

ANALYSIS OF SPELLING ERRORS AMONG PUPILS WITH SPELLING DIFFICULTIES IN DEMONSTRATION PRIMARY STAFF SCHOOL, GUMEL, JIGAWA STATE, NIGERIA

AHMAD USAINI UMAR¹, AHMAD SHAFIQ USAINI² & MUJAHID USAINI UMAR³

¹Department of Psychology, Jigawa State College of Education, Gumel

²Arriyadah English Learning Center (English Zone), Al-Jafr, Al-Ahsa, The Ksa

³Postgraduate Student, Department of Psychology, Bayero University, Kano

auumar89@gmail.com, ahmadshafiqusaini@gmail.com

mujahidusainiu@gmail.com

Abstract

This study investigated the prevalence and types of spelling errors among pupils with spelling difficulties in Demonstration Primary Staff School, Gumel, Jigawa State, Nigeria. The constructive theory guided the research, which aimed to inform English teachers on how to improve their pupils' spelling proficiency. The study had two objectives and two research questions, employing a descriptive survey research design with a sample of 485 pupils (250 boys and 235 girls). However, only 86 pupils (35.6%) aged 7-12 years were identified with spelling difficulties, comprising 40 boys and 46 girls from primary 6. The Spelling Proficiency Test (SPT) was used to collect data, ensuring validity and reliability. Frequency, simple percentage and ranking order were used to analyze the data. The results showed a significantly higher prevalence of spelling errors among pupils with spelling difficulties than those without. The study identified and ranked the types of spelling errors by frequency. Recommendations include: teachers should be aware of pupils with spelling difficulties and provide comprehensive intervention; focus on errors with higher frequency; and researchers should investigate strategies to improve spelling proficiency among pupils with spelling difficulties.

Keywords: Analysis, Spelling Difficulties, Spelling Errors, Development Factors, Mother Tongue Interference

Introduction

Many researchers have carried out studies on spelling and the causes of its errors (Alhaisoni et al., 2015; Alenzi, 2018; Altamimi & Rashid, 2019b; Fitria, 2020). As a crucial component of writing, spelling poses a major challenge to most beginner learners of English, resulting in misspelt words and incoherent sentences (Hyland, 2003). English spelling in general presents problems because of the contrast between the sounds of letters or groups of letters and the various ways they can be written (Altamimi & Rashid, 2019a). This becomes one of the obvious reasons for prevalent spelling errors bedeviling L2 learners. However, other learners with spelling difficulties may have poor phonological awareness, memory and visual/auditory perception. Therefore, pupils with one or all of these conditions may encounter many errors which repeatedly manifest in their writing. Consequently, pupils face spelling challenges due to their inability to spell correctly or to remember the spelling patterns of words. This leads to meaningless writing and poor comprehension of a written text. As a complex aspect, spelling needs mastery not only among pupils with spelling difficulties but also among other pupils who may not have the above-mentioned conditions.

Spelling and its Difficulties

Spelling is highly crucial in learning the English Language as its lack leads to students' poor academic performance. It offers insight into the actual level of learners' linguistic and cognitive abilities (Stage & Wagner, 1992). Spelling entails the correct connection of the phonemes and graphemes (Alenzi,

2018:118). The art of correctly combining a word from letters relates to the appropriate choice and arrangement of letters to form words (Fitria, 2020). However, learning to spell is not a straightforward process; it involves numerous mental processes (Alenzi, *ibid*). While, spelling difficulty is defined as a learning disorder with an impairment in written expression and requires the specification of whether spelling accuracy, grammar and punctuation accuracy, clarity or the organization of written expressions are compromised (American Psychology Association, 2013). Children with spelling difficulties are inaccurate writers in both orthography systems, transparent and opaque (Angelelli, et al 2010). English language teachers need to identify these children and proffer comprehensive support to them.

Spelling is a complex cognitive activity in which several mental processes are involved (Dada, 2015). Spelling errors are deviation from the rules of forming words (arranging letters to form words) which could occur in the form of replacing one letter with the other, omission of letters or wrong arrangement of the letters of a word Oluwadare 2012 (cited in Dada, 2015). According to Botley and Dillah (2007), spelling errors are ubiquitous because, despite years of drilling and training in schools, spelling errors still appear in large numbers in the writing produced by learners. Summaira (2011) affirmed that committing errors is a reflection of the cognitive activity of a learner and tells us a great deal about the internalised process of language production. This implies that students commit spelling errors due to a lack of competence in the target language (Dada, 2015). Likewise, Cook (1997:474) argued that “correct spelling is a sign of education; a spelling mistake is a solecism that betrays carelessness or plebeian origins. Spelling is thus a crucial factor in the way people present themselves”.

According to James (1998), spelling errors fall within the context of Error Analysis (EA) and they occur when a learner makes an encoding error while writing and could be distinguished as ‘misspellings’ on one hand and ‘mechanical errors in writing’ on the other hand. Khansir (2010) cited in Dada (2015) posited that behaviourists believe that errors are a symptom of ineffective teaching or as evidence of failure and also view it as largely due to mother tongue interference that the teacher has failed to predict and allow for when errors do occur.

Types of Spelling Errors

Basically, spelling errors have been classified into two, namely typographic and cognitive errors (Amir, 2016). The former includes errors, such as letter insertions, letter omissions, letter substitutions and transpositions, whereas the latter stems from phonetic similarities, such as writing ‘acedemy’ instead of academy (Yanyan, 2015:1629). The following are the specific errors stated by Dada (2015), Subhi and Yasin (2015) and Amir (2016):

Letter Insertion: This is a spelling error where one additional letter is included in the spelling of words. One of the most common insertions is known as consonant doublings, which include errors, such as /gg/ in ‘agreement’, /ff/ in ‘proffessional’ or /ll/ as in ‘already’ or ‘carefull’ and are considered “one of the most complex areas of the English spelling system”. Other common insertions include the insertion of /e/ after /i/ (as in /ie/) for sounds corresponding to /aɪ/ in misspellings, such as ‘priemary’ or ‘dierect’. Insertions typical for pupils with spelling difficulties include writing /boxxes/ instead of /boxes/ due to a lack of phonemic awareness of letters.

Letter Omission: This is a spelling error where one letter in a word is not spelt out. The most common letter omitted by pupils with spelling difficulties is /n/ when it is used within consonant clusters, such as with the misspelling ‘desigs’. Other common errors include the omission of one consonant in a pair consonant, such as the omission of /c/ from the consonant pair /cq/ in misspellings like ‘aquisition’ or the /h/ from /ch/ or /gh/ in misspellings, such as ‘scholarship’ or ‘thought’. Another common omission is the silent word-final /e/ in misspellings, such as ‘morphem’ and ‘softwar’ as well as when it precedes /ly/ in ‘unfortunatly’ or ‘completly’.

Letter Substitution: This is one of the most common errors committed by pupils with spelling

difficulties. It is also divided into either the substitution of single letters or grapheme substitutions of multiple related changes, for example, writing 'thort' instead of thought. Therefore, vowel substitutions occur with the letters /a/, /e/, and /i/, for example, /a/ may be replaced by /e/ and /i/ resulting in 'persuaded' and 'imaginative', /e/ can be replaced by /a/ and /i/ resulting in 'machinary' and 'convinient' and /i/ can be replaced by /a/ and /e/ resulting in 'linguistics' and 'definatly'.

Transposition: This is a spelling error where two consecutive letters change places. It mostly occurs with the letter pairs /e/ and /i/ that produce errors such as 'concieved', 'acheived' or 'foriegner'. The transposition of letter pairs /t/ and /e/ is also common and can lead to well-known confusions of homophones, such as spelling discrete as 'discreet' or near-homophones, such as spelling quite as 'quiet'. Other types of spelling errors include:

Reflection of Mispronunciation: Reflection of mispronunciation occurs in a situation whereby a pupil perceives a sound which is not pronounced. This happens as a result of not paying attention attentively to a teacher. In other words, a reflection of mispronunciation happens on the words which share the same sound but differ in spelling form (homonyms). In this case, a pupil with spelling difficulties cannot write a word contextually due to associated problems with difficulty in realizing words in context.

Neographism: This is also another type of spelling error. This situation occurs when a pupil does not know the spelling pattern of a particular word. A pupil with this form of error writes any word which comes to his/her mind without necessarily knowing whether it is correct or wrong.

Theoretical Framework

This study is grounded in the Constructivist Theory of spelling development, which has been significantly influential in South America and certain regions of Europe. This theory, initially proposed by Ferreiro and Teberosky (1982) and later supported by Treiman (2017), posited that children actively construct their own understanding of writing from an early age. Through a process of hypothesis testing, children refine their understanding by comparing their hypotheses to the writing they encounter, discarding, modifying, or developing new hypotheses as needed. A key hypothesis that young children construct, according to this theory, is that letters in printed words represent syllables in spoken words. This constructivist approach emphasizes the active role of children in constructing their own knowledge of spelling, rather than merely receiving instruction.

Statement of the Problem

Despite the importance of spelling skills in academic success, many pupils in primary schools in Nigeria, particularly in Demonstration Primary Staff School, Gumel, Jigawa State, continue to struggle with spelling difficulties. The prevalence of spelling errors among these pupils poses a significant challenge to their academic performance, communication skills, and overall educational development. However, there is a lack of empirical research on the nature and extent of spelling errors among pupils with spelling difficulties in this context. Therefore, this study aims to investigate the types and frequency of spelling errors among pupils with spelling difficulties in Demonstration Primary Staff School, Gumel, Jigawa State, Nigeria, in order to inform effective interventions and strategies to improve their spelling proficiency.

Objectives of the Study

The objectives were to:

1. find out the prevalence of spelling difficulties among pupils of Demonstration Staff School Gumel Jigawa State.
2. ascertain the type of spelling errors exhibited by the primary six (6) pupils of Demonstration Staff School, Gumel, Jigawa State.

Research Questions

The following research questions were investigated:

1. What is the prevalence of spelling difficulties among pupils of Demonstration Staff School Gumel Jigawa State?
2. What are the types of spelling errors exhibited by the primary six (6) pupils of Demonstration Staff School, Gumel, Jigawa State?

Methodology

This study utilised a survey research design to investigate and analyze the prevalence and types of spelling errors among pupils with spelling difficulties in Demonstration Primary Staff School, Gumel, Jigawa State, Nigeria. The descriptive survey design enabled the collection of data from a large sample of pupils, providing a comprehensive understanding of the scope and nature of spelling errors in this specific context. The target population of this study comprised all Primary 6 pupils of Demonstration Primary Staff School, Gumel, Jigawa State, totaling 485 pupils. This population consisted of 250 male pupils and 235 female pupils, representing a balanced mix of both genders. The sample size of this study comprised 86 Primary 6 pupils from Demonstration Primary Staff School, who were identified as exhibiting spelling difficulties. This sample consisted of 40 male pupils and 46 female pupils, representing 35.6% of the total population of Primary 6 pupils in the school. Purposive sampling was employed in this study, as it allowed for the deliberate selection of participants who exhibited specific characteristics. Since the focus was on pupils with spelling difficulties, only those who manifested these characteristics were chosen as subjects for the study. This non-random sampling approach enabled the researcher to target the specific population of interest and gather in-depth insights into their experiences with spelling difficulties.

The study employed the Spelling Proficiency Test (SPT), a researcher-constructed instrument, to assess the spelling abilities of pupils exhibiting spelling difficulties. The SPT consisted of 10 questions evaluating various aspects of spelling proficiency, including: phonological awareness, morphemic awareness, position of sounds /k/ and /f/, position of the letter 'a' and plural formation. Pupils who scored less than 30% (less than 30 out of 100) on the SPT were identified as having spelling difficulties and were therefore eligible for selection in the study. This cut-off score served as the criterion for determining spelling difficulty.

The Spelling Proficiency Test (SPT) underwent rigorous validation and reliability testing to ensure its accuracy and consistency. Content validity was established through expert review, where specialists in Special Education and English Language evaluated the test items for relevance and appropriateness. Specifically, they rated each item as either 'relevant' or 'quite relevant' to ensure the test aligns with the intended constructs. Additionally, a pilot study was conducted to assess the reliability of the SPT. This preliminary testing enabled the researchers to refine the test and ensure its internal consistency, thereby establishing the reliability of the instrument. By establishing both content validity and reliability, the SPT was deemed a trustworthy measure of spelling proficiency for pupils with spelling difficulties.

This study utilized descriptive statistics, specifically frequency and simple percentage, to answer the research questions. The frequency counts and percentage distributions of responses were employed to provide a comprehensive understanding of the data, enabling the researcher to: identify patterns and trends in the data, determine the prevalence of specific responses and compare the responses across different categories.

Results

Research Question One: What is the prevalence of spelling difficulties among pupils of Demonstration Staff School Gumel, Jigawa State?

Table 1: Frequency and Percentage of prevalence of spelling difficulties among pupils (male & female) of Demonstration Staff School Gumel, Jigawa State.

Sex	No. of Pupils	No. of Pupils with Spelling Difficulties	Percentage
Males	250	40	16.0%
Females	235	46	19.6%
Total	485	86	35.6%

Table 1 above shows the prevalent rate of primary six (6) pupils exhibiting spelling difficulties in Demonstration Staff School. The Table depicted 485 pupils, which comprised 250 males and 235 females. On the whole, 86 were identified as having spelling difficulties, representing 35.6%. Among the identified pupils, males (40 or 16.0%) and females (46 or 19.6%), respectively.

Research Question Two:

What are the types of spelling errors exhibited by the primary six (6) pupils of Demonstration Staff School, Gumel, Jigawa State?

Table 2: Frequency, Percentage and Rank-order of types of spelling errors exhibited by the primary six (6) pupils of Demonstration Staff School, Gumel, Jigawa State.

Type of Spelling Errors	Frequency	Percentage	Ranking
Insertion of Letters	160	26.2%	2nd
Omission of Letters	225	36.8%	1st
Substitution of Letters	35	5.7%	5th
Transposition	10	1.6%	6th
Reflection of Mispronunciation	80	13.1%	4th
Neographism	100	16.3%	3rd
Total	610	100%	

Table 2 above reveals six types of errors identified from the primary six (6) pupils. The type of spelling errors depicted the highest frequency of 225 out of 610 was the omission of letters (36.8%). The second one was the insertion of letters (160 or 26.9%). The third was neographism (100 or 16.3%) and reflection of mispronunciation (80 or 13.1%). While substitution of letters was found to have a frequency of 35 (5.7%), the last was transposition (10 or 1.6%).

Discussion of Findings

The first finding revealed that 86 pupils (35.6% of the total sample) exhibited spelling difficulties, with a notable gender disparity. Specifically, 40 males (16.0% of the total sample) and 46 females (19.6% of the total sample) struggled with spelling. This finding aligns with the study conducted by Bartonova (2014), who found a similar gender distribution among students with learning disabilities in Bron City, with 80% (n=24) being girls and 20% (n=6) being boys. Further analysis of the sample revealed a prevalence of specific sub-types of spelling difficulties: dyslexia: 40% (n=12), dysgraphia: 7% (n=2), dysorthographia: 7% (n=2), dyscalculia: 7% (n=2), co-occurring dyslexia and dysgraphia: 13% (n=4) and co-occurring dysgraphia and dysorthographia: 26% (n=8). These findings provide insight into the specific challenges faced by pupils with spelling difficulties and highlight the importance of tailored support and interventions.

The second finding revealed a diverse range of spelling errors among the participants, encompassing various types, forms, and patterns. Notably, the Primary 6 pupils exhibited the following error frequencies: omission of letters: 225 instances (36.8%) and insertion of letters: 160 instances (26.2%).

These results align with the findings of Subhi and Yasin (2015), who investigated English spelling errors among Iraqi students in Malaysia. Their study showed that: omission errors accounted for 53% (182 instances) of the total errors and insertion errors accounted for 24% (84 instances) of the total errors. The congruence between these findings suggests that omission and insertion errors are consistent challenges in spelling, transcending contextual boundaries. This highlights the need for targeted interventions to address these specific error types and improve spelling proficiency.

Conclusion

Conclusively, the study found some pupils with spelling difficulties in Demonstration Primary Staff School, Gumel, Jigawa State, Nigeria. Thus, the types of errors were analyzed using frequency and ranking order which concluded that omission of letters was found to be the highest occurring errors among the primary six pupils.

Recommendations

This study provides the following recommendations:

Teachers should be aware of the existence of pupils exhibiting spelling errors so that appropriate intervention can be provided.

Since the types of spelling errors exhibited by the pupils vary, teachers should concentrate on remediating the errors with the highest frequency.

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