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Speech Intelligibility of the Diastratic Varieties of Philippine English

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Abstract

The rise of English globalization has prompted speech production variations that reveal the cultural and social backgrounds of the different speakers. However, intelligibility issues of the different varieties have also become a concern. Thus, the present study attempted to assess the intelligibility of Philippine English (PE) diastratic varieties' speech recordings produced by local Cebuano speakers. Further, it aimed to specifically evaluate the speakers' production differences, rate the intelligibility of the language varieties, and determine the effect of language variety on the listener-evaluators in terms of intelligibility and distraction ratings. Using an exploratory sequential mixed method design, the speech participants in this study were carefully chosen through multistage sampling first by social class and then by phonological variations. The three final sample speakers out of the initial eighteen were finally categorized as acrolect, mesolect, and basilect. The evaluating groups included English language users from the USA, the Philippines, Korea, and Thailand, and each group represented a region in Kachru's concentric circle of the World Englishes model. The results identified acrolect as the most intelligible variety followed by mesolect. Basilect, on the other hand, was considered very distracting to the evaluator groups, resulting in a significantly low intelligibility score. Thai evaluators gave

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the lowest intelligibility ratings, which may be attributed to two factors, L1 interference and unfamiliarity of L2 variation. Finally, future directions and implications in the classroom and industry are stated to create a sense of cultural awareness and to promote a deeper intercultural understanding that comes with international intelligibility.

Keywords: Cebuano English, English varieties, intelligibility, language distraction, L1 interference.

1. INTRODUCTION

The English language generally serves as a medium or the primary bridge to link the linguistic division among hundreds of different speakers across the globe. The phenomenal dispersion of English in the international arena is what probably prompted Crystal (2003) to claim that, "nobody owns it [English] anymore (p. 2)". To date, non-native speakers of the language (as a foreign or second language) far outnumber native speakers. Crystal (2003) further noted that this enormous number of non-native English users has developed a variety of speaking styles that they believe to be effective and convenient, hence, the emergence of English variations worldwide.

Along with the rise of English as a *lingua franca* all around the world, its variations can result in unintelligibility among speakers. Earlier and current scholars believed that these language variations or accents are the principal reasons that lead to poor speech intelligibility (Bent & Bradlow, 2003; Gruszka, 2013; Jenkins, 2000; Levis, 2018). Intelligibility is broadly defined by Munro and Derwing (2015) as the extent to which a listener understands a speaker's message. Smith and Nelson (2019) listed the ways intelligibility is attained by listeners; they can identify the words spoken (intelligibility), understand the message (comprehensibility), and understand the intent behind the message (interpretability).

The linguistic area where English varieties generally diverge from each other is pronunciation, and due to these production deviations, intelligibility is primarily threatened (Jenkins, 2000). Gruszka (2013) commented that much of the content is lost if the speech is unintelligible due to an accent. When this happens, it will eventually result in frustration, withdrawal, or demotivation of both listeners and speakers. Therefore, Jenkins (2003) suggested that if we promote global communication, pronunciation demands careful consideration.

Philippine English, which will be henceforth referred to as PE, is phonologically distinct because of its heterogeneous nature. As a repercussion of the multi-linguality of the Philippines, various ethnic and local language groups adopted English as a second language differently in terms of phonology and accents. With over a hundred local languages in the Philippines, each with individual distinctions, the English language is assimilated according to the locality's native language features. While Tagalog English or Taglish had been extensively represented as Philippine English in previous studies (Dayag, 2007; Dita & De Leon, 2022; Tayao, 2008), little is known about the intelligibility of Philippine English and its varieties spoken by Cebuanos or Cebuans. Cebuano is the largest local language group in the Philippines and is known for its hard accent. How English is used and understood in this region is the focal point of this study.

The current investigation aims to assess the level of intelligibility of Philippine English lectal varieties produced by Cebuano English speakers as evaluated by different international, local, native, and non-native listeners. The study specifically addresses the following research objectives:

1. Identify the phonological production differences of the PE varieties,
2. Assess and compare the speech intelligibility ratings of PE varieties,
3. Determine the effect of language variation on:
   - the intelligibility rating of the evaluators, and
   - the level of distraction.

The findings of the study could serve as a linguistic basis for Philippine language practitioners and other policy and decision-makers to improve the quality of Philippine English production in the light and interest of international intelligibility whether it be in academia or industry. Philippine Statistics Authority (2019) has reported that more than 2 million Filipino workers are internationally employed, and studies such as that of Li and Chen (2019) and Leung (2011, 2012) reported that linguistic factors are one issue that Filipino workers face in their workplace because their language is difficult to understand. Many of these Filipino foreign workers are Cebuano speakers. Thus, the results of this study are timely and could shed additional light on how to achieve successful communication that comes with intelligibility.

2. LITERATURE REVIEW

The global dispersal of the English language paved the way for English variations. These variants of English gave rise to the dispute as to whether to strictly abide by the standard norm or retain and tolerate the language variations (Kirkpatrick, 2014). Milroy and Milroy (2012) pointed out the difficulty of defining Standard English since General American English (GAE) or the Received Pronunciation (RP) of British English can be both identified as Standard English. Aside from what is believed to be standard, other English varieties globally are highly stigmatized and draw negative criticism. Farrell and Martin (2009) mentioned that non-standard varieties, which might include Taglish in the Philippines or Singlish in Singapore, are at times conceived to be illegitimate since they connote a failure in attempting to be standard.

Moreover, anything different from the standard is thought to be inferior, deviant, or deficient. Despite these heavy criticisms toward the new and emerging Englishes, Kachru's 'World Englishes' framework (1985, as cited in Kirkpatrick, 2014), originally posited in 1982, argued that all varieties of English are linguistically equal. This notion, where non-native speakers can also preserve their cultural and ethnic identity through their own distinct English language variety, has been widely accepted to date. In this model, the English language is used in three regions or three concentric circles that include inner, outer, and expanding circles. The inner circle covers the regions where English is used as the mother tongue (e.g., the UK, the USA, or Australia). The outer circle consists of the regions where the native language is not English but is used as the Lingua Franca between language and ethnic groups (e.g., Malaysia, Nigeria, and the Philippines). The expanding circle includes those regions where English is used for international communication or as a foreign language (e.g., Thailand, Korea, and China).

2.1 Philippine English and its Varieties

Culturally and linguistically rich, the Philippines has recognized over a hundred distinct local languages. McFarland (2008) identified 118 languages, while Grimes (2002) listed 163. The widely used local languages are Tagalog, Cebuano, Hiligaynon, and Ilocano, and they mainly signify the local regions they represent. Despite these language variations, Filipinos generally employ two languages, the Filipino language (alternately, Tagalog) and English, both serving as the lingua franca of the country.

The utilization of the English language has become an integral part of Filipino culture. It is the medium of public education, the media, and business (McFarland, 2008). It has also become an alternative medium of communication for the Filipino language in teaching specific subjects such as mathematics and English, and others in the classroom, and English has even become a vital source of Filipino vocabulary.

This state of complementing both Filipino and English aids the rise of the varieties of English in the country. Both languages influence each other. Filipino has been 'Englishized', and English has been 'Filipinized'. The elite and the upper class maintain the English status quo, while the middle and the lower levels of the social ranks adopt English in a manner in which the native tongue or the local language of the region largely influences English use (Tupas, 2004).

There is not one specific type of PE, which thereby adds to its linguistic uniqueness. Several attempts have been made to classify PE. According to Gonzales (2008), English classification is geographically based, and the speaker can be easily identified as to what cultural community he or she belongs to. Suprasegmental features, such as intonation, stress, and tone, indicate one's local cultural affiliations, such as Cebuanos, Hiligaynon, Ilocanos, and Maranaos.

The seminal and benchmark study on the variety of PE, which points back more than four decades ago, was proposed by Llamzon (1977). This was one of the first attempts to identify PE based on social class and the framework was subsequently expanded by Tayao (2004) incorporating phonological variations. Llamzon (1977) initially classified PE into three lectal categories–acrolect, mesolect, and basilect groups–based on their education levels, professions, and language use in different domains. The acrolects included educated professionals whose English usage involved both work and home, i.e., broadcast media, academia, religious services, and other professionals who specialize in speech, drama, linguistics, or mass communications. The mesolects comprised professionals whose English usage was within the bounds of work only and not at home. The last variety, which is labeled as basilect, consisted mainly of non-professionals, and it included those who had finished high school level and some who had even studied post-secondary vocational courses. They used English only occasionally at work.

In addition to Llamzon's (1977) social distinctions, Tayao's (2004) phonological descriptions created a clearer delineation among the phonological varieties. At the segmental level, acrolects generally resemble native speakers in most features. Some differences can be found, however. For example, the aspiration of the voiceless stops (/p/, /t/, /k/) was occasional in the language of acrolect but never in the mesolect and basilect varieties. For the mesolect and basilect groups, sibilants such as /ʃ/ as in 'ship', /ʒ/ as in 'genre', and /z/ as in 'zoo' are generally coalesced as /s/, and /r/ is rendered as a rolled or one-tap /r/ in contrast to retroflex liquid of GAE.

In the case of basilect, the labiodental fricative /f/ (voiceless) and /v/ (voiced) are absent from the consonant inventory and are realized by the bilabial stops /p/ and /b/, respectively. So as with the interdental fricatives /θ/ (voiceless) and /ð/ (voiced), the basilect variety realizes them as alveolar stops /t/ and /d/, respectively. The affricate /tʃ/ is realized as /ts/ for 'check', and /dʒ/ is realized as /dy/ for 'jeep'. For consonant clusters, basilects do not pronounce them as such. There is an omission of the final consonant as in /pas/ for the 'past' and an addition of a vowel before the initial consonant, such as /iskul/ instead of /skul/ for 'school'.

2.2 Philippine English intelligibility

There is a dearth of intelligibility studies of Philippine English in wider contexts. There are a few recent studies, however, that did venture into the topic. Dayag (2007) explored the 5 to 10 minutes recorded speech samples of five mesolect exemplars. The speech samples included an extended monologue, and sentence readings incorporating problematic areas for Filipino speakers. The researcher asked both six native and non-native highly educated listeners, with each Kachruvian circle represented, to assess the samples. The study resulted in an overall score of 70% intelligibility. The native raters could understand 80% of the speech samples, while the second language speakers and the foreign language speakers could comprehend 75% and 55%, respectively.

Similarly, Dita and De Leon (2017), in a lectal study of low proficient and high proficient university PE speakers, found the speech samples to be 60% intelligible to non-native speakers through cloze test evaluations of speech productions. Tonio (2019) also found that PE in the classroom as used by their teachers is highly intelligible to young international students. Between acrolect and mesolect PE, the latter showed higher intelligibility ratings using cloze tests due to a slower speech rate and a syllabic timed-adjusted speech.

Conversely, in Ghobain's (2016) study of World Englishes' intelligibility, 234 students and professionals rated Filipino English speakers' speech samples as difficult to understand next to Indian English speakers, 30.6% and 8.1%, respectively. The study posited that familiarity with the language variation may have caused the comprehension rating. Nevertheless, the fact remains that some aspects of Filipino English are difficult to understand.

In all of these studies, two sets of participants were involved. The first set were exemplary Filipino speakers mostly from the acrolect and mesolect groups. The second set of participants were the listeners or evaluators who assessed the speech samples. The second set of participants constituted Filipino and non-Filipino English speakers. The present study revisited the intelligibility level of PE from the perspectives of the local Cebuano variations through the lens of local and international evaluators, and this time, with the inclusion of the basilect variety.

3. METHODS

The study employed an exploratory sequential mixed method design in which qualitative and quantitative data are collected and analyzed in a sequence of phases. Bringing the two methods together can help draw new insights beyond the information gained from the separate quantitative and qualitative results (Fetter et al., 2013).

3.1 Participants

Two groups of participants in three specific phases were generally involved in this study: the speakers for the speech production and the listener-evaluators for the speech perception or intelligibility. The speaker participants were chosen via multi-stage sampling. The first stage was lectal group clustering of the participants based on social and educational backgrounds. For the second stage, purposive sampling was used wherein a sample was chosen to represent the group incorporating the phonological features of each variety. Multistage sampling was used to reduce the massive time taken for the research, most specifically for the evaluators' part, and to find the right sample needed for the research.

Phase 1 was the speech elicitation and production from three different PE speech varieties based on social category or background. At the outset, there were 18 participants. During Phase 2, the participants were narrowed down to the selection of one sample speaker-participant for each variety. Lastly, Phase 3 was the evaluation of speech samples, and the different evaluators electronically accessed the data for assessment. Table 1 displays a summary of the participants, which includes both the speakers and the evaluators in all three phases.

Table 1. Participants' profiles.

		Participants' Description	Participants (N)	Total
Speakers	**Phase 1** Speech Elicitation and Production– Initial Selection	Acrolect	5	18
		Mesolect	7	
		Basilect	6	
	Phase 2 Narrowing Down – Final Selection	Acrolect (A-PE)	1	3
		Mesolect (M-PE)	1	
		Basilect (B-PE)	1	
Evaluators	**Phase 3** Evaluation	Inner Circle (USA)	20	80
		Outer Circle(PHL)	20	
		Expanding Circle(KOR)	20	
		Expanding Circle(THAI)	20	

3.1.1 Speakers

Considering Xia's (2013) stance that gender differences impact language use, only male participants were selected. One reason mentioned emphasized that females have better pronunciation than males. The initial 18 adult participants for Phase 1 were native speakers of Cebuano, which is the local language used by the most significant number of Filipinos next to Tagalog. It is known for its hard accent, which has vowels that originally and mainly consist of only /a/, /ɪ/, and /u/ (Tayao, 2008). Following Llamzon's (1977) and Tayao's (2004) categorization, five participants were classified as acrolect, seven as mesolect, and six as basilect based on their education and social status.

In Phase 2, the general criteria of the selection of samples were based on Tayao's (2004) phonological categorization of the different Filipino lectal speakers. The three samples that closely resembled Tayao's categorization were then selected. They had never lived or traveled to any native-speaking countries. The acrolect representative (A-PE), 44 years old, worked in an international English private institute whose job involved evaluating and rating the speech production of non-native

ESL learners. English was used in the house with his children. The mesolect exemplar (M-PE), 37 years old, was a school principal who had been an elementary school teacher. The basilect representative (B-PE), 42 years old, was a public transportation driver and had a vocational course in automotive technology.

3.1.2 Evaluators

The listener-evaluators, who responded randomly, were from the USA, the Philippines, Korea, and Thailand. They represented the inner, outer, and expanding regions of Kachru's concentric circles. Native-speaking evaluators should be adults, and the educational background of non-native-speaking evaluators should at least be college-level. The 20 inner circle evaluators **(**USA) were American adults and the outer circle evaluators were 20 university students from the Philippines **(**PHL**).** The expanding circle evaluators were also university students, including 20 from Korea (KOR) and 20 from Thailand (THA).

3.2 Instruments

Two general types of instruments were used in the study. The first is for speech production and the other is for the speech evaluation.

3.2.1 Speech production

Three modified speech elicitation instruments were employed while gathering the speech samples. The three activities included isolated word sounds, diagnostic reading, and free speech. The isolated word sounds list was adapted from the Goldman Fristoe Test of Articulation (GFTA), a systematic technique of assessing an individual's articulation of speech sounds (consonants and consonant clusters) of General American English by showing images that contain the target sound. In total, 60 individual pictures including word names were to be elicited from the speakers. For the diagnostic reading, a one-paragraph piece developed by Weinberger (2015) containing most of the consonant, vowel, and cluster sounds of GAE phonology was read by the speakers. Its readability score was 90.000 on the Flesch Reading Ease (FRE), which interpreted the reading piece as very easy to read, as it is generally understood by 11-year-olds. For free speech, Jones (1991) suggested a picture designed to elicit an unrestrained speech expression. The speakers were told to describe and discuss spontaneously what they saw in the picture. The speech productions were transcribed using the International Phonetic Alphabet.

3.2.2 Speech evaluation

The speech assessment samples were virtually accessed by the evaluators. The speech samples from the three language tasks produced by speakers were attached to the survey. The tasks included the production of isolated word sounds, diagnostic reading, and free speech. Another section of the speech evaluation added a researcher-made Likert-scale questionnaire for distraction rating of the PE varieties. The distraction assessments were placed at the end of each section in the speech production

of the speakers. The evaluators had to rate the degree of distraction for the utterance performed.

3.3 Data Collection and Analysis Procedure

Generally, the data was collected via speech recordings and had undergone two types of speech transcriptions, the Romanized transcription, and the International Phonetic Alphabet (IPA) transcriptions to identify the phonological differences. The researchers had to organize individual sessions with the participants for the speech elicitation process in the Philippines. All the initial 18 Filipino participants were scheduled one at a time for speech elicitation of the three speech tasks. The adapted 60 GFTA words were presented in colorful pictures on a monitor screen for the speakers to identify the isolated word sounds. When the speakers failed to recognize the target words, word prompts appeared for reading without a time limit. For the diagnostic reading, the piece was given for free reading. The last task, free speech, was a one-minute picture description. After the careful selection to identify only one speech sample per variety, the speech production samples were then processed for evaluation. The researchers sought the assistance of online survey facilitators from the USA, Thailand, and Korea. The speech tasks were rated using a 6-index Likert scale grounded on Morley's (1991) speech intelligibility index evaluation of student communicability. The scores of the assessment were analyzed using statistical measures, specifically to analyze between-group ratings, multiple comparisons, and relationships between data.

4. RESULTS AND DISCUSSION

The results and discussion section are presented under three sub-headings that include the a) identification of the phonological production differences of the PE varieties, b) assessment and comparison of the speech intelligibility ratings of PE varieties, and c) determination of the influence of language variation to the intelligibility rating given by the evaluators and the distraction level to the evaluators The headings of each subsection address the three research questions, respectively.

4.1 Phonological Production Differences of the PE Varieties

To answer the first research objective, the speech samples were analyzed through the speakers' phonological variations in the consonant and vowel levels. While A-PE closely resembled GAE, B-PE had shown the greatest deviance in both consonant and vowel productions.

Consonants in PE can be described as below:

- Firstly, for consonants, B-PE had an observable stopping deviation. Four main fricatives were replaced by stops /f/ to /p/, /v/ to /b/ as in the production of 'five' which became [paɪb]. The sound /θ/ for 'three' became [trɪ] and the /ð/ for 'they' became [deɪ].
- Secondly, the deaspiration of voiceless stops /p/, /t/, and /k/ was apparent. A-PE had been consistent in the aspiration or with a puff of air for these stops while M-

PE appeared inconsistent. B-PE, however, did not show signs of aspiration for these stops.

- Thirdly, is B-PE's depalatalization of /tʃ/ and /dʒ/ and substituted as /ts/ and /ds/ as in [lants] for 'lunch' and [dsar] for 'jar'. Similarly, 'brushing' was delivered as [brasɪŋ].
- Last is the fricative devoicing. A-PE similarly resembled GAE, while A-PE devoiced unspelled sounds. The /z/ in 'zebra' was pronounced. However, for 'rise' and 'please', /s/ was used. For B-PE, whether spelled or unspelled, the /z/ sound coalesced with /s/ as in [sɪbra] or [tsɪs] for 'zebra' and 'cheese'.

Meanwhile, for vowels, a few observations were found:

- First is M-PE and B-PE's tendency to substitute front vowels with back vowels. Thus, 'sack' was delivered as [sak] which rhymed with 'sock'. Similarly, 'rack' and 'cup' were heard as 'rock' or 'cop' by listeners.
- B-PE manifested limited vowel variations. Only [a], [ɪ], and [ʊ] were apparent. Other vowel sounds were hardly recognizable especially when produced at word level and where context was not included.
- Another vowel-related deviance was the unmaintained length of vowel sounds of M-PE and B-PE, such as [i] and [u] for 'sheep' and 'fool', which sounded like 'ship' and 'full'.
- M-PE's schwa sound was present /ʌ/, but the unstressed /ə/ was absent. The word 'landed' and 'glasses' were pronounced in full front vowels as [landɛd] and [glassɛs].
- For B-PE, other vowels were replaced with [a], [ɪ] and [ʊ].
- Next is vowel simplification for B-PE, in which it was apparent where the diphthongs became monophthongs. 'Go' and 'plate' became [gʊ] and [plɪt].
- Lastly, vowel epenthesis or sound addition by B-PE was evident in unstressed vowels, such as [əs'tar] for 'star' or [ɪs'paɪdər] for 'spider'. Occasionally, M-PE joined B-PE in inserting a vowel in between consonants as [tʊ'wɛlv] and [tʊ'wɛlb], respectively.

4.2 PE Variety's Speech Intelligibility Ratings

The three PE lectal varieties were rated differently by the evaluators across three speaking tasks. The speakers' intelligibility ratings and other descriptive data are shown in Table 2. The data presented in the figures are based on the standardized *z* scores to add a more vivid visualization of how the scores deviate from or coincide with the general mean or median.

Table 2. Intelligibility scores of the three speakers in all three tasks.

	Descriptive Statistics					K-W Test		
	e	**Eval. (N)**	**Mdn**	**M Rank**	**z**	**H**	**df**	***p***
Task 1	A-PE (80) M-PE (80) B-PE (80)	240	5.98 5.47 4.09	173.82 135.28 52.40	0.877 0.361 -1.186	160.323	2	.000*
Task 2	A-PE (80) M-PE (80) B-PE (80)	240	6.0 5.0 3.0	170.00 140.48 51.03	1.299 0.621 -0.734	132.851	2	.000*
Task 3	A-PE (80) M-PE (80) B-PE (80)	240	5.0 4.0 3.0	169.04 124.45 68.01	0.758 0.064 -0.631	88.810	2	.000*

Table 2 continued…

Total	A-PE (80) M-PE (80) B-PE (80)	240	5.64 4.62 3.0	167.35 139.03 55.13	1.289 0.564 -.0885	49.333	2	.000*

It can be observed that the median scores and the mean ranks of B-PE, M-PE, and A-PE consistently moved in an ascending pattern for all three tasks, respectively.

It was also observed through the employment of the K-W test that there were statistically significant differences among the speakers in all three tasks. Moreover, the post hoc pairwise comparisons (Table 3) revealed a statistically significant pattern, which proved that A-PE was higher than M-PE [$H(2)=42.562$] and B-PE [$H(2)=131.400$]; and M-PE was higher than B-PE [$H(2)=88.838$] with a significance of $p=.000$ in each paired comparison of all three tasks.

Table 3. Pairwise comparisons of the three PE speakers.

	Speakers	**H**	**Std Error**	**p**
	B-PE – M-PE	76.750		.000*
Task 1	B-PE – A-PE	138.350	10.948	.000*
	M-PE – A-PE	61.600		.000*
	B-PE – M-PE	89.450		.000*
Task 2	B-PE – A-PE	118.975	10.750	.000*
	M-PE – A-PE	29.525		.000*
	B-PE – M-PE	56.438		.000*
Task 3	B-PE – A-PE	101.025	10.745	.000*
	M-PE – A-PE	44.588		.000*
	B-PE – M-PE	88.838		.000*
Overall	B-PE – A-PE	131.400	10.973	.000*
	M-PE – A-PE	42.562		.000*

Figure 1 represents the *z* scores of the speakers (indicated in Table 2), thereby giving a more precise visualization of the overall results of the speakers' production rating. Figure 1 gives a visualization that B-PE scores are below the mean in all three tasks, but the scores of both M-PE and A-PE are above the mean. It is also evident that even if M-PE's scores are above the mean, A-PE significantly shows the highest scores in all three tasks.

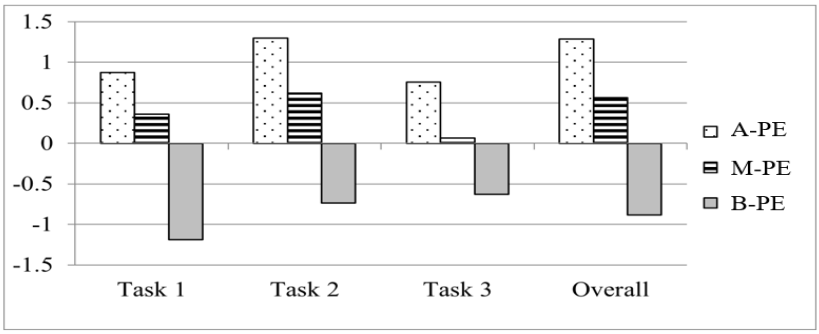

Figure 1. Speakers' general intelligibility *z* scores in the three speech tasks.

From these results, it can be inferred that the three sample PE speakers were significantly different from each other. In response to the second research objective regarding the speech production of the varieties of PE, the present study gave a

conclusion that the A-PE speaker, when it comes to intelligibility, had been rated as the highest among the three varieties, followed by the M-PE. The least-rated speaker was the B-PE. Using the overall median scores of all three tasks found in Table 3, B-PE had an index of 3 (Mdn=3.0), M-PE was inclined to an index of 5 (Mdn=4.62), and A-PE was leaning towards an index of 6 (Mdn=5.643). The different speakers' speech intelligibility indices are described in Table 4.

Table 4. PE speakers' speech description according to Morley's (1991) speech intelligibility index.

Speakers	Morley's Index	Description
A-PE	6	Speech is very clear, near-native, and only minimal features of difference from the native English speakers.
M-PE	5	Speech is fully understandable, and only occasional sound variance and other features are present but not seriously distracting
B-PE	3	Speech is reasonably understandable but significant listener effort is required due to the speaker's pronunciation errors, which hinder communication and cause listener distraction.

The matching indices confirmed Tayao's (2004) phonological categorization of the lectal varieties of Philippine English which are acrolect, mesolect, and basilect. The acrolect, which approximated A-PE in the present study, closely resembled those of GAE phonemes. Though displaying increased phonological differences from GAE, the mesolect or M-PE was still considered comprehensible and broadly represented general Filipino English. Basilect, which was equated to B-PE, was the variety that is greatly affected by the phonology of the local tongue.

4.3 Influence of Language Variation on the Intelligibility Rating and the Distraction Level to the Evaluators

This section discusses two subtopics: the intelligibility ratings of the evaluators and the distraction level caused by the language variation. Each is discussed separately.

4.3.1 Intelligibility ratings of the evaluators

The evaluators were composed of four groups from the different regions in Kachru's circle. The USA and the Philippines (PHL) represented the inner circle and the outer circle, respectively, while Korea (KOR) and Thailand (THA) represented the expanding circle. The descriptive statistics in Table 6 show the general rating of the different evaluators about the speakers in the three tasks and the K-W test results.

For Task 1, the results of the K-W test showed no considerable difference among the evaluator groups, but significant differences were found in Tasks 2 and 3. For Task 2, the evaluators, whose scores were arranged from the highest to the lowest, PHL, USA, KOR, and THA, were significantly different at p=.000 [H(3)=28.060]. Similarly, a significant difference of p=.000 [H(3)=42.266] for the evaluators' ratings was also apparent in Task 3 for PHL, KOR, USA, and THA, respectively.

The post hoc analyses for both Tasks 2 and 3, shown in Table 6, pointed to THA as having a relatively different and lower score when compared with each of the other evaluator groups. There was a significant difference between USA, PHL, and KOR

compared with each other in Tasks 2 and 3 except for THA, which gave the lowest rating for intelligibility.

Table 5. Intelligibility rating of the evaluator groups in the three tasks.

	Descriptive Statistics					K-W Test		
	Evaluators	**Eval(N)**	**Mdn**	**M Rank**	**Z**	**H**	**df**	**p**
Task 1	USA (20) PHL (20) KOR(20) THA (20)	240 (80x3)	5.5 6 5 5	127.15 126.58 119.48 108.80	.361 .877 -.154 -.154	7.185	3	.066
Task 2	USA (20) PHL (20) KOR (20) THA (20)	240 (80x3)	5 5 4 3.5	130.93 141.93 127.88 81.27	.621 .621 -.056 -.395	28.060	3	.000*
Task 3	USA (20) PHL (20) KOR(20) THA (20)	240 (80x3)	4 4.5 4 3	124.92 146.99 138.37 71.73	.064 .411 .064 -.631	42.266	3	.000*
Total	USA (20) PHL (20) KOR (20) THA (20)	240 (80x3)	5 5 5 4	124.97 145.72 133.93 77.13	.565 .565 .565 -.160	39.458	3	.000*

Table 6. Pairwise comparisons of the four evaluator groups.

	Evaluators	**H**	**Std Error**	**p**
	THA – KOR	-27.450		.001*
Task 2	THA – USA	34.600	7.196	.000*
	THA – PHL	43.650		.000*
	THA – USA	28.825		.000*
Task 3	THA – KOR	-37.100	7.232	.000*
	THA – PHL	43.475		.000*
	THA – KOR	-32.025		.000*
Overall	THA – USA	34.500	7.348	.000*
	THA – PHL	42.975		.000*

The *z* scores were then compared to assess the evaluator groups that fell above and below the mean for the intelligibility of the three speakers' productions, as shown in Figure 2. It appeared that the four evaluator groups' scores for B-PE were all below the mean, which signified that the evaluator groups rated B-PE the lowest. It is also noticeable that the THA group, which had a significantly lower score than each of the other groups, had consistent scores below the mean for all three speakers.

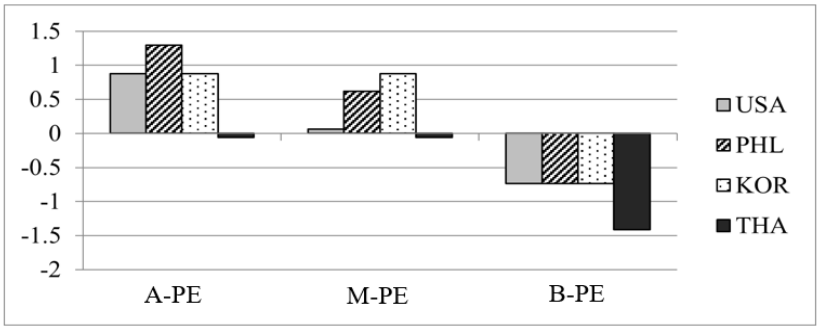

Figure 2. Evaluators' general rating for the three speakers.

The results in this section show from all three speech tasks, only the first task on word sound in isolation, had no significant differences among the evaluator groups. However, in the extended speech tasks, only the THA group had given a significantly low intelligibility rating to the production of the three speakers. Although Korea belongs to Kachru's expanding circle with Thailand, the level of intelligibility of Korean evaluators was comparable to the USA and the Philippines in this study. There was no significant difference in Korea's rating from the USA and the Philippines.

The significant difference between Thai evaluators from the other groups could be attributed to two assumed factors. The first was the type of language Thais use for their local language. Thai is a tonal language, which relies significantly on five different tones for meaning. Several studies mentioned by Zhang et al. (2008) described that the linguistic experiences and perceptual pieces of training were affected by the acoustic patterns of speech. Thai, being a tonal language, could be an interfering factor in intelligibly understanding language productions that might be different from its local language, and in this case, PE is considered an atonal language.

The second factor that might point to the intelligibility results of the evaluators was the familiarity with the language variation. Intelligibility is high when the interlocutors have the same linguistic background (Smith & Nelson, 2019) or when pronunciation is familiar (Dita & De Leon, 2022). Of the four evaluator groups, only the Thais were not closely linked to GAE. Even though Thailand was not a British colony, its neighboring countries, such as Myanmar, Singapore, and Malaysia were (Baker & Phongpaichit, 2014).

The English language in Thailand conformed to the King's English and was highly influenced by a colonial hierarchical standpoint (Buripakdi, 2011). Since Thailand has had a greater deal of negotiations with British English (BE) than American English (AE), it is highly possible that BE is widely used and has persisted in the country. Cedar (2006) also claimed that Thai and Americans use language differently, and having a background in the other language influences listening comprehension (Sadighi & Zare, 2006). With this assumption, Thai EFL evaluators may not be significantly accustomed to GAE or any similar variety to Korean EFL learners, who preferred GAE to any other variety. In Korea, AE was more preferred than other English varieties. Statistics in Wagner's (2009) study reported that 68.7% of the English teachers in Korea in 2005 were from the USA and Canada, and only 7.8% were identified as BE. In 2008, the percentage increased to 71.8% and 8.6% for Americans/Canadians and British teachers, respectively.

Based on the findings, the first research question regarding the evaluators was addressed. Of all the evaluator groups in this study, Thailand gave the lowest intelligibility rating by a significant margin. It suggests that the intelligibility rating of the evaluators cannot always be determined by the regions of Kachru's circles, whether the learners belong to ESL (outer circle) or EFL (expanding circle) regions. Some factors may have affected the intelligibility ratings of the listeners, and they may include the listeners' local language interference, and the type of English one is accustomed to.

4.3.2 Speech distractions of language variety ratings

To address the second part of the third research objective, a correlation analysis was first conducted to assess if there was a relationship between the overall

intelligibility ratings and the distraction ratings of the evaluators. Spearman's Rho test in Table 7 indicates a significantly moderate negative linear relationship between the two variables [*rs*(238)=-.67 and *p*=.000]. This result suggested that the higher the intelligibility rating given by the evaluators to the speakers, the lower the equivalent rating of distraction.

Table 7. Correlation between intelligibility and distraction ratings.

		Intelligibility ratings	**Distraction ratings**
Intelligibility ratings	Correlation Coefficient	1.000	-.674**
	Sig. (2-tailed)	.	.000
	N	240	240
Distraction ratings	Correlation Coefficient	-.674**	1.000
	Sig. (2-tailed)	.000	.
	N	240	240

**. Correlation is significant at 0.01 level (2-tailed)

The description of the data presented in Table 8 shows that B-PE's production had been given the highest distraction rate from the evaluators (*Mdn*=4.0). M-PE followed (*Mdn*=3.0), and A-PE had the least distraction rating (*Mdn*=2.0). The result of the K-W test indicated a very significant difference [*H*(2)=72.712 and *p*=.000], which stipulated that the distraction ratings of the three PE speakers' production were statistically different.

Table 8. Distraction factor of the speakers' production.

Descriptive statistics			**K-W test**			
Speakers	Evaluation (N=240)	Mdn	MRank	df	H	*p*
B-PE	80	4.0	165.53			
M-PE	80	3.0	121.48	2	72.712	.000*
A-PE	80	2.0	74.49			

The post-hoc analysis results in Table 9 also give additional and specific information. When compared to each other with regards to distraction rating, each speaker had a significant difference of *p*=.000 [*H*(2)=10.678]. B-PE's production had been rated as 'very distracting', M-PE as 'rather distracting', and A-PE as 'slightly distracting'.

Table 9. Pairwise comparison of the distraction rate given to the speakers.

	Speakers	**H**	**Std Error**	**p**
	A-PE – M-PE	46.981		.000*
Distraction rating	B-PE – A-PE	91.038	10.678	.000*
	M-PE – A-PE	44.056		.000*

The data in this subsection indicated that the evaluators gave B-PE a high distraction rate, which consequently resulted in a very low intelligibility rating. On judgments of intelligibility to speakers with different foreign accents, the result of the current investigation seemed to agree with the studies of Bent and Bradlow (2003), Kennedy and Trofomovich (2008), Chen (2011), and Jacewicz and Fox (2014), which gave proof that accents or differences in production could affect the intelligibility rating of the different evaluators.

To answer the question of whether the speech production deviations had caused distractions and had affected the intelligibility of the evaluators, the results revealed a moderate negative relationship between the distraction rate and intelligibility rate, which could be explained such that the higher the distraction rate goes, the lower the intelligibility rating becomes and vice versa. B-PE's speech production, which had greatly deviated from M-PE and A-PE, had been considered very distracting to the evaluator groups, resulting in a significantly low intelligibility score.

5. CONCLUSION

The present study aimed to assess mainly the speech intelligibility of the three diastratic varieties of Philippine English Cebuano speakers as evaluated by local (Filipino) and international (American, Korean, and Thai) listeners. The results of the study attempted to legitimize the variety of Philippine English in the Cebuan region as A-PE, M-PE, and B-PE, which stood for acrolect, mesolect, and basilect PE. Among the three lectal varieties of Philippine English, acrolect PE, which approximates greatly GAE, received the highest intelligibility rating from the evaluators. Mesolect PE, which displayed some phonological variations from GA, was still rated as largely intelligible. On the other hand, basilect PE, which significantly deviated from GA and the other PE variations in phonological production, was rated as the least intelligible variety. A moderate negative relationship was also found between the intelligibility ratings from the evaluators and the distraction ratings due to the speech production variation. Thus, those varieties, which were rated higher in intelligibility, also gave the evaluators a more negligible distraction effect. In basilect PE, the production difference appeared to have significantly distracted the evaluators, thereby giving PE the lowest rating for speech intelligibility. The present results support earlier studies that argued that standard Philippine English, which was previously identified as mesolect PE, is comprehensible or intelligible in the international context. However, the previous studies did not include the intelligibility assessment of the other varieties. While acrolect-PE and mesolect-PE were generally described as intelligible in both local and international contexts, basilect-PE had been neglected and given less attention in the research field.

Furthermore, the present study found that Kachru's model of World Englishes did not define the level of intelligibility of English language learners. Both Korean and Thai evaluators belong to the expanding circle. However, the Korean evaluators showed no significant difference from the American and the Filipino evaluators. The Thai evaluators gave the lowest intelligibility rating to the PE speakers, and this can be attributed to two assumed factors, which included the local tonal language of the evaluators.

The findings of the current study could be beneficial to academia and industry. While content and grammar are essential in language learning, proper production is equally important if the goal is international intelligibility. In attaining accuracy and fluency, language teachers must also give appropriate learning interventions to all varieties of English speakers. Teachers and lesson developers must consider the standard levels of acrolect, mesolect, and basilect. Pronunciation in speech must also be given emphasis aside from the content if international intelligibility is pursued. To

become more globally accommodating and to develop familiarity and tolerance of varieties, the incorporation of English varieties in the classrooms is encouraged.

The study has also a significant value to a considerable number of overseas Filipino workers, which mainly represents basilect-PE in the fields of domestic, vocational, and skilled jobs abroad. Language practitioners in the Philippines should give attention to language improvement not only on the standard mesolect-PE but also with basilect-PE to avoid frustration, withdrawal, or demotivation of both listeners and speakers as the result of unintelligible speech. Even though the focus is not necessarily on the type of English patterned after the norm, the emphasis should be on the clarity of the message, to attain a working and successful communication. Overall, the results of this study are intended to construct a sense of cultural awareness about the current status of the ethnic varieties of Philippine English and promote a deeper cultural understanding that comes with international intelligibility. In general, the results of this study may be profitable in contexts where English is an international language, in English language teaching and learning in the Philippines, and in communities in any other region around the globe that enjoy the freedom of their English variety.

Part of the limitations of the study is the number and type of speech exemplars involved. Future research would benefit from using several participants of each language variety in the study as it could help provide viable data and results. Also, using different language samples from other Philippine local language varieties is suggested.

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