

Results

ANOVA

ANOVA - count

	Sum of Squares	df	Mean Square	F	p
model	287559	5	57512	9.51	< .001
category	16614	1	16614	2.75	0.106
model * category	35976	5	7195	1.19	0.334
Residuals	217802	36	6050		

[3]

Post Hoc Tests

Post Hoc Comparisons - model

Comparison		Mean Difference	SE	df	t	Ptukey
model	model					
CounTR	- DeepDataSpace	-19.8	38.9	36.0	-0.509	0.995
	- Grounded counting Dino	24.1	38.9	36.0	0.621	0.989
	- Human	-52.6	38.9	36.0	-1.352	0.754
	- Segment anything	84.4	38.9	36.0	2.170	0.277
	- Training free object	181.6	38.9	36.0	4.670	< .001
DeepDataSpace	- Grounded counting Dino	44.0	38.9	36.0	1.130	0.865
	- Human	-32.8	38.9	36.0	-0.843	0.957
	- Segment anything	104.2	38.9	36.0	2.679	0.105
	- Training free object	201.4	38.9	36.0	5.180	< .001
Grounded counting Dino	- Human	-76.7	38.9	36.0	-1.973	0.377
	- Segment anything	60.2	38.9	36.0	1.549	0.636
	- Training free object	157.5	38.9	36.0	4.049	0.003
Human	- Segment anything	137.0	38.9	36.0	3.522	0.014
	- Training free object	234.2	38.9	36.0	6.022	< .001
Segment anything	- Training free object	97.3	38.9	36.0	2.501	0.151

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - category

Comparison		Mean Difference	SE	df	t	Ptukey
category	category					
Clumped	- Spaced	-37.2	22.5	36.0	-1.66	0.106

Note. Comparisons are based on estimated marginal means

Comparison				Mean Difference	SE	df	t	Ptukey
model	category	model	category					
CounTR	Clumped	- CounTR	Spaced	15.4167	55.0	36.0	0.28030	1.000
		- DeepDataSpace	Clumped	17.5000	55.0	36.0	0.31818	1.000
		- DeepDataSpace	Spaced	-41.7083	55.0	36.0	-0.75833	1.000
		- Grounded counting Dino	Clumped	105.5833	55.0	36.0	1.91969	0.740
		- Grounded counting Dino	Spaced	-41.8750	55.0	36.0	-0.76136	1.000
		- Human	Clumped	-41.6250	55.0	36.0	-0.75682	1.000
		- Human	Spaced	-48.1250	55.0	36.0	-0.87500	0.999
		- Segment anything	Clumped	105.8750	55.0	36.0	1.92499	0.737
		- Segment anything	Spaced	78.2917	55.0	36.0	1.42348	0.951
		- Training free object	Clumped	188.2917	55.0	36.0	3.42347	0.059
		- Training free object	Spaced	190.3750	55.0	36.0	3.46135	0.054
	Spaced	- DeepDataSpace	Clumped	2.0833	55.0	36.0	0.03788	1.000
		- DeepDataSpace	Spaced	-57.1250	55.0	36.0	-1.03863	0.995
		- Grounded counting Dino	Clumped	90.1667	55.0	36.0	1.63939	0.883
		- Grounded counting Dino	Spaced	-57.2917	55.0	36.0	-1.04166	0.995
		- Human	Clumped	-57.0417	55.0	36.0	-1.03712	0.996
		- Human	Spaced	-63.5417	55.0	36.0	-1.15530	0.989
		- Segment anything	Clumped	90.4583	55.0	36.0	1.64469	0.880
		- Segment anything	Spaced	62.8750	55.0	36.0	1.14318	0.990
		- Training free object	Clumped	172.8750	55.0	36.0	3.14317	0.111
		- Training free object	Spaced	174.9583	55.0	36.0	3.18105	0.102
DeepDataSpace	Clumped	- DeepDataSpace	Spaced	-59.2083	55.0	36.0	-1.07651	0.994
		- Grounded counting Dino	Clumped	88.0833	55.0	36.0	1.60151	0.897
		- Grounded counting Dino	Spaced	-59.3750	55.0	36.0	-1.07954	0.994
		- Human	Clumped	-59.1250	55.0	36.0	-1.07500	0.994
		- Human	Spaced	-65.6250	55.0	36.0	-1.19318	0.986
		- Segment anything	Clumped	88.3750	55.0	36.0	1.60681	0.895
		- Segment anything	Spaced	60.7917	55.0	36.0	1.10530	0.992
		- Training free object	Clumped	170.7917	55.0	36.0	3.10529	0.120
	Spaced	- Training free object	Spaced	172.8750	55.0	36.0	3.14317	0.111
		- Grounded counting Dino	Clumped	147.2917	55.0	36.0	2.67802	0.277
		- Grounded counting Dino	Spaced	-0.1667	55.0	36.0	-0.00303	1.000
		- Human	Clumped	0.0833	55.0	36.0	0.00152	1.000
		- Human	Spaced	-6.4167	55.0	36.0	-0.11667	1.000

Note. Comparisons are based on estimated marginal means

Comparison				Mean Difference	SE	df	t	Ptukey
model	category	model	category					
Grounded counting Dino	Clumped	- Segment anything	Clumped	147.5833	55.0	36.0	2.68332	0.275
		- Segment anything	Spaced	120.0000	55.0	36.0	2.18181	0.572
		- Training free object	Clumped	230.0000	55.0	36.0	4.18180	0.008
		- Training free object	Spaced	232.0833	55.0	36.0	4.21968	0.008
		- Grounded counting Dino	Spaced	-147.4583	55.0	36.0	-2.68105	0.276
		- Human	Clumped	-147.2083	55.0	36.0	-2.67650	0.278
		- Human	Spaced	-153.7083	55.0	36.0	-2.79469	0.225
		- Segment anything	Clumped	0.2917	55.0	36.0	0.00530	1.000
	Spaced	- Segment anything	Spaced	-27.2917	55.0	36.0	-0.49621	1.000
		- Training free object	Clumped	82.7083	55.0	36.0	1.50378	0.930
		- Training free object	Spaced	84.7917	55.0	36.0	1.54166	0.918
		- Human	Clumped	0.2500	55.0	36.0	0.00455	1.000
		- Human	Spaced	-6.2500	55.0	36.0	-0.11364	1.000
		- Segment anything	Clumped	147.7500	55.0	36.0	2.68635	0.273
		- Segment anything	Spaced	120.1667	55.0	36.0	2.18484	0.570
		- Training free object	Clumped	230.1667	55.0	36.0	4.18483	0.008
Human	Clumped	- Training free object	Spaced	232.2500	55.0	36.0	4.22271	0.007
		- Human	Spaced	-6.5000	55.0	36.0	-0.11818	1.000
		- Segment anything	Clumped	147.5000	55.0	36.0	2.68181	0.275
		- Segment anything	Spaced	119.9167	55.0	36.0	2.18029	0.573
		- Training free object	Clumped	229.9167	55.0	36.0	4.18029	0.008
		- Training free object	Spaced	232.0000	55.0	36.0	4.21817	0.008
		- Segment anything	Clumped	154.0000	55.0	36.0	2.79999	0.222
		- Segment anything	Spaced	126.4167	55.0	36.0	2.29848	0.496
	Spaced	- Training free object	Clumped	236.4167	55.0	36.0	4.29847	0.006
		- Training free object	Spaced	238.5000	55.0	36.0	4.33635	0.005
		- Segment anything	Spaced	-27.5833	55.0	36.0	-0.50151	1.000
		- Training free object	Clumped	82.4167	55.0	36.0	1.49848	0.931
		- Training free object	Spaced	84.5000	55.0	36.0	1.53636	0.920
		- Training free object	Clumped	110.0000	55.0	36.0	1.99999	0.690
		- Training free object	Spaced	112.0833	55.0	36.0	2.03787	0.666
		- Training free object	Spaced	2.0833	55.0	36.0	0.03788	1.000

Note. Comparisons are based on estimated marginal means

[4]

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] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from <https://cran.r-project.org/package=car>.
- [4] Lenth, R. (2020). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from <https://cran.r-project.org/package=emmeans>.