Abstract

Background: False memory illusions have been widely studied using the Deese/Roediger-McDermott paradigm (DRM). In this paradigm, participants study words semantically related to a single nonpresented critical word. In a memory test critical words are often falsely recalled and recognized. Method: The present study was conducted to measure the levels of false recognition for seventy-five Spanish DRM word lists that have multiple critical words per list. Lists included three critical words (e.g., HELL, LUCEFER, and SATAN) simultaneously associated with six studied words (e.g., devil, demon, fire, red, bad, and evil). Different levels of forward associative strength (FAS) between the critical words and their studied associates were used in the construction of the lists. Specifically, we selected lists with the highest FAS values possible and FAS was continuously decreased in order to obtain the 75 lists. Results: Six words per list, simultaneously associated with three critical words, were sufficient to produce false recognition. Furthermore, there was wide variability in rates of false recognition (e.g., 53% for DUNGEON, PRISON, and GRATES; 1% for BRACKETS, GARMENT, and CLOTHING). Finally, there was no correlation between false recognition and associative strength. Conclusions: False recognition variability could not be attributed to differences in the forward associative strength.

Keywords

False memory, false recognition, DRM paradigm, forward associative strength (FAS).