Abstract

Priming is deemed an important approach to language learning, and it is used to enhance interaction between speakers. Various studies have indicated that the priming effect is higher for unrelated words but there has been minimal empirical evidence on the effect of priming on emotional valence, identification of patterns, and letter identification. This study aimed to indicate the effect of stimuli on three types of tasks: meaning task, letter search, and cogload. The study involved the use of forward and backward masking before the target letter or word was presented at the screen for some time. Anxiety was used to denote the negative emotional valence while happiness wasSpielberg State-Trait Anxiety Inventory while positive emotional valence was measured using the Oxford Happiness Scale. The results indicates that presentation of a prime related or unrelated to the target word did not yield significant differences. Generally, the use of stimuli was shown to have a great effect on all the tasks indicated by the high levels of correctedness.

Introduction

The acquisition of language is a daunting endeavor that requires teachers and student to adequately engage in relevant tasks. The learning process is governed by the prevailing notion that the human mind entails both conscious and unconscious processes that aid in perceiving words and letters irrespective of whether awareness is created or not (Kouider & Faivre, n.d.). It is conceived that the presentation of related words is used to enhance perception for related words compared to unrelated words (Heyman, Rensbergen, Hutchison, & Deyne, 2015). However, there has not been adequate research on the use of these related and unrelated words on pattern identification, which is one of the objectives of this study.

When a stimulus affecting behavior and/or neural activity when an individual remains unaware is referred to as unconscious perception. This is what is perceived as initiating a response without a creating awareness; the rationale for doing this is establishing dissociation between the processing bit and the conscious access. Until now, there is confusion on which direction teachers should take considering in reference to subjective and objective measures. The notion of correctly identifying words or letters is based on one's memory working capacity as indicated by Heyman et al. (2015). Despite the fact that stimuli is presented, there is bound to be some level of error as is evident in various scenarios, including court cases. Most of the studies on the effect of stimuli and awareness on language learning are old; hence, this study is essential in that it aims to give up-to-date evidence on this subject.

<div align="center">Hypotheses</div>

- ✓ There is no difference between creating awareness and not creating awareness on the correctness of tasks
- ✓ Priming effect has no effect on judgment
- ✓ The is no significant difference in priming effects for emotional valence

✓ Priming effect has no effect on identification of patterns in words and letter search
tasks

Discussion

This study indicated that priming effect is greater for emotional valence only when
unrelated negative words were used. However, no priming effect was realized for letter
search or cog load. This findings indicate that creation or lack of creation of awareness has no
effect on language learning or letter identification. Hence, this study supports the hypothesis
that students can accurately name figures even when there was no stimuli in sight (Williams,
1938). Thereby, it is true that subliminal stimuli can help to correctly identify a response.
This study supports the hypothesis that there is no relationship between awareness and
conscious experience of information because students are able to correctly accomplish tasks
even when there is no awareness about it. This study indicated that the perception of letters
and words is strongly associated with emotional valence, and especially the negative valence.
This is similar to what previous studies have indicated regarding the effect of lack of
awareness on perception. In a study by Merikle, Smilek, and Eastwood (2001),

In view of the fact that reaction times were fastest for lettersearch, these results are
similar to those of previous studies that indicate that perception of words can occur without
awareness when an appropriate task is used (Reingold & Merikle, 1990). The fact that there
was no riming effect for lettersearch is supported by the study by de Groot and Nas (1991)
which showed that lexical representations for Dutch-English translations are not affected by
the priming. Hence, students can identify words and letters whether familiar or unfamiliar
words are used as stimuli. The lack of priming effect on identification of patterns and letters
could be attributed to the value of the pseudo-words; thus, it becomes easy to identify the
targeted words due to easiness in resemblance compared to the concept of semantic meaning
(Harris, Bargh, & Brownell, 2009).

The priming effect for emotional valence was high on a retrospective basis as indicated by Heyman et al. (2015). Based on their study, there was a high priming effect for backward associates irrespective of the type of working memory capacity. However, this study went further to indicate the effect of priming on emotion, and especially for negative emotional valence. Previous studies have studied the effects of such subliminal priming using magnetic resonance imaging, which can be used as a basis to explain the results shown in the present study. Whalen et al. (1998) indicated that fearful faces were linked to greater neural activity than happy faces; hence, the greater priming effect for negative emotional valence compared to positive emotional valence.

On a different note, this study tends to nullify the highly held notion that unconscious perception makes individuals to be under confident when identifying target words because the use of unrelated words is regarded a subjective measure (Persaud, McLeod, & Cowey, 2007). In addition, compared to other studies (Neely, 1991) that indicate faster reaction times when prime relatedness is evident, this study did not indicate faster reaction times for prime unrelatedness between the prime word and target word for all the three tasks. The difference in the findings on this phenomenon could be due to the selection bias of subjects that are native English speakers. The results from this study, however, are not conclusive due to various limitations that might have introduced bias as discussed below.

Limitation

Despite the fact that the study conducted an anxiety assessment test to understand the emotional levels of participants, there is no indication of a baseline language assessment, which is likely to affect perception of words and letters. In addition, there is no indication that the participants used in this study has the same level of anxiety levels of the beginning of the study because differences anxiety levels at the beginning of the study might affect the priming effects of the results. The fact that native English speakers were used might have

resulted in the nature of results considering that native English speakers are familiar with English compared to non-native speakers. Therefore, it is necessary to conduct a similar study on a group of students, who English is not their first language, with the same level of knowledge in English. Another source of limitation is in the types of questions extracted from the scales, and there it is not clear what determined the selection of the questions used instead of using the entire scales. Also, there was need to comment on the questions that were extracted and also report on their reliability and validity.

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