

A SURVEY OF ARTICULATION DISORDERS AMONG PRIMARY SCHOOL PUPILS IN IBADAN AND OGBOMOSO, NIGERIA

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Abstract

The study investigated a survey articulation disorders among primary school pupils in Ibadan and Ogbomoso, Nigeria, focusing on the causes, gender differences, prevalence, and relationship with behavioural disorders. The descriptive research design involved 40 randomly selected teachers using a structured questionnaire. Findings indicated that 55% of respondents attributed articulation disorders to hereditary factors, while 57.5% considered some causes untraceable. A high number of respondents (72.5%) perceived a higher prevalence in girls, though 60% disagreed that females are more likely to have these disorders. Additionally, 77.5% of respondents considered articulation disorders common, with increasing cases reported. Mixed perceptions were observed regarding the association between articulation and behavioral disorders. The study highlights the need for genetic counselling, increased awareness, and training for educators, along with addressing cultural perceptions and providing psychosocial support to affected pupils. These insights underscore the importance of considering genetic, environmental, and cultural factors in addressing articulation disorders among primary school pupils.

Keywords: *Articulation disorders, primary school pupils, speech, language*

Introduction

Man is a social animal because of his ability and capability to interact with one another, especially through speech-language skills. Language is a subset of communication and is defined as the intended message or information that is

contained in the utterance of a speaker which can be shared by a given community making communication possible among a particular group of people. Speech is a subset of man's language, it is a special and unique gift of God to man. It is glaring that one of the major distinct characteristics that differentiate between man from other lower animals. Speech and language are two major components of communication both are closely interrelated and the problem is one can have a significant impact on an individual daily activities.

Speech is an aspect of language which is oral communication, receiving and sending of information through verbalization modes. It is a social behaviour of expressing one's ideas, thoughts, and feelings using oral size sequence. It is the most common symbol system used in communication by man. Speech leads to language and language is the code the tribe uses to communicate to themselves. Only members of the tribe can understand the genetic code. Language is used to express tradition and culture also. It is a learnt behaviour (Salami & Oseni 2004; Okuoyibo & Makinde, 2004) like any other organs in the body, the speech apparatus responsible for speech production could be defective and this will lead to speech defect or speech impairment and one of the speech disorder could be in form of an articulation disorder, voice, language disorders and disorder of time/frequency. For speech to be termed defective, it must call attention if the others, not about the age and gender of the speaker (Olawale, 2000).

Articulation is a system of a configuration of the vocal tracts that is the larynx and pharyngeal, oral and nasal cavities resulting from the positioning of the mobile organs of the vocal tract (tongue) relative to other parts of the vocal tract that may be rigid that is (hard palate). This configuration modified an airstream to produce the sound of speech. The main articulators are the tongue, the upper lip, lower lip, upper teeth, the upper gum ridge (alveolar ridge), the hard palate, the vellum (soft palate), the uvular (free-hanging end of the soft palate), the pharyngeal wall and the glottis, any accident or deformity to any of these organs can lead to malfunction of speech organ and this will not allow all this organ to team up properly to produce well-articulated speech sound. This condition is called articulation disorder.

Articulation disorder is an abnormality in the speech sound production process, as a result of inaccurate speaker act. This results in the omission, addition, substitution or distortion of certain speech sounds. The child recognised with articulation disorder fails to master the speech sound. Therefore, a child who says "blead" for "read", "wise" for "rice", "yewo" for "yellow", "yeg" for "leg" has an articulation disorder of omission of consonant sounds. Causes of articulation disorder are trace oral/motor defecting hearing impairment neurological impairment, genetic predisposition and insufficient exposure to language models during early development identifying the specific factors and get appropriate intervention is the duty of a speech-language therapist (ChatGpt, 2024).

Statement of Problem

One of the most common articulation disorder in childhood is the error in speech sound production. Articulation problems are obvious in children under the age of 10 and it has been estimated that articulation disorders represent 5% of the speech disorder in children. Children with articulation disorder contribute 5% of the speech-language pathology working in the schools. Importantly, it is evidence that speech plays vital role in total development of children. Its defect may result in poor academic performance, lack of confidence, low self esteem as well as social and communication disorder. Articulation disorder as a type of speech disorder plays

negative effects on communication and inter-personal relation among the pupils. Also resulted to poor communication skills especially among primary school pupils to explain their feelings, thought, idea and express themselves freely without been laughed at. Therefore a study on a survey of articulation disorder among primary school pupils as well as creating awareness on ways of educating teachers and parents on the social and educational risk of articulation disorder is necessitated.

Purpose of the Study

The general purpose of the study was to investigate a survey articulation disorders among primary schools in Ibadan and Ogbomoso. The specific purposes were to determine the:

- i. causes of articulation disorder among primary school pupils in Ibadan and Ogbomoso
- ii. gender difference in the prevalence of articulation disorders among primary school pupils in Ibadan and Ogbomoso
- iii. prevalence of articulation disorder among primary school pupils in Ibadan and Ogbomoso
- iv. relationship between articulation disorder and behavioural disorder among primary school pupils in Ibadan and Ogbomoso.

Research Questions

- i. What are the causes of articulation disorder among primary school pupils in Ibadan and Ogbomoso?
- ii. Is there a gender difference in the prevalence of articulation disorders among primary school pupils in Ibadan and Ogbomoso?
- iii. What is the prevalence of articulation disorder among the selected primary school pupils Ibadan and Ogbomoso?
- iv. What is the relationship between articulation disorder and behavioural disorder among primary school pupils in Ibadan and Ogbomoso?

Scope of the Study

This research work was carried out in some selected primary school in Ibadan and Ogbomoso.

Research Design

The descriptive research design of the survey type was adopted for this study.

Population of the Study

The population of the study consisted of teachers of pupils with articulation disorder in some selected primary schools in Ibadan and Ogbomoso.

Sample and sampling procedure

The sample of this study was some selected teachers of government and private primary school in Ibadan and Ogbomoso metropolis. This study specifically employed purposive sampling techniques to recruit the participants during second term examination by visiting the schools. Forty (40) teachers were involved in the study equal number of teachers from Ibadan and Ogbomoso, ranged from twenty to forty (20-40) years were considered in this study.

Research Instrument

The major instrument that was used for this study was a questionnaire titled "Articulation Disorder and Pupils Questionnaire (ADAPQ)". It was divided into two sections (A and B).

Section A: This contained information on the demography of the respondent while section B consisted of two sections containing items related to the objectives of the study.

Respondents are to choose one out of two selected options

- i. Agree (A)
- ii. Disagree (D)

Procedure of Data Collection

The research administered the questionnaire to the respondents one after the other as their various schools. The questionnaire was administered under a conducive atmosphere. The researchers ensure that the respondents filled the questionnaire properly.

Method of Data Analysis

The data collected for the study was analyzed using simple percentages and frequency counts.

Results and Discussion

Presentation of Demographic Information

Table 1: Gender, Class and Age range of respondents

Gender	Frequency	Percentage
Female	17	42.5
Male	23	57.5
Total	40	100
Class	Frequency	Percentage
Pry 1 – 3	19	47.5
Pry 4 – 6	21	52.5
Total	40	100
Age range	Frequency	Percentage
20 – 29	6	15
30 – 39	20	50
40 and above	14	35
Total	40	100

The total number of participants used for this study is forty (40) and distribution of this participants within these schools revealed 17 (42.5) were female while 23 (57.5) were male. 19 participant were from pry 1-3 while 21 (47.5) were from Pry 4-6 (52.5) and their age were ranged from 20 to 40 years of age.

Research Question 1: What are the causes of articulation disorders among primary school pupils in Ibadan and Ogbomoso?

Table 2: Causes of articulation disorders among primary school pupils

S/N	ITEM	A	(%)	D	(%)	Total
1.	Children with articulation disorders have the disorder as hereditary	22	55	18	45	40 (100%)
2.	There are children who develop articulation disorder after they become pupils in school	15	37.5	25	62.5	40 (100%)
3.	There are pupils whose reasons for their articulation disorders are untraceable	23	57.5	17	42.5	40 (100%)

Table 2 presents data on the causes of articulation disorders among primary school pupils in Ibadan and Ogbomoso, indicating that 55% of respondents believe the disorders are hereditary, 37.5% think they develop after school enrolment, and 57.5% consider some causes untraceable. The majority do not believe that the disorders develop after starting school, while a significant portion acknowledges hereditary and untraceable causes.

Research Question 2: Is there a gender difference in the prevalence of articulation disorders among primary school pupils in Ibadan and Ogbomoso?

Table 3: Gender difference in the prevalence of articulation disorders among primary school pupils

S/N	ITEM	A	(%)	D	(%)	Total
4.	The rate of girls with articulation disorders is more than that of boys	29	72.5	11	27.5	40 (100%)
5.	Female pupils are more likely to have articulation disorder	16	40	24	60	40 (100%)
6.	I believe there is a gender difference in the rate of prevalence of articulation disorder	30	75	10	25	40 (100%)

Table 3 provides data on the perceived gender differences in the prevalence of articulation disorders among primary school pupils in Ibadan and Ogbomoso. A significant majority (72.5%) believe that the rate of articulation disorders is higher in girls than in boys. However, the majority (60%) disagree that female pupils are more likely to have articulation disorders, while 40% agree. Additionally, three-quarters of the respondents (75%) believe there is a gender difference in the prevalence of articulation disorders, while 25% do not. In summary, the data suggest that a significant majority of respondents perceive a gender difference in the prevalence of articulation disorders, with many believing that girls are more affected than boys, although there is a divergence in opinion regarding whether female pupils are more likely to have these disorders

Research Question 3: What is the prevalence of articulation disorder among primary school pupils in Ibadan and Ogbomoso?

Table 4: Gender difference in the prevalence of articulation disorders among primary school pupils

S/N	ITEMS	A	(%)	D	(%)	Total
7.	Articulation disorder is common among primary school pupils in Ibadan and Ogbomoso	31	77.5	09	22.5	40 (100%)
8.	I know many pupils with articulation disorder in Ibadan and Ogbomoso	28	70	12	30	40 (100%)
9.	The number of pupils with articulation disorder in Ibadan and Ogbomoso has been on the increase	29	72.5	11	27.5	40 (100%)

Table 4 presents data on the perceived prevalence of articulation disorders among primary school pupils in Ibadan and Ogbomoso. The table shows that 77.5% of respondents agree that articulation disorders are common, 70% report knowing many pupils with such disorders, and 72.5% believe the number of affected pupils is increasing. This suggests that articulation disorders are perceived as prevalent and rising among primary school pupils in these areas.

Research Question 4: What is the relationship between articulation disorders and behavioural disorder among primary school pupils in Ibadan and Ogbomoso?

Table 5: Relationship between articulation disorders and behavioural disorder among primary school pupils in Ibadan and Ogbomoso?

S/N	ITEM	A	(%)	D	(%)	Total
10.	Pupils with articulation disorders are destructive	22	55	18	45	40 (100%)
11.	Pupils with articulation disorder do not obey school regulations	13	32.5	27	67.5	40 (100%)
12.	Pupils with articulation disorder exhibit short temper	14	35	26	65	40 (100%)

Table 5 provides data on the perceived relationship between articulation disorders and behavioral disorders among primary school pupils in Ibadan and Ogbomoso. The table shows that 55% of respondents believe pupils with articulation disorders are destructive, while 45% disagree. Additionally, 32.5% think these pupils do not obey school regulations, with 67.5% disagreeing. Furthermore, 35% of respondents agree that pupils with articulation disorders exhibit a short temper, whereas 65% do not. These results indicate mixed perceptions, with a notable portion of respondents associating articulation disorders with certain behavioural issues, although a majority do not link articulation disorders with disobedience or short temper.

Discussion of Findings

Research Question 1: What are the causes of articulation disorder among primary school pupils in Ibadan and Ogbomoso?

The above result shows that articulation disorder is caused by hereditary, and it is untraceable. These findings are similar to the research suggesting a genetic predisposition to speech and language disorders (Stark & Tallal, 1981). Meanwhile, the lower agreement on school-related development points to the need for further

investigation into environmental and educational factors. Similarly, Adewale et al (2018) in Nigeria emphasised the role of hereditary factors in speech disorders.

Research Question 2: Is there a gender difference in the prevalence of articulation disorders among primary school pupils in Ibadan and Ogbomoso?

The result shows that a significant majority believed girls are more affected by articulation disorders than boys, yet some respondents disagreed that female pupils are more likely to have these disorders. This seeming contradiction suggests complex perceptions about gender and speech disorders. Existing literature often reports a higher prevalence in boys for various developmental disorders, including articulation issues (Shriberg et al., 1999). However, cultural factors in Nigeria may influence these perceptions, as societal expectations and reporting biases could lead to differing views on gender-specific prevalence (Ogunyemi & Adeyemi, 2017).

Research Question 3: What is the prevalence of articulation disorder among the selected primary school pupils Ibadan and Ogbomoso?

Moreover, the result showed larger percentage of respondents considers articulation disorders common among primary school pupils in Ibadan and Ogbomoso. These findings are consistent with a general recognition of speech disorders as prevalent issues in primary education settings (Tomblin et al., 1997). In Nigeria, it is that there significant rates of speech and language disorders among school-aged children (Oyeleye, 2015), supporting the perception of rising cases, potentially due to increased awareness and diagnostic capabilities.

Research Question 4: What is the relationship between articulation disorder and behavioural disorder among primary school pupils in Ibadan and Ogbomoso?

The research indicated mixed perceptions regarding the relationship between articulation and behavioural disorders. While some respondents believe pupils with articulation disorders are destructive, fewer respondents associate these disorders with disobedience or short temper. This suggests that while there is some acknowledgement of behavioural issues, it is not uniformly accepted. Previous research indicates that children with speech disorders may experience social and emotional challenges, including increased frustration and behavioural problems (Baker & Cantwell, 1987). In Nigeria, studies by Okanlawon (2016) have highlighted the psychosocial impacts of speech disorders, including bullying and social withdrawal, which can contribute to perceived behavioural issues.

Conclusion

The findings of this study align with several previous studies, highlighting the hereditary nature of articulation disorders and an increasing prevalence due to rising awareness and reporting. The observed gender differences, which suggest a higher prevalence in girls, contrast with some international findings that report a higher prevalence in boys, indicating potential cultural and societal influences specific to Nigeria. Additionally, the mixed perceptions about the relationship between articulation and behavioural disorders suggest the need for more nuanced research to understand the complexities of how these issues intersect. Overall, these insights underscore the importance of considering genetic, environmental, and cultural factors in addressing articulation disorders among primary school pupils.

Recommendations

Based on the findings of this study the following recommendations are made:

1. Considering the significance of heredity as a cause of articulation, genetic counseling and support are recommended for families.
2. It is crucial to increase the awareness of articulation disorder by training educators to recognize and address potential environmental and educational factors that may contribute to this disorder.
3. It is important to address cultural and societal perceptions relating to the gender prevalence in articulation disorders.
4. There is a need to consider the mixed perceptions of behavioural issues associated with articulation disorders by implementing programmes targeted at managing frustration and social challenges and providing psychosocial support to reduce bullying and social withdrawal among affected pupils.

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