

**Supplementary Table 2.** Target voice features (1-16 sentences)

Target voice feature	Statistical feature	t	df	p
f0_contour	std	-7.76	1774	<0.001
	skewness	-4.93		<0.001
	kurtosis	2.90		0.00
	first_derivative_std	-5.80		<0.001
	first_derivative_skewness	3.18		0.00
	second_derivative_std	-5.66		<0.001
	second_quartile	3.46		0.00
	third_quartile	-6.19		<0.001
	q3_q2_range	-8.41		<0.001
	q3_q1_range	-5.56		<0.001
	percentile_99	-5.50		<0.001
	percentile_1_99_range	-5.50		<0.001
	linear_regression_slope	-3.82		0.00
	linear_regression_mse	-8.74		<0.001
f0_statistics	mean	-6.91	1774	<0.001
	std	-3.68		0.00
log_energy	-	2.44	1774	0.01
log_energy_slidingwindow	first_derivative_mean	-3.50		0.00

	first_derivative_skewness	3.05		0.00
	second_derivative_mean	-2.60		0.01
	third_quartile	2.42		0.02
	percentile_99	2.74		0.01
	linear_regression_offset	2.51		0.01
formants	F3	-2.62	1774	0.01
	F4	-4.36		<0.001
loudness	-	3.24	1774	0.00
rms	mean	-2.45	1774	0.01
	first_derivative_kurtosis	-3.10		0.00
	second_derivative_kurtosis	-2.59		0.01
	second_quartile	-3.18		0.00
	third_quartile	-2.56		0.01
	q2_q1_range	-3.86		0.00
	q3_q1_range	-2.59		0.01
	linear_regression_mse	-3.36		0.00
mfcc	mean_1	5.15	1774	<0.001
	mean_2	6.01		<0.001
	mean_3	-2.44		0.01
	mean_4	-397		<0.001

mean_5	5.22	<0.001
mean_8	-5.14	<0.001
mean_10	-4.58	<0.001
mean_12	-4.08	<0.001
mean_13	-4.70	<0.001
std_1	-6.45	<0.001
std_4	4.23	<0.001
std_6	5.70	<0.001
std_7	-2.64	0.01
std_9	-3.58	0.00
std_12	-5.03	<0.001
skewness_3	-2.44	0.01
skewness_4	-2.65	0.01
skewness_7	-3.25	0.00
skewness_10	5.06	<0.001
kurtosis_1	2.87	0.00
kurtosis_5	2.79	0.01
kurtosis_13	-2.52	0.01
first_derivative_mean_4	-4.43	<0.001
first_derivative_mean_11	3.05	0.00

first_derivative_std_1	-8.72	<0.001
first_derivative_std_2	-4.64	<0.001
first_derivative_std_3	-4.67	<0.001
first_derivative_std_5	-5.56	<0.001
first_derivative_std_6	-3.15	0.00
first_derivative_std_7	-4.62	<0.001
first_derivative_std_8	-3.27	0.00
first_derivative_std_9	-6.83	<0.001
first_derivative_std_10	-3.11	0.00
first_derivative_std_11	-4.11	<0.001
first_derivative_std_12	-4.37	<0.001
first_derivative_std_13	-4.61	<0.001
first_derivative_skewness_2	2.83	0.00
first_derivative_skewness_5	3.28	0.00
first_derivative_skewness_13	2.99	0.00
second_derivative_mean_1	-3.01	0.00
second_derivative_mean_7	3.05	0.00
second_derivative_std_1	-8.89	<0.001
second_derivative_std_2	-7.54	<0.001
second_derivative_std_3	-5.69	<0.001

second_derivative_std_4	-5.35	<0.001
second_derivative_std_5	-7.87	<0.001
second_derivative_std_6	-7.18	<0.001
second_derivative_std_7	-6.22	<0.001
second_derivative_std_8	-5.15	<0.001
second_derivative_std_9	-6.37	<0.001
second_derivative_std_10	-4.82	<0.001
second_derivative_std_11	-4.45	<0.001
second_derivative_std_12	-4.57	<0.001
second_derivative_std_13	-4.91	<0.001
second_derivative_skewness_1	-3.57	0.00
second_derivative_skewness_2	5.19	<0.001
second_derivative_skewness_7	2.92	0.00
second_derivative_kurtosis_4	-3.88	0.00
second_derivative_kurtosis_5	-4.07	<0.001
second_derivative_kurtosis_7	-3.19	0.00
first_quartile_1	6.60	<0.001
first_quartile_2	5.65	<0.001
first_quartile_4	-5.19	<0.001
first_quartile_5	4.59	<0.001

first_quartile_6	-4.14	<0.001
first_quartile_8	-5.77	<0.001
first_quartile_10	-4.37	<0.001
first_quartile_11	-2.81	0.01
first_quartile_12	-2.47	0.01
first_quartile_13	-4.66	<0.001
second_quartile_1	4.66	<0.001
second_quartile_2	5.75	<0.001
second_quartile_4	-3.71	0.00
second_quartile_5	4.19	<0.001
second_quartile_8	-5.42	<0.001
second_quartile_10	-5.17	<0.001
second_quartile_12	-4.23	<0.001
second_quartile_13	-5.29	<0.001
third_quartile_1	3.52	0.00
third_quartile_2	5.77	<0.001
third_quartile_3	-3.03	0.00
third_quartile_5	5.18	<0.001
third_quartile_8	-4.69	<0.001
third_quartile_10	-5.55	<0.001

third_quartile_12	-6.17	<0.001
third_quartile_13	-4.73	<0.001
q2_q1_range_1	-5.85	<0.001
q2_q1_range_4	3.18	0.00
q2_q1_range_5	-2.66	0.01
q2_q1_range_6	3.98	<0.001
q2_q1_range_11	3.35	0.00
q2_q1_range_12	-4.17	<0.001
q3_q2_range_1	-5.10	<0.001
q3_q2_range_5	2.92	0.00
q3_q2_range_6	3.80	0.00
q3_q2_range_7	-2.67	0.01
q3_q2_range_12	-4.75	<0.001
q3_q1_range_1	-6.54	<0.001
q3_q1_range_4	2.9	0.00
q3_q1_range_6	4.33	<0.001
q3_q1_range_9	-2.82	0.00
q3_q1_range_11	2.51	0.01
q3_q1_range_12	-5.22	<0.001
percentile_1_1	8.14	<0.001

percentile_1_2	2.61	0.01
percentile_1_4	-6.29	<0.001
percentile_1_6	-4.81	<0.001
percentile_1_8	-4.71	<0.001
percentile_99_1	2.36	0.02
percentile_99_2	5.28	<0.001
percentile_99_3	-2.79	0.01
percentile_99_5	4.99	<0.001
percentile_99_6	2.53	0.01
percentile_99_7	-5.80	<0.001
percentile_99_8	-3.58	0.00
percentile_99_12	-5.56	<0.001
percentile_99_13	-3.34	0.00
percentile_1_99_range_1	-5.51	<0.001
percentile_1_99_range_4	4.71	<0.001
percentile_1_99_range_5	2.61	0.01
percentile_1_99_range_6	6.40	<0.001
percentile_1_99_range_7	-2.68	0.01
percentile_1_99_range_9	-3.6	0.00
percentile_1_99_range_12	-4.59	<0.001



	linear_regression_offset_1	3.90		<0.001
	linear_regression_offset_2	3.91		<0.001
	linear_regression_offset_5	4.93		<0.001
	linear_regression_offset_8	-4.55		<0.001
	linear_regression_offset_10	-2.97		0.00
	linear_regression_offset_11	-2.58		0.01
	linear_regression_offset_12	-2.6		0.01
	linear_regression_offset_13	-3.34		0.00
	linear_regression_slope_4	-4.54		<0.001
	linear_regression_mse_1	-6.46		<0.001
	linear_regression_mse_4	3.89		0.00
	linear_regression_mse_6	5.62		<0.001
	linear_regression_mse_7	-2.45		0.01
	linear_regression_mse_8	3.15		0.00
	linear_regression_mse_9	-4.44		<0.001
	linear_regression_mse_12	-4.86		<0.001
jitter	Localabsolutejitter	4.000	1774	<0.001
shimmer	localdbshimmer	2.94	1774	0.00
	apq3	2.87		0.00
	apq5	3.40		0.00

	apq11		3.17		0.00
hnr	-		-6.67	1774	<0.001
dfa	-		-8.06	1774	<0.001

---

Abbreviations: rms-root mean square, mfcc-Mel Frequency Cepstral coefficients, hnr-harmonics to noise ratio, dfa-detrended fluctuation analysis; Target voice features were selected based on significant group difference of SAS total score of under and above 0.6; Benjamini-Hochberg method was employed for multiple comparisons correction.