

Augmented In-Person Stats

The following pages include the full statistical test result tables for the in-person deployment (i.e., third experiment) covered in the manuscript body. This information includes the full post hoc testing results.

Results

ANOVA

| | Sum of Squares | df | Mean Square | F | p | η^2 |
|----------------------|----------------|----|-------------|------|-------|----------|
| ANOVA - Friendliness | | | | | | |
| Condition | 1.84 | 2 | 0.922 | 1.46 | 0.243 | 0.056 |
| Residuals | 30.98 | 49 | 0.632 | | | |

[3]

Assumption Checks

| F | df1 | df2 | p |
|--|-----|-----|-------|
| Homogeneity of Variances Test (Levene's) | | | |
| 0.675 | 2 | 49 | 0.514 |

[3]

| Statistic | p |
|-------------------------------|--------|
| Normality Test (Shapiro-Wilk) | |
| 0.950 | 0.0285 |

ANOVA

| | Sum of Squares | df | Mean Square | F | p | η^2 |
|-----------------|----------------|----|-------------|-------|-------|----------|
| ANOVA - Service | | | | | | |
| Condition | 1.11 | 2 | 0.557 | 0.657 | 0.523 | 0.026 |
| Residuals | 41.56 | 49 | 0.848 | | | |

[3]

Assumption Checks

| F | df1 | df2 | p |
|--|-----|-----|-------|
| Homogeneity of Variances Test (Levene's) | | | |
| 1.78 | 2 | 49 | 0.180 |

[3]

| Statistic | p |
|-------------------------------|--------|
| Normality Test (Shapiro-Wilk) | |
| 0.943 | 0.0143 |

ANOVA

| | Sum of Squares | df | Mean Square | F | p | η^2 |
|---------------|----------------|----|-------------|------|---------|----------|
| ANOVA - Funny | | | | | | |
| Condition | 13.5 | 2 | 6.761 | 8.68 | 5.93e-4 | 0.262 |
| Residuals | 38.2 | 49 | 0.779 | | | |

[3]

Assumption Checks

| F | df1 | df2 | p |
|--|-----|-----|-------|
| Homogeneity of Variances Test (Levene's) | | | |
| 0.0553 | 2 | 49 | 0.946 |

[3]

| Statistic | p |
|-------------------------------|---------|
| Normality Test (Shapiro-Wilk) | |
| 0.840 | 6.07e-6 |

Post Hoc Tests

| Comparison | | Mean Difference | SE | df | t | P _{tukey} | Cohen's d |
|----------------------------------|----------------|-----------------|-------|------|----------|--------------------|-----------|
| Condition | Condition | | | | | | |
| Post Hoc Comparisons - Condition | | | | | | | |
| Explicit | - Non-explicit | 2.11e-15 | 0.303 | 49.0 | 6.97e-15 | 1.00000 | 1.78e-15 |
| | - No Speech | 1.07 | 0.298 | 49.0 | 3.59 | 0.00216 | 1.21 |
| Non-explicit | - No Speech | 1.07 | 0.298 | 49.0 | 3.59 | 0.00216 | 1.21 |

Note. Comparisons are based on estimated marginal means

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Estimated Marginal Means

Condition

| Condition | Mean | SE | 95% Confidence Interval | |
|--------------------------------------|------|-------|-------------------------|-------|
| | | | Lower | Upper |
| Estimated Marginal Means - Condition | | | | |
| Explicit | 4.29 | 0.214 | 3.86 | 4.72 |
| Non-explicit | 4.29 | 0.214 | 3.86 | 4.72 |
| No Speech | 3.22 | 0.208 | 2.80 | 3.64 |

[4]

ANOVA

| | Sum of Squares | df | Mean Square | F | p | η^2 |
|-----------------|----------------|----|-------------|-------|-------|----------|
| ANOVA - Overall | | | | | | |
| Condition | 0.118 | 2 | 0.0589 | 0.108 | 0.898 | 0.004 |
| Residuals | 26.709 | 49 | 0.5451 | | | |

[3]

Assumption Checks

| F | df1 | df2 | p |
|--|-----|-----|--------|
| Homogeneity of Variances Test (Levene's) | | | |
| 3.76 | 2 | 49 | 0.0303 |

[3]

| Statistic | p |
|-------------------------------|---------|
| Normality Test (Shapiro-Wilk) | |
| 0.850 | 1.13e-5 |

One-Way ANOVA (Non-parametric)

| | χ^2 | df | p | ϵ^2 |
|-------------------|----------|----|---------|--------------|
| Kruskal-Wallis | | | | |
| Laughed | 11.329 | 2 | 0.00347 | 0.22214 |
| Anthropomorphized | 3.282 | 2 | 0.19375 | 0.06436 |
| Related | 18.607 | 2 | 9.11e-5 | 0.36485 |
| Discomforted | 0.244 | 2 | 0.88514 | 0.00478 |

Dwass-Steel-Critchlow-Fligner pairwise comparisons

| | | W | p |
|--------------------------------|---------------------|------|---------|
| Pairwise comparisons - Laughed | | | |
| Explicit | Non-explicit | 1.05 | 0.73882 |
| Explicit | No Speech | 4.47 | 0.00446 |
| Non-explicit | No Speech | 3.54 | 0.03312 |

| | | W | p |
|--|---------------------|-------|-------|
| Pairwise comparisons - Anthropomorphized | | | |
| Explicit | Non-explicit | 2.55 | 0.168 |
| Explicit | No Speech | 1.15 | 0.693 |
| Non-explicit | No Speech | -1.48 | 0.548 |

| | | W | p |
|--------------------------------|---------------------|------|---------|
| Pairwise comparisons - Related | | | |
| Explicit | Non-explicit | 2.25 | 0.2487 |
| Explicit | No Speech | 5.90 | 8.91e-5 |
| Non-explicit | No Speech | 4.04 | 0.0119 |

| | | W | p |
|-------------------------------------|---------------------|--------|-------|
| Pairwise comparisons - Discomforted | | | |
| Explicit | Non-explicit | -0.492 | 0.936 |
| Explicit | No Speech | -0.669 | 0.884 |
| Non-explicit | No Speech | -0.170 | 0.992 |

References

- [1] The jamovi project (2024). *jamovi*. (Version 2.6) [Computer Software]. Retrieved from <https://www.jamovi.org>.
- [2] R Core Team (2024). *R: A Language and environment for statistical computing*. (Version 4.4) [Computer software]. Retrieved from <https://cran.r-project.org>. (R packages retrieved from CRAN snapshot 2024-08-07).
- [3] Fox, J., & Weisberg, S. (2023). *car: Companion to Applied Regression*. [R package]. Retrieved from <https://cran.r-project.org/package=car>.
- [4] Lenth, R. (2023). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from <https://cran.r-project.org/package=emmeans>.