

S3 Table. Linear mixed models for the usage of Low-F0 and High-F0 calls.

Tests of Fixed Effects (Proportion of Low-F0 calls):

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	51	79.270948	0.000
Group	2	51	9.076	0.000425
Sex	1	51	.203	.654
Age	1	51	11.120	0.001597

Post-hoc pairwise comparisons (Proportion of Low-F0 calls):

Group/Sex 1	Group/Sex 2	Mean Difference	Std. Error	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Low-F0 group	Control group	.100	.023	51	0.0003	.042	.158
High-F0 group	Control group	.035	.023	51	.410	-.023	.094
Low-F0 group	High-F0 group	.064	.026	51	.049	.000	.129
Female	Male	.009	.021	51	.654	-.033	.051

Tests of Fixed Effects (Proportion of High-F0 calls):

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	49	83.982	.000
Group	2	49	8.274	0.000802
Sex	1	49	.719	.400
Age	1	49	40.034	.000
Age*Group	2	49	4.706	.014

Post-hoc pairwise comparisons (Proportion of High-F0 calls):

Group/Sex 1	Group/Sex 2	Mean Difference	Std. Error	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Low-F0 group	Control group	.009	.021	51	1.000	-.043	.061
High-F0 group	Control group	.063	.021	51	.012	.011	.115
Low-F0 group	High-F0 group	-.054	.023	51	.068	-.111	.003
Female	Male	-.015	.019	51	.432	-.052	.023

Two models are presented (one for Low-F0 and one for High-F0 calls). The models included the age of the pups (four time points, i.e. recording sessions), the sex of the pups, and the group (i.e. Control, *Low-F0* group, or *High-F0* group). The second table of each test contains post-hoc pairwise comparisons of estimated marginal means (Bonferroni-adjusted for multiple comparisons). The P-values of factors that significantly influenced the calls are marked in bold. Insignificant interactions were removed and the models were recomputed. Analysis conducted in SPSS.