Associative interference: The effect of contextual separation on learning word-pair associations

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People form many competing associations sharing a common word, such as names, e.g., aretha-FRANKLIN and FRANKLIN-roosevelt or locations, e.g., PHONE-bag and PHONE-wallet, yet they can resolve this interference between words to correctly name a famous person or locate their phone. This resolution may be influenced by learning the associations separately rather than together. Studies have examined accuracy for two competing associations when one word-pair is learned to a high proficiency before learning the second word-pair (Postman & Gray, 1977; Wichawut & Martin, 1971). This procedure allowed one to form a stronger memory for one association compared to the other. However it is unclear how contextual separation affects one's ability to remember two competing associations when the same amount of time is spent learning each one. This study examined the effect of contextual separation during learning (1 or 2 list(s)) on recall accuracy. We calculated the correlation between recalling the target words (e.g., aretha and roosevelt) and measured participants' language background. Bilinguals may deal with competing associations daily as they have two languages referring to similar concepts. We found that learning competing associations in two lists helped participants form facilitative rather than competing relationships between the target words. Also multi-linguals were better able to handle this associative interference compared to monolinguals. Our results support findings that learning word pair associations separately can create different contexts, which aid in recall (Sahakyan & Kelley, 2002; Unsworth, Brewer & Spiller, 2013; Verkoeijen, Rikers, & Schmidt, 2004) and suggest that our memory for two competing word-pair associations can positively interact with each other.