

Kusev, P., Ayton, P., van Schaik, P., & Stewart, N. (2009). Judgments relative to patterns. Paper presented at the 22nd Bi-annual Conference on Subjective Probability, Utility and Decision Making. Italy. Rovereto. 23-27, 2009. Abstracts of the SPUDM, EADM bulletin.

Four experiments study relative frequency judgment and recall of sequentially presented items drawn from two distinct categories (e.g., cities, animals). The experiments show that judged frequencies of sequentially encountered stimuli are affected by certain properties of the sequence configuration. We find (a) a first-run effect whereby people overestimate the frequency of a given category when that category is the first repeated category to occur in the sequence and (b) a dissociation between judgments and recall; respondents may judge one event more likely than the other and yet recall more instances of the latter. Judged frequency of categories of items is influenced by the first run - which may reflect the operation of a judgment heuristic. The distribution of recalled individual items does not correspond to the frequency estimates, indicating that participants do not make frequency judgments by sampling their memory for individual items. We propose a simple strategy whereby respondents use the first run as a cue to frequency that accounts for this observation and other context effects on memory and judgment.