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AN ANALYSIS OF THE PHONOLOGICAL FEATURES OF SELECTED THREE-YEAR-OLD PUPILS' SPEECH

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ABSTRACT

Sound perception is pivotal to language acquisition and usage, and, it is the bedrock of the accumulation of linguistic knowledge by every individual. However, misperception of sounds and sound mispronunciation can be language-based, physiological or cognitive-oriented. This study aimed to assess the renditions of selected three-year-old pupils from a clinical phonological perspective. Twenty utterances of kindergarten pupils were recorded during recess. These utterances were transcribed and analysed both perceptually and acoustically. This study adapted a blend of the clinical phonological and clinical psycholinguistic approaches for the analysis of the selected pupils 'utterances. It has been found that even though the linguistic manifestation of the pupils is characterised by phonemic/syllabic substitution, reduction and omission, gender differences play a role in cognitive and linguistic development of the pupils. Also, despite the differences in the cognitive abilities of the pupils, they manifest language characteristics which is self-correcting over a given period.

Keywords: Linguistic Competence and Performance, Language Acquisition and Language Manifestation

INTRODUCTION

he linguistic endowment and disposition of every individual can be attributed to two distinct but interrelated phenomena — competence and performance. Linguistic competence, also regarded as linguistic knowledge, is a universal phenomenon that refers to an individual's linguistic capability to speak (produce a sequence of meaningful sounds) and be understood by others. This explanation is based on the mentalists' view that language is an innate ability, a manifestation of the language acquisition device (LAD) (Chomsky, 1965). Hence, every individual, irrespective of race, colour, gender, and status, acquires language the same way. Contrarily, performance is personal-oriented; it is the distinct capability of an individual to use language as dictated by the psychological (affective cues), physiological (articulatory features), and social/sociocultural (socialisation agents, culture, etc.) factors.

Linguistic competence and linguistic performance are coined as 'langue' and 'parole' by de Saussaure (1916). According to him, langue refers to the system of a language as a whole while parole refers to specific usages within the system. Hence, competence represents the entire system of language within a speech community while performance equates with parole. Not only performance but also language competence is pre-determined by cognitive/neurological, physiological, and social factors.

This study focuses on the assessment of the performance of selected three-year-old pupils from the clinical phonological perspective. Also, it is believed that the linguistic repertoire of children of age three constitutes their linguistic manifestation which is based on their developmental characteristics. As a result, this study aimed to identify, describe, and analyse the phonetic features of language manifestations in children of age three to examine whether the social variable of gender, physiological characteristics and cognitive features have a significant impact on the interlanguage of selected kindergarten pupils.

Literature Review

Since this study focuses on developmental issues in selected three-year-old pupils' language acquisition, it is pertinent to

examine related views on the topics —language, thought, and cognition; and interlanguage and second language acquisition. The conceptual basis for the study, Clinical Linguistics, is also examined with specific emphasis on its propositions and assumptions for the evaluation of the data under investigation.

Language, Thought and Cognition

Language is the most effective tool for the communication of thoughts, emotions, and ideas. This view of language has been criticised by numerous scholars, among them, Piaget (1976), based on the explanation that both children and adults engage in non-reciprocal discourses (monologues) either silently or aloud. Hence, Piaget (1976) opined that the function of language is not solely for communication. He classified speech into two: egocentric (i.e. the form of speech which includes individual monologue, collective monologue, and repetitions with no particular audience); and socialised (i.e. the form which is reciprocal). He concluded that children up to six years cannot differentiate between individual and social life as they do not exhibit 'verbal continence'. Children have autistic thoughts until seven to eleven years when they develop perceptual intelligence even though they acquire language faster than adults. At this stage, Piaget claimed that the children think based on experience and logic like adults as they have outgrown thinking in images, myths and symbols. He likened the thought process of the children at this stage to reality (like in adults) as against the invented thought process between ages 3-6 years.

Citing Claparede (1967), Butler-Bowdon (2013) states that children have mental abilities (thought and reasoning) that are inferior to those of adults; therefore, they commit more errors. This is contrary to Piaget's view that children behave the way they do because they are fundamentally different in the way they think and the way they perceive the world. This explains the gap in communication between adults and children. He posited thatit is difficult for adults to understand children because they assume that the children also think logically. Aitchison (2003) points out that children do not form influential social groups, hence, their speech patterns are unlikely to be adopted by other speakers. Even though children's speech patterns are not suitable to be adopted as models as has pointed out, paying attention to the linguistic patterns of children might help to detect children with speech disorder at a very early stage and also aid teachers to identify specific problem areas of individual pupils so as to design teaching methods and techniques to address those problems in an ESL classroom.

According to Verduzco (2016), thoughts and language systems are connected through the cognitive processes and functions; and the cognitive process involves the collection, storage, and use of information consciously or unconsciously through attention, memory, perception and learning, thinking, decision-making, speaking and acquisition, to mention but a few. The cognitive process changes over time with the age of individuals. It is usually active at a younger age than at the later stage of life but it is not universal as it varies across individuals. The change at the later stage is often likened to problems such as different categories of aphasia.

Interlanguage and Second Language Acquisition

The perspective, theory, and approach of interlanguage came into being as a result of the criticism levied against the two previous approaches - Contrastive and Error Analysis foranalysing second language issues in learners of English. According to Al-khresheh (2015), both contrastive analysis and error analysis were considered insufficient for describing second language phenomena. It was said that contrastive analysis is most predictive at the phonological level and least predictive at the syntactic level because no language has been adequately compared to another language. Also, contrastive analysis was criticised based on the argument that interlingual interference from the first language is not the only reason for the occurrence of errors in second language acquisition. Even though error analysis is also popular at addressing second language problems, it was not without any limitations as some researchers criticised the approach as lacking statistical inference and subjective in its interpretation of errors (Abdel-Qader, 2000; Bell, 2009).

Al-khresheh (2015) describes interlanguage as a systematic approach that has a specific set of rules distinct from the rules of the target language (second language), an approach that is used for the sake of communication among speakers of similar first language background for intelligibility. Camposon (2012) submits that interlanguage is a concept which refers to a dynamic linguistic system developed by a learner of a second language who has not become fully proficient in the language but who has been simplifying the second language by preserving some features of the first language. Among the simplification method adopted by the second language learner is an overgeneralisation of the second language rules in speaking or writing. Interlanguage perspective can be applied to the analysis of learners' underlying knowledge of the target language's sound system, lexico-grammatical features and the analysis of learners' language-use norms.

Mason (2017) asserts that interlanguage is an emerging linguistic system, a second language learner's development based on his incapability which enables him to approximate the target language by preserving some features of his first language in speaking or writing in the target language, thereby creating innovations through the use of strategies such as transfer, over generalisation, and simplification. Not only this, Mason claims that specific psychological processes are involved in the creation of a learner's interlanguage and this enables the learner to first, construct utterances in the native language to convey the same message made by the learner and second, form utterances in the target language to convey the same message made by the native speaker of that language.

Mason's claim further gives credence to the indispensability of the cognitive factors in strengthening the competence and performance of the learners. In the opinion of Tarone et al. (1976), there are two types of interlanguage users: those whose interlanguage is distinguished by stability and those with unstable interlanguage. Tarone (2001) is of the view that some of the major assumptions of the theory of interlanguage are borrowed from the mentalist theory as there is a shift in the psychological perspective of second language learning from the behaviourist's approach to a mentalist's notion.

From the scholarly descriptions of the concept of interlanguage so far, it can be said that the ability of the second language learner to create a linguistic model based on the knowledge of the first language and the level of exposure in the second language for effective communication is simply interlanguage. The second language learners' linguistic creation is indispensable to specific thought and cognitive processes. Hence, the subsequent section describes how the clinical approaches account for the influence of the cognitive factors in speech production, especially, the studied sample i.e. the three-year-old pupils.

Conceptual Framework

The conceptual framework for this study is clinical linguistics with an emphasis on clinical phonology and clinical psycholinguistics. Crystal (1981) describes clinical linguistics as the application of linguistic sciences to the study of language disability in all its forms, i.e. language disorder, dysfunction, disturbance, disadvantage, deficit, deprivation, and handicap, which may include stuttering, loss of speech, noticeable pronunciation disturbance and dramatic effects. He asserts that the common disorders in children are substitution resulting in mispronunciation due to delayed phonological development and physiological challenges such as cleft palate and the over generalisation of grammatical rules.

Cummings' (2017) describes clinical linguistics as an aspect of speech-language pathology which is concerned with the application of linguistic concepts, theories, and methods to the study of language disorders which result from impairment in either prosody, phonology, morphology, syntax, semantics, pragmatics or discourse. This view of Cummings corroborates with the previous notions of the discipline by previous scholars. Language disorder which is the object of study in clinical linguistics can be related to language production or comprehension in the linguistic areas identified. As a result of its relationship with speechlanguage pathology, clinical linguistics is responsible for the assessment, diagnosis, and treatment of clients with a range of communication disorders. Clinical phonology is an approach to the assessment and management of speech sound disorders while clinical psycholinguistics merges methods and theories of psychology and linguistics to examine the psychological processes and the bases of the rules of language to proffer solutions to language-related problems.

Methodology

The population for this study constitutes three-year-old children learning English as a second language in Ilorin metropolis from which samples were drawn. The three-year-old kindergarten one (KG 1) pupils were selected purposively as a case study from one of the private schools in the locality,. Twenty utterances were drawn from the conversations of the pupils during recess but not all the words of the utterances were analysed; only mispronounced words or sounds were extracted for analysis. The pupils were not only of the same age but also have similar L1 backgrounds. Eleven (11) of the pupils were from the north-central state,

Kwara state while the remaining four (4) were from the south-west, Ekiti and Osun states respectively. Considering the state of origin of the studied sample, Yoruba is their L1 as those from Kwara state are from Offa, Ilorin-East and Afon local government areas.

The pupils' interactions were recorded during the recess period with the aid of an Mp3 device. The recorded utterances were converted to Wav files and transcribed by the researcher. The pupils' utterances were analysed using the propositions and assumptions of the clinical phonology and clinical psycholinguistic approaches as well as the Praat software application. Not only this, since clinical linguistics is an interlanguage phenomenon, the pupils' utterances are also analysed using the interlanguage perspective of simplification.

Data Presentation

The twenty (20) selected utterances of the studied kindergarten pupils are presented in the table below alongside the transcription of the marked words. The analysis of the data is based on the marked words; not the entire utterances.

Marl	ked Words	
Data	Pupils' Utterances	Marked Words

Table 1. A Presentation of the Pupils' Utterances and the

Data	Pupils' Utterances	Marked Words	
1	Be looking at it, be looking at it everybody, be	/lʊkɪŋ/	/evribadi/
	looking at it ooo!		
2	Go inside, go inside!	/insaid/	
3	Give me, give me, give me joor, I will give you back.	/ g Iv/	/bæk/
4	Aunty take, aunty	/teɪk/	
5	Me, I will sleep on the rug.	/sli:p/	/rag/
6	Sitdown, sit down ah ah!	/sɪt/	/daon/
7	Oya, stand up Salamah, standup!	/stænd/	/лр/
8	Hold your chair, your chairgomgom,	/jo:/	/ʧɛə/
9	Eat it, eat it, eat it.	/i:t/	
10	Don't sit down, don't sit down!	/dəont/	/daon/
11	Bringthatthing!	/brɪ ŋ /	/ðæt/ /Өŋŋ /
12	Aunty beat you, aunty will beat you	/bi:t/	/a:ntɪ/
13	Gobir, whenyou know your abc(singing)	/wɛn/	/ju:/
14	See me, hold me, give me, hm, hm	/si:/	/həʊld/
15	Let's be looking at it	/lɛtz/	/loki ŋ /
16	Are you sleeping, are you sleeping(singing)	/sli:prŋ/	
17	Touch it, touch it very well, touch it!	/tʌʧ/	/veriwel/
18	It'sokay everybody	/əʊkeɪ/	/evribadi/
19	I willtell my mummy for you.	/wil/	/tɛl/
20	Colourblue, colour red, colour of our uniform, to	/kʌlə-blu:/	/ju:nɪfɔ:m/
	become a lawyer(singing)	/rɛd/	/bɪkʌm/ /ləɪə/

Data Analysis

In the course of data collection, the pupils were carefully examined to verify any form of disability. From the observation and investigation, it was found that none of the pupils sampled for this study is linguistically disadvantaged or handicapped; however, pronunciation problems constitute pupils' inability to form sounds of words correctly, disfluency, articulatory disorder, and voice disorder, as well as pronunciation disturbance. The analysis of the pupils' utterances was carried out using these parameters.

Phonological Simplification

Linguistically, it is noticeable that the speeches of the studied pupils are characterised by some mispronunciation through the perception of their renditions in the course of the analysis. These phonological patterns are reflected through their mispronunciation of constituent phonemes of words, or of specific phonemes and/or syllables. Hence, mispronunciation in the studied utterances are highlighted as follows:

Table 2: Word Transcriptions and the Pupils' Renditions

Data	Words	Transcription	Pupil's Realisations	
1	looking, everybody	/luki ŋ /ɛ/vribʌdi/	[ju:kı ()]ɛ[vɪbədɪ]	
2	Inside	/insaid/	[I f art]	
Data	Words	Transcription	Deficit Realisations	
3	give, back	/gIv//bæk	[g]I[b a :k]	
4	Take	/teɪk/	» · · · · ·	
5	sleep, rug	/sli:p/ /rʌg/	[ʃi:p] [drəɡ]	
6	sit down	/sɪt/ /daʊn/	[si:] [dʒaʊn] variation 1	
7	stand up	/stænd/ /ʌp/	[ftænd], [op]	
8	your chair	/jɔ:/ /ʧɛə/	[dʒɔ:] [ʧiə]	
9	Eat	/i:t/	[i: tf]	
10	don't, down	/dəʊnt/ /daʊn/	[dʒəʊn] [baʊn] variation 2	
11	bring that thing	/bri ŋ // ə ætli /Əŋ /	[bɪ ŋ], [dæ]t[n]	
12	beat, aunty	/bi:t/ /a:nti/	[bi:t] <mark>√</mark> [a:nt i:]	
13	when you	/wɛn/ /ju:/	[wɛn/ <mark>√</mark> [nʊ]	
14	see, hold	/si:/ /həʊld/	[si:n] [əʊd]	
15	let's looking	/lɛtz/ /lʊkɪ ŋ /	[j3:] [wu:kı ŋ]	
16	Sleeping	/sli:pr ŋ /	[ʃli:pɪn]	
17	touch, very-well	/tʌʧ/ /vɛrɪwɛl/	, tjɔtj] [vɛɪwɜ:]	
18	okay, everybody	/əukei/ /ɛvrɪbʌdi/	[əʊkeɪ] √ [ɛvɪbɔdɪ]	
19	will, tell	/wɪl/ /tɛl/	$[w \boldsymbol{\upsilon}]$ $[t \boldsymbol{\varepsilon}]$	
20	colour-blue, red,	/kʌlə-blu:/ /rɛd/	[kəjə-bu:] [j3:]	
	uniform, become,	/ju:nɪfə:m/ /bɪkʌm/ /ləɪə/	[wu:nɪfɔ:m] [bɪkəm] [lɔjæ]	
	lawyer			

The analysis presented in the table above has revealed different characteristics of the pupils' utterances, both with both correct pronunciation and mispronunciation. The pupils' renditions that vary are those which involve the simplification procedure. This procedure aids the pupils to minimize or eradicate the complexities surrounding specific phonemic/syllabic realisations. Illustrations can be drawn from datum 1, where there is substitution and reduction of the initial syllables and datum 3, where there is an elongation of the concluding sound in the words, hence, the substitution of the appropriate phoneme.

Datum 1

(Be **looking** at it, be looking at it **everybody**, be looking at it ooo!)

A //bilokiŋətit, bilokiŋətitevribadı, bilokiŋətitəo// B [[biju:kiŋətit, biju:kiŋətitevibədi, biju:kiŋətit ə:]]

Datum 3

(Give me, give me, give me joor, I will give you back.)

A //givmi, givmi, givmidʒɔ:,aiwilgivju: bæk//

B [[gimi, gimi, gimidʒɔ:, aiwigiju: ba:k]]

'A', in the illustrations above, represents the superstrate transcription while the 'B' represents the pupil's renditions. The bold emphasis is on the marked words. Other instances of elision/substitution and insertion/elongation are highlighted as follows:

 Table 3: Tabular Presentation of Simplification Processes

 and their Illustrations

Data	Elision/Substitution		Insertion		Reduction/Elongation	
	Superstrate	Substrate	Superstrate	Substrate	Superstrate	Substrate
1	-	-	-	-	/]ʊ/	[j u:]
					/ e vr i/	[EV I]
2	/-said/	[-∫aīt]	-	-	-	-
Data	Elision/Substitution		Insertion		Reduction/Elongation	
	Superstrate	Substrate	Superstrate	Substrate	Superstrate	Substrate
3	-	-	-	-	/æ/	[a:]
					/ g iv/	[gɪ]
5	/sl/	[ʃ]	/rʌ g	[d-rəg]	-	-
6	/d/	[dʒ]	-	-	/sɪt/	[si:]
7	/st/	[ʃ t]	-	-	-	-
	/лр/	[ə p]				
8	/j/	[dʒ]	-	-	-	-
	/ɛə/	[I9]				
9	[t]	[ʧ]	-	-	-	-
10	/d/	[dʒ]	-	-	/dəʊnt/	[dʒəʊn]
	/d/	[b]				

THIS TABLE IS ATTACHED AS A SEPARATE FILE BECAUSE OF ITS FORMATTING

L	/ ⊖ ī ŋ′	[tın]	-	-	/br1 ŋ /	[bɪ ŋ],
	/ð/	[d]			/ðæt/	[dæ]
12	-	-	-	-	/a:ntɪ/	[a:nt i:]
13	/j/	[n]	-	-	-	-
14	-	-	/si:/	[si:n]	/həʊld/	[əʊd]
15	/lɛtz/	[j3:] [wu:]	-	-	/lɛtz/	[j3:]
	/lu/				/lu/	[w u:]
16	/s/	[]]	-	-	-	-
	/ŋ/	[n]				
17	/t/	[ʧ]	-	-	/vɛ rı wɛl/	[veiw3:]
	/Λ/	[ə]				
1						
Data	Elision/S	ubstitution	Inser	tion	Reduction/	/Elongation
Data	Elision/S Superstrate	ubstitution Substrate	Inser Superstrate	tion Substrate	Reduction/ Superstrate	Elongation Substrate
Data	Elision/S Superstrate	ubstitution Substrate [ə]	Inser Superstrate	tion Substrate	Reduction/ Superstrate /ɛvrɪbʌdɪ/	Elongation Substrate [Evibodi]
Data 18 19	Elision/S Superstrate /\/	ubstitution Substrate [ə] -	Inser Superstrate -	tion Substrate -	Reduction/ Superstrate /evrib.di/ /wil/	Elongation Substrate [ɛvibɔdi] [wʊ]
Data 18 19	Elision/S Superstrate /\/ -	ubstitution Substrate [ə] -	Inser Superstrate -	tion Substrate -	Reduction/ Superstrate /ɛvrɪbʌdɪ/ /wɪl/ /tɛl/	Elongation Substrate [ɛvɪbɔdi] [wʊ] [tɛ]
Data 18 19 20	Elision/S Superstrate /A/ - /kAlə/	ubstitution Substrate [ə] - [kəjə] [j3:]	Inser Superstrate -	tion Substrate -	Reduction/ Superstrate /ɛvrıbʌdɪ/ /wɪl/ /tɛl/ /-blu:/	Elongation Substrate [ɛvibɔdɪ] [wʊ] [tɛ] [-bu:]
Data 18 19 20	Elision/S Superstrate /\/ - /k\lə/ /rɛd/	ubstitution Substrate [ə] - [kəjə] [j3:] [w] [ə]	Inser Superstrate -	tion Substrate	Reduction/ Superstrate /ɛvribʌdɪ/ /wil/ /tɛl/ /-blu:/	Elongation Substrate [Evibodi] [wʊ] [tɛ] [-bu:]
Data 18 19 20	Elision/S Superstrate /// // /kalə/ /red/ /j	ubstitution Substrate [ə] - [kəjə] [j3:] [w] [ə] [ləjæ]	Inser Superstrate -	tion Substrate	Reduction/ Superstrate /ɛvrɪbʌdɪ/ /wɪl/ /tɛl/ /-blu:/	Elongation Substrate [Evibodi] [wʊ] [tɛ] [-bu:]
Data 18 19 20	Elision/S Superstrate /\/ - /kAlə/ /rɛd/ /j /\A/	ubstitution Substrate [ə] - [kəjə] [j3:] [w] [ə] [lɔjæ]	Inser Superstrate -	tion Substrate	Reduction/ Superstrate /ɛvrıbʌdɪ/ /wɪl/ /tɛl/ /-blu:/	Elongation Substrate [ɛvibɔdı] [wʊ] [tɛ] [-bu:]

The three variables of the simplification procedures: phonemic and syllabic substitution, insertion, as well as phoneme elongation and reduction in the pupils' utterances are analysed in the table above. There is a preponderance of elision and substitution, followed by reduction and elongation. The less frequent is insertion. Insertion is based on two factors: first is the limited sound repertoire of the pupils, i.e. the pupils' inability to produce specific phonemes based on their level of cognitive development, intelligence and motivation. The brain abilities of children vary as a result of the development of neuronal connectivity of different brain parts that are involved in language learning. Other causal factors include the environment, peers influence/modeling. A remarkable illustration is a comparison between data 6 and 10.

А	down-	/daʊn/
В		[dʒ aʊn]
С		[b aʊn]

'A', in the table, represents the superstrate transcription while 'B' and 'C' are the substrate varieties. While B is a female pupil's rendition, C is rendered by a male pupil. Considering the properties of the variant sounds, B appears to be closer to A than C. Both A and B are alveolar and voiced but C is bilabial. Hence, the substitution of the superstrate with a different phoneme which features is far from the source.

The second is the influence of the pupils' first language. It is widely believed that children between ages 2-5 years at the early state of linguistic development are immersed in the language of their environment. Even for those that are exposed to English language at home, they acquire the infelicities in the variety(ies) of English language spoken in their environment.

Another discovery from the foregoing analysis is that the pupils' error are also phonologically inclined. For instance, in datum 13, the utterance:

when you know your abc	//wɛnju:nəʊjɔ:eɪbɪsɪ//
is realised as	[[wɛ nn u: <u>nəʊ</u> jɔ: eɪbɪsɪ]].

The illustration above indicates that the occurrence of /n/ at the boundary of the preceding word is responsible for the adaptation of the same phoneme at the initial position of the succeeding word. This same phoneme initiates the following word, thereby giving it a form of rhyme. This is a phonological process of progressive assimilation; however, the pupil is unconscious of this phenomenon. The pupils' interlanguage is a responsible factor for this occurrence.

Generally, from the analysis, it has been observed that the degree of deficiency among the pupils varies based on gender and developmental factors. The female pupils generally are found to be less deficient than their male counterparts as their word-realisations are appropriate and correspond with the superstrate transcriptions. A notable deduction from the analysis is that in spite of the pupils' mispronunciation, their realisations of $/\eta$ are appropriate. This can be associated with the manner of their renditions which is slow and steady. Also, the pupils' do not speak in volumes; they make use of limited number of words at a stretch of utterance ranging from one to eight. All these, put together are responsible for this achievement. Based on scientific evidence, it has been proven that from infant age, children can discriminate among sounds of all human languages, including the sounds of languages used in their environments (Jensen, 2011).

Pronunciation Disturbance

Pronunciation disturbance is a noticeable phonological problem in the pupils generally. This, according to Crystal (1981), is as a result of a delayed phonological development in the pupils. From the analysis carried out in the previous section, it has been found that pronunciation disturbance is not only caused by phonological development of the pupils but also by deficiency in physiological characteristics and other problems such as the mood of the pupils, constriction in the sensory organs of language production (nose, mouth, etc.) due to the pupils' state of health. As discovered in the previous section, physiological disturbance in the pupils leads to variation in realisations. Hence, these variations are analysed using the spectrogram below.

Fig. 1: Datum 6 [d3aon] Down Fig. 2: Datum 10 [baon]



From the spectrogram analysis above, it can be inferred that the speeches of the pupils are fragmented instead of being connected. This fragment has proven disturbance in the speech production. However, in spite of the fragmentation identified in the pupils' speech and despite the differences in the phonemic components of the lexical realisation, especially at the word initial, the pitch is close to similarity even though there is a slight difference in the duration of articulation.

Fig. 3: Datum 1 Looking [ju:kiŋ] Fig. 4: Datum 15 [wu:kiŋ]



Like figures 1 and 2, the spectrogram analyses in Fig. 3 and 4 reveal speech fragmentations; however, there is a remarkable variation in pitch as well as the duration of rendition. This signifies that the level of pronunciation disturbance in individual pupil varies based on developmental factors, both physiological and cognitive. Also, from the spectrogram analysis, it has been observed that phonological disturbance is the bedrock of speech deficiency among the studied samples. Similarly, it has been revealed that the female pupils are more developed in their speech than their male counterparts; hence, there is less evidence of pronunciation disturbance in the female respondents than their male counterpart. This is evident in the first pair of spectrogram analysis as both pupils are female. This finding corroborates the views of Lakoff (1973) and Labov (1975) on gender variation and language use.

Even though the pupils' renditions are characterised with phonological disturbance, This form of communication is intelligible among the pupils since they can perceive the message passed across by their co-interlocutors better and decipher the sense conveyed at the literal level as language use by this category of language users operates at this level. They have limited capability of deploying deep contextual indicators in their day-to-day exchanges. Relatively, the teacher have every-day contact with the pupils, intelligibility here too is attainable. However, someone who does not have daily contacts with language users in this age group might find it difficult to perceive (auditory) the renditions of the pupils very well as it may require paying more attention to the speech.

Discussion of Findings

From the analysis of the selected pupils' utterances from a clinical phonological perspective, it has been found that:

- i. Even though pronunciation disturbance characterise the psycholinguisticrepertoire of the pupils generally, there is variation based on gender. An important deduction here is that the cognitive development is a pre-determinant of the social variation of gender.;
- ii. apart from this, it has been found that, in spite of the differences in the cognitive abilities of the pupils, they manifest under-developed language which is self-correcting as time goes on;
- iii. also, out of the three variables of the simplification procedures adopted by the pupils, elision and substitution have the most frequency of occurrence than other characteristics based on limited sound repertoire of the pupils as well as the pupils' level of exposure to their first language;
- iv. phonological disturbance is the bedrock of speech deficiency among the studied samples and physiological development of the pupils has a remarkable contribution to this speech defect; and
- v. not only the pupils' physiological characteristics but also their cognitive development affect their interlanguage.

Conclusion

From the analysis of the pupils' renditions, it can be concluded that more specifically, just as language acquisition is universal based on the mentalists' position, sound disorder and pronunciation disturbance are the same among the studied pupils and physiological and psychological characteristics affect the interlanguage of the pupils. Generally, not only children but all individuals at different stages have similar linguistic characteristics except for those with abnormal conditions (speech deficiencies) which can be remedied through speech therapy.

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