## Spanish 203 Sentence Reading Task Results

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## Overview

**Note**, for P2E, one observation was removed as it was coded as "23\_126" and caused an error in the code. If this was in error, we can update the data file and re-run the code.

Table 3 shows the results of each t-test in which tap duration production is compared from pre to post test. The results suggest that the duration of taps by participant P1E fell by 29.73 (95% CI 27.52 - 31.94), as determined by a paired t-test (t(62) = -26.874, p < .005). The same trend was observed in P2E: tap duration decreased by 9.02 (95% CI 7.29 - 10.74), as determined by a paired t-test (t(65) = -10.443, p < .005)

Table 4 shows an analogous analysis in trill production in which pre-test duration was compared to post-test duration. The results of the paired t-test were inconclusive for P1E, 1.24 (95% CI -3.56 - 6.04; t(49) = 0.519, p < .6). On the other hand, P2E's trill duration increased by 63.2 (95% CI 54.81 - 71.59; t(48) = 15.147, p < .005).

## Plots

Here are a few boxplots by participant. These plots show the distribution of responses per participant in both taps (Figure 1) and trills (Figure 2) between the pre and post tests.

Table 1: Average duration of tap productions during pre and post-tests per participant

time	P1E	P2E	
PRE	56.11	34.78	
POST	26.53	25.45	

Table 2: Average duration of trill productions during pre and post-tests per participant

time	P1E	P2E
PRE	50.24	55.56
POST	51.48	118.98

Table 3: Results of Paired t-tests of taps comparing duration during pre and post tests

Participant	df	p_val	t_val	estimate	ci_lo	ci_hi
P1E	62	0	-26.874	-29.730	-31.942	-27.519
P2E	65	0	-10.443	-9.015	-10.739	-7.291

Figure 1: Productions of taps per participant during the pre and post test

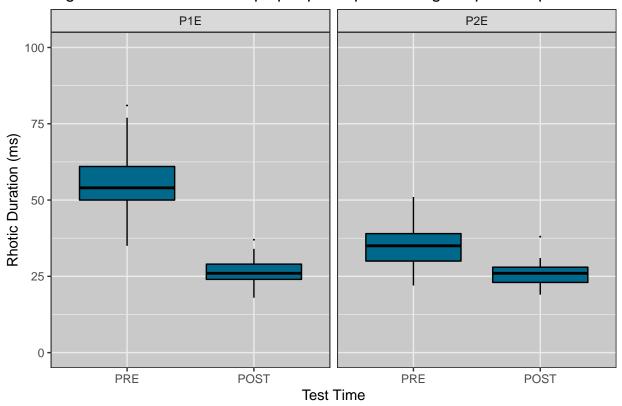


Table 4: Results of Paired t-tests of trills comparing duration during pre and post tests

Participant	df	p_val	$t_val$	estimate	ci_lo	ci_hi
P1E	49	0.606	0.519	1.240	-3.562	6.042
P2E	48	0.000	15.147	63.204	54.814	71.594

P1E POST PRE POST

Test Time

Figure 2: Productions of trills per participant during the pre and post test