**Debriefing for Recognizing Words**

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This study is concerned with the automatic processing taking place during spoken word recognition. Previous studies have found that both sound and spelling information influence how quickly and accurately a spoken word is recognized. For example, hearing a word on the study list (*parasite*) activates other words with similar sounds and spellings (e.g., *paragraph*) to a great extent during study. Therefore, *paragraph* seems very familiar to participants at testing time, leading to false recognition errors to *paragraph* (report having heard *paragraph* before when, in fact, *parasite* was heard on the study list).

In this study, participants were asked to listen carefully to a long list of spoken items. Then participants were asked to take one of two different types of tests—(1) a recognition test (“old” word from study list or “new” word not heard on study list) or (2) a word-fragment completion test (fill in missing letters to form a complete word). Most of the studied items shared some sounds and spellings with their tested partners. Our aim is to determine whether testing memory with a word-completion test will reveal even greater evidence of the activation process compared to testing memory with a standard recognition test.

A recognition test is thought to be a test of explicit memory—a conscious attempt to inspect memory of the study list and retrieve whether the item was previously heard. However, The activation of potential word candidates, is thought to be an automatic or implicit process. This automatic process may have a very weak impact on explicit, conscious memory. Therefore, we should obtain a more sensitive measure of activation’s impact on memory when we use an implicit test of memory like the word-fragment completion test. The test words were simply presented as word fragments (e.g., *p\_ra\_ra\_h*) and participants were instructed to complete the fragments with the first word that came to mind. The automatic activation process should be evident then with faster and more accurate solutions for the test word (paragraph) when a related partner was presented during study (e.g., *parasite*) versus an unrelated partner (e.g., *minimum*).

Understanding the factors that affect the speed and accuracy of word recognition may be relevant in educational and therapeutic settings. For example, understanding the organization and connections among words stored in memory may eventually help special education teachers to develop instructional approaches for children with learning disabilities related to speech processing.

The general results of this study will be available toward the end of the semester and will be posted on the bulletin board across from the Psychology Department office (Bridges Hall, room 360).

**Whom to contact for more information:**

If you have questions about this study, or if you would like to receive a summary report of this research when it is completed, please contact Dr. Christine Malone in Bridges Hall, room 360G (phone 218-477-2804).

**Whom to contact about your rights in this experiment:**

Dr. Rochelle Bergstrom, bergstro@mnstate.edu, phone 218-477-4084, Co-Chair of the Psychology Departmental Review Committee or else Dr. Robert Nava, irb@mnstate.edu, phone 218-477-4308, Chair of MSUM Institutional Review Board.

**If you feel that you are experiencing adverse consequences from this study**: Adverse consequences are not expected, but if concerns arise as a result of participating in this experiment, please contact MSUM Counseling Services at 218-477-2211.

If you are interested in learning more about the topic of this research project you may want to consult:

<http://develintel.blogspot.com/2006/04/implicit-vs-explicit-memory-two.html> -- A scholarly blog about explicit and implicit memory.

 **Thank you for your participation**!