

## Supplemental Material S4. Aim 2 (sub-aim) models.

*Notes:* Condition was contrast coded, and session was centered.

**Model Rhythm:** `subset_rhythm <- glmer(cbind(successes, failures) ~ session + (1 + session | Subject) + (1 + condition | sentence) + (1 | observations))`

### Random effects:

| <i>Groups</i> | <i>Name</i> | <i>Variance</i> | <i>Std.Dev.</i> | <i>Corr</i> |
|---------------|-------------|-----------------|-----------------|-------------|
| observations  | (Intercept) | 1.00704         | 1.0035          |             |
| sentence      | (Intercept) | 0.67133         | 0.8193          |             |
|               | condition1  | 0.41679         | 0.6456          | -0.04       |
| participant   | (Intercept) | 2.76601         | 1.6631          |             |
|               | session     | 0.05166         | 0.2273          | -0.09       |

*Number of obs:* 1297, *groups:* obs, 1297; sentence, 30; participant, 13

### Fixed effects:

|             | <i>Estimate</i> | <i>Std. Error</i> | <i>z value</i> | <i>Pr(&gt; z )</i> |
|-------------|-----------------|-------------------|----------------|--------------------|
| (Intercept) | -1.14781        | 0.48705           | -2.357         | 0.0184 *           |
| session     | 0.43813         | 0.06992           | 6.266          | 3.7e-10 ***        |

**Model Control:** `subset_control <- glmer(cbind(successes, failures) ~ session + (1 + session | subject) + (1 | sentence) + (1 | observations))`

*Notes:* Session was centered.

### Random effects:

| <i>Groups</i> | <i>Name</i> | <i>Variance</i> | <i>Std.Dev.</i> | <i>Corr</i> |
|---------------|-------------|-----------------|-----------------|-------------|
| observations  | (Intercept) | 0.93996         | 0.9695          |             |
| sentence      | (Intercept) | 0.58944         | 0.7678          |             |
| participant   | (Intercept) | 2.77635         | 1.6662          |             |
|               | session     | 0.01683         | 0.1297          | -0.56       |

*Number of obs:* 646, *groups:* obs, 646; sentence, 30; participant, 13

### Fixed effects:

|             | <i>Estimate</i> | <i>Std. Error</i> | <i>z value</i> | <i>Pr(&gt; z )</i> |
|-------------|-----------------|-------------------|----------------|--------------------|
| (Intercept) | -1.21417        | 0.48728           | -2.492         | 0.0127 *           |
| session     | 0.33542         | 0.05582           | 6.009          | 1.87e-09 ***       |