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VARIATION IN PALATO-ALVEOLAR FRICATIVES OF UNDERGRADUATES' SPOKEN ENGLISH

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ABSTRACT

The students of the University of Africa, Nigeria, seemingly, have allophonic variations of palato-alveolar voiceless and voiced fricatives ($/\int$ / and $/\Im$ /), during the articulation of some English words. The study investigates these variants of the palate-alveolar fricatives, using 20 male and 20 female student-respondents. The linear regression was deployed to analyse the only null hypothesis. Also, the praat software Version 6.1.52, was used for the acoustic analysis of the collected speech sounds. The result reveals that the students articulate the voiced palato-alveolar fricative ($/\Im$ /) with a variant of $/\Im$ / at the word medial position, and rejected the hypothesis on gender differentiation. The study suggests that phonemic interchange should be recognised as a variant of the $/\Im$ / among the second users of English. Since the use is phonetic and not phonemic, the physical realisation of the underlying phoneme $/\Im$ / should be a codification of an emergent realisation in the L2 phonological repertoire of the interchange of palato-alveolar fricatives.

Keywords: Free variation, Palatal Alveolar Fricatives, Gender, Pronunciation, praat

1.0 INTRODUCTION

Language variability cannot be overwhelmed in all instances of language use. This fact attests to the diachronic changes that are identified with the British language during the old, middle and early periods of language use (Baugh & Cable, 1951). A language experiences changes at the levels of phonetics, phonology, morphology, syntax, and semantics. All these areas of language keep evolving in all the languages of the world.

The English language, apart from being an international medium of communication, has become a native, second, and foreign language, understood and reorganised by many. It is a language that has a lot of variants, for which Kachru (1985) coins, "Englishes": British, American, Australian, Nigerian, Indian Englishes, etc. are realised differently, and there cannot be uniformity in terms of accents used by the users (Mareva, Kaburise, & Klu; 2016a). Users vary individually, nationally, regionally and globally.

The Standard Nigerian English as a variety of the British English language is spoken in Nigeria by the educated Nigerians (Jolayemi, 2006, & 2008; Akinjobi, 2012a, & 2013b; Jolayemi,

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Akinjobi, Ojo & Faleye, 2022). The Received Pronunciation which is used as a model is realised variously, even by the native speakers (Jowitt, 2022). A lot of pronunciation variants have been recorded, even in some British English regions, caused by different factors (ethnic, social and geographical) which affect how a language is spoken within a country (Adebayo, 2018, 2020). These factors are interrelated, and reflected in the grammar, vocabulary, and pronunciation of every language variety. These however engender variations in the social and regional dialects. It is against this background that this paper seeks to investigate a distinct segmental variation among the students of the University of Africa, Toru-Orua Bayelsa State, Nigeria.

2.0 STATEMENT OF THE PROBLEM

Articulatory variation occurs among speakers of different languages; this variation is conditioned by a lot of factors, which include their origins and socio-cultural backgrounds (Collins & Mees, 2003). For instance, in some South Western accents of British English, the initial 'f' and 's' are regularly voiced, becoming 'v' and 'z' (Britannica, n.d.) It is observed that speakers of English as a second language generally realise the voiceless and the voiced palato-alveolar fricatives interchangeably. The major problem for this study to resolve is to investigate the extent to which voiced palato-alveolar fricatives, /ʃ/ and /ʒ/, are interchanged in the speech of students, University of Africa (UAT). In other words, the study examines if they substitute the two phonemes, thereby creating a variant of the phoneme in question.

2.1 Objectives of the Study

It is pertinent to investigate the use of $/\sqrt{3}$ among the students of the UAT in order to identify their occurrence, the gender variable intervention, and the environment at which the variation occurs, perhaps it is phonetic, and not phonemic; and if the variation is dialect or language specific. This leads to the following specific objectives:

- i. examine if the students of the UAT swap the palato-alveolar fricatives, /J/ and /J/, in their spoken English;
- ii. examine if the observed variation of palato-alveolar fricatives in the spoken English of the UAT students /ʒ/, is phonetic or phonemic; and
- iii. investigate if gender affects the variant choices of palato-alveolar fricatives in the spoken English of the UAT students.

2.2 Research Questions

Derived from the above objectives, the following Research Questions are, hereby, formulated:

- i. Do the students of the UAT swap the palato-alveolar fricatives (/ʃ/ and /ʒ/) in their spoken English?
- ii. Is the observed variation of palato-alveolar fricatives in the spoken English of the UAT students phonetic or phonemic?
- iii. Does gender affect the variant choices of palato-alveolar fricatives in the spoken English of the UAT students?

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2.3 Hypothesis

Arising from Research Question iii is the sole null hypothesis of the study, as presented below:

i. Gender does not affect the variant choices of palato-alveolar fricatives in the spoken English of the UAT students?

2.4 Related Literature Review

The period of colonisation and post-colonisation by Britain witnessed the development and nativisation of the English language in Nigeria. The Nigerian English has become a nativised language that functions uniquely within its own cultural context, following the development of the pidgin language. The Nigerian and British English cannot be said to have the same standard because they are two language varieties, with different spellings, pronunciation, and grammatical rules, which have led to a major occurrence of faulty analogy. In other words, there is the possibility of assuming erroneously that the linguistic features of British English apply to Nigerian English, which may not necessarily be so. The L1 linguistic features in some instances, are used in representing L2 world experience, where adequate concepts cannot be used to achieve that purpose.

Kachru (1985) proposes three concentric circles to explain that different varieties of English are used all over the world. The Inner Circle, which consists of countries where English is used as a primary language, for instance the U.S. and Canada; the Outer Circle, which includes countries where English is used as a second or official language, e.g., Nigeria and India; and the Expanding Circle, which consists of countries where English is studied as a foreign language, for instance China and Russia. The differences in the three circles cut across all the linguistic aspects of a language, but which is much quite evident in pronunciation.

Pronunciation is an important aspect of language learning. Without appropriate pronunciation of words in expressions, mutual intelligibility to native and non-native speakers maybe affected. This suffice to say, that meaning is either misunderstood or totally meaningless to the hearers of the target language. According to Hornby (2008, p. 352) and Manser (1991, p. 330), pronunciation is the way in which language or words are spoken. Odisho (2003, p. 57) also buttresses that, "pronunciation is the production of speech sound for communication, but to make the communication run well, those sounds must be comprehended by another person."

The difficulties in pronunciation are as a result of the irregularity in the spelling of the English words, as against its realisations. Most of the time, there is no one to one correspondence between the spellings and the pronunciations. The inconsistency is thus significant, that Roach (1991, p. 3) proposes that "because of the notorious confusing nature of English spelling, it is particularly important to learn to think of English pronunciation in terms of phonemes rather than letters of the alphabet".

The heterogeneous nature of the Nigerian English is very evident that Gut (2004, pp. 822-823), observes that some English vowels and consonants have different variants due to speakers' diverse regions and ethnicity. Gut reveals that, for instance, that in Hausa English, the voiced labiodental fricative /v/ is realised as [v] or [b], while it is realised as [v] or [f] in Yoruba

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English. Josiah, Bodunde & Robert (2012) admit that there are many distinctive features that distinguish the spoken variety of English in Nigeria from the Received Pronunciation (RP).

According to Flege (1995) and Best, Mcroberts & Goodell (2001), one common source of L2 difficulty in pronunciation is the inconsistency between the sound inventory of L1 and L2. The incongruity that exists in the phonemic inventory of British English and Nigerian languages could be a source of mispronunciation of certain English consonants by the Nigerian learners of English. For an instance, English has two palato-alveolar phonemes (/ʃ, ʒ/), whereas most Nigerian languages have [ʃ], such that there is possibility of Nigerian speakers of English as L2 to transfer the voiceless palato-alveolar to represent its voiced counterpart. In consonance with this observation, Maddieson (1984), asserts that voiced fricatives across languages are underrepresented compared to the voiceless fricatives.

Akande (2008) examines the realisation of ten variables which include the (th), (dh), (v), (er), and (u) in the spoken English of Nigerian graduates. Akande discovers that the English of Nigerian graduates is characterised by th- and dh- stopping, h-dropping and h-insertion, lack of contrast between lax and tense vowels, and that voiced or voiceless fricatives are frequently realised as voiceless fricative in word-final position.

Some studies, for instance Milroy & Hartley (1994), have shown that males and females within a community explore phonological resources differently. It has also been argued that gender should be viewed first in ranking as against class in its influence on language changes, since in any community the distinction between gender roles is greater than that between social classes. This observation is supported by Adebayo (2020) who discovers, among others, variances in pitch accents of different age and gender groups. Investigated age and gender groups realise the nuclear falling (H*+L) and rising pitch accents (L*+H) variably, which resulted in different phonetic articulations of the same phonological representation.

Fajobi & Akande (2018) investigate 33 respondents which comprise 13 females and 20 males with different levels of education. Their findings reveal that the (dh) variable (voiced dental fricative) is significantly affected by gender, while the (th) variable (the voiceless dental fricative) is not. Thus, they conclude that sociolinguistic variables like gender, can significantly affect the realisation of linguistic variables.

Nigerian English phonology has been researched at the segmental and suprasegmental levels, and scholars have claimed that it differs systematically from the Standard British English (Gut, 2001; Atoye, 2005; Jolayemi, 2006, Awonusi, 2007; Udofot, 2007). It has been observed that in spite of various research on the two aspects of phonology, none has considered the study of the palato-alveolar fricatives. Though, it is an established fact that variations exist in different languages, the differences present in the use of the palato-alveolar fricatives among users of English requires investigation because it forms part of the discovery of the language. The investigation would add to the existing knowledge about the language and the users.

3.0 THEORETICAL FRAMEWORK

The study adopts the variationist framework, which emphasises that varieties exist in Spoken English. Several scholarly works such as Labov (1994, 2006), Herat (2005) and Mesthrie (1997) have used this approach to investigate varieties present in spoken English. They

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consider social variables such as gender, age group, educational level, social class, and ethnicity to investigate the systematic differences and inconsistency in language-use. On this premise, discrepancies observed between the Standard Nigerian English, and other native varieties of English are considered features as against errors (Eka, 2000; Udofot, 2013).

This study, taking a cue from Eka (2000) and Udofot (2013), therefore, considers peculiar variability in the spoken English by the respondents as features of an L2 usage.

4.0 METHODOLOGY

40 students participated in the task of reading sentences with 20 English words with voiced and voiceless post alveolar fricatives at the medial position. A total of 800 words with the focused phonemes were investigated. A questionnaire to elicit demographic and linguistic information from the respondents on age, gender, level of study, mother tongue (L1), second language (L2) and other filler questions, was designed. The focused phonemes had equal representation of words, were recorded with a digital recorder, which were later analysed by the Praat acoustic software (6.1.52, 2021), for phonetic transcription using the International Phonetic Alphabet (IPA). The results obtained were based on the auditory, acoustic and perceptual analysis of the focused words under investigation. The transcription was compared with the IPA, and conclusions were made. The general uses of the focused phonemes are represented on bar charts, to indicate the percentage of the frequency of use. The frequencies of the articulation of the voiced and voiceless palato-alveolar in the speech of the respondents bordering on swapped occurrence, phonetics versus phonemic, and dialect versus language were calculated by percentage. The only null hypothesis bordering on gender was analysed by the t-test statistic.

- i. Existence of swapping
- ii. Phonetic/phonemic
- iii. Effects of gender

Below is presented the results of the investigation of the various variables of the study; also presented is the analysis of the collected data.

4.1 Swapping of f and f

An examination of the interchangeable use of /ʃ/ and /ʒ/ among the students of the UAT forms the first objective of the study, which leads to the first Research Question. The outcome of this examination is summarised in the Table 1 below:

Table 1: The Interchanged use of /ʃ/ and /ʒ/

		No of Word Count for /3/	No of Word Count for /ʃ/	
		400	400	
Total of /ʒ/	RP Output	227	-	

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No of words with variant /ʃ/	173	-	
Total % of realisation of words with /3/	56.75	-	
Total % of realisation of word with variant /ʃ/	43.25	-	
Total RP Output of /ʃ/	-	395	
No of words with variant /3/	-	5	
Total % of realisation of words with /ʃ/	-	98.75	
Total % of realisation of word with variant /3/	-	1.25	
Grand total for /ʒ/realisation	227/400 (main)	Grand total for /ʃ/ realisation	395/400 (main)
	173/400 (/ʃ/ variant)		5/400 (/ʒ/variant)
Total -800	232/800 (/ʒ/ variant)		568/800 (395+173)
100%	29%		71%

From the Table 1 above, there is enough evidence to show that the respondents, like their other L2 users of English, swap the palato-alveolar fricative phonemes, $/\int$ / and /3/. This is because, of the 800-total number of usages, the phonemes were used interchangeably 568 number of times, constituting 71 % of the usage.

Table 2: The Performance of the Respondents on the Basis of Gender

S/N	Respondents	Word	Total	RP Output	Total	%	of	Total	%	of
		count	of /3/		realisation		of	realisation	of w	ord
					words with	/3/		with varia	nt /ʃ/	
1	Males	200	97		48.50			59.50		
2	Females	200	130		65			35		

The above table indicates that two phonemes are $\sqrt{3}$. 48.5 % of the male realise the sound with the correct articulation, but the remaining 59.5% use the voiceless counterpart, \sqrt{f} . The female

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appropriate better in $\frac{3}{65\%}$, compared to the males (48.5%). The performance is graphically represented below, in Figure 1.

Figure 1: The Performance of Voiced Palato-Alveolar Sound on the Basis of Gender

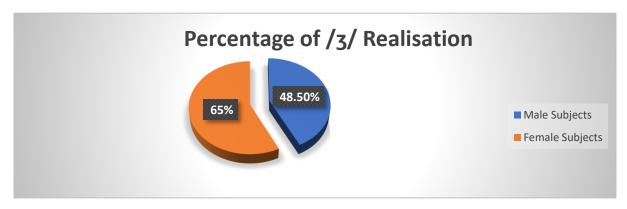


Table 3: General Performance of the Respondents in /ʃ/

S/N	Respondents	Word	Total R	RP	Total	%	of	Total % of
		count	Output	of	realisation o	of wor	rds	realisation of
			/ʃ/		with /ʃ/			word with variant
								/3/
1	Males	200	197		98.5			1.5
2	Females	200	198		99			01

The words with the /ʃ/ sound are adequately realised with the default pronunciation by the respondents, hence, no variance in the articulation of the sound. They perform equally (male 98.5%, female 99% realisation) in articulating the focused words. This is also presented graphically below in figure 2.

Figure 2: General Performance of Voiceless Palato-Alveolar Sound

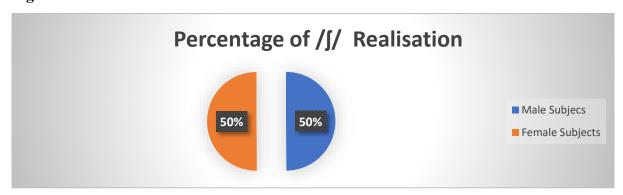


Table 4: Performance of the Male Respondents in /ʃ/

S/N	Focused	IPA	Phonetic	RP	Variant	%	% of /3/
	Words	Transcription	on	Output	Output	of	output
		_		of	/3/	/ʃ/output	-
				/ʃ/	_	_	

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Gra	nd Total		197	03	98.5	1.5
10	conscience	/kɔnʃ(ə)ns/	20	00	100	00
9	fission	/fɪʃ(ə)n/	20	00	100	00
8	nation	/neɪʃ(ə)n/	20	00	100	00
7	machine	/meʃi:n/	20	00	100	00
6	ocean	/ʊəʃ(ə)n/	20	00	100	00
5	special	/speʃ(ə)l/	20	00	100	00
4	situation	/sɪtjʊeɪʃ(ə)n/	20	00	100	00
3	digestion	/daidzestʃ(ə)n/	20	00	100	00
2	patience	/peil(ə)us/	20	00	100	00
1	moustache	/məsta:ʃ/	17	03	85	15

It is observed in Table 4 that all the male respondents adequately realise the words with /ʃ/ with the appropriate articulation, compared to the words ending with the suffix '-sion'. It is also observed that words that end in '-tion' and '-sion' are realised majorly the same way, hence the /ʃ/ variant of the phoneme /ʒ/.

Table 5: Performance of the Male Respondents in /3/

S/N	Focused	IPA Phonetic	RP	Variant	%	%
	Words	Transcription	Output	Output	of	of
			of	/ ʃ /	/3/	/ʃ/
			/3/		output	output
1	usual	/ju:ʒʊəl/	18	02	90	10
2	leisure	/li:ʒə/	18	02	90	10
3	elision	/ɪlɪʒ(ə)n/	02	18	10	90
4	confusion	/kənfju:ʒ(ə)n/	02	18	10	90
5	occasion	/ʊəkeɪʒ(ə)n/	03	17	15	85
6	visual	/vɪʒ(j)ʊəl/	16	04	80	20
7	measure	/тезә/	19	01	95	05
8	seizure	/si:ʒə/	17	03	85	15
9	division	/dɪvɪʒ(ə)n/	00	20	00	100
10	vision	/vɪʒ(ə)n/	02	18	10	90
Gran	d Total		97	103	48.5	51.5

Table 5 analysis reveals that the male respondents realise the phoneme /3/ with the voiceless counterpart /5/, in words ending with the bound suffix '-sion'. This can be viewed in the percentage of realisation. For instance, all the males (100%) realised the word 'division' with the voiceless phoneme /5/; they have 0% articulation using phoneme /3/. Also, in Table 5, 90 % of the respondents realise the words: 'elision, confusion, and vision' with /5/. The word 'occasion' is equally realised majorly with the voiceless counterpart. It has 85% realisation. All the other words with the phoneme /3/, are overwhelmingly realised without any noticeable variant.

Table 6: Performance of the Female Respondents in /ʃ/

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S/N	Focused	IPA Phonetic	RP	Variant	%	%
	Words	Transcription	Output	Output	of	of
			/ ʃ /	/3/	/ʃ/	/3/
					output	output
1	moustache	/məsta:ʃ/	18	02	90	10
2	patience	/peɪʃ(ə)ns/	20	00	100	00
3	digestion	/daidzestʃ(ə)n/	20	00	100	00
4	situation	/sɪtjʊeɪʃ(ə)n/	20	00	100	00
5	special	/speʃ(ə)l/	20	00	100	00
6	ocean	/ʊəʃ(ə)n/	20	00	100	00
7	machine	/meʃi:n/	20	00	100	00
8	nation	/neɪʃ(ə)n/	20	00	100	00
9	fission	/fɪʃ(ə)n/	20	00	100	00
10	conscience	/kɔnʃ(ə)ns/	20	00	100	00
Gran	d Total		198	02	99	01

In Table 6, analysis shows that the females articulate the phoneme/ʃ/ without any noticeable peculiarity. As seen in the table, 99% of the respondents use the default pronunciation. This realisation is similar to their male counterparts who have 98.5% realisation.

Table 7: Performance of the Female Respondents in /3/

S/N	Focused	IPA Phonetic	RP	Variant	%	%
	Words	Transcription	Output	Output	of	of
			/3/	/ ʃ /	/3/	/ʃ/
					output	output
1	usual	/ju:ʒʊəl/	20	00	100	00
2	leisure	/li:ʒə/	19	01	95	05
3	Elision	/ılıʒən/	07	13	35	65
4	confusion	/kənfju:ʒ(ə)n/	07	13	35	65
5	occasion	/ʊəkeɪʒ(ə)n/	04	16	20	80
6	visual	/vɪʒ(j)ʊəl/	20	00	100	00
7	measure	/тезә/	20	00	100	00
8	seizure	/si:ʒə/	20	00	100	00
9	division	/dɪvɪʒ(ə)n/	08	12	40	60
10	vision	/vɪʒ(ə)n/	05	15	25	75
Gran	d Total		130	70	65%	35%

In Table 7, the analysis of the voiced palato-alveolar sound is realised by the females with some difference, compared to their male counterparts. In the words: 'elision' and confusion, it is observed that 35% of the female respondents articulate the words with /3/. In other words, two variants are in use by the respondents. This is against the 10% realisation by the male respondents. Also observed is the realisation of the word 'division' with $/\int$ / by 60% of the female respondents, as against 100% by the male respondents. The word 'vision' has 75% of the female respondents realising it as $/\int$ /. These observations, however, assume that there are two variants of /3/ in use by the respondents.

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4.2 Presentation of the Acoustic Evidence for /ʃ/ and /ʒ/ Usage

The next step in this paper is to present some scientific evidence to show that gender affects the use of $\frac{1}{3}$ and $\frac{1}{3}$.

Figure 3: Spectrogram of the voiced palato-alveolar realisations

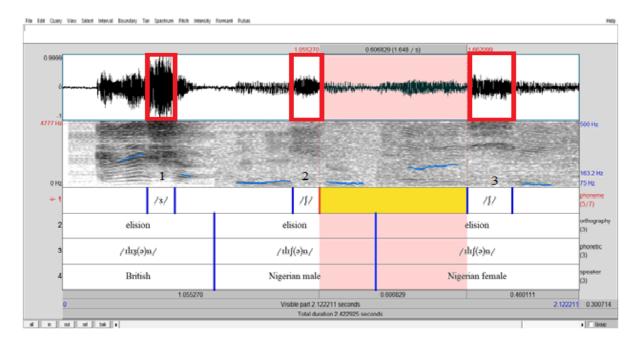


Figure 3 above reveals the realisation of /ʒ/ by a native speaker and the respondents' representatives. The oscillograms for /ʒ/ are marked with the rectangular shapes in Figure 3 for all the respondents. The British speaker realised the word 'elision' with vibration of the vocal folds. It is observed that the sound waves have some dashed lines in the upper red rectangular shape. It reveals vertical patterns associated with the regular vibration of the vocal folds, and randomly turbulent airstream. This extends to the spectrogram labelled 1. It is easily observed that the native speaker has a voicing band which is spread out, and has a higher concentrated fundamental frequency range which is shown in the density of the frication. This cannot be said of the male and female Nigerian respondents; there is no vibration of the vocal cords as seen in the spectrogram labelled 2 and 3. The British respondent displays constriction in the vocal tract, while the Nigerian male and female respondents display the otherwise.

5.0 DISCUSSION

An examination of the status of /3/ as phonetic/phonemic forms the second objective of the study, which leads to the second Research Question.

It is observed that in the disyllabic and trisyllabic words investigated, respondents display a level of peculiarity in the articulation of the voiced palato alveolar fricatives, as against the voiceless counterpart. Total voicing is seemingly not phonologically distinctive for the voiced palato alveolar fricative among its Nigerian users. The study reveals that learners have peculiarity in articulating the voiced palato alveolar fricative at the word medial position, with

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the bound morpheme '-sion'. This finding further buttresses Adebayo (2018 & 2020) and Fajobi & Akande (2018) views on social factors, such as age and gender, affecting linguistic choices. The state of the glottis during articulation for the voiced phoneme is unconsciously swapped for the preferred one. All the investigated words with the two phonemes (/ʒ/ and /ʃ/) are realised in all environments with default articulation, except words ending with the bound morpheme '-sion', which are realised as /ʃ/. Nigerian languages lack the phoneme /ʒ/ in their sound inventories, and thus respondents find it easier to articulate the sound with the available phoneme in their L1. Although, the analysis equally reveals that in other environments without the suffix'-sion', they realise the same sound with correct appropriation. This observation justifies Bartkova & Jouvet's (1999, p.1726) claim that "For every phoneme of a language an alternative phoneme is defined in the other language. When both languages contain the same or very similar phonemes, finding a phonemic counterpart is quite straightforward".

The above spectrogram in figure 3, explains the realisation of the phoneme /3/ by the two gender groups. As revealed in Tables 2, 7 and 8, as well as figure 1, it is observed that gender affects the appropriation of /3/, generally. The female respondents appropriate the default phoneme with 65% realisation, as against their counterparts who have 48.5% realisation, in words ending in suffix – 'sion'. Females tend to pronounce better, based on the analysis. This has actually not caused any communication breakdown, as it is observed that a lot of L2 speakers of English realise the phoneme as observed in the speech of UAT males and female students. Some studies, for instance Milroy & Hartley (1994), have shown that males and females within a community explore phonological resources differently.

As revealed in Tables 2, 5 and 7, the respondents do not distinguish between /ʒ/ and /ʃ/ in an instance. They use the voiceless and voiced palato-alveolar fricatives in free variation. In other words, they devoice the voiced phoneme in a similar environment, thus creating a phonemic free variation. They interchange the two phonemes, thereby creating a variant of the phoneme in question. Although, the two phonemes are substituted for each other in the same environment, they do not cause any change in meaning

A similar observation is also found in Northern dialect of British English. According to Britannica (n.d.), RP /a:/ (the first vowel in father) is still realised as /æ/ (like the 'a' in fat) in words for instance laugh, fast, and path. All languages have dialects, and there is no dialect that should be considered non-standard in contrast to other dialects. These peculiarities in different languages have also been supported by Taiwo, Adeniran, Ofulue & Iyere, (2017, p.16). They assert that:

It should however, be clear that all dialects are equally correct, expressive and logical. In this sense, no dialect should be seen as superior to the other. Each dialect is used to express the culture of the speakers.

Acoustically speaking, there is enough evidence (see the Oscillogram and Spectrogram above) to suggest that the voiceless palatal-alveolar fricative is in free variation with the voiced counterpart, as the occurrence in the same position still maintains the intended meaning.

Hypothesis result on gender status in the use of f and f forms the third objective of the study, which leads to the third Research Question, and the only null hypothesis.

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Table 8: Linear Regression Results on the Effect of Gender on the Variant Choices of Palato -Alveolar Fricatives in the Spoken English of the UAT Students

Model	Standardized Coefficients	t-value	Sig. (p-value)
	Beta		
(Constant)		12.791	0.000
Gender	0.394	2.645	0.012
R	0.394		
\mathbb{R}^2	0.155		
Adjusted R ²	0.133		

 $\alpha = 0.05$

Table 4 is a linear regression result of the dependent variable (scores of students in the pronunciations of palato-alveolar fricatives) regressed against the independent variable (Gender). The result from the analysis in Table 4 also confirms that gender is positively related to scores of students in the variant choices of palato-alveolar fricatives (R = 0.394). Testing the hypothesis at 0.05 significant level, the p-values (0.012) of gender is less than the alpha value (0.05), therefore, there is a significant effect. This means that the null hypothesis which states that 'gender does not affect the variant choices of palato-alveolar fricatives in the spoken English of the UAT students' is rejected. In conclusion, gender does affect the variant choices of palato-alveolar fricatives in the spoken English of the UAT students. Also, the 13.3% Adjusted R2 value indicates the variation in gender, and can be explained by variability in the choices of palato-alveolar fricatives in the spoken English of the UAT students.

6.0 CONCLUSIONS

The respondents, from the summary, swap the two phonemes, subconsciously, without affecting the meaning. Also, the interchangeable use of the two phones could be considered phonetic, and not phonemic because their statuses as distinctive phonemes is not seen at play. The analysis has further buttressed that the substitutable use of /J/ and /z/ is influenced by gender. The females are observed appropriating the voiced palato-alveolar fricative more than their male counterparts. It is assumed that the phoneme /z/ is in free variation with /J/ because its use has not created any change in meaning. The respondents display appropriate articulation of the phoneme /z/ in several of the words, but only in the instance of words with the bound morpheme '-sion', as seen in Tables 5 and 7, for the male and female respondents.

In tandem with some scholars, (Gut, 2001; Atoye, 2005), Jolayemi, (2006), Awonusi (2007) and Udofot (2007), Nigerian English phonology differs from British English because of its peculiarity. Nordquist (2020) defines free variation in phonetics and phonology "as an alternative pronunciation of a word (or a phoneme in a word) that doesn't affect the word's meaning." The choice of a variant over another may be affected by a lot of extra grammatical factors which includes sociolinguistic variables, e.g. age, gender and class, as well as performance variables, such as speech style and tempo (Kager, 2004).

In all, people have their peculiar accents in all the dialects, and as such should be considered part of their pronunciation idiosyncrasies, since meaning is understood. All languages are

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equal, and differences can be considered as uniqueness, as no two speakers of a language can speak the same way, provided meanings are not vitiated.

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