The breadth of animacy in memory: New evidence from prospective memory

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The animacy effect describes a memory phenomenon where animate entities (e.g., animals, people) encoded in a past event are remembered better than inanimate things (e.g., objects). This effect has been widely replicated in multiple languages, encoding procedures, and to-be-remembered materials (e.g., words, pictures). It was hypothesized that, from an evolutionary perspective, it would have been adaptive for humans to better remember animate (vs. inanimate) things, as animates have a higher potential to influence survival and reproductive success (e.g., animates can be predators, prey, potential partners). Although it is widely assumed that memory primarily concerns past events, memory functioning is foremost future-directed. Indeed, most daily tasks involve future-oriented intentions, such as remembering to deliver a message to a friend or to take medication at the appropriate time. This type of memory is known as "prospective memory". Following the same evolutionary framework, we hypothesized that prospective memory should also be sensitive to the animacy dimension of targets (i.e., those that signal the need to implement an intention). Across a series of three studies, participants engaged in an ongoing task while being presented with words corresponding to animate and inanimate things; however, whenever specific animate and inanimate words were presented (e.g., bottle and dancer), participants should remember to undergo a specific task (i.e., to press a different keyboard key; prospective memory task). These studies were conducted with both Portuguese and English participants and used various procedures. Our findings revealed, for the first time, that animate targets also improve the execution of future intended actions (Figure 1). Besides the theoretical importance of this novel finding, potential applications are to be explored. Who knows whether using animate (vs. inanimate) cues in our daily lives would improve our prospective memory performance?

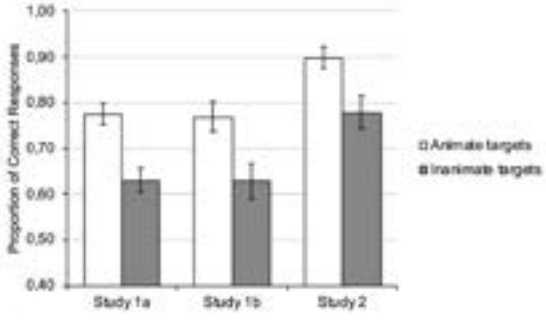

FIGURE 1
Mean Proportion of Prospective Memory Correct Responses for Animate and Inanimate Targets, Across Studies. Error Bars Represent Standard Errors of the Mean.

References

Félix, S. B., Poirier, M., Nairne, J. S., & Pandeirada, J. N. S. (2023). The breadth of animacy in memory: New evidence from prospective memory. *Psychonomic Bulletin and Review*. Advance online publication. https://doi.org/10.3758/s13423-023-02406-y