

**Table S1.** The F statistics calculated for each model tested in the study with the R *stats* package (R core team 2021). The eta squared effect size statistic and 95% confidence interval for eta squared were calculated in the R package *effectsize* (Ben-Shachar et al. 2020).

Model	F test statistic	Effect size	
		$\eta^2$	95% CI
<b>Zoos</b>			
volume~time	$F_{(1,119)}=0.878, P=0.351$	0.007	0.00, 1.00
net sentiment~time (full)	$F_{(1,119)}=163.8, P<0.0001$	0.58	0.49, 1.00
net sentiment~time (no outliers)	$F_{(1,117)}=178.7, P<0.0001$	0.60	0.52, 1.00
<b>Aquariums</b>			
volume~time (full)	$F_{(1,119)}=14.24, P=0.0003$	0.11	0.03, 1.00
volume~time (no outlier)	$F_{(1,118)}=14.44, P=0.0002$	0.11	0.04, 1.00
net sentiment~time	$F_{(1,119)}=28.12, P<0.0001$	0.19	0.10, 1.00
<b>Circuses</b>			
volume~time	$F_{(1,119)}=32.6, P<0.0001$	0.22	0.12, 1.00
net sentiment~time	$F_{(1,119)}=8.74, P=0.0038$	0.07	0.01, 1.00
<b>Wildlife parks</b>			
volume~time (full)	$F_{(1,119)}=36.77, P<0.0001$	0.24	0.13, 1.00
volume~time (no outlier)	$F_{(1,118)}=183.0, P<0.0001$	0.61	0.52, 1.00
net sentiment~time	$F_{(1,119)}=14.3, P=0.0002$	0.11	0.04, 1.00
<b>Safari parks</b>			
volume~time (full)	$F_{(1,119)}=2.35, P=0.128$	0.02	0.00, 1.00
volume~time (no outliers)	$F_{(1,117)}=11.88, P=0.0007$	0.09	0.03, 1.00
net sentiment~time	$F_{(1,119)}=13.29, P=0.0004$	0.10	0.03, 1.00

## References

Ben-Shachar M.S., Lüdtke D., Makowski D. (2020) effectsize: Estimation of Effect Size Indices and Standardized Parameters. *Journal of Open Source Software* 5(56): 2815. <https://doi.org/10.21105/joss.02815>

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