

Innovations

A Sociophonetic Study of Simulation Factors on the Spoken English of Undergraduates in Nigeria

Mercy Adenike Bankole (PhD)

Department of English and Literary Studies, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria

Corresponding Author: [Mercy Adenike Bankole](#)

Abstract: *The teaching of spoken English in Nigeria at different levels of education has not yielded the expected communicative competence among the learners of English as a second language. This may be due to different factors such as difference in the inventories of English sounds system and learners' mother tongue sounds system, lack of functional language laboratory, and most important, lack of model of Standard English pronunciation in Nigeria. For national and international intelligibility, approximation of Standard English pronunciation is required. Hence, Akinjobi (2015) recommends tools and sources as non-enculturation sources of contact with the native speakers of English. She emphasizes that these could help the learners of English as a second language in approximation to the Standard English pronunciation. This study, therefore, examines the influence of simulation factor on the production of English sibilants of undergraduates in Nigeria and to determine if such can help in approximation of Standard English pronunciation in Nigeria. The study adopted Bandura's Cognitive Social Learning theory as a theoretical framework. Speech filing system (SFS) and Analysis of Variance (ANOVA) were used for the acoustic and statistical analyses. Data were purposively collected from 240 part three undergraduates from six Universities in southwest, Nigeria through structured questionnaire and a prepared word list to test sibilants of English at all word positions. The findings revealed that simulation factor enhances correct realization of some English sibilants which seems difficult and problematic for Nigerian learners of English because of their absence in the inventory of their mother tongue. The study recommends that approximation to correct pronunciation of Standard English by second language learners in Nigeria irrespective of language background seems possible through simulation factors.*

Keywords: *spoken English, simulation factor, sibilants and pronunciation.*

1. Introduction

Having correct pronunciation has been the target of every learner of English as a second language. Despite the fact that English language is taught as a subject and at the same time a medium of instruction for other subjects in the Nigeria education system, observations have shown that the spoken English of Nigerians as second learners of English is markedly different from the native speaker's pronunciation, Jowitt, 2000, 2019; Jibril,1995; Akinjobi,2004, 2009; Bankole,2019; Gut, 2002, and Olaniyi,2020. The causal factor includes the difference in the sound system of Standard English and learners of English as a second language in Nigeria. Also, most primary, secondary and even University teach spoken English in an ESL context without a standard language laboratory, hence, most students learn only the theoretical aspects of what their textbooks provide, Aina, (2020). Other factors include the problem with the traditional method of teaching and learning which made the process not interesting and cumbersome, lack of English background knowledge as well as teachers' inability to be role models for the learners of English as second language, Akinjobi and Aina, 2014; Agboyinu,2018 and Aina,2020. Even, learning in Nigerian context is described as problematic because teachers themselves are trained in the variety of English characterized by some forms of Nigerian standard, Amuseghan and Tunde-Awe (2016). Pengxiang Ma (2023) explains that despite the fact that most primary school require students to start learning English from early grade as we have it in most Nigeria early primary schools today, the study reveals that most teachers adopt traditional English teaching methods, while parents do not attach much importance to pronunciation training. However, the need for users of English as a second language to have correct pronunciation has been the major concern of English language scholars in Nigeria. Akinjobi (2015) recommends non-enculturation sources (news casters pronunciation, educative programs, cartoon network, dictionary with audio aids, British and American films, etc.) of contact with native speakers which could be helpful to learners of English as second language in their efforts to have both national and international intelligible spoken English. Earlier studies had focused on the use of simulation to teach communicative competence in English even as a foreign language with little consideration of simulation factor that enhances correct pronunciation of children spoken English in Nigeria. Also, Aiyeola (2020) investigated influence of technological-based non-enculturation sources on vowel reduction in educated Yoruba teenager English in Nigeria. This explains that observation and imitation play significant role in the acquisition of language. This paper in order to corroborates earlier study, therefore, examines the effect of simulation factor on the spoken English of selected undergraduates in Nigeria.

2. Aim and Objectives of the study

The aim of this paper is to examine the effect of simulation factor on the spoken English of selected undergraduates in southwest Nigeria using sociophonetic approach. Thus, the specific objectives of the study are:

- i) to examine the effect of simulation factor on the realization of English sibilants by undergraduates in southwestern, Nigeria?
- ii) to examine the sociological variables that enhance simulation factor in the spoken English of undergraduates in southwest Nigeria.

3. Research Questions

- i) what is the effect of simulation factor on the realization of English sibilants by undergraduates in southwestern, Nigeria?
- ii) what are the sociolinguistic variables that enhance simulation factor in the spoken English of undergraduates in southwest Nigeria?

4. Literature Review

Simulation is described as reality of function in a simulated and structured environment, Jones (1982) Simulation in language learning had been given attention in previous studies by different language scholars. However, most of the research focused on acquisition of English as a foreign language and generally on achieving communicative competence in English through simulation (Choudhary, 2013; Mona&Ehab, 2022; Bankoleetal. 2022; and Pengxiang Ma, 2023)

Choudhary (2013) investigates the effectiveness of simulation in developing oral skills. The rationale and purpose behind this research study was to implement this modern technique of simulation in English language teaching to freshman students of pharmacy. The sample of the study comprised of the whole population of new students of pharmacy students at Taif University. The experimental group was taught by using integrated simulation activities in their English language classes while the control group was taught without simulation. The pre-intervention and post-intervention scores analyzed have reported that the experimental group outperformed the control group in their oral communication.

Charles, Agostinho and Fausatina (2019) carried out a research on how to develop speaking skill through the simulation method. The objectives of the study are to experiment simulation method and to know the differences before using the simulation method in pre-test and post-test. A total number of twenty students were used for the study. The instrument used was a conversation between a guest and a hotel reception at the front desk. The result of data analysis proved that there is a significant improvement in both teaching and learning processes using simulation method.

Laura and Amparo (2019) examine how students speaking skills can be developed through simulation-based instruction. In the study, a group of University engineering students were taught with simulation to aid their use of English as a foreign language. The selected students were taught English through both class-based and a large-scale real time web-based simulation. The results indicate that students progressed significantly in four language-related areas which are vocabulary, pronunciation, variety of expression and grammar.

Aiyeola (2020) investigated the influence of technological facilities on Nigerian teenagers' vowel reduction abilities to determine if such abilities can alternatively model Standard British English pronunciation in Nigeria. Labov Variability theory and Prince's Metrical phonology were used as theoretical framework. Three hundred teenagers were selected, using criterion sampling. A native speaker served as baseline. A questionnaire was administered to establish participants' technology contact level. Unstressed syllables of content words and grammatical words in weak contexts, produced by respondents into Speech Filling System were analyzed using one-way analysis of variance at 0.05 metrical grid and complemented with acoustic analysis. Findings show that vowel strengthening in metrically weak position reduced as exposure to Technological-based non-enculturation sources increased. Hence, the 21st century technological-based non-enculturation sources of native English that are available to teenage Nigerians can model their approximation to Standard English pronunciation.

Mona and Ehab (2022) also conduct a research on the effect of using simulation strategy in developing speaking skills in English as a foreign language. The study tried to find out a technique of reinforcement that can help students who study English as a foreign language develop their speaking skills. The researcher used a quantitative approach with an experimental design involving fifty students divided into two groups; experimental and control groups. Both groups were from level 3 who were learning English at College of Science and Arts, King Khalid University. The results were analyzed using SPSS, Pearson correlation coefficient. The result revealed that using the simulation strategy helped the students of the experimental group to develop speaking skills and affected speaking micro-skills such as body language, fluency, pronunciation, intonation, grammar, and vocabulary usage.

5. Sibilants

These are sounds produced when the airstream is directed by the tongue towards the sharp edge of the teeth, which are held together. This explains the manner of articulation of some fricatives and affricate consonants. Examples of English sibilants are /ʃ, ʒ, ʒ, ʒ, ʒ, ʒ, s, z/. The sounds /tʃ/ and /dʒ/ are affricates while the remaining ones: /θ, ð, s, z, ʃ, ʒ/ are fricatives. It is observed that some sibilants constitute

problem for Nigerian learners of English due to the absence of those sounds in the inventory of their mother tongue.

6. Theoretical Framework

The theoretical framework for this study is Bandura's (1963) Cognitive Social learning theory. The study adopted Bandura (1963) Cognitive Social Learning theory to substantiate the fact that observation, modeling and imitation play significant role in acquisition and language learning. The theory claims that acquisition and learning take place through observation and modeling. Bandura (1963) explains that people are active agents who can be influenced by their environment. Human behavior is also explained in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences. Hence, children are surrounded by many influential models such as parents within the family, characters on children's Television, friends within peer group and teachers at school whom they can observe and imitate their language. This explains that both real life models; parents and teachers, as well as symbolic models such as those transmitted by radio and television can serve as effective means of eliciting imitative behavior. The study is examined within the purview of Cognitive social theory because learners observe and imitate words uttered by different models since social approval is provided on each occasion.

7. Research Methods

There were two hundred and forty students purposively selected across six universities in southwest of Nigeria for the study. The selected universities are University of Ibadan, Ibadan, University of Lagos, Lagos, Federal University, Oye-Ekiti, Ekiti State, Ekiti State University, Ado-Ekiti, Adekunle Ajasin University, Akungba Akoko, Ondo State, and Olabisi Onabanjo University, Ago-Iwoye, Ogun state. Forty students comprising both males and females were selected from each school making a total number of two hundred and forty students. The selected students are those who have the repertoire of both Yoruba and English languages and can equally be situated within Banjo's (1970) variety of Nigerian English. Variety III is classified as that spoken by secondary school leavers enriched with vital phonemic distinction that makes it both nationally and international intelligibility. The selected students are those who have not been to the countries where English is a native language. Each participant was given a questionnaire to be filled and a prepared word list to test sibilants at all word positions which was read into a recording device in respect of identified sociolinguistic variables. The voice recorded were transcribed and scored in order to compare the performance of each respondent with each of his/her sociolinguistic indices listed. Data were subjected to perceptual, statistical and acoustic analyses. Analysis of variance (ANOVA) was

carried out to test the hypotheses whether overall performance mean scores are the same across the tested baseline questions. The result is reports at 5% level of significance.

8. Analyses

Research question 1. What is the effect of simulation factor on the realization of English sibilants by undergraduates in southwestern, Nigeria?

In this section, a correct pronunciation of each sibilant at word-initial, word-medial and word-final positions was allotted one mark, also, the wrong pronunciations were counted and the total score was recorded.

Table 8.1. Overall performance of the frequency in the realisation of English Sibilants at different word positions

SOUNDS	INITIAL				MEDIAL				FINAL			
	CORRECT	%	INCORRECT	%	CORRECT	%	INCORRECT	%	CORRECT	%	INCORRECT	%
/θ/	150	62.5	90	37.5	135	56.3	105	43.7	178	74.2	62	25.8
/ð/	152	63.3	88	36.6	153	63.8	87	36.2	152	63.3	88	36.6
/s/	230	95.8	10	4.2	234	97.5	06	2.5	237	98.8	03	1.2
/z/	186	77.5	54	22.5	219	91.25	21	8.75	181	75.4	59	24.6
/ʃ/	230	95.8	10	4.2	219	91.25	21	8.75	224	93.3	16	6.6
/ʒ/	135	56.3	105	43.7	130	54.2	110	45.8	137	57.1	103	42.9
/ʒ/	181	75.4	59	24.6	165	68.7	75	31.25	190	79.1	50	20.8
/dʒ/	235	97.9	05	2.1	234	97.5	06	2.5	233	97.1	07	2.9

The above table shows that the performance of the selected respondents is highly significant due to the effect of simulation factor. Out of 240 candidates, 150 (62.5) correctly pronounced voiceless dental fricative at the initial position while the remaining 90 represented 37.5% incorrectly pronounced the sound. A significant 152 (63.3%), 153 respondents (63.8%) and 152(63.3%) correctly pronounced the voiced dental fricative at the three different word positions and insignificant 88 respondents (36.6%), 87respondents (36.2%) and 88respondents (36.6%) respectively pronounced it wrongly. Also, the voiced post-alveolar fricative was correctly realized by 135 respondents representing 56.3% at the initial word position, 130 respondents (54.2%) at word medial position and 137 (57.1%) at word

final position despite the absence of the sound in the sounds inventory of respondents' mother tongue.

Research question 2: What are the sociolinguistic variables that enhance simulation factor in the spoken English of undergraduates in southwest Nigeria?

Ten variables were developed to obtain information in respect of the respondents' social background and the effect on their performances. The sociolinguistic variables are:

- 1) My parents do allow me to watch Educative Programs
- 2) It is compulsory for every member of my family to listen to news
- 3) I watch foreign films at my leisure time
- 4) I listen to channels, VOA, BBC news and programs
- 5) My parents do correct my spoken English
- 6) I do imitate the spoken English of my parents
- 7) I do imitate the spoken English of my secondary school teachers
- 8) I do imitate the spoken English of my primary school teachers
- 9) I do watch cartoons and imitate cartoonists
- 10) The primary schools I attended is very keen about students' pronunciation

8.2.1 My parents do allow me to watch Educative Programmes

9.	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	141	37.60	6.162	20	47
MORE OFTEN	75	36.73	5.383	26	48
LESS OFTEN	16	34.31	5.275	22	42
LEAST OFTEN	5	34.83	5.857	29	44

ANOVA					
OVERALL PERFORMANCE'					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	102.173	3	34.058	0.990	0.039
Within Groups	8015.219	233	34.400		
Total	8117.392	236			

As shown in table 8.2.1 above, 141 (21%) respondents that chose 'most often' for being allowed by their parents to watch educative programmes had the highest score (37.60) while 75 (11.48%) with 'more often' scored the (36.73) followed by less often who scored 34.31 and those with 'least often' who had the least mean

score, 34.83. From all indications, the difference is very significant since the P-Value in the ANOVA table is < than 0.05

Table 8.2. 2: It is compulsory for every member of my family to listen to News

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	47	37.74	6.411	20	48
MORE OFTEN	55	36.24	5.872	23	45
LESS OFTEN	93	35.94	6.088	21	47
LEAST OFTEN	42	34.77	4.554	30	47

ANOVA					
OVERALL PERFORMANCE ^a					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	199.873	3	66.624	1.938	.124
Within Groups	8012.085	233	34.387		
Total	8211.958	236			

As presented in Table 8.2.2, listening to news by the respondents has a very significant (P-value<0.05) effect on overall performance of respondents. This is evident in the analysis of the result presented where most often had 37.74; more often, 36.24; less often, 35.94 and least often, 34.77.

Table 8.2.3: I watch foreign films at my leisure time

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	101	36.79	5.693	21	47
MORE OFTEN	61	36.49	5.694	23	46
LESS OFTEN	44	36.30	6.234	24	48
LEAST OFTEN	29	33.38	5.728	20	46

ANOVA					
OVERALL PERFORMANCE ^a					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	271.734	3	90.578	2.691	.047
Within Groups	7775.866	231	33.662		
Total	8047.600	234			

Report in Table 8.2.3 reveals that, watching foreign films most often led to greater scores (36.79) by respondents followed by ‘more often’ (36.49), ‘less often’ (36.30) and ‘least often’ (33.38) respectively. The mean performance scores across the different options are statistically significant (P-Value < 0.05). That is, watching foreign films contributes to respondents’ approximation of Standard British English.

Table 8.2.4: I listen to Channels, VOA and BBC Programmes

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	42	37.02	6.560	20	48
MORE OFTEN	54	36.32	6.005	21	46
LESS OFTEN	95	35.71	5.659	22	47
LEAST OFTEN	47	35.13	5.511	22	46
Total	238	36.13	5.876	20	48

NOTE: The remaining 2 are invalid.

ANOVA					
OVERALL PERFORMANCE`					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	100.384	3	33.461	.969	.408
Within Groups	8083.313	234	34.544		
Total	8183.697	237			

As presented in Table 8.2.4, 42 respondents who claimed that they listened to News, VOA and BBC programmes ‘most often’ had the highest mean score of 37.02 followed by 54 respondents who indicated to watch the programme ‘more often’ who had 36.32 mean score. A majority of the respondents, 95, who claimed that they listened to News, VOA and BBC programmes ‘less often’ had 35.71 mean score while the remaining 47 respondents who also indicated ‘least often’ had 35.13 mean score. The results clearly showed that the performance of the respondents was also very significant.

Table 8.2.5: My parents do correct my spoken English

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	50	37.48	6.076	20	47
MORE OFTEN	55	36.35	5.797	23	48
LESS OFTEN	62	35.16	6.429	22	46
LEAST OFTEN	68	35.25	5.126	22	44
Total	235	36.08	5.891	20	48

NOTE: The remaining 5 respondents did not provide answer to the question

ANOVA					
OVERALL PERFORMANCE`					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	215.231	3	71.744	2.096	.101
Within Groups	7905.390	231	34.222		
Total	8120.621	234			

As shown in Table 8.2.5, 50 participants who asserted that their parents do correct their spoken English ‘most often’ had 37.48 mean score while 35 who claimed ‘more often’ had 36.35 mean score and 62 participants who choose ‘less often’ had 35.16 mean score while the remaining 68 participants who also claimed ‘least often’ had 35.25 mean score. The results as displayed above indicated that there was significant difference in their performances. This implies that students that their parents do correct their spoken English performed better than those that were not corrected.

Table 8.2.6: I do imitate the spoken English of my parents

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	72	35.19	6.001	20	47
MORE OFTEN	72	36.40	5.357	23	48
LESS OFTEN	51	36.88	6.707	21	46
LEAST OFTEN	41	36.32	5.387	27	47
Total	236	36.12	5.872	20	48

NOTE: The remaining 4 respondents left the column void

ANOVA					
OVERALL PERFORMANCE`					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	98.667	3	32.889	.953	.416
Within Groups	8004.769	232	34.503		
Total	8103.436	235			

The overall performance of the respondents as distributed in Table 8.2.6 implied that the 72 respondents who do imitate the spoken English of their parents ‘most often’ had the mean score of 35.19; another 72 respondents who do imitate ‘more often’ had 36.40 mean score, 51 respondents who imitate ‘less often’ had 36.88 mean score and the remaining 41 respondents who imitate their parents ‘least often’ had 36.32 mean score. The results confirmed that there is no significant difference in the result of those who imitate the spoken English of their parents and those who do not.

Table 8.2.7: I do imitate the spoken English of my Secondary School Teacher

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	49	37.65	6.617	20	47
MORE OFTEN	50	36.12	5.743	23	48
LESS OFTEN	62	35.60	5.466	26	46
LEAST OFTEN	74	34.59	5.729	21	47
Total	235	36.09	5.923	20	48

NOTE: The remaining 5 participants left the question unanswered.

ANOVA					
OVERALL PERFORMANCE'					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	272.005	3	90.668	2.639	.049
Within Groups	7935.936	231	34.355		
Total	8207.940	234			

As illustrated in Table 8.2.7, the result showed those that imitate their secondary school teachers most often, more often, less and least often with the scores 37.65, 36.12, 35.60 and 34.59, respectively. The difference in the various performances is significant. This implies, imitating one's secondary school teachers' good pronunciation enhances better performance in approximation of Standard British English

Table 8.2.8: I do imitate the spoken English of my Primary School Teacher

	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	50	37.45	6.461	21	48
MORE OFTEN	44	36.92	5.513	24	46
LESS OFTEN	40	35.90	6.410	22	45
LEAST OFTEN	99	34.20	5.431	20	46
Total	233	36.12	5.912	20	48

NOTE: The remaining 7 participants did not answer the question.

ANOVA					
OVERALL PERFORMANCE'					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	262.656	3	87.552	2.555	.046
Within Groups	7845.979	229	34.262		
Total	8108.635	232			

Based on the report in Table 8.2.8, the difference in the scores between those that often imitate the spoken English of their primary school teachers and those that seldom imitate them are significantly different (ANOVA: P-value <0.05). While those who imitate the spoken English of their primary school teachers' correct pronunciation most often and more often had mean scores 37.45 and 36.92 respectively, those who do not score 35.90 and 34.20 in that order. The result is very significant.

Table 8.2.9: I do watch cartoon and imitate cartoonists

	N	Mean	Standard Deviation	Minimum	Maximum
MO	47	37.44	6.441	21	48
MR	39	36.83	5.744	24	46
LO	37	34.11	6.476	22	45
LS	92	35.95	5.460	20	46
Total	215	36.09	5.970	20	48

NOTE: The remaining 25 participants left the column void.

ANOVA					
OVERALL PERFORMANCE ^a					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	243.616	3	81.205	2.320	.049
Within Groups	7384.524	211	34.998		
Total	7628.140	214			

As displayed in Table 8.2. 9 above, those that did watch cartoon and imitate cartoonist more often performed better than those participants who did not. And the variations in the performance mean score is significant across the ratings; most often and more often scored 37.44 and 36.83 respectively, less often and least often had the mean scores of 34.11 and 35.95.

Table 8.2.10: The Secondary School I attended is very keen about Students' Pronunciation

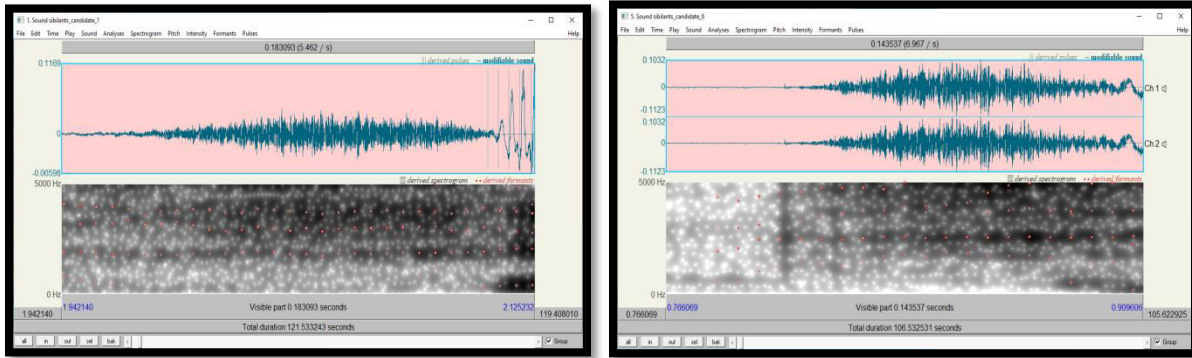
	N	Mean	Standard Deviation	Minimum	Maximum
MOST OFTEN	129	36.36	5.960	20	47
MORE OFTEN	78	36.31	5.843	21	48
LESS OFTEN	22	35.89	6.083	26	46
LEAST OFTEN	8	36.50	5.757	30	44
Total	237	36.09	5.893	20	48

NOTE: The remaining 3 are invalid

ANOVA					
OVERALL PERFORMANCE ¹					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	11.771	3	3.924	.112	.035
Within Groups	8184.187	233	35.125		
Total	8195.958	236			

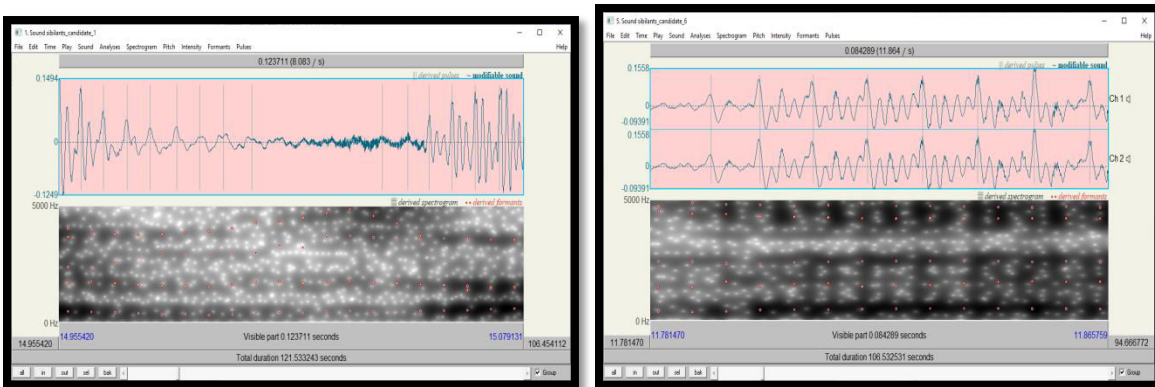
The overall performance as illustrated in Table 8.2.10 explains that the majority of the respondents (129) who confirmed that the secondary schools attended were very keen about students' pronunciation most often had the highest mean score of 36.36, while those who claimed more often, less often and least often had the mean scores of 36.31, 35.89 and 36.50 respectively. The results showed that there was a significant difference in their performance.

8.11: Spectrographic realization of sibilants that are absent in the inventory of respondents' mother tongue



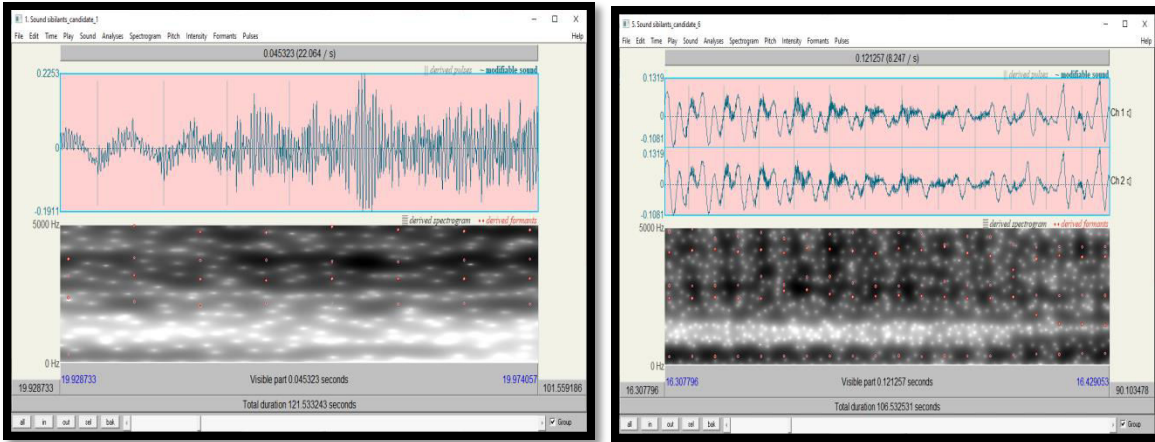
correct realization voiceless dental fricative [θ] wrong realization voiceless dental fricative [θ]

Figure 8.11.1. Spectrograms of (correct realization of [θ], [θ] in the word ‘theory’ at word-initial position) compared with wrong realization of the sound. The sound was wrongly realized as /t/ voiceless alveolar stop by respondents who were not exposed to non-enculturation sources.



Correct realization of voiced dental fricative[ð] wrong realization of voiced dental fricative[ð]

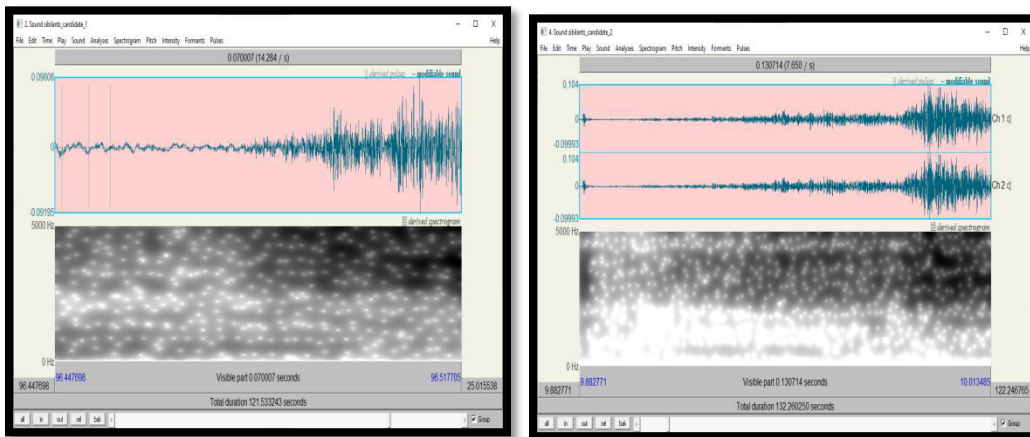
Figure 8.11.2 Spectrogram of [ðei] ‘they’ (correct realisation of [ð] at word-initial position) compared with Spectrogram of [dei] ‘they’ (wrong realisation of [ð] at word-initial position) The sound was realized as /d/ voiced alveolar stop .



correct realization of voiced post alveolar fricative [ʒ] wrong realization of voiced post alveolar fricative [ʒ]

Figure 8.11.3 Spectrogram of ‘vision’ (correct realisation of [ʒ] at word-medial position) compared with Spectrogram of [viʒŋ] ‘genre’ (wrong realisation of [ʒ] at word-medial position)

The palate-alveolar fricative [ʒ] was correctly realised by most of the respondents who were exposed to correct pronunciation of the sibilant through technological facilities.



correct realization of voiceless post alveolar fricative [tʃ] wrong realization of voiceless post alveolar fricative [tʃ]

Figure 8.11.4 Spectrogram of [tʃi:p] ‘cheap’ (correct realisation of [tʃ] at word-initial position) compared with Spectrogram of ‘cheap’ (wrong realisation of [tʃ] at word-initial position)The sound was correctly realized by respondents who were exposed to correct production through non-enculturation sources.

8.12. Discussion of Findings

The overall performance of the respondents in Table 8.1 shows a significant effect of simulation factor on the production of English sibilants. This explains that non-enculturation contact of the second learners of English as a second language with native speakers by watching television, imitation of the correct pronunciation of English teachers, and listening to educative programmes on Radio stations such as British Broadcasting Corporation (BBC) and Cable Network News (CNN) may enhance correct pronunciation and equally serve as model.

Ten different items were generated to elicit information in respect of the respondents' social background. The purpose is to examine the correlation between the respondents' social background and realization of English sibilants. Analysis of variance was carried out to test the hypothesis whether overall performance means scores were the same across the tested variables on social background of the respondents. The result is reported at 5% level of significance.

Based on the result obtained in Table 8.2 on the tested baseline question, the finding revealed that the difference is very significant since the P-Value in the ANOVA table is lesser than 0.05. This implied that watching educative programme by the respondents enhances adequate realization of English sibilants. The significant performance is hinged on the fact that imitating the correct pronunciation of the participants contributed to the correct approximation to Standard British English.

The analysis in Table 8.2.2 explains that those respondents who listened to News performed significantly than those who do not. This is obvious in the findings where those respondents who listen to News most often had the highest mean score of 37.74 compared to the performance of those who listen to news less and least often. The result therefore has a significant value since the P-Value is lesser than 0.05. It is usually assumed that those who listen to news had the tendency of performing better in spoken English through observation and imitation of the broadcasters and presenter than those who do not. The finding in this study therefore, confirmed the assertion that there is a close affinity between listening to news and adequate approximation of English phonemes.

The findings of this study on the variable that bothers on the relationship between watching of foreign films and approximation of Standard spoken English in Table 8.2.3 is significant. The result indicated a significant performance by those respondents' who watch foreign films most often. Previous studies on language acquisition and learning attest to the fact that children/learners acquire and learn language by imitation. This study, therefore, is proposing that the ability to imitate the native speakers' correct pronunciation of English phonemes may help in better approximation of Standard English phonemes.

The report on the variable “I listen to channel, VOA and BBC programmes and approximation of better realization of English sibilants” in Table 8.2.4 illustrates that majority of the participants who claimed that they listen to Voice of America (VOA) and British Broadcasting corporation (BBC) most often had the highest mean score of 37.02. The findings corroborate the result in Table 8.2 that listening to news has enormous effect on pronunciation of English phonemes. The results therefore, clearly confirm that there is a significant different in the performance of those who listen to educative programmes and those who do not.

As obtained in Table 8.2.5 on the tested variable; “my parents do correct my spoken English”, the result clearly delineated that those students that their parents do correct their spoken English performed better than those who were not corrected. The result also corroborates the outstanding performance of the respondents whose parents’ occupation fell within the category of public servant. The identified public servants as indicated by the respondents are lecturers, secondary and primary school teachers.

Also, the result on the variable “I imitate the spoken English of my parents” as displayed in Table 8.2.6 points out that there is no significant difference in the performances of those who imitate the spoken English of their parents most often and those who do it least often. From the above result, one can infer that the spoken English of the respondents’ parents deviate from Standard British English.

The result on the variable; “I do imitate the spoken English of my secondary school teachers” as presented in Table 8.2.7 showed those that imitate their secondary school teachers most often and more often approximated to Standard British English than those who do not. The difference in the various performances is very significant. This implies, imitating one’s secondary school teachers’ correct pronunciation enhances better performance in approximation of Standard British English.

Interestingly, the result on the variable “I do imitate the spoken English of my primary school teachers” confirmed the importance of teachers as models to their students at any level of education. The ANOVA results (P-value <0.05) in Table 8.2.8 illustrates that the difference in the scores between those that often imitate their primary school teachers and those that seldom imitate them are evidently significantly in the sense that those who do imitate the spoken English of their primary school teachers approximated the English sibilants better than those who do not. The distinct performances of the respondents have exhibited that the role of a teacher as a role model in the educational system of the country is very important. Exposure to good models of the target language may also enhance effective pronunciation. It is worthy of note that the critical age hypothesis is very relevant in

language learning. The critical period hypothesis by Lennerberg in 1967 proposes that there is a critical phase between the ages two and thirteen in which individual is able to acquire first language or learn the second language. The hypothesis claims that these few years of life is the crucial time in which individual can acquire a language if presented with adequate stimuli or else, the learner in case of second language may not reach a native-like level. To corroborate this view, Roach (2000, 2008) asserts that children have an enviable ability to acquire the rapid pronunciation of a language if they are provided with necessary social contact with native speakers and meaningful communication situation. The aforementioned may therefore account for the better performance of those respondents who do imitate their primary school spoken English at primary school as well at secondary school. In addition, the result on the variable; I do watch cartoon and imitate the cartoonist” supported the assertion that imitation is very germane in approximation to Standard British English phonemes. The result as illustrated in Table 8.2.9 is significant across ratings; most often and more often scored 37.44 and 36.83 respectively, less often and least often had the mean scores of 34.11 and 35.95 correspondingly. The performance through imitation of correct spoken English is very significant. Moreover, the correlation between the variable “The secondary school I attended is very keen about students’ pronunciation” is very significant. The result as obtained in Table 8.2.10 confirmed that the most respondents that the secondary school attended were very keen about their students’ pronunciation approximated correctly the SBE phonemes. It was also observed by the researcher that the respondents could differentiate between the alveolar stops; [t], [d] and dental fricatives; [θ], [ð], and this clearly prevented unnecessary substitution of phonemes.

9. Recommendations and Conclusion

The study has revealed that nine out of the ten variables developed to correlate the respondents’ realization of English sibilants were very significant to better approximation of English sibilants. The findings, therefore, corroborate and confirm Akinjobi’s (2015) and Aiyeola’s (2020) earlier works and assertion that teenagers’ exposure to technological facilities is immensely significant to second learners’ better approximation to Standard British English. Also, the positive effect of watching educative programmes by the participants’, listening to news, imitation of correct pronunciation of both primary and secondary school teachers and the cartoonist on their spoken English are very significant.

References

1. Akinjobi, A. (2004). *Phonological investigation of vowel weakening and unstressed syllable Obscuration in educated Yoruba-English*. Thesis. English, Arts. University of Ibadan
2. Akinjobi, A. (2015). *Non-enculturation sources of Standard spoken English for non-native speaker: The Nigerian example*. *Lagos review of English studies: A journal of language and Literary studies*. 17 (2) :31-41
3. Akinjobi, A. & Aina, M.O. (2014). *Nigerian English language teachers as supposed models for English word stress assignment: Ilorin Journal of the Humanities*, 23: 33-64
4. Aiyeola, A. F. (2020). *Influence of technological-based non-enculturation sources of native English on vowel reduction in educated Yoruba (Nigerian) teenage English*.
5. Aina, M.O. (2020). *Grammatical intonation tune assignment by English language teachers-in-Training in some public universities in southwestern Nigeria*. *Journal of Phoneticians & Phonologists in Nigeria*. 1: 79-103
6. Bankole, M.A. (2019). *A sociophonetic analysis of the production of English sibilants by Undergraduates Yoruba-English bilinguals in southwestern Nigeria*. Thesis. English, Arts, Ekiti State University.
7. Bankole, O.F. Oluwatoyin, T.O. & Olaniyan, A.S. (2022). *Towards demystifying students' phobia for phonetics and phonology: digital or analogue instructional strategies? : Open Journal of modern linguistics*, 12 (4)
8. Banjo, A. (1970). *The English language and the Nigerian environment: Journal of Nigeria English Studies Association*. 4(1): 45-51
9. Charles, F.G, Agostinho, D.S. & Faustina, Y. (2011). *Developing speaking skill through simulation Method: Journal of Innovation studies on character and Education*. 3 (2) 240-255 iscjournal.com.
10. Choudhary, R. (2013). *An investigation of effectiveness of simulation in developing oral skills: A case study: European Scientific Journal*. 9 (32) 254-269
11. Domange, R. (2023). *The vowels of Delhi English: Three studies in sociophonetics*. Thesis, English, Humanities, Stockholm University.
12. Jalali, M.E (2013). *A critical look at the variationist approach to studying language: International Journal of Language learning and Applied Linguistics World*. (IJLLALW)4 (4): 30-44
13. Jibril, M. (1995). *A practical course of English Pronunciation: A perceptual approach*. London: Edward Arnold
14. Jowitt, D. (2000). *Patterns of Nigerian English Intonation*. *English Worldwide*. 21 (1): 147-174
14. Labov, W. (1966). *The social stratification of English in New York City*. Arlington: centre for Applied Linguistic

15. Labov, W. (2006). *A sociolinguistic perspective on sociophonetic research: Journal of Phonetics*: 5 (34) 45-56
16. Laura, A. & Amparo, G (2019). *Developing English speaking skills through simulation-based Instruction, teaching English with technology*. 19 (2) 3-20 www.tewtjournal.org
17. Mona, M.H. & Ehab, A. (2022). *The effect of using simulation strategy in developing English as a foreign language speaking skill: Journal of Language Teaching and Research*. 13 (1):198-206
18. Oladipupo, R.O. (2014). *A Sociophonetic investigation of Standard British English connected speech processes in Nigerian English. Thesis. English, Arts, University of Ibadan.*
19. Oladipupo, R.O. & Akinjobi, A. (2016). *A Sociophonetic study of young Nigerian English Speakers: Ghana Journal of linguistics*. 4 (2): 92-107
20. Olaniyi, O. (2011). *Articulation as a means of identifying educated Nigerian speakers of English: A phono-sociolinguistic study. Thesis. English, Arts. University of Ilorin.*
21. Olaniyi, O. (2020). *Towards a mastery of and ideal model and a realistic goal of spoken English In Nigeria In Rotimi Oladipupo, Julianah Akindele and Ayo Osisanwo (Eds.) Phonetics*
22. *Phonology and Sociolinguistics in the Nigerian Context. A Festschrift for Adenike Akinjobi. Ibadan: Stirling-Horden Publisher Limited*
23. Pengxiang Ma, H.L. (2023). *Issues and strategies in phonetics teaching of primary school English: Open Access Library Journal*. 10 (5).
24. Roach, P. (2010). *English Phonetics and Phonology. A practical course. Fourth edition. Cambridge: University press*