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## Exploring Spelling Errors in Extemporaneous Essays: A Case Study of Pakistani University EFL Learners

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### Abstract

*Spelling competence is an integral part of a good written communication in English. EFL learners, nonetheless, face difficulties in spelling correctly. This study explored the spelling errors of EFL university students in Balochistan - Pakistan. With a qualitative case study research design, the data were obtained through extemporaneously written essays by a sample of 117 participants analyzing spelling errors through Cook's (1997) taxonomy focussing the most common types of English spelling errors. The findings ranked four types of spelling errors as: first, omission (37.24%); second, substitution (31.01%); third, insertion (25%); and fourth, transposition (07%) errors in order of occurrence. The study suggests to pedagogical and curriculum considerations to support learners to cope with spelling errors with a further need to study spelling errors in changing and technology enhanced learning environments.*

**Key Words:** Spelling Errors, Error Analysis, Omission, Substitution, Insertion, Transposition, Cook's Taxonomy

### Introduction

A spelling error occurs when a learner may not follow the English orthographic principles by producing a phonetically correct but unconventional attempt, for example, writing *parashoot* instead of 'parachute' (Rahmanian & Kuperman, 2019). Thus, lexical or morphological confusion may also produce spelling errors or due to the overlap in sub-skills required for reading and spelling, as when 'carrier' is misspelled *career* (Bennett-Kastor, 2004). Spelling errors are the violation of certain conventions for representing phonemes (sounds) by means of graphemes (letters). Linguistically, phonemes are the smallest units of sound (for instance /t/, /d/ in 'to' and 'do') and graphemes are the minimal written feature (as <t> in 'to' and <d> in 'do'). Hence, spelling errors occur

when the phonographic rules that determine how a given phoneme is to be represented in writing are broken. Additionally, written mis-encodings are the second type of spelling errors which are divided into interlingual and intralingual types. Interlingual mis-encoding may be the influence of the first language (L1) spelling rules that do not exist in the target language (TL). Whereas intralingual mis-encodings include overgeneralization, homophone confusion, mis-choice, and letter-naming. Homophone confusion, the second subtype of spelling error, is often observed in confusable pairs such as 'brake/break', 'discus/discuss,' and 'chilly/chilli' etc. All such types of spelling errors may help to investigate spelling errors in a corpus (Botley, Hakim

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& Dillah, 2007). Spelling errors of students are, nonetheless, ubiquitous despite years of training and drilling in school, college, and university, they still appear in their writings. Other than that, spelling errors of students are contentious because they reveal the necessary information about the important aspects of the second language learning development, such as students' interlanguage.

Spelling is interrelated with reading and writing. Together they form the solid foundation for literacy wherein spelling is considered as one of the basic skills that should be mastered (Arndt, 2010; Garbe, 2012; Sherrow, 2015; Hendricks, 2017; Lindner, 2018; Treiman, 2018). Spelling competence is considered as an integral part of written communication because it enables a writer to express their ideas, thoughts, and facts lucidly. Accurate spelling is popularly considered a marker of a well-educated person. However, spelling difficulty has widely been reported as a matter of grave concern (Adoniou, 2014; Arndt, 2010; Bennett-Kastor, 2004; Hempenstall, 2015; Hendricks, 2017; Russak, & Kahn-Horwitz, 2015; Lindner, 2018). Poor spelling may negatively affect learner success in several ways and may also continue beyond school years. As a result, a student may tend to write fewer words in compositions or may develop a mindset that they cannot write and avoid writing. Such a condition may then lead to arrested writing development that may constrain reading comprehension and vocabulary expansion (Daffern, 2017; Johnson, 2016; Llombart-Huesca, 2017; Treiman, 2018). Moreover, for poor spelling performance, raters are often instructed by examination boards to deduct marks and assign a lower grade (Linder, 2018; Santangelo & Graham, 2015).

In addition, according to Hempenstall, 2015, Linder (2018), and Llombart-Huesca (2017), if an applicant's resume contains spelling errors, employers may have negative perceptions of their intellect and abilities. Incorrect spelling may also impact everyday tasks during work. Lastly, due to poorly spelled written communications, businesses may be negatively affected, for example, byways of losing customers (Bahr, Silliman, Danzak & Wilkinson, 2015). Sometimes, a misspelt word may change the meaning of the entire text (Adoniou,

2014; Arndt, 2010; Garbe, 2012; Hendricks, 2017; Lindner, 2018; Sherrow, 2015; Treiman, 2018). Thus, as Gopee and Deane (2013) asserted, poor spelling skills may hinder educational success, employment opportunity, interpersonal relations, and self-esteem.

For EFL learners, the English spelling system remains complex due to its non-phonetic nature leading to a variety of spelling errors while writing (Vaisman, & Kahn-Horwitz, 2019). Therefore, this study is specifically focused on exploring the frequency of spelling errors occurring in essay writing at a university in Pakistan. In applied linguistics, error analysis as the subfield of second language acquisition (SLA) deals with all types of errors, including their possible reasons as well as remedies (Botley, Hakim & Dillah, 2007; Kraichoke, 2017).

## Rationale

In Pakistan, English is commonly used in official and academic contexts with high expectation of proficiency and accuracy in written English (Jamil, Majoka & Kamran, 2016). However, many Pakistani EFL university students may not possess a robust grasp in English writing skills, and therefore they make spelling and other composition errors (Sajid & Siddiqui, 2015). That may be mainly due to the textbooks designed for age-old grammar-translation method, which may not cater to the needs of EFL students, teachers' lack of attention and corrective feedback to every individual due to lengthy syllabi, overcrowded and large classrooms, and short span of classroom time, rote-learning and replication of bookish and imitative content rather than interpretive learning, occasional use of English and lack of writing practice (Bilal, Tariq, Din, Latif & Anjum, 2013; Manan, 2019; Sajid & Siddiqui, 2015). That is why, in spite of reaching the higher level of education, many Pakistani EFL learners, while writing, still make spelling errors, which may leave negative impacts upon their grading. While spelling poses particular trouble for EFL learners in Pakistan, this serious issue is nonetheless overlooked by the educators of the country (Ijaz, Mahmood, & Ameer, 2014). Few studies examined

the types of errors and their frequency by Pakistani EFL learners. The results showed that due to native language interference, lack of necessary feedback, and improper assessment system appeared to be the primary cause for such errors. The researchers concluded that learners cannot attain the required writing proficiency may be due to the lack of error analysis research implementation ([Ahmed, Amin, & Qureshi, 2016](#); [Butt & Rasool, 2012](#); [Hussain, Hanif, Asif, & Rehman, 2013](#); [Jamil, Majoka, & Kamran, 2016](#); [Sarfranz, 2011](#); [Unar, Shakir, & Ahmed, 2017](#)).

Nevertheless, the aforementioned studies, conducted in Pakistan, were based on common error analysis, which investigated vocabulary, grammar, punctuation, and other errors in the writeups of students. These studies, in fact, either overlooked spelling errors at all or gave them minimal importance. Other than that, most studies that examined the common errors of Pakistani students in writing English do not seem authentic because they have not been published in internationally recognized journals but found in local journals. That is why their findings may not seem to be a reliable guidance for students, teachers, and future researchers. While spelling has not received much research attention internationally ([Gaintza & Goikoetxea, 2016](#)), in Pakistan too, particularly in Balochistan, there has been no major study that may have focused on the spelling errors of students. Keeping the above-mentioned factors in view, the focus was to find various types of spelling errors emerging in the extemporaneous essays of university EFL learners and the possible reasons behind these spelling errors. Thereby, the implications of this study may relate to EFL students, EFL teachers, curriculum developers, syllabi designers, course planners, administrators of educational institutions, educational authorities, and future researchers to cope with this demanding area of the English language.

### Theoretical Framework

This exploratory study drew upon V. J. [Cook \(1997\)](#) taxonomy of common types of English spelling errors, suggesting that there may be chances of four most common types of spelling errors which contain

omissions (for example, *roomate* for 'roommate'), substitutions (for example, *calendar* for 'calendar'), insertions (for example, *until* for 'until') or transpositions (for example, *protein* for 'protein') (OSIT).

### Literature Review

[Cook \(1997\)](#) explored spelling errors in English and discovered four types of most common spelling errors, omission spelling errors, for example, *hight* for 'height', substitution spelling errors, for example, *speech* for 'speech', insertion spelling errors, for example, *pronunciation* for 'pronunciation' and transposition spelling errors, for example, *curropt* for 'corrupt'. Most of the spelling errors occurred due to the confusion of sound-letter correspondences and some with individual words such as *because* and *kidneys* etc. In EFL context, numerous studies have been conducted following [Cook \(1997\)](#) theoretical framework of types of English spelling errors (see, for example, [Albalawi, 2016](#); [Alhaisoni, Al-Zuoud & Gaudel, 2015](#); [Al-Oudat, 2017](#); [Alzuoud & Kabilan, 2013](#); [Golshan & Reigani, 2015](#)). These studies indicated the most common reason and causes of spelling errors, which include the complexity of English spelling system, discrepancy and inconsistency between spelling and pronunciation, silent letters, many spelling rules with many exceptions, focusing on flow of ideas rather than on correct spelling, negative transfer of L1 letters and sounds, homophones, overgeneralization of spelling rules, poor reading and writing proficiency, poor listening skills, students' low motivation for learning and carelessness, lack of error correction and lack of strategic spelling instruction.

English spelling system is also considered non-phonetic and, thus, may be little hard to acquire because one may not accurately predict how to pronounce a large number of English words simply by looking at their spellings, nor one can spell a large number of words accurately just through hearing their pronunciation. Having a deep orthography ([Adoniou, 2014](#)), there can be sound-letter inconsistencies in the English writing system due to having 26 letters but about 44 phonemes that may be spelt in at least 350 ways ([Lindner, 2018](#)). As a result

of this complexity, mastering English spelling may be more difficult (Zhao, Quiroz, Dixon, & Joshi, 2016). Hence, English spelling acquisition is generally considered, by some scholars, to be a lifelong process (Russak, & Kahn-Horwitz, 2015). Thus, the degree of choice for alternative spellings may be a possible reason for many spelling errors in English (Dixon, Zhao, & Joshi, 2012). Several studies have countered the misconception that the English spelling system is chaotic, illogical, irrational, unprincipled, and thus problematic. For example, Dixon, Zhao, and Joshi (2012) informed that although some English spellings may be confusing, a majority of English words are regulated by spelling rules. Similarly, Adoniou (2014) also stated that being a morphophonemic language, English sounds systematic, which can be shared with ESL and EFL learners at all stages. However, if learners are taught the similarities in word origin, such as in Greek and Latin word constructions, then nearly only four percent of English words seem truly irregular. Hence, students should be taught to rely mainly on a phonemic approach to spelling (Joshi, Treiman, Carreker, & Moats, 2008; Hemenstall, 2015).

Spelling appears to be a major issue for university students, despite studying and using English for years (Botley, Hakim & Dillah, 2007). This led the researchers to recommend that spelling be given more emphasis in curriculum planning, and an emphasis on regular reading practice on the part of language learners would be a useful way of exposing students to plenty of examples of correct spellings and that would help them to unconsciously avoid making spelling errors. In a study, Mohebbi and Firoozkahi (2021) discovered a number of spelling errors on the street signs, billboards, and at the airports in some major cities of Iran, an EFL country, and highlighted the possible reasons behind the problem and suggested some remedies for it.

## Teaching Spelling

Some studies have expressed dissatisfaction with the traditional method of spelling instruction with little attention focused on teaching and assessing students' spelling, due to which students may try to rote memorize spelling lists for a test (see, for example,

Arndt, 2010; Joshi & Aaron, 2005; Sherrow, 2015; Treiman, 2018; Westwood, 2015). Dymock and Nicholson (2017) indicated that adoption of the age-old strategy of rote memorization of hundreds of English words might not be sufficient for school ESL students and suggested that the rule-based explicit instruction may have a greater outcome in increasing spelling performance. Cordewener, Verhoeven, and Bosman (2016) suggested that spelling consciousness and spelling performance may improve with multiple practice opportunities, the error detection-correction strategy, proofreading and re-writing the same draft, and providing immediate corrective feedback on spelling accuracy either from the teacher, through students' self-monitoring or peer review. The researchers recommended ESL instructors to foster a habit in students to self-monitor by identifying and comparing their errors with correct spellings.

## Technology and English Spelling

As Garbe, 2012 discovered that computer-assisted instruction (CAI) may not only provide direct and personalized instruction but may also increase a student's motivation to learn. Similarly, Sherrow (2015) indicated that computer-based reading interventions might increase spelling consciousness and spelling performance. Likewise, the study conducted by Shih, Lee, and Cheng (2015) discovered the effectiveness of the utilization of smartphone apps in English spelling study course for college ESL students through the method of blended teaching. The researchers concluded that mobile phone apps designed to practice English spelling might make students' spelling conscious and develop their spelling skills rapidly. Hence, e-learning may lead ESL learning beyond the boundary of a traditional classroom space and characterizes flexibilities in learning spaces, time, and pace.

## Method

The current study employed a qualitative research design to help understand a complex phenomenon (English spelling errors) that may be difficult to capture through quantitative research design in a specific context (Levitt, Motulsky, Wertz, Morrow, & Ponterotto, 2017; Patten & Newhart, 2017; Santiago,

[2015](#)) with a qualitative case study approach ([Creswell, 2014](#)). Case study approach refers to gathering and analyzing data from one or more cases and provide considerable confidence for interpreting the data. The University of Balochistan was counted as a case for this study based on which the data were collected from various departments in the form of student essays. Case study design posited the following strengths to answer the research questions of the current study. Firstly, it provided concrete illustrations or living examples ([Houghton, Casey, Shaw & Murphy, 2013](#)) of spelling errors of the participants, including common types and frequencies of those errors. Secondly, the evidence from the case(s) is commonly considered more convincing, and therefore the overall research may be regarded as being more vigorous ([Yin, 2017](#)). Other than that, case study design supported strengthening the external validity ([Tetnowski, 2015](#)).

### **Population and Sample**

Out of overall 14000 currently registered students within the main campus of the University of Balochistan, Quetta, an estimated 10000 are enrolled in the undergraduate study programmes, and they were considered the target population for this study. Established in 1970, the University of Balochistan is the oldest, largest, and the only public sector general university of the province, imparting affordable higher education to the entire population of the province in science, arts, and humanities. It is located in the heart of Quetta, the capital city of the province of Balochistan, Pakistan. The University of Balochistan is comprised of eight academic faculties: basic sciences, life sciences, earth, and environmental sciences, pharmacy and health sciences, social sciences, management sciences, business and IT, education and humanities, and literature and languages. Within these faculties, there are 45 departments, four institutes, and five specialized centers for research. These departments operate morning and evening study programmes in their respective subject areas. The University of Balochistan was selected as a case study site for data collection for the reason that the population of the study also represented several communities of Balochistan in terms of linguistic backgrounds such

as Balochi, Brahui, Pashto, Sindhi, and other languages. Inhabiting in a multilingual environment, they commonly use Urdu as a second language, and majority of them hail from Urdu medium institutions. Being in EFL settings, they may not have an opportunity to learn the target language (English) the way it is acquired in English as a second language (ESL) surroundings, where English is used as a language of instruction in all educational institutions and as a lingua franca among the speakers of other languages for day-to-day communication ([Alasfour, 2018](#)). A convenience sampling method was used to gather data from conveniently available potential participants ([Ghaljaie, Naderifar, & Goli, 2017](#)). Convenience sampling is 'simple', 'easy', 'quick' and 'economical' to produce results. Furthermore, any member of the target population, without any certain criterion, can be part of convenience sample ([Etikan & Bala, 2017](#)).

### **Data Collection**

In the current study, extemporaneous essays of university EFL undergraduates were required to explore their spelling errors. After seeking the prior official permission, a slot of 148 available participants enrolled in the BS programmes in the academic session 2018-22 was selected from BS third semester of six departments of the University of Balochistan, Quetta. The participants were non-English major sophomore EFL students and had attended Functional English language (FEL) courses in the first and second semesters. Three departments were from the faculty of natural sciences (i.e., Biochemistry, Microbiology, and Physics), and three were from the faculty of social sciences (i.e., Economics, Psychology, and Sociology). Ethical considerations were observed with informed consent of the participants who were assured that these essays were solely for research purposes and that they could withdraw from the study at any stage without giving a reason. They could write freely and at their own pace without any anxiety and fear. After data collection, out of 148 essays, 31 were excluded on account of being illegible. Thus, a total of 117 essays were included for the final analysis. Table 1 presents the demography of research participants.

**Table 1.** Number of Essays from Various Departments

Essays	Biochemistry	Microbiology	Physics	Economics	Psychology	Sociology
Collected	26	25	21	20	27	29
Discarded	04	08	03	03	06	07
Analyzed	22	17	18	17	21	22

### Research Instrument

A research instrument is defined as the tool employed to gather the required data (Creswell, 2014). Qualitative research is inductive and the researcher generally explores meanings and insights in a given situation (Creswell & Creswell, 2017). Therefore, the required data of spelling errors were collected through students' essays (250-300 words) written extemporaneously in their classrooms (Winkler 2016) on any one of the following topics in a specific time period of one hour:

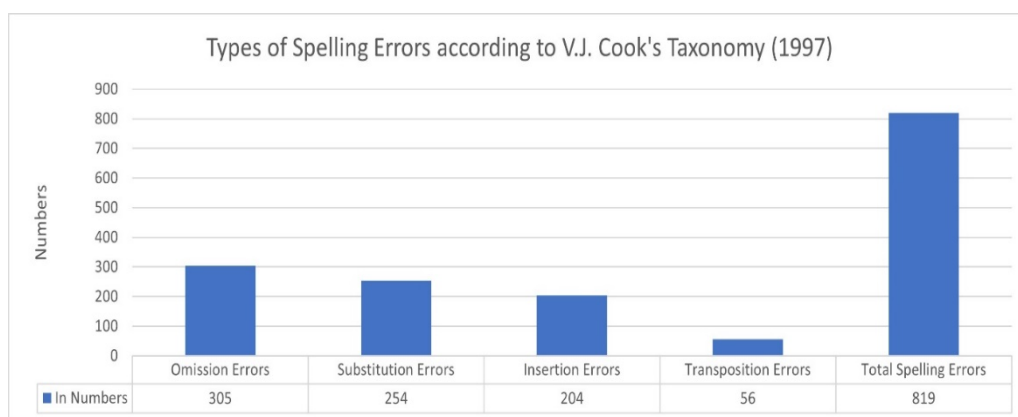
- a) A great teacher
- b) A good friend
- c) Advantages of mobile phone
- d) Benefits of daily exercise

To ensure the validity as a significant part of transparency, trustworthiness, utility, and dependability (Mohajan, 2017; Oliver, 2010), various discussion essay topics (adapted from TOEFL and IELTS, which are internationally recognised as the most standard systems of assessing academic writing) were discussed with the senior-most EFL instructors of the University of Balochistan, Quetta. They selected four topics so that the tertiary participants easily and confidently attempt to write at

their free will. Accordingly, data were collected through EFL students' extemporaneous essays. To achieve the research objectives, Cook (1997), pp. 483-485) taxonomy of types of spelling errors was used to analyze spelling errors, which involved three steps: (1) collection of sample spelling errors from participants' extemporaneous essays, (2) identification of spelling errors and (3) description of spelling errors with their types, frequencies, and percentages. After collection, the data were coded for frequency and the percentages to be calculated for each spelling error type in order to determine the rank and order of spelling error types.

### Results

Drawing upon Cook (1997) theoretical framework of the most common types of English spelling errors, results showed that the student essays contained overall 819 spelling errors. With regard to the order of the common errors, the omission spelling errors (with 305 errors – 37.24%) stood first, substitution spelling errors (with 254 errors – 31.01%) stood second, insertion spelling errors (with 204 errors – 25%) stood third, and transposition spelling errors (with 56 errors – 07%) stood forth (see Figure 1).



**Figure 1:** Frequency of the types of spelling errors

Thus, the collected data in the study reflected spelling errors of the EFL learners despite reaching the level of higher education. Following are the details of four types of the most common spelling errors, namely, omission, substitution, insertion, and transposition (OSIT).

Errors with examples that emerged in the selected participants' extemporaneous essays:

### Omission Spelling Errors

Omission spelling errors are the absence of letter(s) that do exist in the conventional spelling of a word. Based on Figure 1, the essays of the participants of the current study reflected 305 omission spelling errors. Some of the examples may be found in the excerpts given below.

- St. 53, L-13: You can get success in lots of *different* (different) ways.
- St. 49, L-41: A great teacher does not want to destroy the *generation* (generation).
- St. 116, L-3: They are very *cooperative* (cooperative).
- St. 100, L-3: A teacher takes a person from lower to *heights* (heights) of sky.
- St. 10, L-12: We can easily communicate with friends and family in *foreign* (foreign) countries.

### Substitution Spelling Errors

Substitution spelling errors refer to as the replacement of a letter(s) with an incorrect letter(s) in a word. As depicted in Figure 1, it is observed that the spelling errors of substitution were 254 in the samples produced by the participants. The following excerpts show examples of substitution spelling errors.

- St. 85, L-31: Cellphone can help in *presentation* (presentation) and other learning tasks.
- St. 29, L-7: We talk about health *maintenance* (maintenance).
- St. 90, L-24: My friends face the problems *together* (together).
- St. 84, L-14: He teaches *grammar* (grammar).
- St. 2, L-25: Mobile phones also have a *calendar* (calendar).

### Insertion Spelling Errors

Insertion spelling error is the occurring of an error(s) due to adding an extra letter (s) in a word. Based on Figure 1, 204 insertion spelling errors were produced by the participants in the current study. Some examples are visible in the following excerpts.

- St. 36, L-13: You can save all *photos* (photos) in cellphone.
- St. 35, L-31: The other advantage of cellphone is *an alarm* (alarm).
- St. 76, L-18: A good friend never wants to *loose* (lose) you.
- St. 90, L-2: Real and *truly* (truly) friends are those who put their footprint in the heart.
- St. 80, L-5: Exercise lower the risk of *diabetes* (diabetes).

### Transposition Spelling Errors

Transposition spelling errors refer to the errors that occur as a result of disordering certain letters in a word. Table 1 reveals that in the present study, 56 transposition spelling errors arose.

- St. 16, L-8: We watch movies and short comedy *vedios* (videos).
- St.36, L-25: People can connect with short text *messages* (messages).
- St. 19, L-13: We *achieve* (achieve) many things.
- St. 91, L-7: They take several days to *deliver* (deliver).
- St. 2, L-42: Mobile phone makes our life easy in every *field* (field).

### Discussion and Suggestions

By following [Cook \(1997\)](#) theoretical framework of most common types of English spelling errors, the findings of the current study revealed that the selected population made four types of the most common types of spelling errors in their extemporaneous essays, which contained 305 omission spelling errors, 254 substitution spelling errors, 204 insertion spelling errors and 56 transposition spelling errors (OSIT). Thus, the results of the present study align with the findings of [Albalawi \(2016\)](#), [Alhaisoni, Al-Zuoud & Gaudel, 2015](#), [Al-Oudat, 2017](#), Alzuoud and Kabilan (2013),

and [Golshan and Reigani \(2015\)](#). The results of the present study may be explained that (a) Pakistani university EFL students make spelling errors of several types, (b) omission is the most frequent type of spelling errors followed by substitution and insertion spelling errors, whereas transposition emerged as the least frequent type of spelling errors, (c) previous literature, nonetheless, may contain suggestions and recommendations for reducing such spelling errors, and (d) the possible reasons for such similarities may be that the participants in all abovementioned studies were EFL students who may be likely to make spelling errors in writing extemporaneous essays (Adoniou, 2014; [Alhaysony, 2012](#); [Garbe, 2012](#); [Hempenstall, 2015](#); [Hendricks, 2017](#); [Park, 2011](#); [Vaisman & Kahn-Horwitz, 2019](#); [Westwood, 2015](#)). In the light of past research, the current study suggests the following remedies for reducing spelling errors and recommends some strategies for enhancing EFL learners' spelling proficiency.

EFL instructors must first work on removing the commonly prevailing misconception that the English spelling system is chaotic, illogical, irrational, unprincipled, and thus problematic by raising students' awareness that the English spelling system is manageable. To this end, [Dixon, Zhao and Joshi \(2012\)](#) may be followed. Although some English spellings are confusing, being a morphophonemic language, English is quite systematic which must be shared with EFL learners at all stages (Adoniou, 2014). Moreover, the English spelling system is organized around the interrelation of several layers of linguistic knowledge of word cognitive skills, which are orthography (letters in conventional sequences), phonology (speech sounds), morphology (word parts that convey meaning and grammar) etymology (history of words) and semantics (meanings). Therefore, EFL instructors require a thorough understanding of the linguistics of English spelling or metalanguage, as [Hendricks, 2017](#) suggested.

EFL students should be made well aware of the fact that the English language has different ways to pronounce the same spelling and several different ways to spell the same sound. If they can articulate the consonants and vowels of the English language and know their common combinations, they may

comfortably absorb the spellings of words ([Westwood, 2015](#)). [Garbe, 2012](#) also argued that when teachers employ the whole-word-study, they are encompassing all areas of literacy because improvement in one area aids the development in other areas. Teachers should explain to EFL learners to clearly recognize some troublesome suffixes, for example, /-ent/ as in 'respondent' or /-ant/ as in 'applicant', /-ence/ as in 'occurrence' or /-ance/ as in 'importance', /-ial/ as in 'initial' or /-cial/ as in 'beneficial', /-able/ as in 'dependable' or /-ible/ as in 'responsible', /-ably/ as in 'dependably' or /-ibly/ as in 'responsibly', /-ability/ as in 'dependability' or /-ability/ as in 'responsibility'. Similarly, Teachers should explicitly explain as to why the spelling shift that occurs in the following words: for example, the 'y' in 'friendly' turns into an 'i' in 'friendliness' but, not in 'carrying'. In the same way, they should explicitly explain when adding a suffix what conditions apply to double the final consonant of a word or not. For example, why /tt/ occurs in 'fitted' but not in 'benefited' and why /rr/ occurs in 'preferred' but not in 'preference'. Also, explain why the final 'e' in the words like 'desire' is dropped in 'desirable', but why it is retained in 'noticeable'.

A thorough understanding of etymology and word origins may help to be an efficient speller. By origin, English is a Germanic language, however, in course of time it became a polyglot language, by drawing its spelling patterns from various other languages that it came into contact with over the years, such as Anglo-Saxon, Norman-French, Latin and Greek etc. Word origins often give clues and cues about sound-letter, grammar and meaning relationships (Adoniou, 2014). Thus, knowing common roots and affixes may help EFL learners to automatize more words with their spelling. When a learner knows where a word or word construction comes from, they may see similar spelling patterns for other words with the same origin.

English spelling system follows certain rules. By learning one word, students may automatically recognise how several other similar words are spelt that follow the same rule. Becoming familiar with these rules may help EFL learners avoid several common spelling errors. Nonetheless, rules may not apply on every word because there may be few

exceptional words that may not conform to the rule. Teachers, therefore, should explicitly familiarize the learners with these exceptions to the rules. For example, the famous oft-quoted rule: *'i before e but not after c'* helps explain the difference between the spellings 'ie' as in *'belief'* and 'ei' in *'receive'*. This, however, may not be universally applicable. Hence, the learners need to learn the exceptions to prevent tripping up, such as *'protein'*. Previous studies recommended explicit teaching of spelling rules with exceptions may have a greater outcome in mastering English spelling.

The use of multiple word lists at the appropriate learning levels had better be included in spelling instruction and the study of which should be assigned in small amounts across the week. In this connection, [Albalawi \(2016\)](#) also recommended that EFL instructors should provide organized lists of: homophonic words, irregular words, words with silent letters, and commonly misspelt words. Hence, it may be concluded that the practice of multiple word-lists serves to highlight the spellings of words keeping aside the disruptions of meaning, context, grammar, punctuation and handwriting, and so forth and, resultantly, may maximize the spelling performance of students.

Spelling may be best acquired from regular expressive writing. The more EFL learners write words and manipulate the English language, the more conducive it may be to build robust spelling skills. [Alhaysony, 2012](#) also recommended adequate English writing practices in order to reduce spelling errors in the writeups of EFL students. Students' spelling consciousness and spelling performance improves with conscious effort, multiple practice opportunities, and providing immediate corrective feedback on spelling accuracy from teacher ([Cordewener, Hasselman, Verhoeven, & Bosman, 2018](#)). In this regard, a spellcheck may function as a learners' proofreading tool for spelling, as it spots most English spelling errors by showing a red curly underline and giving accurate spelling suggestions before they become printed typos. EFL students should be encouraged to play word games, crosswords, puzzles, take online spelling quizzes and use spelling practice apps, which may be useful for

testing one's spelling and improving spelling skills ([Shih, Lee & Cheng, 2015](#)).

[Westwood \(2015\)](#) observed that knowing word families based on visual similarities regardless of their pronunciation may help, for example, *boot, book, blood, door and poor* etc. While spelling a word, good spellers recall its image already stored in their mind. The famous "look-cover-write-check" method and using flashcards to train may be effective especially for learning irregular words. Second, instructors may also encourage learners to say and spell the word aloud, which may help strengthen the connection between the pronunciation and spelling of it as well as reinforce the accurate spelling in auditory memory. Thirdly, hearing and writing or typing a word simultaneously is relating the sounds with the letters that represent them, and this may enhance learners' English encoding and decoding skills. In this connection, [Westwood \(2015\)](#) indicated that multisensory typing programs that combine visual, auditory and kinesthetic components of spelling, such as touch-type-read and spell, help boost recognition of accurate letter combinations and strengthen the spellings of selected words in poor spellers' long-term memory.

[Golshan and Reigani \(2015\)](#) also suggested that learners need to use multiple tricks and tactics for remembering challenging and trickier spellings easily and permanently. Such as chunking and mnemonics etc. Chunking method is to segment longer words into syllabic or morphemic chunks for spelling learning convenience as *'haem or rage'* (haemorrhage) etc. Mnemonics, on the other hand, are auditory or visual cues and clues as rhymes, pictures or sentences, and so on that may make the challenging spellings simple and robustly memorable. For example, the following famous rhyme *'i before e but not after c'* reminds when to spell 'ie' and when to write 'ei' or when sounds like 'a' as in 'neighbour' and 'weight.' Similarly, the sentence: *'big elephants can always understand small elephants.'* may help students remember the spelling of *'because'*. Curriculum developers should incorporate from plethora of spelling practice activities that educators introduce from time to time. Spelling should be given more emphasis in curriculum planning, as it is causing difficulties for

students, even at the higher education levels ([Botley, Hakim & Dillah, 2007](#)).

### Implications

As this study indicates, EFL learners commit spelling errors despite reaching the higher level of education, which may affect their grading. While spelling poses particular trouble for EFL learners in Pakistan, this serious issue is nonetheless overlooked by the educators and researchers of the country. The findings of this study enhance the awareness of EFL teachers, EFL learners, future researchers, educational authorities, and curriculum planners to cope with this challenging area of the English language on the following grounds. First of all, this study may be considered as a substantial Pakistani contribution to the relatively inadequate knowledge on English spelling error analysis in Pakistan with a significant contribution to research on the topic in the EFL circle. Additionally, as the data were collected from the EFL university students in their classrooms, the findings of this study, on one hand, inform about the prevailing situation of English spelling proficiency among EFL learners, on the other hand, the findings also likely to benefit those researchers who will be working on the demanding area of spelling errors in Pakistan in general and in Balochistan in particular to familiarize EFL instructors with the types and frequencies of EFL students' spelling errors. Moreover, the study also implicates a need that curriculum and assessment should include components for spelling proficiency.

### Limitations

The current study explored spelling errors in the extemporaneous essays of EFL students' and suggested possible solutions to reduce spelling errors in their writing and proposed some strategies to enhance their spelling proficiency. Nevertheless, the findings of this study may not be generalized, because this study had some limitations. For example, the current study dealt with only spelling errors while keeping the other errors related to writing skills such as vocabulary, grammar, punctuation, capitalization, coherence, cohesion, and other mechanical errors aside. Whereas, this study explored the spelling

errors in the essays extemporaneously written by university students, it did not analyse the spelling errors observed in other academic and official documents, on signboards, in written sources on social media and internet forums such as in emails, text messages and in chatting or occurring elsewhere. Additionally, the current analysis was based on the data which were collected from the non-English major undergraduate students of only the main campus of one particular university, the University of Baluchistan Quetta, a limited research site, while leaving its sub-campuses in the city and regional campuses elsewhere in the province aside. Thus, students majoring in English, EFL teachers, schools, colleges, universities, or other educational institutes of the province or the country were not included. Moreover, only six departments of the university were selected for data collection and did not look for gender or any other variations. Hence, the study's findings may not be generalized to all the educational institutions of the city, province, or country.

### Conclusion

The current study was based on qualitative case study research design, and its intent was to increase the understanding of EFL students' spelling problems. The findings determined that Pakistani EFL university students confronted spelling difficulties in writing extemporaneous essays. The study followed [Cook \(1997\)](#) theoretical framework of most common types of English spelling errors and their frequencies of occurrence and thus concluded that the selected population made all four types of the most common spelling errors, namely, omission spelling errors, substitution spelling errors, insertion spelling errors and transposition spelling errors (OSIT). Among which omission emerged as the most frequent type of spelling errors followed by substitution and insertion spelling errors, whereas transposition was the least frequent type of spelling errors. The results of the present study aligned with the findings of [Albalawi \(2016\)](#), [Alhaisoni, Al-Zuoud & Gaudel, 2015](#), [Al-Oudat, 2017](#), [Alzuoud, and Kabilan \(2013\)](#), and [Golshan and Reigani \(2015\)](#). The reasons for these similarities may be that participants in all the abovementioned studies were EFL students, who may possibly make spelling errors in writing extemporaneously. Drawing on the findings, the

present study also suggested some strategies to maximize EFL students' spelling proficiency. These suggestions are likely to guide various potential stakeholders such as EFL students, EFL teachers, curriculum developers, syllabi designers, language policymakers, and other educational authorities. It is hoped that the educators address the weak area of spelling as the key focus in the curriculum for EFL

classrooms at school, college, and university levels. Finally, the study presented some recommendations for future researchers to carry out further vigorous research in the demanding area of spelling error analysis at school, college, and university levels so that spelling problems may be professionally analyzed.

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