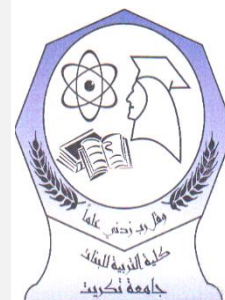




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A Cross- Linguistic Study on the Production of English Lexical Stress: Reliance on Language Proficiency Cue

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Keywords: <ul style="list-style-type: none">- L2 production- lexical stress- L1 interference- language proficiency	Abstract <p>Stress is an important phonological feature that exists in many languages of the world (e.g., English, Spanish, Turkish and Classical Arabic, etc.). It increases the articulateness and intelligibility in speech and communication mainly English as a phonemic language (Kiriakos & O'Shaughnessy, 1989). This study examines the L2 learners' performance of typologically two unlike languages in the production of English lexical stress. Iraqi Arabic and Chinese Malaysian L2 learners are included in the production experiment to allocate lexical stress in real and nonce words. The results of the experiment presented that Chinese Malaysian group realized significantly better than the Iraqi Arabic group in producing lexical stress and Iraqi Arabic subjects had an additional difficulty in the production of mismatch syllabic patterns. After computing and controlling the language proficiency variable for both language groups, their subjects' mean percentage scores were equitably alike and statistically no significant difference in performance. Nevertheless, the Iraqi Arabic learners were better at allocating stress in match syllabic patterns than Chinese Malaysian L2 learners, but the difference was also not significant suggesting that the chief difficulty in which L2 learners come across in obtaining English lexical stress was</p>
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Available online	concerning to L1 influence specifically stress patterns and tones. The study exhibited that lexical stress difference is inflexible for L2 learners irrespective of their native languages.
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دراسة لغوية مقارنة حول النطق للنبر على مستوى لكلمات الإنكليزية: الاعتماد على معيار

كفاءة اللغة

ا.م.د. حسن شعبان علي الثلاب

قسم اللغة الإنكليزية _ جامعة تكريت

<p>الخلاصة : النبر هو سمة صوتية مهمة موجودة في العديد من لغات العالم (على سبيل المثال ، الإنجليزية والإسبانية والتركية والعربية الفصحى ، إلخ). فهو يزيد من النطق والوضوح في الكلام والتواصل وخاصة اللغة الإنجليزية كلغة صوتية (Kiriakos & O'Shaughnessy ، 1989) تبحث هذه الدراسة في أداء متعلمي اللغة الثانية من لغتين مختلفتين من حيث النمط في النطق للنبر على مستوى الكلمة في اللغة الإنجليزية. تم تضمين متعلمي اللغة العربية العراقية والماليزية الصينية في تجربة النطق لتحديد النبر على مستوى الكلمة في الكلمات المعجمية وغير المعجمية. أظهرت نتائج التجربة أن المجموعة الماليزية الصينية حققت نتائج أفضل من المجموعة العربية العراقية في نطق النبر على مستوى الكلمات وأن الناطقين لهجة العربية العراقية واجهوا صعوبة إضافية في نطق المقاطع غير المتطابقة. بعد حساب متغير إتقان اللغة والتحكم فيه لكلتا المجموعتين اللغويتين ، كانت متوسط درجات المشاركين في الدراسة متشابهة بشكل منصف ولم يكن هناك فرق مهم إحصائيًا في الأداء. ومع ذلك ، كان متعلمي اللغة العربية العراقيين أفضل في تحديد النبر في الأنماط المقطعية للمطابقة مقارنة بمتعلمي اللغة الإنجليزية الماليزيين الصينيين ، لكن الاختلاف لم يكن كبيرًا أيضًا مما يشير إلى أن</p>	<p>الكلمات الدالة:-</p> <ul style="list-style-type: none">- اداء اللغة الثانية- النبر على مستوى الكلمة- تداخل اللغة الام- كفاءة اللغة <p>معلومات البحث تاريخ البحث:</p> <p>الاستلام: 2021_2_16</p> <p>القبول: 2021_3_17</p> <p>التوفر على النت</p>
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الصعوبة الرئيسية التي يواجهها متعلمي اللغة العربية في اتقان النبر على مستوى الكلمة الإنجليزية كانت تتعلق بتأثير اللغة الام على وجه التحديد أنماط النبر والنغمات. أظهرت الدراسة أن اختلاف النبر على مستوى الكلمة يشكل صعوبة لمتعلمي اللغة الثانية بغض النظر عن لغاتهم الأصلية .

1. Introduction

Lexical stress is a mental phonological characteristic of words that states the most prominent syllable in a word. Since lexical stress could be placed in various locations within a word, languages as English, Dutch, or Italian, are distinct in being identified as free stress languages. For that reason, the location of lexical stress could be mostly unpredictable or not completely liable by instructions in these languages. Thus, the speaker (L2 learners) may use facts taken from other different origins to allocate stress to a word such as understanding the distributional features of languages, the categorical rules and lexically stored information (Sulpizio et al., 2016). Roach (2009) simplifies that English word stress is greatly complex for the reason that its rules are not predictable for English syllabic structures and word affixes. Cruttenden (2008) also highlights that it is difficult to state any complete patterns for English stress system as there are lots of exceptions in its stress systems. Accordingly, many phoneticians and researchers have recommended that L2 learners could acquire lexical stress of specific words as part of the acquisition practice for each new lexical item (Howard, 2010). Therefore, it is basically a complex matter for L2 learners to manage the assignment of lexical stress in English. Additionally, similar to segmental phonemes, tones are lexically contrastive in Mandarin and the main acoustic correlate of tones is the fundamental frequency (f_0) system in excess of a syllable (Lee et al., 2008). Normally, the phonological tone is recognized phonetically by pitch. Conversely, it has been cited in literature that there are other feasible methods to express a phonological tone. In another word, tone can have various phonetic symbols. Obviously, tone could be articulated by extended duration, with or without phonetic pitch contour (Lockwood, 1983; Bethin, 2006; van der Hulst, 1999). Molczanow (2015) remarks that tone can interact with stress assignment, duration, and syllable structure. He also adds that tone can interact directly with vowel quality without the facilitating elements such as syllable structure or duration.

In speech production, the prosodic structure has been commonly accepted as a crucial component, since it transfers impressively large structural and discourse information (Herman, 2000; Selkirk, 1995; Swerts & Geluykens, 1994). However, models of transfer influence have been framed completely upon studies of segmental contrasts. They identify the significance of earlier phonological learning. Nevertheless, as they concentrate on segmental transfer effects, and avoid the interaction of the phonetic resemblances with structural differences which are unavoidably come across in even

the simplest matters of the prosodic interaction phenomena. Few studies, that thoroughly look at the phonetic properties of L2 prosody production of various language backgrounds, have presented how L1 phonology limits the production and of L2 prosodic patterns (Best, 1995; Flege, 1995; Kuhl, 1993). Zhang and Francis (2010) simplify that lexical stress has diverse characteristics in different languages. They add that the stress system in English and Spanish languages is contrastive in that words may simply differ in the position of stress, for example contract as a noun the first syllable is stressed and as a verb the second syllable is stressed. While the rules of lexical stress are fixed in other languages as French occurring on the last syllable of a word. However, native experience with a specific stress form may cause complications when learning the stress systems of a diverse language. For instance, in a sequence of stress studies (Dupoux, Pallier, Sebastian, & Mehler, 1997; Dupoux, Peperkamp, & Sebastian-Galles, 2001) established that French L2 learners come across difficulties in discriminating Spanish stress contrasts, they concluded that native listeners of languages with a fixed stress pattern might practice “stress deafness”. Dupoux et al., (2008) recommended that non-native listeners’ stress deafness could be caused by their failure to encode contrastive stress in their phonological symbols or system. Arciuli (2017) clarifies that lexical stress forms as presented by English previous studies show an imperative part in the production of words. L2 learners of English language normally comprehend problems in the production of English lexical stress as a result of the prosodic transference of their first language. Thus, it has been assumed that the problem of Iraqi Arabic and Chinese Malaysian L2 learners with the production of English lexical stress is caused by L1 stress systems and/or tonal transfer. Nevertheless, little research has been dedicated to discover the effect of L1 and language experience in the production of English lexical stress.

This study explains the prosodic transfer impacts on the production of English lexical stress patterns by Iraqi Arabic and Chinese Malaysian L2 learners of English. The present study basically aims to fill a gap in the literature about the effect of L1 stress systems and language proficiency across two typologically different prosodic system languages. Using a set of real and nonce words as stimuli that would comprise segmental transfer effects. In addition to the language proficiency grouping (beginner, intermediate and advanced) that might provide some relevant phonetic features that are required to master the target phonological differences in production. The current study concentrated on Iraqi Arabic and Chinese Malaysian L2 learners of English. The results demonstrate that L1 stress patterns and language proficiency have a significant effect on L2 learners’ performance for both language groups in the production of lexical stress. Language Experience intensely impacts a listener’s ability to identify and signify spoken words. In sum, the current study makes an effort to explicate the following questions: What is the overall performance mean percentage scores in the production of lexical stress based on language proficiency by both language group’s subjects? What are the overall mean percentages scores in the performance of both language group based on match and mismatch syllabic patterns? These questions were examined in a production experiment of real and nonce words.

2. METHODS

2.1. Subjects

Two different typologically language groups of 169 subjects took part in production experiment. One language group consists of 87 Iraqi Arabic native subjects (81 male and 6 female). The group's mean age was (range: 20-47). The second group of L2 learners was made up of 82 Chinese Malaysian native subjects with a mean age of 22 (18 male and 64 female). Iraqi participants ranged in age from 27 to 50 years of age (M=37), while Chinese Malaysian speakers were 19–30 years of age (M=23.5). The Iraqi speakers were all native Iraqi Arabic dialect, while the Chinese Malaysian speakers were all originally from Malaysia. All participants were recruited from UPM, UMP and UKM Universities and had normal hearing, speech, and language ability according to their self-report. All the participants were compensated RM 10 for taking part in this study.

2.2. Stimuli

Listeners in this study were presented with a wordlist comprises disyllabic and trisyllabic English real and nonce words that represent 22 syllable structure patterns in Iraqi Arabic which match and mismatch with English syllable structures. The total number of words is 88 which are of a noun grammatical class. In other words, four tokens for each syllable structure for the production task, as it usually occurs in multisyllabic words in isolation. The words are selected after the familiarity test done for 13 Iraqi and Malaysian students as syllable structures are chosen according to Iraqi Arabic syllable structures to distinguish syllable structures that match or mismatch with English patterns so they are expected to be familiar with these words. All stimuli were recorded by one male native speaker of British English.

2.3. Procedure

Subjects were offered a wordlist which comprises 106 (88 real and nonce words and 18 fillers), the nonce words were drawn from a specifically designed multilingual pseudo (nonce) word generator which is called Wuggy. It is a pseudo word generator particularly geared towards making nonce words for psycholinguistic experiments. Wuggy makes pseudo words (nonce words) in Basque, Dutch, English, French, German, Serbian (Cyrillic and Latin), Spanish, and Vietnamese (<http://crr.ugent.be/programs-data/wuggy>). The task comprises two parts: the production wordlist and the PSYCHOPY software programme which provides subjects with the recorded words.

A short practice session preceded the real task in which subjects listened to a number of English words with different stress positions to ensure that everyone understands what lexical stress is. Then, they listened to prerecorded test materials through a headset a Logitech at a self-adjusted comfortable listening level and they were individually tested in a quiet room and seated comfortably in front of a Dell Inspiron laptop computer at the UPM, UMP and UKM Universities. The computer was used to present stimuli and record each participant's voice. The actual experimental items were presented in written form. Every participant has to read aloud 88 experimental and 18 filler items. In every trial, participants see the stimulus for four seconds centered on the screen in isolation. This was done so as to familiarize participants with each item and prevent erroneous syllabification and pronunciation. In general,

participants considered the task to be easy and did not guess the aim of the study. They did not report any difficulties. The subjects are also instructed to respond as quickly as possible. This experiment takes approximately 5-10 minutes to be completed. Each token is presented once. If they could not produce the stimulus in the specified time was considered as missing trial and wrong response. The number of trial for Iraqi Arabic group was (9222) (106x87) and the Chinese Malaysian group was (8692) (106x82). Thus, the total number of trials for both language groups was (17914) (106x169).

3. RESULTS

3.1 Language group production results

Overall Chinese Malaysian subjects in the production of lexical stress ($M = .7079$, $SD = .0740$) scored higher than Iraqi Arabic subjects ($M = .6630$, $SD = .0940$). Based on the results of independent samples t -test, $t(167) = -3.43$, $p = .001$, 95% CI $[-.07077, -.01913]$. Since the significant value was smaller than alpha at .05 level of significance, the null hypothesis was rejected. It can be concluded that there is a significant difference in the performance of both language groups mean percentage scores in the production of lexical stress. See Figure 1.

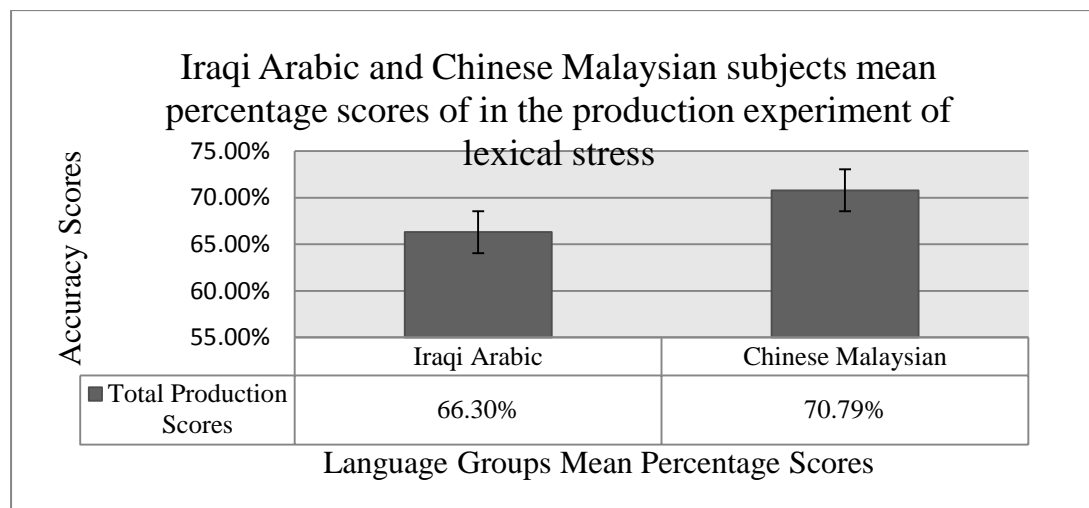


Figure 1. Shows the mean percentage scores in the production of lexical stress of both language groups.

The performance of Chinese Malaysian language group in the production of lexical stress was (70.79%) which was found to be better than the Iraqi Arabic performance in the same experiment with a mean percentage score (66.30%).

3.2 Language proficiency effect

3.2.1 Iraqi Arabic language proficiency results

An analysis of variance showed that the effect of language proficiency on the production of stress by Iraqi Arabic subjects was significant, $F(2, 84) = 15.57$, $p = .000$, see Table 1. Since the significant value is smaller than alpha .05 level of significance, we reject the null hypothesis. Therefore, it can be concluded that there was a significant effect of language proficiency on subjects' performance mean percentage scores in the production of lexical stress.

Table 1. Iraqi Arabic proficiency levels mean percentage scores in the production of lexical stress.

One -Way ANOVA						
Proficiency Levels	N	Mean	Std. Deviation	df	F	Sig.
Beginner	38	.622	.0942	2	15.57	.000
Intermediate	26	.653	.0710	84		
Advanced	23	.741	.0674	86		
Total	87	.663				

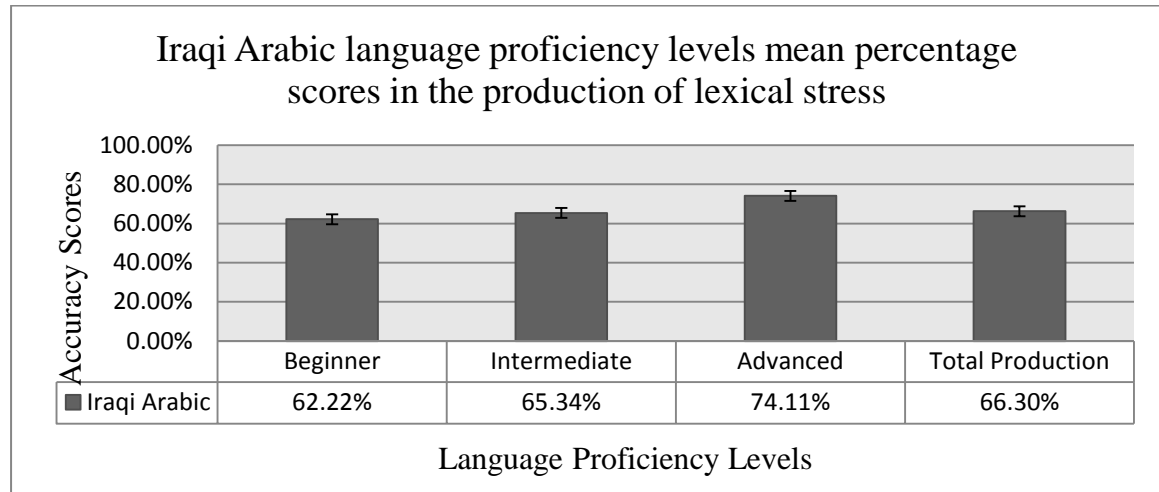


Figure 2. Presents Iraqi Arabic mean percentage scores in the production of lexical stress based on language proficiency levels.

Iraqi Arabic language proficiency levels subjects vary in their performance mean percentage scores in lexical stress production experiment. Advanced subjects performed better than the other two proficiency levels with a mean percentage score (74.11%). In contrast, the intermediate subjects also performed well with a mean percentage score (65.34%). Whereas the mean percentage scores of the beginner subjects in the production of English lexical stress was (62.22%) which was the lowest mean percentage score see Figure 2. Above which simplify the variety in subjects performance mean percentage scores in the production of lexical stress.

3.2.2 Chinese Malaysian proficiency levels results

An analysis of variance showed that the effect of language proficiency on production of lexical stress by Iraqi Arabic subjects was significant, $F(2, 79) = 7.35, p = .001$, see Table 1. Since the significant value is smaller than alpha .05 level of significance, we reject the null hypothesis. Therefore, it can be concluded that there was a significant effect of language proficiency on subjects performance mean percentage scores in the production of lexical stress.

Table 2. Chinese Malaysian Language Proficiency Performance in the Production of Lexical Stress.

One-Way ANOVA						
Proficiency Levels	N	Mean	Std. Deviation	df	F	Sig.

Beginner	20	.658	.0590	2	7.35	.001
Intermediate	38	.715	.0734	79		
Advanced	24	.736	.0688	81		
Total	82	.707	.0740			

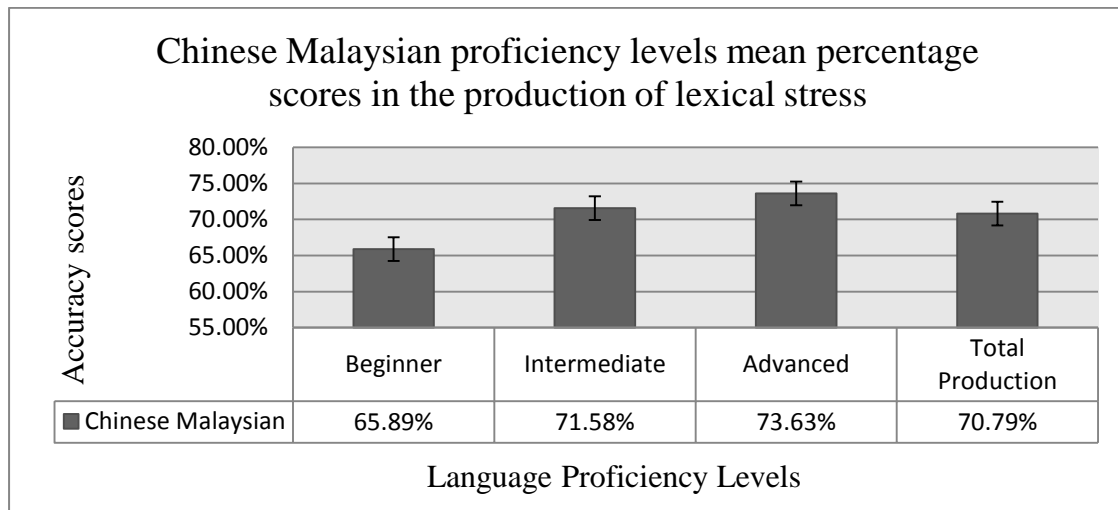


Figure 3. Presents Chinese Malaysian Proficiency Levels Mean Percentage Scores in the Production of Lexical Stress.

The Chinese Malaysian proficiency levels vary in their performance mean percentage scores in the production of lexical stress in real and nonce words. The advanced group performed better than the other two proficiency groups with a mean percentage score (73.63%). In contrast, the intermediate group also performed well with a mean percentage score (71.58%). Whereas the mean percentage scores of the beginner group in the production of English lexical stress was (65.89%) which was the lowest mean percentage scores. Figure 3. Above clarifies the disparity in the production of lexical stress performance mean percentage scores.

3.2.3. Language proficiency groups interaction

A One-Way between groups ANOVA was performed to compare the impact of language proficiency on subjects' performance mean percentage scores in the production of lexical stress. Subjects were divided into three levels based upon their language proficiency scores. The result variable was found to be normally distributed and equal variances are assumed based upon results of Leven's test ($F(163) = 1.25, p = .286$). There was a statistically significant differences in the production scores for the three proficiency levels ($F(2, 163) = 12.6, p = .00, \eta^2 = .28$). The degree of difference in the means and effect size was large (partial eta squared = .28). See Figure 4. Below.

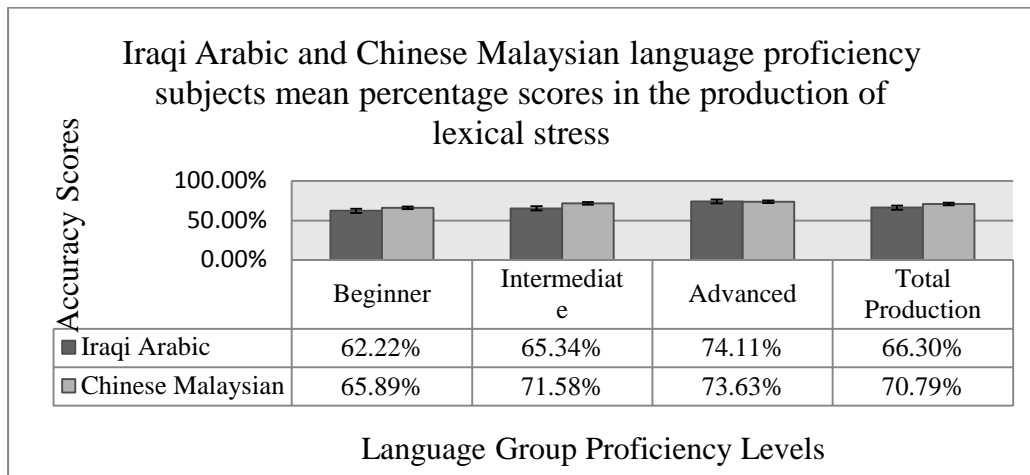


Figure 4. Presents Iraqi Arabic and Chinese Malaysian proficiency levels mean percentage scores in the production of lexical stress.

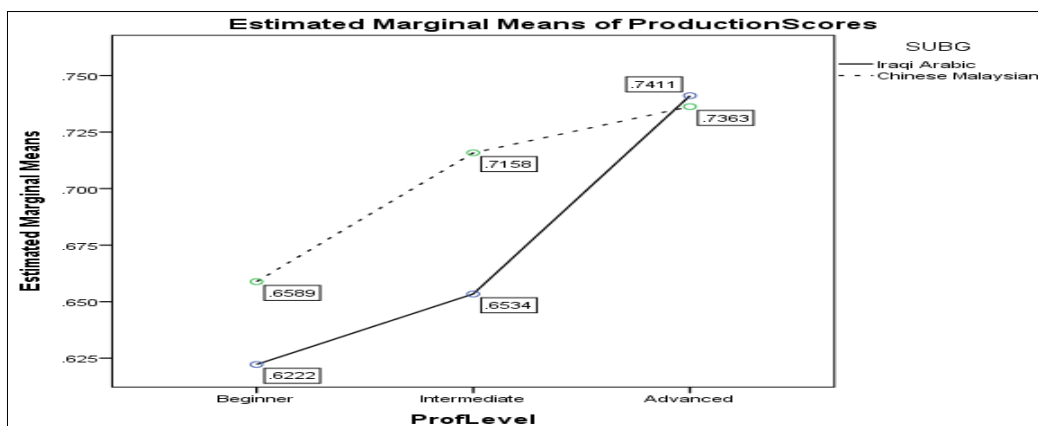


Figure 5. Shows both Language groups' proficiency levels interaction.

3.3. Syllable condition and L1 effect

The Iraqi Arabic subjects mean percentage scores in the production of lexical stress in match syllable patterns ($M = .8912$, $SD = .0799$) scored higher than Chinese Malaysian subjects ($M = .8651$, $SD = .0885$). Based on the results of independent samples t -test, $t(96) = 1.530$, $p = .129$, 95% CI $[-.00776, .05991]$ see Table 1. Below, since the significant value was larger than alpha, the null hypothesis was not rejected. It can be concluded that subjects' performance in the production of lexical stress in match syllable patterns had no significant effect on their mean accuracy scores. However, the Iraqi Arabic subjects mean percentage scores in the production of lexical stress in mismatch syllable patterns was ($M = .5585$, $SD = .0987$) scored lower than Chinese Malaysian subjects ($M = .6180$, $SD = .0851$). Based on the results of the independent samples t -test, $t(96) = -3.195$, $p = .002$, 95% CI $[-.09651, -.0225]$, since the significant value was smaller than alpha at .05 level of significance, the null hypothesis was rejected. It can be concluded that there is a significant difference in the production of lexical stress in mismatch syllable patterns.

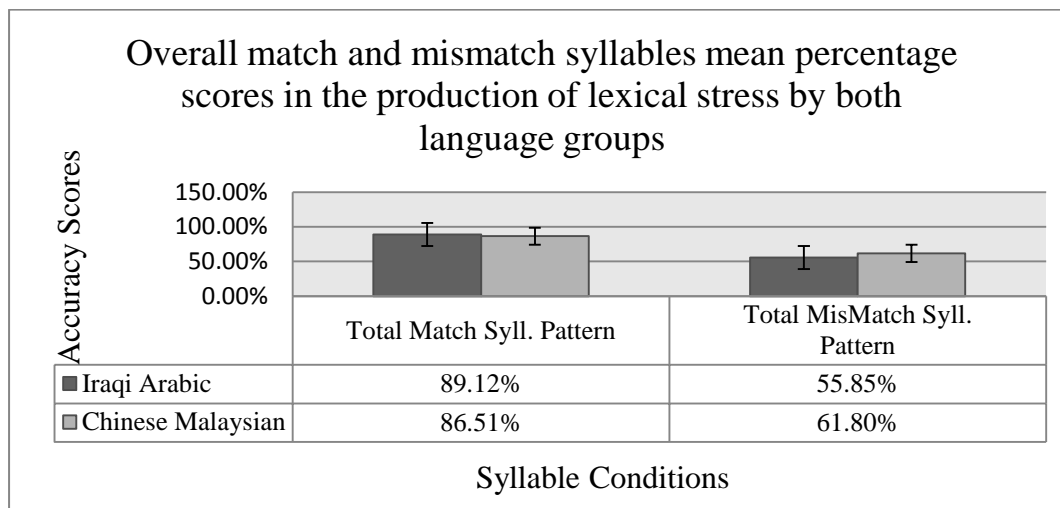


Figure 6. Presents the mean percentage scores in the production of lexical stress in match and mismatch syllables.

Figure 6. Presents the mean percentage score of Iraqi Arabic subjects which was (89.12%) in the production of lexical stress in match syllable patterns. In contrast, the mean percentage score for Chinese Malaysian group was (86.51%). It is obvious that the Iraqi Arabic language group was found to perform better than the Chinese Malaysian language group in the production of lexical stress in match syllable patterns. On the contrary, the Chinese Malaysian subjects mean percentage score in the production of lexical stress in mismatch syllable patterns was (61.80%) which is higher than the Iraqi Arabic subjects mean percentage score (55.85%).

3.4. Word category and syllable condition interaction

A two-way repeated measured analysis of variance (ANOVA) was conducted on the influence of two independent variables (real words, nonce words) on the Iraqi Arabic and Chinese subjects' performance mean percentage scores group (N=98) in the production of lexical stress. Real words include two categories (match and mismatch syllabic patterns) and nonce words consist of two categories (match and mismatch syllabic patterns). All effects were statistically significant at the .05 significance level. The main effect of the Iraqi Arabic in real words type yielded an F ratio of $F(1, 96) = 37.96, p < .000$, indicating a significant difference between match real syllabic patterns ($M = .9286, SD = .0708$), mismatch syllabic patterns ($M = .5848, SD = .1059$). Whereas the main effect for nonce word type yielded an F ratio of $F(1, 96) = 37.96, p < .000$, indicating a significant difference between match nonce syllabic patterns ($M = .8537, SD = .1187$), mismatch nonce syllabic patterns ($M = .5322, SD = .1214$). The interaction effect was significant ($F(1, 96) = 24.12, p < .000$). However, all effects were statistically significant at the .05 significance level for Chinese Malaysian subjects. The main effect for real words type yielded an F ratio of $F(1, 96) = 37.96, p < .000$, indicating a significant difference between match real syllabic patterns ($M = .8753, SD = .9856$), mismatch syllabic patterns ($M = .6468, SD = .0944$). The main effect for nonce word type yielded an F ratio of $F(1, 96) = 37.96, p < .000$, indicating a significant difference between match nonce syllabic patterns ($M = .8549, SD = .1050$), mismatch nonce syllabic patterns ($M = .5892, SD = .11274$). The interaction effect was significant ($F(1, 96) = 24.12, p < .000$).

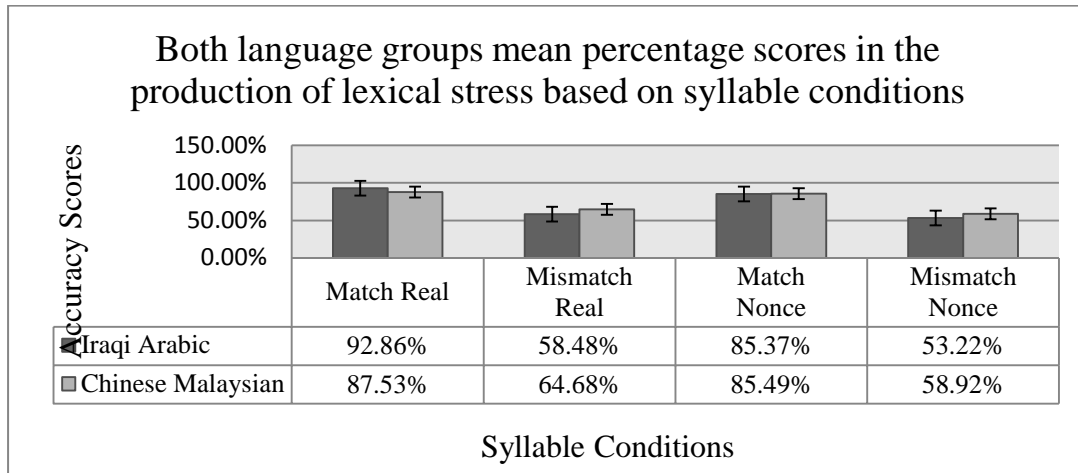
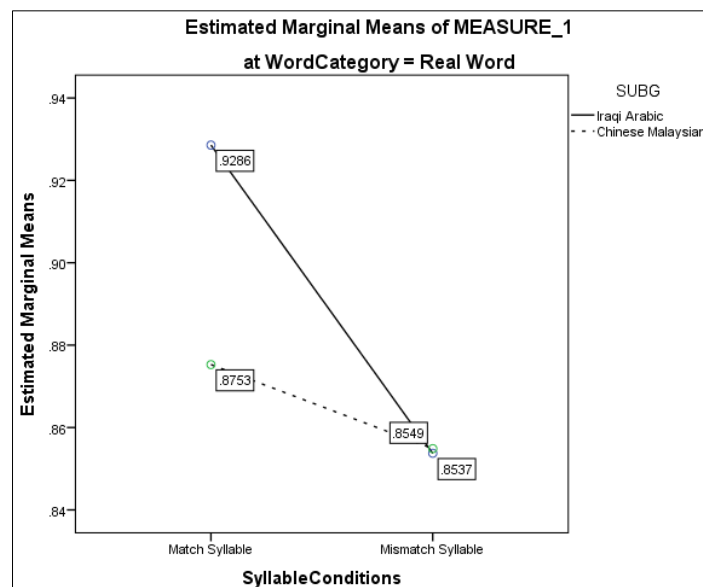


Figure 7. Presents language groups mean percentage scores in the production of lexical stress based on syllable condition.

As shown in Figure 1 the mean percentage score of the Iraqi Arabic language group was (92.86%) in the production of lexical stress in match real syllable patterns. In contrast, the mean percentage score for Chinese Malaysian group was (87.53%). Whereas the case is different in mismatch real syllable patterns in which the Chinese Malaysian language group scored (64.68%) which is higher than that of the Iraqi Arabic subjects mean percentage scores (58.48%). However, it is obvious that the Iraqi Arabic language group was found to perform worse than the Chinese Malaysian language group in the production of lexical stress in match and mismatch nonce syllable patterns. Chinese Malaysian subjects mean percentage score in the production of lexical stress in match nonce syllable patterns was (85.49%) which is higher than the Iraqi Arabic subjects mean percentage score (85.37%) and the Chinese Malaysian mean percentage scores was (58.48%) in the production of lexical stress in mismatch nonce syllable patterns in contrast with the mean percentage scores of Iraqi Arabic subjects (53.22%).



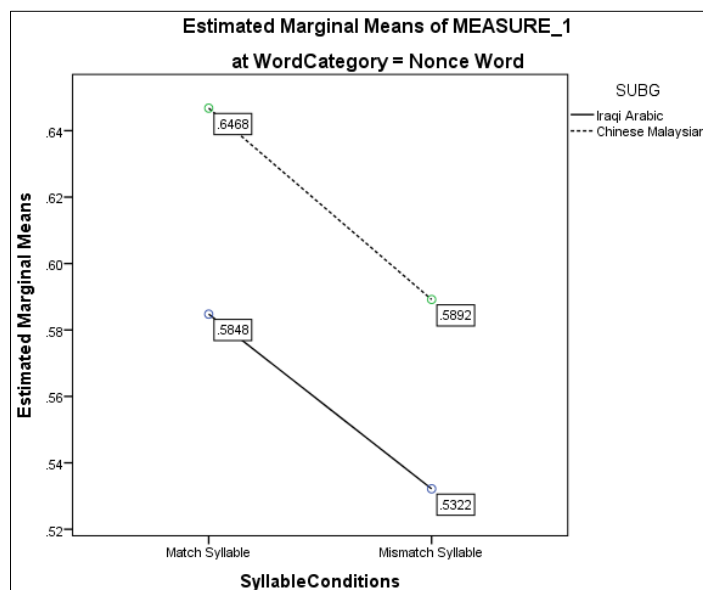


Figure 8. Shows the profile plots for both language groups in the production of lexical stress based on syllable conditions.

4. DISCUSSION

The main purpose of the first research question was to test how L1 stress patterns influence the performance of L2 learners in production of lexical stress. In the production experiment, speakers of two typologically different languages: Iraqi Arabic and Chinese Malaysian were tested. There is no doubt that L1 has a strong influence on the target language during the process of second language acquisition. This influence results from similarities and differences between L1 and L2. Odlin (2003) considered that language transfer affects all linguistic subsystems including phonology. As a matter of fact, Stress Deafness Model (Peperkamp & Dupoux, 2002) does not make any predictions of non-stress languages as it proposes a hierarchy of languages with only predictable stress languages. Accordingly, the results attained for the effect of language are expected regarding the production of lexical stress for both language groups and they go in line with the expectations made in Stress Typology Model (Altman & Vogel, 2002) and also support the results of Altmann s' (2006). In another words, the performance of non-stress languages is to some extent close to the performance of the native speakers in the production of lexical stress. Stress Typology Model provides an explanation for the better performance of non-stress languages which is the lack of the stress system in their phonology. Thus, the Chinese language group performed better than the Iraqi Arabic language group in this task.

Additionally, the overall performance for each language group might be affected by language proficiency range of subjects. It is also expected that L2 learners' aptitude in the production of English lexical stress may be improved with an increasing in the level of language proficiency. The adopted models expected that this influence is impossible and that the degree of stress 'deafness' influenced by the features of the L1s regardless the amount of exposure to L2. For the most part, these models made important inferences for L2 learners of predictable stress languages that they could not perceive or produce stress at the same range as non-stress languages L2 learners did because they are stress deafness. As a result non-stress language L2 learners are expected to perform better in the production and perception of lexical stress. Kijak

(2009) explained that the inconsistent and inaccurate statistics in the previous studies in the production and perception of lexical stress were mainly because the small and unsatisfactory numbers of subjects in each proficiency level for each language group. Thus, these studies dealt with the data descriptively as they might reveal trends that clarifying the likely influence of language proficiency. However, to get accurate statistical results the current study fills this gap in literature with three language proficiency levels and large numbers of subjects within each level and language group. Each language group consists of a good-sized number of subjects for beginners, intermediate and advanced groups. The results show a rise in scores from one language proficiency level to another. This result proposes that language proficiency has a direct effect on L2 learners' ability in the production of lexical stress. This is actually suggested by both stress perception and production models. It is also concluded that subjects' ability to produce stress can be improved with an increasing in language proficiency level. The performance of both language groups (Iraqi Arabic and Chinese Malaysian subjects) increased across different proficiency levels. However, their performance does not vary much especially for the advanced level, they are to some extent the same and there was no statistically significant difference between them, though the case might be different for beginner and intermediate levels.

Accordingly, advanced subjects of both language groups were able to perform better than the beginner and intermediate proficiency levels in the production of lexical stress. Another drawback stated in the previous studies the system of classification of subjects into proficiency levels, as there might have been some differences between the methods in which different institutes classified their learners which in turn might have an effect on the results. The present study makes use of all possible issues that may affect the results. Making a direct Oxford Placement Test for each subject before trying the perception and production experiments that could assist to determine the exact level of language proficiency of each subject. Accordingly, it was expected to find a slight improvement in the performance of each subject with the rising in the proficiency level for both language groups. Therefore, the results of the current study does not go in line with Dupoux et al. (2008) regarding the French subjects who were unsuccessful to make lexical representations of contrastive stress in L2 Spanish. This may suggest that for speakers who lack a certain feature in their L1 lexicon, it may no longer be possible to produce that feature in L2. The current results also do not go in line with those obtained by Wayland and Guion (2004) concluding that English natives were not improving on their perception of Thai tones after training in contrasting to the Chinese subjects, along with those by Guion (2005) clarifying that Korean natives requiring the same abstract representation as the English for stress. This result goes in line with Flege's (1995) idea that perceptual ability remains adaptive over a lifetime. Best (1995) declares that within the outline of the Direct Realist Theory, more exposure to the L2 even as the learners approach adulthood makes the classification change and reorganization possible. Yu (2012) also supports the claim that L2 experiences play a role in the accuracy of the production and perception L2 phonological system. The results of the present study also support the findings of Bavandpour and Thai (2014) in the sense that language proficiency has an effect on the mean percentage scores of a particular language group. Kijak (2009) adds in this regard that though the results of some previous studies confirm that language proficiency has no effect on L2 learners' performance in the perception and

production of lexical stress, but they do not ignore the probability of such a claim either.

5. Conclusions

The focus of the present study was to test the prosodic transfer impacts on the production of English lexical stress patterns by Iraqi Arabic and Chinese Malaysian L2 learners of English and to examine whether the results of the current study go in line with the claims made by SDM and STM for predictable stress language and non-stress language L2 learners. The results revealed that Iraqi Arabic and Chinese Malaysian ESL learners' performance in the production of English lexical stress varied as a role of their proficiency in their second language and their native language. It was proved that experience has an important effect on subjects' performance. Beginners and intermediate L2 learners committed more errors in the assignment of lexical, in contrast to advanced learners and there was a significant difference between them. However, the degree of difficulty tends to be different from one variety of language to another among learners depending on their knowledge of L2. The performance of both language groups were good in the production of lexical stress in real and nonce words, therefore, it seems that the results of the study in line with the claims of the models adopted. To investigate L1 effect in the production of lexical stress, it was necessary to control the effect of language proficiency for both language groups. Accordingly, it was obvious that the Iraqi Arabic L2 learners' performance in match syllable structure was much better than mismatch syllable structure. To sum up, the investigation adds that some of the prosodic incorrectness in the production of L2 lexical stress was predictable such as L1 interferences. Thus, additional studies are required to improve teaching methods to lessen these L1 transfer effects.

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