



## Code-switching Usage in Social Media: A Case Study from Oman

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**Abstract.** Multi-linguals have observed a widespread trend of switching between two utterances in foreign language settings entitled code-switching or (CS). It has been noticed that CS usage in social networking websites has not yet been explored intensively in the higher educational institutions of the Gulf region; the reason that attracted us to conduct this study in Oman (one of the Arab Gulf region countries). This study explores the educators and learners' attitudes towards using CS in social networks within the higher educational context in Oman. Two questionnaire surveys were administrated with 338 students and 21 educators in the study, in addition to two interview sessions with both students and educators. Results indicated that 86.40 % of the students code-switch on social networks, whereas 81 % of the educators do so. WhatsApp is found to be the most social networking App used for code-switching by both students and educators. Furthermore, results indicated that students are highly positive in their attitudes toward the use of code-switching in social media. Additionally, the study presents other implications and future work.

**Keywords:** *Code-switching, social media, higher education, attitudes, Oman.*

### 1. Introduction

Multilanguage speakers have observed a widespread trend of utilizing different utterances. This is called Code-Switching (CS). CS refers to the notion that a speaker shifts from one language or a variety into another in the course of a text or a conversation. CS plays a vital role in the higher educational context. Students and educators are the main characters who are involved in such phenomenon. In order to identify the strength, weakness and build the required strategy for CS implementation, students and educators' attitudes towards CS need to be carefully investigated. In the present study, our target is to investigate the educators and students' attitudes towards CS at Al Buraimi University College (BUC); which is considered as one of the leading higher educational intuitions in Oman (Al Emran & Shaalan, 2014; Al-Emran & Shaalan, 2015a; Al-Emran et al., 2016; Al-Emran & Malik, 2016; Al-Emran & Shaalan, 2017).

In the literature, CS has been defined from several perspectives. Jingxia (2010) pointed out in his study that the term "*code*" denotes any system of signals including numbers and words with real meanings. Wardhaugh and Fuller (2014) defined code as a strategy that more than one bilingual speaker uses for communication purposes. An increasing number of research papers have defined code-switching in different contexts where each of which attempts to clarify this concept from a variety of views in the area of socio-linguistics. Jdetawy (2011) and Taweel and Btoosh (2012) referred to code-switching as the occurrence of switches between two languages in bilinguals' utterances which takes place in the form of a single word, phrase or sentence along with Momenian and Samar (2011) who defined CS as the occurrence of switches both between and within utterances. Jingxia (2010) introduced code-switching as the notion of moving between two languages in the middle of a conversation when both speakers speak the same two languages. Then and Ting (2010) defined code-switching as the concurrence within the same conversation substitution of passages of utterance that is related to a couple of syntactic systems. Similarly, Greggio and Gil (2007) indicated that code-switching is a linguistically-viewed perception in evolving bilinguals among speakers with different utterances. Leyew (1998) refers to code-switching as

the diglossic circumstances in which bilinguals utilize various dialects in various circumstances. Contrarily, Gingràs (1974), Lee (2010), and Bilgin and Rahimi (2013) suggested that code-switching can occur within two different languages at sentence boundaries instead of two different varieties in the same discourse. In other words, Nunan and Carter (2001) argued that code-switching alternates between the speakers' mother tongue and the target language which they aim to acquire.

Social media websites make it easy to communicate with colleagues on anytime anywhere settings (Salloum et al., 2017). Social networking websites provide a reliable platform for the higher educational institutions. According to Schlenkrich and Sewry (2012), social media sites help their users to make relationships and broadcast information among social networks. The majority of educators, students, parents and businesses utilize tools in social media for communication with each other in a quick, effective method.

According to a study revealed by Rimmer (2007), social media is defined as data collection, representation, processing and dissemination of race, religion, books, movies, and relationship status, shared between friends, family members and strangers. According to Hung and Yeun (2010), social networking technologies are used in various contexts for improving communication affectivity. They added that learning is a social activity that specifically benefits from social networking usage; it provides opportunities for learning inside and outside classrooms and increases the interaction among learners. As indicated by Mazer et al. (2007), social networking sites allow both educators and students to develop the mutual relationship between students and educators; and create a positive learning experience for both parties.

Social media are increasingly apparent within higher educational contexts. Instructors use social media technology as an educational tool to improve teaching and support active learning for learners (Tess, 2013). In this sense, Selwyn (2012) indicated that an increasing number of higher educational institutions are likely to cope up with social media applications and users. A growing number of educators have begun to consider the significance of social media sites for education; as they deeply raise ideological questions about institutionalized educational nature. However, educators integrate social media into their current methods. They take into consideration the practical challenges of how to design blended curricula and assess students' authored work. Staff and students are supposed to be equally supported while making eloquent use of these sites (Gray et al., 2010; Buckley et al., 2010). In addition, Crook (2008) claimed that universities need to support students' self-directed activities by offering them a good governance of technology-based learning. Certainly, a lot of technological analysts have highlighted a new stage of digital technologies, including the semantic web, cloud computing and the internet of things. They also enthused social media technology to be best developed in higher educational contexts and educators.

## 2. Literature Review

The phenomenon of code-switching has been intensively studied by various scholars to investigate its usage in the higher educational context. Alenezi (2010) explored learners' linguistic attitudes towards the language of teaching and their language attitudes' effects on academic performance of these learners during a science class of Human Development in Kuwait University. The researcher combined both qualitative and quantitative research methods in order to gain precise results. The study questionnaires were administrated based on 3 males and 14 females who study occupational therapy in the college of Allied Health Science. The collected data were evaluated by means of percentages in order to measure the differences in the participants' attitudes. Findings of this exploratory study reported positive language attitudes towards CS between Arabic and English.

Johansson (2014) aimed to study when and why teachers switch languages while teaching English in an upper secondary school in Sweden. The study also attempted to find out the preferred language teaching in various classroom settings by both teachers and students. The researcher interviewed five experienced teachers at different upper secondary schools. Questionnaires were also conducted with 96 students (42 males and 54 females). Results indicated that the teachers, generally, were not in favor of CS. Results also revealed that most of the learners tended to switch between Swedish and English. On the other side, 87% of the learners sought to make them speak English more than Swedish.

Social media websites play a significant role in the educational context. Various studies were conducted to examine the impact of these websites in the educational context. Bermudez et al. (2016) demonstrated the perception of secondary school students about using social media while learning English. An online survey, which was conducted with male and female students randomly, determines social media impact on learning English. Results justify that the majority of female respondents, who are studying in both

public and private schools, consider social media an important part of learning. Google Plus, YouTube, Google docs and Edmodo are examples of the most widespread social media platforms used by students. These forums provide students with better English language awareness in their secondary education, since all the students lack a similar English fluency level. Besides, English and social media platforms assist students in their learning. Mutual interactions help students learn better than listening to teachers, since they utilize social media to improve their academic performance and educational techniques. Their survey results consider social media as a very fruitful source and students enjoy learning while using them.

Karal et al. (2015) studied the influence of Facebook groups' educational use as an online community on the high school students' language usage. Thirty grade 11 students, who attend a high school in Trabzon, Turkey, took part in the study. Firstly, the researchers obtained initial data about students' Facebook usage in order to determine the dynamics obtained to encourage Facebook usage for educational purposes. Secondly, the researchers created a Facebook group and assigned a literature teacher to be the group guide. The study continued for twelve weeks; students' tasks including compositions, poems, essays, debates, the teacher's observations, and examined interview data. Results showed that Facebook enhances students' learning process, interaction and collaboration between learners and their teachers. However, Facebook groups are effective on issues related to writing ability development, cooperation and communication among students, communication and cooperation between teacher and students. Facebook as a social networking website is utilized to satisfy some educational purposes along with the teacher's presence and Facebook group that support students to use language more properly and effectively.

Lantz-Andersson et al. (2013) analyzed the way students follow to structure their communication in social networking sites (SNS) within schools and how that helps linguistic and educational practices. Systematically, the study implements conceptual merits of frame analysis rather than sociocultural perception. Ethnographic data were collected from a Facebook group in English-oriented classes, containing 60 learners who age from 13 to 16 years and come from several countries like Colombia, Finland, Sweden, and Taiwan. Results showed potentials for framing both the activity and boundary crossing to produce long-lasting spaces for cooperative language-learning events in classes where students bring together their language learning subjects with their linguistic communicative usage daily. However, these lengthy spaces are difficult to maintain and have to be chronically discussed. Implementing social media for educational determinations is supposed to be dynamically, deliberately and collaboratively discussed by students and educators to make an innovative space of language learning with its own constraints and potentials, as well as, to make good use of young people's several active linguistic uses in social media daily. There are different issues that continue to be re-thought and re-visited including linguistic issues related to learner and teacher roles and how students' digital vernacular use can be recognized as other communicative styles than those frequently reflected from an instructive perception.

According to a study conducted by Akbari et al. (2016), as per Astin's Theory of Student engagement, the most significant issue in teaching and learning is the increased level of students' engagement in education. The most effective educational atmosphere is student engagement increase. The study analyzed the impact of network usage for pedagogical goals on students' engagement, learning, and motivation. The study attempted to investigate whether there is any difference between Facebook group and face-to-face group in terms of language learning through a detailed comparison between the two groups: a control group, which was using face-to-face education, and an experimental group, which was using Facebook. Results revealed significant differences between the two groups regarding their engagement, motivation, and learning. The group using Facebook revealed significantly higher results while taking the TOEFL post-test than the face-to-face group with no differences in the pre-test. Additionally, higher motivation and engagement levels were significantly reported by the Facebook group after taking the course as compared to the face-to-face group. It was found that there was no connection between motivation and engagement. Thus, English language undergraduates' attitudes towards the effectiveness of the specific environment and Facebook features for English language learning were examined. The authors claimed that students' usage of Facebook permits them to study more effectively and develop their language abilities, for the reason that these networking websites allow students to have diverse interactions and to exchange information during cooperation in order to raise their educational outcomes.

Liao (2014) employed a reasonable integration of an old theory called a Community Language Learning (CLL) with new technology (CALL/ML) for future language classrooms. It investigated a way in

which (CLL) method, when employed by means of new technology with Facebook, can be the most effective approach in a flipped EFL classroom. The main concern of this study is decreasing levels of learners' anxiety and enhancing their language performances within English classrooms. Curran (1976) claimed that CLL approach can reduce learner insecurity and anxiety. Results indicated that the experimental group, which was taught with a CLL approach integrated with CALL and ML, exhibited improved language performances.

According to the literature, there is an increasing number of research papers that address the role of code-switching (CS) in education with more focus on the higher educational sector globally. Moreover, social media has played a significant role in promoting English language learning processes. As we observed from the aforementioned studies that there is a lack of studies regarding the use of code-switching in social media websites. One of the main factors that need to be fully considered before using CS in these websites as an educational method is students' and educators' attitudes towards CS. To this end, we are seeking to answer the following research questions in order to examine the students' and academics' attitudes towards the use of code-switching in social media within the higher educational settings in Oman:

**RQ1:** To what extent is code-switching used in social networking websites by students?

**RQ2:** How is code-switching perceived by students in terms of gender, major, degree and level of study in the social networks apps?

**RQ3:** To what extent is code-switching used in social networking websites by educators?

**RQ4:** How is code-switching perceived by educators in terms of gender, qualification, age, academic experience, and academic rank in the social networks apps?

### 3. Research Methodology

The present research study investigates the students' and educators' attitudes towards using code-switching in social media within the higher educational settings in Oman. Understanding those attitudes will assist the decision makers in the higher educational institutions in Oman to identify the strengths and weaknesses and to build their own strategy of using CS in social media websites. Attitudes indicate whether or not the students and faculty members are adopting CS and are getting enough benefit from that usage in social media. In the present study, some variables were collected from (Al-Emran and Shaalan, 2015b); such variables include, gender and major (for students); gender, academic rank and academic experience (for educators), whereas other variables were developed by the researchers themselves.

#### 3.1. Instrument and Data Collection

Data are collected through two methods: the questionnaire survey (Quantitative method) and interviews (Qualitative method). Surveys and interviews have been administrated at Al Buraimi University College (BUC) at Al Buraimi Governorate, Oman. Two kinds of questionnaire surveys are designed and distributed, one for students and the other for educators. The distribution of the surveys has been conducted by the authors and with the assistance of the educators within each department. The interviews were performed by the first author and the students through asking them several questions regarding the use of CS in a face-to-face discussion. In addition, interviews were also performed with the educators in which they were asked several questions regarding the use of CS in social media. The total number of participants was 338 students and 21 educators.

According to Al-Emran and Shaalan (2015a) and Al-Emran et al. (2016), the study follows the purposive convenience sampling technique in which the participants were easily reachable and willing to take part in the present study. The students took part from different majors, departments and degrees (Diploma, Advanced diploma, and Bachelor). The population of the educators was picked from different nationalities with different qualifications, academic rank, and teaching experience. The questionnaire surveys were prepared and designed by the researchers themselves based on the study research questions. English is the language that was used in preparing the surveys as it is the language that is easily communicated to both students and educators. Some items were selected from other studies like Eldin (2014) and Al-Emran et al. (2016).

On the other side, the interviews are designed by the researchers themselves in accordance with the research questions of the present study. English has been used in preparing the interviews since it is the language that both students and educators communicate in easily.

## **4. Results**

### **4.1. Descriptive statistics for demographic data**

Based on the analysis of students' demographic data, results indicated that 65.7% of the students were females while only 34.3% were males. 36.7% of the participants were categorized under the Business Administration department, while 34.9% of them were categorized under the IT Department and 28.4% of them were listed under the English Department. 64% of the participants were aged between 18 and 22. 74.3% of the participants were studying at the bachelor degree level. 49.7% of the participants' CGPAs were ranged between 2.00 and 2.99. The analyzed educators' personal/ demographic data show that 66.7% of the participants were males. 66.7% of them were master degree holders, while 28.6% were PhD and 4.8% were bachelor degree holders. Around 38% of the participants were aged between 36 and 45 years old. 52.4% of the participants had more than 10 years of experience. 71.4% of the participants were listed under instructor academic rank.

### **4.2. Students' attitudes towards the use of code-switching in social media**

As per Table 1, results revealed that most of the students agree with the issue that code-switching helps them to convey new words easily while they are switching between English and Arabic with a mean score of (4.31). Moreover, results demonstrated that the second highest mean score (4.09) of the surveyed items tends to the concern that Code-switching allows students to express the ideas that they can't express in Arabic. It has been observed that the students agree with the matter that they are feeling more comfortable and confident with a reasonable mean score of (3.84). To this end, the mean score of all the items are above (3); this indicates that students are highly positive in their attitudes toward the use of code-switching in social media.

Items	Answers	Percentage	Mean	Standard Deviation
Code-Switching via social media enhances my communication skills.	Strongly Disagree	11	<b>3.64</b>	1.201
	Disagree	17.5		
	Neutral	24		
	Agree	41.7		
	Strongly Agree	5.9		
Code-switching via social media helps me to develop my language skills.	Strongly Disagree	8.6	<b>3.57</b>	1.117
	Disagree	13		
	Neutral	25.9		
	Agree	31.2		
	Strongly Agree	21.2		
Code-switching via social media helps me to convey new words easily.	Strongly Disagree	3.2	<b>4.31</b>	1.149
	Disagree	3.9		
	Neutral	17.5		
	Agree	35.8		
	Strongly Agree	39.7		
Code-switching via social media makes me feel more comfortable and confident.	Strongly Disagree	5.1	<b>3.84</b>	1.065
	Disagree	7.5		
	Neutral	32.2		
	Agree	37.5		
	Strongly Agree	17.7		
Usage of English through social media allows me to express the ideas that I can't express in Arabic.	Strongly Disagree	3.7	<b>4.09</b>	1.221
	Disagree	7.2		
	Neutral	20.8		
	Agree	42.1		
	Strongly Agree	26.2		

**Table 1. Students' attitudes toward code-switching in social media.**

### 4.3. Research Questions' Analysis

#### **RQ1: To what extent is code-switching used in social networking websites by students?**

In order to answer the above research question, the following two questions were conducted in the distributed survey.

#### **Do you use code-switching in your chatting on social networks (Facebook, Twitter, Google+, WhatsApp, etc ...)?**

As per (Figure 1), it is clearly mentioned that 86.40 % of the students code-switch on social networks, while only 13.60% do not. The high relative percentage indicates that the students are highly motivated to use code-switching frequently on social networks. This can be attributed to the reason that they tend to obtain, deliver, and share information, news, and educational issues while using social networking websites.

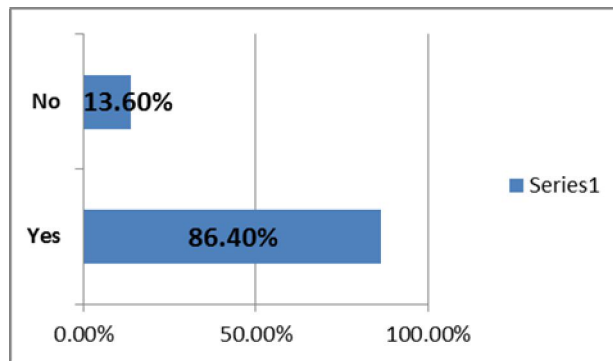


Figure 1. Students' usage of code-switching in social networks.

As indicated during the interview questions, the majority of the students stated that they code-switch on social networks for showing off and lacking equivalents.

**What is the most frequent social networking App that you usually use code-switching in your daily chatting?**

Figure 2 demonstrates the most frequent social networking apps that students use for code-switching. We can observe from the results that 43.5 % of the students are using WhatsApp for chatting. Moreover, most of the social networks Apps such as WhatsApp, BBM, Facebook, Twitter and Google+ make up the second biggest category with 40.5 %. Contrarily, none of the students indicated that they code-switch on Twitter in their daily chatting.

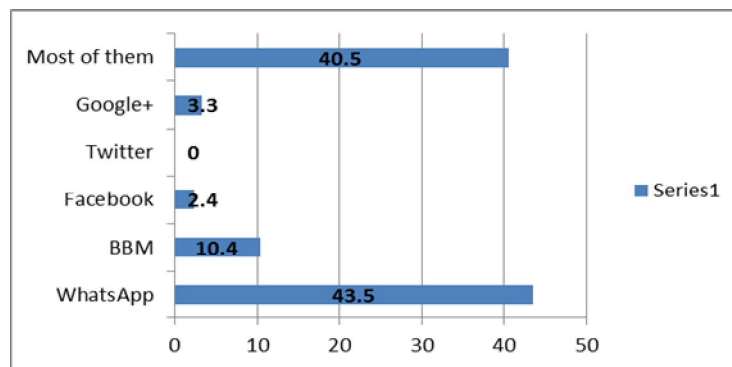


Figure 2. The most frequent social networking App used by students for code-switching.

**RQ2: How is code-switching perceived by students in terms of gender, major, degree and level of study in the social networks apps?**

In order to answer the above research question, we analyzed the data of those who only used code-switching in social networking websites (i.e. 86.40 %). As per (Figure 3), it is clearly revealed that 58.28% of female students tend to code-switch while using social networking app, while only 28.11% of males do.

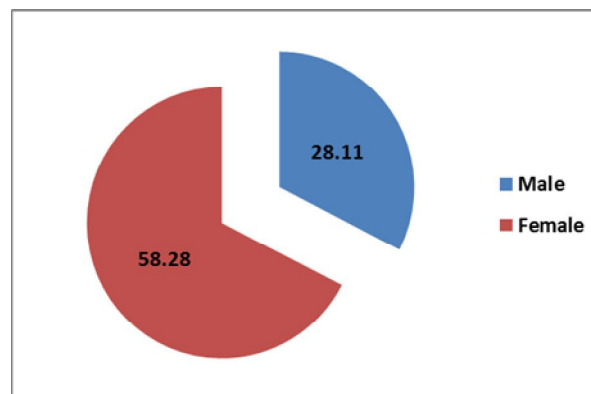


Figure 3. Students' perception of CS in terms of gender in social networks.

Figure 4 proves that the majority of students who use CS while chatting in social networks are from IT and business departments with 32.25% and 31.06 % respectively. It is clearly shown that students studying English language code-switch in social networks with 23.07%.

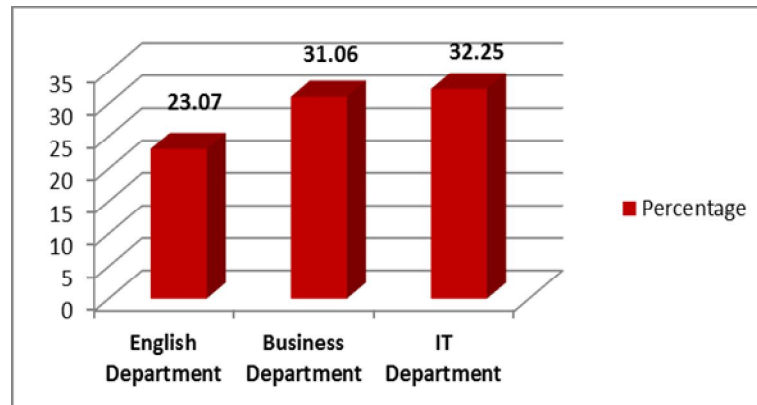


Figure 4. Students' perception of CS in terms of major in social networks.

According to (Figure 5), it is stated that students holding Bachelor degrees make up the highest category of using code-switching while chatting in a social network with 62.72%; however, only 23.69 % of students, who are holding both diploma and advanced diploma, do chat in social networks.

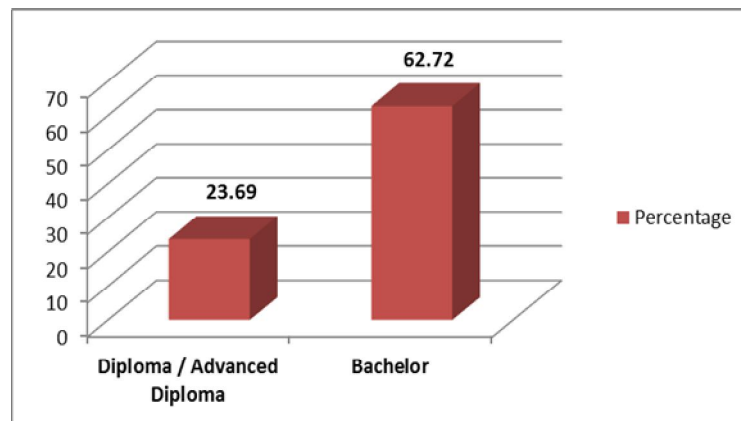


Figure 5. Students' perception of CS in terms of degree in social networks.

Figure 6 indicates that middle-level students, whose CGPA is between (2.0 and 2.99) form the highest category of using code-switching in social networks; they make up 40%. The next highest category is high-level students, whose CGPA is between (3.0 and 4.0), score 35%. However, only 5% of low-level students use CS in their daily chatting on social networks.



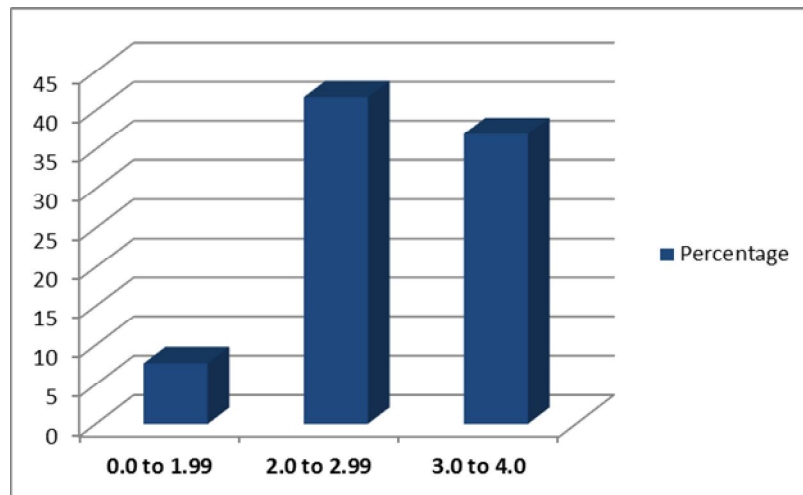


Figure 6. Students' perception of CS in terms of level of study in social networks.

**RQ3: To what extent is code-switching used in social networking websites by educators?**

In order to answer the above research question, the researchers conducted the following two questions in the distributed questionnaire survey.

**Do you use Code-Switching in your chatting on social networks (Facebook, Twitter, Google+, WhatsApp, etc ...)?**

Figure 7 shows that 81% of the educators code-switch on social networks, while only 19% do not. It is evident that the educators are commonly interested in code-switching in online interactions. This could be attributed to the reasons that educators are well-educated and knowledgeable in their field which lead them to code-switch due to the lack of equivalents.

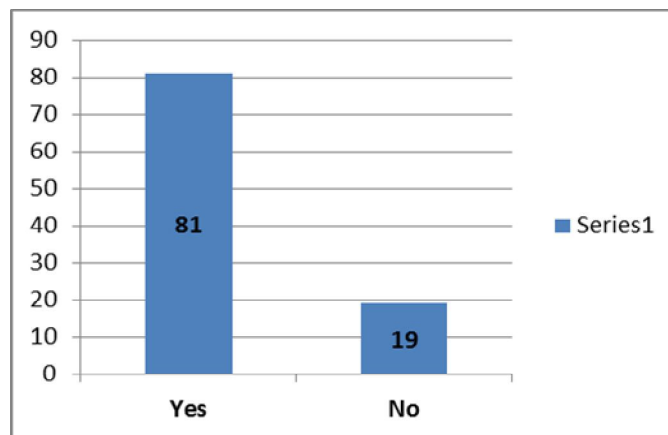


Figure 7. Educators' usage of code-switching in social networks.

As indicated during the interview questions, the majority of the educators stated that they code-switch on social networks for communicating with friends and recalling memories.

**What is the most frequent social networking App that you usually use code-switching in your daily chatting?**

As per (Figure 8), the most frequent social networking apps used by educators for code-switching is WhatsApp. The results revealed that 71.4 % of the educators tend to code-switch on WhatsApp for chatting. Furthermore, most of the social networks Apps such as WhatsApp, BBM, Facebook, Twitter and Google+ make up the second highest category with 28.6 %. In contrast, none of the faculty members stated that they code-switch on BBM, Facebook, Twitter and Google+ in their daily chatting.

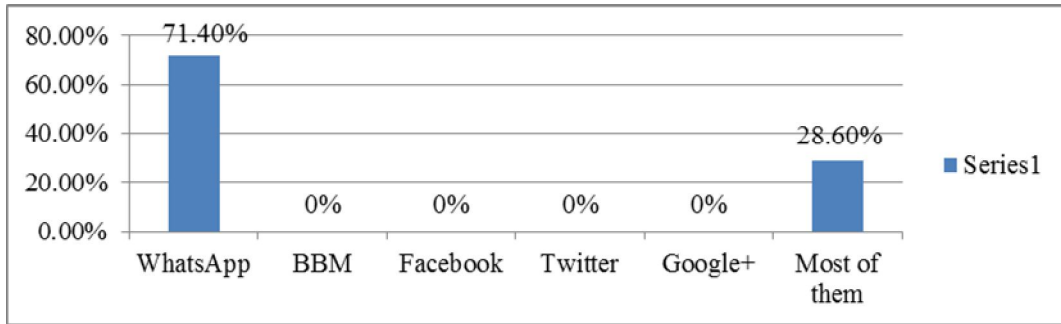


Figure 8. The most frequent social networking App used by educators for code-switching.

**RQ4: How is code-switching perceived by educators in terms of gender, qualification, age, academic experience, and academic rank in the social networks apps?**

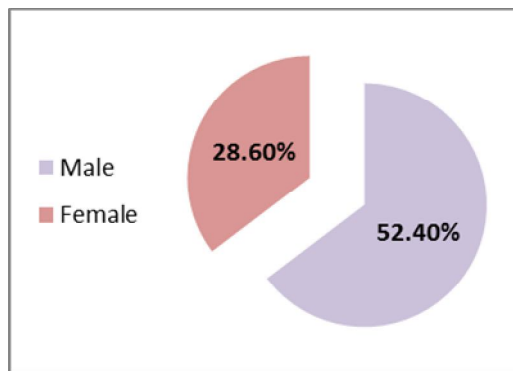


Figure 9. Educators' perception of CS in terms of gender in social networks.

Answering the above question requires analyzing CS users' data in social networking websites. Figure 9 clearly demonstrates educators' use of CS while using social networks; it shows that 52.40% of female educators utilize code-switching in social networks compared to males with only 28.60%.

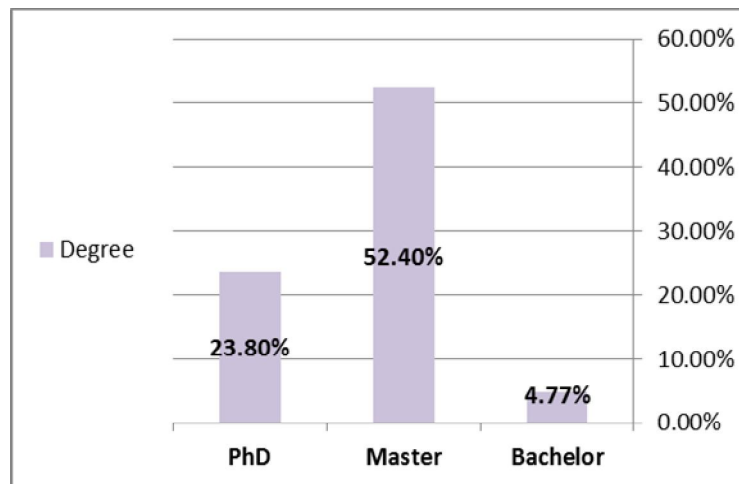


Figure 10. Educators' perception of CS in terms of qualifications in social networks.

As per (Figure 10), master holders make up the majority of educators who use CS in social networking websites with 52.40%. It is clearly stated that educators holding PhD and bachelor degrees represent the next highest range with 23.80% and 4.77% respectively. This is due to the fact that the majority of the participants are master holders.

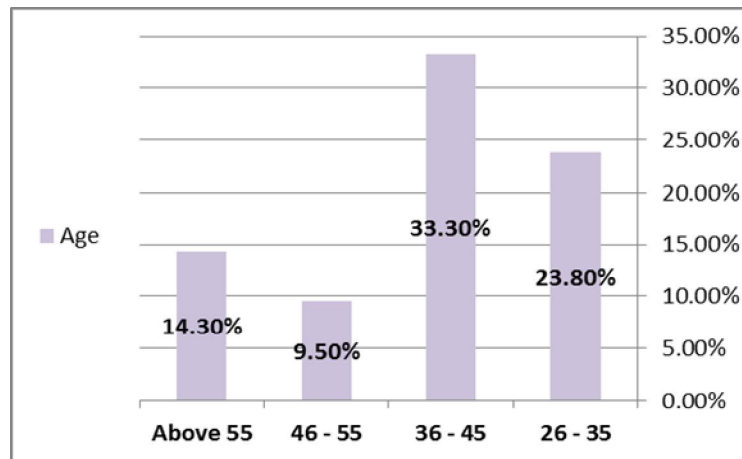


Figure 11. Educators' perception of CS in terms of age in social networks.

Figure 11 proves that educators aging between 36 and 45 years form the highest category of using CS in social networking websites with 33.30%. It is clearly shown that 23.80% of educators whose ages range between 26 and 35 years form the next highest category. However, only 9.50% of 46 and 55 years old of educators code-switch while chatting in social networks.

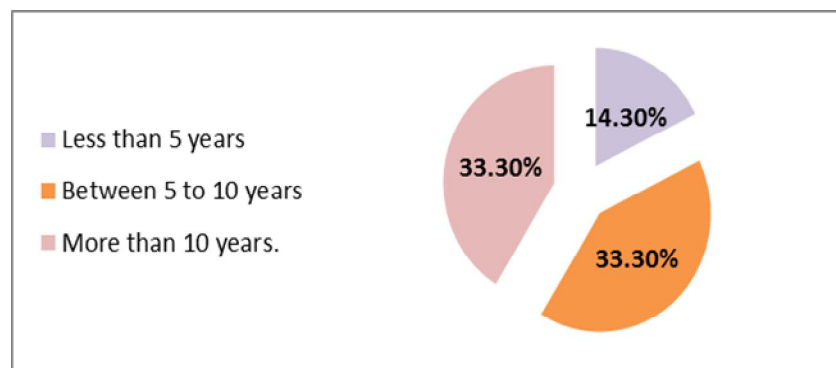


Figure 12. Educators' perception of CS in terms of academic experience in social networks.

According to (Figure 12), experienced educators with five and more than 10 years code-switch using social networks with 33.30%. However, 14.30 % of educators with less than 5 years of experience are less motivated to code-switch in social networks. This could be referred to the diversity of experience at work throughout their years of experience in which they interact with people from different backgrounds and cultures.

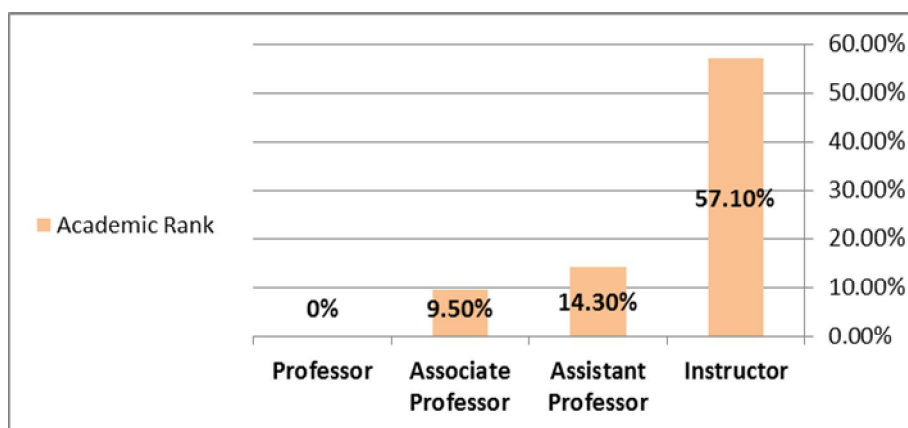


Figure 13. Educators' perception of CS in terms of academic rank in social networks.

According to (Figure 13), it is stated that instructors form the most frequent CS users in social networks; this group makes up 57.10% followed by assistant and associate professors with 14.30% and 9.50% respectively. Figure 13 demonstrated that professors do not code-switch in social networks. This is due to the fact that the professors' participants are Zero in the study and the majority of the participants are master holders.

## 5. Conclusion and Future work

Researchers have demonstrated that switching between two codes is an accepted linguistic action in the context of bilingual educational systems. The present study highlights the attitudes of both students and educators towards code-switching in social networking websites within the higher educational context. It has been noticed in the literature that code-switching in social networks has not yet been studied intensively within the Gulf region universities; consequently, we draw attention to our study on Oman (one of the Gulf region countries) which partly addresses the gaps that have not been covered yet within the existing literature. The researchers conducted two questionnaire surveys, one for students and the other for educators in order to obtain a full picture of students' and educators' attitudes towards switching between Arabic and English in social networks. Four research questions underpin the present study. Al Buraimi University College (BUC) at Al Buraimi Governorate, Oman was the site of this study. 338 students took part in the study (N=116) males and (N=222) females. 21 instructors took part in the study (N=14) males and (N=7) females. The collected data were analyzed using the SPSS software.

Results indicated that 86.40 % of the students code-switch on social networks, while only 13.60 % do not. In addition, 43.5 % of the students are using WhatsApp for chatting. Moreover, 58.28% of female students tend to code-switch while using social networking app, but only 28.11% of males do. It is also revealed that the majority of students who use CS while chatting in social networks are from IT and business departments with 32.25% and 31.06 % respectively. Additionally, students holding Bachelor degrees make up the highest category of using code-switching while chatting in a social network with 62.72%. Middle-level students, whose CGPA is between (2.0 and 2.99) form the highest category of using code-switching in social networks; they make up 40% of the entire sample of students. In terms of students' attitudes, results indicated that the mean score of all the items were above (3). This indicates that students are highly positive in their attitudes toward the use of code-switching in social media.

Regarding educators, it is evident that they are commonly interested in code-switching on social networks; 81% of the educators code-switch on social networks, while only 19% do not. Findings also revealed that 71.4 % of the educators tend to code-switch on WhatsApp for chatting. It is also revealed that 52.40% of female educators utilize code-switching in social networks compared to males with only 28.60%. Educators, aging between 36 and 45 years, form the highest category of using CS in social networking websites with 33.30%. Moreover, educators with five years and more than 10 years of experience code-switch in social networks with 33.30%. Instructors form the most frequent CS users in social networks; they make up 57.10% followed by assistant and associate professors.

As a limitation, only 21 educators took part in the present study. Accordingly, educators' attitudes were not measured due to the limited number of participants. As a future direction, we intend to increase the number of educators in order to add more value to the current results. That is, increasing the number of educators will contribute to the measurement of their attitudes which is missed from the current study. In addition, the researchers are interested in examining the students' and educators' attitudes at other universities in Oman by investigating other factors. Samples from other different universities will definitely add more value to the observed results.

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