Augmented Student Pool Stats

The following pages include the full statistical test result tables for the university-student-focused study (i.e., first study) outlined in the manuscript body. This information includes the complete post hoc testing results.

Results

Repeated Measures ANOVA on Warmth

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**0.176**	1.95	0.0899	0.443	0.6382	0.000	0.000	0.006
Residual	**Greenhouse-Geisser**	**29.726**	146.56	0.2028					
Speech	**Greenhouse-Geisser**	**125.275**	1.37	91.1282	65.850	2.16e-15	0.171	0.171	0.468
Residual	**Greenhouse-Geisser**	**142.682**	103.10	1.3839					
Behavior ✻ Speech	**Greenhouse-Geisser**	**2.002**	3.68	0.5442	2.141	0.0817	0.003	0.003	0.028
Residual	**Greenhouse-Geisser**	**70.116**	275.89	0.2541					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	363	75	4.85					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		**Speech**	**Mean Difference**	**SE**	**df**	**t**	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	-0.8604	0.1074	75.0	-8.01	0.000
	-	**Explicit**	-0.9488	0.1038	75.0	-9.14	0.000
Non-explicit	-	**Explicit**	-0.0885	0.0523	75.0	-1.69	0.215

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	**Mean**	**SE**	**Lower**	**Upper**
Estimated Marginal Means - Speech				
No Speech	1.86	0.0696	1.72	2.00
Non-explicit	2.72	0.1161	2.49	2.95
Explicit	2.81	0.1062	2.60	3.02

[4]

Repeated Measures ANOVA on Competence

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**0.212**	2.00	0.106	0.574	0.564	0.000	0.000	0.008
Residual	**Greenhouse-Geisser**	**27.695**	149.88	0.185					
Speech	**Greenhouse-Geisser**	**63.950**	1.32	48.371	42.741	5.29e-11	0.082	0.082	0.363
Residual	**Greenhouse-Geisser**	**112.217**	99.15	1.132					
Behavior ✻ Speech	**Greenhouse-Geisser**	**1.154**	3.58	0.323	0.994	0.405	0.002	0.001	0.013
Residual	**Greenhouse-Geisser**	**87.050**	268.17	0.325					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	486	75	6.48					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		Speech	Mean Difference	SE	df	t	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	-0.6272	0.0895	75.0	-7.006	2.61e-9
	-	**Explicit**	-0.6681	0.0985	75.0	-6.781	7.03e-9
Non-explicit	-	**Explicit**	-0.0409	0.0443	75.0	-0.923	0.627

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	Mean	SE	Lower	Upper
Estimated Marginal Means - Speech				
No Speech	2.47	0.0957	2.28	2.66
Non-explicit	3.10	0.1140	2.87	3.33
Explicit	3.14	0.1132	2.92	3.37

[4]

Repeated Measures ANOVA on Discomfort

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**0.204**	2.00	0.102	0.934	0.3950	0.001	0.001	0.012
Residual	**Greenhouse-Geisser**	**16.358**	149.69	0.109					
Speech	**Greenhouse-Geisser**	**4.899**	1.66	2.943	10.341	1.95e-4	0.016	0.016	0.121
Residual	**Greenhouse-Geisser**	**35.533**	124.87	0.285					
Behavior ✻ Speech	**Greenhouse-Geisser**	**1.869**	3.64	0.513	2.777	0.0318	0.006	0.006	0.036
Residual	**Greenhouse-Geisser**	**50.459**	273.19	0.185					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	197	75	2.63					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		**Speech**	**Mean Difference**	**SE**	**df**	**t**	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	0.0270	0.0371	75.0	0.729	0.74702
	-	**Explicit**	-0.1645	0.0544	75.0	-3.023	0.00949
Non-explicit	-	**Explicit**	-0.1915	0.0436	75.0	-4.396	1.05e-4

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	**Mean**	**SE**	**Lower**	**Upper**
Estimated Marginal Means - Speech				
No Speech	2.17	0.0633	2.05	2.30
Non-explicit	2.15	0.0597	2.03	2.26
Explicit	2.34	0.0777	2.18	2.49

[4]

Repeated Measures ANOVA on IOS

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**1.07**	2.00	0.537	2.10	0.126	0.001	0.001	0.027
Residual	**Greenhouse-Geisser**	**38.26**	149.95	0.255					
Speech	**Greenhouse-Geisser**	**81.23**	1.73	46.826	29.28	3.02e-10	0.093	0.093	0.281
Residual	**Greenhouse-Geisser**	**208.10**	130.11	1.599					
Behavior ✻ Speech	**Greenhouse-Geisser**	**1.79**	3.69	0.485	1.46	0.217	0.002	0.002	0.019
Residual	**Greenhouse-Geisser**	**91.55**	276.43	0.331					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	450	75	6.00					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		**Speech**	**Mean Difference**	**SE**	**df**	**t**	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	-0.509	0.1090	75.0	-4.67	3.83e-5
	-	**Explicit**	-0.838	0.1282	75.0	-6.54	2.03e-8
Non-explicit	-	**Explicit**	-0.329	0.0906	75.0	-3.63	0.00147

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	**Mean**	**SE**	**Lower**	**Upper**
Estimated Marginal Means - Speech				
No Speech	1.30	0.0673	1.17	1.44
Non-explicit	1.81	0.1218	1.57	2.05
Explicit	2.14	0.1383	1.86	2.42

[4]

Repeated Measures ANOVA on JRS

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**1.40**	1.85	0.756	3.41	0.0393	0.002	0.002	0.044
Residual	**Greenhouse-Geisser**	**30.70**	138.68	0.221					
Speech	**Greenhouse-Geisser**	**90.07**	1.62	55.446	47.80	4.30e-14	0.116	0.115	0.389
Residual	**Greenhouse-Geisser**	**141.31**	121.83	1.160					
Behavior ✻ Speech	**Greenhouse-Geisser**	**2.14**	3.60	0.596	1.94	0.1107	0.003	0.003	0.025
Residual	**Greenhouse-Geisser**	**82.71**	269.95	0.306					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	433	75	5.78					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		Speech	Mean Difference	SE	df	t	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	-0.515	0.0796	75.0	-6.47	2.65e-8
	-	**Explicit**	-0.885	0.1106	75.0	-8.00	0.00
Non-explicit	-	**Explicit**	-0.370	0.0788	75.0	-4.69	3.59e-5

Comparison							
Behavior		Behavior	Mean Difference	SE	df	t	p_{tukey}
Post Hoc Comparisons - Behavior							
A	-	**B**	-0.1069	0.0478	75.0	-2.238	0.0713
	-	**C**	-0.0285	0.0412	75.0	-0.692	0.7686
B	-	**C**	0.0784	0.0376	75.0	2.088	0.0992

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	Mean	SE	Lower	Upper
Estimated Marginal Means - Speech				
No Speech	2.72	0.0850	2.55	2.89
Non-explicit	3.24	0.1113	3.01	3.46
Explicit	3.61	0.1182	3.37	3.84

Behavior

			95% Confidence Interval	
Behavior	Mean	SE	Lower	Upper
Estimated Marginal Means - Behavior				
A	3.14	0.0972	2.95	3.34
B	3.25	0.0952	3.06	3.44
C	3.17	0.0928	2.99	3.36

[4]

Repeated Measures ANOVA on Anthropomorphism

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**0.330**	1.96	0.169	0.584	0.555	0.000	0.000	0.008
Residual	**Greenhouse-Geisser**	**42.355**	146.78	0.289					
Speech	**Greenhouse-Geisser**	**57.897**	1.51	38.403	40.949	7.81e-12	0.075	0.075	0.353
Residual	**Greenhouse-Geisser**	**106.041**	113.07	0.938					
Behavior ✻ Speech	**Greenhouse-Geisser**	**1.026**	3.55	0.289	0.992	0.406	0.001	0.001	0.013
Residual	**Greenhouse-Geisser**	**77.543**	266.53	0.291					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	489	75	6.53					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		**Speech**	**Mean Difference**	**SE**	**df**	**t**	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	-0.548	0.0845	75.0	-6.49	2.44e-8
	-	**Explicit**	-0.668	0.0933	75.0	-7.17	1.25e-9
Non-explicit	-	**Explicit**	-0.120	0.0527	75.0	-2.28	0.0646

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	**Mean**	**SE**	**Lower**	**Upper**
Estimated Marginal Means - Speech				
No Speech	1.85	0.0820	1.68	2.01
Non-explicit	2.40	0.1170	2.16	2.63
Explicit	2.52	0.1200	2.28	2.76

[4]

Repeated Measures ANOVA on Likeability

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Within Subjects Effects									
Behavior	**Greenhouse-Geisser**	**2.15**	1.88	1.146	3.31	0.0424	0.003	0.003	0.042
Residual	**Greenhouse-Geisser**	**48.68**	140.68	0.346					
Speech	**Greenhouse-Geisser**	**33.64**	1.87	17.980	17.24	4.01e-7	0.041	0.040	0.187
Residual	**Greenhouse-Geisser**	**146.36**	140.34	1.043					
Behavior ✻ Speech	**Greenhouse-Geisser**	**3.36**	3.81	0.880	2.51	0.0446	0.004	0.004	0.032
Residual	**Greenhouse-Geisser**	**100.27**	286.07	0.350					

Note. Type 3 Sums of Squares

[3]

	Sum of Squares	df	Mean Square	F	p	η^2_G	η^2	η^2_p
Between Subjects Effects								
Residual	497	75	6.63					

Note. Type 3 Sums of Squares

Post Hoc Tests

Comparison							
Speech		Speech	Mean Difference	SE	df	t	p_{tukey}
Post Hoc Comparisons - Speech							
No Speech	-	**Non-explicit**	-0.539	0.0970	75.0	-5.55	1.20e-6
	-	**Explicit**	-0.331	0.0997	75.0	-3.32	0.00397
Non-explicit	-	**Explicit**	0.208	0.0796	75.0	2.61	0.02894

Comparison							
Behavior		Behavior	Mean Difference	SE	df	t	p_{tukey}
Post Hoc Comparisons - Behavior							
A	-	**B**	-0.1018	0.0597	75.0	-1.704	0.2103
	-	**C**	-0.1307	0.0511	75.0	-2.555	0.0334
B	-	**C**	-0.0289	0.0486	75.0	-0.596	0.8228

[4]

Estimated Marginal Means

Speech

			95% Confidence Interval	
Speech	Mean	SE	Lower	Upper
Estimated Marginal Means - Speech				
No Speech	3.23	0.105	3.02	3.44
Non-explicit	3.77	0.118	3.53	4.00
Explicit	3.56	0.112	3.33	3.78

Behavior

			95% Confidence Interval	
Behavior	Mean	SE	Lower	Upper
Estimated Marginal Means - Behavior				
A	3.44	0.102	3.24	3.64
B	3.54	0.107	3.33	3.76
C	3.57	0.100	3.37	3.77

[4]

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] Singmann, H. (2023). *afex: Analysis of Factorial Experiments*. [R package]. Retrieved from https://cran.r-project.org/package=afex.

[4] Lenth, R. (2023). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from https://cran.r-project.org/package=emmeans.