Word-stress free variation in Nigerian English

ADERONKE AKINOLA AND ROTIMI OLADIPUPO

A corpus-based study

1. Introduction

English, in the course of its progressive evolution and global spread, has had contacts with different languages (Hogg & Denison, 2006) which have led to the emergence of native and non-native varieties spoken in different countries of the world. This, in part, has resulted in variable pronunciations of English lexical items, such as *anti-* pronounced as /ænti/ or /æntaɪ/ at the segmental level and *adult* as /'ædʌlt/ or /ə'dʌlt/ at the suprasegmental level of stress (Hogg & Denison, 2006). In addition to this, phonological free variation in English has been motivated by phonetic processes, phonological changes and sociolinguistic factors, among others (Shitara, 1993; Mompean, 2010).

A few studies (Shitara, 1993; Wells, 1995, 1999, 2003; Henderson, 2010; Mompean, 2010) have been carried out on phonemic and stress free variation in native English varieties which have contributed immensely to our understanding of this phenomenon and to the successive reviews of Wells' (2000, 2008) *Longman Pronunciation Dictionary* (LPD). Conversely, such empirical studies are very scarce in Nigerian English (NigE, henceforth) even though it is common knowledge that English words are prone to variable pronunciations in the NigE accent, owing to the influences of the British and American varieties on the one hand (Awonusi, 1994; Ogbulogo, 2005; Obasi, 2019) and cross-linguistic influence from indigenous languages on the other (Jowitt, 2019). This, therefore, limits our understanding of the concept of phonological free variation in a non-native English setting. Yet, as shall be established in this study, this phenomenon is germane for the standardisation of NigE.

In filling this gap, therefore, this study attempts a corpus-based investigation of word-stress free variation in NigE with a view to identifying NigE speakers' preferences. It is believed that the findings would serve as a resource material required for a review of a revised edition of the existing Dictionaries of Nigerian English (Igboanusi, 2002; Adegbite, Udofot & Ayoola, 2014). The objectives of this study are as follows:

(i) to ascertain the variability of word-stress patterns in NigE
(ii) to identify the preferred stress free variants
(iii) to establish the influences on the NigE speakers' preferences



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This section has provided a background for this study. Section 2 examines the concept of free variation in English while section 3 discusses word stress in NigE. In Section 4 the methodological approach to the study is described. The results of the analysis are presented in section 5 and discussed in Section 6, and the paper finally concludes with recommendations in section 7.

2. Free variation in English

The concept of free variation in phonology accounts for the occurrence of two or more different sounds in the same environment without constituting a meaning change and without being considered incorrect by the native speakers. The phenomenon may also be explained as a case of instability or free fluctuation in sounds (Hughes, Trudgill & Watt, 2005) as a result of which a particular sound may be variably pronounced at different times by the same speaker or differently by two speakers (Fatunsin, 2007). Free variation may occur at the segmental (e.g. *schedule* as /ʃeʤu:l/ or / ʃkeʤu:l/, *dilemma* as /dɪlemə/ or /daɪlemə/) and supra-segmental (e.g. *detail as* /'di:teɪl/ or /dɪ'teɪl/, *finance* as /'faɪnænᵗs/ or /fə'nænᵗs/) levels.

At the segmental domain, free variation may manifest in phonetic or phonemic form. It may occur as an instance of phonetic realisations of a phoneme, for example, the pronunciation of the initial voiceless alveolar plosive in *team* as aspirated [tʰi:m] or unaspirated [tᵒi:m], or a situation where certain sounds are realised as different phones from one native accents to another (e. g., RP /ɒ/ as /ɑ:/ in GA). In its phonemic form, free variation may occur due to differentiation in the number of phonemes in a language (McCully, 2009; Roach, 2009), thereby allowing a set of phonemes in a particular language to be used interchangeably. For example, both long /e:/ and diphthong /eɪ/ are present in some northern British English accents, while the same long /e:/ is realised as/eɪ/ in BBC pronunciation.

At the suprasegmental domain, free variation may occur in the stress pattern of a particular word in isolation with no change in grammatical category (e.g. *vaccine* /'væksi:n/ or /væk'si:n/; *complex* /'kɒmpleks/ or /ḳɑ:m 'pleks/) or in connected speech (e.g. a shift in stress placement in *eco'nomic,* as in *think about the 'economic 'value they have*), yet without a meaning difference. Lastly, free variation may also manifest through the processes of assimilation, coalescence and reduction in connected speech. These may result in phonological alternations such as *this shop* as /ðɪs ʃɒp/ or /ðɪʃʃɒp/; *God bless you* as /gɒd bles ju:/ or /gɒd bleʃʊ/ and *would you* as /wʊd ju:/ or /wʊʤu/.

This study focuses on free variation in lexical stress patterns. Essentially, this phenomenon explains the possibility of more than one stress pattern on a particular word in its citation form (e.g. *ciga'rette* or *'cigarette*, *ap'plicable* or *'applicable*, '*distribute* or *di'stribute, 'communal* or *co'mmunal*) without a change in meaning or grammatical category (Mompean, 2010; Cruttenden, 2014). This, therefore, precludes stress variation that is due to stress shift (e.g., *su'ccess* versus *'success 'power*) or leads to a change in grammatical class such as *au'gust* (adjective) and *'August* (noun), *'present* (adjective/noun) or *pre'sent* (verb).

The occurrence of lexical-stress free variation may be due, largely, to accent differences (Shitara, 1993; Katalin & Szilárd, 2006; Henderson, 2010) or what Simo Bobda (2010) refers to as stress variation in space. Variability in the accents of the two major native English varieties (RP and GA), globally considered as models for teaching and learning English in the second language setting, has considerably yielded lexical-stress free variation in various English varieties. Examples are *advertisement* pronounced as /əd'vɜ:tɪsmənt/ (RP) and /ædvə'taɪzmənt/ (GA); *formidable* as /fɔ:'mɪdəbəl/ (RP) and /'fɔ:rmɪdəbəl/ (GA); *harass* as /'hærəs/ (RP) and /hə'ræs/ (GA); and so on (Shitara, 1993; Simo Bobda, 2010).

Word-stress free variation has also been shown to be conditioned by social factors, such as age, level of education and gender, among others. For example, preferences for certain word stress variants (e.g., *harass*, *formidable*, *justifiable*) are found to be influenced by age, gender or level of education of speakers in both British and American English varieties (Shitara, 1993; Wells, 1995).

Another explanation for lexical-stress-free variation, according to Simo Bobda (2010), is variability in time. Evidence abounds of diachronic stress shift on English words over time which has yielded several competing stress patterns. For example, the lexical items *´illustrate, ´revenue,* and *´abdomen* with stress preference on the initial syllable in present-day British English were, prior to the 18th century, stressed on the penultimate syllable as *i ´llustrate, re´venue, ab´domen*. Today, both the traditional and newer forms are in free variation (Wells. 2008, Simo Bobda, 2010).

Generally, the concept of free variation has not received detailed attention in phonological theory, possibly due to the traditional assumption that it was insignificant to the linguistic field

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(Mompean, 2010). Nevertheless, a few studies in the native English varieties have paid attention to the phenomenon, whose findings have improved our understanding of the concept (Henderson, 2010; Mompean, 2010) and have provided support for the revised editions of the English Dictionaries (Shitara, 1993; Wells, 1999, 2003).

On the other hand, research into lexical-stress free variation in a second language setting such as Nigeria is yet to be seen, despite that the accent is replete with variable pronunciations under the influences of native Englishes and substrate languages. The present study, therefore, is an attempt to extend the study of free variation in word stress to a non-native variety.

3. Word stress in Nigerian English

English, in Nigeria, has graduated from just being the language of trade and of teaching the Christian ethos to that of government, diplomacy, literature, the mass media, and of inter-ethnic and international communication (Oyeleye, 2016). It is the nation's official language and, unarguably, the most influential and dominant language (Gut, 2004). The contact of English with the over 500 indigenous languages (Ebenhard, Simons & Fennig, 2019) has, however, exposed it to substratum influence which has resulted in a domesticated variety known as Nigerian English. The existence of NigE is no longer in doubt (see Gut, 2004; Jowitt, 2019). Rather, commendable efforts are geared towards its codification and standardisation (Gut, 2012; Adegbite et al., 2014) which have yielded series of studies at different linguistic levels.

At the suprasegmental level of phonology, several studies have posited that NigE differs remarkably from British English (BrE) in stress assignment. These studies are agreed that, in view of the serious challenge which stress poses to most users of English as a second language, NigE speakers have developed nativised stress-placement strategies which have yielded peculiar but definable stress patterns. Some of these include backward and forward stress shift in contrast to the native-English stress patterns (Atoye, 1991; Simo Bobda, 2010; Atoye et al., 2018; Jowitt, 2019) and replacement of English stress with tone (Amayo, 1980; Gut, 2007; Udofot, 2007; Gussenhoven & Udofot, 2010; Fajobi, 2014).

In addition to these, however, users of English in Nigeria are also exposed to the American and British English stress patterns, which are often in free variation (Atoye et al., 2018; Obasi, 2019), in view of the initial contact with the British and the subsequent political, economic and educational interactions with the United States of America (Awonusi, 1994; Jowitt 2019). This presupposes that NigE speakers are beneficiaries of different linguistic influences with different variants of English word stress in their repertoire.

It is against this backdrop that the study of word-stress free variation in NigE is worthwhile. The present study goes beyond mere identification and description of NigE word stress patterns which was the preoccupation of earlier studies. It is intended, as a first step, to empirically establish the pronunciation preferences of NigE speakers amongst competing word stress patterns through corpus analytical methods.

4. Methodology

The data for this study were sourced from the International Corpus of English (ICE) – Nigeria, which contains 1,010,382 words of spoken (609,586) and written (400,796) NigE usage. The ICE–Nig was compiled between 2007 and 2014 at the Universities of Augsburg and Münster (Gut, 2014) as part of the International Corpus of English project founded by Greenbaum and associates in 1990 (Unuabonah & Gut, 2018). The text samples were supplied by male and female Nigerians with a wide range of age groups who have been educated in Nigeria through the medium of English to at least the end of secondary school. These include media practitioners, politicians, university lecturers and students, medical doctors, sport analysts and commentators, lawyers, judges, technocrats and clergy. The choice of these categories of informants as the population sample for this study is premised on their recognition as suitable candidates for the codification of NigE (Gut, 2012).

Specifically, the study concentrates on the spoken categories of the corpus which contain formal, semi-formal and informal texts, such as conversations, unscripted speeches, broadcast interviews, classroom lessons, broadcast talks, non-broadcast talks, broadcast news, and so on. Table 1 shows the data types in the spoken part of the corpus and the total number of files and words contained in each of the texts.

Forty-four lexical items that are prone to stress variation in native Englishes were compiled from Shitara (1993), Mompean (2010) and Wells' (2008) *Longman Pronunciation Dictionary* (LPD). The words, in their inflectional forms (plural, present tense and past tense), were

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Table 1: Word count of the spoken part of the ICE–Nig corpus

Text type	Total No. of files	File Name	No. of Words
Broadcast discussion	26	bdis_01–26	40,290
Broadcast interview	10	bint_01–10	20,356
Broadcast news	40	bnew_01–40	40,916
Broadcast talk	43	btal_01–43	40,138
Business transactions	11	btr_01–11	20,732
Class lessons	14	les_ 01–14	41,394
Commentaries	56	com_01–56	40,770
Conversations	67	con_01–67	180,789
Cross examinations	10	cr_01–10	20,486
Demonstrations	14	dem_01–14	20,594
Legal presentations	14	leg_01–14	20,481
Non-broadcast talks	10	nbtal_01–10	20,156
Parliamentary debates	20	parl_01–20	20,161
Phone calls	7	ph_01–07	20,624
Unscripted speeches	50	unsp_01–50	61,699
Total	**392**		**609,586**

(Source: Gut, 2014)

searched in ICE–Nig using AntConc corpus analysis toolkit version 3.4.4 (Anthony, 2014); the search returned 31 words with various rates of occurrences. In order to ensure a well balanced representation of each word, therefore, 18 items which occurred ten times and more were eventually chosen for the analysis. Table 2 contains the lexical items analysed in this study.

The analysis involved listening to the relevant audio files of each word in ICE–Nig by the authors to determine the particular variants produced. Both raters are Nigerian L2 speakers of English and trained phonologists. Each listened to the audio clips independently and noted the variants produced, after which their findings were compared. Cases of disagreement were resolved by jointly listening to the disputed audio clips; and where it was difficult to reach a consensus, the opinion of another trained phonologist was sought and then a decision was made. The data were subsequently analysed quantitatively by counting the tokens of occurrence of each variant and speaker and converting them to percentages. The variants with higher percentages of tokens of occurrence and higher number of speakers were taken as the preferred variants. In a situation of intra-speaker variation, where the same speaker pronounces the two variants of a lexical item, the number of times such variation occurs is indicated as a superscript above the total number of speakers (see Table 2). Wells' (2008) LPD model was adopted for the transcription of native English pronunciation variants while Adegbite et al.'s (2014) phonemic model of NigE was adopted for the NigE phonemic representations.

To establish the preferred stress variant of a particular lexical item, two levels of analysis were carried out. First, the sum of each variant was calculated as a percentage of the total sum of occurrences of the lexical item in the corpus; and second, the number of speakers who produced each variant was also calculated as a percentage of the total number of speakers who produced the word. Therefore, the variants with the higher (or highest) percentage of occurrence and the higher (or highest) rate of speakers were regarded as the preferred. This is statistically represented as shown in (Figure 1):

5. Findings

A total of 18 lexical items that typically exhibit stress variation in the native English varieties were analysed in this paper. Each word appears

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Table 2: Tokens, number of occurrences and speakers

Word Family	Total number of tokens in ICE–Nig.	Total number of speakers in ICE–Nig.
ADDRESS: address (37), addresses (5)	42	30(1)
ADULT: adult (7), adults (4)	11	6
CONTACT: contact (10), contacted (4)	14	12
CONTRIBUTE: contribute (25), contributes (2), contributed (10)	37	28(1)
CREATE: create (54), creates (3), created (29)	86	59(1)
DETAIL: detail (9), details (61), detailed (6)	76	41
DICTATE: dictate (7), dictates (5)	12	9
DISPUTE: dispute (7), disputes (15)	22	8
FINANCE: finance (18), finances (6)	24	13(1)
IDEA: idea (57), ideas (43)	100	66(3)
INCREASE	17	12
RESEARCH: research (78), researchers (9)	87	51
RESOURCE: resource (22), resources (62) REVENUE	84 16	44 12
TRANSLATE: translate (8), translates (1), translated (4)	13	11
UMBRELLA: umbrella (7), umbrellas (3)	10	8
VEHICLE: vehicle (42), vehicles (22)	64	31
WEEKEND: weekend (20), weekends (5)	25	18

in different inflectional forms grouped as a word family (e.g. CREATE: create, creates and created). The lexical items were grouped into three categories: disyllabic items with invariant word stress in the corpus, disyllabic items with variant word stress and trisyllabic words whose stress alternates between the initial and penultimate syllable in native Englishes. The native British and American English pronunciation forms, as well as the NigE speakers' pronunciation variants and preferences, are tabulated and discussed accordingly. Since the inflectional forms of each item do not show stress differences, only the base form is shown on the tables as representing each word family. For example, CREATE stands for *create*, *creates and created* (see Table 3).

Table 3 shows that no stress variation was exhibited in five disyllabic words: *adult*, *detail (n,v)*, *weekend*, *dictate(v)* and *increase(n)* in the corpus. In all instances of occurrence of the lexical items, all the speakers demonstrated total preference for stress on the initial syllable of

$$\frac{Sum\ of\ variant}{Total\ sum\ of\ occurences\ of\ a\ lexical\ item} x\ 100$$

$$\frac{No\ of\ speakers\ of\ a\ variant}{Total\ No\ of\ speakers\ of\ a\ lexical\ item} x\ 100$$

Figure 1. Statistical representation of preferred variants

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Table 3: Words with invariant words stress in Nigerian English

Lexical items	Native British and American variants	Nigerian word stress in ICE–Nig.	Total number of tokens in ICE–Nig.	Total number of speakers in ICE–Nig.
adult	/'ædʌlt, ə'dʌlt/	/'adɔlt/	11	6
detail(n, v)	/'di:teɪl, dɪ'teɪl/	/'ditel/	76	41
weekend	/'wi:kend, wi:k'end/	/'wikɛnd/	25	18
dictate(v)	/'dɪkteɪt, dɪk'teɪt/	/dik'tet/	12	9
increase(n)	/'ɪnkri:s, ɪn'kri:s/	/'ɪnkris/	17	12

'*adult* (11 tokens produced by six speakers), *'detail* (76 cases produced by 41 speakers), '*weekend* (25 instances produced by 18 speakers) and *'increase(n)* (17 tokens produced by 12 speakers), and on the final syllable of *dic'tate(v)* (12 tokens produced by nine speakers). The result for '*adult* in this study is similar to that of Wells' (2008) LPD which indicates that 84% of BrE speakers preferred stress on the initial syllable, but different from Shitara's (1993) finding which reveals that 88% of AmE respondents showed a preference for stress on the final syllable of *a'dult*. The score for '*detail* tallies with Mompean's (2010) and Wells' (2008) LPD findings respectively which show the BrE (85.5%) and AmE (75%) speakers' predilection for stress on the initial syllable of the same word. Wells' (2008) LPD entry for '*weekend* shows that NigE speakers' preference for stress on the initial syllable of the item is in tandem with the AmE prereference, as against the BrE primary variant: *wee'kend*. Stress on the final syllable of *dic'tate (v)* agrees with the BrE preferences but differs from the word-initial stress variant favoured in AmE as LPD (Wells, 2008) reports.

The lexical items in the second category are disyllabic words that take stress either on the initial or final syllable. Table 4 shows that NigE speakers

Table 4: Disyllabic words with variant word stress in ICE–Nig.

Lexical items	Native British and American variants	ICE–Nig variants	Number of tokens and speakers with % in brackets			
		V1 V2	V1	Speakers	V2	Speakers
dispute(n)	/'dɪspju:t, dɪ'spju:t/	/`dispju:t/ /di`spju:t/	21(95.45)	7(87.50)	1(4.55)	1(12.50)
address(n)	/'ædres, ə'dres/	/a`drɛs/ /`adrɛs/	37(88.10)	26(86.70)	5(11.90)	4(13.30)
idea	/'aɪdɪə, aɪ'dɪə/	/ai`dia/ / `aidia/	72(72)	40(60.61)	28 (28)	26(39.39)
research(v,n)	/'ri:sɜ:ʧ, rɪ'sɜ:ʧ/	/ri`sɛʧ/ /`risɛʧ/	70(80.46)	42(82.35)	17(19.54)	9(17.65)
finance(n)	/'faɪnæn^{t}s, faɪ'næn^{t}s/	/fai`nans/ /`fainans/	19(82.61)	11(84.62)	4(17.39)	2(15.38)
contact(v)	/'kɒntækt, kɒn'tækt/	/kɔn`takt/ /`kɔntakt/	10(71.43)	8(66.67)	4(28.57)	4(33.33)
translate	/'trænzleɪt, trænz'leɪt/	/tran`sleɪt/ /`transleɪt/	12(92.31)	11(91.67)	1(7.69)	1(8.33)
create	/'krieɪt, kri'eɪt/	/kri`et/ /`kriet/	83(96.51)	58(98.31)	3(3.49)	1(1. 69)
resource	/'rɪsɔ:s, rɪ'zɔ:s/	/ri`sɔ:s/, /`risɔ:s/	80(95.24)	42(95.45)	4(4.76)	2(4.55)

V1- Variant 1 (NigE main/prefered variant); V2- Variant 2 (NigE alternative variant)

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preferred stress on the initial syllable of *'dispute(n)* while *a'ddress(n)*, *i'dea*, *re'search(v,n)*, *fi'nance (n)*, *con'tact(v)*, *tran'slate*, *cre'ate* and *re'source* were predominatly stressed on the final syllable. Seven (87.50%) out of eight speakers exhibited a preference for stress on the initial syllable in 21 (95.45%) of the 22 cases of *'dispute(n)* found in the corpus. This differs from Mompean's (2010) and Wells' (2008) LPD findings which reveal a predilection for stress on the final syllable of the same word in both BrE and AmE, which is an exception to the English noun-verb alternation stress rule and further confirms the notion that English stress is unpredictable (Simo Bobda, 2010; Jowitt, 2019).

In *a'ddress(n)*, the final syllable was predominantly stressed in 37 (88.10%) out of 42 tokens by 26 (86.70%) speakers. This includes an incidence of intra-speaker variation within the same discourse by a female speaker (btr_11) who produced *address* with final stress twice and with initial stress once. The result compares with Wells' (2008) LPD entry for the same word, which reveals that 58% of AmE speakers showed preference for stress on the final syllable and that the variant is the primary pronunciation in BrE. Table 4 also reveals that 40 (60.61%) speakers in 72 (72%) cases preferred stress on the final syllable of *i'dea*. This finding is similar to the LPD data (Wells, 2008) which shows the stress variant as the BrE speakers' only pronunciation form and the preferred variant for 86% of AmE respondents based on a preference poll. Again, a number of speakers in the corpus varied their pronunciation of *idea*, shifting between initial and final stress. For example, in (bdis_12), a male discussant produced /'aidia/ once and /ai'dia/ thrice, while a female lecturer (btr_07) and a male lecturer (les_01) each pronounced both variants of *idea* in two different instances.

Final stress was also adopted in 70 (80.46%), out of 87 cases of *re'search* (both the verbal and the nominal forms) by 42 (82.35%) speakers. The poll results for the same word in LPD (Wells, 2008) reveal that 80% of BrE speakers also preferred stress on the same syllable, while 78% of AmE respondents placed stress on the initial syllable (*'research*). The finding also supports the possibility of distinguishing between the verb (*re'search)* and the noun (*'research*), which LPD (Wells, 2008) reports for the native speakers, as the two tokens of the verb form in the corpus were accented on the final syllable, whereas the noun received stress on the intial syllable in majority of the cases.

Preference for final stress was also observed by 11 (84.62%) speakers in 19 (82.61%) of the 23 tokens of *fi'nance(n)* and by eight speakers (66.67%) in ten instances of the total cases of *con'tact(v)*, representing 71.43%. This includes a case of intra-speaker variation which occurred in the pronunciation of *'finance* and *fi'nance* by a news reporter in (bnews_31). However, both findings are at variance with Wells' (2008) LPD entries which indicate that the initial syllable is the preferred stress position for both words in the American and British English varieties. Final stress was again favoured in 12 (92.31%) of the 13 tokens of *tran'slate* by 11 (91.67%) speakers and in 80 (95.24) of the 84 cases of *re'source* by 42 (95.45%) spearkers. In both cases, NigE speakers aligned with the BrE final stress preference against the initial stress pattern in AmE. Finally, in this category, 58 speakers (98.31%) overwhelmingly placed stress word-finally on *cre'ate* in 83 (96.31%) of the 86 tokens found in the corpus. A presenter also varied his pronunciation of *'creates* and *cre'ated* with stress on the first and the second syllable respectively. The finding agrees with LPD (Wells, 2008) which shows that 87% of American respondents preferred final stress on the same lexical item and that it is the primary pronunciation in BrE.

The third category of lexical items considered in this study comprises trisyllabic words: *contribute*, *umbrella, revenue* and *vehicle* which are typically stressed on the initial or penultimate syllable in native Englishes. As shown in Table 5, *contribute* was stressed on the intial, penultimate and final syllables by NigE speakers; however, it was final stress, *contri'bute*, that was overwhelmingly favoured by 25 (89.29%) of the 28 speakers in 31 (83.78%) cases of all the total incidence of the lexical item. A female lecturer (unsp_05) also exhibited internal variation in her pronunciation of the lexical item; toggling between initial stress on *'contribute* and penultimate stress on *contri'buted*. The result is different to Mompean's (2010) finding and the LPD (Wells, 2008) poll results which show that 78% and 73% of British respondents respectively preferred stress on the penultimate syllable (*con'tribute)*, which is also the case in AmE.

Table 5 further shows that 7 (87.5%) out of 8 speakers preferred stress on the initial syllable in 7 (70%) of the 10 cases of *umbrella* found in the data; whereas LPD (Wells, 2008) reveals that both American respondents (86%) and British speakers favour penultimate stress. *Revenue* was pronounced with intial stress in 15 (93.75%) of 16 cases by 11 (91.67%) speakers, which agrees

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Table 5: Trisyllabic words with variant word stress in ICE–Nig.

Lexical items	Native British & American variants	ICE–Nig. variants			Number of tokens and speakers with % in brackets				
		V1	V2	V3	V1	Speakers	V2	Speakers	V3	Speakers
contribute	/ˈkɒntrɪbjuːt, kɒnˈtrɪbjuːt/	/kɔntriˈbjuːt/	/konˈtri/, /ˈkɔn. . ./		31(83.78)	25(89.29)	3(8.11)	2(7.14)	3(8.11)	1(3.57)
umbrella	/ʌmˈbrelə, ʌmˈbrelə/	/ˈɔmbrɛla/, /ɔmˈbrɛla/			7(70)	7(87.50)	3(30)	1(12.50)		
revenue	/ˈrevənjuː, -nuː/, /rɪˈvenjuː/	/ˈrevenjuː/, /reveˈnjuː/			15(93.75)	11(91.67)	1(6.25)	1(8.33) 1(3.23)		
vehicle	/ˈviːkəl/, viːˈhɪkəl/	/ˈviːikul/, /viˈhikul/			63(98.44)	30(96.77)	1(1.56)			

with the main variant in British and American English (Wells, 2008). Finally, out of the 64 tokens of *vehicle* found in the corpus, stress was placed on the first syllable *('vehicle)* in 63 (98.44%) instances by 30 (96.77%) speakers. This trend agrees with Wells' (2008) findings in LPD which marks the same stress position as the norm in BrE and the preferred for 95% of AmE speakers.

6. Discussion

In this paper, an attempt is made to investigate variations in the patterns of word stress in NigE, through a corpus analytical approach, in order to establish the NigE speakers' word stress preferences. The results show varied stress patterns on some of the lexical items examined. Out of the 18 words that were eventually considered for analysis in ICE–Nig, 13 were found to have exhibited stress free variation, with NigE speakers preferring one variant to another. For example, most speakers preferred stress on the initial syllable of *'dispute*, *'vehicle*, *'umbrella* and *'revenue* but favoured word-final stress on *a'ddress(n)*, *i'dea*, *re'search (v,n)*, *fi'nance(n)*, *con'tact*, *tran'slate*, *cre'ate*, *re'source* and *contri'bute*. On the other hand, stress assignment on *'adult*, *'detail(n,v)*, *'weekend*, *dic'tate(v)*, *'increase(n) and re'source* did not show variation. This, however, does not suggest that stress is not variable on these words in NigE; analysis of controlled elicited speech is likely to yield a different result. Even then, the patterns of stress on those words reveal the NigE speakers' preferences: word-initial stress was preferred in *'adult*, *'detail*, *'weekend* and *'increase* while word-final stress was favoured in *dic'tate*.

The study further reveals patterns of word stress that are characteristic of the NigE variety. Essentially, it confirms the scholarly position that the stress patterns of many traditional native English words have been subjected to 'radical redistribution' in the ESL setting (Simo Bobda, 2010: 64), yielding forms that differ markedly from the established native English norms (Jowitt, 2019). NigE speakers' stress preferences in the data show that, although stress assignment was similar to the native English patterns in some cases (e.g. *'increase*, *'detail*, *cre'ate* and *'revenue*), a few lexical items had the traditional order of stress on them reversed. In the first instance, stress on some words was reassigned to an earlier syllable; for example, *'dispute* and *'umbrella* were stressed on the initial syllable as against the final *dis'pute* and penultimate *um'brella* positions preferred in British and American English. This

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tendency, referred to as regressive stress shift (Atoye, 1991) or backward stress (Simo Bobda, 2010), has been established as an important process of stress assignment in NigE that is characteristic of such words as *'estate*, *'success*, *'assault*, *'cassette*, *'contempt*, *'adjacent* and *'opponent* typically stressed on a later syllable in native Englishes (Atoye, 1991; Simo Bobda, 2010).

Secondly, some lexical items had the stress on them shifted forward from their typical position in native Englishes. This was demonstrated in *con'tact*, *fi'nance(n)* and *contri'bute* whose stress was predominantly moved forward from the initial or penultimate position preferred in the British and American English varieties. This trend, known in NigE as progressive stress shift (Atoye, 1991) or forward stress (Simo Bobda, 2010), is considered the most significant influence on NigE stress evidenced by the following pronunciation: *pe'trol*, *co've*t, *soli'cit*, *inter'pret* and *manipu'late* amongst others (Atoye, 1991; Simo Bobda, 2010; Jowitt, 2019).

A deeper examination of the data further reveals some underlying strategies that possibly account for the NigE speakers' patterns of stress preferences identified above. These include generalised application of syllable weight and noun-verb alternation constraints (Simo Bobda, 2010). The weight of the syllable as an important factor of stress assignment in English determines stress placement on the strong final (heavy) syllable of a disyllabic word. It is only when that position is weak that the penult is then considered (Hayes, 1981; Simo Bobda, 2010). A strong syllable, in this regard, contains a short vowel followed by a consonant cluster or a long vowel or diphthong followed by any number of consonants (Jowitt, 2019).

This appears to be the dominant rule that accounts for the NigE speakers' preferences in the data. Stress was generally placed on the strong final syllable of all disyllabic verbs (except 'detail'[v][1]). These include *re'search(v)*[2], *con'tact*, *tran'slate*, *cre'ate*, and *dic'tate*). It was also applied to disyllabic nouns: *fi'nance(n)*, *ad'dress(n)*, *i'dea*, *re'search(n)*, and *re'source*) and extended to a multi-syllabic word (*contri'bute*) without regard to exceptions in native Englishes. Also in keeping with the rule, primary stress was moved from weak final and penultimate syllables of some multisyllabic words to a strong (heavy) intial syllable (e.g. '*vehicle* /'vi:ɪkəl/, *'umbrella*). This tendency has also been reported as a significant factor that is responsible for the prevalence of forward stress in NigE as seen in *multi'ply*, *exer'cise*, *sur'vey*, *an'cestor*, *ca'lendar* and *cha'llenge*, amongs many other lexical items (Simo Bobda, 2010; Jowitt, 2019).

The other native English stress rule which appears to influence NigE speakers' stress preference in the data is the noun-verb alternation constraint, which guides stress placement on the initial and final syllables of disyllabic words that can function as a noun and as a verb respectively (e.g. *'export(n)* versus *ex'port(v)*). This was attested in their preference for stress on the initial syllable of *'increase(n)* and *'detail(n)* which were stressed following the native English rule. In some cases, however, NigE speakers tend to observe this rule without paying attention to its large number of exceptions. Instances in the data include *'dispute (n)* (where final-syllable stress *di'spute(n)* is preferred in British and American Englishes) and *con'tact(v)* (with preference for stress on the initial syllable *'contact(v)* in British and American Englishes). Similar lexical items in this category as attested by Simo Bobda (2010) include such nominal forms as *a'dvice* and *as'sault* (stressed as *'advice*, *'assault* in NigE) and verbal forms as *'purchase* and *'kidnap* (stressed as *pur'chase* and *kid'nap* in NigE).

It follows from the above that word stress preferences in NigE are underlyingly influenced by the speakers' knowledge of the native English stress rules (Simo Bobda, 2010), which they rightly apply in some cases but generalised in others. Besides, in view of their contact with and exposure to the standard native varieties through education and non-enculturation sources, such as the media (Jowitt, 1991; Akinjobi, 2013), NigE speakers seem to have absorbed the native English pronunciation of some of the lexical items. This is evident in their overwhelming preferences for stress on the initial syllables of *'adult* (as in BrE), *'weekend* (as in AmE) and *'revenue* (as in BrE and AmE), where the syllable weight rule was not applied (see Table 6). This also explains the native-like stress on some lexical items, for example, *fi'nance(n)*, *'contact* and *con'tribute*, produced as alternative variants (V2) by very few speakers.

It should also be noted that, in some cases, stress preferences in NigE were subject to a combination of factors. For instance, final-syllable stress on *con'tact(v)* can be explained as a combined influence of the generalised application of syllable weight rule (which pushes stress to the strong final syllable) and noun-verb alternation constraint (whereby nouns and verbs are stressed on the initial and final syllables respectively).

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Table 6: NigE stress free variants in comparison with AmE and BrE varieties

Rank	Word	NigE	BrE	AmE	Influencing accent
1.	address (n)	/a'dres/	/ə'dres/	/æ'dres/	BrE/AmE
2.	contact (v)	/kɔn'takt/	/'kɒntækt/	/'kɑːntækt/	NigE
3.	dictate (v)	/dik'tet/	/dɪk'teɪt/	/'dɪkteɪt/	BrE
4.	finance (n)	/fai'nans/	/'faɪnæn^{t}s/	/'faɪnæn^{t}s/	NigE
5.	idea	/ai'dia/	/aɪ'dɪə/	/aɪ'diːə/	BrE/AmE
6.	research(v,n)	/ri'sɛʧ/	/rɪ'sɜːʧ/	/'riːsɜːʧ/	BrE
7.	resource	/ri'sɔːs/	/rɪ'zɔːs/	/'riːsɔːs/	BrE
8.	adult	/'adɔlt/	/'ædʌlt/	/ə'dʌlt/	BrE
9.	detail(n,v)	/'ditel/	/'diːteɪl/	/'dɪteɪl/	BrE/AmE
10.	dispute (n)	/'dispjuːt/	/dɪ'spjuːt/	/dɪ'spjuːt/	NigE
11.	weekend	/'wikɛnd/	/wiː 'kend/	/'wiːkend/	AmE
12.	umbrella	/'ɔmbrɛla/	/ʌm'brelə/	/ʌm'brelə/	NigE
13.	contribute	/kɔntri'bjut/	/kən'trɪbjuːt/	/kən'trɪbjuːt/	NigE
14.	create	/kri'et/	/kri'et/	/kri'et/	BrE/AmE
15.	vehicle	/'viːɪkl/	/'vɪəkl/	/'viːəkl/	BrE/AmE
16.	translate	/træns'leɪt/	/trænz'leɪt/	/'trænzleɪt/	BrE
17.	increase	/'ɪnkriːs/	/'ɪnkriːs/	/'ɪnkriːs/	BrE/AmE
18.	revenue	/'revenjuː/	/'revənjuː/	/'revənuː/	BrE/AmE

7. Conclusion

This paper set out to investigate variations in the word stress patterns of NigE speakers, using the spoken part of ICE–Nigeria as a database. The goal was to determine their word stress preferences. The findings have demonstrated the variability of word stress in NigE as obtained in native Englishes (Wells, 2008), which justifies the claim that language is inherently variable (Foulkes & Docherty, 2006). As this study has shown, peculiar word stress patterns of NigE speakers can be accounted for by the generalised application of the native English stress rules (syllable weight and noun-verb alternation constraints) as well as speakers' exposure to standard native English pronunciation. This suggests that NigE speakers' word stress preferences are subject to 'two standardising forces' which interact with one another; on the one hand is peculiarly Nigerian standard and, on the other, exonormative British and American Standard (Jowitt, 2019: 32). Both of them exact influences on NigE speakers' word stress preferences. This position is further strengthened by the cases of intra-speaker variations attested in a number of lexical items in the study. This suggests that, although NigE takes its root from native Englishes, especially British and American English varieties, it has definable features that stand it out as a variety of World Englishes. This is the type of variety that Achebe (1966: 22) refers to as 'a new English, still in full communion with its ancestral home but altered to suit its new African surroundings'.

It is in view of this realisation that the present study seeks to echo the call for the codification and standardisation of NigE. These findings, therefore, provide useful resource materials for the revision of existing dictionaries of NigE usage (e.g., Igboanusi, 2002; Adegbite et al. 2014), which is a sine qua non for endonormative standardisation (Bamgbose, 1998; Jowitt, 2019). As Bamgbose (1998: 4) puts it:

> One of the major factors militating against the emergence of endomormative standards in non-native Englishes is precisely the dearth of codification. Obviously, once a usage or innovation enters the

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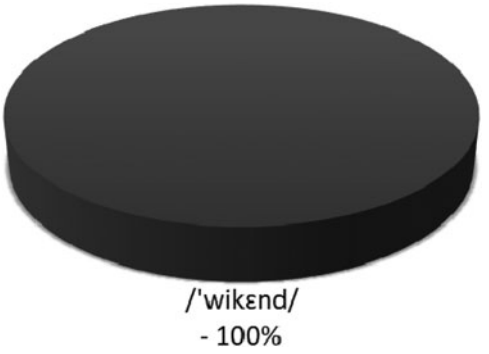


Figure 2. The preference poll for *weekend*

dictionary as correct and acceptable usage, its status as a regular form is assured.

The proposed revision will be patterned after Wells' (2008) *Longman Pronunciation Dictionary* which was influenced by Shitara's (1993) survey of American pronunciation preferences, amongst other polls. In addition to the existing entries in the dictionaries, the edition would contain the NigE speakers' pronunciation preference charts. A demonstration of the proposed dictionatry entry is hereby provided below, using two of the lexical items examined in this study: *weekend* and *contribute.*

Existing Entries:
Igboanusi (2002)
weekend the sense of *weekend* in Nigeria differs slightly from the sense in which it is used in BE. In Nigeria, *weekend* starts from Friday (after working period) to Sunday, but in Britain, it is Saturday and Sunday.

Adegbite et al (2014)
weekend /wikɛnd/HL, n., a typical *weekend* in Nigeria starts from after work on Friday and ends on Sunday night: "The 'bachelor's eve' takes place on Friday, next *weekend*."

The proposed revised edition will include:
Weekend
– Preference poll: /ˈwikɛnd/ - 100% (Figure 2)

Contribute
– Preference poll: /kɔntrɪˈbju:t/ - 83.78%; kɔnˈtri. . . - 8.11%; /ˈkɔn. . ./ - 8.11%,. (Figure 3)

This paper provides a first-step attempt at investigating word stress preferences in Nigerian English which will serve as a catalyst for future studies. We, however, acknowledge its limitations and shortcomings; one of which is the small size of ICE–Nig which resulted in the examination of only a few lexical items. So many words that typically exhibit free variation in native Englishes and which could have made the analysis and discussion more robust and extensive were not found in the corpus, while some with less occurrences were excluded. It will be more enterprising, therefore, to see a field-based study that would advance this study, address the constraints and, possibly, examine the sociophonetic variation of word stress preferences in NigE.

Notes

1 There are only 2 tokens of the verbal form of *detail.*
2 There are only 2 tokens of the verbal form of *research.*

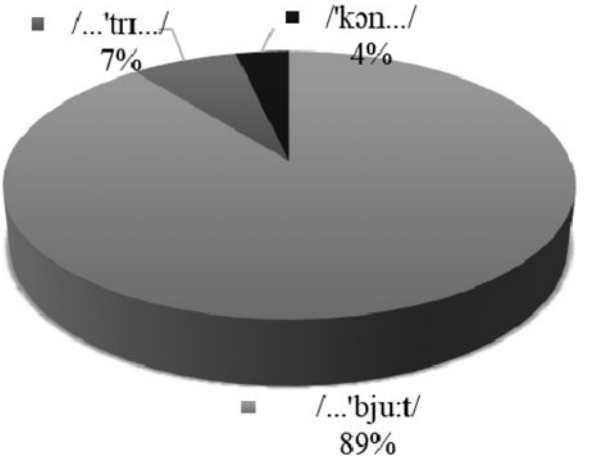


Figure 3. The preference poll for *contribute*

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