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Code-Switching Between Informal Iraqi Dialect and English language Among Iraqi Arab Speakers via WhatsApp Application: Linguistic and Non-Linguistic Factors

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ABSTRACT

Code-switching is described as the shifting that occurs between two or more languages concurrently within one conversation. This study aims to examine the application of code-switching between Informal Iraqi Dialect (IID) and English language among Iraqi Arab speakers of English via one of the smartphone applications, namely WhatsApp Messenger (WM). The study also seeks to recognize the types of code switching and motivations among Iraqi students of English for switching from IID into English language. This research adopted a qualitative approach, which involved Fifty (50) typed conversations of twenty (20) Iraqi post-graduate students studying at Universiti Putra Malaysia (UPM). Data were collected via two instruments, dubbed WM application to gather the typed conversations and semi-structured interviews. The results obtained from the WM application indicated that the most predominant type of code-switching (CS) used by the participants was intrasentential CS, especially the intra-lexical code-switching. The findings suggest that the

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E-mail addresses: ahmdartss@yahoo.com (Ahmed Abdulateef Sabti) smrashid@upm.edu.my (Sabariah Md Rashid) ed.huzaifa.youssef@uoanbar.edu.iq (Hutheifa Yousif Turki) *Corresponding author majority of the Iraqi students are inclined to code-switch to English language in smaller parts within the word boundary. The analysis of the interview data disclosed three motivations for the application of codeswitching, namely linguistic, technological, and political factors.

Keywords: Code-switching, informal Iraqi dialect, Iraqi monolingual speakers, WhatsApp tool

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INTRODUCTION

Nowadays, people have the tendency to utilize social networking as a means of meeting, interacting and sharing ideas with others (Anderson et al., 2010). Social networking has contributed the creation of new opportunities for interactions and collaborations among people either in social contexts such as those involving friendship or in educational contexts such as those involving teachers and students. Social networking applications such as Facebook, Twitter, LinkedIn, and WhatsApp Messenger (WM) have become widely used in people's everyday communication.

In regards to the most recent popular social network applications, WM is a proprietary, cross-platform instant messaging application for smartphones. It is used to send and receive messages from individuals such as friends, family members, teachers, and students. WM is a commonly available technological tool offering many advantages for people's communication and interaction in both written and spoken modes in their mother tongue, a language common to them, or by switching between two languages.

The practice of switching to another language is common among multilingual communities and is a common indicator of language contact (Ting, 2007). Switching occurs when bilingual or multilingual speakers switch and use words from different languages in their interactions (Myers-Scotton, 1993). Eldridge (1996), for instance, mentioned possible factors that led to the occurrence of code-switching (CS)

from one language to another, specifically, the linguistic and social-psychological factors. As for the former, CS occurs when individuals in the conversation are unable to express themselves in one language, which could be due to the lack of proficiency in the target language. In this case, CS serves to fill the void in the target language (L2) which is not known or understood (Cook, 2013; David, 2003). In contrast, the social-psychological factor involves speakers' conveying their attitudes to listeners.

Code switching, which could occur between two or more languages, is a common phenomenon among bilingual and multilingual speakers, and this phenomenon has been studied by various researchers (Amazouz et al., 2018; Cahyani et al., 2018; Eldridge, 1996; García et al., 2018; Milroy & Muysken, 1995). CS is defined as a communicative method which involves switching from one language to another in the same discourse by the same speaker in order to facilitate the communication process for social and educational objectives (Amazouz et al., 2018; Bahous et al., 2014; Cahyani et al., 2018; Chung, 2006; García et al., 2018; Ismail, 2015; Larbah, 2013; Milroy & Muysken, 1995; Mujiono et al., 2013; Then & Ting, 2009). The practice of code switching has different impacts on different speech communities. A speech community may only borrow some lexis from other languages. But, the constant use of code-switching in phrases and sentences can result in the invention of new languages (Eldridge, 1996; Milroy & Muysken, 1995).

Code switching from Arabic to English is a common phenomenon among Arab speakers of English (Abalhassan & Alshalawi, 2000; Al-Rowais, 2012; Amazouz et al., 2018; Bahous et al., 2014; Isamil, 2015; Ziamari, 2007). Such behaviours were studied among Arab speakers in the United States who use English as a foreign language (Abalhassan & Alshalawi, 2000). Their study revealed that all the respondents switched from Arabic into English and vice versa to some degree in their conversations because they did not recall terms in Arabic, and it was easier to use the equivalent terms in English and vice versa. This may be ascribed to their lack of linguistic competence which is deemed a key factor in leading to occurrences of code-switching. Besides that, several academicians also reported that linguistic competence acted as a significant factor in enhancing individuals' proficiency levels in a target language (Ariffin & Husin, 2011; Magid & Mugaddam, 2013). Another study in the Arab world was undertaken by Bahous et al. (2014) who examined the phenomenon of code-switching in the Lebanese context. Their findings revealed that the respondents switch in their classes for the purpose of better learning. This study also disclosed that code-switching contributed to the enhancement of the learning process. Other two studies were carried out in Saudi Arabia by Al-Rowais (2012) and Ismail (2015). Al-Rowais's (2012) study concluded that the participants had a tendency to switch from Arabic into English for the purpose of enriching meaning or strengthening the

effect of expressions. As for Ismail's (2015) study that sought to identify the type of codeswitching from Arabic to English among young bilingual Saudi Arabian students, it was perceived that the participants were likely to switch from Arabic into English in terms of single nouns and adjectives. It could be argued that the main reason for the occurrence of code-switching might be the lack of linguistic competence whereby the learners were not able to convey their message to a listener. To this end, such individuals resorted to switching from a language to another in order to cultivate their attitudes in conveying their message to the listener.

The practice of CS could be a threat to a national language (e.g., Arabic language). For instance, a study by Dar (2016) examined the influence of code switching on Pakistani learners' native identity and their attitudes toward the second language (L2). The findings of this study revealed that English as a second language (ESL) posed a threat to the Pakistani learners' national languages (e.g., Urdu and other regional languages), their identity, and also the Pakistani culture. This could be an indicator of the learners' gradual shift from their native culture to the Western culture attacking the national identity of the Pakistani learners. Similarly, another study conducted by Ziamari (2007) on code-switching between Arabic and French languages used by Moroccan Arab speakers in Morocco disclosed that Moroccan Arab speakers used CS immensely and frequently in their everyday utterances both inside and outside their community of speech. In fact, French language constitutes a threat to the Arabic language of the Moroccan people and has corrupted and seriously influenced the Moroccan dialects (Hachimi, 2013; Post, 2015; Ziamari, 2007). The recurring use of code-switching between French and Arabic language has led to the borrowing of numerous words (Hachimi, 2013; Post, 2015).

Similarly, Iraqis tend to codeswitch sometimes in their conversations. Mohammed et al. (2015) had undertaken a study in Iraq with Iraqi EFL undergraduate students as subjects of the study. Based on their findings, four factors were detected, namely lack of proficiency in L1, linguistic, technological, and political factors that led these Iraqi undergraduate students to switch from Arabic into English. Furthermore, as Iraqis are a part of Arab world, this is indicative that Arab people are likely to codeswitch between Arabic and English in their communication (Abalhassan & Alshalawi, 2000; Al-Rowais, 2012; Amazouz et al., 2018; Bahous et al., 2014; Hachimi, 2013; Ismail, 2015; Ziamari, 2007). Iraqi students have a tendency to code-switch between Arabic and English in their communication on the WM application with other Iraqis, especially with the Informal Iraqi Dialect (IID). The occurrence of code-switching among Iraqis may affect their first language (Arabic). This notion is supported by some academics in that the practice of code-switching has negative influences on speakers' L1, including causing the loss of L1 fluency (Dar, 2016; Sert, 2005).

From these reviews, it is clearly seen that there is an extensive amount of research on code-switching among various speech communities. However, many studies tended to focus on existing multilingual communities rather than monolingual communities such as Iraqi Arab speakers using the WM application. Thus, the current study aims to identify the types of codeswitching patterns with a focus on the Informal Iraqi Dialect (IID) and English via the WM application among Iraqi male post-graduate students and to investigate their motivations for code-switching from Arabic to English.

Types of Code-switching

CS takes place at different levels of speech. Code-switching occasionally happens among the turns of diverse speakers in the same conversation, perhaps in clauses when speakers switch within the phrases they use in a conversation, or within a single sentence when they use words or terms from different languages in one sentence (Milroy & Muysken, 1995). In short, CS occurs at different sentence levels: between sentences, clauses, or within single sentences. Myers-Scotton (1993) classified CS into two categories as either intersentential switching (between sentences), or intra-sentential switching (within a single sentence or sentence fragment). However, Poplack (1980) classified code-switching into three categories: tag-switching, intersentential switching, and intra-sentential switching.

Tag Switching

Tag switching is defined as a practice where learners attach a language tag entirely onto another language during the utterances. It is also described by Qian et al. (2009) as "the insertion of a tag or a short fixed phrase in one language into an utterance which is otherwise entirely in the other language". In other words, tag-switching contains discourse markers or sentence fillers that lead a speaker to carry on talking.

Inter-sentential Switching

Inter-sentential code-switching includes switching at "a clause or sentence boundary whereby each clause or sentence is either in one language or the other" (Qian et al., 2009). In other words, the first clause/sentence could be spoken in a language, then proceeded by another language as an entirely different language. Qian et al. (2009) stated that "inter-sentential code-switching may also occur when one speaker takes up where another leaves off".

Table 1 Some examples of CS types

Intra-sentential Switching

In contrast to inter-sentential switching, Hamers and Blanc (2000) defined intrasentential code-switching as the switching that occurred within the clause or sentence boundaries, which had the highest complexity as it required the combination of the grammatical patterns of each language used. This type contains the greatest syntactic risk and a speaker should be familiar with the two languages when code-switching, or rather, the speaker should be fluent in both languages (Qian et al., 2009).

Furthermore, intra-sentential CS is fragmented into two types, dubbed "intra-lexical and intra-phrasal". The former refers to the use of the lexis of different languages in a sentence, whereas the latter means switching within phrasal boundary (Chuchu, 2007). Table 1 presents some examples related each type of CS.

CS Types	Examples	
Tag switching	- المنافس الأخير ها ها انت غير قادر على الحصول عليها, سو واتس ذا نيكس؟ T: Last competitor haha, you can't get it, so what's the next?	
Inter-sentential Switching	- جيد _, ممتاز يو كان يوزت ان ذا كلاس. T: Good, excellent, you can use it in the class.	
Intra-sentential Switching	- ما هي موهبتك, فوتبول او ريدنك او ترافانك؟ T: What is your hobby; football, reading or travelling?	

METHOD

Participants

In this study, 20 Iraqi post-graduate students from Universiti Putra Malaysia (UPM)-Malaysia participated in this study. These students were identified via purposive sampling whereby the participants were intentionally selected as they fitted the criteria of the participants who could provide the required data. The participants were made aware of their participation in this study, but they were not aware of the purpose of this study in order to avoid the Hawthorne Effect which was the alteration of behaviour by the subjects of a study due to their awareness of being observed (Ary et al., 2010).

The central phenomenon investigated in this study was the behaviour of the codeswitching among the Iraqi male students who were enrolled in post-graduate studies (MA Programmes). Due to privacy and ethical concerns, these kinds of studies have the tendency to deal only with a small number of messages (e.g., typed conversation on WM) that researchers can collect from participants (Biesenbach-Lucas, 2007). Thus, this study was limited to analysis of only fifty (50) typed conversations from twenty participants aged from 24 to 30 years old. The participants were from one ethnic group using the same dialects and studying at different faculties in UPM. The rationale behind selecting only male participants is that the Iraqi context is one of the Arab contexts that does not support male-female relations. Thus, it is a challenging job for the researcher to contact female students for this

purpose because a female student may have personal issues that cannot be published.

Instruments

The current study used two instruments: typed conversations from the WhatsApp Messenger application of the participants' smartphones and semi-structured interviews.

Typed Conversations via WM Application

WhatsApp is a Smartphone application for the purpose of instant messages where its popularity has risen. Moreover, it is a free social application that is thoroughly available for many learners of English all over the world. One of WhatsApp's significant characteristics is its ability to enhance communication within a group. The participants used this application to help them deal with some issues related to their studies and some personal topics.

The typed conversations were used to aid in understanding the central phenomenon, code-switching, among the participants. The data were analysed in particular to observe the patterns of code-switching used by the participants. A total time of four weeks was allocated to collect the data from the participants. In this study, twenty colleagues were requested to forward their typed conversations to the WM application of the researcher's personal smartphone. Of these typed conversations, the sentences that contained code-switching were extracted and arranged in two tables. The rationale behind extracting only the sentences with code-switching is that the conversations

contained some personal issues related to the participants that could not be published.

Semi-Structured Interview

Aside from collecting the typed conversations, semi-structured interviews were also conducted with the participants to collect the data that were related to their motivations for switching from the Iraqi dialect to English language. The interview involved five participants based on Creswell's (2014) recommendations reporting that 5 to 25 participants are recommended in a qualitative study. These five participants were randomly selected from the total and were voluntary.

Kvale (1994) stated that a semistructured interview should contain a sequence of themes that were translated into questions developed in a way that were flexible to follow up answers. Such a type of interview is flexible in nature and thus, this flexibility may lead a researcher to produce new questions whenever interesting topics arise (Flick, 2008).

In accordance with this, the semistructured interviews of this study contained some themes. These themes were developed based on the factors identified in the past empirical studies that led to the occurrence of code-switching. Content validity of the questions was prepared by experts in the research areas. The researcher requested assessments from experts such as lecturers and PhD students, and some of their suggestions and recommendations were considered to improve the questions' suitability.

Data Analysis

The data gathered from WM and semistructured interviews were qualitatively analysed. Several steps were taken in the analysis of data. First, the conversations collected from the WM application were examined to identify Arabic and English code-switching data practiced by the Iraqi male post-graduate Arab speakers. Second, labelling of the data from the WM application was performed according to the potential types of code-switching (e.g., tag switching, inter-sentential switching, or intra-sentential switching). Third, each type was re-examined carefully to ascertain that it accurately represented the nature of its supporting data. Finally, semi-structured interview sessions were held in order to discover the motivations for switching from Arabic into English language. In this stage, the interviews were recorded, and the data were transcribed using Atkinson and Heritage's (1984) technique.

RESULTS

This section is divided into two subsections. The first subsection sheds light on the results obtained from the WM texts that are related to the types of CS employed by the participants, while the second subsection focuses on the results obtained from semi-structured interviews that are related to the motivations for the occurrences of CS.

Results of WM instrument

As mentioned previously, code-switching is categorised into three categories: tag-

switching, inter-sentential-switching, and intra-sentential switching (Poplack, 1980). The data of the fifty typed conversations indicated that the most prominent type of CS used by the participants was intra-sentential. This confirms the belief of Poplack (1980) and Scheu (2000), who claimed that the most frequently used code-switching category was intra-sentential. In more specific terms, intra-sentential is broken into two types: intra-lexical and intra-phrasal. Among the intra-sentential switches, it is found that single nouns are the most frequently code-switching category employed by the participants, which belongs to the intralexical CS type. The findings of this study are in accord with other research in that intra-lexical CS (within word boundaries) is the most frequently occurring CS type (Chuchu, 2007). Table 2 and Table 3 show the extracted sentences of intra-sentential CS used by the participants between IID and English language with the WM application. Table 1 presents code-switching employed for household items.

Based on Table 2, the results show that the students switched between different language lexis in one sentence. Specifically, intra-sentential switches occurred in the middle of a sentence as the participants used half the sentence in Arabic and continued to the other half in English language, as shown in the next example:

- لازم اصلح <mark>البايب</mark> مال الحمام

From this example, a participant began the utterance in Arabic, then shifted to

- T: I have to fix the *pipe* of the bathroom

English language (pipe) and finally resorted back to Arabic. In this case, the participant filled a gap by using a term in English language to deliver his message. Some academics have avowed that intra-lexical code-switching can be applied to fill a void in conversation as a communicative strategy (Chung, 2006; Mujiono et al., 2013; Then & Ting, 2009). Hence, most of the participants switched within word boundaries as they were not able to recall terms in Arabic. These findings support the findings of Abalhassan and Alshlawi's (2000) study, which reported that code-switching was used when participants were unable to recall terms in Arabic language.

Based on Table 2, all the terms/words used by the Iraqi students are related to household items. This may be ascribed to the products that have been imported to Iraq, especially after the American Invasion of Iraq in 2003. After 2003, trade exchanges between Iraq and other countries led to an increase in imported products such as satellite equipment, mobile devices, computers, gaming consoles, and many other products. All these products are advertised in English language, which has possibly contributed to the use of new English terms rather than the equivalent Arabic ones to identify the products. This is because these terms are not lexicalised in Arabic and may also be attributed to the sense of carelessness of linguists to provide Arabic equivalent coinages of English terms to avoid using code-switching. Such kinds of behaviour may not only threaten an individual's mother tongue but the

Table 2
English and Arabic code-switching on household items

No	English Sentences in English Language	Arabic Sentences in (IID)
1	Where is the <i>thermos</i> ?	وين ترمز الشاي؟
2	I need to buy a new kettle	انا احتاج اشت <i>ري <mark>کنیتل</mark> ج</i> دید
3	Come to drink a coffee	تعال اشرب كوفي
4	I need to fix the <i>remote control</i>	ارید أصلح <i>ریمونت کونترول</i>
5	Please wash my <i>pyjamas</i>	اغسل <i>البجاما</i> مالتي
6	Bring the <i>jug</i> of water with you	جيب <i>الجك</i> المي معاك
7	Where is the <i>remote control</i> ?	این <i>ریمونت کونترول</i> ؟
8	You need <i>tape</i> for these <i>wires</i>	انت لازم تلف <i>الواير بالتيب</i>
9	This <i>cable</i> attaches the printer to the <i>computer</i>	هذا كبيل يربط الطابعة <i>بالكمبيوتر</i>
10	You have a nice living room decor	بالمناسبة <i>ديكور</i> صالتك كلش حلوه
11	Is your <i>television</i> still under <i>warranty</i> ?	هل ما زال <i>تلفزيونك</i> تح <i>ت الورنتي</i> ؟
12	Bring along the table fan	جيب معاك <i>الفان</i> المنضدية
13	I need a three-pin <i>plug</i>	احتاج بلاك ثلاث روس
14	Do not forget to bring the drill	لا تنسى تجيب <i>الدريل</i>
15	I have to fix the <i>pipe</i> of the bathroom	لازم أصلح <i>البابيب</i> مال الحمام
16	Put the fish inside the <i>oven</i>	ضىع السمكة <i>بالإوفن</i>
17	You do not have <i>air-conditioner</i> in your room?	لا تملك <i>الإيركونديشُن</i> في غرفتك؟
18	Just a moment, I need to go to the toilet	فقط لحظة، أنا بحاجة للذهاب للتواليت
19	Let's buy a sport bicycle	دعنا نشتري <i>پايسكل</i> رياضي

national identity. This notion is reinforced by some academics who have noted that code-switching is a significant element that may lead an individual to gradually move from his native culture to the intended culture (Dar, 2016; Hachimi, 2013; Post, 2015; Ziamari, 2007). Some examples of code-switching through the influence of the imported products after 2003 are illustrated as follows:

این ریمونت کونترول؟

- **T:** Where is the *remote control*?

- هل ما زال تلفزيونك تحت الورنتي؟

- **T:** Is your *television* still under *warranty*?

Based on this, it can be said that the participants' code-switching is in more minor components rather than a complex switching such as phrases, clauses or sentences. Table 3 presents some extracted

Table 3
English and Arabic code-switching in different domains

No	English Sentences in English Language	Arabic Sentences in (IID)
1	Automatic gear is more relaxing than manual one	<i>القير الاوتاماتيكي</i> اكتر راحة من <i>ماتول</i>
2	My apartment has a nice design	شَفَتَي نَمَاكُ <i>لِيزِ إِين</i> جميِل
3	The tire has a lot punctures	<i>تاير</i> بي هواية ښاچر
4	We played football yesterday and I scored a \emph{goal}	البارحة لعينه طوية وسجلت كول
5	Mobile cover protects your mobile	<i>موبایل کفر</i> یحفظ <i>موبایلك</i>
6	He changed the battery of his mobile	هو غير <i>الباتري</i> مال <i>موبايله</i>
7	Give me a <i>miscall</i> please	سويل <i>ي ممىكول</i> من فضلك
8	I forgot my <i>mobile phone</i> at your home	نسيت <i>الموبايل فون في</i> بيتك
9	I have read your <i>paper</i> today	انا قرأت <i>ال</i> نبيب مالتك اليوم
10	Where are you? which cafeteria?	انت وين باي كافتريا؟
11	What happened for your motor?	اسّبيه <i>ماطورك</i> ؟
12	Your car <i>bonnet</i> is open	شَفَتَ بْنِيْ سدِارتَكَ مَفَنُوح
14	Buy for me <i>blank disk</i> please	اسّتريل <i>ي البلاتك ديسك م</i> ن فضاك
15	He wore a <i>jacket today</i>	شفته اليوم لابس جاكيت بالحر!!
16	Send a <i>message</i> to Mustafa	ار سل مست لمصطفى
17	Your T-shirt is large or medium?	<i>التيشيرت لارج</i> أو مليم؟
18	I need a <i>lorry</i> for my goods?	اريد <i>لوري</i> لنقل الأغراض
19	Buy one <i>packet</i> enough	اس <i>َنَري باكنت و</i> احد كافي
20	It is necessary to read the <i>abstract</i> first	اقر أ <i>الابستراكت</i> اولأ
21	Just go to UPM <i>clinic</i> for your <i>headache</i>	روح لليو بي ام كلينك لتقحص <i>الهيديك</i>
22	Let's take a <i>taxi</i>	خلينيا اخذ <i>تكسي</i>

sentences of code-switching employed in different domains such as technological devices, mobile accessories, or car parts.

As seen in Table 3, all the codeswitching applied by the participants is also within the intra-sentential type, or rather, within the word boundaries. Some individuals consciously attempted to show their prestige within a high social class community by using or speaking some words in English. Examples of codeswitching in such contexts follow:

- القير الاوتاماتيكي اكثر راحة من مانول.

- T: Automatic gear is more relaxing than manual one.

- ارسل مسج لمصطفى.

- T: Send a message to Mustafa.

Based on these two examples, on the one hand, individuals may try to show such behaviours deliberately by using codeswitching to bridge the social gap. In such an event, individuals try to show that they are at a high level of education by using some English words when communicating with others in IID. On the contrary, such behaviours could be attributed to a lack of recalling the terms in the mother tongue whereby individuals try to switch into another language in order to fill the gap. This type of code-switching is called a contrasting code-switching. Bautista (2004), for instance, endorsed this view that codeswitching had two types: deficiency-driven and proficiency-driven. The former occurs when an individual is not fully proficient in using one language and thus, has to resort to another language while the latter occurs when an individual is proficient in two

languages and is able to switch from one to the other. This indicates that linguistic competence could be the significant element in motivating such kinds of behaviour which may drive individuals to the use of code-switching, and it is also a considerable element in enhancing their proficiency level in the target language (Ariffin & Husin, 2011; Bautista, 2004; Magid & Mugaddam, 2013).

Besides that, the findings of this study also revealed that the participants tended to use English words related to the technology field. Such English words included, file, download, restart, handset, external hard disk, internet, screen, connect, miscall, sign in, sign out, log in, log out, keyboard, article, click, save it, update, folder, download, earphones, email, and message. An example of using these words is illustrated below:

- انا ارغب بشراء هاندست واكسترنال هارد ديسك بالاضافة الى فان لكمبيوتري.

- T: (I want to buy handset, external hard disk and computer fan)

The popularity of technological devices, i.e., computers or mobiles has altered the way of learning, teaching, and even the communication. New technologies such as social networking or mobile applications accelerate the alterations in the environments of learning and teaching. The widespread use of smartphones has brought millions of mobile applications to EFL/ESL learners such as WhatsApp Messenger (WM), Viber, and others. Kim and Kwon (2012), for instance, reported that technology enabled learners to participate in both collaborative and individual language learning activities that led to the rapid

development of English language skills, i.e., speaking, listening, reading, and writing. Added to this, technology provides a variety of language learning tools and resources that drive learners to be more motivated, independent, and socially interactive (Ahn, 2018; Kim & Kwon, 2012; Rosell-Aguilar, 2017; Viberg & Grönlund, 2012). It can be said that technology plays a considerable role in improving and expanding individuals' English language skills such as vocabulary, listening, speaking, reading comprehension, and writing. The following example illustrates the use of certain words as a result of the impact of technology:

- نسيت الموبايل فون في بيتك.

- T: (I forgot my *mobile phone* at your home)

Ahn (2018), for instance, supported the belief that "technology is an effective tool for improving English language skills such as vocabulary, listening, speaking, grammar, reading comprehension, and writing". The impact of technological devices can steer individuals to apply some terms in English such as when communicating with others using smartphone applications (i.e., WhatsApp Messenger). Thus, application of some English terms by individuals (e.g., Iraqis) in their mother tongue in daily conversations is the occurrence of codeswitching.

Results of the Interviews

The intent of conducting interviews was to discover the motivations behind employing the CS. Five participants were randomly selected to participate in this interview. Based on the result of the interview,

three motivations were provided for the application of CS.

The first motivation refers to the influence of the western colonization of Iraq in 2003. A majority of participants alleged that the occurrences of CS could be influenced by the Western colonization of the country in 2003. The participants revealed that English terms and lexis have been sometimes used in their daily conversations. This may result in the formation of code-switching to English. The next is an example of one of the participants' interviews:

"these words I use them in our daily conversations and also my friends and family use these words I think these words came from occupation American British in 2003"

From these responses, it is apparent that the younger generation of Iraqis could be affected by Western influences from the colonization of the British and Americans in Iraq. Thus, there are perhaps indicators that Western colonization in Iraq has expanded linguistic influences, particularly as in the use of borrowed words from English language that have been used in Iraqis' daily conversations. Phillipson (1992) described the spread of English language as a "linguistic imperialism".

"...linguistic imperialism is effected by penetration and the establishment of a bridgehead, for instance the establishment of a colonialist education system, within an exploitative structure. As English is also used widely for supranational and international links, English linguistic imperialism operates globally as a key medium of Centre- Periphery relations" (56).

Thus, this may affect the mother tongue, the identity, or even the cultural heritage. Tsui and Tollefson (2007) supported this belief that the use of English "may produce nationals who are ambivalent about their own identity, and nations that are stripped of their rich cultural heritage". Tsui and Tollefson (2007), for instance, provided an example related to this matter, i.e., Malaysia. They referred to Malaysia as a country that was influenced by the language of the colonial country (e.g., English language) whereby many English words had been inserted into the mother tongue of Malaysians (Bahasa Melayu) such as komputer, fakulti, agensi, sosial, minit, nombor, kaunter, and universiti. It is also asserted by Tan (2009) that Malaysia was influenced by the former colonial power and as "the language they left behind became more widespread within the local community, borrowing was often undertaken by those within the community who speak English concurrently with other languages". Likewise, Albury (2017) affirmed that "English had served as a lingua franca between ethnic groups - including the Malay – under British colonial rule, and is still commonly used in interethnic communication".

Another study conducted by Benabadji (2017) confirmed the phenomenon of loanwords through the influence of colonialism which occurred within Algerian Arab society. The study stressesed that many loanwords in the Algerian Arabic dialect "belong to various origins; Spanish, Turkish, Italian, English, and French which is the most expanded one, because of the long period of French colonization". In sum, colonization plays a considerable role in the borrowing of many words into the language of the colonised country.

The second motivation indicates that Arabic terms are sometimes not applied during the conversation because the equivalent words or terms in Arabic language may not be recalled. Here is an example from one of the interviewees:

"Well I find it more easy or use the English words rather than Arabic in some situations. I used or maybe I am accustomed to use these English words"

The findings of this study agree with the viewpoint of Sert (2005), who stated that students use a certain equivalent lexical item in a language, and then they code-switched. Sert (2005) defined this behaviour of code-switching as a the "equivalence function," which refers to "a defensive mechanism for students as it gives the student the opportunity to continue communication by bridging the gaps". Similarly, Azlan and Narasuman (2013) carried out a study in the Malaysian context which reported that code-switching occurred because the

participants could not recall the words. Azlan and Narasuman (2013) referred to such behaviours as a "Lack of Register", which denoted that a certain vocabulary was not available to a speaker, and then the occurrence of code-switching was manifested. It can be said that Iraqi students may employ code-switching because of not recalling terms, and based on this, they resort to the use of equivalent lexical terms.

The third motivation behind the application of CS is the impact of technological devices. The use of technological devices such as smartphones and laptops as well as the use of the Internet (e.g., social networking sites such as Facebook, Instagram, and Twitter and Internet relay chat) are major factors in using some English terms during conversations. The participants declared that the use of technological or mobile devices contributed to the enhancement of their English language skills.

"I see the use of technology in everyday I mean every day we sign in to some technology tools for examples, facebook or use whatsapp, viber, instagram or twitter"

The extract above refers to the daily use of technological devices among the participants whereby the impact of these technological devices plays a significant role in employing English terms/words among the participants. Abdullah and Siraj (2018) emphasised that students had motivation to learn vocabulary through the short message

service (SMS) over their mobile devices. Added to this, Kim (2017) avowed that "the short message service (SMS) supported by mobile phones facilitated student learning of new vocabulary as it was fast, immediate, and readily available". Thus, mobile devices serve as an effective tool for vocabulary learning. This indicates that the impact of technology or mobile devices steers individuals to apply some terms in English language during conversations in their mother tongue and hence, the occurrence of code-switching is recorded. In brief, technology generally represents the key and contributing factor in the application of code-switching among these recent generations and Iraqis in particular.

DISCUSSION

The aim of using code-switching is to enable other people to grasp the speech easily. The participants in this study used code-switching in order to achieve their conversational objectives. The findings revealed that the students tended to employ CS in intra-sentential contexts within word boundaries such as with single nouns. The findings of this study are in agreement with the findings of some studies indicating that the most employed type is intra-sentential CS (Kebeya, 2013; Poplack, 1980; Scheu, 2000). Conversely, the findings of this study conflict with the findings of two studies conducted in two different contexts: Qian et al.'s (2009) study in China and Azlan and Narasuman's (2013) study in Malaysia. Their findings demonstrated that the most applied type of CS was inter-sentential switching followed by intra-sentential switching and tag-switching.

Three motivating factors were demonstrated that led the EFL Iraqi students to employ code-switching in their conversations: linguistic, technological, and political factors. The current study agrees with Mohammed et al.'s (2015) study that linguistic, technological, and political factors were the motivations that drove the Iraqi EFL undergraduate students to apply code-switching.

Linguistic Factors

Linguistic competence is one of the factors that led the EFL Iraqi students to use code-switching. This study is obviously parallel with Cook's (2013), who disclosed that the linguistic factor signified a natural tendency whereby an individual made use of code-switching in the case of inability to place in proper words to describe particular objects, people, or events in the target language. In dealing with this gap, individuals will naturally 'borrow' words from a language in order to deliver their message.

In addition, the study corroborates the findings of Sert (2005), who described this kind of code-switching as an "equivalence function" by stating that code-switching was used to provide an opportunity for individuals to continue communicating to fill the gaps. In a related move, but in Malaysian context, Azlan and Narasuman (2013) labelled such behaviours of codeswitching as a "Lack of Register." Their findings revealed that the occurrence of code-switching was recorded once an individual was unable to recall a certain term

and hence, they resorted to the use of the equivalent lexical terms. The next example presents such a kind of code-switching when an individual could not recall the term "تصميت" in Arabic language and then switched to the use of the equivalent word "design" in English language to bridge the gaps.

- شقتى تملك ديزاين جميل

- T: (My apartment has a nice design)

This example indicates that English words/terms are used to fill in the void in order to complete their utterances or exchanges. The findings of the present study are in agreement with studies that reported code-switching can be applied as a communication strategy (Chung, 2006; Mujiono et al., 2013; Then & Ting, 2009). Hence, this signifies that code-switching occurs as a strategy for individuals to accomplish their communication goals.

Technology Factors

The impact of technologies such as laptops, tablets, computers, and mobile phones have become part and parcel of everyday lives. By dealing with technological devices, many English words have been adopted as technological terms, for example, *click*, *file*, *save it*, *restart*, *update*, *folder*, *download*, *screen*, *earphones*, *handset*, *computer fan*, *external hard disk*, *cartridge*, and *printer*. This resulted in extensive use of these words in Iraqis' conversations. The following examples illustrate the use of technological terms:

- سوي ابديت لكمبيوتر مالتك بالغضط على كليك ريستارت

- T: (You might update your computer by clicking on restart)

- تكدر تسوي فولدرين

- T: (you can make two folders)

. شوف الفيلم مال احمد زكى على تى في

- T: (Watch the film of Ahmed Zaki on TV)

These findings are aligned with the findings of Sabti and Chaichan (2014), who revealed that the use of technology could help students to expand and increase their vocabulary knowledge. Also, the current study upholds the findings of some studies that technology provides an opportunity for individuals to take part in activities of language learning that steer to the rapid advancement of English language skills (i.e., speaking, listening, reading, and writing) (Ahn, 2018; Kim & Kwon, 2012; Rosell-Aguilar, 2017; Viberg & Grönlund, 2012). Hence, it is apparent that the use of vocabulary related to technology has encouraged the participants to apply codeswitching. Besides that, findings of some prior studies revealed that the short message service (SMS) encouraged individuals to learn new terms by using mobile phones (Abdullah & Siraj, 2018; Kim, 2017). This implies that technological devices may enable individuals to utilise some words/terms in English language when communicating with others and thus, codeswitching occurs.

Political Factors

The third motivation for code-switching is the political factor (the Western colonisation of Iraq). In recent years, Western powers represented by the USA occupied Iraq and deployed various military operations in the country. The presence of Americans and other Westerners in the country has encouraged the use of English words and terms in Iraq, which resulted in borrowing numerous words from the English language. Likewise. British colonisation of the South East Asian countries such as Malaysia (Tanah Melayu and Borneo) and Singapore in the 19th century brought many English terms into the local Malay language (e.g., Bahasa Melayu). The use of localised terms has created a huge impact on the Malay language (e.g., Bahasa Melayu), and loanwords are still being extensively used by Malaysians and have become part of the official and standard language. The findings of the present study are consistent with the findings of a study conducted by Albury (2017), which demonstrated that English language under British colonial rule was applied as a lingua franca between ethnic groups—including the Malays and is still commonly used in interethnic communication.

The findings of this study are supportive of the findings of two prior studies in the Arab context carried out in Morocco by Ziamari (2007) and Algeria by Benabadji (2017). The findings of Ziamari's study (2007) showed how the French colonisation of Morocco influenced the Arabic language used by the Moroccan Arab speakers. The Moroccans have extensively switched between Arabic and French language. Similarly, Benabadji (2017) asserted that the primary reason for the many loanwords in

the Algerian Arabic dialect was the French colonization. Thus, the occurrence of code-switching among the Iraqis may belong to the Western colonizers of Iraq, particularly the Americans, who resided in Iraq during the Western military occupation of Iraq.

CONCLUSION

This study demonstrated the employment of code-switching between IID and English language among Iraqi post-graduate students at UPM. This employment of code-switching was relatively limited in daily conversations of the Iraqi post-graduate students on WM. The findings of this study divulged that the participants had a tendency to utilize code-switching within word boundaries such as with single nouns, which is defined as intra-sentential. Added to this, the findings of the qualitative data demonstrated three motivations behind employing codeswitching among the subjects, which are the (1) linguistic factor, (2) technology factor, and (3) political factor. It can therefore be said that code-switching may be employed to minimize the miscomprehension or difficulties in understanding the message between two parties.

It can be concluded that codes-witching during conversations and in online social media in particular, i.e., WhatsApp Messenger, is a dynamic and interactive process between the participants whereby the second and subsequent speakers are necessarily influenced by the language choices made in the initial turn or utterance. In this case, an individual who employs code-switching is at the same time regarded

as both influencer and influenced by the phenomena of code-switching.

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REFERENCES

- Abalhassan, K. M., & Alshalawi, H. G. (2000). Code-switching behavior of Arab speakers of English as a second language in the United States. *Intercultural Communication Studies*, 10(1), 179-188.
- Abdullah, M. R. T. L., & Siraj, S. (2018). The evaluation of learning implementation model for English language learning via Fuzzy Delphi method. *Pertanika Journal of Social Sciences and Humanities*, 26(S), 33-54.
- Ahn, S. K. (2018). Korean EFL college students' acceptance and use of smartphone applications for English language learning (Doctoral dissertation), Alliant International University, Los Angeles, USA.
- Albury, N. J. (2017). Mother tongues and languaging in Malaysia: Critical linguistics under critical examination. *Language in Society*, 46(4), 567-589
- Al-Rowais, H. H. (2012). Code switching between Arabic and English: social motivations and structural constraints (Master dissertation), Ball State University, USA.
- Amazouz, D., Adda-Decker, M., & Lamel, L. (2018, May). The French-Algerian code-switching triggered audio corpus (FACST). In *LREC 2018 11th edition of the Language Resources and Evaluation Conference*, Miyazaki, Japan.
- Anderson, A. R., Dodd, S. D., & Jack, S. (2010). Network practices and entrepreneurial growth. *Scandinavian Journal of Management*, 26(2), 121-133.

- Ariffin, K., & Husin, M. S. (2011). Code-switching and code-mixing of English and Bahasa Malaysia in content-based classrooms: Frequency and attitudes. *The Linguistics Journal*, 5(1), 220-247.
- Ary, D., Jacob, L. C., & Sorensen, C. (2010). Introduction to research in education (8th ed.). Belmont, USA: Thomson Wadsworth.
- Atkinson, J. M., & Heritage, J. (Eds.). (1984). *Structures of social action: Studies in conversation analysis*. New York, USA: Cambridge University Press.
- Azlan, N. M. N. I., & Narasuman, S. (2013). The role of code-switching as a communicative tool in an ESL teacher education classroom. *Procedia-Social and Behavioral Sciences*, 90, 458-467.
- Bahous, R. N., Nabhani, M. B., & Bacha, N. N. (2014). Code-switching in higher education in a multilingual environment: A Lebanese exploratory study. *Language Awareness*, 23(4), 353-368.
- Bautista, M. L. S. (2004). Tagalog-English code switching as a mode of discourse. *Asia Pacific Education Review*, *5*(2), 226-233.
- Benabadji, A. (2017). Integration of French Loanwords into Algerian Arabic Dialect. *London Journal of Research in Humanities and Social Sciences*, 17(1), 83-92.
- Biesenbach-Lucas, S. (2007). Students writing emails to faculty: An examination of e-politeness among native and non-native speakers of English. Language Learning & Technology, 11(2), 59-81.
- Cahyani, H., de Courcy, M., & Barnett, J. (2018). Teachers' code-switching in bilingual classrooms: Exploring pedagogical and sociocultural functions. *International Journal of Bilingual Education and Bilingualism*, 21(4), 465-479.
- Chuchu, D. A. F. (2007). *Code-switching in a multilingual environment*. Perak, Malaysia: Penerbit Universiti Pendidikan Sultan Idris.
- Chung, H. H. (2006). Code switching as a communicative strategy: A case study of Korean–English bilinguals. *Bilingual Research Journal*, 30(2), 293-307.

- Cook, V. (2013). Second language learning and language teaching fourth edition. London, England: Routledge.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, USA: SAGE Publications Inc.
- Dar, S. R. (2016). Code switching in English as second language in ESL class room: Students' identities, attitudes and feelings. *Asian Journal of Multidisciplinary Studies*, 4(1), 82-88.
- David, M. K. (2003). Role and functions of code-switching in Malaysian courtrooms. *Multilingua*, 22(1), 1-20.
- Eldridge, J. (1996). Code-switching in a Turkish secondary school. *ELT Journal*, 50(4), 303-311.
- Flick, U. (2008). *Designing qualitative research*. Thousand Oaks, USA: Sage.
- García, P. B., Leibold, L., Buss, E., Calandruccio, L., & Rodriguez, B. (2018). Code-switching in highly proficient Spanish/English bilingual adults: Impact on masked word recognition. *Journal of Speech, Language, and Hearing Research*, 61(9), 2353-2363.
- Hachimi, A. (2013). The Maghreb-Mashreq language ideology and the politics of identity in a globalized Arab world. *Journal of Sociolinguistics*, *17*(3), 269-296.
- Hamers, J. F., & Blanc, M. H. A. (2000). *Bilinguality* and bilingualism (2nd ed.). Cambridge, England: Cambridge University Press.
- Ismail, M. A. (2015). The sociolinguistic dimensions of code-switching between Arabic and English by Saudis. *International Journal of English Linguistics*, 5(5), 99-109.
- Kebeya, H. (2013). Inter-and intra-sentential switching: Are they really comparable? *International Journal of Humanities and Social Science*, *3*(5), 225-233.
- Kim, H. Y., & Kwon, Y. H. (2012). Exploring smartphone applications for effective mobile-assisted language learning. *Multimedia-Assisted Language Learning*, 15(1), 31-57.

- Kim, S. Y. (2017). Smart learning: Approaches and materials for language learning. *Multimedia-Assisted Language Learning*, 20(3), 62-83.
- Kvale, S. (1994). InterViews: An introduction to qualitative research interviewing. Thousand Oaks, USA: Sage Publications, Inc.
- Larbah, M. S. (2013). Code switching in ESL classrooms: A study of adult Arabic learners (Master dissertation), Curtin University, Australia.
- Magid, M. E. A., & Mugaddam, A. H. (2013). Code switching as an interactive tool in ESL classrooms. *English Linguistic Research*, 2(2), 31-42.
- Milroy, L., & Muysken, P. (1995). *One speaker, two languages. Cross-disciplinary perspectives on code-switching.* New York, USA: Cambridge University Press.
- Mohammed, Q. M., Hameed, F. W., & Yasin, M. S. M. (2015). Code-switching between informal Iraqi dialect and English Language among Iraqi undergraduate students at Baghdad University. *International Journal of Education* and Research, 3(6), 193-208.
- Mujiono, M., Poedjosoedarmo, S., Subroto, E., & Wiratno, T. (2013). Code switching in English as foreign language instruction practiced by the English lecturers at universities. *International Journal of Linguistics*, *5*(2), 46-65.
- Myers-Scotton, C. (1995). Social motivations for codeswitching: Evidence from Africa. Oxford, England: Oxford University Press.
- Phillipson, R. (1992). *Linguistic imperialism*. Oxford, England: Oxford University Press.
- Poplack, S. (1980). Sometimes I'll start a sentence in Spanish y termino en Espanol: Toward a typology of code-switching. *Linguistics*, *18*(7-8), 581-618.
- Post, R. E. (2015). The impact of social factors on the use of Arabic-French code-switching in speech

- and IM in Morocco (Doctoral dissertation), The University of Texas at Austin, USA.
- Qian, X., Tian, G., & Wang, Q. (2009). Codeswitching in the primary EFL classroom in China–Two case studies. *System*, *37*(4), 719-730.
- Rosell-Aguilar, F. (2017). State of the app: A taxonomy and framework for evaluating language learning mobile applications. *CALICO journal*, *34*(2), 243-258.
- Sabti, A. A., & Chaichan, R. S. (2014). Saudi high school students' attitudes and barriers toward the use of computer technologies in learning English. *SpringerPlus*, *3*(1), 460.
- Scheu, U. D. (2000). Cultural constraints in bilinguals' codeswitching. *International Journal of Intercultural Relations*, 24(1), 131-150.
- Sert, O. (2005). The functions of code-switching in ELT classrooms. *The Internet TESL Journal*, *11*(8). Retrieved November 14, 2017, from http://iteslj.org/Articles/Sert-CodeSwitching.html
- Tan, S. I. (2009). Lexical borrowing in Malaysian English: Influences of Malay. *Lexis. Journal in English Lexicology*, *3*(5), 11-62.
- Then, D. C. O., & Ting, S. H. (2009). A preliminary study of teacher code-switching in secondary English and Science in Malaysia. *Tesl-Ej*, *13*(1), 1-17.
- Ting, S. H. (2007). Influence of ethnicity and hierarchical status on language choice in a multilingual organisation in Sarawak. Sarawak Museum Journal, 64(85), 221-250.
- Tsui, A. B. M., & Tollefson, J. W. (2007). Language policy and the construction of national cultural identity. In A. B. M. Tsui, & J. W. Tollefson (Eds.), *Language policy, culture and identity in Asian contexts* (pp. 1-21). USA: Routledge.
- Viberg, O., & Grönlund, Å. (2012) Mobile assisted language learning: A literature review. mLearn 2012. 11th World Conference on Mobile and Contextual Learning, Helsinki, Finland.

Ziamari, K. (2007). Development and linguistic change in Moroccan Arabic-French code switching. In C. Miller, D. Caubet, J. Watson, & E. Al Wer (Eds.), *Arabic in the City* (pp. 275-290). London, England: Taylor & Francis.