### SECOND LANGUAGE LEARNER AUTONOMY: LEARNERS' SELF-ASSESSMENT OF PRONUNCIATION AND THEIR AWARENESS OF ITS ROLE IN COMMUNICATION

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The purpose of this study is to investigate learning second language (L2) pronunciation from the perspective of learner autonomy. Research has indicated that the misevaluation of their own pronunciation by L2 learners may be one of the hindrances to better pronunciation teaching and learning. A study was conducted with 27 non-heritage learners of Korean at a college in North America to examine if this claim is supported. The study asked participants to answer questions about their self-assessment of Korean pronunciation and their attitudes toward pronunciation in communication. The study also asked them to read 62 words and eight sentences containing 18 target consonants and 12 target vowels to examine how L2 learners' production of a target language sound aligns with their self-assessment of their pronunciation. The study found that learners from two different learning period groups evaluated their pronunciation positively. There was no significant difference between the two levels in terms of segment production accuracy, despite the lower-level learners' accuracy being slightly lower than that of the upper-level learners. More importantly, the learners' self-assessment of their pronunciation aligned with their actual production for both groups. The results suggest that L2 learners possess a proper understanding of and competence in evaluating their target language pronunciation, indicative of learner autonomy.

Keywords: Dunning-Kruger effect, learner autonomy, L2 pronunciation, learning period, self-assessment of pronunciation

## **INTRODUCTION**

For adult second language (L2) learners, obtaining native-like pronunciation of a target language at any stage of learning is hard, despite the introduction of speech sounds from the beginning of learning. As a result, pronunciation can be one of the most frustrating areas of L2 pedagogy for both educators and learners. Numerous studies suggest teaching methods for successful pronunciation training for better verbal communication (Nagle & Hiver, 2023; Saito & Plonsky, 2019; Sardegna, 2022). However, the effectiveness of the outcomes does not match with the educators' expectations or learners' efforts (Derwing & Rossiter, 2002; Elliott, 1997). This study investigates the factors contributing to the marginal impact of pronunciation teaching. Two theories offer relevant perspectives about L2 learners and their learning of pronunciation.

One theory finds causes for the marginal impact of pronunciation training from learners' selfassessment of their L2 pronunciation. Learners may not be able to detect if their own pronunciation is correct or incorrect due to lack of experience (Foote, 2010; McCrocklin, 2016). Lower-level L2 learners may overestimate their pronunciation in particular (Trofimovich et al.,

Kim, M-H. & Ha, H. (2024). Second Language Learner Autonomy: Learners' Self-Assessment of Pronunciation and Their Awareness of its Role in Communication. In D. J. Olson, J. L. Sturm, O. Dmitrieva, & J. M. Levis (eds), *Proceedings* of 14<sup>th</sup> Pronunciation in Second Language Learning and Teaching Conference, (pp. 1-14). Purdue University, September 2023. <u>https://doi.org/10.31274/psllt.17581</u> 2016). The Dunning-Kruger effect is claimed to be one of the causes of overestimation of the pronunciation by low-level L2 learners: "Poor performers tend to misjudge their ability" because they are unaware of their incompetence (Trofimovich et al., 2016, p.123). Since Kruger and Dunning (1999) suggested that less skilled individuals tend to overestimate their abilities due to their lack of competence in recognizing their own limitations, phonological research has found the 'Dunning-Kruger effect' from L2 learners' self-assessment of their target language pronunciation (Ortega et al., 2022; Saito et al., 2020). However, other studies claim that the Dunning-Kruger effect is a "statistical artefact," and it is not an absolute cause for misjudgement (Hiller, 2023, p. 1).

The other theory attempts to identify the causes of learning or potential unlearning as stemming from learners' autonomy. Holec defined learner autonomy as "the ability to take charge of one's learning" (1981, p. 3). Dickinson (1995) later found evidence that learner autonomy is the foundation of "learning success and enhanced motivation," when learners "control their own learning" (p. 174). Moyer (2017) claims that learning is by choice not by limits. There have been many other research studies on the relationship between learner autonomy and language learning (Almusharraf, 2018; Dickinson, 1995; Gürses, 2021; Little, 2022).

This study investigates whether lower-level learners indeed overestimate their L2 pronunciation, despite their limited proficiency. In addition, it explores whether misjudgement is the sole reason for the overestimation due to their lack of experience or if L2 learners understand and control their pronunciation based on their priorities regardless of their proficiency level.

### **Research Questions**

To investigate what may hinder learners' L2 pronunciation, four questions are posed.

1) Do L2 learners with varying learning periods perceive the role of pronunciation differently?

2) Are learners' self-assessments of their pronunciation and their L2 learning period inversely related?

3) Does learning period influence L2 learners' target language pronunciation?

4) Do learners' self-assessments of their pronunciation align with their actual pronunciation?

## **METHODS**

## **Participants**

This study was conducted with 27 non-heritage learners of Korean at a college in North America. Among the participants, 12 were enrolled in the 2nd-year class and 15 were enrolled in the 3rd-year class of Korean language when they took part in the study. The 2nd-year students had approximately 200 in-class study hours, while the 3rd-year students had approximately 350 in-class study hours at the time of the study. The learners' Korean proficiency levels were not assessed using standardized tests. The study labelled learners as lower-level and upper-level

based on their learning periods. The learners did not receive separate Korean pronunciation training other than individual feedback or corrections in class, during office hours, or as feedback on oral assignments.

## Procedure

## Online survey

The participants answered five questions about their self-assessment of Korean pronunciation and their attitudes toward pronunciation in communication on a Google Form. Three questions used a Likert scale ranging from 1 to 5, while two questions required a Yes or No response. Additionally, two questions had subsequent prompts asking for the reasons for their given answers (APPENDIX A).

## Reading task

Participants read 62 words and eight sentences written in Korean that included 18 target consonants and 12 target vowels in word-initial position as a class assignment (APPENDIX B). They uploaded their recordings to the course website. There was no special control for the recording as long as it was audible because the purpose of this task was to examine how accurate learners' target language sounds were.

## Analysis

## Awareness and self-assessment of L2 pronunciation

To address research questions 1) and 2), the learners' awareness of the role of pronunciation in communication and their self-assessment of pronunciation were analysed and compared across learning periods using Descriptive statistics. An analysis was also conducted on responses to open-ended questions that inquired about the reasons behind participants' selections on the Likert scale or in response to 'Yes/No' queries. This examined how L2 learners with different amounts of learning recognized the importance of L2 pronunciation and assessed their own L2 pronunciation.

## Production of L2 segments

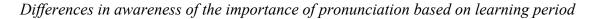
In order to answer research questions 3) and 4), consonants and vowels in the first syllable of words were collected through the production assignment, totaling 2,263 consonants and 3,152 vowels. Two experienced Korean instructors listened to the recordings and rated the target consonants and vowels as correct or incorrect. Allophonic differences or specific types of incorrect pronunciation were not considered, as the focus of the study lay in L2 sound production in real-life in-person communication. The initial interrater agreement on ratings was 96.9%. After excluding 168 unmatched tokens that the raters disagreed on, 100% agreement among raters was achieved regarding the 5,247 tokens used for the analysis. This part examined whether duration of learning is reflected in consonant and vowel production, or if lower-level learners are less skilled in L2 sound production. Also, the accuracy rate was calculated to verify whether learners' self-assessment of their pronunciation aligns with their actual pronunciation.

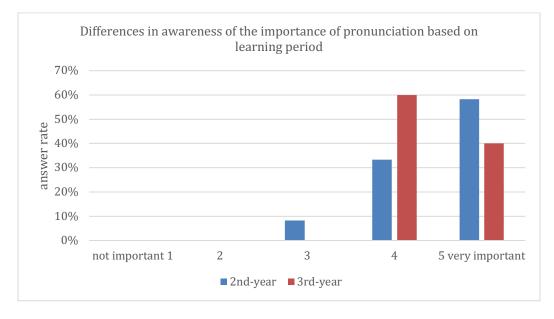
### RESULTS

#### Awareness of importance of pronunciation in L2 communication

The first survey question was, "How important is pronunciation when you communicate in a foreign language?" Regardless of the learning period, most participants chose either '4' or '5' on a Likert scale where options ranged from '1' (not important) to '5' (very important) as shown in Figure 1. RQ1 was not confirmed because both groups replied positively about the importance of pronunciation in communication. If there is any difference, it is an inverse difference between the two groups: the 2nd-year class learners chose '5' more than the 3rd-year class learners did. This result indicates that lower-level learners' limited progress in learning L2 pronunciation may not be attributed to their ignorance of its importance in communication.

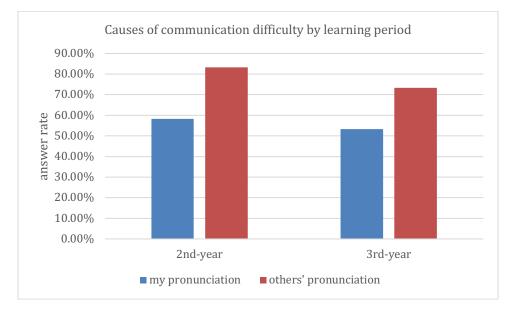
#### Figure 1





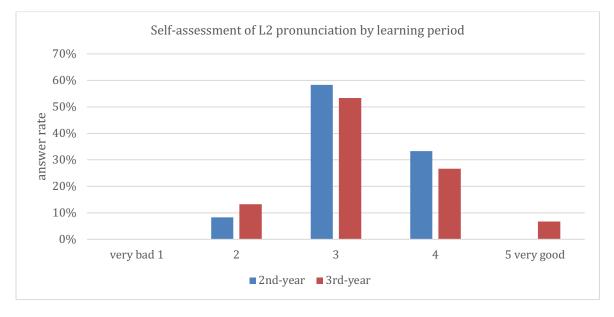
#### Self-assessment of target language pronunciation

To the question "Have you had communication difficulty due to your Korean pronunciation?" 58.3% of 2nd-year class learners and 53.3% of 3rd-year class learners chose 'Yes.' To the question "Have you had communication difficulty due to others' Korean pronunciation?" 83.3% of 2nd-year class learners chose 'Yes' and 73.3% of 3rd-year class learners chose 'Yes' (Figure 2). The study asked these two questions to examine whether learners are satisfied with their L2 pronunciation. All learners chose others over themselves as the cause for communication difficulty, suggesting that they were satisfied with their own target language pronunciation. However, the difference in satisfaction between the groups was not definitive, as lower-level learners perceived both themselves and others, more than upper-level learners, as the cause of communication difficulty.



*Learners' belief about causes of communication difficulty by learning period* 

The study also asked the participants "How do you evaluate your Korean pronunciation?" Most of the learners chose either '3' or '4' from the Likert scale from '1' (very bad) to '5' (very good). The result indicates L2 learners evaluated their target language pronunciation positively in general, but it does not provide evidence that lower-level learners evaluated their pronunciation more positively than upper-level learners, or vice versa, as indicated in Figure 3. Thus, RQ2 is not answered positively, suggesting that learners' self-assessment of their pronunciation may not be inversely related to their L2 learning period.

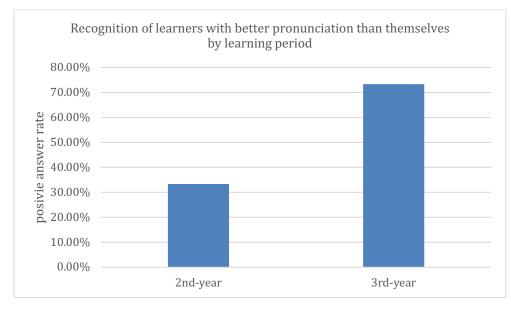


### Self-assessment of L2 pronunciation by learning period

The participants' follow-up responses explaining why they evaluated their pronunciation as good or bad are noteworthy. A 2nd-year class learner wrote "...I still get the *hangul* mixed up...," whereas two 3rd-year class learners wrote "I just haven't had that much speaking practice with native Koreans...," and "...I feel like I have had little exposure to practical use of Korean with natives..." For the reasons why they chose '4' or '5,' or 'good' or 'very good,' the 2nd-year class learners wrote answers such as "I try to pronounce the same way I hear Korean speakers do," "I am told my pronunciation sounds natural," "I think it is fine," "A native Korean student complimented by pronunciation once," or "Watched a lot k-dramas." The 3rd-year class learners wrote reasons for their good pronunciation as "I practiced a lot by watching YouTube videos, TV shows, and streams of native speakers talking...," "because I prioritize it greatly...," or "...listening to a lot of Korean / being around people who speak Korean...."

Based on the reasons provided for bad or good pronunciation, it appears that lower-level learners may lack the competence to understand or control their pronunciation. The sources of their self-evaluation are either incorrect ("I still get the *hangul*, a Korean alphabet, mixed up.") or external ("I am told my pronunciation sounds natura.l"). On the other hand, the learners in the 3rd-year class clearly articulate their reasons for evaluating their pronunciation as either bad or good.

The last question on the survey was "Do you think there are many students whose pronunciation is better than yours?" One-third of the 2nd year class learners and 73.3% of the 3rd year class learners chose 'Yes' as shown in Figure 4. The answers can be inverted as more than 70% of the lower-level learners assessed their pronunciation is better than others, while less than 30% of the upper-level learners evaluate their pronunciation as better than others. This result may be the only one that answers RQ2 positively: Learners' self-assessment of their pronunciation and their L2 learning period are inversely related.



Assessment of others' pronunciation by learning period.

When the participants were asked "If your choice was 'yes' for the previous question, why do you think their pronunciation is better than yours? If you chose 'no' for the previous question, why do you think your pronunciation is better than other students?" All learners mentioned 'practice' as a factor contributing to their or others' improved pronunciation, along with 'exposure to Korean media,' 'confidence,' and 'learning phonological rules.' This suggests that learners possess an understanding of effective methods for learning and developing L2 pronunciation.

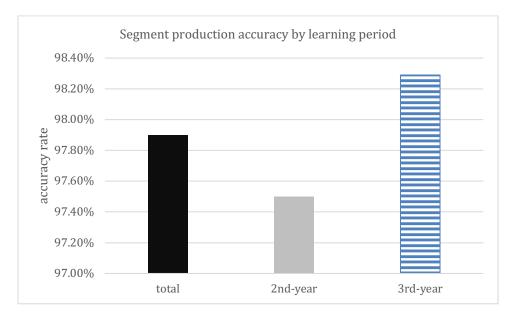
In summary of the survey results, four characteristics were identified among Korean learners regarding their self-assessment of L2 sounds and awareness of L2 pronunciation in communication across different learning periods. First, all learners are aware of the importance of L2 pronunciation in communication. Second, learners believe that the pronunciation of other learners causes more communication difficulties than their own, regardless of learning period. Third, learners tend to evaluate their pronunciation positively in general, regardless of their learning period. Fourth, lower-level learners think their pronunciation is better than that of their peers.

## Learners' L2 pronunciation

The segment production accuracy rate of all learners was 97.9%. Lower-level learners with less learning experience made more errors in pronouncing consonants and vowels compared to upper-level learners. This suggests a positive answer to RQ3: Learning period influences L2 learners' pronunciation of the target language. However, the accuracy gap between the two learning period groups was only 0.79%. Specifically, the accuracy rate was 97.5% for 2nd-year class learners and 98.29% for 3rd-year class learners, as shown in Figure 5. All learners exhibited high accuracy rates ranging from 94.3% to 100% in producing segments. While

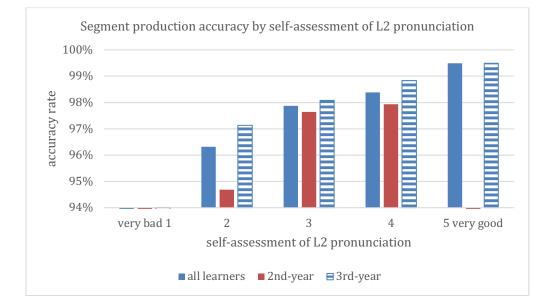
learners with less learning experience showed slightly lower accuracy compared to those with more experience, the difference was too small to conclusively assert that learning period significantly influences L2 learners' pronunciation of the target language, especially for segment production in word-initial position.

## Figure 5



Segment production accuracy rate by learning period

The learners' self-assessment of L2 pronunciation aligned with their actual production of segments, as indicated in Figure 6. This may answer RQ4 positively: Learners' self-assessment of their pronunciation aligns with their actual pronunciation. Nevertheless, the difference in accuracy between assessments was too small to conclude that learners of any proficiency level properly evaluate their L2 production.



## Segment production accuracy by self-assessment of L2 pronunciation

## DISCUSSION

The study investigated whether the hindrances to L2 pronunciation learning are better explained by the Dunning-Kruger effect or by learner autonomy. The survey results regarding learners' self-assessment of their pronunciation did not clearly differentiate between the two groups with different learning periods. Additionally, segment production accuracy was 94.3% or higher for all learners, and the difference between the two groups was not sufficient to determine whether lower-level learners with less learning experience are less skilled in target language sound production. Further research is required to attain more comprehensive insights into L2 pronunciation from the perspective of learners.

The study discovered contradictory characteristics of learners of lower-level learners. Their selfevaluation of their pronunciation corresponded with their actual pronunciation. This contradicts the claim made by the Dunning-Kruger effect that lower-level learners are less able to accurately evaluate their performance. On the other hand, lower-level learners sought other sources for their judgment on their good or bad pronunciation, which might indicate that their judgment was affected by their lack of experience.

The lower-level learners' segment pronunciation had more errors than upper-level ones did. However, their performance itself was not poor. Close to 98% of segments were pronounced properly by all learners in the study, and 97.5% by the 2nd-year learners and 98.3% by the 3rdyear learners were correctly produced. This is a positive result, considering the learning and use environment of a target language is mainly the classroom. In order to achieve a clear distinction between learning periods or proficiency groups, further studies in different phonological and phonetic environments are required. For example, phonological processes such as obstruent nasalization and lateralization are the most difficult to acquire, irrespective of L1 of Korean learners (Baasanjav, 2022; Heo, 2012; Kwon, 2022), and they might give different perspectives, both pedagogical and theoretical, on L2 pronunciation teaching and learning.

The participants in the study were limited to 2nd-year and 3rd-year Korean language students. Further research with participants spanning more diverse proficiencies is necessary to compare differences across various levels. The significant disparity in learners' proficiency levels may provide clearer evidence of the Dunning-Kruger effect or learner autonomy and could also suggest alternative factors influencing learners' self-evaluation of their pronunciation.

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## APPENDIX A

Questions for self-assessment of L2 pronunciation

How important is pronunciation when you communicate in a foreign language? 1   2   3   4   5								
Not important	0		-		0 V	ery important		
How do you evaluate your Korean pronunciation?								
How do vou eva	luate vo	ur Korea	n pronun	ciation?				
How do you eva	luate yo	ur Korea 2	n pronun 3	ciation? 4	5			

If you evaluate your pronunciation as good or very good, what do you think is the reason for that?

If you evaluate your pronunciation as bad or very bad, what do you think is the reason for that?

Have you had communication difficulty due to your Korean pronunciation?

o yes

o no

Have you had communication difficulty due to others' Korean pronunciation?

o yes

o no

Do you think there are many students whose pronunciation is better than yours?

o yes

o no

If you chose 'yes' for the previous question, why do you think their pronunciation is better than yours? If you chose 'no' for the previous question, why do you think your pronunciation is better than other students?

## **APPENDIX B**

List of words and sentences for L2 sound production

아래 단어와 문장을 한 번 씩 크게 읽고 녹음을 해서 코스웹에 올리세요. 올리기 전에 녹음이 잘 들리는지 확인을 꼭 하세요. (Please read the following words and sentences once each. Record your reading and upload an audio file to the course website. Before uploading the file, please ensure that your recording is clear and audible.)

편애	어제	환율	쉬다	걸리다	옥체	걸신
편리하다	깨끗하다	화요일	아침	그림	으름장	졸다
바람	위	깨방정	억지로	짜다	놀자판	들것
왔어요	켤레	뜀박질	룸메이트	왼쪽	놀다	외탁
뭐예요	왼쪽	뛰다	우리	빨리	의사	며칠
이사	쌀롱	졸부	악을 쓰다	짠눈	와전	취약
오늘	멸공	빠끔	싸움	왼쪽	트럭	내일
외박	애국심	원기소	들어오다	우기다	의기소침	룸펜
취미	바둑	이론	트집	살림		

감기에 걸려서 콧물이 많이 나왔어요.

겨울 방학 동안 집에만 있어서 조금 외로웠어요.

귀가 아파서 동네에 있는 병원에 갔어요.

수업을 들을 때 의자가 불편하면 선생님 말씀이 잘 안 들려요.

저는 까만색 구두를 사고 싶었는데 핑크하고 레드 밖에는 안 팔았어요.

저는 아침에 밥보다 빵을 많이 먹는 편이에요.

지난 토요일에 친구하고 싸우고 많이 울었어요.

짜장면을 만들려면 어떤 재료가 필요해요?

Target consonants and vowels in IPA

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Consonant targets	Vowel targets
/k/ /kulim/ 'picture'	/a//tcak*u/ 'repeatedly'
/n/ /nɛil/ 'tomorrow'	/e//hensa/ 'event'
/t/ /tulkʌs/ 'stretcher'	/////tce/ 'yesterday'
/l/ /lummeit <sup>h</sup> uu/ 'roommate'	/o/ /tcolta/ 'to doze off'
/m/ /munhak/ 'literature'	/wa//wateAn/ 'misrepresentation'
/p//palam/ 'wind'	/ <mark>wɛ</mark> / /wɛpak/ 'sleepover'
/s//swita/ 'to rest'	/u/ /munhak/ 'literature'
/tc//tcolta/ 'to doze off'	$/w_{\Lambda}//mw_{\Lambda}/$ 'what
/teh//tehwimi/ 'hobbies'	/wi//tc <sup>h</sup> wimi/ 'hobbies'
/kh/ /khosmul/ 'runny nose'	/ɯ/ /kɯlim/ 'painting'
$/t^{h}//t^{h}$ ulta/ 'to turn on'	/wi//wisa/ 'doctor'
/p <sup>h</sup> //p <sup>h</sup> ipu/ 'skin'	/i/ /p <sup>h</sup> ipu/ 'skin'
/h/ /hɛŋsa/ 'event'	
/k*/ /k*etatta/ 'to realize'	
/t*/ /t*aŋkhoŋ/ 'peanut'	
$p^{*}/p^{*}$ to take out'	
/s*//s*ilum/ 'traditional Korean wrestling'	
$/tc*//tc*ik\epsilon/$ 'stew'	