

Supplemental Material S1. Mean duration of tone productions in each subgroup* to convert equal normalized durations to differentiated normalized durations.

Target	Transcription	Grade	Group	Mean (ms)	d^{**}
1	1	0	0	292.7866	0.6762
1	1	1	1	304.098	0.7023
1	1	1	2	337.8952	0.7804
1	1	3	1	233.2812	0.5388
1	1	3	2	307.9042	0.7111
1	1	5	1	256.2571	0.5918
1	1	5	2	299.964	0.6928
1	2	1	1	218.8064	0.5053
1	2	1	2	331.6113	0.7658
1	2	3	1	275.5768	0.6364
1	2	3	2	341.3642	0.7884
1	2	5	1	261.8408	0.6047
1	2	5	2	257.0812	0.5937
1	3	1	2	362.8879	0.8381
1	3	3	2	355.678	0.8214
1	3	5	2	315.6543	0.7290
1	4	0	0	150.4315	0.3474
1	4	1	2	305.0115	0.7044
1	4	3	2	151.3078	0.3494
1	4	5	1	127.0545	0.2934
1	4	5	2	150.3805	0.3473
1	7	1	1	294.9072	0.6811

1	7	1	2	424.9883	0.9815
1	7	3	2	377.3237	0.8714
1	7	5	1	218.6863	0.5050
1	7	5	2	258.7265	0.5975
2	1	1	1	224.9419	0.5195
2	1	3	2	355.5045	0.8210
2	1	5	2	383.1165	0.8848
2	2	0	0	291.0445	0.6722
2	2	1	1	325.6172	0.7520
2	2	1	2	411.9192	0.9513
2	2	3	1	269.6184	0.6227
2	2	3	2	392.6003	0.9067
2	2	5	1	285.074	0.6584
2	2	5	2	324.1729	0.7487
2	3	1	1	356.1816	0.8226
2	3	1	2	372.7262	0.8608
2	3	3	1	279.3431	0.6451
2	3	3	2	394.8265	0.9118
2	3	5	1	331.1964	0.7649
2	3	5	2	352.8528	0.8149
2	4	1	2	295.3422	0.6821
2	6	1	1	135.9296	0.3139
2	6	1	2	346.3776	0.7999
2	6	5	1	101.7302	0.2349
2	6	5	2	99.1276	0.2289

2	7	0	0	183.5777	0.4240
2	7	1	1	344.5162	0.7956
2	7	3	1	214.3274	0.4950
2	7	3	2	288.8446	0.6671
2	7	5	2	227.1053	0.5245
3	1	1	1	266.542	0.6156
3	1	1	2	323.7469	0.7477
3	1	3	2	227.0788	0.5244
3	1	5	1	261.0106	0.6028
3	1	5	2	257.0509	0.5937
3	2	1	1	186.5576	0.4308
3	2	1	2	362.9013	0.8381
3	2	3	1	275.9791	0.6374
3	2	3	2	353.5356	0.8165
3	2	5	1	329.9448	0.7620
3	2	5	2	294.6177	0.6804
3	3	0	0	329.9243	0.7619
3	3	1	1	357.187	0.8249
3	3	1	2	380.215	0.8781
3	3	3	1	304.0069	0.7021
3	3	3	2	375.0078	0.8661
3	3	5	1	305.5773	0.7057
3	3	5	2	316.3496	0.7306
3	4	1	1	266.6402	0.6158
3	4	1	2	281.1253	0.6493

3	4	3	1	229.1353	0.5292
3	4	3	2	206.2982	0.4764
3	4	5	1	210.0216	0.4850
3	4	5	2	234.0256	0.5405
3	6	0	0	249.7958	0.5769
3	6	1	1	233.9535	0.5403
3	6	1	2	236.9061	0.5471
3	6	3	1	221.4159	0.5114
3	6	3	2	296.6629	0.6851
3	6	5	1	172.1528	0.3976
3	6	5	2	171.377	0.3958
3	7	1	1	263.3831	0.6083
3	7	1	2	336.7051	0.7776
3	7	3	1	322.9365	0.7458
3	7	3	2	369.1289	0.8525
3	7	5	1	207.8079	0.4799
3	7	5	2	297.2461	0.6865
4	1	1	1	242.6749	0.5605
4	1	1	2	262.616	0.6065
4	1	3	1	203.2396	0.4694
4	1	3	2	351.9744	0.8129
4	1	5	1	171.0575	0.3951
4	1	5	2	288.24	0.6657
4	2	1	2	344.1634	0.7948
4	2	3	1	302.0503	0.6976

4	2	3	2	433.9326	1.0022
4	2	5	1	359.5275	0.8303
4	2	5	2	334.1975	0.7718
4	3	1	1	284.2208	0.6564
4	3	1	2	426.9365	0.9860
4	3	3	2	397.3319	0.9176
4	3	5	2	230.9049	0.5333
4	4	0	0	192.9268	0.4456
4	4	1	1	241.2322	0.5571
4	4	1	2	237.7363	0.5490
4	4	3	1	193.2204	0.4462
4	4	3	2	232.556	0.5371
4	4	5	1	209.638	0.4842
4	4	5	2	229.8224	0.5308
4	7	0	0	118.616	0.2739
4	7	1	1	264.2917	0.6104
4	7	1	2	312.1487	0.7209
4	7	3	1	281.6596	0.6505
4	7	3	2	381.5296	0.8811
4	7	5	1	357.383	0.8254
4	7	5	2	241.813	0.5585

* Subgroups are defined by target (1 = Tone1, 2 = Tone2, 3 = Tone3, 4 = Tone4), transcription (1 = Tone1, 2 = Tone2, 3 = Tone3, 4 = Tone4, 6 = semi-Tone3, 7 = uncategorizable), grade (0 = Teacher, 1 = Grade1, 3 = Grade3, 5 = Grade5), group = (0 = Teacher, 1 = heritage speakers of Mandarin, 2 = L2 learners of Mandarin).

** $d = \text{Subgroup_Mean} / \text{Subgroup_Mean}_{\max}$