and Jalbert et al (2011) found that the word length can be abolished if lists are used that are composed of alternating short and long words. Jalbert et al (2011) theorise that the WLE could partly be caused by the fact that short words, when presented consecutively, tend to have more orthographic neighbours (words that differ by only one letter), which may have a positive effect on facilitation, and therefore result in better recall. Inter-item association theories have shown support for this approach (Crowder, 1986). This also highlights a general issue with studying memory for verbal stimuli, as the lexical properties and unique meanings of words to the individual are difficult to control for, and so great care must be taken when devising stimuli lists.

Furthermore, Katkov, Romani and Tsodyks (2014) found that free recall resulted in the effect being reverse, with long words being easier to remember. They reject the WLE, saying that recall is dependent on the size of the neural representations that a word possessed, and that, on average, larger words have more varied neural representations and so tend to be remembered more easily. Despite this, they note how large variances in recall ability exist within a given word length, and so they suggest, like many others, that there is more than one short term verbal memory factor functioning during the presentation of visual stimuli. This alternate explanation undermines the theory that long words are forgotten because articulatory rehearsal process does not have time to maintain them. Therefore, accumulative evidence would seem to indicate that the WLE is not able to prove that the articulatory rehearsal process is a key mechanism in verbal short-term memory, lessening its contribution to the phonological loop model.

The third effect of verbal short-term memory is the irrelevant sound effect (ISE), otherwise known as the unattended speech effect: Where serial recall of visually presented words is disrupted by simultaneous speech (Salamé and Baddeley, 1989). ISE exists even when participants are told to ignore the noise (Tremblay et al, 2000) and is thought to occur because irrelevant sounds interfere with the articulatory rehearsal process element of the phonological loop, with speech gaining obligatory access to the verbal STM store (Baddeley, 2010). In a classic experiment to test this phenomenon, participants might be presented with a sequence of digits which they are required to memorise, during which background noise is played, that might consist of speech, music or some other form of sound, depending on the experimental hypothesis.