**Preliminary Results, Mario's Master Thesis, 14.07.2025**

Independent variables

- Probe-to-Target Similarity (PTS; Nachfolgende Analysen beziehen sich vorerst ausschließlich auf PTS=Same-Trials)

- Queried Item Position (QIP: "P **=** T**1**?" vs. "P = T**2**?", visual probe, comparison; Gerne auch eine andere Bezeichnung; Analysen beziehen sich nur auf die zwei genannten question prompts, die Analysen zu den beiden anderen, "P!=T1?" vs. "P!=T2?", stehen noch aus.)

- Target Position (TP: 1 vs. 2; tactile stimulus, encoding)

- Accessory Stimulus Position (ASP: 1 vs. 2; auditory stimulus, encoding)

- Target-to-Nontarget Similarity (TNS: low vs. high; tactile stimulus, encoding)

Dependent variable

- *p*(c) = *p*(*correct*) - *p*(*error*).

**Table 1. *p*(c) under all *TP* (*Target Position*) × *ASP* (*Accessory Stimulus Position*) × *QIP* (*Queried Item Position*) × *TNS* (*Target-to-Nontarget Similarity*) experimental conditions / combinations**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***TP*** | **ASP** | **QIP** | **TNS** | ***Mean p(c)*** | ***SD p(c)*** |
| 1 | 1 | 1 | high | .57 | .39 |
| 2 | 1 | 1 | high | .45 | .25 |
| 1 | 2 | 1 | high | .69 | .34 |
| 2 | 2 | 1 | high | .51 | .48 |
| 1 | 1 | 2 | high | .44 | .54 |
| 2 | 1 | 2 | high | .83 | .16 |
| 1 | 2 | 2 | high | .41 | .48 |
| 2 | 2 | 2 | high | .75 | .19 |
| 1 | 1 | 1 | low | .70 | .39 |
| 2 | 1 | 1 | low | .74 | .18 |
| 1 | 2 | 1 | low | .72 | .31 |
| 2 | 2 | 1 | low | .68 | .26 |
| 1 | 1 | 2 | low | .67 | .40 |
| 2 | 1 | 2 | low | .83 | .17 |
| 1 | 2 | 2 | low | .76 | .29 |
| 2 | 2 | 2 | low | .83 | .15 |

**Table 2. Results of the repeated-measures ANOVA**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Parameters* | | | |
| *Model* | *df* | *F* | *MSE* | *p* |
| *TP* | 1,8 | 1.105 | .224 | .324 |
| *ASP* | 1,8 | 0.355 | .015 | .568 |
| *TNS* | 1,8 | 11.96 | .078 | .009\*\* |
| *QIP* | 1,64 | 1.940 | .119 | .169 |
| *TP × ASP* | 1,8 | 0.998 | .048 | .347 |
| *ASP × QIP* | 1,64 | 0.210 | .013 | .649 |
| *QIP × TNS* | 1,64 | 0.015 | .001 | .904 |
| *TP ×TNS* | 1,8 | 0.862 | .023 | .380 |
| *TP × QIP* | 1,64 | 14.76 | .905 | .000\*\*\* |
| *ASP × TNS* | 1,8 | 0.010 | .045 | .924 |
| *TP × ASP × TNS* | 1,8 | 0.055 | .052 | .820 |
| *TP × ASP × QIP* | 1,64 | 5.952 | .365 | .017\* |
| *ASP × QIP × TNS* | 1,64 | 1.499 | .092 | .225 |
| *TP × ASP × QIP × TNS* | 1,64 | 0.000 | .000 | .993 |

*Note*. *TP* = *Target Position*, *ASP* = *Accessory Stimulus Position*, *TNS = Target-to-Nontarget Similarity*, *QIP = Queried Item Position*; *MSE* = *Mean Sum of Squared Errors; p = Level of significance.*

*R* comment for running regression model*: p*\_*c* ~ *TP*\**ASP*\**TNS*\**QIP* + *Error*(*participant* / (*TP*\**ASP*\**TNS*\**QIP*))

**Table 3. Means of means (and *SD*s) for (error-corrected) percent correct, p(c), underlying the significant 2-way interaction between *Target Position* and *Queried Item Position*:**

|  |  |  |
| --- | --- | --- |
|  | *Queried Item Position* | |
| *Target Position* | 1 | 2 |
| 1 | .67 (.35) | .57 (.44) |
| 2 | .59 (.32) | .81 (.17) |

*Note*. *p*(*c*) = *p*(*correct*)-*p*(*error*)

**Table 4. Descriptives on the significant 3-way interaction between Target Position (TP), Queried Item Position and Target-to-Nontarget Similarity (TNS) with respect to *p*(c) = *p*(*correct*) - *p*(*error*)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Means* (and *SD*s) |  |  |  |
|  |  | QIP | |
|  | TP | 1 | 2 |
| TNS=low | 1 | .71 (.34) | .71 (.34) |
|  | 2 | .71 (.22) | .83 (.15) |
|  |  |  |  |
| TNS=high | 1 | .63 (.36) | **.42** (.49) |
|  | 2 | **.48** (.37) | .79 (.17) |

**Table 5. Descriptives on the significant 3-way interaction between Target Position (TP), Queried Item Position and Accessory Stimulus Position (ASP) with respect to *p*(c) = *p*(*correct*) - *p*(*error*)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Means* (and *SD*s) |  |  |  |
|  |  | QIP | |
|  | TP | 1 | 2 |
| *ASP*=1 | 1 | .64 (.38) | .55 (.48) |
|  | 2 | .60 (.26) | .83 (.16) |
|  |  |  |  |
| *ASP*=2 | 1 | .70 (.32) | .58 (.42) |
|  | 2 | .59 (.39) | .79 (.17) |

**Table 6. Descriptives on the significant 3-way interaction between Target Position (TP), Queried Item Position and Accessory Stimulus Position (ASP) with respect to *p*(c) = *p*(*correct*) - *p*(*error*)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Means* (and *SD*s) |  |  |  |
|  |  | QIP | |
|  | TP | 1 | 2 |
| *ASP*=1 | 1 | .64 (.38) | .55 (.48) |
|  | 2 | .60 (.26) | .83 (.16) |
|  |  |  |  |
| *ASP*=2 | 1 | .70 (.32) | .58 (.42) |
|  | 2 | .59 (.39) | .79 (.17) |

**Table 7. Descriptives on 3-way interaction between Queried Item Position (QIP), Accessory Stimulus Position (ASP) and Target-to-Nontarget (TNS) with respect to *p*(c) = *p*(*correct*) - *p*(*error*)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Means* (and *SD*s) |  |  |  |
|  |  | QIP | |
|  | *ASP* | 1 | 2 |
| *TNS*=low | 1 | .72 (.30) | .75 (.31) |
|  | 2 | .70 (.28) | .79 (.23) |
|  |  |  |  |
| *TNS*=high | 1 | .51 (.32) | .63 (.44) |
|  | 2 | .60 (.42) | .58 (.39) |