Correction to: Evidence for Dialects in Three Captive Populations of Common Marmosets (*Callithrix jacchus*)

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The original article unfortunately contained mistakes. The changes and corrections are shown below:

Methods

- As variation in the amplitude could be mainly influenced by body posture and head tilt, we have now excluded the parameter “shimmer” from the analysis.
- We have corrected some irregularities in the data set.

We therefore provide here the results with the corrected data and without shimmer. Although the numbers in some results change, the main conclusion of the original paper remains the same.

The online version of the original article can be found at <https://doi.org/10.1007/s10764-017-9979-4>

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Table 3 Factor loadings of acoustic parameters on five PCA factors (F1-F5) with an Eigenvalue > 1 extracted for three call types in common marmosets.

Parameter	Phee call					Trill call					Food call				
	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5
sound_duration	0.23	-0.78	0.29	0.10	-0.06	-0.06	0.58	-0.49	0.38	-0.13	0.18	-0.60	0.17	-0.18	0.21
MeanF0	0.97	-0.01	0.13	-0.08	0.98	0.98	0.06	0.02	0.07	0.03	0.98	-0.04	-0.17	-0.01	-0.01
F0start	0.84	-0.01	-0.38	-0.21	0.91	0.91	-0.29	0.10	-0.07	-0.08	0.97	0.06	-0.05	-0.14	0.01
F0end	0.84	0.06	0.32	-0.10	0.89	0.89	0.20	-0.11	0.21	0.13	0.91	-0.21	-0.29	0.10	0.00
MaxF0	0.92	0.02	0.31	-0.08	0.95	0.95	0.25	0.02	0.09	0.01	0.98	0.06	-0.07	-0.10	0.01
TimeMaxF0	-0.15	-0.11	0.66	0.25	-0.28	-0.28	0.38	-0.34	0.44	0.34	-0.06	0.07	-0.25	0.75	0.12
MinF0	0.88	-0.04	-0.32	-0.17	0.93	0.93	-0.31	0.01	0.02	0.03	0.91	-0.21	-0.28	0.08	-0.01
F0absslope	0.07	0.89	0.33	0.04	0.03	0.03	0.44	0.69	-0.34	0.08	0.44	0.72	0.22	-0.18	0.10
F0Var	0.05	0.86	0.44	0.00	0.08	0.08	0.70	0.47	-0.36	-0.03	0.31	0.74	0.19	-0.34	-0.18
FmRate	-	-	-	-	-0.16	-0.16	-0.66	-0.07	-0.22	0.02	-	-	-	-	-
Fmextend	-	-	-	-	0.06	0.06	0.88	0.18	-0.02	0.00	-	-	-	-	-
Q25	0.86	-0.05	0.00	0.13	0.50	0.50	-0.17	0.22	0.38	-0.32	0.88	-0.10	0.15	0.13	0.02
Q50	0.82	0.09	-0.01	0.40	-0.32	-0.32	-0.01	0.41	0.61	-0.36	0.55	-0.01	0.65	0.33	0.01
Q75	0.21	0.08	-0.38	0.81	-0.22	-0.22	-0.14	0.53	0.59	0.19	0.13	-0.09	0.82	0.36	-0.01
Fpeak	0.07	-0.42	0.22	0.03	-0.01	-0.01	0.28	-0.22	0.14	-0.34	0.07	-0.20	0.03	-0.31	-0.37
Timeofmaxintensity	-0.08	-0.10	0.16	0.47	0.10	0.10	0.00	0.01	0.18	0.76	0.02	0.47	-0.31	0.52	-0.44
jitter	0.00	0.50	-0.55	0.08	-0.16	-0.16	-0.32	0.64	0.21	0.11	-0.01	0.41	-0.15	0.03	0.76
Shimmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Factor loadings larger than +0.5 or smaller than -0.5 are marked in bold, indicating that the parameter made a considerable contribution to the factor. For description and definition of the parameters see Table 2. We collected data in February 2014 in the Istituto Superiore di Sanità in Rome, Italy, in 2014 and 2015 at the University of Zürich, Switzerland and in October/November 2015 at the Universidad Autónoma de Madrid, Spain

Table 4 Results of a permuted Discriminant Function analysis (pDFA) testing for population differentiation in common marmoset vocalisations.

Call type	Comparison	n	Correct (%)	Expected (%)	p value	Crossvalidated correct (%)	Crossvalidated Expected (%)	p value
Phee	Madrid – Rom – Zürich	1304	65.69	49.32	0.002	62.70	38.67	0.001
	Madrid – Rom	652	82.76	64.77	0.004	88.92	58.13	0.001
	Zürich – Rom	804	80.98	65.22	0.015	79.19	54.01	0.003
	Zürich – Madrid	1152	74.1	59.95	0.002	75.61	55.45	0.001
Trill	Zürich – Madrid	461	86.41	61.83	0.001	84.45	58.41	0.001
Food	Madrid – Rom – Zürich	3598	63.12	45.08	0.001	58.19	40.53	0.001
	Madrid – Rom	2137	81.41	62.34	0.001	77.29	60.90	0.001
	Zürich – Rom	2622	69.29	61.16	0.025	65.66	56.25	0.019
	Zürich – Madrid	2437	77.09	59.63	0.001	74.45	56.38	0.001

We obtained expected values by calculating the mean of correctly classified calls in the randomized datasets created in the pDFA. We collected data in February 2014 in the Istituto Superiore di Sanità in Rome, Italy, in 2014 and 2015 at the University of Zürich, Switzerland and in October/November 2015 at the Universidad Autónoma de Madrid, Spain

Table 5 Results of post-hoc analyses testing which Principle Components contributed most to differences in three call types between three populations of common marmosets.

	Phee call			Trill call			Food call		
	df	f	p	df	f	p	df	f	p
Factor 1	41.934	5.724	.001	25.664	14.844	.001	38.280	2.260	.118
Factor 2	39.931	4.065	.025	26.983	4.978	.034	38.191	11.057	.000
Factor 3	42.194	1.228	.303	26.027	6.391	.018	37.294	19.785	.000
Factor 4	41.306	13.801	.000	26.620	27.880	.000	37.804	7.067	.002
Factor 5	–	–	–	23.361	.003	.955	36.504	125	.883

Values $p < 0.05$ are marked in bold. (df = degrees of freedom). We collected data in February 2014 in the Istituto Superiore di Sanità in Rome, Italy, in 2014 and 2015 at the University of Zürich, Switzerland and in October/November 2015 at the Universidad Autónoma de Madrid, Spain

Table 6 Result of linear mixed effect models testing for the influence of colony, body mass, colony&body mass, and colony&bodymass on five PCA factors in three different call types in common marmosets.

Call type	factor	Model	[colony], [mass]				[colony], [mass]				[colony]&[mass]			
			Δ AIC	p value	Δ AIC	p value	Δ AIC	p value	Δ AIC	p value	Δ AIC	p value	Δ AIC	p value
Phee	fac1	0	.548	.984	9.71	.984	9.64	.427 [c]	.595 [m]	17.82	.974 [c]	.600 [m]	.892 [c]&[m]	.590 [c]
	fac2	0	.036	.066	10.40	.066	9.33	.241 [c]	.518 [m]	16.90	.827 [m]	.482 [c]&[m]	.175 [c]	.204 [m]
	fac3	0	.016	.031	10.62	.031	8.57	.181 [c]	.429 [m]	16.70	.235 [c]&[m]	.363 [c]	.502 [m]	.237 [c]&[m]
	Fac4	0	.001	.001	11.12	.001	8.32	.058[c]	.161 [m]	15.59	.003 [c]	.769 [m]	.008 [c]&[m]	.585 [c]
Trill	fac1	0	.002	.059	15.13	.059	9.17	.017 [c]	.532 [m]	10.07	.147 [m]	.506 [c]&[m]	.274 [c]	.391 [m]
	fac2	0	.003	.001	7.42	.001	7.46	.429 [c]	.115 [m]	15.68	.173 [c]&[m]	.696 [c]	.536 [m]	.173 [c]&[m]
	fac3	0	.044	.254	12.16	.254	9.58	.082 [c]	.510 [m]	16.30	.024 [c]	.533 [m]	.173 [c]&[m]	.696 [c]
	fac4	0	.000	.001	14.84	.001	9.35	.024 [c]	.533 [m]	17.60				

Table 6 (continued)

Call type	factor	Model	[colony], [mass]		[colony], [mass]		[colony] ³ [mass]	
			Δ AIC	p value	Δ AIC	p value	Δ AIC	p value
Food	Fac5	0	.970	.904	9.76	.833 [c] .809 [m]	17.77	.969 [c] ³ [m] .542 [c] .876 [m] .558 [c] ³ [m] .982 [c] .736 [m] .943 [c] ³ [m] .485 [c] .657 [m] .444 [c] ³ [m]
	fac1	0	.887	.943	9.76	.721 [c] .737 [m]	18.20	.992 [c] .148 [m] .592 [c] ³ [m]
	fac2	0	.139	.133	9.76	.666 [c] .628 [m]	17.75	.060 [c] .222 [m] .091 [c] ³ [m]
	fac3	0	.000	.000	8.12	.001 [c] .134 [m]	16.90	.138 [c] .840 [m] .143 [c] ³ [m]
	Fac4	0	.362	.966	10.10	.119 [c] .200 [m]	14.57	.091 [c] ³ [m]
	Fac5	0	.417	.494	9.48	.688 [c] .955 [m]	15.76	.138 [c] .840 [m] .143 [c] ³ [m]

P values < 0.5 are bold, and letters in brackets indicate which factor of the model they belong to ([c] = colony, [m] = mass; [c³m] = interaction between colony and mass). Δ AIC values are calculated as the distance of each model to the respective best model. For description and definition of the parameters see Table 2. We collected data in 2014 and 2015 at the University of Zürich, Switzerland and in October/November 2015 at the Universidad Autónoma de Madrid, Spain