

Supplemental Material 2

Manuscript title: Prospective memory in the rat
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We used a Bayesian analysis to test the null hypothesis (Gallistel 2009) that the correlation between slope and latency is zero, using prior hypotheses (Cohen 1988) that the correlation is small ($r = -0.1$), medium ($r = -0.243$), or large ($r = -0.371$). This analysis showed that the null hypothesis was superior to both medium and large effects, with Bayes factors of 27 and 3262, respectively. A small-effect prior hypothesis (Bayes factor = .53) produced a negligible result (Gallistel 2009), suggesting that the observed 0.0036 proportion of variance could not be distinguished from 0.01 proportion of variance. Overall the weight of evidence suggests that the null hypothesis of zero is a reasonably safe bet.

References

- Cohen J (1988) Statistical power analysis for the behavioral sciences. Second edn. Lawrence Erlbaum Associates, Hillsdale, NJ
Gallistel CR (2009) The importance of proving the null. Psychol Rev 116 (2):439-453.
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