Part 3

Goal: To test if estimated parameters in RLWM are *reliable predictors* of stable learning strategies.

1. **Do a *real* replication study** using the same experiment and models with a new group of people.

2. ~~Change the *task*~~:

- Discourage WM use – *what's left when WM can't be used?*
  - *dynamic ISI*

- Discourage declarative learning for some blocks.
  - *Utilize* difficult stimuli (stars?)

- Detect RL vs LTM use by flipping associates.

3. ~~Change the *models*~~:

- Increase the likelihood that WM would be used for easier conditions.

- Increase load by providing a "Richer" experience of stimuli by defining more (overlapping) features (color, subject, orientation etc.)

- Slower RL by altering parameter range?

4. **Predict performance in a new task +:**

  Weather Prediction Task or others

  - *Perhaps collect new data with additional tasks (span tasks, e.g.)*

  - *New expanded range of RLWM parameters*

Estimated parameters in Exp 1
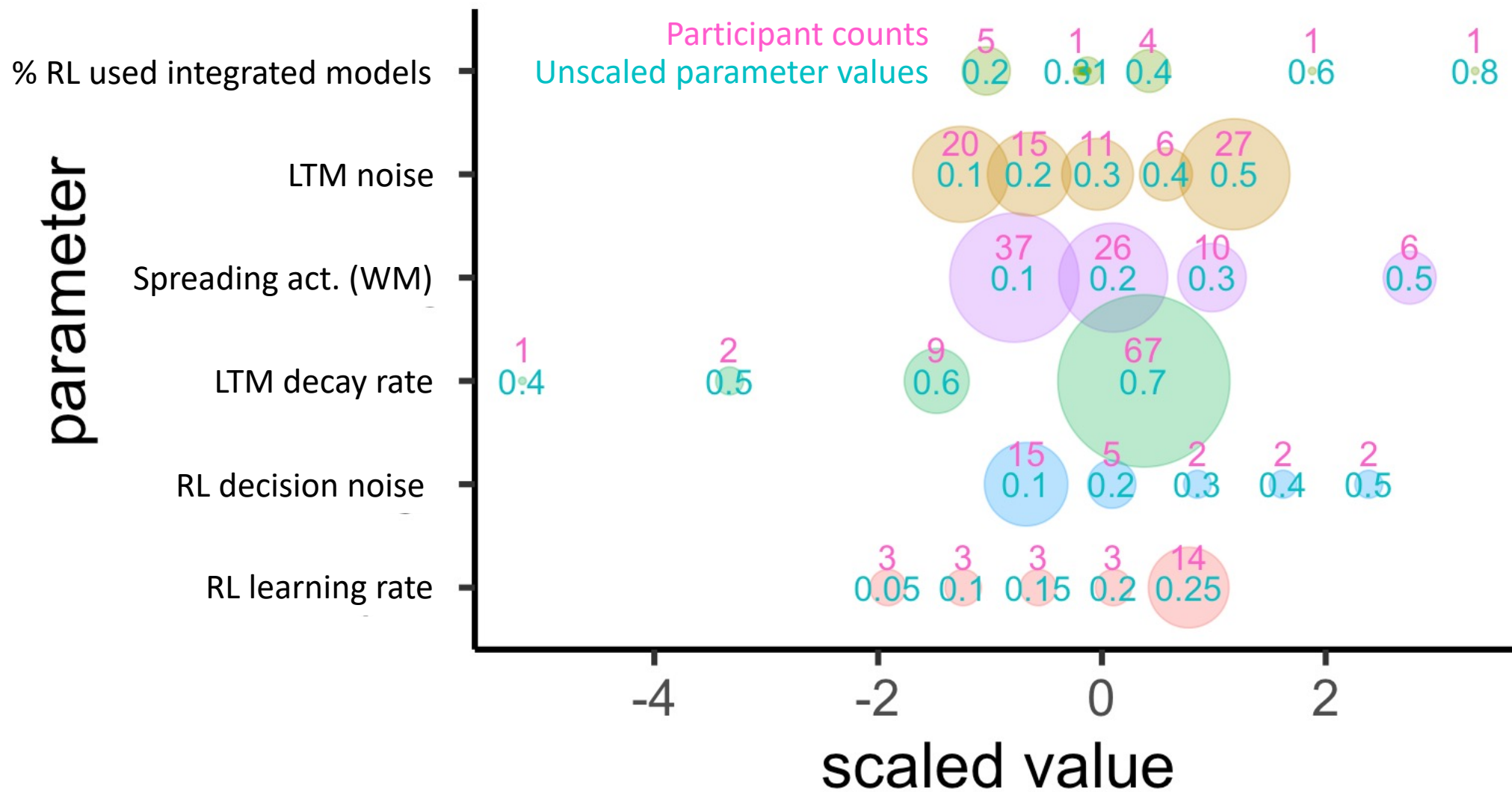
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Available data:

Experiment	n
RLWM	83
PSS	60 (stag +uclimb)
Weather Prediction	35 (stag)
N-back	60 (stag +uclimb)
Span Tasks	48 (realm + uclimb)
Artificial Grammar	35 (stag)
All-UCLIMB	25 (uclimb)

ACT-R Models that exist *in some form*:
- SPAN and N-back (Lovett et al.)
- PSS (Stocco et al.)
- Weather Prediction (TheT3ddy)

Perhaps we could use all *four* tasks to test the reliability of
- **Working memory** function/parameters
- **Reinforcement Learning** function/parameters
- **LTM** function/parameters

Note: probably fit all RLWM subjects to an integrated model to estimate both RL and LTM parameters.