

Learning from failure?

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Learning and testing

- Optimising learning is important for both students and educators.
- The *testing effect* (Roediger & Karpicke, 2006)
- Tests seem to help even when performance is poor (Kornell et al. 2009) ...
- ... and even for arbitrary pairings such as vocabulary learning (Potts & Shanks, 2014).



Potts & Shanks (2014)

Generate: roke - ? / roke - man / roke - mist

Study: roke - mist

Test:

'roke' means: lament threat mist loud

RESULT: Generate better than Study.

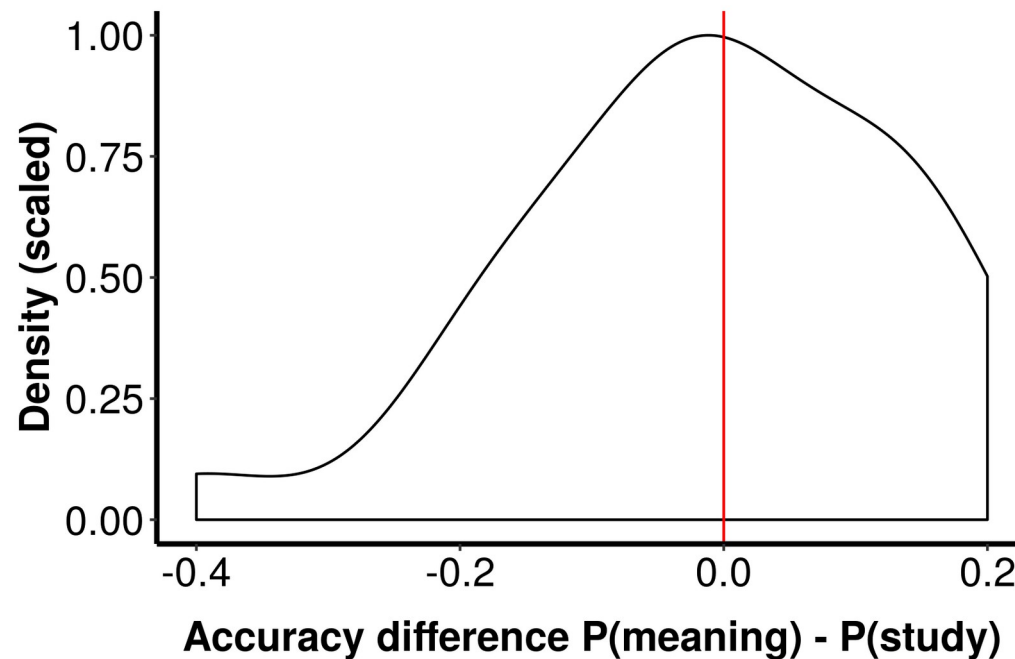
Our question

Would the Potts & Shanks result generalise to a more challenging type of test? (i.e. recall rather than recognition)

Method

- **27 participants** (2 lost due to technical errors)
- **Within-subjects** (Generate vs. Study)
- **15 word pairs per condition** (e.g. gadoid = fish)
- **Generate:**
 - 10 seconds: cue (gadoid) and guess
 - 7 seconds: pair (gadoid – fish)
- **Study:**
 - 17 seconds: gadoid – fish
- **Recall test: All 30 cues**
 - What does this word mean? gadoid

Results



Meaning: 0.13

Study: 0.14

BF = 0.30

No effect of study type in a cued recall test.

Next steps

- **Performance very low - floor effect?**
- **Test after each encoding coding.**

Any questions?