## Vowel Space

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# Abstract

This is an abstract.

Keywords: vowel, Mandarin

### Vowel Space

#### Methods

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

**Participants** 

Material

Procedure

## Data analysis

We used R (Version 3.4.2; R Core Team, 2017) and the R-packages dplyr (Version 0.7.6; Wickham, François, Henry, & Müller, 2018), forcats (Version 0.3.0; Wickham, 2018a), ggplot2 (Version 3.0.0; Wickham, 2016), here (Version 0.1; Müller, 2017), janitor (Version 1.1.1; Firke, 2018), papaja (Version 0.1.0.9842; Aust & Barth, 2018), purrr (Version 0.2.5; Henry & Wickham, 2018), readr (Version 1.1.1; Wickham, Hester, & Francois, 2017), rio (Version 0.5.10; C.-h. Chan, Chan, Leeper, & Becker, 2018), skimr (Version 1.0.3; McNamara, Arino de la Rubia, Zhu, Ellis, & Quinn, 2018), stringr (Version 1.3.1; Wickham, 2018b), tibble (Version 1.4.2; Müller & Wickham, 2018), tidyr (Version 0.8.1; Wickham & Henry, 2018), and tidyverse (Version 1.2.1; Wickham, 2017) for all our analyses.

### Results

### Discussion

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