# Results : Sensitivity (d-prime)

## Repeated Measures ANOVA

Within Subjects Effects

| | Sum of Squares | df | Mean Square | F | p | $\eta^2_p$ |
|---|---|---|---|---|---|---|
| Probe Type | 0.01499 | 1 | 0.01499 | 0.02170 | 0.884 | 0.001 |
| Probe Type ✻ YesKey | 0.00220 | 1 | 0.00220 | 0.00318 | 0.956 | 0.000 |
| Residual | 13.12349 | 19 | 0.69071 | | | |
| Compatibility | 71.76098 | 1 | 71.76098 | 83.59729 | < .001 | 0.815 |
| Compatibility ✻ YesKey | 0.21495 | 1 | 0.21495 | 0.25041 | 0.623 | 0.013 |
| Residual | 16.30984 | 19 | 0.85841 | | | |
| Presentation Time | 62.74341 | 5 | 12.54868 | 37.27613 | < .001 | 0.662 |
| Presentation Time ✻ YesKey | 2.23012 | 5 | 0.44602 | 1.32492 | 0.260 | 0.065 |
| Residual | 31.98091 | 95 | 0.33664 | | | |
| Probe Type ✻ Compatibility | 51.69345 | 1 | 51.69345 | 76.63277 | < .001 | 0.801 |
| Probe Type ✻ Compatibility ✻ YesKey | 0.31920 | 1 | 0.31920 | 0.47320 | 0.500 | 0.024 |
| Residual | 12.81665 | 19 | 0.67456 | | | |
| Probe Type ✻ Presentation Time | 4.36758 | 5 | 0.87352 | 1.89472 | 0.102 | 0.091 |
| Probe Type ✻ Presentation Time ✻ YesKey | 5.27116 | 5 | 1.05423 | 2.28670 | 0.052 | 0.107 |
| Residual | 43.79755 | 95 | 0.46103 | | | |
| Compatibility ✻ Presentation Time | 15.85659 | 5 | 3.17132 | 5.84134 | < .001 | 0.235 |
| Compatibility ✻ Presentation Time ✻ YesKey | 0.20661 | 5 | 0.04132 | 0.07611 | 0.996 | 0.004 |
| Residual | 51.57637 | 95 | 0.54291 | | | |
| Probe Type ✻ Compatibility ✻ Presentation Time | 15.25768 | 5 | 3.05154 | 6.19535 | < .001 | 0.246 |
| Probe Type ✻ Compatibility ✻ Presentation Time ✻ YesKey | 0.91112 | 5 | 0.18222 | 0.36996 | 0.868 | 0.019 |
| Residual | 46.79250 | 95 | 0.49255 | | | |

*Note.* Type 3 Sums of Squares

**[3]**

Between Subjects Effects

| | Sum of Squares | df | Mean Square | F | p | $\eta^2_p$ |
|---|---|---|---|---|---|---|
| YesKey | 3.25 | 1 | 3.25 | 1.26 | 0.276 | 0.062 |
| Residual | 49.17 | 19 | 2.59 | | | |

*Note.* Type 3 Sums of Squares

## Assumptions

Tests of Sphericity

| | Mauchly's W | p | Greenhouse-Geisser ε | Huynh-Feldt ε |
|---|---|---|---|---|
| Probe Type | 1.000 | NaN [a] | 1.000 | 1.000 |
| Compatibility | 1.000 | NaN [a] | 1.000 | 1.000 |
| Presentation Time | 0.429 | 0.421 | 0.772 | 0.993 |
| Probe Type ✻ Compatibility | 1.000 | NaN [a] | 1.000 | 1.000 |
| Probe Type ✻ Presentation Time | 0.612 | 0.870 | 0.883 | 1.000 |
| Compatibility ✻ Presentation Time | 0.206 | 0.020 | 0.736 | 0.935 |
| Probe Type ✻ Compatibility ✻ Presentation Time | 0.563 | 0.778 | 0.824 | 1.000 |

[a] The repeated measures has only two levels. The assumption of sphericity is always met when the repeated measures has only two levels.

## Repeated Measures ANOVA

**Action** probes

Within Subjects Effects

| | Sum of Squares | df | Mean Square | F | p | $\eta^2_p$ |
|---|---|---|---|---|---|---|
| Presentation Time | 44.95761 | 5 | 8.99152 | 19.1290 | < .001 | 0.502 |
| Presentation Time ✻ YesKey | 4.50167 | 5 | 0.90033 | 1.9154 | 0.099 | 0.092 |
| Residual | 44.65453 | 95 | 0.47005 | | | |
| Compatibility | 0.82095 | 1 | 0.82095 | 5.0699 | 0.036 | 0.211 |
| Compatibility ✻ YesKey | 0.00514 | 1 | 0.00514 | 0.0317 | 0.861 | 0.002 |
| Residual | 3.07661 | 19 | 0.16193 | | | |
| Presentation Time ✻ Compatibility | 3.14966 | 5 | 0.62993 | 1.1616 | 0.334 | 0.058 |
| Presentation Time ✻ Compatibility ✻ YesKey | 0.25747 | 5 | 0.05149 | 0.0950 | 0.993 | 0.005 |
| Residual | 51.52020 | 95 | 0.54232 | | | |

*Note.* Type 3 Sums of Squares

**[3]**

Between Subjects Effects

| | Sum of Squares | df | Mean Square | F | p | $\eta^2_p$ |
|---|---|---|---|---|---|---|
| YesKey | 1.71 | 1 | 1.71 | 1.34 | 0.261 | 0.066 |
| Residual | 24.25 | 19 | 1.28 | | | |

*Note.* Type 3 Sums of Squares

## Repeated Measures ANOVA

**Scene** probes

Within Subjects Effects

| | Sum of Squares | df | Mean Square | F | p | $\eta^2_p$ |
|---|---|---|---|---|---|---|
| Presentation Time | 22.153 | 5 | 4.431 | 13.524 | < .001 | 0.416 |
| Presentation Time ✻ YesKey | 3.000 | 5 | 0.600 | 1.831 | 0.114 | 0.088 |
| Residual | 31.124 | 95 | 0.328 | | | |
| Compatibility | 122.633 | 1 | 122.633 | 89.445 | < .001 | 0.825 |
| Compatibility ✻ YesKey | 0.529 | 1 | 0.529 | 0.386 | 0.542 | 0.020 |
| Residual | 26.050 | 19 | 1.371 | | | |
| Presentation Time ✻ Compatibility | 27.965 | 5 | 5.593 | 11.341 | < .001 | 0.374 |
| Presentation Time ✻ Compatibility ✻ YesKey | 0.860 | 5 | 0.172 | 0.349 | 0.882 | 0.018 |
| Residual | 46.849 | 95 | 0.493 | | | |

*Note.* Type 3 Sums of Squares

**[3]**

Between Subjects Effects

| | Sum of Squares | df | Mean Square | F | p | $\eta^2_p$ |
|---|---|---|---|---|---|---|
| YesKey | 1.54 | 1 | 1.54 | 0.770 | 0.391 | 0.039 |
| Residual | 38.04 | 19 | 2.00 | | | |

*Note.* Type 3 Sums of Squares

## References


**[1]** The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

**[2]** R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).

**[3]** Singmann, H. (2018). *afex: Analysis of Factorial Experiments*. [R package]. Retrieved from https://cran.r-project.org/package=afex.