

# Examination of Boys' and Girls' Spelling Errors of Phonemic Interchange in Kiswahili Functional Writing among Ekegusii Secondary School Learners

by

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## Abstract

This study examined phonemic interchange spelling errors commitment in Kiswahili functional writing by secondary school learners who speak Ekegusii as their mother-tongue. It was carried in Nyamira County, Kenya. The study was grounded in the three theories: Error Analysis, Interlanguage and Gender Social Role. The sample compromised 326 participants of equal gender distribution drawn from 8 secondary schools. Purposive and simple random sampling techniques were used to select the secondary schools and simple random sampling was employed to select the participants. They wrote a Kiswahili functional essay whereby spelling errors were identified and typified for comparison. The study used the qualitative paradigm whereby descriptive analysis techniques (means, percentages and frequencies) were used to analyze data. The study revealed that there was interchanging of correct phonemes with wrong ones as evidenced by: interchanging of wrong consonants with consonants, consonants with diagraphs, diagraphs with consonants, diagraphs with diagraphs and vowels with consonants. The study recommended that: teaching of Kiswahili spelling should zero in on phonemic awareness in the context of L1 and L2, teaching spelling should of Kiswahili should drawn examples from problematic L1 and L2 phonemes teaching of Kiswahili spelling should be taught vis-à-vis the learners' L1 and L2 sameness as well as differences, and spelling and reading be taught concurrently since they complement each other.

**Key words:** phoneme, Interlanguage, spelling errors, and phonemic interchange spelling errors.

## Introduction

Gender studies should zero in on the writing skill and its indispensable sub-skills where boys have remained underachievers. This is critical to bridging gender disparities in performance and achievement. Failure to research into this skill and its basic sub-skills continues to feminize achievement in measurable educational outcomes and militates against the realization of EFA goal FIVE – eliminating gender achievement disparities in education. Basow (2008, p.287) has posed a pertinent question to those who are interested in campaigning for the improvement of the performance of female learners in education and all stakeholders in education saying a ‘legitimate question, however; why are boys not achieving educationally [in terms of grades high, graduation rates] the same degree of girls?’ This scholar’s stance underscores the urgent need to focus on subject areas (sub-skills) where the male learners’ performance and achievements are unsatisfactory.

It follows that to eliminate gender disparities in measurable learning outcomes, one of the inevitable concerns is the boys’ unsatisfactory achievement across education system in all subjects. As Jha and Kelleher (2006, p.x111) rightly aver, ‘we want therefore to understand and address boys’ underachievement in the contexts where it is an issue whilst continuing to focus on girls’ access to education. It is not either one or other.’ This requires comparing boys’ and girls’ performance with a view to establishing performance gaps in order to strategize on how to assist the underachieving gender to be at par with the other. As Adeyemi (2008, p.2) rightly contends, ‘the right to perform well in all subjects in schools should be seen as the right of all students, irrespective of gender’. It is therefore gender bias and discrimination to continue ignoring conducting studies aimed delving into subjects in which girls are underachievers as boys continue to trail them in language skills such as writing and reading.

On writing about the significance of learning outcomes such as literacy skills, Nkinyangi (2005, p.2) notes that, ‘those who enroll in school and go through full cycle should have tangible skills to take home so that they justify the time, energy and resources they put in the learning process’. Among these skill is the writing skill and its sub-skills. Studies that have been done have demonstrated that females (girls) are better writers. For instance, Adeyemi’s (2008) study on composition writing indicates that girls significantly outscored their male counterparts. The findings of his research dictates that the causes of boys’ underachievement be unearthed in order to institute measures with a view to assisting them to be at par with their female counterparts as regards writing ability. Failure to carry out research to establish the causes of boys’ underachievement maintains the status quo or even worsens the boys’ performance and achievement in the writing skill and its essential sub-skills.

One of the indispensable strands of the writing process is spelling. This is why Gathumbi and Masembe (2008) refer to it as a basic skill to the writing of the skill; because of its semantic and communicative roles. Its significance in the writing process cannot be gainsaid. On underscoring its importance to the entire writing process, Schonell (1985, P. 8) contends that, “it is only possible to succeed at a task if we possess the necessary skill and ability to spell is obvious fundamental part of writing”. This implies that a learner who is lacking this sub skill will flounder in his /her writing achievement. Murphy and Snell (1991, p.11) have underlined the significance of correct spelling averring, “Poor spelling is one of the characteristics of poor writing. It defeats the purpose of words, which is to communicate meaning. It annoys readers.” The former and latter quotes indicate that a learner who is a poor speller jeopardizes his /her achievement in Kiswahili compositions. Abell (1994) cited in Boras (2003, p.9) has also pointed to what happens to a poor speller saying they, “often feel embarrassed about their lacking of skill and are unhappy about allowing others to see what they have written.” Thus, the gender that is faced with the spelling inability performs poorly such as in Kiswahili composition paper 101, in Kenya Certificate of Secondary Education where its marking is given precedence.

Studies that have been done globally revealed that there are gender differences in spelling. It is on this premise that Boras (2003, p.13) says that, “looking specifically at gender differences in spelling development between adult learners and children, there is a difference.” It is important to emphasize that female learners outscore their male counterparts in the spelling sub skill. A study carried out by the State Department of Education in 2000 (State Moves, 2000) revealed that boys have difficulties with spelling as well as reluctance to write as compared with their female counterparts. If girls are superior to boys in this critical sub skill of the writing process, the inevitable question to the boy researchers is, what causes the boys to trail the girls? This question is geared towards unearthing the major types of the spelling errors and how they impinge upon the achievement of both boys and girls. As spelling remains one of the mechanical difficulties to effective communication and subsequently achievement, it is necessary to establish what linguists consider as the major sources of spelling errors and in particular phonemic interchange spelling errors that make boys to goof more than their female counterparts. This is important to researchers and teachers of Kiswahili who are interested in intervening to ensure boys do not continue to trail girls in Kiswahili compositions as a result of their spelling inability.

Various scholars have pointed to L1 interference as the source of Kiswahili spelling errors (Msanjila, 2005; Norrish, 1987 & Richards, 1971). These spelling errors that result from L1 are caused by lack of phonological awareness and in particular phonemic awareness and an in-depth understanding of both L1 and L2 phonological and orthographic systems. As Adams (1990), Bradley and Bryant (1983), Stanovich and Siegel (1994) and Share (1995) say, “Phonology is critical to the development of reading and writing”. This implies that a limited phonological awareness and in particular phonemic awareness of L2 contributes to committing phonemic interchange spelling errors.

Taha's (2006) study of Arabic indicated that girls are better processors of phonology. His study established clear gender differences on phonological spelling errors. Since phonological spelling errors emanate from lack of phonological (phonemic) knowledge between L1 and L2 phonology systems, there is need to compare the phonemic interchange spelling errors made by boys and girls. As Little (1973, p. 89) correctly states, 'a systematic comparison of the phonological system of the native [Ekegusii] with that of the language to be learned we discover the learning problem'. Therefore, identifying, classifying and delineating phonemic interchange spelling errors resulting from Ekegusii, leads to an in-depth knowledge of the types of phonemic interchange spelling errors committed by the two genders. Consequently, this forms the basis for strategizing on how to assist the boys to acquire spelling ability and enhance the spelling ability of the two sexes.

Substituting correct phonemes with wrong ones results in misspelling of Kiswahili words and this impacts negatively on the learner's ability in this basic language skill. The non-existence of some Kiswahili sounds such as (/d,f,l,p,z,j,ð,θ/) in Ekegusii results in misspelling of Kiswahili words as a result of phonemic interchange (substitution). There is scant literature on the type of wrong phonemic interchange that results in spelling errors of phonemic interchange in Kiswahili and whether or not both boys and girls commit the same spelling errors of phonemic interchange. Delving into the phonemic interchange spelling errors among Ekegusii secondary school learners unearthed how boys and girls made spelling errors in Kiswahili compositions.

Unearthing the type of spelling errors of phonemic interchange committed by both boys and girls is critical to instituting appropriate interventions aimed at "equalizing" the boys' performance and achievement with that of girls. Knowledge of types of spelling errors of phonemic interchange would form the basis for eliminating the gender gap in spelling ability in Kiswahili functional writing and Kiswahili language in addition to improving the spelling ability of the two genders.

## **Literature Review**

One of the major concerns of the writing skill researchers should be - which sub skills of the writing process are mechanical obstacles to being a good writer? Writing is the skill that demonstrates one's academic ability since it plays a key role in taking examinations. This requires all learners to be well versed in the writing skill and its critical mechanical components such as the spelling sub skill. The spelling sub-skill plays a pivotal role in communication particularly when the writer adheres to its conventions. On the contrary, misspelling of Kiswahili words impedes communication and renders the written work difficult to understand. What follows is the question as to whether or not the writer is learned. Msanjila (2005, p.22) has stated that "the problem of spelling is a persistent problem which applies even to professional writers, journalists, and academics."

Smedley (1983, p.7) has indicated what a poor speller is considered saying, "...a person who is prone to error may be regarded as uneducated or ignorant." In life, none wants to be seen as uneducated or ignorant. Anyone who has gone to school and completed the full cycle of secondary education wants to be deemed as learned, but not an antithesis of the same.

Studies that have been conducted globally have revealed that girls significantly outscore their male counterparts in the spelling dimension (Asher & Simpson, 1994; Corsini, 1994; Marshall, 1978 & Mwamwenda, 1978). Waitutu's (1995) study on Kiswahili functional writing revealed that spelling is the second worst performed strand of the writing skill. Moochi's (1999) study on Kiswahili creative writing also revealed that both boys and girls performed poorly in this facet. The study also ranked spelling as the second worst performed in Kiswahili creative writing. The two studies do indicate that this one of the most difficulty sub skill of the writing process to gain competence in. Moochi's study on gender differences in Kiswahili creative writing focusing on the five dimensions rated in the process of examining Kiswahili compositions in the Kenya Certificate of Secondary Education (K.C.S.E.) revealed that girls significantly outperformed their male counterparts in the spelling element.

Taha's (2006) study revealed gender differences in phonological superiority. His study focused on phonological and lexical processing of Arabic. The study revealed that girls significantly outscored their male counterparts in phonological processing. The study demonstrated that boys committed more phonological spelling errors in Arabic than their female counterparts. This implies that girls have more phonological awareness in phonics and phonemes vis-à-vis their male counterparts. Muhando (2015, p.9) has emphasized the importance of phonological awareness when he avers that, "research has also revealed that phonological knowledge is a crucial underlying component in reading and spelling." This implies that a learner's lack of phonological awareness and in particular phonic and phonemic awareness results in spelling inability. This study zeroed in on phonemic interchange spelling errors committed by Ekegusii learners who learn Kiswahili as their target language. Failure to be well versed in phonemic awareness of Ekegusii as their L1 and Kiswahili as their L2 provides a detailed explication for committing phonemic interchange spelling errors that emanate from their phonological limitations of the phonological systems of the two languages. As correctly stated by Muhando (2015, p.8), "spelling errors of performance is as a result of their dependence on L1 phonological knowledge." The study sought to examine the boys' and girls' phonemic interchange spelling errors, categorize them, and compare each of the spelling errors of phonemic interchange vis-à-vis the two genders.

Prior to conducting this study, no study had been undertaken with a view to unearthing the impact and gravity of the phonemic interchange spelling errors committed by Ekegusii secondary school boys and girls in Kiswahili functional writing. As Corder (1981, p.35) rightly states, "it is the difference of the mother tongue and the second language [Kiswahili] which the learner has to learn should be the matter of concern."

It is the phonemic differences between Ekegusii and Kiswahili that a learner should be aware of to spell Kiswahili words correctly. A learner who lacks phonemic awareness between the two languages is prone to making spelling errors as a result of phonemic interchange. Callary (1981, p. 296) explains that “phonemes are contrastive sound units: they make a difference in words.” Substituting one phoneme for another will usually result in a word of another meaning. “For instance, a secondary school Kiswahili learner who substitutes [č] for [j] in the word *kuja* (come) will change the meaning to nails as a result of substituting [č] for [j]. The present study examined the type of phonemic interchange spelling errors committed by the two genders and whether or not both committed the same phonemic interchange spelling errors.

The theoretical framework for this study followed the triangulation approach that permitted use of three theories in undertaking the study. The three theories were: Error Analysis (Corder 1967), Interlanguage (Selinker 1972) and the Social Role (Eagly, 1987). Each of these theories was critical and relevant to this study as explicated below. The Error Analysis Theory (EAT) was critical to undertaking this study since the study aimed at identifying the phonemic interchange spelling errors, describing them, and categorizing them. This theory is comparative. It delineates errors on the basis of comparing of the interlanguage (based on Ekegusii) with the target language (Kiswahili). It builds on the Interlanguage Theory and remains wholly descriptive. EAT also acknowledges L1 (mother tongue) transfer as one of the sources of errors. A study of a learner’s errors forms a significant part of the systematic study of the interlanguage of the learners. It follows that researching into the phonemic interchange spelling errors committed by Ekegusii secondary school boys and girls is important for understanding of the process of SLA, in this case Kiswahili. Errors are important as a source of information about the linguistic development of second language acquisition (Kiswahili) and can lead to accounting for the learner’s interlanguage in terms of phonemic interchange spelling errors traceable to L1. Richard (1992), refers to this type of errors as interlingual errors. For instance, learners whose first language is Ekegusii may transfer some sounds (phonemes) from Ekegusii to Kiswahili and this may result in committing spelling errors of phonemic interchange. L1 interference may make Ekegusii learners to wrongly interchange phonemes /j/ with /č/, /z/ with /s/, /l/ with /r/, inter alia. In a nutshell, the EAT is relevant to this study since it helped to point out how Ekegusii secondary school learners committed spelling errors of phonemic interchange as a result of interchanging correct sounds (both consonants and ligatures) with wrong ones. The L1 interference evidenced by phonemic interchange spelling errors points to lack of phonological awareness and in particular phonics and phonemic awareness between Ekegusii as L1 and Kiswahili as L2, phonological systems.

Larry Selinker’s (1972) Interlanguage Theory (ILT) was pertinent to this study. According to this theory, second language learners employ a separate linguistic system in learning the target language. Barry (1987) states that this linguistic system is intermediate between that of the native language and the one being taught.

Selinker identified five central cognitive processes used in internalizing the target language. They are: language transfer, transfer of training, strategies of second language learning, strategies of second language communication and overgeneralization of the target language linguistic material.

Each of the above central cognitive processes can be used to account for the learner's spelling errors of phonemic interchange. For instance, language transfer may cause negative transfer such as transferring of Ekegusii phonemes to Kiswahili standard phonemes. For example, Ekegusii learner may write *kuchimudu* instead of *kujimudu* (able to sustain oneself financially/economically). The learner has wrongly interchanged /j/ with /č/. This phonemic interchange has culminated in misspelling of the Kiswahili word *kujimudu*. This has been caused by lack of phonemic awareness. This spelling error of phonemic interchange can be traced to L1 and the cause is negative transfer of L1 phonemes.

Transfer of training as another principal cognitive process involved in learning the target language (Kiswahili Spelling) may account for the phonemic interchange spelling errors. This process centres on instructional methods and teaching and learning materials used by the instructor. Stevens (1978) has identified two types of teaching: inferior and superior language teaching. In superior language teaching, learners achieve high levels of command of language whereas in inferior language teaching learners achieve low levels of command of the target language. Therefore, a learner may make spelling errors of phonemic interchange because of inferior teaching such as in derivation. This may make a learner wrongly interchange /z/ with /s/ whereby the learner writes *katasa* instead of *kataza* (prevent/ stop somebody from doing something). Therefore, transfer of training can account for spelling errors of phonemic interchange among boys and girls.

Learning strategies may also account for the spelling errors of phonemic interchange since learners' employ L1 experience to learn the target language. These learning strategies emphasize that learners approach the material to be learned from their native language perspective. As a result, in adapting an English word technology, the learner may misspell it as *teknolochia* instead of *teknolojia*, presently referred to as *teknohama*. The learner has wrongly interchanged sound /j/ with /č/. This implies that the learner has employed his/her L1 learning strategy to learn how to adapt English words and this has made him/her to misspell the word s/he wants to adapt. Therefore, learners who adapt English terms using their L1 phonemic knowledge substitute correct phonemes with the incorrect ones.

Overgeneralization as another process of internalizing the target language (Kiswahili spelling) is another source of spelling errors of phonemic interchange. According to Norrish (1987), this may be occasioned by the manner or the order in which language items are presented to the learners by the teacher. This culminates in incomplete application of rules such as in derivation and influences the spelling errors of phonemic interchange such as wrongly replacing sibilant /s/ with /z/, /r/ with /l/, /t/ with /d/ among others.

The strategies of communication as the last principal cognitive process of acquiring and internalizing Kiswahili spelling conventions may cause spelling errors of phonemic interchange. Corder (1982), has explicated the effects of employing the two communication strategies to realize communication. He refers to the two strategies of communication as *message adjustment* and *resource expansion*. He explains message adjustment as a strategy used to refuse further interaction or trying to sidestep certain topics or saying less. This implies that a learner who has difficulty in spelling a particular word may discard it or the whole point. Or, the learner may use a synonym hence avoid committing spelling errors of phonemic interchange. This strategy may be used to account for phonemic interchange spelling disparities between male and female learners. In other words, employing the *semantic avoidance* approach such as by the girls may result in their committing fewer spelling errors of phonemic interchange as compared with their male counterparts.

According to Corder, the *resource expansion strategy* is used with a view to increasing by one means or other linguistic resources by skillful manipulation of what is learned. As a result, the writer may paraphrase, circumlocution, guess, coin words, borrow from other language(s) or switch to another language. This is a *risk-taking strategy* that may culminate in spelling errors of phonemic interchange as a result of guessing the spelling of a word, joining words, or wrong adaptation (swahilization) of English words. For instance, a learner who does not know the Kiswahili word *teknohama* may borrow the word technology and misspell it as *teknolochia* instead of *teknolojia*. The learner has wrongly interchanged [j] with [č]. It follows that this spelling error of phonemic interchange has been brought about as a result of borrowing the term technology from English and wrongly adapting it. This indicates that the learner has not mastered adaption rules (rules for *Swahilizing* English words).

It is important to underscore that *resource expansion* as one of the communication strategies make second language learners to make more spelling errors of phonemic interchange as a result of borrowing words from English and adapting them, ‘mixing Kiswahili, English and mother tongue (Ekegusii) among other resource expansion approaches. In sum, it is important to note that ILT explains why both girls and boys commit spelling errors of phonemic interchange but is limited in accounting for the gender gap of spelling errors of phonemic interchange between boys and girls. This necessitates the use of the Social Role Theory by Eagly 1987 to provide an explication for the possible disparity of spelling errors of phonemic interchange between Ekegusii boys and girls learning Kiswahili as their TL.

The Social Role Theory (SRT) put forward by Eagly (1987) explains that men (boys) and women (girls) behave differently in social situations and take different roles due to the expectations the society puts upon them. According to this theory, the gender differences such as in measureable learning outcomes are as a result of social and cultural expectations for men (boys) and women (girls). The social and cultural expectations are also referred to as gender stereotypes.



The SRT focuses on gender stereotyping and how this contributes to the notion that there are male-specific and female specific careers. An example of gender stereotyping is that teaching and nursing are considered as feminine whereas construction and engineering are considered as male domains. It is because of gender stereotypes that languages are considered as domains of females and this may influence the females to have a predilection for languages. Through socialization and the formation of gender roles, the behaviours of men and women perpetuate the social and cultural expectations and they influence performance of boys and girls in languages and in particular in reading and spelling.

Socialization and formation of gender stereotypes make both the boys and girls to be motivated differently. Boys and girls are motivated differently because of the societal gender stereotypes that influence boys' and girls' career choices. Research has demonstrated that there are two basic types of motivation in language learning: integrative and instrumental (Norrish, 1987). Integrative motivation gives rise to more satisfactory performance in the target language - it relates to the learner's willingness to identify with the culture of the target language, perceived personality of the speaker (teacher) as well as his/her habits. Instrumental motivation leads to less satisfactory results. The learner uses language for a specific purpose, such as for a study or business reasons. Norrish has emphasized that more phonological errors are likely to be committed by learners' whose motivation is instrumental. This implies that socialization makes girls to have integrative motivation whereby they perform better than boys in spelling. Possibly, most girls want to identify with the Kiswahili culture, perceived personality of the instructor as well as her/his habits.

It is possible that boys have the instrumental motivation that makes them to be outscored in Kiswahili spelling whereas the girls have both integrative and instrumental motivation as they are learning Kiswahili spelling. This implies that girls have positive attitude towards learning Kiswahili spelling conventions whereas the boys are negative. Drives and needs affect language hence this motivate both boys and girls differently. Moreover, both boys and girls may have varying integrative and instrumental motivation levels in language teaching – learning settings and this may be the rationale behind boys trailing girls in Kiswahili spelling and even in Kiswahili phonemic interchange spelling errors.

In conclusion, the grounds for using EAT, ILT and SRT were as follows. First, the use of EAT facilitated identification, description and categorization of Kiswahili spelling errors of phonemic interchange and the learner's spelling competence level (development) vis-à-vis L1 interference. Second, ILT was pertinent to this study since it pointed to the five cognitive processes the learner uses to acquire L2 and how the five principal cognitive processes cause L1 interference (interlingual errors) and in particular phonemic interchange spelling errors. Finally, SRT accounts for the gender disparities such as in spelling and in particular phonemic interchange spelling errors as predetermined and perpetuated by gender stereotypes and language competence (ability).

## **Research Design**

This study was carried out using the qualitative paradigm. According to Creswell, (1994: p. 8) “the qualitative approach incorporates much more of literary form of writing than the quantitative approach. The researcher was required to write a lot of literature based on examining the spelling errors of phonemic interchange, categorizing them and making a comparative analysis vis-à-vis gender. According to Smith (1987), cited in Creswell (1994. P.8) ‘there are four strands of the qualitative approach: the interpretive, artistic, systematic and theory driven approaches. The researcher was expected to systematically interpret the spelling errors of phonemic interchange as informed and guided by the theories used in carrying out this study. Therefore, the qualitative approach was selected because of the demands of the study.

## **Study Area**

The study was conducted in Nyamira County, Kenya located at GPS of 0.5210 ° s, 34.9140 ° E. Most of the learners (if not all) in this study area used Ekegusii as their mother tongue hence it was logical to use them to generate data for the study as Ekegusii is a Bantu language as is Kiswahili. The study aimed at unearthing how linguistic sameness and difference impacted on phonemic awareness of the learners.

## **Sampling Procedure and Sample Size**

The study comprised 326 form four participants drawn from 8 secondary schools. The county (District) had 80 secondary schools – single sex and co-educational, boarding and day schools with an enrolment of about 16,000 learners. Form four provided the study population. These were boys and girls who were divided into two strata based on sex. It was believed that as a candidate class they had exhaustively learnt Kiswahili phonemes and phonics hence able to correctly spell words in Kiswahili functional writing.

Lists of all secondary schools in each administrative division in the County were obtained from the statistics department of the County Director of Education’s office (previously known as the District Education Officer). The lists were used to generate four other lists that were used in sampling the eight schools that were used in the study. Purposive and simple random sampling techniques were used to select 8 secondary schools used in the study. Purposive sampling technique was used to select the only two boys’ schools in the county and simple random sampling technique – lottery design was employed to select two girls’ schools, two mixed boarding secondary schools, and two mixed day secondary schools, totaling 8 secondary schools. The simple random sampling technique (lottery approach) was also used to select 27 participants from each of the 7 schools for each of the two sexes except for the mixed day where it was used to select 28 participants for each sex. The table below shows how the sampling was done.

<b>School Type/ Sex and Quantity</b>	<b>Number of Participants Selected</b>	
	<b>Boys</b>	<b>Girls</b>
Single sex	54	54
Mixed Boarding	54	54
Mixed day	55	55
Sub-total	163	163
<b>Grand-total</b>	<b>326</b>	

## **Research Instruments**

The research instrument for this study was a Kiswahili functional writing task. The task was a letter to the editor of an imaginary daily newspaper called *Yamaizi Leo*. It required the participants to write a letter to the editor explicating the reasons for the increase of rape incidents and suggesting measures to be put in place to combat it. Prior to developing the research tool, the researcher who was the Kenya National Examination Council, Kiswahili Compositions examiner had consulted subject experts at Moi University as well as Kenya Certificate of Secondary Education Kiswahili Paper 1 – Composition examiners and team leaders with over ten years of experience. The instrument was piloted whereby appropriate corrections were made to realize full validity. A test-retest was undertaken to test the reliability of the research task whereby it administered twice to the same group of participant not included in the study. A computation of the correlation co-efficient using Pearson Product Moment Co-efficient formula indicated that the correlation co-efficient was 0.88. This was a sufficient pointer to the task reliability.

## **Data Collection Procedures**

The source of data for this study were the Kiswahili spelling errors of phonemic interchange originating from the Kiswahili functional writing task written by the 326 participants of the 8 secondary schools. The researcher and his research assistants went to each of the sampled schools and administered the research task. This was followed by the error identification and categorization training session to prepare the researcher and his research assistants to embark on identifying and categorizing spelling errors of phonemic interchange. The error identification process employed the error – count technique for each of the participant’s errors of phonemic interchange.

The researcher and his research assistants adhered to Corder (1972) five stages for analyzing errors: Identifying the corpus of the language, identification of errors in the corpus, classification of errors, the explanation of the errors and evaluation of the errors. The phonemic interchange spelling errors of each participant were tabulated vis-à-vis phonemic interchange spelling error in preparation for data analysis.

## Data Analysis

Data were analyzed using descriptive statistics since this study was qualitative paradigm based. This enabled the researcher to tabulate data and provide responses to the research questions. Techniques used were means, frequencies and percentages. These means of central tendencies permitted the researcher to reduce the voluminous information of the spelling errors of phonemic interchange, classify them and present them as directed by the research objective.

## Results

The spelling errors of phonemic interchange occur as a result of a learner's lack of phonic and phonemic awareness phonological knowledge between his/her L1 (Ekegusii) and the target language. The learner who commits the phonemic interchange spelling is penalized by the examiner and subsequently this impinges upon his/her overall performance and achievement in Kiswahili functional writing as well as creative writing and overall achievement in Kiswahili as a language.

The phonemic interchange spelling errors committed by both boys and girls totaled 1640 (29%) out of the 5684 spelling errors committed by the two sexes. The study indicated that the boys committed 973 (59%) spelling errors of phonemic interchange and that only 7% (N=163) did not commit the phonemic interchange spelling errors. On the other hand, the girls committed 667 (41%) of the 1640 phonemic interchange spelling errors. The study indicated that 16% (N=163) did not make the spelling errors of phonemic interchange.

This study revealed that in total, there were five categories of phonemic interchange spelling errors. Both boys and girls committed all the five categories of phonemic interchange spelling errors. The researcher classified the phonemic interchange spelling errors, viz:

- (i) Consonants with consonants;
- (ii) Consonants with digraphs;
- (iii) Digraphs with consonants;
- (iv) Digraphs with digraphs and
- (v) Vowels with consonants.

The following instances of phonemic interchange demonstrated the wrong phonemic interchange that culminated in misspelling of words:

### **i) Consonants with Consonants**

Both boys and girls wrongly interchanged consonants with other consonants and this resulted in phonemic interchange spelling errors. The following examples evidence how both boys and girls wrongly interchanged consonants with consonants and occasioned misspelling of words.

Sex	Error Example and Gloss	Correct Spelling	Gloss
<b>Boys:</b>	- <i>kubuuza</i>	- <i>kupuuza</i>	- despite
	- <i>ingisa</i>	- <i>ingiza</i>	- involve
	- <i>upakaji</i> (painting)	- <i>ubakaji</i>	- rape
	- <i>mararamishi</i>	- <i>malalamishi</i>	- complaints
<b>Girls:</b>	- <i>kufaa</i> (appropriateness)	- <i>kuvaa</i>	- dress
	- <i>ajari</i> (overtime)	- <i>ajali</i>	- accident
	- <i>ambukiswa</i>	- <i>ambukizwa</i>	- be infected
	- <i>avya</i> (abort)	- <i>afya</i>	- health

### ii) Consonants with Digraphs

The following examples demonstrated that both boys and girls alike wrongly interchanged consonants with diagraphs:

Sex	Error Example and Gloss	Correct Spelling	Gloss
<b>Boys:</b>	- <i>Uji</i> (porridge)	- <i>uchi</i>	- naked
	- <i>Jini</i> (evil spirit)	- <i>chini</i>	- down
	- <i>Pajika</i>	- <i>pachika</i>	- impregnant
	- <i>Zida</i>	- <i>shida</i>	- problem/challenge
<b>Girls:</b>	- <i>uji</i> (porridge)	- <i>uchi</i>	- naked
	- <i>Komeza</i>	- <i>komesha</i>	- stop
	- <i>Zinazojangia</i>	- <i>zinazochangia</i>	- that contribute to
	- <i>Aja shule</i>	- <i>acha</i>	- drop out of school

### iii) Digraphs with Consonants

The following examples showed that both boys and girls committed phonemic interchange spelling errors as a result of wrong interchange of digraphs with consonants.

Sex	Error Example and Gloss	Correct Spelling	Gloss
<b>Boys:</b>	- <i>mcha</i> (persons who fears God) - <i>mapacha</i> (twins) - <i>nche</i> - <i>nchia</i>	- <i>mja</i> - <i>mapaja</i> - <i>nje</i> - <i>njia</i>	- human being - thighs - outside - pathway
<b>Girls:</b>	- <i>hawachui</i> - <i>Kuchua</i> - <i>vichana</i> - <i>machangili</i>	- <i>hawajui</i> - <i>kujua</i> - <i>vijana</i> - <i>majangili</i>	- they do not - to know - youths - poachers

#### iv) Digraphs with Digraphs

The following instances evidenced how both boys and girls wrongly interchanged digraphs with digraphs.

Sex	Error Example and Gloss	Correct Spelling	Gloss
<b>Boys</b>	- <i>mathara</i> - <i>Maadhiri</i> - <i>mathubuti</i>	- <i>madhara</i> - <i>maathiri</i> - <i>madhubuti</i>	- side effect - it affects - firm
<b>Girls</b>	- <i>adhiri</i> (shame) - <i>aidha</i> - <i>athibiwa</i>	- <i>athiri</i> - <i>aidha</i> - <i>adhibiwa</i>	- affect - also - be punished

#### v) Vowels with Consonants

Boys and girls misspelled the word *suala* (issue) as *swala* (gazelle). This phonemic interchange This study indicated that on average, boys committed more spelling errors of phonemic than their female counterparts. Boys committed 59% (N=973 out of 1640) spelling errors of phonemic interchange whereas their female counterparts made 41% (N=667 out of 1640).

## Discussion

The results of the present study indicated that both boys and girls committed phonemic interchange spelling errors. Girls committed 59% (N=973) phonemic interchange spelling errors whereas their male counterparts committed 41% (N=667). This study also revealed that the phonemic interchange spelling errors are the major interlingual (phonological) errors committed by the two sexes. This confirms various related studies that underscore that learners commit such errors as a result of L1 interference. Msanjila (2005:p.22) avers that, 'it appears that the wrongly words cited... are a result of influence from, ethnic mother tongues.' Muhando's (2015) study also established that Arabic and Chinese impacted negatively on L2 (English) spelling. It follows that EkeGusii phonological and orthographic systems interference culminated in the boys' and girls' phonemic interchange spelling errors. The Interlanguage Theory formed the basis of providing an explication for the occurrence of the phonemic interchange spelling errors as the Error Analysis theory provided a framework for analyzing and classifying them. Tracing the origin of the phonemic interchange spelling errors to L1 and classifying what constitutes them is a panacea to assisting the learners to get rid of them and be good spellers.

Phonological awareness and in particular phonemic knowledge is critical to spelling ability. This implies that limited phonemic awareness of the target language – Kiswahili, culminates in committing of phonemic interchange spelling errors. As Muhando (2015:p.9) rightly says, "phonological knowledge is a crucial underlying component in reading and spelling." He continues to say that phonemic awareness helps readers to spell. Muhando has underscored the role of phonemic knowledge in ensuring that learners have a mastery of the spelling sub skill. According to Fletcher – Campall, Soler and Reid, (2009:p11) 'Phonological awareness is typically measured by a child's ability to detect and manipulate component sound in words'. Both boys and girls committed all the five types of the phonemic interchange spelling errors, hence they both need phonological awareness - specifically phonemic knowledge.

The Interlanguage Theory provides the framework for ensuring that the L2 – Kiswahili learners have an in-depth understanding of the L2 phonemic awareness vis-à-vis their L1 such as EkeGusii. This compels the Kiswahili instructor to identify and document L2 and L1 phonemic sameness and differences with a view to ensuring that L1 does not impede L2 spelling ability of his/her learners. The fact that both boys and girls wrongly interchanged liquids, sibilants, fricatives inter alia is an indicator of their limited phonemic awareness (phonological awareness) in relation to EkeGusii and Kiswahili. A thorough examination of the Interlanguage Theory and the application of its five principal cognitive processes (language transfer, overgeneralization and strategies of communication) are critical to ensuring that the Kiswahili learners have a firm grasp of Kiswahili phonemic awareness. One of the hypotheses of this theory – the transfer of training has the potential of ensuring that L2 learners do not commit phonemic interchange spelling errors as a result of their limited phonemic knowledge in Kiswahili.

This construct requires the Kiswahili teacher to employ instructional approaches and resources that ensure that the Kiswahili learner does not commit errors such as Kiswahili phonemic interchange spelling errors because of mediocre teaching and media. This implies that errors that may be caused by poor teaching and learning methods and media can be eliminated in the event there is effective teaching and learning as a result of employing appropriate instructional methods and teaching-learning resources.

This study also revealed that boys committed more phonemic interchange spelling errors than their female counterparts. Studies that have been done have demonstrated that girls outscore boys in reading (Fletcher – Campall, Soler & Reid, 2009). Reading is a precursor to spelling ability. The Social Role Theory (1987), is critical to eliminating the gender stereotyping that perpetuate male specific and female specific language ability skills. The pedagogical approaches and media employed by teachers in schools should be geared towards motivating the boys to develop a reading culture with a view to empowering them to acquire spelling ability same as their female counterparts. In the same vein, instructional methods and teaching –learning resources should be selected carefully with a view to ensuring that boys have a firm grasp of phonemic awareness.

Therefore, the following recommendations may boost the teaching of Kiswahili spelling hence empower learners to master the spelling sub-skills: that Kiswahili phonological awareness (phonemic awareness) be taught in relation to L1 phonemic awareness; that reading and spelling be taught concurrently for they reinforce each other; that effective reading include phonological and phonemic awareness which implies that the norm should be read, spell and write, and moreover, that Kiswahili teachers should teach Kiswahili spelling in the context of the error analysis theory, interlanguage theory and the social role theory.

## **Conclusion**

This study has the following two conclusions derived from the finding: both boys and girls commit phonemic interchange spelling errors; and boys commit more phonemic interchange spelling than their female counterparts. Thus, suggestions for further research include discovering impediments to the teaching of phonological awareness; research into the media used to teach phonological awareness and instructor readiness to teach phonological awareness.



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