words in your head and think about how they sound similar. For example, you might study words like skill, fill, hill, pill.

Is that clear?

You will know which kind of list you’re about to get by a cue. Before each list containing meaningfully-related words, the word MEANING will appear in yellow on the screen for 2 seconds to let you know that you should think about how the following words are related by their meaning. When you are about to see a list that contains rhyming words, the word RHYME will appear in yellow for 2 seconds before the list appears. This cue will let you know to think about how the subsequent words sound alike.

Do you understand?

In each 4-minute scan, you will see 12 lists. Between each list will be a plus sign, also known as a fixation point.

After some of the lists, you will receive a memory test. We will tell you more about the memory tests later, but don’t worry about them while you’re studying the lists. Just think about the MEANING or the SOUND of the words in the lists while they go by.

Is that clear?

Remember to stay AS STILL AS POSSIBLE the entire time you’re in the scanner, and ESPECIALLY during the scan.

Subsequent Study Phases:
You are again going to see short lists of words. Some of the words will be related by their meaning, and others will be related by their sound. Which type of list you are about to see will be made evident by the yellow cue that precedes the list. When the yellow word says MEANING, you should think about how all the following words are meaningfully related to one another. When the yellow word says RHYME, you should think about the sound of the words and how closely they sound alike. Is that clear?

Remember to lie as still as you can throughout the scan.