

# [Use of lexical decision for word recognition](https://assignbuster.com/use-of-lexical-decision-for-word-recognition/)

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The paper “ Use of Lexical Decision for Word Recognition" is a pathetic variant of a term paper on psychology. Lexical decision refers to the investigational mission where the participants classify visual stimuli as words or non-words accurately and as quickly as possible. The findings get mostly interpreted as evidence that people have mental representations for words in a “ mental lexicon” that we access while recognizing words. In word recognition, the human neuro-system has codes and images that are activated when the words representing a particular object or meaning is activated. There are specific areas of the brain that react differently to lexical decisions concerning automatic and controlled processing, whereas other areas respond differently to primed and unprimed lexical decisions. In other words, different neural regions are involved in the processing of lexical decisions for target words related to principal and secondary meanings.

Word recognition is amplified by repetition and frequency of the words. Words that appear more frequently are easily recognizable; frequent words have a robust mental representation than infrequent lexis (Yan, 2010). In addition, low-frequency words require more extensive processing than high-frequency words; this explains the difference in recognition word frequency effect. Advanced studies with orthographically illegal nonwords and orthographically legal but unwarlike nonwords demonstrated that lexical decisions are subjective to word length but are primarily influenced by word frequency. The phenomenon illustrated that the letter length effect was influenced by a post access spelling confirmation. Lastly, the blocked naming of words only yielded outcomes analogous to the lexical decision, devoid of length effects but with frequency effects pinpointing lexical access. Therefore, the results recommended two separate and independent means of word naming, both interceded by a lexical acquaintance (2010).

Experiment 1: Reicher-Wheeler task
The experiment involved twenty participants of Arabic descent, and who was well versed with the native Arabic language. The experiment investigates word recognition using Reicher-Wheeler task. The first stimulus involved visual acuity using the Bailey-Lovie eye chart. Each stimulus was flapped up briefly (17ms) at the center of the screen.

The result indicated that there was a significant difference in accuracy across conditions in the Arabic word recognition. During the session, it was revealed that words were repeated more accurately (86%): pseudo-words had a high accuracy of repetition (81%) than non-words (78%), with the lowest reporting accuracy (71%) recorded for inverted words. The data illustrated that the dominance effects formerly reported in other languages also exist in the Arabic language. The edifying of the PSE and WSE in Arabic demonstrates that the perceptual experiences typify a universal quality of human alphabetic language acuity even in unique languages like Arabic, which varies significantly from the conventional languages (Yan, 2010).

Experiment 2: Lexical Decision Task
The task was used to further investigate the word superiority effect in the Arabic language. Twelve participants, who did not participate in the first experiment, were used. Lexical decision task provides a measure for reaction time for word recognition. The twelve participants were all right-handed so they had left hemisphere dominance in the brain, which is a primary factor in word recognition. The repeated measure t-test was used to calculate the error rates and the reaction times for the lexical decisions in each word and pseudo-word stimuli. The results indicated that there was the observable difference in the accuracy of responses for words and pseudo-words, t(11) = 2. 906. The results had a similarity with other experiments conducted in other conventional languages like English (European languages). The reactions asserted that the lexical definition for the Arabic language conformed to the universal standards, like other languages (Abubaker, 2012).

Conclusion
The word superiority effect achieved by the two experiments exposed the enhanced dispensation of the decisive letter rather than the process of erudite presumption. The results contributed in a number of ways to the understanding of Arabic word recognition, and provided an important basis for more research into this topic (Whitehouse, 2008). In particular, the experiments revealed that similar processes are involved in the recognition of Arabic words are also used to recognise words in Latinate languages, despite the very different characteristics of Arabic. Therefore, with very brief contact duration, these features of Arabic do not prevent the relative efficiency of real word perception. More broadly, the demonstration of WSE and PSE in Arabic indicates that these phenomena represent a culturally global aspect of human alphabetic language.