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THE OCCURRENCE OF CODE-SWITCHING AMONG MALAYSIAN UNDERGRADUATES ON WHATSAPP: REVIEW OF THE LITERATURE

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Abstract:

This research proffers a critical overview of the theoretical and analytical occurrence of code-switching by reviewing a range of empirical and relevant studies. In particular, the dominating and governing factor of computer-mediated communication and code-switching. This research also probes the pertinent concepts, focusing on the types of code-switching and its correlation with computer mediated communication. Subsequently, it reviews the structural features of WhatsApp, deliberating the occurrence of code-switching among UiTM undergraduates in Malaysia, noting the social motivation of style-shifting. The research concludes with recommendations for future research, emphasising on the issue of its applicability to the analysis of second language acquisition and learning.

Keywords: code-switching, Computer-Mediated Communication (CMC), WhatsApp, bilingualism

1. Introduction and Background

Language is fundamental to our lives and it is the cultural tool that sets humans apart from any other species. Over the last few years, endless communication across the globe

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occurred with the help of technological advancement. This form of communication has led to invaluable insights of interaction, resulting in an increase in the number of researches related to contact linguistics through Computer-Mediated Communication (CMC) specifically among polyglots (Ahmad, 2014). The language contact phenomena consist of code-mixing and code-switching. In examining code-switching in Malaysia, WhatsApp is the perfect instant messaging application to be used in the study. WhatsApp has provided a new type of online communication where it affects the users' language choice that gives them the opportunity to express themselves creatively even in writings where multiple languages exist and mix in one setting. Halim, Nadri & Mahmood (2015) stated that code-switching is an ordinary occurrence in Malaysia. It is a unique language manner of speakers who speak more than one language and it is considered as a crucial characteristic of their communication skills. In Malaysia, switching to another language is called as Bahasa Rojak (Bukhari et al., 2015). They also stated that Malaysian locals use Bahasa Rojak whether in verbal communication or online communication. However, despite being a common phenomenon in Malaysia, there are two sides of the argument involving code-switching. To expound, the overusing may lead to second language acquisition (Jingxia, 2010). This statement is strengthened by purists who believed that language is supposed to maintain its criterion where there is no phenomenon called codeswitching (Milroy, 2011). Code-mixing or code-switching indicates "laziness" and it may bring harm to their own linguistic performance. From the perspective of learners who have impressive language skills, code-switching is seen as an obstacle to becoming competent in another language (Ariffin & Husin, 2011). Despite the negative point of view towards code-switching, it also provides advantages to people. Code-switching is viewed as a revolution and it improves creativity skills of society to convey their emotions. "Giles argued that speakers would tend to converge (adopt similar styles of speaking) when they wish to reduce the social distance between one another, and diverge (speak differently) when they wished to emphasize their distinctiveness or increase their social distance" (Mesthire et al., 2000, p.151). Code-switching can be a useful tool to highlight a point and strengthen a phrase. Speakers often code-switch when they feel overwhelmed in a situation. For example, when the speaker is angry, the appropriate word or expression in their second language is easier to use.

Code-switching is the act of communicating in different language variations in a single conversation. Being fluent in more than one language is a common thing in Malaysia as Malaysia is a multiracial country, comprising Malays and non-Malay indigenous which make up 62% of the total population, Chinese and Indians consist of 27% and 8% respectively as well as other races which form 3% of the total population (Paramasivam, 2010). Holmes (1992) pointed out that code-switching can be defined as a phenomenon where the speaker alternated their first language to their second language. A speaker switches to another language to indicate belongingness in a group as well as shared identity with a speaker. Mahmud and Wong suggest that interculturally competent speakers try to emulate the linguistics ability of the host country (2016). In this context, the phenomena of code-switching may exist. According to Wardaugh (1986),

code-switching is a communication medium to build or ruin bounds in a group; to produce, to elicit or alter social relationship with their morality and responsibility. Kachru (1978) stated that code-switching is the skill to switch from one code to another. He also adds that it is the alternation (of codes) determined by functions, situations and participants.

The rapid growth of electronic communication has transformed the traditional methods of communication and written expression. In the age of technology where people are communicating using Computer-Mediated Communication (CMC), it has become one of the most preferred medium of communication where multilingual people communicate using various languages. Computer-mediated Communication (CMC) is systems which allow society to interact among each other through mediums of technologies such as electronic mail, video conference, forums, social networking sites and chat rooms (Nur & Marlyna, 2014). It involves the use of Internet, social software, namely instant messaging, YouTube, email, social networking sites and Internet forums (Parke & Marsden, 2017). Code-switching often occurs on the internet as social media websites and instant messaging are used by multilingual CMC users (Al-Qaysi & Al-Emran, 2017). Within the Malaysian context, WhatsApp is widely used by a large number of Malaysians.

Bilingual is an individual who uses two languages to communicate and completely understand both languages (Nagel, Temnikova, Wylie & Koksharova, 2015). Definition of bilingualism differs according to the level of competency in the languages. Bilingual speakers may have a low level of competency in the languages, or they may also be very fluent in the languages which helps bilinguals to look like a native speaker (Edele et al., 2018). To be bilingual signifies different concepts to different individuals. An individual may call himself as bilingual just because they are proficient in conversing or read in many languages. Other than that, an individual may call himself as bilingual because they have the opportunity to live in an environment where the people around him speak in two languages and at the same time, they acquire the languages naturally which is called as simultaneous bilingualism (Wei, 2020). Thus, sequential bilingualism occurs when an individual acquires a new language after obtaining their first language.

Researchers have long been fascinated by the phenomena of code-switching, thus they examined what causes such occurrences. Most studies on face-to-face communication in bilingual communities have been conducted up until now, however there are only few studies that are related to computer-mediated communication (CMC). This research examines the relevant concepts, emphasising on the types of code-switching and correlation of code-switching and technology. It also discusses the structural features of WhatsApp, deliberating the occurrence of code-switching among UiTM undergraduates in Malaysia, observing the social motivation of style-shifting. The paper concludes with recommendations for future research, focusing on the issue of its applicability to the analysis of second language acquisition and learning.

2. Computer-mediated Communication (CMC)

According to Crystal (2006), the existence of the Internet, the web and technology have led to the emergence of a new platform to share information, allow people to contact each other through electronic communication. CMC is a way of interaction via technology such as all kinds of Internet activity including email, instant messaging, and bulletin boards (Nur Izyani, 2016). CMC can be categorised into two main modes according to aspect of synchronicity; synchronous and asynchronous CMC.

Synchronous CMC provides a way for participants to connect and communicate in actual time and to anticipate an instant feedback from each other in a discussion. In order to achieve a successful communication, both sender and receiver must be logged in simultaneously on platforms such as live chatrooms, where chat interactions are mostly presented as textual messages, written and sent by users who logged in at the same time. For example, Facebook Messenger. Platforms such as video and web conferences also require the users to be logged in simultaneously. The use of webcams is essential in order to achieve a smooth process of video conferencing. In addition, social media upsurges the quality of face to face communications (Mahmud et al., 2018). A very fast connection is also important to make the process run smoothly. For instance, Skype, Google Meet and Zoom. Lastly, platforms such as instant messaging (Nur Izyani, 2016). Instant messaging is a type of online communication through computers or mobile devices. It allows users to communicate privately. For example, WhatsApp and Telegram.

Asynchronous CMC, on the other hand, varies in terms of instance as participants are not required to be available simultaneously which can lead to late replies in the communication. One of the types of asynchronous CMC is email. Email can be used to share documents to other people and is commonly used by employers to deliver information to their employees. Other than that, discussion boards are also used by students as they can be accessed anytime and anywhere. Blogs are also one of the types of asynchronous CMC that do not require the users to be available simultaneously as it is a type of platform that allows the users to share posts which are written in brief and are frequently updated. Several examples are Blogspot, WordPress and Tumblr. Social networking sites are platforms that are web-based and mobile-based to transform human communication into a fun and creative interaction (Cohn, 2011).

3. The use of WhatsApp in Malaysia

WhatsApp is an instant messaging application for smartphones that provides a way for users to share information in the form of messages, images, videos, audios and documents through the Internet (Barhoumi, 2015). It has more than 1.5 billion active users worldwide (Constine, 2018). According to a research done by Telenor Research (2016), there are many other instant messaging applications, namely Telegram, LINE and WeChat. Nevertheless, 97% Malaysians prefer WhatsApp compared to any other

applications for the purpose of communication, and only a small 3% respondents from the research said they used WhatsApp less than once a month. According to Newman, Fletcher, Kalogeropoulos, David & Nielsen (2017) of Reuters Institute for the Study of Journalism at Oxford University, Malaysians are the world's largest users of WhatsApp at 51%. WhatsApp has transformed human communication as it brings many advantages to people. WhatsApp is a free messaging application compared to the traditional Short Message Service (SMS) communication which required its users to pay. It also provides a new function of mobile communication which is the group chats. It can be concluded that the use of traditional SMS has significantly decreased as WhatsApp is more convenient and provides a lot of beneficial functions to people (Resende, Melo, Sousa, Messias, Vasconcelos, Almeida & Benevenuto, 2019). There are several important features in WhatsApp that make this app loved by many people around the world. According to Resende et al. (2019), the first attribute is communication that takes place on WhatsApp is end-to-end encrypted, where all the messages, images, videos, audios and documents can only be seen by the sender and receiver. Second, the group chats function on WhatsApp allows up to 256 members to communicate with each other (Resende et al., 2019). Lastly, WhatsApp also provides a way for users to disseminate information by having the broadcast message feature.

WhatsApp has provided many benefits to people especially in the aspect of teaching and learning. Barhoumi (2015) pointed out WhatsApp provides a way to share knowledge among peers, enhances learner's manipulative skills, smoothens learning process and strengthens evaluation process. According to Che Su, Che Hasniza, Hassan & Bahtiar (2018), WhatsApp is also perceived as an effective educational mobile tool as it helps students in building their own knowledge while using the digital mobile devices. WhatsApp is an instant messaging application that is produced particularly for educational purposes which can encourage interpersonal skills, creativity as well as soft skills among learners (Che Su et al., 2018). The group chats function on WhatsApp allows students and teachers to communicate and express ideas easily. Meanings of the messages on WhatsApp can be delivered easily to the students, making the communication to become even more effective as WhatsApp provides instant response among the group members to participate in the conversation during discussion on certain topics (Izyani & Mohamed, 2016). Learning through WhatsApp is also one of the most creative teaching methods that can be used by teachers or lecturers to draw students' interest, attention and deliver a fun learning approach. The students are able to convey their ideas through several features of WhatsApp such as sending documents, uploading photos, recording voice notes, providing web-links for users and many more. Therefore, WhatsApp provides an opportunity for the students to actively participate in learning activities conducted by educators.

If a person is fluent in more than one language, then the person is considered as multilingual. Multilingualism is a common thing in Malaysia as Malaysia is a multiracial country where there are Bumiputera, which consists of Malays and non-Malays indigenous as well as Sabahan and Sarawakian. According to Department of Statistics

Malaysia (2010), Bumiputera makes up 67.4% of the population. Other than that, the Chinese comprise 24.6% of the total population, meanwhile the Indians represent 7.3%. According to Albury (2017), the language that is commonly used in the Malay community is Bahasa Melayu, the Chinese uses varieties of languages such as Hokkien, Cantonese and Hakka. Meanwhile, Tamil is used in the Indian community. In Sabah and Sarawak, most of them use different languages such as Bidayuh, Iban and sometimes code-switch to Bahasa Melayu. Manglish is also used in Malaysia such as Bahasa Rojak or 'Salad Language'. Bahasa Rojak involves speech that uses two languages at inter and intrasentential level (McLellan 2012; Nil, Zurina & Shamala, 2012). Therefore, bilingualism and multilingualism in Malaysia leads to a phenomenon called code-switching. Sociolinguists have always been intrigued to investigate about code-switching and the factors that cause code-switching. There are many factors which lead people to switch to another language in an utterance such as lack of vocabulary, emphasis of a point, display of identity and habitual expression. Therefore, this research intends to discuss the relevant concepts, highlighting the types of code-switching and correlation of codeswitching and technology among UiTM undergraduates in Malaysia.

4. Review of Literature and Pertinent Concepts

4.1 Types of Code-Switching

According to Poplack (1980), code-switching can be separated into three categories:

- a) Tag-switching tag, interjection, and several expressions in a language are placed in a sentence that is completely in a different language.
- b) Inter-sentential switching the language switch occurs at sentence boundaries.
- c) Intra-sentential switching the language alternation that happens naturally without any abruptions in the centre of a sentence

In tag-switching, it can occur anywhere without 'violating the grammatical rule' of the sentence. It can be defined as the act of placing a tag in a sentence of another language. The arrangement of syntax won't be affected as the tags can be easily placed in a sentence (Ahmad, 2014). For instance, in English-Malay switching one could say, "I mean, kita boleh pergi makan sama-sama". Inter-sentential switching, on the other hand, takes place outside the sentence or the clause level. For example, "Why? What's wrong? Apa yang dah jadi?". Intra-sentential switching is very common in the languages that share a common family. It occurs in the same utterance which as a result, it will consist of elements of the two languages. For instance, "Ali tengah study dalam bilik dia". Ahmad (2014) stated that the difference between inter-sentential and intra-sentential is hard to recognise because of the spontaneous and unpredictable nature of speech.

From another perspective, Blom and Gumperz (1972) categorised code-switching into the following two types which are situational and metaphorical. Situational code-switching occurs when there is a difference in environment of a discussion, namely the differences in speaker, topic as well as setting. In this form of code-switching, the reason why the speaker code-switches can be recognised by the speaker himself. Hence, it can

be said that in situational code-switching, the speaker has a specific purpose for doing it (Nita, 2013). For instance, when an individual is having a conversation with his or her friends on a specific topic, but suddenly someone with different language proficiency joins in the conversation, he or she eventually code-switches in order to adjust to the current situation. Metaphorical code-switching, on the other hand, consists of strategies that are used to manage conversation, specifically when apologising, requesting, complaining, as well as refusing. Metaphorical code-switching can be pointed out as a code-switching with no specific purpose. This is because the speaker does not realise that they code-switch when communicating with other people. According to Nita (2013), it frequently occurs to someone who is proficient in two or more languages. For instance, when an individual is apologizing to his or her friends, the speaker automatically code-switches without even realizing it.

4.2 Reasons and Factors of Code-Switching in Malaysia

The factors of code-switching have been of great interest to a lot of linguists from different linguistic preferences. Malik (1994), as cited in Choy (2011), pointed out ten factors that led to code-switching, such as absence of facility, absence of register ability, speaker's emotions, to highlight a point, habitual utterances, semantic significance, to display identity within a group, to speak to different audience, pragmatic factors and lastly, to draw attention.

There are a lot of factors that lead people to code-switch. One of the factors is lack of facility. When certain terms cannot be found in other languages, bilinguals communicate by code-switching to convey themselves and to prevent any misinterpretation from happening. Other factor is lack of register ability. Bilinguals find it hard to select the right words in a certain language to discuss a topic. Thus, they codeswitch when they don't have the skills in both of the languages. Code-switching also occurred because several phrases would sound better in another language compared to the original language. For instance, the phrase "La clase de hoy fue way over my head." (The class that I had today was way over my head). The phrase "over my head" which carries the meaning "incomprehensible" is the proof that people would use another language that they prefer in an utterance (Nik & Suthagar, 2013). Emotions of a speaker also play an important role in influencing people to code-switch. When an individual is having inconsistent mood, code-switching may take place. For instance, happiness, annoyance and fearful. Bilingual speakers code-switch according to mood as using other phrases in another language takes a shorter time to express at that certain time. Speakers also code-switch on certain sections in an utterance to grab the attention of listeners and to highlight a point in situations such as in an argument. According to a research conducted by Joanna (2014), it was found that educators in Malaysia have the tendency to code-switch a lot in classrooms. They said phrases in English and said it again in Malay language to make it more comprehensible so that the students can grasp easily what the teachers are talking about. Since Malay language is the common language that is commonly used by learners, it is often utilised for code-switching purposes in most English classrooms. Besides that, habitual utterances is one of the factors that lead to code-switching as it occurs in greetings, discourse particles, requests and apologies. For example, the phrase "Excuse me" that can be found in a Malay language utterance shows that it is commonly used as a habitual expression by the Malaysian-English bilingual speaker (Marzieh, Vigneswari & Koik, 2016). Code-switching can also express crucial and relevant linguistic and social information where bilinguals want to express their personality or feelings to each other. In a study conducted by Choy (2011), he defined semantic significance as a "verbal strategy". The occurrence of code-switching in a group is for the purpose of displaying solidarity with a certain group. For instance, this situation can be seen in a classroom where teachers are trying to develop a friendly relation with students. Joanna (2014) stated that code-switching helps teachers to attain the desired learning outcomes and at the same time, build an encouraging language environment in the classroom. Code-switching also takes place according to addressee identity, where various languages are utilised in conversations when they talk to other listeners. Other than that, pragmatic factors also leads to code-switching. The occurrence of codeswitching depends on the characteristics of a discussion. For instance, the speakers have to ensure whether the conversation is in a formal or informal setting, and with whom they are speaking to. Lastly, code-switching used in the media or advertisements are able to grab the attention of the audience. In Malaysia, Bahasa Rojak or the mixture of two languages is commonly used among Malaysians including in Malaysian media especially in advertising. For instance, in a research conducted by John & Dumanig (2013), the phrase "Lagi power, lagi best" in a Perodua advertisement indicates a creative combination of Malay and English words by using a familiar phrase in Malaysia, "best". The phrase which consists of Malaysian identity has drawn customers' attention and allowed the customers to have a positive attitude towards the brand.

According to Siti, Wawan & Anita (2019), the three reasons; semantic significance, pragmatic factors, as well as to draw attention are irrelevant to Computer-mediated Communication (CMC) as those reasons are only applicable to speakers who meet faceto-face. From another point of view, Ahmad (2014) stated several factors that influence the use of code-switching; namely, to display solidarity, to reflect social status, to talk about a specific topic, to display affection, or to impress other people. Code-switching is utilised to express unity between individuals who live in a community with cultural diversity or the same ethnic group (Noorzaina & Nuraini, 2017; Ahmad, 2014). Social status can also be demonstrated by code-switching as speakers who use different languages suggest that they are intellectuals who are proficient in many languages. Therefore, code-switching is indeed a way to differentiate themselves from other social classes (Ahmad, 2014). When discussing a certain topic, speakers may speak in two languages. Another reason for code-switching is to display affection. It is popularly used by speakers to convey emotions and personalities. Speakers tend to code-switch not only when they want to display their fondness towards someone else, but code-switching is also used to demonstrate feelings such as joy, enthusiasm, annoyance, disappointment and a lot of other feelings. Holmes (1992) stated that code-switching often occurs to

express disapproval. Lastly, code-switching is used to impress the audience and will drive their determination to carefully investigate the message displayed as code-switching reflects a particular social class which can make the speaker appear more credible (Nerghes, 2011; Ahmad, 2014). Therefore, code-switching is popularly used by speakers in speech as it helps them to reach their target in convincing the audience due to the fact that it is a successful way that helps to capture the attention of the audience.

4.3 Types of code-switching mostly used by UiTM undergraduates on WhatsApp

Poplack (1980) pointed out that there are three different categories of code-switching, including tag-switching, inter-sentential switching and intra-sentential switching. From another point of view, Blom and Gumperz (1972) stated that code-switching can be categorised into two different forms, namely situational and metaphorical code-switching. According to a study by Caparas & Gustilo (2017), the researchers found out that inter-sentential code-switching is mainly used by Facebook users because they tend to code-switch from English to Tagalog. This is because a Facebook user who posts a message wants the readers to read and understand it well. Besides that, Ahmad Setiawan (2012) also stated that inter-sentential code-switching occurs when there is an act of switching from a language to a different language at sentence boundaries. On the other hand, a study by Ahmad (2014) revealed that in inter-sentential code-switching, it is vital for its speakers to be competent in the languages so that it suits the principles of the languages such as syntax, word formation, grammar and pronunciation.

A study that was conducted by Shogren (2011) revealed that a girl used her second language when she wanted to request something from her father by saying "Please", which caused his father to lower his voice and ask her to go by herself. However, the girl was not satisfied with the result of her request. Thus, she opted to use metaphorical codeswitching by switching to her second language when replying to her father to show her disappointment. Therefore, these findings suggest that metaphorical code-switching allows people to modify the mood of a discussion especially during an argument or in the midst of complaining and requesting. Other than that, according to a study conducted by Mujiono, Soepomo, Edi and Tri (2013), the findings have shown that code-switching was being utilised by English lecturers to reinforce the request or command to students in classroom.

4.4 The factors that influence the undergraduates to code-switch on WhatsApp

There are many factors of code-switching from linguists of different linguistic preferences. Malik (1994); as cited in Choy (2011) stated ten factors that led to code-switching, such as absence of facility, absence of register ability, speaker's emotions, to highlight a point, habitual utterances, semantic significance, to display identity within a group, to speak to different audience, pragmatic factors and lastly, to draw attention.

According to a study conducted by Engku, Mohamed and Najwa (2013), the subject in their study regularly inserted the particle "lah" during conversation. The subject even acknowledged in the interview session that she often inserts the particle

"lah" and other discourse particles to display friendliness as a Malaysian English speaker. Besides that, similar findings were also found in a study conducted by Noorzaina and Nuraini (2017). The findings of the study explained that in WhatsApp group application, the respondents often inserted discourse particles. For instance, discourse particles; "lah", "kan", "haah" in order to convey their politeness during a conversation as one of the means to produce a better communication with each other. The findings obtained showed that the respondents code-switch because it has become a habit of them to include Malay language discourse particles in a full-English sentence as a way to soften the sentence and emphasize the point of the message. Noorzaina and Nuraini (2017) expressed that the insertion of discourse particles in a full-English sentence is common in a multiracial country and multilingual country like Malaysia. Therefore, Malaysians tend to code-switch by inserting discourse particles without having the realization that they are doing code-switching when communicating with one another.

A study by Nik & Suthagar (2013) identified that the majority of the respondents switched to another language to either highlight a certain statement or to clarify a statement for others to understand. Meanwhile, in a study conducted by Noorzaina & Nuraini (2017), the researchers found that the respondents code-switch because they want to express on certain things that they may not be able to convey using their first language or second language. The majority of respondents also agreed that they code-switch to overcome issues such as lack of vocabulary and grammatical problems. This indicates that the respondents switch to another language while communicating on WhatsApp because they are afraid that they might commit grammatical errors and they find it is easier to code-switch instead of having to think of the correct grammar and words to use. The findings were in line with a study conducted by Astuti (2020) who pointed out that the respondents included Indonesian words into their English sentence as a communication method, in order to avoid problems such as grammatical problems and lack of vocabulary.

5. Conclusion

This research may give various implications to students, especially the second language learners and teachers at schools as code-switching is an essential instrument for language teaching. It is vital to spread awareness about code-switching practice to students and teachers. Other than that, this research provides a lot of valuable information to teachers because it explains the forms of code-switching that are mostly utilised by UiTM undergraduates and the factors that influence them to code-switch on WhatsApp. Therefore, this research can be used as a stepping stone for the educators to take initiatives by recommending actions that can be taken to teach students who are second language learners. Meanwhile, for students in higher education institutions, this research may help them to be conscious of their habits to code-switch whenever they are communicating with each other, whether in verbal communication or non-verbal communication. It is undeniable that code-switching brings a lot of advantages in the

aspect of communication as it helps to create a successful communication with each other. However, students should not take lightly on the choice of language when they speak as it may give impact to their career in the future and personal development. Hence, it is important to take initiatives to reduce the frequent use of code-switching among undergraduates in higher education institutions.

There are a few recommendations that should be taken into consideration for future research. This research discusses the use of code-switching among UiTM undergraduates while communicating using WhatsApp, where all of the students are Bumiputera, which makes up of Malays, natives, as well as Malaysian Borneo and their first language is mostly Malay Language. As a result, this research is limited in observing the usage of code-switching as it only involves code-switching between Malay Language and English. Hence, future researchers can improve the present study by conducting a study that includes other races such as Chinese and Indian students for the purpose of exploring the usage of code-switching which uses languages other than Malay language. Other than that, this research is also limited to the occurrence of code-switching on WhatsApp only. Future researchers should conduct a study on other types of Computer-Mediated Communication (CMC) as we are living in the era where CMC is an important medium to interact with each other especially during the pandemic. By conducting a code-switching study on other types of CMC, it will provide additional insights into the practice of code-switching and it will lead into obtaining various interesting information.

Conflict of Interest Statement

The authors declare no conflicts of interests.

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References

- Ahmad, A. T. S. E. (2014). Socio linguistic study of code switching of the Arabic language speakers on social networking. *International Journal of English Linguistics*, *4*(6), 78-86.
- Ahmad, S. (2012). Study on the use of language switching and code switching in movie "Kejarlah Jodoh Kau Kutangkap". State Islamic College of Tulungagung. Available at: http://repo.iain-tulungagung.ac.id/867/
- Albury, N. J. (2017). Mother tongues and languaging in Malaysia: Critical linguistics under critical examination. *Language in Society*, 46(4), 567.
- Al-Qaysi, N., & Al-Emran, M. (2017). Code-switching usage in social media: a case study from Oman. *International Journal of Information Technology and Language Studies*, 1(1), 25-38.
- Ariffin, K. & Husin, M. S. (2011). Code-switching and code-mixing of English and Bahasa Malaysia in content-based classrooms: Frequency and attitudes. *Linguistic Journal*, *5*, 220-247.
- Astuti, C. W. (2020). Language awareness: Language use and reasons for codeswitching. *LLT Journal: A Journal on Language and Language Teaching*, 23(1), 116-130.
- Barhoumi, C. (2015). The effectiveness of WhatsApp mobile learning activity theory on students' knowledge management. *Journal of Contemporary Educational Technology*, 6(3), 221-238.
- Blom, J. P. & Gumperz, J. J. (1972). Social meaning in linguistic structure: Code-switching in Northern Norway. In J. J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics: The ethnography of communication*, 407-434.
- Bukhari, N. I. B. A., Anuar, A. F., Khazin, K. M., & Abdul, T. M. F. B. T. (2015). English-Malay code-mixing innovation in Facebook among Malaysian University students. *Researchers World*, 6(4), 1-10.
- Caparas, P., & Gustilo, L. (2017). Communicative aspects of multilingual code switching in computer-mediated communication. *Indonesian Journal of Applied Linguistics*, 7(2), 349-359.
- Chan, K. L. R. (2019). Trilingual code-switching in Hong Kong. *Applied Linguistics Research Journal*, 3(4), 1-14.
- Che, S. M., Che, H. C. S., Hassan, A. B. & Bahtiar, M. (2018). Understanding the usage of WhatsApp among Malaysian employees through the lens of social influence theory. *International Journal of Engineering & Technology*, 7(4.38), 1039-1043.
- Choy, W. F. (2011). Functions and reasons for code-switching on Facebook by UTAR English-Mandarin Chinese bilingual undergraduates. Universiti Tunku Abdul Rahman. Retrieved from http://eprints.utar.edu.my/263/1/EL-2011-0803813-1.pdf
- Cohn, M. (2011). Social Media vs. Social Networking. Retrieved from https://www.compukol.com/social-media-vs-social-networking/.

- Constine, J. (2018). WhatsApp hits 1.5 billion monthly users. \$19B? Not so bad. Retrieved from https://techcrunch.com/2018/01/31/whatsapp-hits-1-5-billion-monthly-users-19b-not-so-bad/
- Crystal, D. (2006). Language and the internet (2nd ed.). Cambridge: Cambridge University Press.
- Department of Statistics Malaysia (2010). Population distribution and basic demographic characteristic report 2010. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/ctheme&menu_id=L0pheU4_3NWJwRWVSZklWdzQ4TlhUUT09&bul_id=MDMxdHZjWTk1SjFzTzNkRXYzc_VZjdz09
- Edele, A., Kempert, S., & Schotte, K. (2018). Does competent bilingualism entail advantages for the third language learning of immigrant students?. *Learning and Instruction*, 58, 232-244.
- Engku, H. E. I., Mohamed I. A. S. & Najwa T. A. (2013). Code-switching in English as a foreign language classroom: Teachers' attitudes. *English Language Teaching*, 6(7). 139-150.
- Halim, H. A., Nadri, H. N. A., & Mahmood, F. (2015). Code mixing on Facebook among Malaysian TESL students. *Advances in Social Sciences Research Journal*, 2(5). 27-33.
- Holmes J. (1992). Code-switching or code-mixing. Language choice in multilingual communities. *An Introduction to Sociolinguistics (p.41-52)*. United Kingdom, UK. Longman Group UK Limited 1992
- Izyani, M. & Mohamed A. E. (2016). Students' perception on the use of WhatsApp as a learning tool in ESL classroom. *Journal of Education and Social Sciences*, 4(6)
- Jingxia, L. (2010). Teachers' code-switching to the L1 in EFL classroom. *The Open Applied Linguistic Journal*, 3(10), 10–23.
- Joanna, T. S. (2014). Code switching in the Malaysian ESL classroom. (Thesis, Master of Arts). University of Otago.
- John, D. A. F., & Dumanig, F. P. (2013). Identity construction and code switching in English newspaper advertisements. *The Journal of the South East Asia Research Centre for Communications and Humanities*, 5(1), 57-71.
- Kachru, B. (1992). *Teaching world Englishes*. The other tongue: English across cultures. Champaign. University of Illinois Press.
- Malik, L. (1994). *Socio-linguistics: A study of code-switching*. New Delhi, ND: Anmol Publications Pvt. Ltd.
- Mahmud, M. M., Ramachandiran, C. R., & Ismail, O. (2018). Social media dependency: The implications of technological communication use among university students. In *Redesigning learning for greater social impact* (pp. 71-87). Springer, Singapore.
- Mahmud, M. M., & Wong, S. F. (2016). Understanding the repercussions of intercultural communicative competence: a study on the degree of students' cultural awareness, social and communication skills. *Journal of Human Sciences*, 13(3), 5561-5573.

- Marzieh, H., Vigneswari, C. K., Koik, S. J. (2016). Social factors for Code-switching -a study of Malaysian-English bilingual speakers. *International Journal of Language and Linguistics*, 4(3).
- McLellan, J. (2012). Code-switching and the influence of 'substrate' languages in the development of Southeast Asian Englishes. *English in Southeast Asia: Features, policy and language in use,* 267–88.
- Mesthire, J., & Larry (2000). Innovations to modern day approaches to teaching and learning. Pittsburgh University Press.
- Milroy, J. (2011). Some effects of purist ideologies on historical descriptions of English. In *Linguistic purism in the Germanic languages* (pp. 324-342). de Gruyter.
- Mujiono, Soepomo, P., Tri, W. & Edi, S. (2013) Code switching in English as foreign language instruction practiced by the English lecturers at universities. *International Journal of Linguistics*, 5(2). 40-48.
- Nagel, O. V., Temnikova, I. G., Wylie, J., & Koksharova, N. F. (2015). Functional bilingualism: Definition and ways of assessment. *Procedia-Social and Behavioral Sciences*, 215, 218-224.
- Nerghes, A. (2011). The impact of code-switching on persuasion: An elaboration likelihood perspective. Wageningen University.
- Newman, N., Fletcher, R., Kalogeropoulos, A., David A. L. L. & Nielsen, R. K. (2017). Reuters Institute Digital News Report 2017. Oxford University, 116-122.
- Nik M. N. I. A., & Suthagar N. (2013). The role of code-switching as a communicative tool in an ESL teacher education classroom. *Procedia Social and Behavioral Sciences* 90, 458 467
- Nil, Zurina, M. & Shamala, P. (2012). Code-switching in Gol & Gincu. *Procedia Social and Behavioral Sciences* 66:169–75.
- Nita, S. (2013). An analysis of code switching occurred in a puppet show. *Anglicist* 2(1).
- Noor, A. Q. & Mostafa, A. E. (2017). Code-switching usage in social media: A case study from Oman. *International Journal of Information Technology and Language Studies*, 1(1), 25-38.
- Noorzaina, I. & Nuraini, H. S. (2017). Code-mixing and code-switching practice among UITM undergraduates students in face-to-face and WhatsApp group application. *AIJLLS*, 1(4), 612-629.
- Nur Izyani, R. (2016). Intrasentential code-switching among Malays in Malaysia on Facebook. University of Essex.
- Nur, S. H. & Marlyna, M. (2014). The functions of code-switching in Facebook interactions. *Procedia Social and Behavioral Sciences* 118.
- Paramasivam, M. (2010). Codeswitching in communication: A sociolinguistic study of Malaysian secondary school students. *Pertanika J. Soc. Sci. & Hum.* 18 (2): 407 415.
- Parke, K. & Marsden, N. (2017). Lay theories regarding computer-mediated communication in remote collaboration. Open Praxis, 9(1), 17–30.

- Poplack, S. (1980). Sometimes I'll start a sentence in Spanish y termino en espanol: toward a typology of code-switching. In Li Wei (Ed.), The bilingualism reader (pp. 213-243). London and New York: Routledge.
- Resende, G., Melo, P., Sousa, H., Messias, J., Vasconcelos, M., Almeida J. & M, Benevenuto, F. (2019). (Mis)Information dissemination in WhatsApp: Gathering, analyzing and countermeasures. International World Wide Web Conference Committee, 1-11.
- Shogren J. B. (2011) Analysis of code-switching and code-mixing among bilingual children: Two case studies of Serbian-English language interaction. Wichita State University.
- Siti, A. N. A., Wawan, W. & Anita. (2019). The occurrence of code-switching on WhatsApp group application by EFL learners. *Asses Journal*, 15-25.
- Wardaugh, R. (1986). An Introduction to Sociolinguistics. Oxford: Basil Blackwell Ltd. Wei, L. (2020). Dimensions of bilingualism. In *The bilingualism reader* (pp. 3-22). Routledge

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