

Arab EFL Learners' Reading Ability in English and Arabic

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Abstract

Reading ability in English is decisive in determining the academic achievement of university students who study the English language, or any other subject in English. Extensive research has been conducted to explore whether ESL/EFL reading problems are language-specific or general reading problems. In this regard, previous research on the relationship between L1 and ESL/EFL reading abilities in different languages refers to various degrees of interdependence between L1 and reading in ESL/EFL. Yet, little attention has been paid to investigating the relationship between reading ability in English (L2) and Arabic (L1). This study examines whether university students' L2 (English) reading ability significantly correlates to that in L1 (Arabic). The study achieved this objective by administering two standardized reading tests in English and Arabic on 36 Arab university students who studied English language and literature. To assess the participants' overall EFL proficiency level and to test Cummin's Threshold Hypothesis, the researcher got the study participants to take a standardized EFL test. Data obtained was quantitatively analyzed. The results of the study showed that reading abilities in EFL and Arabic moderately correlated only at advanced-level EFL proficiency, which comes in agreement with Cummin's hypothesis. Results are discussed and pedagogical implications are also made.

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Introduction

The investigation of the relationship between L1 and L2 reading ability/abilities is open to multiple scenarios for explaining such a relationship, especially when developing L2 reading ability is subsequent to developing literacy in L1. First, there is a possibility that L2 reading ability evolves independently from any prior L1 reading experience. Secondly, in the opposite scenario, L2 reading development is expected to generally build on the previously developed ability when developing L1 reading ability. The third scenario refers to the possibility of L1-L2 reading transfer occurring only under certain conditions (e.g., attaining specific abilities/skills in L1 literacy, degree of similarity/difference between written texts in L1 and L2, or achieving a certain level of proficiency in L2). Any serious attempt to research the relationship between reading ability in ESL/EFL and that in L1 should find out which of these scenarios is more plausible on a

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case-by-case basis. Despite the lack of consensus among linguists as concerns the role of L1 in developing L2 reading ability, a considerable number of research studies refer to a degree of interdependence between L2 and L1 reading.

Analysis of the results of the 'Progress in International Reading Literacy Study' (i.e. an international literacy index on learners' reading in L1 and/or English) in 2016 points out that Arab states which participated in the study (i.e., United Arab Emirates, Qatar, Bahrain, Saudi Arabia, Oman, Morocco, and Egypt) occupy the tail end of this international index (Thomson et al., 2017). Among the 50 countries, Saudi Arabia ranked 44th with a mean reading score of 430, while Egypt ranked 49th with a mean score of 330. If we compare these mean scores with those of the countries at the top of world ranking (i.e., Singapore 576 and Hong Kong 569), the magnitude of (bi)literacy problems in Arab countries can be conceptualized.

However, the relationship between ESL/EFL reading ability and that in Arabic as L1 has not received proper attention. Based on the need to gain further insight into the relationship between reading ability in EFL and that in Arabic as L1, it is hoped that the findings of this study contribute to a better understanding of such a relationship. Moreover, if the results of this study refer to a significant relationship between L2 (English) and L1 (Arabic) reading ability, such results imply that EFL educators should design teaching material and activities to enable EFL learners to build on their L1 literacy experiences to develop EFL reading ability.

To fill the gap resulting from the scarcity of research on the reading ability of Arab EFL learners in L2 and L1 and gain insight into the relationship between EFL and L1 reading, this study attempts to answer the following research questions: Is there a correlation between Arab EFL learners' ability in L2 reading and that in L1? At which level of L2 overall proficiency does this correlation show (if applicable)? It is noteworthy that in this study, 'reading ability' in English and Arabic is defined as 'reader's measurable performance as numerically assessed through word identification, word comprehension, and passage comprehension'.

Literature Review

• *The Study of ESL Reading Ability*

The relationship between reading in ESL/EFL and that in L1 of learners of English has been extensively studied. Most of the studies in this line of research were based on Cummins' pioneering study on bilingualism (1979). Cummins argued that a beneficial form of bilingualism is grounded in robust L1 skills. The conclusion drawn in his study resulted from merging two hypotheses, namely, the 'threshold hypothesis' and the 'developmental interdependence hypothesis'. According to the threshold hypothesis, a bilingual learner must attain a certain linguistic level in L2 (i.e. a threshold) to avoid negative interference of L1 knowledge and, more importantly, benefit from that knowledge at cognitive and academic levels of L2. Cummins contends that "the threshold cannot be defined in absolute terms; rather it is likely to vary according to the children's stage of cognitive development and the academic demands of different stages of schooling" (Cummins, 1979). Closely related, the developmental interdependence hypothesis suggests that the competence level bilingual learners reach is partly due to the competence they have developed in L1 when those learners begin to be intensively exposed to L2.

Furthermore, the development of high-level L1 skills tends to lead to the development of L2 skills at the same level, without affecting L1 competence negatively. Cummins (2009) and Cummins (1979) referred to compelling evidence of interrelation between L1 and ESL reading shown in "the areas of phonological awareness, reading comprehension, cognate-vocabulary knowledge, and use of reading strategies" (Cummins, 2009).

Studies have indicated that L1 reading influences L2 reading at the levels of reading ability, attitudes towards reading, and reading strategies. This line of research has investigated the relationship between ESL/EFL reading and that in Japanese (Yamashita, 2004), Hungarian (Nikolov & Csapó, 2010), Spanish (Atwill et al., 2009; Kamhi-Stein, 2003), Chinese (Chuang, Joshi, & Dixon, 2011) Korean (Lee & Schallert, 1997), French (Horst, White, & Bell, 2010) and Croatian (Nikolov, 2010) where these languages are the native languages of ESL/EFL learners respectively. The majority of these studies indicated various degrees of interdependence between L1 and L2 reading. Some studies even referred to this relationship when English is L3 to native speakers of Dutch (van Gelderen et al., 2003).

Koda (1988) investigated the influence of L1 orthographic systems on cognitive processes taking place in L2 reading to explore cognitive process transfer from L1 to L2 reading. The study reports the findings of two experiments conducted with 83 advanced readers whose first languages use different orthographic structures (i.e., Arabic, Spanish, and Japanese). Results show that L1 reading cognitive processes are transferrable to L2 reading. The study also reveals that the orthographic structure of L1 significantly influences ESL reading. In a similar vein, Hornberger (1989) reviewed a massive body of research on biliteracy and bilingualism to build a theoretical framework for understanding biliteracy where L2 is ESL. Referring to the absence of a complete theory in 'literacy' and 'bilingualism', the author states that each literacy case is unique and context-

dependent, and so is each biliteracy case. Thus, each biliteracy case can be configured by referring to several interconnected continua (i.e., from micro to macro, from oral to literate, from reception to production, from L1 to L2, simultaneous versus successive exposure, similar versus dissimilar language structures, and convergent versus divergent scripts). This study's main contribution is refuting the 'literacy myth' which labels some languages as 'oral' while others are 'literate' in nature. The study also provides evidence for the role of positive transfer in L2 reading. Building on research results affirming a positive role for L1 literacy skills in building L2 literacy.

Likewise, Horst, White, & Bell (2010) proposed using L1-L2 related material to raise 'cross-linguistic awareness'. They regarded this type of material as 'a metalinguistic awareness' that is thought to contribute effectively to developing ESL reading skills. They piloted this teaching material intensively for one school year with ESL learners whose L1 was French and concluded that employing such materials successfully is feasible on the condition that teachers have a good command of both L1 and L2 and are willing to refer to L1 inside the classroom. Similarly, Buckwalter & Gloria Lo (2002) studied the simultaneous biliteracy development of a Taiwanese 5-year-old child for 15 weeks following the child's arrival in the US. The study aimed to investigate the nature of the 'emerging biliteracy' in Chinese and English and, more specifically, to find out whether the developing literacy in one language either hinders or enhances the development of literacy in the other language. The researchers concluded that children with simultaneously emerging biliteracy manage to develop an awareness of intentionality of print, the match between spoken and written words, and unique conventions of print in the two languages. This awareness serves as a base to develop literacy in any language(s) without any negative interference between emerging literacies.

Conversely, Li (2006) scrutinized biliteracy (in Chinese and English) and tri-literacy (in Mandarin, Cantonese, and English) in 3 ESL Chinese Canadian children. The author attributed achievement in developing cross-literacy to non-linguistic variables, namely, parents' perception of their status in the society to which they immigrated, their attitude to the role of their mother tongue, the quality of teaching in ESL, and school language policies. These factors shape ESL readers' language preferences and patterns of literacy development (Li, 2006). In the same vein, Bartlett (2007) related achievement in ESL literacy to identity. In other words, the study attributes success in reading in ESL to the extent to which a reader solidifies their identity as a successful learner. Reporting the results of a case study on a female bilingual high-school student, the author explains how this young woman positioned herself as a bilingual achiever through biliteracy practices.

In addition, Arab-Moghaddam & Senechal (2001) investigated the simultaneous development of biliteracy in Persian (L1) and English (ESL) for 55 children. The study procedures included word reading, phonological and orthographic processing skills, spelling, vocabulary knowledge, and a survey on past reading experience targeting children's parents. The results showed that performance in reading in Persian was better than that in English. Also, performance in all tasks is positively interrelated in each language.

Another line of research focused on investigating specific aspects of ESL reading. For instance, Durgunoğlu, Mir, & Ariño-Martí (2002) investigated the correlation of reading mechanics – including understanding how oral language is manifested in its written form through word recognition, knowledge of syntax, and oral proficiency – in L1 (Spanish) and ESL for 29 Hispanic American bilingual children. The study results showed that while word recognition does not relate with oral proficiency, which suggests that decoding of words is independent of verbal abilities, syntactic analysis abilities correlate in Spanish and English. Likewise, Brisbois (1995) examined whether L1 reading, L2 knowledge of lexicon and structural grammar, and L2 reading correlate. Using quantitative analysis of test scores in the above-mentioned areas, the author concluded that L1 reading ability is transferable to L2 only after learners develop an adequate level in L2 overall proficiency.

Another study in this research line investigated word recognition as one of the 'small skills' used by ESL readers (Kroll, Sumutka, & Schwartz, 2005). They provided evidence for the non-selectivity of lexical access while reading in ESL. This non-selectivity is due to competition between L1 and L2. However, ESL readers control for this non-selectivity using visual clues and a bottom-up flow of information. The study refers to the nature of orthography in L1 and L2, phoneme-grapheme correspondence in L1 and L2, the context of reading task, level of the bilingual reader in L2, and the nature of the reading task itself as factors affecting word recognition task (Kroll, Sumutka, & Schwartz, 2005).

One study of considerable relevance to the present study is that of Abu-Rabia & Siegel (2002), who looked into working memory, language, and reading skills of bilingual 56 Arab-Canadian children between the ages of 9 and 14. Results revealed that children developed language proficiency in both languages. Besides, the authors argued that there is a correlation between acquiring word and pseudoword memory and syntactic awareness in the two languages. Also, the study reported no significant differences between Arab bilingual children and their native English-speaking counterparts as far as working memory, language, and reading skills are concerned. The study concluded by stating that bilingualism has no negative influence on the simultaneous development of English and Arabic literacy skills. The authors also regard the effect of Arabic orthography as 'positive' due to the 'regular nature' of grapheme-phoneme correspondence.

Conversely, [Hayes-Harb \(2006\)](#) compared letter and word recognition of adult Arab ESL readers with that of non-Arab ESL and native English readers. The study reported the results of two experiments on letter and word recognition and concluded that both native English and non-Arab ESL learners variably outperformed Arab ESL readers in response time and accuracy of response. The author argued that Arabic orthographic system is a negative factor in the concurrent development of biliteracy in an ESL context.

However, some studies critically reported methodological flaws and ‘stereotypes’ in research on ESL biliteracy. [Bernhardt \(1994\)](#), for instance, critically examined 75 language teaching methods textbooks and 3 academic journals to investigate how ESL readers are portrayed. The analysis revealed that ESL readers are labelled as dialect speakers, disabled learners, possibly literate learners, and finally, learners with cultures holding ‘different’ stances towards literacy. Similarly, ESL reading research is characterized by a lack of clear criteria to distinguish poor ESL readers from readers with learning disabilities. In line with this conclusion, [Limbos & Geva \(2001\)](#) concluded that teachers’ assessment of ESL readers lacks accuracy. After reviewing academic records with notices of concern about ESL readers labelled as ‘children at risk of reading disability,’ the authors administered tests to 369 ESL children and compared test results with scholastic records. Results pointed out the low sensitivity of teachers’ evaluation of ESL learners’ reading ability.

Furthermore, ESL poor reading abilities are usually attributed to learners’ native culture ([Klingner, Artiles, & Barletta, 2006](#)). This study also concluded that L2 overall proficiency does not play a decisive role in ESL reading performance. In agreement with this result, [Pray & Jiménez \(2009\)](#) contended that ESL proficiency assessment results are not predictors of performance in ESL reading. They also pointed out that in comparison with native speakers, ESL readers can perform equally well or even better. Finally, the study lends little weight to socio-cultural variables in literacy learning ([Pray & Jiménez, 2009](#)).

In conclusion, studies on the relationship between ESL and L1 reading – including scant research on Arab ESL learners – tend to give contradictory results concerning the effect of L1 on reading in ESL. Moreover, conclusions drawn in some of these studies are not valid either due to having methodological flaws, or basing such conclusions on linguistic and cultural stereotypes.

• *The Study of EFL Reading Ability*

Studies on the relationship between EFL learners’ reading ability and that in L1 investigated various aspects of this relationship. Hypothesizing that L2 proficiency plays a more significant role than L1 reading ability in predicting L2 reading ability, [Lee & Schallert \(1997\)](#) attempted to explore how L2 proficiency and L1 reading skill contribute to L2 reading ability by testing Cummin’s Threshold Hypothesis. Scores of 809 Koreans teenage EFL learners in L1 and L2 reading tests, and an L2 proficiency test were quantitatively analyzed. The results of the analyses supported the threshold hypothesis. In a related manner, [Nikolov & Csapó \(2010\)](#) explored the relationship between reading ability in Hungarian as L1 and that in EFL for approximately 8600 Hungarian children between the ages of 6 and 14. The study results revealed a strong correlation between L1 and L2 reading comprehension skills. In another large-scale study, [Chuang, Joshi, & Dixon \(2011\)](#) collected and analyzed scores of reading tests in Mandarin Chinese (L1) and English (L2) for 30,000 nine-grade students in Taiwan. The study aimed to find out whether L1 reading ability significantly correlates to that in L2. The authors concluded that L1 and L2 reading abilities are significantly correlated, which supports Cummin’s developmental interdependence hypothesis.

On a similar account, [van Gelderen et al. \(2003\)](#) scrutinised the relationship between the English reading ability of Dutch students learning EFL as L2, Dutch students studying EFL as L3, and that in Dutch (L1). Reading ability was operationally defined to include language knowledge, speed of processing this language knowledge, and metacognitive strategies. The study revealed that the ‘nature’ of reading comprehension in Dutch as L1 (for Dutch monolinguals) and L2 (for Dutch bilinguals), and in EFL as L2 (for Dutch monolinguals) and L3 (for Dutch monolinguals) does not vary. However, there are some variations in reading skills.

Another line of research focused on specific aspects of EFL reading in relation to L1. For example, [Yau \(2011\)](#) looked into the role of mental translation when reading classical Chinese and English by Taiwanese EFL learners. The study adopted both Gadamer’s theory of hermeneutics and Vygotsky’s social-cultural theory as a theoretical framework for the analysis. Data collected included reading comprehension tests, questionnaires on mental translation, and think-aloud protocols. The study results showed that mental translation is positively associated with reading in L1 (Chinese) and L2 (English). However, learners hold ambivalent attitudes towards using mental translation during reading.

On a different account, [Mihaljević Djigunović \(2010\)](#) explored how the age at which EFL learners begin to learn English affects the L1-L2 relationship in general, and L1-L2 reading in particular where L1 is Croatian, and L2 is English. The author defined early beginners as students who start learning EFL before the age of 9, while late beginners are those who begin to learn EFL at or after the age of 10. Data was collected from 414 Croatian EFL learners who were tested in reading in Croatian and English. The study results suggested that early beginners outperform late beginners in reading. This significant difference is attributed to early beginners’

longer exposure to L2, which allows them to draw on previously developed L1 skills. Closely related, [Roller \(1988\)](#) examined the transfer of reading skills from Shona – an African language spoken in Zimbabwe – as L1 and EFL. The study aimed to decide on the age when Shona speakers should start learning reading in English. The 272 study participants took reading and vocabulary tests in Shona and English to assess the influence of text language, text originality (i.e., whether the text is original or translated), and student grade on the transfer of reading ability. The results of the study pointed out that there was no positive transfer of reading skills except for fifth graders, which suggests that it is possibly useful for EFL to delay receiving instruction in EFL reading. This result contrasts with that of the study of [Mihaljević Djigunović \(2010\)](#).

[Parry \(1996\)](#) looked into the relationship between cultural membership and readers' preferences as concerns reading strategies they use. The author employed participants from two distinct cultural groups, namely Nigerian secondary school students and Chinese university graduates. After administering a multi-task reading test and conducting interviews, the author concluded that whereas Nigerian EFL learners tend to use top-down reading strategies, their Chinese counterparts preferred using bottom-up reading strategies. These results are attributed to learners' different cultural backgrounds and previous L1 literacy experiences. In contrast, [Mokhtari & Reichard \(2004\)](#) compared the use of specific reading strategies and metacognitive awareness in both native speakers of English and Moroccan EFL learners when reading English for academic purposes. They concluded that despite belonging to different socio-cultural contexts and having different literacy experiences, the two study groups reported using similar strategies and strategy awareness.

[Steffensen, Goetz, & Cheng \(1999\)](#) reported the results of three experiments conducted on Chinese EFL readers of a narrative text in Chinese (L1) and English (L2). The study aimed to explore imagery experienced during reading. The research is grounded in the theory of cognition, which points out that while reading, there is a dual representation system: the verbal system, which depends on linguistic clues, and the nonverbal system, which relies on the representation of images. The study results showed that readers of the English text experienced fewer images than those reading the Chinese text. No significant differences were reported concerning emotional responses.

From the above review, it can be concluded that the vast majority of studies took an interest in investigating particular aspects of reading ability in either L2 or both L1 and L2. Little attention has been paid to scrutinizing the nature of overall reading ability in EFL in relation to its counterpart in L1. Moreover, research on the reading ability of Arab ESL/EFL learners in L2 as related to that in L1 remains scant. To the best of the author's knowledge, there is no published research on the correlation between the reading ability of Arab EFL learners in both L1 (Arabic) and L2 (English). Besides, EFL reading has been usually reported to be an area of difficulty for Arab learners of English ([Hayes-Harb, 2006](#)).

Method

• Research Design

This study attempts to explore the relationship between reading ability in L2 (EFL) and that in L1 (Arabic) across two EFL proficiency levels (i.e., intermediate and advanced). The study adopted a non-experimental criterion-group design because it included no manipulation of the independent variable (i.e., EFL proficiency level). It also compared the reading ability of Arab EFL learners (i.e. a quantitative dependent variable) across levels of EFL proficiency (i.e. a quantitative independent variable). The study controls for the variables of age group and linguistic/cultural background by equating the comparison groups on these variables. The study participants belong to the same age group (17 – 22 years) and shared the same linguistic and cultural background.

• Sampling

The study randomly sampled 36 Arab EFL university students studying English language and literature, drawn from a larger pool of 120 students. During data collection, they were second, third, and fourth-year students at a Saudi University. They have been studying EFL for about 14 years. They all acquired Arabic as their mother tongue, and they still used it as the primary medium of communication outside classrooms. These participants developed their ability to read in Arabic during their early school years (from 6 to 9 years). They also developed an ability to read in EFL during the first school stage (from 6 to 12 years). This means that they developed biliteracy in L1 and L2 almost simultaneously. They studied at a department where English is the medium of instruction.

• Data Collection

All the participants took a paper-based TOEFL test (Test of English as a Foreign Language) to determine their language proficiency level. The participants who agreed to take the test and participated in the study were formally invited to sign a letter of informed consent. The participants who reported that they have never taken this kind of test received one training session to equate all the participants on the variable of familiarity

with the test and to overcome the influence of novelty. During this session, they received input on the test, its sections, sub-sections, and test directions. One day after delivering this test orientation session, the participants sat for a retired version of TOEFL. Kuder-Richardson Coefficient (KR20) – a statistical tool employed to determine the reliability of binary measurement (e.g., test questions) – was used to investigate the test reliability. Referring to the test data, the degree of test reliability was 0.970. Within the framework of KR20, reliability is indicated by a coefficient of 0.90 or more.

An experienced independent rater graded participants' exam papers as per TOEFL scoring guidelines. As the study looks into the EFL reading ability of Arab university students, it was hypothesized that in lower proficiency levels, lack of overall language ability might interfere with the assessment of reading ability. As a result, participants with a score less than 450 were excluded from the study. It was determined that test-takers with scores ranging from 450 to 549 would be classified as intermediate EFL learners, whereas those whose scores are 550 and above would be categorized as advanced. To avoid selecting participants close to the cut-off scores, the author selected advanced-group participants with the highest grades and intermediate-group participants with the lowest scores to proceed with data collection procedures. The TOEFL scores of the 18 intermediate-group students ranged from 458 to 496, with a mean of 477 (SD =14.55). Their ages ranged from 18 to 21 with a mean of 19.4 (SD = 1.052). Based on test scores, too, the scores of the 18 advanced-level participants ranged between 589 and 640 with a mean of 614.5 (SD = 15.69). Their age range was again between 17 and 22, with a mean of 19.5 (SD = 1.23). As a result, 18 intermediate-and 18 advanced-level participants were chosen to take reading tests in English and Arabic.

The 36 participants then took a standardized reading comprehension test in English (Nelson-Denny Reading Comprehension and Vocabulary Test). The next day they took a standardized reading test in Arabic designed according to the Common European Framework of Reference for Languages by The Saudi National Centre of Assessment (Qiyas). The test focuses on word and passage comprehension and word meaning recognition.

Results

To answer the research questions on the relationship between reading ability in EFL and Arabic, the author applied quantitative data analysis measures. The aim of answering the first and second research questions was to investigate the possibility of the transfer of reading ability from L1 to L2. Scrutinizing the correlation between reading ability in L2 and L1 across the intermediate and advanced proficiency levels could give us insight into the validity of Cummin's Threshold Hypothesis. In this sense, if the hypothesis is proved, we tend to think about 'one reading ability' which evolves while developing L1 literacy, and is then transferred when considerable progress is achieved in L2. Conversely, if the hypothesis is rejected, we are given sensible reasons to think that reading ability in Arabic as a native language and that in EFL are independent abilities.

To answer the research questions, the author analyzed test scores using the Mann-Whitney test to measure the correlation between these scores in the two groups. As shown in Table 1, test scores are statistically processed to investigate correlation across two proficiency levels and gender. As noticed in Table 1, data shows a non-significant correlation between reading ability in L2 and L1 for intermediate-level participants, whereas the correlation is statistically significant for the advanced participants. This result was consistent for male and female participants. In this way, the results of data analysis tend to prove the Threshold Hypothesis. In other words, the correlation between reading in EFL (L2) and that in Arabic (L1) has not developed until readers have developed an overall advanced proficiency in EFL.

Table 1: *The Relationship Between Reading Ability in English and Arabic.*

Research Groups	Number of Participants	Mean Scores in Reading in Arabic	Mean Scores in Reading in English	Sum of Ranks in Reading in Arabic	Sum of Ranks in Reading in English	Significance at 0.05
Intermediate	Male (3)	56.60	63.50	663.00	674.50	0.09 (Not sig)
	Female (15)	79.24	80.24	1894.50	1923.00	0.39 (Not sig)
Advanced	Male (4)	84.58	88.22	1942	1954	0.05 (Sig)
	Female (14)	93.26	94.90	1964	1982	0.04 (Sig)

*P < 0.05; **P < 0.01; ***P < 0.001

As it appears in Table 1, female participants outperformed their male counterparts across all the reading tasks in both English and Arabic. Yet, the disproportion between the numbers of male and female participants – which reflects the actual demographic structure of the department to which participants belong – makes it difficult to draw a valid conclusion as concerns the implications of this result. It is also observed that advanced-level participants did better in both reading tasks in L2 and L1. Besides, it can be discerned that across both levels of proficiency and gender, participants' performance in reading in English surpassed that in reading in Arabic, as shown in Figure 1.

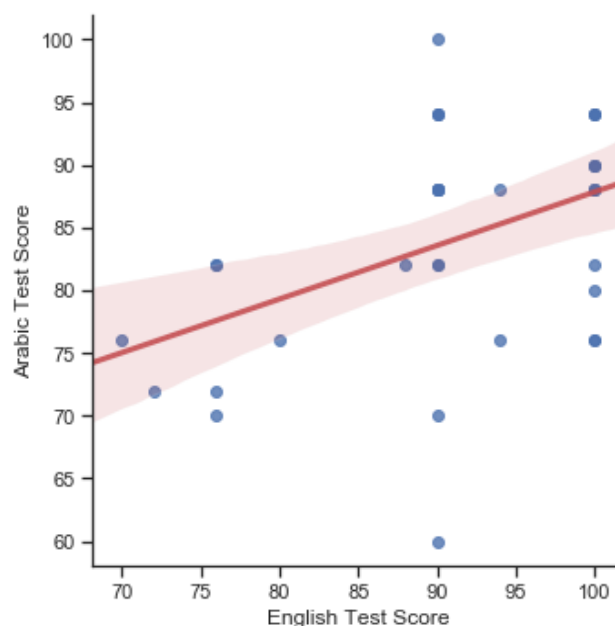


Figure 1: Results of Reading Tests in English and Arabic.

Discussion

The study results show a correlation between reading ability in EFL (L2) and Arabic (L1) among advanced-level Arab EFL learners, but not among their intermediate-level counterparts. This result proves Cummin's Threshold Hypothesis and supports the findings of a considerable number of studies on non-Arab ESL/EFL learners (Chuang, Joshi, & Dixon, 2011; Nikolov & Csapó, 2010; Roller, 1988; van Gelderen et al., 2003). However, this result is not backed by previous research on Arab EFL students in this particular research point. One explanation of the partial lack of correlation between reading abilities in EFL and Arabic is provided by Milton & Alhazmi (2020), who explained that Arabic words generally have three-consonant roots that serve as a 'base' for word-formation processes. Using evidence from eye-tracking research, the authors stated that reading in Arabic entails the removal of affixes to guarantee swift word recognition. They argued that this strategy is not transferable to reading in English because word formation in English is not 'tri-consonantal.' Therefore, Arab learners of English have to develop new strategies that depend on 'shape recognition.' This difference leads to 'delayed' development of L2 (English) reading ability. This interpretation could explain why reading ability does not develop adequately in EFL until readers reach higher levels of proficiency in L2.

Conversely, other linguists argue that building learners' robust literacy skills in Arabic is needed before starting to teach them literacy skills in EFL. This argument agrees with the findings of Roller (1988), who recommended delaying the teaching of EFL literacy. In this context, Hornberger (1989) referred to "the usefulness of the Koranic preschool experience for promoting reading skills" (Hornberger, 1989). She argued that Moroccan children significantly base their literacy in French as a second language, and later in EFL, on literacy they acquired in Arabic through Qur'anic preschool education although the text's "conceptual and linguistic complexity is far beyond the understanding of the young children who memorize it.

The level of the reading outstrips the children's speaking knowledge of the language; yet they do read it" (Hornberger, 1989). Such findings give weight to studies calling for capitalizing on L1 literacy to develop EFL reading ability. In this context, Bhooth, Azman, & Ismail (2014) referred to the usefulness of using Arabic as a resource to facilitate learning reading in EFL classrooms. They concluded that learners could use Arabic as a scaffolding strategy to explain new concepts while reading English literary texts. This comes in agreement with what Eisenchlas, Schalley, & Guillemin (2013) called for when they argued that "the cost of not investing in successful home language (L1) literacy programs will be higher in the long run than their implementation costs". They recommended that Australian educational institutions should support literacy programs in mother tongues – including Arabic – in an attempt to enhance literacy in ESL.

Conclusion

One of the implications for teaching EFL reading to Arab EFL learners would be their partly facing difficulty in reading in both L1 and L2. They would remain unable to draw upon reading skills they develop in L1 and use them in L2 until they create a sophisticated level of EFL proficiency. These results imply that

more efforts are needed to develop young learners' reading skills in Arabic before starting to teach them reading in English or any other foreign language. The revival of Koranic preschool education can contribute significantly to developing the Arabic reading skills of young learners through exposure to vast vocabulary and mastery of reading patterns that by far 'outstrip' children's repertoire of vocabulary and speaking ability. When developed and enhanced, it is that ability which learners can draw upon in reading in any foreign language, including EFL. It is also suggested that adequate time and effort should be dedicated to 'sustain' literacy skills developed in L1 even if the medium of school instruction is a foreign language.

Furthermore, using Arabic (L1) as a scaffolding strategy in EFL reading classrooms could be a useful tool in helping slower readers who struggle with reading in English. This strategy could be part of the remedial action plans adopted to help poor readers. This remedial work could also include enhancing reading skills in both L1 and L2 and using L1 to support slower readers at all levels of education, regardless of medium of instruction or content taught.

References

- Abu-Rabia, S., & Siegel, L. S. (2002). Reading, Syntactic, Orthographic, and Working Memory Skills of Bilingual Arabic-English Speaking Canadian Children. *Journal of Psycholinguistic Research*, 31(6), 661-678. doi: <https://doi.org/10.1023/A:1021221206119>
- Arab-Moghaddam, N., & Senechal, M. (2001). Orthographic and phonological processing skills in reading and spelling in Persian/English bilinguals. *International Journal of Behavioral Development*, 25(2), 140-147. doi: <https://doi.org/10.1080/01650250042000320>
- Atwill, K., Blanchard, J., Christie, J., Gorin, J. S., & García, H. S. (2009). English-Language Learners: Implications of Limited Vocabulary for Cross-Language Transfer of Phonemic Awareness With Kindergartners. *Journal of Hispanic Higher Education*, 9(2), 104-129. doi: <https://doi.org/10.1177/1538192708330431>
- Bartlett, L. (2007). Bilingual literacies, social identification, and educational trajectories. *Linguistics and Education*, 18(3-4), 215-231. doi: <https://doi.org/10.1016/j.linged.2007.07.005>
- Bernhardt, E. B. (1994). A Content Analysis of Reading Methods Texts: What are we Told about the Nonnative Speaker of English? *Journal of Reading Behavior*, 26(2), 159-189. doi: <https://doi.org/10.1080/10862969409547844>
- Bhooth, A., Azman, H., & Ismail, K. (2014). The Role of the L1 as a Scaffolding Tool in the EFL Reading Classroom. *Procedia - Social and Behavioral Sciences*, 118, 76-84. doi: <https://doi.org/10.1016/j.sbspro.2014.02.011>
- Brisbois, J. E. (1995). Connections between First- and Second-Language Reading. *Journal of Reading Behavior*, 27(4), 565-584. doi: <https://doi.org/10.1080/10862969509547899>
- Buckwalter, J. K., & Gloria Lo, Y.-H. (2002). Emergent biliteracy in Chinese and English. *Journal of Second Language Writing*, 11(4), 269-293. doi: [https://doi.org/10.1016/S1060-3743\(02\)00088-7](https://doi.org/10.1016/S1060-3743(02)00088-7)
- Chuang, H.-K., Joshi, R. M., & Dixon, L. Q. (2011). Cross-Language Transfer of Reading Ability: Evidence From Taiwanese Ninth-Grade Adolescents. *Journal of Literacy Research*, 44(1), 97-119. doi: <https://doi.org/10.1177/1086296X11431157>
- Cummins, J. (1979). Linguistic Interdependence and the Educational Development of Bilingual Children. *Review of Educational Research*, 49(2), 222-251. doi: <https://doi.org/10.3102/00346543049002222>
- Cummins, J. (2009). Literacy and English-Language Learners: A Shifting Landscape for Students, Teachers, Researchers, and Policy Makers. *Educational Researcher*, 38(5), 382-384. doi: <https://doi.org/10.3102/0013189X038005382>
- Durgunoğlu, A. Y., Mir, M., & Ariño-Martí, S. (2002). The relationships between bilingual children's reading and writing in their two languages. In *New directions for research in L2 writing* (pp. 81-100). Springer, Dordrecht. doi: https://doi.org/10.1007/978-94-010-0363-6_4
- Eisenclas, S. A., Schalley, A. C., & Guillemin, D. (2013). The Importance of Literacy in the Home Language: The View From Australia. *SAGE Open*, 3(4), 2158244013507270. doi: <https://doi.org/10.1177/2158244013507270>
- Hayes-Harb, R. (2006). Native speakers of Arabic and ESL texts: Evidence for the transfer of written word identification processes. *Tesol Quarterly*, 40(2), 321-339. doi: <https://doi.org/10.2307/40264525>
- Hornberger, N. H. (1989). Continua of Biliteracy. *Review of Educational Research*, 59(3), 271-296. doi: <https://doi.org/10.3102/00346543059003271>
- Horst, M., White, J., & Bell, P. (2010). First and second language knowledge in the language classroom. *International Journal of Bilingualism*, 14(3), 331-349. doi: <https://doi.org/10.1177/1367006910367848>
- Kamhi-Stein, L. D. (2003). Reading in two languages: How attitudes toward home language and beliefs about reading affect the behaviors of "underprepared" L2 college readers. *Tesol Quarterly*, 37(1), 35-71. doi: <https://doi.org/10.2307/3588465>
- Klingner, J. K., Artiles, A. J., & Barletta, L. M. (2006). English Language Learners Who Struggle With Reading: Language Acquisition or LD? *Journal of Learning Disabilities*, 39(2), 108-128. doi: <https://doi.org/10.1177/00222194060390020101>
- Koda, K. (1988). Cognitive process in second language reading: transfer of L1 reading skills and strategies. *Interlanguage studies bulletin (Utrecht)*, 4(2), 133-155. doi: <https://doi.org/10.1177/026765838800400203>
- Kroll, J. F., Sumutka, B. M., & Schwartz, A. I. (2005). A cognitive view of the bilingual lexicon: Reading and speaking words in two languages. *International Journal of Bilingualism*, 9(1), 27-48. doi: <https://doi.org/10.1177/13670069050090010301>

- Lee, J. W., & Schallert, D. L. (1997). The relative contribution of L2 language proficiency and L1 reading ability to L2 reading performance: A test of the threshold hypothesis in an EFL context. *Tesol Quarterly*, 31(4), 713-739. doi: <https://doi.org/10.2307/3587757>
- Li, G. (2006). Biliteracy and trilingual practices in the home context: Case studies of Chinese-Canadian children. *Journal of Early Childhood Literacy*, 6(3), 355-381. doi: <https://doi.org/10.1177/1468798406069797>
- Limbos, M. M., & Geva, E. (2001). Accuracy of Teacher Assessments of Second-Language Students at Risk for Reading Disability. *Journal of Learning Disabilities*, 34(2), 136-151. doi: <https://doi.org/10.1177/002221940103400204>
- Mihaljević Djigunović, J. (2010). Starting age and L1 and L2 interaction. *International Journal of Bilingualism*, 14(3), 303-314. doi: <https://doi.org/10.1177/1367006910367847>
- Milton, J., & Alhazmi, K. (2020). The Effect of Arabic Word Structure and L1 Reading Processes on the Structure of the English L2 Lexicon. In *First Language Influences on Multilingual Lexicons* (pp. 53-66). Routledge. doi: <https://doi.org/10.4324/9780429031410-5>
- Mokhtari, K., & Reichard, C. (2004). Investigating the strategic reading processes of first and second language readers in two different cultural contexts. *System*, 32(3), 379-394. doi: <https://doi.org/10.1016/j.system.2004.04.005>
- Nikolov, M. (2010). Interaction of early English and mother tongue. *International Journal of Bilingualism*, 14(3), 283-287. doi: <https://doi.org/10.1177/1367006910367853>
- Nikolov, M., & Csapó, B. (2010). The relationship between reading skills in early English as a foreign language and Hungarian as a first language. *International Journal of Bilingualism*, 14(3), 315-329. doi: <https://doi.org/10.1177/1367006910367854>
- Parry, K. (1996). Culture, literacy, and L2 reading. *Tesol Quarterly*, 30(4), 665-692. doi: <https://doi.org/10.2307/3587929>
- Pray, L., & Jiménez, R. T. (2009). Developing Literacy in Second-Language Learners. *Educational Researcher*, 38(5), 380-381. doi: <https://doi.org/10.3102/0013189X09339353>
- Roller, C. M. (1988). Transfer of cognitive academic competence and L2 reading in a rural Zimbabwean primary school. *Tesol Quarterly*, 22(2), 303-318. doi: <https://doi.org/10.2307/3586938>
- Steffensen, M. S., Goetz, E. T., & Cheng, X. (1999). A cross-linguistic perspective on imagery and affect in reading: Dual coding in Chinese and English. *Journal of Literacy Research*, 31(3), 293-319. doi: <https://doi.org/10.1080/10862969909548050>
- Thomson, S., Hillman, K., Schmid, M., Rodrigues, S., & Fullarton, J. (2017). *Highlights from PIRLS 2016: Australia's perspective*. Melbourne Vic: Australian Council for Educational Research (ACER). Retrieved from <https://research.acer.edu.au/pirls/2>
- van Gelderen, A., Schoonen, R., de Glopper, K., Hulstijn, J., Snellings, P., Simis, A., & Stevenson, M. (2003). Roles of linguistic knowledge, metacognitive knowledge and processing speed in L3, L2 and L1 reading comprehension: A structural equation modeling approach. *International Journal of Bilingualism*, 7(1), 7-25. doi: <https://doi.org/10.1177/13670069030070010201>
- Yamashita, J. (2004). Reading attitudes in L1 and L2, and their influence on L2 extensive reading. *Reading in a Foreign Language*, 16(1), 1-19. Retrieved from <http://hdl.handle.net/10125/66597>
- Yau, J.-I. C. (2011). Roles of mental translation in first and foreign language reading. *International Journal of Bilingualism*, 15(4), 373-387. doi: <https://doi.org/10.1177/1367006910380038>