Analysis of Spelling Errors of Saudi Beginner Learners of English Enrolled in an Intensive English Language Program

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Abstract

This study reports the types of spelling errors made by the beginner learners of English in the EFL context as well as the major sources underpinning such errors in contextual writing composition tasks. Data were collected from written samples of 122 EFL students (male and female) enrolled in the intensive English language programme during the preparatory year at the University of Ha'il in Saudi Arabia. Students were given 1.5 hours to write on one of four different descriptive topics related to their life and culture.

The spelling errors found in the writing samples was analysed and classified intofour categories of errors according to Cook's Classification: omission, substitution, insertion, and transposition. An analysis of errors established that errors of omission constituted the highest proportion of errors. The majority of learners' spelling errors were related to a wrong use of vowels and pronunciation. When uncertain about accurate spellings, beginner learners often associated a wide range of vowel and consonant combinations in an attempt to spell words accurately, sometimes even combining two distinct lexical items by overlapping vowels. The findings suggest that spelling errors are mainly the outcome of anomalies existing in the target language of the learners as well as L1 interference from their internalized Arabic language system.

Keywords: omission, substitution, insertion, transposition, overlapping errors

1. Introduction

In Saudi context, English is taught as a foreign language (EFL), in which students are supposed to master the four language skills. Teaching the skill of writing is one of the most challenging areas of language instruction and learning in the Saudi EFL context (Aljarf, 2007). As an important component of writing, spelling poses a major challenge to most beginner learners of English, resulting in misspelled words and incoherent sentences Hyland (2003). Hildreth (1962) observes that correct spelling is evidence of good manners and bad spelling may give the impression of inadequate education or carelessness. Bean and Bouffler (1987) claimed that, 'Standard spelling has assumed importance beyond the function it plays in written language. It has become the 'ticket' to the literacy club—the heir to the traditions and scholarly world of print'. Spelling is a communication tool, not an end in itself (Chandler-Olcott, 2001). Inaccurate spelling often sends a message that the writer is careless or less intelligent than other students (Granham & Harris, 2005).

In addition, it has been noted that many English language learners, including Arab students, have difficulties with English spelling (Al-zuoud, K. M., & Kabilan, 2013). These difficulties have been attributed to a number of causes, such as the differences in the orthographic system between Arabic and English, and first language (L1) interference. Moreover, these spelling difficulties cause many spelling errors which negatively affect the writing proficiency of Arab students (Saiegh-Haddad, 2004).

Addressing spelling errors should be an integral part of teaching English language. Bad spelling affects English sentence structure and causes the mispronunciation of words. Bowen (2011) emphasized the learning of spelling as a component of writing, not as the result of studying isolated words. Despite the importance of spelling in producing meaningful written texts, language programmes mostly focus on teaching listening, speaking, reading, writing, vocabulary building, and grammar and often neglect spelling instruction. We, as the researchers, claim that spelling in the Saudi context has not been given the priority it deserves.

2. Literature Review

The literature on spelling errors among students contains only some studies investigating the spelling difficulties

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which Arab students face in studying EFL. For example, Al-Jarf (2005) investigated the correlation between the spelling and listening comprehension of students and a decoding test in the Saudi context. Analysis of data revealed that while EFL students misspelled 41.5% of the words and provided correct responses to only 49.5% of the questions in the listening comprehension test and only answered 52% of the questions correctly in the decoding test. Next, Al-Jarf (2007) examined spelling errors of 36 first year students majoring in language and translation in a university in Saudi Arabia. She found that important influences in English spelling errors were Arabic spelling system, students' mispronunciation, interference with other English words, and unfamiliarity with American pronunciation. The study recommended that subsequent research should focus on these influences in understanding Arab students' difficulties of English spelling.

Al-zuoud and Kabilan (2013) examined spelling errors in the written compositions of 43 Jordanian students of English in a university. They analysed a total of 228 spelling errors that occurred in 43 written papers and subsequently categorised them into four types according to Cook's classification (1999): a) omission, b) substitution, c) insertion, and d) transposition. The results indicated that the most frequent spelling errors were substitution and omission errors.

Likewise, Al-Jabri (2006) investigated the spelling errors of 114 Omani fifth-grade students in two rural schools in Oman. Data were collected from spelling tests on 10 words. In this study, the most frequent errors committed were also errors of omission and substitution, while the errors of transposition and insertion were less frequent.

Swan and Smith (2001) stated that spelling problems are greater among Arab students, due to the linguistic differences between Arabic and English, compared to spelling errors made by other learners from non-Arabic backgrounds, whose languages share more similarities with English. Figueredo and Varnhagen (2004) also compared the difference in spelling errors and correction. The sample for this study consisted of Canadian students (16 males and 37 females). The researchers used two essays written by the university students. Participants were given to read essays written by university students and identify spelling errors in those essays. The researchers classified the spelling errors into three types: phonological, orthographic, and morphological and found that the participants made more phonological errors compared to orthographic and morphological errors. Al-Taani (2006) studied spelling errors in students' composition writing at the secondary level in the United Arab Emirates. The sample in this study consisted of 200 randomly selected students during the academic year 2003/2004. The researcher classified and identified the position of spelling errors showing that most spelling errors occur in the middle of misspelled words. The paper recommends that more time should be allocated to the investigation of spelling errors of this type.

Fender (2008) studied the spelling of Arabs and non-Arab ESL students reporting that Arab students tend to have lower success level spelling skills, as well as difficulties in spelling patterns of general and multi-syllabic words. Chen and Cheng (2008) and Coombe and Barlow (2008) focusing on grammar, pronunciation, and spelling argue that these linguistic features play the role in understanding the factors underlying proficient and less proficient writing. Moreover, poor spelling affects writing motivation: poor spellers often have less motivation in writing essays (Sipe, 2008).

He and Wang (2009) investigated spelling errors among two Chinese EFL beginner young learners for 14 months. The results showed that spelling errors occurred as a result of using 10 name-based letters and 20 sound-based letters. Additionally, errors occur with EFL writers who cannot grasp the complexity of vowels and consonants in the English spelling system. In Singapore, Dixon et al. (2010) examined the first language (L1) influence on 285 bilingual children's spelling performance in their second language (L2). The analysis showed a significant direct influence of L1 on correct spelling: Chinese group made more substitution and transposition errors than Malay and Tamil.

A review of literature on spelling errors reveals a lack of research and shows that very few studies have investigated the difficulties that Arab university students have with spelling when learning English as a foreign language. Therefore, our study is important for measuring frequency and finding major sources of spelling errors in writing from Saudi EFL students in the intensive English language programme in the Preparatory Year. The classification and data analysis of spelling errors in this study is based mainly on Cook's classification (1999): i) Omissions (the deletions of some letters), ii) Substitutions (replacing one letter with another), iii) Insertions (adding extra letters), and iv) Transpositions (reversing the position of letters).

3. Methods

3.1 Overview

In light of the preceding discussion, this paper is devoted to investigating the English spelling errors of Saudi

male and female EFL students at the university of Hai'l. A number of analytical procedures were used to analyse the data:

- 1) Identifying the deviant forms. This was done by a detailed analysis of the output.
- 2) Analysing and classifying spelling errors found in the writing samples.
- 3) Establishing a frequency count of such errors and the sources of the errors.

3.2 Participants

A total of 122 EFL students participated in the study, (43.45% male) and (56.55% female), all enrolled in an intensive English language programme during the preparatory year at the University of Ha'il in Saudi Arabia. The ages of the students ranged from 18 to 20 years, with a mean of 19 years, and they were selected randomly to participate in the study. The participants' English language levels ranged between elementary and pre-intermediate. Students move to a higher level when they successfully complete a seven-week course. In each level, they receive instructions that cover reading, writing, listening, and speaking skills. All of the participants in this study had English language learning experience of minimum six years in the intermediate and secondary schools. Ninety-eight percent of the subjects reported never having visited an English-speaking country.

3.3 Instruments

3.3.1 Written Samples

The participants were asked to write a well-organized essay on one of four familiar topics. They were asked to write approximately 150 to 300 words. The suggested topics were the following:

- 1) My city
- 2) My country
- 3) My favourite team
- 4) My summer holiday

3.3.2 Data Collection and Analysis

The researchers classified errors according to Cook's classification of spelling errors (1999) (omission, substitution, insertion, and transposition). Moreover, the researchers recorded the frequency of each error type and their percentages of the total.

4. Results and Discussion

This section offers the findings of the study and an analysis of spelling errors most frequently committed by 122 Saudi EFL students (53 males and 69 females) in the preparatory year at the University of Ha'il. We then examine each of the major error types (omission, substitution, insertion, and transposition) individually as well as the main sources of errors. The study draws mainly on Cook (1999), who studied the proportions of spelling mistakes/errors made by L2 students. Errors in spelling were categorized according to OSIT (Omission, Substitution, Insertion, and Transposition).

Table 1. Frequency of errors according to OSIT

| Gender | Omission | Substitution | Insertion | Transposition | Total |
|-----------------|----------|--------------|-----------|---------------|-------|
| Male | 195 | 183 | 76 | 28 | 482 |
| Female | 267 | 246 | 149 | 45 | 707 |
| Total | 462 | 429 | 225 | 73 | 1189 |
| Percentage Mean | 39.6% | 34.9% | 19.1% | 6.4% | 100% |

At first glance, the figure above clearly depicts that out of 1189 total errors analysed, the errors of omission occupy the highest position with a percentage mean of 39.6% (462 errors), followed by errors of substitution with a percentage mean of 34.9% (429 errors). This result concurs with Al-Jarf (1999), who analysed the types of errors made by 72 first year students at a university in Saudi Arabia. The finding also correspond with Alhaysony (2012), who examined article usage errors in the written samples of 100 first-year female students at the Department of English in the University of Ha'il. She found that omission errors were the most frequent. In this study, errors of insertion and transposition, however, occurred less frequently than the first two types of errors,

with percentage means of 19.1% (225) and 6.4% (73), respectively. The frequency of transposition errors found in this study aligns with Cook (1999), who examined errors made by L2 students, reviewing writing samples from 375 students with diverse first languages, including Arabic.

An analysis of the errors, in general, shows a strong correlation between the articulation and the spelling of words. In terms of gender, the male subjects made a total of 482 errors, whereas, the female subjects made a total of 707 errors—a much higher number than recorded fortheir male counterparts. The variation in the figures was a result of a bigger sample size of female subjects (69), who also produced longer texts than their 53 male counterparts. Firstly, we identified the intralingual errors within the English language—the target language of the participants. The onset of these error types is mainly accounted for, by the anomalies of articulation and spelling inherent in English words themselves. The other issue involves the participants' own habit of manipulating standard pronunciation of words which resulted in writing wrong spelling. These two variables could have contributed to the omission, substitution and insertion and transposition errors.

4.1 Errors of Omission

EFL students, particularly beginner writers, may manipulate and associate a wide range of vowels and consonants combinations to form words. A strong correlation was found between the articulations of English words and the ways in which these words were spelled by participants. Some omission errors, and those most commonly found in the current study, for example, were 'famos', 'famus', 'famose', or 'fameus'—presumably the products of representing wrongly articulating 'famous'. The errors could also constitute, in the first place, a knowledge deficit in identifying the base word 'fame' and its spelling and then in recognizing the bound morpheme '-ous' in order to transform it into an adjective by dropping the silent [e] in the final position when combining with '-ous' morpheme, which begins with a vowel. Such errors are described as errors of invented spelling (Gentry, 2000). Invented spellings are not necessarily typical of omission errors; they might appear in the other types of errors as well.

When we examined the sources of errors in this study, we assume that such errors may be attributed to the participants' attempt to construct a word based on their knowledge of grapheme-phoneme relationships. For example, silent letters present problems to the participants when guessing accurate spelling of target words, such as in the representations of 'country' by omitting [u] in 'contry', 'league' by [u] in 'leage', and 'beautiful' by [a] in 'beutiful'. They chose to omit mute vowels [u] and [a] because they are articulated precisely the way they were written. This could have led participants to think that the vowels in these words best represented the articulation of the target words. In the case of writing these words, the students could have drawn on their orthographic knowledge, which was marked by their effort to correspond grapheme with phoneme. The Preparatory Year students at the University of Ha'il are mostly beginner writers learning to develop their spelling skills. Beginner writers, at an early stage of spelling and writing, depend heavily on their 'phonemic awareness and orthographic knowledge to spell' (Kelman & Apel, 2004, p. 57).

Furthermore, we identified a high frequency of eliminating [e] at the end of the words, such as 'becaus' for 'because', 'by plan' for 'by plane', 'favourit' for 'favourite/favorite', and 'sam' for 'same'. The analysis of spelling errors in this study was based on contextual writing in which the subjects were given the task of writing paragraphs on one of four topics provided. It offered more opportunity and a wider context to see spelling errors not only at the morphological level, but also at the syntactic level. We also observed the phenomena of eliminating inflections such as -ing in 'I'm talk' as well as the plural marker [s], in 'there are many supermarket/building', 'there are super player', 'every Muslim come', and 'My holiday end'. When we view these errors at the morphological level, we may interpret that the root morpheme and the inflection morpheme are being compartmentalized, thus displaying the difficulty in making accurate combinations of these two morphemes. This corresponds with Sterling (1983), who found similar errors underscoring that the errors of this nature are 'morpho-orthographic, the graphemic forms of root morpheme and inflection morpheme stored separately in the internal lexicon [and] retrieved when an item is to be spelt and put together after the application of the appropriate adjustment' (p. 356). However, at the syntactic level, these deviations may further contribute to making associations with the grammar of subject-verb agreement deviation. Alhaysony (2012) contends that errors of this type are generally increasing due to insufficient English writing practices: the author recommends adequate practices in writing in English as well as proper methods of teaching English grammar in order to reduce and eliminate the writing errors of Saudi students.

The reason for the occurrence of omission errors is interlingual, which can be attributed to the distinction found between English and Arabic. There is a high potential for errors in producing accurate spellings in the English language system, which is far more complex mainly due to the lack of patterns in spelling and articulation.

Arabic, on the other hand, is a language which is written precisely the way it is articulated.

4.2 Errors of Substitution

As mentioned above, the errors of substitution were the second most frequent errors in the written texts produced by the subjects. These errors were the outcomes of substituting vowels more frequently than consonants, and they were mainly related to pronunciation. This finding aligns with Cook (1999), who found a high proportion of vowel substitution errors and pronunciation errors, with errors mainly related to Arab students' pronunciation. In writing 'peaceful', the participant's choice of [fol] instead of [ful], a bound morpheme, seems close to the standard pronunciation of the word. In the same fashion, errors of substituting [c] with [s] in 'nise' for 'nice' and 'sentar' for 'centre/center' underlines the errors that occur as a result of having no systematic rule for representing the /s/ consonant with the [c] or [s] phonemes in the initial position. This is the reason why the participants substituted one for the other. These errors can be attributed to a failure to recognise the fact that English words have multiple correspondences between the sounds of the language and the letters that represent those sounds.

Likewise, in English, the /tJ/ consonant is mostly represented by the [ch] or [tu] combinations. The subject's decision to substitute [u] with [ch] in 'natchral' for 'natural' appears to be a substitution error; but it could also be a product of reflecting pronunciation of 'natural' which can be best represented by omitting [u]. Thus, this kind of multifaceted error demands analysis from various perspectives.

Further, representing 'people' with 'peapoul' (both substitution and omission errors) and 'intertiment' for 'entertainment' seems to be the product of incorrect pronunciation. Sterling (1983) underscores such errors as 'not incorrect spellings of the correct sounds but rather correct spelling of incorrect sounds' (p. 359). Additionally, the study also revealed an interesting error in writing 'studiem' for 'stadium' and 'housepetal' for 'hospital'. Clearly, the errors entered the text as a convergence of two lexical items: 'studio and stadium' and 'house and hospital' with the divergent meanings. In an effort to produce these words, the two different vowels of the two distinct lexical items were overlapped, which led to the twisting of the spelling. The initial, the middle, and the final positions of the consonant sounds in both items were used fairly accurately. However, the failure to distinguish the vowels of the initial position, /ei/ and /u:/, and their phonemic overlapping resulted in the production of 'studiem'. The same phenomenon was observed in 'housepetal' where the /au/ and /o/ sounds were overlapped in the initial position of the word. The overlapping errors, a new phenomenon identified by this study, refer to the blending of parts taken from two distinct words. These kinds of errors may not be typical only to substitution errors, but may emerge in the other types of errors as well.

As described earlier with the omission errors, the issue of invented spelling resurfaced in the substitution errors as well. Such examples are 'realy' for 'really', 'bezy' for 'busy', 'usally' for 'usually', 'therteen' for 'thirteen', and 'musium' for 'museum'. This result corresponds with He and Wang (2009) who studied four Taiwan Mandarin children taught by native speakers of English finding that participants repeatedly displayed invented spellings. In addition, other substitution errors included 'exaited' for 'excited', 'togather' for 'together', and 'amizing' for 'amazing'. It is plausible that these errors occurred in the subjects' efforts to correspond the articulation with the spelling. In the last two words, the incorrect choices of the mid-position of the vowels might suggest there is a subtle difference in the correspondence between the articulation and the spelling of these words. This might pose a further challenge to the teacher in adopting effective techniques for correcting these errors. In order to spell such words accurately, students should have developed 'mental graphemic representations (MGR)' which refer to the images of words, syllables, and morphemes in the students' memory (Apel and Masterson: 2001).

4.3 Errors of Insertion

Insertion errors occurred mainly because of the addition of redundant letter(s) in a word. In the samples, the first category of spelling errors was the insertion of [t] in 'coatch' for 'coach', 'mutch' for 'much', and 'eatch' for 'each'. There are a large number of common lexical items (e.g., catch, batch, butcher, stitch, ditch, ketchup, kitchen, match, sketch) forming the /t J/ consonant with the combination of the [tch] consonant cluster. The sources of such errors may be attributable either to overgeneralization of representing the /t J/ consonant with the [tch] cluster or/and a competence deficit in making a distinction between the words with [ch] and [tch] clusters for representing the /t J/ consonant.

The major sources of the errors relate to the distinction between competence and performance (Chomsky, 1965). The main contention is whether the participants made errors because they had insufficient knowledge to spell the words accurately, or whether the performance errors were made due to a temporary lapse in attention or confusion. Native speakers generally make performance errors that are characterized by mistyping or omission,

substitution, insertion, or transposition of a single letter or two. On the contrary, as non-native writers do not have adequate knowledge of the target language, they usually make competence errors. In the case of the EFL subjects in this study, participants were Arabic speakers learning English at the early stages of an intensive language course. From the samples, we found that one of the subjects had consistently repeated 'for example' (for example) in three instances throughout the text. Additionally, we encountered 'alwayes' repeated twice in the written texts of two subjects. A lack of competence can be considered the main cause of these errors. However, one of the participants spelled 'for example' correctly on one occasion, whereas on the other occasion it was misspelled as 'for example'. In this case, the source of error is, presumably, both competence and performance failure.

4.4 Errors of Transposition

Errors of transposition, or mis-ordering, were the least frequently appearing errors in this study. Despite their relative rarity, these errors should not be ignored if the goal is to eliminate, or at least reduce the spelling errors of Saudi students. Transposition errors included 'freind' for 'friend', 'thier' for 'their', and 'quite' for 'quiet'. In these errors, the mis-ordering of the vowels 'ie' was the most frequent error, which corresponds with Cook (1999). The other errors, for example, were 'beuateful' for 'beautiful', 'pepole' for 'people', and 'shose' for 'shoes'.

5. Conclusion

This paper investigated the four types of spelling errors made in English writing by Saudi male and female students at the University of Ha'il in Saudi Arabia. It also aimed to uncover the sources of these errors. The study found that learners' spelling errors were generally the products of differences between the articulation of English words and the spelling of these words.

The errors can also be related to the differences existing between the Arabic and English language systems. The current study reveals that the most frequently occurring errors were errors of omission. At a closer look, these errors revealed that the omission of vowels occurs more frequently than the omission of consonants. The students had difficulties especially with silent vowels and in making their association with articulation. This phenomenon concurs with Al-Jarf (1999), who found similar difficulties in freshmen students. The second most frequent errors were the errors of substitution. Again, these errors were more frequently related to the substitution of vowels than the substitution of consonants. The study also revealed an interesting phenomenon of a substitution error occurring in the overlapping of two lexical items, such as 'studio and stadium' as 'studium' appearing as 'stadium'. On the other hand, the least frequently occurring errors were the errors of insertion and transposition.

The study revealed that learners' attempts to spell words accurately were thwarted when they seemed to primarily recall the pronunciation of the English words. In this sense, L1 interference is not the only source of spelling errors. In fact, the target language itself was the main source of many spelling errors. Articulation of some English vocabulary bears a close resemblance to the respective spelling, for example, hard, word, keep, fast, can, sofa, see, etc. In this instance, their internalized Arabic language system, which is written precisely the way it is articulated, could have helped the learners to produce accurate spelling. On the other hand, a large number of English words are different from their articulation and spelling. In certain errors of substitution, for example, learners chose to write 'therteen' for 'thirteen' and 'musium for 'museum'. The learners, especially beginner writers, as in the current study, may have over generalized the complex spelling rules from the first two language sources, or from inadequate learning, thus making such errors. Many of these errors can be explained as a negative transfer from L1. Furthermore, these types of errors support the view that 'L1 is one of the cognitive processes used by learners to extract the rules and principles of the target language' (Alhaysony, 2012, p. 63). Finally, the spelling errors found in the written texts could be attributed also to the inability of learners to recall the correct spelling words previously encountered through reading or elsewhere, resulting in misspelled words.

6. Implications for Teaching L2 Writing

The current study has some implications for the coherent teaching and learning of English language spelling. Spelling is closely intertwined with pronunciation, vocabulary, listening, reading, and writing. We found that learners of EFL had difficulty in establishing a link between the articulation and spelling of words. We also explored whether that silent letters mislead students from incorrectly spelling words. Spelling errors originate from this inconsistency in the spelling system of English words. This means that it might be necessary to teach the spelling of vocabulary in tandem with their pronunciation and then integrate the words into sentence writing and a composition. In this sense, spelling errors should be viewed and analysed not only at the morphological

level but also at the syntactic and semantic levels to provide a broader context for learning the language. This procedure may benefit learners in actually noticing the differences which exist in English articulation and spelling. The purpose of embedding pronunciation and spelling in writing is to provide learners with meaningful context as well as to help them discover correct spelling as an essential element of good writing.

Learners generally find that the memorization of spelling is a complex task, particularly the spelling of multisyllabic words. One of the techniques which might prove effective is to encourage learners to memorize words in syllabic chunks. For example, learners may memorize the word 'expensive' better as 'ex-pen-sive' rather than getting them to spell 'e-x-p-e-n-s-i-v-e'. Similarly, the word 'entertainment'—another multisyllabic word spelled incorrectly by some learners — can be memorized more efficiently if it is learned in chunks as in 'en-ter-tain-ment' rather than the individual letters 'e-n-t-e-r-t-a-i-n-m-e-n-t'. Further, the study reports that the origin of errors stems from vowel manipulations rather than consonant combinations. These errors could be attributed to the traditional approach to language teaching which stresses that English only has five vowels: 'a,e,i,o,u'. Therefore, English spelling instruction could be more effective if learners are taught spelling by embedding all vowels and diphthongs (approximately 20) at the early stage of their language learning.

However, some conventional techniques of teaching spelling, such as dictation and/or pair-word list of homophones, may prove more effective in teaching spelling before using words in sentences. Dictation of a short text can be administered on a weekly basis preferably chosen from the vocabulary that students will encounter in each lesson or unit. Learning could be reinforced later when learners actually notice words being used contextually in reading, listening, speaking, and writing activities from the textbook or teaching/learning materials. It will offer an exposure to the spelling system of the target language which may allow learners to notice and correct their spelling errors by themselves. Next, spelling instruction which selects spelling errors from students' writings could draw more attention to the value of accurate spelling. Then, proofreading a written text with spelling errors could be another technique of spelling instruction. Finally, students often think that learning to spell correctly is not as interesting as learning the other language skills. Therefore, the teacher needs to adopt some strategies to motivate them to learn spelling according to the types of errors students commit.

7. Limitations of the Study

This present study has certain limitations. First, the data collection for the four familiar topics was taken through written texts. Therefore, the study does not undertake an analysis of the four types of errors through dictation, listening, or any other forms of data collection. Next, the subjects in this study were beginner learners of English in a preparatory year programme.

8. Recommendations for Further Research

The present study makes some recommendations for researchers who are interested in the written spelling habits of Saudi EFL learners. One recommendation is, therefore, to compare and analyse spelling errors collected from the same group of learners using multiple methods, such as listening, dictation, and written texts, which might yield different results. Furthermore, it will be interesting to collect and compare spelling errors from different levels and groups of learners, for instance, by comparing secondary school students with university students. It would also be interesting to study Arabic and English grapheme-phoneme relationships to identify sources of English spelling errors. Finally, the present study recommends further focused research to investigate errors that originate from L1 interference, or any other sources, in order to produce accurate English spelling.

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