

A Comparative Analysis on Native and Non-Native Korean Speakers' Vowel Productions

Jungah-Lee<sup>1</sup>, Heidi Shi<sup>2</sup>, & Jeongim Jin<sup>3</sup>

<sup>1</sup> University of Oregon

<sup>2</sup> University of Oregon

<sup>3</sup> University of Oregon

Author Note

Jung-ah Lee joined the Department of East Asian Languages and Literatures at the University of Oregon at 2017.

Correspondence concerning this article should be addressed to Jungah-Lee, 1248 University of Oregon Eugene, Oregon 97403-1248. E-mail: jlee27@uoregon.com

## Abstract

This paper investigates Korean vowel spaces of native Korean speakers (NS) and non-native Korean speakers (NNS, L1: English). The vowel production of NS and NNS were compared. All the speakers recorded eight Korean cardinal vowels, which are [i], [e], [æ], [ɐ], [ɔ], [u], and [a] three times. A preceding consonant was lenis fricative [s] sound of Korean. The participants' production was normalized by using Lobanov normalization function in the R program. Results show that NNS cannot differentiate the Korean mid-vowels and back vowels such as [ɐ], [ɔ], and [u]. This research can be helpful to investigate that L1 English can affect the L2 Korean learners' vowel pronunciation.

*Keywords:* Community of Practice, Language Socialization

Word count: X

22	A Comparative Analysis on Native and Non-Native Korean Speakers' Vowel Productions	
----	--	--

23	<b>Contents</b>	
----	-----------------	--

24	Abstract	<b>2</b>
----	----------	----------

25	A Comparative Analysis on Native and Non-Native Korean Speakers' Vowel Productions	<b>3</b>
----	--	----------

26	<b>1.Introduction</b>	<b>4</b>
----	-----------------------	----------

27	<b>2. Methodology</b>	<b>4</b>
----	-----------------------	----------

28	<i>2.1 Participants</i> . . . . .	4
----	-----------------------------------	---

29	Korean Native Speakers . . . . .	4
----	----------------------------------	---

30	Korean Non-native Speakers . . . . .	4
----	--------------------------------------	---

31	<i>2.2 Speech Materials</i> . . . . .	4
----	---------------------------------------	---

32	<i>2.3 Procedure</i> . . . . .	4
----	--------------------------------	---

33	<b>3. Restuls and Discussion</b>	<b>4</b>
----	----------------------------------	----------

34	<b>4. Conclusion</b>	<b>4</b>
----	----------------------	----------

35	<b>References</b>	<b>5</b>
----	-------------------	----------

## 1. Introduction

In this paper, our group investigated Korean vowel productions of Korean native speakers (NS) and non-native Korean speakers (NNS) by analyzing acoustic features. We aimed to examine native speaker pattern of vowel formants in Korean, and to explore second language learners' patterns in comparison to those of NNSs. Our results were analyzed by using normalization and statistic functions in the R program. The results indicate that L1 (English) of the NNSs might affect their L2 Korean vowel production. It is important to know what sounds students may have trouble with and what causes the difficulty in L2 Korean acquisition (Idemaru, 2018). Thus, this study is useful in terms of as well as suggesting crucial research in the second language education field.

## 2. Methodology

We adopted the method introduced by (???), the author of *Phonetics and phonology of Nantong Chinese*. We used methods introduced by (???). Besides we also adopted the diligent and collaborative approach to Rstudio (see (???)).

### 2.1 Participants

The authors gathered teenagers who attend different schools on the Pacific Northwest, *Eugene, Oregon*.

**Korean Native Speakers. n=3**

**Korean Non-native Speakers. n=3**

### 2.2 Speech Materials

### 2.3 Procedure

## 3. Results and Discussion

## 4. Conclusion

## References