

BRIEF SUMMARY

Denkinger, B., & Koutstaal, W. (2014). A set of 265 pictures standardized for studies of the cognitive processing of temporal and causal order information. *Behavior Research Methods*, 46, 229–239.

Planning, predicting, reasoning, and acting often depend crucially on the correct encoding and application of knowledge concerning the temporal and causal ordering of events. Yet no pictorial stimulus set is optimized for investigating the processing of temporal and causal order information. We introduce a novel stimulus set of 265 black-and-white line drawings depicting a diverse array of recognizable events. Most of the images in the stimulus set ($N=222$) share a thematic or conceptual association with one other image in the set, and the stimuli were created and extensively normed such that the image pairs vary in the degrees to which they share a causal, ordered relation with one another. The stimuli were standardized in a series of normative tasks, including concept/noun/verb agreement, perceived frequency, visual similarity, and indexes of three features of causal associations between events (i.e., temporal proximity, exclusivity, and priority). Both younger adults (ages 18–30 years) and older adults (ages 60–80 years) contributed normative data, allowing for broad applications of the stimuli to the study of normal and age-related changes in the encoding, retention, and retrieval of information regarding temporal and causal order. Complete normative data sets are available in the online supplemental materials, and the full stimulus set is available by contacting the first author.

KEYWORDS: causal learning, serial order, memory, associative learning, temporal order
