

## Lab Report 5

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### **Introduction**

When the word 'sleep' is exposed to someone it will evoke a faster response to the word 'bed' compared to unrelated word like 'banana'. As sleep and bed are more closely linked words in our memory, people tend to react faster when the other words are presented. Numerous types of related stimuli can be used with priming. Priming effects, for instance, might be triggered by stimuli that are theoretically, linguistically, or perceptually connected. Priming may be a useful tool for learning and studying in the actual world.

Priming speeds up our information processing and shortens the time needed for memory retrieval. Long-term memory, according to psychologists, is thought to include informational units (also known as schemas). There are several strategies to either raise or reduce the activation of these schemas. These memories are more accessible when specific informational units are activated to a higher degree. Information is less likely to be recalled from memory when activation is reduced. By leveraging how our brains process, retain, and recall information, priming works with our unconscious brain to alter our thinking patterns and behaviours. It is well established that priming enhances cognitive and behavioural reaction times.

### **Method**

This study examines the impact of linguistic stimuli characteristics on an implicit word stem completion (WSC) task to investigate priming. Each word in this database also has a unique solution word fragment and the following indices that are related to the fragments: baseline of completion (shows how likely it is that a fragment will be completed correctly); priming (increase in the percentage of correctly completed fragments when the corresponding word has just been processed); and the ratio of letters to empty spaces (the number of letters given divided by the number of letters deleted). Each original word's letters were removed at random to create the fragments. Five-letter words had two letters removed, six-letter words had two or three letters removed, and seven-letter words had three or four letters removed. After that, each fragment was examined until just one correct solution fragment was found.

The first was the study phase, where participants had to determine how familiar a set of words were to them. Participants were required to complete a list of fragments in the second phase, half of which were words from the first phase.

## Results

Priming score = proportion of hit from study\_word - proportion of hit non primed words

proportion of hit from study_word	100%	5/5	1
proportion of hit non primed words	20%	1/5	0.2
Priming score	0.8		

## Discussion

Priming is a phenomena that is frequently used to illustrate how recently experienced perceptions may change how a person perceives and recognises faces. While priming frequently produces quicker and/or more correct answers in facial recognition after studying the same or similar images, adaptation typically results in a perceptual bias opposite to the adaptor (i.e., original face versions are moved away from the adaptation faces). One can distinguish between several priming paradigms, each of which targets certain mental ideas. Repetition priming, for instance, defines a paradigm in which a stimulus is first shown as a prime and then presented once more in the following test phase adjacent to alternative stimuli. Showing a bunch of facial expressions and then late putting them and non primed expressions in a order to understand how many primed ones were recognized and how many non primed ones.

<https://github.com/Aayushi0103/Priming>