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The Complexity of English Consonant Clusters: A Study on Akwa Ibom English Bilinguals

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Abstract: This study examined the phonotactics of consonant clusters in English as well as its complexity at the onset and coda positions in words. It determined that English words exhibit consonant clusters up to three at onset and up to four at the coda. The study restricted itself to the performance ability of Akwa Ibom English bilinguals in the production of consonant clusters. The Stratified Random Sampling Technique was adopted in the selection of thirty respondents in Senior Secondary Two (SS2) class. The instrument contained a short passage and sixty words where the respondents were made to read aloud into an audio device. The data were analyzed perceptually using simple percentage. The results thereby showed that Akwa Ibom English bilinguals do not have difficulty in the production of word-initial consonant clusters but they have difficulty in the production of word-final consonant clusters, especially when it has to do with certain combinations. The study concluded that Akwa Ibom English bilinguals demonstrate cases of reduction and simplicity at coda consonant clusters, and a slight epenthesis where there are vowel letters but with no sounds.

Keywords: Phonotactics, Consonant Clusters, Onset, Coda, Complexity, English Bilinguals, Reduction, Simplicity and Epenthesis.

Introduction

The morphological structures of various languages in the world differ considerably in terms of the syllable structures that they permit. According to Nyarks and Okey-Agbo (2023), language is the most important attributes of mankind because it is the medium of communication. Okono and Enang (2020) posited that language is a creation that every human being is endowed with or blessed; language is used as a unique tool for expression. Okono (2019) mentioned that English language has arguably become a world language. English as a language has complex onsets and codas. Some natural languages, for example, Hawaiian allows no more than one consonant in the onset and none in the coda, so that every word ends in a vowel. Standard Chinese allows only nasal consonants in the coda, producing words such as “Beijing” and “shanghai” (Fromkin, Rodman & Hyams 2003, p.249). Many languages have consonant clusters in their morphology whether at onset or coda position. Some of these languages include English, German, Polish among others. But each of these languages has a number of differences in their phonotactics.

Phonotactics is a term used to refer to rules of sound combination in respect of actual or potential words, though the ultimate aim is that of arriving at well formed sequences in natural languages (Eka 1996, p.44). Phonotactics is regarded as the legal sequencing of speech sounds. It often governs the sequencing of segments within the syllable (Hayes 2009). For instance, in English,

we have sequences like “tr” (as in truth), “tw” (as in twin), “spr” as in spread among others but not “tb”, “tk”, “tp” or “gt” either at onset or coda position.

English phonotactics for instance permits clusters of consonant sounds up to three at word-initial position and up to four at word final-position. Apart from the word-initial and word-final positions, English also permits consonant clusters at word medial-position. This is observable in words such as “conclude”, “recruit”, “transform”, “construct” “include” and many others. Moreover, the combinations follow an organized pattern and sequences so that any deviation will easily be seen as an error. For instance, in English, we have consonant clusters such as: /br, bl, kr, gl, kl, sp, fl, spr, skr/, and so on at word-initial position and clusters such as /ks, ld, nd, ts, dz, nts, mpts, sts/, among others at word-final position.

There are other languages whose possibilities of consonant clustering are much more limited such as Spanish and Italian of whose syllables regularly have a simple CV shape just as many African languages (Fromkin, Rodman & Hyams 2003, p.319). In Spanish for instance, clusters are only permitted at onset position while in Arabic, they are only permitted at coda position. In French, we hardly see groups of three or four consonant clusters. A vowel, often, the schwa is inserted as soon as there is a risk of gathering up to three consonants. An example is petite/p∂’tit/. Many languages have larger clusters than English. In Georgian, clusters of up to six consonants can be found at onset position, and in other languages of the Caucasus. Some American and Indian languages also allow clusters of this size (Abercrombie 1967, p.75).

Abercrombie (1967) noted that there is no known language that allows only one pattern, though there are many which have only two. For example, Keresan, a language of the Rio Grande Valley, makes use of patterns like CVC and CVO only, and no others are permissible. Japanese and many Polynesian languages belong to the category that do not permit consonant clusters. Generally, among the languages which permit consonant clusters, differences are found both in the size of the clusters and in the phonotactics. This research is intended to examine the structural content of English consonant clusters as realized by Akwa Ibom English Bilinguals and find out the level of compliance to appropriateness in Standard English.

Statement of the Research Problem

A few researchers have affirmed that very few studies have been conducted on consonant clusters (Memoire de Maitrise, 2001; Rungruang, 2017), and consonant clusters happen to be an interesting area to research in, considering, the complexity of English consonant clusters. As illustrated in the introduction, the English consonant clusters can take up to three consonants at word-initial position and up to four at word-final position, in a single syllable or word. This then poses a considerable problem to African speakers of English who hardly have such clusters or any clusters of consonant at all in their languages.

In Akwa Ibom, a state in the south-south region of Nigeria, there is hardly any consonant cluster at word-initial or word-final position in its major languages _ Ibibio, Annang and Oro. Naturally, it would be difficult for Akwa Ibom speakers of English to pronounce words with consonant clusters. This is because English language in Nigeria exists as a second language, alongside many indigenous Nigerian languages (Edo and Nyarks, 2014). The case of epenthesis, including other cases as reduction and simplicity are not totally unavoidable in some of the speeches or utterances of Akwa Ibom English users and learners.

Objectives of the Study

The objectives of this study are to:

1. analyze the various complexities of consonant clusters in English words;
2. find out the extent to which Akwa Ibom English bilinguals realize consonant clusters appropriately;
3. compare and contrast the performance ability of Akwa Ibom English bilinguals in the production of initial and final consonant clusters.

Review of Related Literature

Very few researches have been carried out on consonant clusters and some of them will be reviewed here. Rungruang (2017) examines consonant cluster acquisition by L2 Thai speakers. The work looks at the acquisition of consonant cluster in two aspects: the transfer of the first language to the second language and markedness effects on the developmental processes in the second language acquisition. To achieve this, a pre-test and post-test were administered on Thai speakers to measure how the participants were able to identify (40) onset and (120) coda clusters at different periods of time.

Data were analyzed using the Markedness Differential Hypothesis by (Eckman, 1977). It was discovered that the Thai participants who were mainly university students performed better in English onset than the coda, although there was no significant difference in both major and minor types of clusters.

Maitries (2001) examines the production of consonant clusters of English by Wolof speakers. The work is based on error analysis approach. It tries to verify the production of English consonant clusters by Wolof learners of English. The error analysis perspective helped to check the pronunciation of consonant clusters by Wolof speakers of English using both written and oral tests.

In summary, the researcher made certain findings that the production of English consonant clusters is problematic to a majority of Wolof students, especially, groups of three and four clusters at word-final positions. This, therefore, results in such errors such as simplification, insertion of epenthetic vowels in-between consonants, assimilation and the wrong pronunciation of past tense suffixes, among others.

Ugorji (2013) examined the variation in complex sequences otherwise referred to as consonant clusters in Jamaican Creoles (JC) and compared same with Standard Jamaican English (SJE). The study discovered that at word-final positions, only two forms, -nt and -lt are allowed in JC but all other cluster types are part of the system of SJE. It concluded that consonant clusters are complex sounds sequences for Jamaican children to acquire or produce.

Fall (1998) is an MA dissertation which examined the Wolof and French consonant clusters using the contrastive analysis (CA) hypothesis. It showed that the occurrence of consonant clusters in Wolof is more significant than its occurrence in French. The study also examined some errors of pronunciation of words with consonant clusters in both languages and observed that such errors occurred as a result of interferences.

Theoretical Framework

This study employs the Generative CV-Phonology Model of syllable structure expounded by Clements and Keyser (1983). The theory was intended to perform three tasks: (a) state the universal principles governing syllable structure; (b) state syllable structure typology, i.e. define the range within which syllable structure may vary from language to language and (c) state language-specific rules governing syllable structure (Katamba 1989). This study will briefly consider the above tasks.

In (a), the syllable is assumed to have a three-tiered structure consisting of a syllable node, a CV-tier whose C and V elements dominate consonantal and vowel segments. In (b), syllable typology is described by including a range of core syllables as linguistic elements which are part of the core grammar, are present in all languages. In (c) above, a mechanism is needed to deal with language-specific structure principles. There are languages which permit structures like V, CV, VC, CVC, and so on. English, for instance, has structures like, CCCVCC as in the word: sprawled /sprɔld/, CCCVCCC as in the word: strengths/streŋɵs/ and the last to consider here is the structure, CCVCCCC as in glimpsed /glimpst/.

Research Methodology

The data for this study were sourced through a structured questionnaire. The questionnaire was cross-checked and corrected by my supervisor before being administered. The questionnaire was divided into two sections, A and B. Section A consisted of questions on respondent's personal bio-data while Section B consisted of the general test questions. Section B was further divided into two parts - the first part contained a passage of twenty-five sentences while the second part contained sixty words. The sixty words were also contained in the passage presented to respondents to read. The words contained consonant clusters at initial and final positions which the respondents were made to read into an audio device.

Respondents were asked to read the passage once and the words twice. The respondents consisted of SSS 2 students selected from three secondary schools in the state. The schools represented the three senatorial districts and respondents were speakers of the three major languages in the state, namely, Ibibio, Annang and Oro. The schools were Four Towns Secondary School (FTSS), Uyo; Comprehensive Secondary School (CSS), Abak, and, Infant Jesus Model Secondary School (IJMSS), Oron, respectively.

Thirty students were selected from the entire population comprising ten students from each school. The Stratified Random Sampling Technique was adopted in selecting the respondents. The Stratified Random Sampling (SRS) or Stratification is a method of sampling that involves the division of a population into smaller sub-groups known as Strata. In SRS, the strata are formed based on members' shared attributes or characteristics, such as educational attainments, occupation, among others. Here, the Strata involved students of SS2 class who were able to speak English as well as their mother tongue from the three linguistic backgrounds. The data collected are presented in the given tables.

Data Presentation

The tabular presentation of data shall only capture one out of the three schools selected but the discussion and analysis shall cover the three schools.

Table 1: Initial Two Consonant Clusters (CCV-) by FTSS

S/N	CCV-	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
1.	growth/grəuɵ/	1	1	1	1	1	1	1	1	1	1	10
2.	slept/slept/	1	1	1	1	1	1	1	1	1	1	10
3.	spherical/s`ferikl/	0	0	1	0	1	0	1	1	1	0	5
4.	plight/plaɪt/	1	1	1	0	1	1	1	1	1	1	9
5.	shrink/ʃriŋk/	1	1	1	0	1	1	1	1	1	1	9
6.	thrust/ɵrʌst/	1	0	1	1	1	1	1	1	1	0	8
7.	glimpse/glɪmps/	1	1	1	1	1	1	1	1	1	1	10
8.	christian/`krɪstʃən/	1	1	1	1	1	1	1	1	1	1	10
9.	scored/skɔ:d/	1	1	1	1	1	1	1	1	1	1	10
10.	principals/`prinseplz/	1	1	1	1	1	1	1	1	1	1	10
11.	drank/dræŋk/	1	1	1	1	1	1	1	1	1	1	10
12.	clouds/klaudz/	1	1	1	1	1	1	1	1	1	1	10
13.	troubled/`trʌbld/	1	1	1	1	1	1	1	1	1	1	10
14.	frame/freɪm/	1	1	1	1	1	1	1	1	1	1	10
15.	spelt/spelt/	1	1	1	1	1	1	1	1	1	1	10
16.	french/frenʧ/	1	1	1	1	1	1	1	1	1	1	10
	Total Correct CCV-	**15**	**14**	**16**	**13**	**16**	**15**	**16**	**16**	**16**	**14**	**151**

Key: R → Respondent; C → Consonant; V → Vowel

Table 2: Initial Three Consonant Clusters (CCCV-) by FTSS

S/N	CCCV-	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
1.	strolled/strəuld/	1	1	1	0	1	1	1	1	1	1	9
2.	strengthen/`streŋənd/	1	1	1	1	1	1	1	1	1	1	10
3.	spread/spred/	1	1	1	1	1	1	1	1	1	1	10
4.	split/split/	1	1	1	1	1	1	1	1	1	1	10
5.	script/skript/	1	1	1	1	1	1	1	1	1	1	10
6.	students/`stju:dnts/	0	0	0	0	0	0	0	0	0	0	0
7.	scroll/skrəul/	1	1	1	1	1	0	1	1	1	1	9
8.	sprite/sprait/	1	1	1	1	1	1	1	1	1	1	10
9.	strict/strikt/	1	1	1	1	1	1	1	1	1	1	10
	Total Correct CCCV-	**8**	**8**	**8**	**7**	**8**	**7**	**8**	**8**	**8**	**8**	**78**

Table 3: Final Two Consonant Clusters (-VCC) by FTSS

S/N	-VCC	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
1.	growths/grəuɵs/	1	1	0	1	0	1	1	0	0	1	6
2.	slept/slept/	1	0	1	1	0	1	1	0	0	1	6
3.	spherical/`sferikl/	1	0	0	0	0	0	1	0	0	0	2
4.	strolled/strəuld/	1	0	1	0	0	1	1	0	0	1	5
5.	plant/pla:nt/	1	0	1	1	0	1	1	1	0	0	6
6.	shrink/ʃrɪŋk/	1	0	1	1	0	1	1	1	1	0	7
7.	thrust/ɵrʌst/	1	0	1	1	1	0	1	0	0	1	6
8.	kicked/kɪkt/	0	0	0	0	0	0	0	0	1	0	1
9.	needs/nɪ:dz/	0	0	1	1	0	0	1	0	1	0	4
10.	film/fɪlm/	1	0	1	0	0	1	1	0	0	0	4
11.	chiefs/ʧi:fs/	1	0	1	0	0	1	1	1	1	1	7
12.	learnt/lɜ:nt/	1	1	1	1	1	1	1	1	1	1	10
13.	mind/maɪnd/	1	0	0	0	0	0	1	0	0	0	2
14.	strict/strɪkt/	0	0	0	0	0	0	1	0	0	0	1
15.	spelt/spelt/	1	1	1	1	0	1	1	1	1	1	9
16.	french/frenʧ/	1	1	1	1	1	1	1	1	0	1	9
	Total Correct VCC	**13**	**4**	**11**	**9**	**3**	**10**	**15**	**6**	**6**	**8**	**85**

Table 4: Final Three Consonant Clusters (-VCCC) by FTSS

S/N	-VCCC	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
1.	next/nekst/	0	0	0	0	0	0	0	0	0	0	0
2.	asked/a:skt/	0	0	0	0	0	0	0	0	0	0	0
3.	lists/lɪsts/	0	0	0	0	0	0	0	0	0	0	0
4.	depths/depɵs/	0	0	0	0	0	0	0	0	0	0	0
5.	bulbs/bʌlbz/	1	0	1	1	0	1	1	0	0	0	5
6.	tasks/ta:sks/	0	0	0	0	0	0	0	0	0	0	0
7.	priests/pri:sts/	0	0	0	0	0	0	1	0	0	0	1
8.	facts/fækts/	0	0	0	0	0	0	0	0	0	0	0
9.	principals/`prinsəplz/	1	0	0	0	0	1	1	0	0	0	3
10.	important/im`pɔ:tnt/	0	0	0	0	0	0	1	0	0	0	1
11.	plants/pla:nts/	1	1	1	1	1	1	1	0	0	1	8
12.	animals/`ænɪmlz/	1	0	0	0	0	0	0	0	0	0	1
13.	troubled/`trʌbld/	0	0	0	0	1	1	1	0	0	0	3
14.	scripts/skrɪpts/	1	0	0	1	0	0	1	1	1	0	5
	Total Correct – VCCC	**5**	**1**	**2**	**3**	**2**	**4**	**7**	**1**	**1**	**1**	**27**

Table 5: Final Four Consonant Clusters (-VCCCC) by FTSS

S/N	-VCCCC	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
1.	twelfths/twelfθs/	0	0	1	0	0	0	0	1	0	0	2
2.	slimpsed/glimpst/	0	0	1	0	0	0	0	1	0	0	2
3.	attempts/ə`tempts/	0	0	0	0	0	1	1	1	0	0	3
4.	prompts/prɔmpts/	1	0	0	0	0	0	1	1	1	0	4
5.	students/`stju:dnts/	1	0	0	0	0	0	1	0	0	0	2
	Total Correct – VCCCC	**2**	**0**	**2**	**0**	**0**	**1**	**3**	**4**	**1**	**0**	**13**

Discussion

In Table 1, a respondent is scored one (1), where he pronounces the given word correctly, and zero (0) where the word is pronounced wrongly. Each respondent pronounced the sixteen words displayed on the table, making a total of one hundred and sixty (160) responses for the CCV-cluster, of which one hundred and fifty one (151) were correct. The few instances of failure was seen in clusters of /sf, ɵr, ʃr, pl). This is very similar to the other two schools, with the same clusters by CSS, Abak and IJMSS, Oron. The correct responses totalled one hundred and fifty (150) in CSS Abak and one hundred and forty seven (147) in IJMSS, Oron. A few instances of failure was recorded in same clusters with CSS Abak, apart from the cluster, /pl/.

Table 2 contains a total of nine (9) words with initial three consonant clusters (CCCV), making a total of ninety (90), given the ten respondents. Correct responses totalled seventy eight (78). One outstanding and common feature here is that the respondents were able to pronounce all other clusters correctly apart from, /stj/ in student, not even one respondent could pronounce the third consonant cluster. One respondent failed /str/ strolled, and another failed /skr/ in scroll. There is a similar situation in CSS Abak and IJMSS Oron.1where there is a total of seventy four (74) and eighty (80) correct responses respectively. In the production of CCCV- by IJMSS, the respondents did not record any failure in the other clusters apart from the combination /stj/ where none of them scored.

Table 3 displayed a total of sixteen (16) words with final two clusters (-VCC) with different combinations, making a total of one hundred and sixty (160). Respondents scored really low in three of the clusters, such as, /kt, nd, kl/, so that they scored a total of eighty five. CSS Abak and IJMSS Oron scored a total of seventy nine (79) and eighty one (81) respectively. Failure was also recorded in the same clusters, but no respondent in CSS Abak and IJMSS Oron pronounced the cluster, /kl/ in spherical correctly. They rather inserted an epenthetic /æ/ in-between the clusters. This is attributive to the orthographic sequence of the word, “spherical”.

In Table 4, a total of fourteen (14) words with final three clusters of different phonotactics were given, making a total of one hundred and forty (140). Out of this number, FTSS scored twenty seven (27); CSS scored seventeen (17); while IJMSS scored twenty six (26). Respondents only performed well in /nts/ cluster (plants) in the three tables, where the total scores were eight (8), six (6) and eight (8), respectively.

Finally, Table 5 displayed five words with final four consonant clusters. Here, thirteen (13) out of fifty responses were correct. The situation worsened in CSS where only six (6) responses were correct and it was worst in IJMSS with only three (3) correct responses. In CSS, no respondent pronounced the clusters, /ŋɵnd, dnts/ correctly while in IJMSS, none pronounced the combinations /ŋɵnd, mpst, dnts/ correctly.

DATA ANALYSIS / RESULT

Table 6: Percentage Analysis of the data obtained from the three Schools

S/N	CCV-	FTSS (IBIBIO)	CSS (ANNANG)	IJMSS (ORON)	TOTAL %
1.	Growth	100	100	100	100
2.	slept	100	100	100	100
3.	spherical	50	60	50	53
4.	plight	90	100	100	97
5.	shrink	90	70	60	73
6.	thrust	80	70	60	70
7.	glimpsed	100	100	100	100
8.	prompts	100	100	100	100
9.	priests	100	100	100	100
10.	principals	100	100	100	100
11.	plants	100	100	100	100
12.	clouds	100	100	100	100
13.	troubled	100	100	100	100
14.	frame	100	100	100	100
15.	spelt	100	100	100	100
16.	French	100	100	100	100
	CCCV-	**FTSS (IBIBIO)**	**CSS (ANNANG)**	**IJMSS(ORON)**	**TOTAL %**
1.	strolled	90	80	100	90
2.	strengthened	100	100	100	100
3.	spread	100	100	100	100
4.	split	100	100	100	100
5.	script	100	90	100	97
6.	students	0	0	0	0
7.	scroll	90	80	100	90
8.	sprite	100	100	100	100
9.	strict	100	90	100	97
	--VCC	**FTSS (IBIBIO)**	**CSS (ANNANG)**	**IJMSS (ORON)**	**TOTAL %**
1.	growths	60	50	40	50
2.	slept	60	80	70	70
3.	spherical	20	0	0	7
4.	strolled	50	40	70	53
5.	drank	60	40	80	60
6.	shrink	70	50	60	60
7.	thrust	60	80	50	63
8.	kicked	10	20	40	23
9.	needs	40	10	30	27
10.	film	40	20	30	30
11.	chiefs	70	20	80	57
12.	learnt	100	60	80	80
13.	mind	20	10	10	13
14.	strict	10	20	10	13
15.	spelt	90	80	80	83
16.	French	90	60	80	77
	--VCCC	**FTSS (IBIBIO)**	**CSS (ANNANG)**	**IJMSS (ORON)**	**TOTAL%**
1.	next	0	0	0	0

2.	asked	0	0	0	0
3.	lists	0	0	0	0
4.	depths	0	10	10	7
5.	bulbs	50	20	40	37
6.	tasks	0	0	0	0
7.	priests	10	0	0	3
8.	facts	0	0	10	3
9.	principals	30	0	20	17
10.	important	10	0	0	3
11.	plants	80	60	80	73
12.	animals	10	0	0	3
13.	troubled	30	30	60	40
14.	scripts	50	50	40	47
	-VCCCC	**FTSS (IBIBIO)**	**CSS (ANNANG)**	**IJMSS (ORON)**	**TOTAL%**
1.	twelfths	20	0	0	7
2.	glimpsed	20	10	0	10
3.	attempts	30	20	10	20
4.	prompts	40	30	20	30
5.	students	20	0	0	7

Table 6 above shows that the sampled population from the three schools representing the three major ethnic groups in the state do not have any significant challenge with initial consonant clusters but do have a considerable problem with final clusters. Also, there are certain clusters or phonotactics that prove quite difficult for Akwa Ibom English bilinguals to realize. Examples are the final clusters /mpts, kts, sts, sks, skt, kst, kt, nd/ among others. Also observed is the case of epenthesis, occurring where there is a vowel letter but without any sound at word-final clusters.

Result of Findings

Table 7: Performance Percentage by FTSS (Ibibio)

S/N	CV STRUCTURE	TR	CR	CR %
1.	CCV-	160	151	94
2.	CCCV-	90	78	88
3.	-VCC	160	85	53
4.	-VCCC	140	27	19
5.	-VCCCC	50	13	26

Key: TR → Total Respondents; CR → Correct Respondents

Table 8: Performance Percentage by CSS (Annang)

S/N	CV STRUCTURE	TR	CR	CR %
1.	CCV-	160	150	94
2.	CCCV-	90	74	82
3.	-VCC	160	79	49
4.	-VCCC	140	17	12
5.	-VCCCC	50	6	12

Table 9: Performance Percentage by IJMSS (Oron)

S/N	CV STRUCTURE	TR	CR	CR %
1.	CCV-	160	147	92
2.	CCCV-	90	80	89
3.	-VCC	160	81	51

4.	-VCCC	140	26	19
5.	-VCCCC	50	3	6

Table 10: Summary Percentage Performance by Akwa Ibom English Bilinguals

S/N	CV STRUCTURE	PERCENTAGE PERFORMANCE
1.	CCV-	93
2.	CCCV-	86
3.	-VCC	51
4.	-VCCC	17
5.	-VCCCC	15

Summary of Findings and Conclusion

Akwa Ibom English Bilinguals demonstrate a level of competence in English consonant clusters at word-initial positions. This is quite commendable as there hardly exist consonant clusters in Akwa Ibom languages and dialects. However, there exist some challenges in the production of consonant clusters at word-final positions mostly in cases of three to four final clusters. By observation, this problem is as a result of ignoring and carelessness on the part of the people, rather than inability. Respondents and, readers generally, tend to ignore plural and past tense suffixes in words.

Be that as it may, it is discovered that they had some difficulties in producing word-final clusters such as /kst/, /skt/, /sts/, /kts/, /mpts/ and word-initial clusters of /sf/ and /stj/. This is believed to be a general problem which does not only pertain to Akwa Ibom English bilinguals. This is so because it corroborates with previous studies like (Rungruang, 2017, Maitrise, 2001, Joan, 2003). It could therefore be concluded that Akwa Ibom English bilinguals also demonstrate cases of reduction, simplicity and a slight epenthesis.

Recommendations and Suggestions for Further Studies

The following recommendations are suggested:

1. English teachers should adopt teaching methods that would help their students to learn to produce consonant clusters appropriately. Transcription of English words should even be introduced and encouraged at secondary school level.
2. School children should be engaged in more reading exercises to improve their reading and speaking skills.
3. Finally, I suggest that further studies on consonant clusters be conducted on gender basis and also across different ethnic groups in the country.

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