# | RESEARCH ARTICLE 

# Absence of Vowels in the English Spelling of Arabic Personal Names on Social Media 

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#### Abstract

| ABSTRACT Many users of social media from different countries and speaking different languages that use non-Latin orthography such as Arabic choose to transliterate their first name and surname in Romanized script, vis English. Due to the differences between the user's native language and English in vowels and consonants and how they are pronounced, some people make vowel and consonant errors in the English spelling of their names due to the user's proficiency level in English and their awareness level of the grapheme-phoneme correspondences in their native as well as English language. This study aims to investigate vowel omissions in the English spelling of Arabic personal names, what kind of vowels are omitted, location of the missing vowels, why educated Arabs omit vowels in the English spelling of their names, whether vowel omissions are attributed to transfer from the native language (Arabic) or lack of competence in English spelling. Analysis of a sample of Arabic personal names with missing vowels in their English spelling showed that in the vast majority of misspelled names, one short vowel is missing. In most cases, the missing short vowel is fatha /a/ in the first syllable of the name. It seems that educated Arabs transfer the Arabic vowel system to English. The Arabic orthographic system has 3 long vowels represented by written letters 1 I a: i:, i:, u:/ and 3 short vowels that are represented by diacritics which are pronounced but not shown in the written form of Arabic words. In addition, omission of short vowels in the English spelling of Arabic names may be attributed to how the name is pronounced in the dialect of the Arabic speaker, not how it is pronounced in Standard Arabic, especially when the vowel is in the initial syllable of some surnames. Vowel deletion may also be due to insufficient proficiency in English and lack of contrastive knowledge of the Arabic and English vowel and spelling systems. Examples of transliterated personal names with missing vowels, explanations, causes, and recommendations for more accurate spelling in English are given.


## | KEYWORDS

Arabic personal names, Facebook spelling, Arabic-English transliteration, name transliteration, spelling competence, missing vowels, vowels deletions, Arabic short vowels, educated Arabs.

## ARTICLE INFORMATION

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## 1. Introduction

English orthography differs from that of many languages, including Arabic, in terms of complexity and regularity. As a result, English spelling is problematic for L2 learners of all ages, proficiency levels and language backgrounds as revealed by a large body of research. For example, Chinese speaking students in grades 2-8 have a variety of difficulties in mastering short vowels, which might be influenced by the greater number "of vowel contrasts in English than in Chinese, and because English vowels are closer to each other in terms of position of articulation than Chinese vowels (Bear, von Gillern \& Xu, 2018). L1 and L2 German students in Grades 5-7 made addition and sequence, substitution, and omission errors (Zhang, Breuer, Grünke \& Joshi, 2022). Spanishspeaking students in Grades 4 to 6 made an equal number of consonant- and vowel-based errors were in each grade level because of the effects of English and Spanish orthographies. Omissions were the most common errors among students in Grades 4 and 6 (Lindner, Wijekumar \& Joshi, 2022). Similarly, Spanish and Catalan speaking children in Grades 4-6 learning English at school made more errors related to orthography than phonology and morphology (Hevia-Tuero, Russak \& Suárez-Coalla, 2023; Tolchinsky,

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2021). Spanish-speaking students from Kindergarten to Grade 3 committed almost all types of errors. They had a lower rate of vowel-based phonological errors, but still had a high rate of consonant-based phonological errors (Zhang, Hudson, Ji, Joshi, Zamora, Gómez-Velázquez \& González-Garrido, 2021)

Regarding spelling problems that Arab students make, university Arab students in the intensive English language program at Sultan Qaboos University in Oman have difficulties spelling English vowels in monosyllabic words. The students provided a wide range of spellings for vowel sounds. No clear patterns of errors were observed in the students' misspellings. The students sometimes omitted vowels and kept the consonants or inserted an additional vowel between consonants (Al-Busaidi \& Al-Saqqaf, 2015).

In another study, Arab students made inversion, omission, substitution, segmentation, insertion, pronunciation, miscellaneous, and unclassified errors (Altamimi, Ab Rashid \& Elhassan, 2018). For English majors at a Saudi university, capitalization and omission errors were the most common among the students ( $28.5 \% \& 19 \%$ respectively) (Alenazi, Chen, Picard \& Hunt, 2021). Arabicspeaking ESL learners have difficulties in spelling English vowels in general ("vowel blindness"). They have more problems with short vowels than long ones and made vowel deletion errors (Saigh \& Schmitt, 2012). Substitution errors constituted the highest percentage of spelling errors among Arab ESL secondary school students (Al-Sobhi, Rashid, Abdullah \& Darmi, 2017).

At King Saud University, results of a dictation test showed that freshman students majoring in translation produced numerous spelling errors. The students had more problems with graphemes than phonemes. They mostly had graphemic problems with vowel digraphs, double consonants, silent vowels and consonants, and homophones. (Al-Jarf, 2019; Al-Jarf, 2010; Al-Jarf, 2009; AlJarf, 2008b). Moreover, freshman students resorted to several faulty spelling strategies. Substitution errors constituted $75 \%$ of the total of whole word errors that all the students produced. The insertion strategy was not used in whole word errors. The strategies used in faulty graphemes were omission, substitution, insertion and reversal in that order. The students substituted a vowel by another faulty vowel, deleted silent vowels, reduced double consonants into a single one, substituted the target digraph by another with the same sound, substituted the target vowel by a digraph, deleted the suffix, deleted vowels altogether, and deleted a silent consonant (Al-Jarf, 2008a; Al-Jarf, 2007b; Al-Jarf, 1999).

Analysis of freshman students' misspellings indicated that the most frequent sources of spelling errors were Ignorance of the English spelling rules, transfer of the Arabic spelling system to English, the students' mispronunciation and overgeneralization in that order (A-Jarf, 2008c). Spelling errors also correlated with decoding skills and listening comprehension (Al-Jarf, 2005a; Al-Jarf, 2005b).

Due to the dearth of studies that examine the spelling/transliteration of vowels in Arabic personal names to English by native Arabic speakers on social media, this study seeks to find out whether Arabic native speakers delete any vowels in the transliteration of their first names and/or surnames based on a sample of names collected from Facebook. Specifically, the study aims to find out: (i) which vowels (short and/or long vowels) Arabic native speakers delete in the English spelling/transliteration of their first names and/or surnames; (ii) why Arabic-native speakers delete some vowels in the English spelling of their names based on a contrastive analysis of the English and Arabic phonological systems and grapheme-phoneme correspondences in both languages; (iii) possible causes of missing vowels, i.e. whether vowel omissions are attributed to interlingual or intralingual factors.

Unlike prior studies in the literature, the current study will examine how educated native-speakers of Arabic spell/transliterate their first names and surnames from Arabic to English on social media without using any software, algorithm, or any machine translation system. It is a human-based Arabic-English spelling/transliteration. The sample of names in the current study is limited to those in the author's list of friends on Facebook. Other Arabic personal names on Facebook are not covered by this study.

This study is significant as it is part of a series of articles that investigate errors in the Arabic-English and English-Arabic spelling/transliteration of hotel names (Al-Jarf, 2021); common personal names in Muslim communities (Al-Jarf, 2023e); shop names in Saudi Arabia such as deviant Arabic transliterations of foreign shop names and decoding problems among shoppers (AlJarf, 2022a); semantic and syntactic anomalies of Arabic-transliterated compound shop names (Al-Jarf, 2023d). It is also part of a series of studies by the author that focus on the spelling/transliteration of Arabic personal names on social media as variant transliterations of the same Arabic personal names on Facebook (Al-Jarf, 2022d); gemination errors in Arabic-English transliteration of personal names on Facebook (Al-Jarf, 2022c); the English transliteration of Arabic personal names with the definite article /al/ on Facebook (Al-Jarf, 2022b); English spelling of Arabic compound personal names on Facebook (Al-Jarf, 2023a); and English spelling of the glottal stop and voiced pharyngeal fricative in Arabic personal names (Al-Jarf, 2023b). The errors that educated Arabs make in spelling/transliterating vowels in their personal names have not been investigated by any prior studies.

## 2. The Arabic and English Orthographic Systems

Arabic has 25 consonant and 3 long vowel letters (See Table 1), in addition to 14 diacritical marks that include three short vowels fatha, damma, and kasra /a, u, i/ and no vowel (sukun) (See Image 1). Diacritical marks are placed above or underneath a consonant letter.

Table 1: The Arabic Alphabet in Arabic Script and Phonetic Alphabet

| $s$ | ي | 9 | ه | ن | م | J | ك | ق | ف | غ | $\varepsilon$ | ظ | b | ض | ص | ش | س | j | $J$ | ذ | د | خ | 2 | ج | ث | ت | ب | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | y | w | h | n | m | 1 | k | q | f | gh |  | z | t | d | s | sh | s | z | r | dh | d | kh | h | j | th | t | b | , |

Image 1: Arabic Diacritics with Examples ${ }^{1}$


In the early stages of reading development, Arab children learn to decode Arabic words in kindergarten through the first three grades with the diacritical marks written above or underneath the consonant letters. All school textbooks are usually fully marked with all the diacritics. When the children master the decoding skills in Arabic and are capable of associating the graphemes, i.e., the written form of the words, with the phonemes, i.e., their spoken form and vice versa, they start to decode words without the diacritics marked on the words. Although words are fully marked with the diacritics in the Holy Quran and the Prophets' Hadiths (Traditions), words in Arabic print materials such as books, magazines, newspapers, social media, street signs, subtitles on T.V. are normally shown without the diacritical marks especially those used for the short vowels. Arabic speakers can read, write and spell words without the diacritical marks, especially the short vowel diacritics. Arab students and adults have no problem reading words that have the same consonants but differ in the diacritics, especially the short words, on top of each consonant. From context, they can tell how a word without the short vowel diacritics is pronounced (Al-Jarf, 2018; Al-Jarf, 2015; Al-Jarf, 2007a; Al-Jarf 1995; AlJarf, 2003; Al-Jarf, (1994a); Al-Jarf, 1994b; Al-Jarf, 1992).

Furthermore, Arabic is diaglossic, i.e., it has a Standard Arabic form that is used in a formal situation and T.V. news and a Colloquial spoken form used in daily conversation with relatives and friends, when shopping and carrying out daily activities. Each Arab country has its own dialect (Colloquial) form and several sub-dialects in the different regions. There are phonological, lexical, and syntactic differences between Standard Arabic and the dialects. Similarly, there are phonological, lexical, and syntactic differences among the dialects spoken across the different Arab countries and within the same country. Thus, the pronunciation of the same personal name might differ from how the name is pronounced in Standard Arabic and differs from how it is pronounced across the dialects. From birth to school age, children are exposed to the local dialect at home and to Standard Arabic in children's books and on T.V. such as dubbed cartoon films.

As for English, it has 21 consonant letters, and 5 vowel letters a e i ou (See Image 2). It has the following vowel diagraphs ai (pair), ay (play), ea (clean, dear, pear), ee (seen), ei (weight), ey (they), ie (friend), oa (soap), oo (book, moon), ou (group, court, count), ow (grow, frown), ue (quest); short vowels in the IPA are /I/ pit, /e/-pet, /æ/ pat, / / / cut, /v/ put, /D/ dog, /ə/ about. Long vowels in the IPA are /i:/ week, /a:/ hard, /כ:/ fork, /3:/ heard, /u:/ boot; and 8 diphthongs /av/ (crown), /ai/ (sight), /ei/ (may), /eә/ (care), /ェə/ (clear), /ou/ (low), /วı/ (boy), /və/ (sure).

[^0]Image 2: The English Alphabet with Phonetic Transcription

| A a | - | [ei] | N | - | [en] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $B \mathrm{~b}$ | - | [bi:] | Oo | - | [ou] |
| C c | - | [si:] | $p \mathrm{p}$ | - | [ pi: ] |
| D d | - | [di:] | Q q | - | [kju:] |
| E e | - | [i.] | R r | - | [ $\mathrm{a}:(\mathrm{r})$ ] |
| F f | - | [ef] | S s | - | [es] |
| G g | - | [dzi:] | T t | - | [ti:] |
| H h | - | [ eitf] | Uu | - | [ju: ] |
| 1 i | - | [ai] | V v | - | [ vi: ] |
| J j | - | [ dzei] | W w | - | [d^dolju] |
| K k | - | [kei] | $\mathrm{X} \times$ | - | [eks] |
| L I | - | [ el] | $Y \mathrm{y}$ | - | [ wai] |
| M m | - | [ em] | Z z | - | [zed] |

Unlike Arabic, English has no diacritics. A comparison of the Arabic and English sound systems revealed that Arabic and English vowels differ in number, length, quality, and position of the lips and tongue (Al-Jarf, 2003; Al-Jarf, 1994a; Al-Jarf, 1994b).

## 3. Data Collection and Analysis

A sample of 177 unique names with missing (omitted/deleted) vowels with a total of 323 occurrences (repeats) was collected from the author's 4000 friends on Facebook. Names where vowels are added, substituted by another vowel, reversed or misrepresented were excluded. 18 names have several variants with missing vowels. The sample includes first names, middle and surnames. All names with a missing vowel were spelled/transliterated by educated native speakers of Arabic such as students, instructors, computer scientists, layers, doctors, journalists, and others. The subjects come from different Arab countries (Jordan, Palestine, Syria, Lebanon, Iraq, Egypt, Algeria Tunisia, Libya, Morocco, Yemen, the Sudan, Kuwait, Qatar, Bahrain, Oman, UAE, and Saudi Arabia). They have different educational levels and different proficiency levels in English.

Names of foreign Facebook friends from Europe, China, Japan, Thailand, Vietnam, USA, and others, those written in other alphabets such as French, Bosnian, Hindi, Vietnamese, Thai, Russian, Uzbek, initials, and abbreviations (Ab, Moh, Mhmd,), nicknames (Sunnygirl), and duplicate transliterations were excluded. Arabic names transliterated by non-native speakers of Arabic such as Malaysians, Uzbek, Bangladeshi, Bosnians, or any other nationality that uses Arabic names were not included in the sample. Only Arabic personal names spelled in English graphemes by native speakers of Arabic were compiled and analyzed. Focus was on names where a vowel is missing in the English spelling. Other spelling anomalies of vowels such as adding a vowel or misrepresenting a vowel sound, using a faulty vowel digraph are not the focus of the current study.

In analyzing the English spelling of Arabic personal names with missing vowels, the first name and the surname of the same person were classified as two tokens, not one. A name with several transliterations such as Hssan and Hsan were counted as 2 tokens. If Hssan and Hsan occurred 10 times in the sample, they were counted as 10 tokens (occurrences).

In anlyzing the missing vowel data, it was noted that variant transliterations of a name might have one, or more missing vowels as in Mhammed and Mohamd. Therefore, in comparing the variants for the same names, missing vowels in each syllable were counted as 1 token. This means that missing vowels in a given name were counted as one error regardless of how many vowels are missing in it.

To describe the distribution of missing (deleted) vowels, the frequencies of names having 1 or more missing vowels were calculated. Names with the highest number of variant vowel omissions and those with the highest occurrences were calculated.

To find out the strategies used transliterating Arabic names with missing vowels, misspelled names were classified as follows: (i) those that match the pronunciation of the name in the user's local dialect, not Standard Arabic; (ii) those in which a vowel is absent from the English transliterations as the corresponding Arabic spelling of the name contains a short vowel that is not shown in the spelling, i.e., transfer of Arabic spelling to English. In addition, vowels omissions were classified as interlingual, i.e., transferring the Arabic orthographic (spelling) system to English; and intralingual errors, i.e., those resulting from lack of competence in English and lack of orthographic knowledge of the English and Arabic vowel systems.

## 4. Results

The sample of personal names with a missing vowel(s) in the current study are shown in Table 2. Table 2 shows that the most frequent names with missing vowels are compound nouns with عبد Abd particularly عبد الرحمن Abdul-Rahman (37 occurrences); محمد AlJurf/Aljarf/ElGarf (17 occurrences); عحرف Mohammad (11 occurrences); عطية Atiyyah (9 occurrences); الجد ابتسام Ibtisam \& شر يف/الشر يف Ibraheem (4 occurrences each); and ابراهيم Shareef (8 occurrences). The rest occurred 1 to 4 times.

In the vast majority of the misspellings in the names in Table 2, one short vowel is missing. A long vowel is missing in اسماعيل *Esmail (Esmaeel) and عبد الحكيم *Abdelhkm (Abdelhakeem) only; and a diphthong is missing in اللهيبي *Al Lehbi (Al Lehaibi) only. In most cases, the missing short vowel is fatha /a/. Most missing fatha/a/ short vowel is in the first syllable of the name. In addition, data analysis has shown few names with 2 missing short vowels: عبد الله *Abdlh (Abdulah), عبد الحكيم *Abdelhkm (Abdelhakeem) and زكريا *Zkrya (Zakariya) and (Alibrahim) only; and names with 3 deleted short vowels *Lbrahim الابراهيم *Almzyn (Almuzayin) only.

Names that contain a final glottal stop preceded by a long /a:/ contain a deleted final vowel as in حسناء *Hsna (Hasnaa); سناء *Sana (Sanaa).

Names containing a pharyngeal fricative $\varepsilon /$ ?/ in word medial or final positions were either preceded or followed by a vowel were spelled with a no vowel or a short vowel instead of a long vowel as in اسماعيل *Esmail (Esmaeel); السعيد *Elsaid (Elsaeed); *Elsaidy (Elsaeedy); الموينع *Almoina (Almouaina). In other case, only one vowel was used rather then two: one for the vowel and the other for /?/ as in رابعة *Rab'ah (Rab'aah) and هزاع *Hizza (Hizzaa).

Names containing y are either spelled with a short vowel only, or a y only without a vowel as in عطية *Atia or Atya (Atiya) \& جستنية *Jastaniah (Jastaniyah).

In some cases, the missing vowel in the English spelling of Arabic personal names is attributed to how the name is pronounced in the dialect of the Arabic speaker, not how it is pronounced in Standard Arabic, especially when the vowel in the initial syllable of some surnames is deleted as in محمد Mhamad, الابراهيم Lbrahim, اللهيبي Al Lehbi, التميمي Al Altmemy, المزين Almzyn, العجمي Alagmy,التويجري Altwaijry, الزغول Alzgool, الزميلي Alzmaily, النجيلة Anjelah, الطريفي Trifi, نصيرات Nserat, خلود Khloud, مرابط M'rabet, ماجدة Magda, غريبي Ghribi, مبارك M'barek, مدانات Mdanat, مسامح Mesmeh, مهذبي Mhadhbi.

Table 2: Sample of Personal Names Spelled with Deleted Vowels

| Arabic Name | How Names are Spelled | Correct spelling | Arabic Name | How Names are Spelled | Correct spelling |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 1 | Al Jjerf | Al jerf | 111. الحلواني | Elhalwany | Elhalawany |
| 2 2. | Eljrf | Eljarf | 112.11. الخضرجي | Elkhadrgy | Elkhadargy |
| 3. 3. | Algref | Algaref | 1113. ا114. المالك | Elmalk | Elmalik |
| 4 4. | Algrf | Algarf | 114.11. المرواني | Elmrwany | Elmarwany |
| 5. 5. | Aljif, 2 | Aljarf | 1115. النجار | Elngar | Elnagar |
| 6. 6. | Elgrf, 2 | Elgarfa | 116.117. السعيدي | Elsaid | Elsaeed |
| 7 | Jrf, 3 | Jarf | 1171. ا118. | Elsaidy | Elsaeedy |
| 8.8. | Ljarf, 6 | ALjarf | 118. 117 الشبراويدي | Elshbrawy | Elshabrawy |
| 9 9. | Mhamad | Mohamad | 1191.118. الشناويوي | Elshnawi | Elshenawi |
| 10. 10 محمد | Mahmmed | Mahammed | 120.121. الشناوي | Elshnawy | Elshenawy |
| 11 11. | Mhamed | Mohamed | 121. الشقرا | Elshqra | Elshaqra |
| 12. 12. | Mohamd | Mohamad | 122. ا2123 السلسلي | El-Slesly | El-Selesly |
| 13. 13. | Mohmad | Mohamad | 123.124. السمان | Elsman | Elsaman |
| 14 14. | Mohmed | Mohamed, | 124. السراج | Elsrag | Elsarag |
| 15. 15. | Mohmeed | Mohameed | 125.124. الصواف | Elswaaf | Elsawaaf |
| 16. 17. | Abdalrhman | Abdalrahman | 126.125. الصواف | Elswaf | Elsawaf |
| 17.16. عبد الرحمن | Abd Alrhman | Abd Alrahman | 127. 126 | Elwkil | Elwakil |
| 18. 18. | Abdalrhman | Abdalrahman | 128.عليان | Elyan | Elayan |
| 19. 18. | Abdelrhman | Abdelrahman | 129.عليان | Elyyan | Elayyan |
| 20. 29. | Abdlrahman | Abdulrahman | 130.131. الزهار | Elzhar | Elzahar |
| 21 21. | Abedalrhman | Abedalarhman | 131. الزهراء | El-Zhraa | El-Zahraa |
| 22 21. | Abdlhamed | Abdulhamed | 132.اسماعيل | Esmail 6 | Esmaeel |


| 23. | Abdelhmed | Abdelhamed | 133. الفنجري | Fangry | Fangary |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 24. 23. | Abdrahim | Abderahim | 134. 133 فرحات | Farhat | Farahat |
| 25. | Abdalslam | Abdalsalam | 135. 134 | Fayz | Fayez |
| 26. 25. | Abdalal | Abdalaal | 136.جمال | Gaml | Gamal |
| 27 26. | Abdallh | Abdallah | 137. 136 | Gelaldin | Gelaledin |
| 28. 27. | Abdlh | Abdulah | 138.137.ريبي | Ghribi | Gharibi |
| 29. 28. | Abd Allh | Abd Allah | 139. 138 غرفوشي | Grrffosh | Garrffosh |
| 30. 31. | Äbd'üł-Lh | Äbd'üłlah | 140. 14 . 141 | Hamd | Hamed |
| 3131. 31 | Abdmalk | Abdmalek | 141. 140 | Hleem | Haleem |
| 32.31. عبد الهادي | Abdlhadi | Abdelhadi | 142.142. 141 | Hlmey | Helmey |
| 33. 32. | Abdelwhab | Abdelwahab | 143.142. 142 | Hloomy | Haloomy |
| 34 33. | Abdalgleel | Abdalgaleel | 144.143. 14 حمدي | Hmde | Hamde |
| 35 36 عيد الحكيم | Abdelhkm | Abdelhakeem | 145. 144. | Hmmam | Hammam |
| 36. 36 عبد الناصر | Abdelnasr | Abdelnaser | 146. 145 | Hassn | Hassan |
| 37 37 | Atia | Atiya | 147 147 حسين | Hsain | Husain |
| 938. 38 | Attia | Attiya | 178. 147 حسن | Hsan | Hasan |
| 39 39 | Attya | Attiya | 149. 1481 | Hsen | Hasen |
| 40. 40 | Atya | Atiya | 150. 159.2 حسناء | Hsna | Hasna |
| 41. 40. | Ebtsaam | Ebtisaam | 151. 150. | Hsny | Husny |
| 42. 42 ابتسام | Ebtsam | Ebtisam | 152. 151 | Hzam | Hazem |
| 43. 42 ابتسام | Ibtsam | Ibtisam | 153.153.اسماعيل | Ismail | Ismeel |
| 44 44. | Ebrahim | Ebraheem | 154.جستنية | Jastaniah | Jastaniyah |
| 46. 45. | Ibrahim | Ibraheem | 155.جنيد | Jneed | Jneed |
| 46. الابراهيم | Lbrahim | Alibrahim | 156.157 | Kamll | Kamell |
| 47 46. | Eprhem | Eprahem | 157.156. 158 | Karm | Karam |
| 48. 47 عبد ربه | Abdorbo | Abdrabo | 158.7.159. | Khedr | Kheder |
| 49. 48. | Abo Flah | Abo Falah | 159.7 158 | Khlaif | Khulaif |
| 50. 50. | Abofars | Abofares | 160.769 | Khlil | Khalil |
| 515. 51. | Aboklile | Abokalile | 161.7. 160 | Khloud | Khuloud |
| 52. 51. | Abouelhamd | Abouelhameed | 162. 161. | M'rabet | Murabet |
| 53 5 . أبو بكيل | Abu Bkil | Abu Bakil | 163. 162 ماجدة | Magda, | Mageda, |
| 54. 53 | Adm | Adam | 164. 163 | Makrm | Makarm |
| 1. 55. | Ahmd | Ahmad | 165. 164 مرزوع | Marzoaa | Marzoaa |
| . 56. | Ait Mlouk | Ait Mulouk | 166. 165 | Matwly | Matwaly |
|  | Akrm | Akram | 167. 168 | M'barek | Mubarek |
| 98. 57. | Al Lehbi | Al Lehaibi | 168. 167 .مدانات | Mdanat | Madanat |
| 169. 59. | Al Tmimi | Al Tamimi | 169.170. مسامح | Mesmeh | Mesameh |
| 60. 60. | Alagmy | Alagamy | 170. 171. مهدبي | Mhadhbi | Muhadhbi |
| 61. 61. | Aldghamy | Aldughamy | 171. 170. | Mhdy | Mahdy |
| 62. الدغمي | Aldghmy | Aldaghmy | 172. 171. | Mhmoud | Mahmoud |
| 63. 62. | Aldhahri | Aldhahiri | 173.0.172. ملحي | Mlhi | Melhi |
| 64. 63. | Alftoh | Alfutoh | 174.173. ممدوح | Mmdoh, | Mamdoh, |
| 65. الجويري | Algwirie | Alguwirie | 175.176. | Mnl | Manal |
| 66. 6. | Alhwary | Alhawary | 176.175. محيي | Mohey | Mohyey |
| 676. 67. | Alhydr | Alhydar | 177.176. محي | Mohy | Mohyi |
| 68. 67. | Alkarm | Alkaram | 178.179. مخلص | Mokhls | Mokhlis |
| 69. القاسم | Alkasm | Alkasem | 179.178. مومني | Moumni | Moumani |
| 70.70. الخراشي | Al-Khrashi | Al-Kharashi | 180. 180 | Munirh | Munirah |
| A1 71. | Alkthiri | Alkathiri | 181.نبهان | Nbhan | Nabhan |
| 72.73. المنصوري | Almnser | Almanser | 182. نصيرات | Nserat | Nuserat |
| 73.73. المنشاوي | Almnshawy | Almenshawy | 183. 183. | Qtah | Qatah |
| A4.74. 73 المنصور | Almnswr | Almansoor | 184. 183 | Rab'ah | Rab'aah |
| 75. الموينع | Almoina | Almouaina | 185. 184. | Ragb | Ragab |
| 76. 76 | Almrakby | Almarakby | 186. 185 | Rhaf | Rahaf |


| 77 77 المزري | Almzre | Almazre | 187. 188 | Rmah | Rimah |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 78.78. المزين | Almzyn | Almuzayin | 188. 188. | Rowida | Rowaida |
| 797. 78 العمر | Alomr | Alomar | 189. 188 . | Rshad | Rashad |
| 80 80. القحطاني | Alqhtani | Alqahtani | 190. 189 | Sabr | Saber |
| 818. 81. | Alsayd, | Alsayed | 191. 190 | Sahr | Sahar |
| 828.82. الشبيتي | Alshbyiti | Alshubyiti | 192.سعيد. 191. | Said 13 | Saeed |
| 83. 88. | Alshreef | Alshareef | 193. 192 | Salkawi | Salakawi |
| 84.8. 81. | Alshrif | Alsharif | 194. 193. | Sallh | Salelh |
| 86.85. السرحاني | Alsrhani | Alsarhani | 195.194. | Salm | Salem |
| 86.85. التميمي | Altmemy | Altamemy | 196. 197 سناء | Sana | Sanaa |
| 87.86. التويجري | Altwaijry | Altuwaijry | 197. 196 | Sayd 3 | Sayed |
| 888. 88 | Alwleed | Alwaleed | 198. 197 صبري | Sbry | Sabry |
| 90.89. الزغول | Alzgool | Alzagool | 199. شبايك | Shabaik | Shabayik |
| 90. 9 الزميلي | Alzmaily | Alzumaily | 200. الشبراويك | Shprawiy | Shaprawiy |
| 91.91. | Amgd | Amgad | 201. شرارة | Shrara | Sharara |
| 92.92. 9 امل | Aml | Amal | 202. شربيني | Shrbiny | Sherbiny |
|  | Amr | Amer | 203. شر يف فين | Shreif | Shareif |
| 94 9 . النجيلة | Anjelah | Anajelah | 204. شريف | Shrif | Sharif |
| 96. 95. | Askandr | Askandar | 205. شروق | Shrok | Shurok |
| 97.96. | Attayb | Attayeb | 206. سليم | Sleem | Saleem |
| 97 97 عزب | Azb | Azab | 207. سليمان | Sleman | Soleman |
| 98. 9 بسيوني | Basuony | Basyuony | 208. سليمان | Slimane | Solimane |
| 99. 9 بدوي | Bdawi | Badawi | 209. سمية | Soumia | Soumaya |
| 100.بن عربي | Benarbi | Benarabi | 210. سرحان | Srhan | Sarhan |
| 101.بن هزاع | Bn Hizza | Bin Hizzaa | 211. 210 سيدي | Syed 1 | Sayed |
| 102.الشرفي | Charfi | Charafi | 212. تقوى | Tqwa | Taqwa |
| 103.102. الفقي | El Fkky | El Fikky | 213. الطريفي | Trifi | Tarifi |
| 104.105. الشاذلي | El Shzly | El Shazly | 214. تسنيم | Tsnem | Tasnem |
| 105.العزبي | Elasby | Elasaby | 215. وردات | Wrdat | Wardat |
| 106. 107 العسكري | Elaskry | Elaskary | 216. وزني | Wzani | Wazani |
| 107.108 | Elbasuony | Elbasyuony | 217. يوسف | Yoosf 1 | Yoosuf |
| 108. البحيري | Elbhiry | Elbehiry | 218. 217 زين العابدين | Zainabdeen | Zainabideen |
| 109. الفرعون | Elfraon | Elfaraon | 219. 218 | Zhraa | Zahraa |
| 110. الغندور | Elghndour | Elghandour | 220. زكريا | Zkrya | Zakariya |

## 5. Discussion

Results of the current study have shown that educated Arabs using Facebook and other social media delete short vowels in the English spelling of their names. They seem to transfer the Arabic spelling conventions (omission of the short vowel diacritics) to English. This finding is partially consistent with prior studies conducted with Spanish, Catalan, French and Chinese students in terms of spelling error types, and error gravity. Students in prior studies by Bear, von Gillern \& Xu (2018); Zhang, et al (2021); Tolchinsky (2021); Joye, Broc, Marshall \& Dockrell (2022) make vowel-based phonological errors, orthographic errors, short vowel errors, and omissions.

In addition, the vowel omissions in the current study are partially consistent with the errors that Arab students make in spelling vowels in Enlgish monosyllabic words, the perceptible mismatch between phonemes and distinguishing short and long vowels and confusing short vowels with diphthongs (Al-Busaidi \& Al-Saqqaf, 2015; Saigh \& Schmitt, 2012); inversion, omission, substitution, segmentation, insertion and pronunciation errors (Altamimi, Ab Rashid \& Elhassan, 2018); and the omission of silent letters and reduction of double letters (Alenazi, Chen, Picard \& Hunt, 2021). In Al-Jarf (2019); Al-Jarf (2010); Al-Jarf (2009); Al-Jarf (2008a); AlJarf (2007b); and Al-Jarf (1999), freshman students majoring in translation at the college of Languages and Translation (COLT) have difficulties with English vowel digraphs, double consonants, silent vowels and consonants, and homophones. They made omission, substitution, insertion and reversal errors in that order. They substituted vowels by other faulty vowels, deleted silent vowels, substituted the target digraph by another with the same sound, substituted the target vowel by a digraph, and/or deleted vowels altogether.

Vowel omission errors revealed in this study are not limited to the English spelling of Arabic personal names, they are similar to the errors that Arabic speakers make in spelling Colloquial Arabic words on Facebook and other social media. Facebook users delete Arabic vowels, substitute long vowels by short ones and vice versa and confuse consonants with the same sound. Some graphemes are no longer used. they completely ignore Standard Arabic spelling rules. They spell words the way they pronounce them in their local dialects (Al-Jarf, (2023c).

Vowel omissions in the English spelling of Arabic personal names on Facebook that were revealed in this study may be due to both interlingual and intralingual factors. Interlingual factors refer to the transfer of the Arabic orthographic system of L 1 to L 2 . In this respect, Chung, Koh, Chen, \& Deacon (2023) and Al-Kinany, Al-Abri \& Ambusaidi, (2022) indicated that learners instinctively and reflexively associate the L2 sounds to the phonetic groups of their L1. Saigh $\&$ Schmitt (2012) reported that Arabic speakers process English short and long vowels in a way that is similar to their L1 in which short vowels are represented by diacritics that are not usually shown in the spelling of Arabic words. Hevia-Tuero, Russak \& Suárez-Coalla (2023); Chung, Koh, Chen \& Deacon (2023), Joye, Broc, Marshall \& Dockrell (2022) emphasized the interference that the native language may have when the two orthographies of the speller are linguistically distant.

On the other hand, vowel omissions in the current study might be attributed to intralingual factors that refer to the insufficient competence in English, lack of knowledge of the differences between the Arabic and English vowel types, vowel length, the graphemes that represent them, the perception of English and Arabic vowel phonemes and how Arabic vowels, especially those represented by diacritics, might be transliterated using English vowels (Al-Jarf, 2022a; Al-Jarf, 2022d; Al-Jarf, 2008c). Bear, von Gillern \& Xu (2018) added that Chinese-speaking students in grades 2-8 have a variety of difficulties in mastering English short vowels, because of the greater number of vowel contrasts in English than Chinese, and because English vowels are closer to each other in terms of points of articulation than Chinese vowels. Hevia-Tuero, Russak \& Suárez-Coalla (2023); Chung, Koh, Chen \& Deacon (2023), Joye, Broc, Marshall and Dockrell (2022) highlighted the incomplete knowledge of English orthography. Zhang, Hudson, Ji, Joshi, Zamora, Gómez-Velázquez \& González-Garrido (2021) added syllable complexity and orthographic difficulties were the best predictors of phonological and orthographic errors. the anomalous nature of the English spelling system, the Arab students' lack of awareness of English spelling rules as well as L1 interference affect Arab speakers' spelling (Al-Sobhi, Rashid, Abdullah \& Darmi, 2017).

Other factors that influence spelling weaknesses, in general, and vowel omissions, in particular, are related to the negative impact of the educational system and syllabus on Arab spellers that ignore the importance of spelling rules, teaching techniques, and the interference between English and Arabic when the learners refer to their mother tongue while writing in the English language (Altamimi\& Rashid (2019).

It seems that some Arabic speakers have learnt wrong English during their junior and secondary school years and have little or no exposure to English and have weaknesses and shortcomings in what the teachers teach and how they teach it. As a result, Arabic speakers continue to make (even after five years of English) lousy, and awkward spelling, pronunciation and grammatical mistakes in writing as well as speaking (Khan, 2019).

## 6. Conclusion and Recommendations

Native-Arabic speakers on Facebook tend to delete short vowels in the English spelling of their first names or surnames. To minimize short vowel omissions in the English spelling of Arabic personal names, some studies in the literature used data mining from the X platform (formerly Twitter) to build spelling resources and systems of personal names from Arabic to English (Mubarak \& Abdelali, 2016). Software with transliteration tables and algorithms were developed by Alghamdi (2009) to standardize the conversion of Arabic proper names to English script and the conversion of foreign proper names to Arabic script. To combat the nuisances of conversion between Romanization and transcription schemes in the transliteration of Arabic, Gorgis (2010 recommended using a Directory of Romanized Arabic Names to serve as an internationally recognized standard for Romanizing Arabic names. In addition, Freeman, Condon, \& Ackerman (2006) recommended using the classic Levenshtein edit-distance algorithm with character equivalency as a solution to the problem of matching personal names in English to the same names represented in Arabic script classes. An automated computer scoring system (ACSS) incorporating an Arabic-English spell checker can be developed and utilized by social media Arab users (Lee, 2023).

In addition, this study recommends raising EFL and translation students' awareness of the differences between English and Arabic vowel systems in the English language, contrastive analysis, phonology, and linguistics courses that they take, and which English vowels corresponds to the 3 short and 3 long Arabic vowels. When teaching English and Arabic vowels, mind-mapping software can be utilized to show relationships among English and Arabic vowels and diphthongs and their corresponding phonemes and graphemes in a diagram, with examples from both languages.

To enable Arabic speakers to transliterate Arabic short vowels in personal names in English correctly, the current study recommends short soelling interventions based on explicit instruction of spelling rules and cross-linguistic comparisons (Tribushinina, Berg \& Karman, (2022).

Finally, other types of vowel, diphthong and vowel digraph errors that educated Arabs make in spelling their names in English such as vowel addition, vowel and diphthong substitution, and misrepresenting vowels and diphthongs are still open for further research in the future.

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[^0]:    1 https://blogs.transparent.com/arabic/basic-arabic-diacritical-marks/

