

Attitudes of Young Moroccans towards the Use of Code-switching in their Facebook Interactions

Khawla KHOUMSSI

*Sidi Mohamed Benabdellah University
National School of Applied Sciences, Fez, Morocco
kh.khoumssi@gmail.com*

Abstract

Code-switching is part of the daily speech of a huge number of Moroccans. The insertion of French words and expressions in the Moroccan individuals' verbal interactions gives the impression that they are modern, educated and belonging to a higher social class. This kind of language is very common among young Moroccans, and considered as a sophisticated way of communicating, especially in social networking sites, mainly Facebook. However, there is a controversy over the use of code-switching all over the world, as some consider it a sign of first language attrition and others, on the other side, perceive it as a conscious act performed by bilingual speakers to serve different communication intents. The main purpose behind this research is to holistically investigate, through survey questionnaire, the phenomenon of code-switching among young Moroccans in Facebook, since it is highly frequent among this category, trying to trace their attitudes towards this linguistic phenomenon, and whether they consider it as a communicative strategy or a sign of Moroccan language attrition. It also attempts to find out whether demographic variables such as, 'age', 'level of education' and 'type of school' can be considered among factors that might influence the way young Moroccan Facebook users perceive CS. Findings achieved from statistical analysis of data also showed that socio-demographic variables mainly age, level of education, type of school, are responsible for variations at the level of attitudes of young Moroccan Facebook users.

Keywords: Code-switching, young Moroccans, attitudes, Facebook, language attrition, communication strategy

1. INTRODUCTION

In almost all Arab countries, code-switching in fact, was considered among the aftermaths of colonialism, which is deemed as a bad memory in the minds of most Arabs. However, given the high position that French occupies in Morocco, this language has gained more ground after independence, and Moroccans are no more hostile towards it, than they were in the colonial era. It becomes a means of upward mobility, especially among Moroccans who occupy higher positions in the country, either in the private as well as in the public sector, they use French as a dominant language in their daily interactions. They also tend to transmit this culture to their children by providing them with French education. Therefore, French becomes a sign of modernity and socio-economic advancement, and people are more eager to learn this language, and integrate it in their daily speech, to appear modern and highly educated; while Moroccan Arabic becomes more restricted to informal domains and ordinary interactions of less educated people belonging to a lower class of society. The best evidence of the deep influence that French exerts over the Moroccan language is the constant use of code-switching between MA and French. Consequently, many words and expressions were borrowed from French and integrated in the Moroccan linguistic repertoire, and barely recognized as separate from it.

With the advent of social media, the phenomenon of code-switching has become even more widespread and common among SNS users, as more instances of code-switching were observed in online interactions, especially among the young generation. Regardless the spread of CS among online communities even more than in their offline conversations, no prior studies have investigated the issue of language attrition in relationship to written forms of CS among these communities, but have mainly concentrated on its spoken forms, especially in immigrant bilinguals' speech (Myers-Scotton, 1998).

Many studies revealed that CS is directly linked to language attrition especially in immigration contexts (cf. Du Bois, 2009; Halmari, 2005) suggesting that when immigrants are no more in contact with their native language, this latter gradually starts to diminish and get replaced by the second language that becomes their sole means of communication wherever they go. Only a few studies reported the loss of first language in a native environment (Boikanyego, 2014) due to the dominance of a foreign language.

Although CS was found to be an indication of language loss (Myers-Scotton, 1998; Du Bois, 2009) many other studies have revealed the opposite, suggesting that CS is a conscious act, rather than a random choice, made by bilingual speakers to serve certain communicative functions (Auer, 1984; Gumperz, 1982; Myers-Scotton, 1998; Montes-Alcalà, 2007; San, 2009). Among the most influential studies in this field is Gumperz's (1982) conversational CS, where he addressed this issue, and suggested different social functions that CS may serve in a bilingual interaction mainly quotations, addressee specification, interjections, reiteration, message qualification, and personalization versus objectivization. The same case for Myers-Scotton's markedness model (1993) which is also evidence that CS is socially-motivated, rather than a random act, and that is a rational choice made by bilingual speakers to negotiate certain social roles (Myers-Scotton, 1993).

1.1. Research Questions and Hypotheses

Q1: How do young Moroccan Facebook users perceive the use of code-switching in Facebook?

H₁: Young Moroccan Facebook users hold positive attitudes towards code-switching in Facebook, and do not consider it as a sign of language attrition;

Q2: What are the factors that determine the attitudes of young Moroccans towards CS in Facebook as an effective communication strategy?

H₂: Age determines the attitudes of young Moroccans towards CS as an effective communication strategy;

H₃: Level of Education determines the attitudes of young Moroccans towards CS as an effective communication strategy;

H₄: Type of school determines the attitudes of young Moroccans towards CS as an effective communication strategy;

Q3: What are the factors that determine the attitudes of young Moroccans towards CS as an indication of language attrition in Facebook?

H₅: Age determines young Moroccans' attitudes towards CS as an indication of language attrition;

H₆: level of education determines young Moroccans' attitudes towards CS as an indication of language attrition;

H₇: Type of school determines young Moroccans' attitudes towards CS as an indication of Moroccan language attrition;

2. LITERATURE REVIEW

Previous studies on the attitudes towards code-switching have, in general, shown that this linguistic phenomenon has been stigmatized all around the world and performed only by imperfect bilinguals, who are not proficient in the languages they use, and try to switch between languages to hide this imperfection; especially before the works of Gumperz and his associates, namely Blom and Gumperz's (1972) article on "code-switching between dialects of Norwegian in Hemnesberget (a Norwegian fishing town)" (Cited in Bassiouney, 2009: 29). "CS between Arabic and a foreign language has been called by one Arab writer, according to Suleiman (2004) "linguistic prostitution", It can also be considered a form of 'colonial penetration', as some people still feel culturally colonized because of the use of this mixture of languages (Suleiman, 2004: 227 as cited in Bassiouney, 2009: 29). Others consider those who code switch between the Moroccan Arabic and French as "strongly marked by French colonialism, to the point where they are not able to express themselves without resorting to the colonizers' language; 'as they are still colonized'" (Bentahila, 1983: 37).

Though CS might be considered as a corrupt form of language or even a stigma, many studies have revealed the opposite, suggesting that CS is a conscious act, rather than a random choice made by bilingual speakers to serve certain communicative functions. Among the most influential studies in this field, is Gumperz's (1982) conversational CS, where he addressed this issue and suggested different social functions that CS may serve in a bilingual interaction mainly quotations, addressee specification, interjections, reiteration, message qualification, and personalization versus objectivization. The same case for Myers-Scotton's

Markedness model (1993), which is also evidence that CS is socially-motivated rather than a random act; and that it is a rational choice made by bilingual speakers to negotiate certain social role.

Myers-Scotton's (1993) markedness model is considered among the most influential theories on code-switching, that provided a general theoretical model that can explain the socio-psychological motivations for CS in all multilingual communities where code-switching is a natural phenomenon (Cited in J. Blommaert, M. Meewuis: 1994). Based on her data drawn from her own field work conducted in Kenyan and Zimbabwean urban settings, she suggests that all speakers in multilingual countries tend to constantly switch between codes or languages, and that they all have a sense of markedness regarding the languages they use in different contexts with different interlocutors (J. Blommaert, M. Meewuis: 1994).

In the same regard, Myers-Scotton (1993) suggests that speakers have a kind of indexicality towards the choice of language; she gave the example of the status of French in Morocco, which is a post-colonial language that indexes prestige, and socio-economic advancement. Thus, a Moroccan speaker may sometimes resort to French, in his/her ordinary conversations, as a strategy to appear more modern and highly educated. It is very common among Moroccans to use French-MA code-switching as an unmarked choice since according to Myers-Scotton: "colonial languages have been institutionalized as the unmarked medium of status-raising activities such as higher education, inter-ethnic communication between the highly educated, business and governmental interactions especially with foreign nationals" (Myers-Scotton, 1993:120). Moroccan Arabic, on the other hand, may index solidarity among Moroccan native speakers.

In addition to Myers-scotton's social motivations, some studies showed that factors, such as age, level of education and level of proficiency could be considered as extra-linguistic motivations behind the use of CS. For example, in a study conducted by Bentahila & Davies (1992) investigating the CS patterns between two groups of Moroccan bilinguals, they came with the conclusion that the use of CS by bilingual speakers is controlled by extra-linguistic factors, such as age of the subjects under study along with their level of education, and the dominant language of their interactions as well as the type of CS used.

Many studies have directly linked CS to language attrition, especially in immigration contexts (cf. de Bot & Clyne, 1994; Halmari, 2005), suggesting that when immigrants are no more in contact with their native language, this latter gradually starts to diminish and get replaced by the second language that becomes their sole means of communication wherever they go. Only few studies have reported the loss of first language in a native environment (Boikanyego, 2014) due to the dominance of a foreign language.

In the Moroccan context, it is hard to determine whether language attrition is taking place or not, as MA is still considered the dominant language of almost all Moroccans. However, the impact of French language is extremely deep on the Moroccan society, and this is reflected through the constant use of French-Moroccan Arabic code switching. The Moroccan users of code-switching might favor one language over another or even one identity over another depending on different factors, sometimes depending on the situation where a conversation takes place, or the topic of the conversation, or even depending on the

person to whom they speak. However, in many times they may unconsciously switch from MA to French without even knowing that they are doing so. This can be due to the deep influence that French colonialism exerted on them. This unconscious act might in some cases be interpreted as a sign of language loss or attrition where many native words and expressions disappear due to the increasing shift to a foreign language.

3. RESEARCH METHODS

This research is a quantitative exploration of young Moroccans attitudes towards CS in Facebook, trying to figure out whether they perceive it as an effective tool of communication that facilitates their interactions in Facebook, or they rather consider it a threat of Moroccan language loss. This study also attempts to find out the factors that are responsible for the way young Moroccans perceive the use of CS in Facebook.

3.1. Sample Selection

This research opted for the probability sampling, where samples were randomly selected. The questionnaire was designed to collect data from 350 young Moroccans, between the ages of fourteen and twenty-five, from different regions in Morocco.

3.2. Instrument

A self-administered questionnaire was designed to collect data from 350 young Moroccans between the age of fourteen and twenty-five from different regions in Morocco. The main purpose behind this questionnaire is to holistically investigate, through a statistical analysis of the respondents' answers, the use of code-switching among young Moroccans in Facebook, trying as well to trace their attitudes towards this linguistic phenomenon. It further examines whether demographic variables such as, 'age', 'level of education' and 'type of school' are responsible of the way young Moroccans perceive CS.

3.3. Data Collection Procedures

Both paper-based and online questionnaires were adopted during this inquiry; the researcher and some colleagues distributed paper-based questionnaires in different settings (mainly schools and faculties). The choice of schools and faculties, other than any other settings, helped approaching a large size of young respondents in a short period of time. The use of internet-based questionnaires gave the opportunity to access a variety of samples from different regions in Morocco. It is a mixed-mode questionnaire that includes both close-ended and open-ended questions. Open-ended questions were designed to give respondents the opportunity to express their opinions, and provide more details about their attitudes towards CS.

3.4. Pilot study

To test the survey questionnaire appropriateness and to ensure the gathered data validity and reliability as well, a pilot study was conducted two months before the distribution of the final survey, using a convenience sampling method with a sample size of thirty young Moroccans who did not participate in the final survey. The purpose behind pilot testing of the questionnaire is to ensure that questions are correctly worded and that all the

included items are unambiguous and easily understood by respondents.

The samples involved in the pilot study were informed that they were in a pre-test stage, and that their remarks and suggestions would be helpful in testing the feasibility of the questionnaire. After analysing the results obtained from pilot test, and taking notes of the respondents' remarks, some modifications were applied at the level of questions as well as the language used. For example, some questions were removed mainly because they were misunderstood by most of respondents, others were developed to elicit more details; and in terms of the language, a simpler language was adopted in the English version of the questionnaire.

3.5. Data Analysis Procedures

Data gathered through survey questionnaire were coded and statistically analysed through SPSS and Eviews. Questionnaires were designed and distributed to more than 350 respondents, of which 260 answered the questionnaire. 25 respondents did not complete the questionnaire, 19 questionnaires with a lot of missing data, 16 are either above or below the specified age groups, and 30 do not have a Facebook account. This means that 90 out of 260 questionnaires were not considered during the analysis, only the 151 remaining questionnaires that were coded and entered as variables in the computer using SPSS.

The analysis of questionnaire's findings is generally divided into two parts. The first part deals with statistical description of variables through frequencies and percentages, mainly presented in tabular as well as graphical forms. As for the second part, it is primarily devoted to inferential analysis of the questionnaire's findings. This part focused on testing hypotheses and answering research questions, that are based on investigating the relationship between independent variables such as, 'age', 'level of education', 'type of schools' and the dependent variables 'CS as communicative strategy' 'CS as a threat of Moroccan language loss'. Whereas, open-ended questions, were qualitatively analysed using coding frames.

To answer research questions and find the relationship between variables, cross-tabulations and chi-square test of independence were employed using SPSS version 19. As for determining the nature of the relationship between variables, 'multinomial logistic regression' test was used via EVIEWS.

4. FINDINGS

The first part mainly focused on testing hypotheses and answering research questions that are based on investigating the relationship between independent variables such as, 'age', 'level of education', 'type of school' and the dependent variables 'attitudes towards the use of CS as an effective communication strategy in Facebook', and 'attitudes towards CS as an indication of Moroccan language attrition'.

4.1. Analysis of findings through descriptive statistics

4.1.1. Attitudes towards the Use of Code-Switching in Facebook

This section of the questionnaire is an attempt to answer the first research question, which sought to investigate the attitudes of young Moroccans towards CS in Facebook. It aimed to find out whether respondents held negative attitudes towards the use of CS, considering it as an indication of Moroccan language attrition, or they hold positive attitudes

towards it, perceiving the use of more than one language in Facebook, besides MA, as an effective communication strategy that enhances their interactions.

a. Attitudes towards CS as an Effective Communication Strategy in Facebook

This question is a mixed-mode question, as it combines both closed-ended and open-ended questions. The first part was represented through a 3-point likert scale closed-ended question, whereas the second part was an open-ended question, through which the samples were required to give more details about their positive or negative attitudes. The findings displayed in Figure. 1 showed that majority of respondents, nearly half of the samples with a percentage of 48, 3 % (N= 73), agreed that CS in Facebook is an effective communication tool that facilitates their interactions in Facebook.

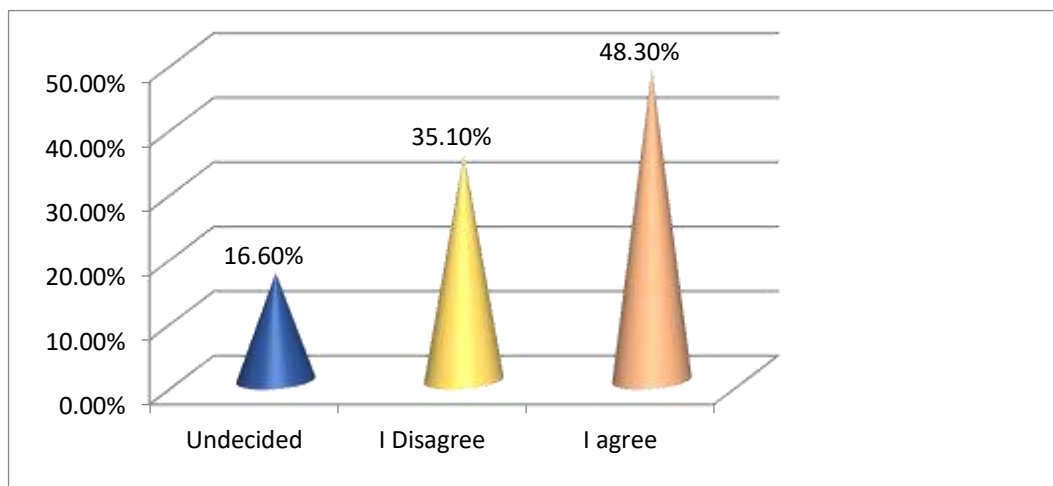


Figure 1: Graphical Representation of the Respondents' attitudes towards CS as an effective Communication Strategy in Facebook

As previously mentioned, the respondents were required to explain their answers, 100 of them did so. Their answers were qualitatively analysed using a coding frame. For those who held positive attitudes towards the use of code-switching in their Facebook interactions and consider it as a good communicative strategy that facilitates their interactions in Facebook, they nearly held the same argument which is that switching between MA and other languages is more practical than using only MA.

To further illustrate these arguments, some respondents stated that the use of CS in Facebook facilitates their typing tasks. For example, they might insert many French and English abbreviations and acronyms that are not available in MA. As one the respondents stated: *“the use of other languages side by side MA in Facebook is a good strategy to minimize the typing efforts and time, as instead of writing long expressions in MA, we only insert their abbreviated equivalents in French or English”*.

Other respondents assumed that CS in Facebook helps them fill lexical gaps, when they cannot find the right word in MA, they resort to their French equivalents that they are more familiar with, especially in terms of CMC jargon. Other arguments support the fact that the use of CS gives young Moroccans the opportunity to play with words and expressions

from different languages, thing that makes their interactions appear more vivid and vibrant. Although this may be true, there were other respondents who disagreed with the above-mentioned statements, arguing that the use of CS in Facebook is a sign of language incompetency and a bad habit, which led to the creation and spread of a wrong language, due to common use of short forms of language and informal vocabulary.

Another argument was highlighted, which is that CS is nothing but a matter of familiarity, something that is taken for granted. For instance, a respondent said:

We are used to this kind of language and that is all, almost everyone in social media sites uses it. It has become a jargon that everybody masters either proficient or not, once you are logged in one of the social networking sites you can easily switch between French and Moroccan Arabic without even being fluent in French.

In the same vain, other respondents believed that switching between French and Moroccan Arabic, for example, is not a choice or a strategy but rather an obligation to escape prejudices. To put it differently, people may switch between French and Moroccan Arabic in Facebook, simply, to avoid being considered as backward and ‘old-fashioned’,

b. Attitudes towards Code-Switching as an indication of Moroccan Language Attrition

This is a mixed-mode question, divided in two parts. The first part is a 5-point likert scale closed-ended question, measuring the attitudes of respondents from strongly agree to strongly disagree and neutral. The second one is an open-ended question through which respondents were invited to give more details about their attitudes. The reason behind designing this question is to determine the extent to which young Moroccans agree or disagree with the fact that CS in Facebook could be considered as an indication of Moroccan language attrition. Based on the findings illustrated in Figure. 2, majority of respondents with a percentage of 39,7% (N= 60) agreed and strongly agreed with this argument, while those who strongly agreed and those who disagreed were in fact equally distributed as both of them represented a percentage of 20,5 % (N= 31). Only a small number of respondents who strongly disagreed 6 % (N= 9), and the remaining 13, 2 % (N= 20) stayed neutral.

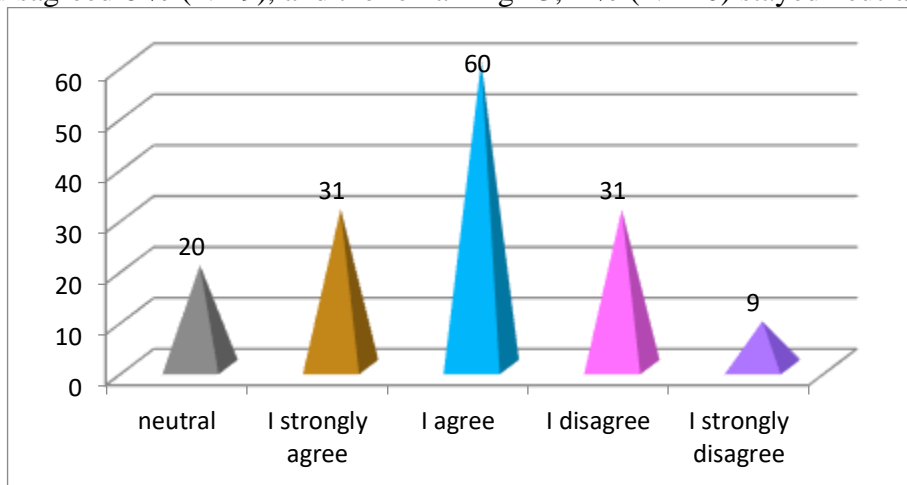


Figure 2: Graphical Representation of Respondents' Attitudes towards CS as An indication of Moroccan Language Loss.

Seventy was the number of respondents who responded to this question, whose answers were qualitatively analysed using a coding frame. As it is represented in Figure 2, only 26, 49% (N= 40) of the respondents held positive attitudes towards the use of CS and did not consider it as an indication of Moroccan language attrition, as they confirmed that the Moroccan language is used on a daily basis and it is deeply engraved in the Moroccan cultural heritage, these facts make it too vulnerable to easily vanish or die. Many of their arguments were in fact similar to those who consider CS as an effective communication strategy (as mentioned in the previous section (attitudes towards CS as a communication strategy). Considering this, one of the respondents said:

I think that the use of more than one language in Facebook is not necessarily a sign of Moroccan language loss, simply because our Moroccan language is who we are, we cannot easily lose it or replace it by another foreign language like French, if we give up on it then we will give up on our history, our civilisation, and consequently we will lose a whole nation we will lose the most precious thing we possess which is our identity.

Another argument was underlined by respondents who did not consider CS in Facebook as an indication of MA loss, is that the most employed language in Facebook and other social networking sites is a hybrid language, which is a mixture of many foreign languages besides MA. This language is very common among young Moroccans and easy to write and could not be considered as an indication of Moroccan language loss as one of the respondents claimed:

I think that inserting French words or any other foreign languages words is very common among young Moroccans in Facebook, it is their way of communicating and in my opinion, it has nothing to do with language loss. It is in fact a language that everybody knows and easy in typing. French, for example, contains many short forms of language like '2r1' (de rien) you cannot find this kind of language in our Moroccan- Arabic that is why most of young Moroccans choose to insert these abbreviations and acronyms for the sake of saving time and nothing else, and for me it is far away to be considered as an indication of Moroccan language loss.

Majority of respondents, as it is manifested in Figure. 8 either agreed or strongly agreed with the fact that CS in Facebook is an indication of Moroccan language loss, and according to their answers, the younger Moroccans insert French and other foreign languages words in their Facebook interactions, the more they get used to these languages and the less they will use their mother tongue, which may lead to its gradual loss. In this regard, one of respondents stated that French is a sign of modernity and people may feel embarrassed if they use only MA in their Facebook interactions, without mixing it with French, and according to him:

We do not use our Moroccan language anymore, what we use now, either in social media sites or real-life conversations, is a mixture of both Moroccan language and French. Some French words are now part of our linguistic repertoire and you cannot recognize whether they are Moroccan or not. Maybe soon, and due to this constant use of French side-by-side Moroccan language, French words will replace a big deal of Moroccan words, and then we would have lost a great part of our linguistic heritage.

Others linked the use of CS in Facebook to modernity and high level of education, as one respondent asserted:

Our pure Moroccan Language has long gone, what we see today is a mixture of languages, and French now has become a sign of socio-economic advancement and modernity. There are some people who consider themselves too modern to speak one sentence in Moroccan Arabic without inserting many French expressions out of a desire to show off and appear more modern and intellectual.

Some of the respondents even considered CS as another kind of ideological and cultural colonialism through which the western culture is taking over the Moroccan one, and that the constant use of French or English words and expressions in Moroccans' day-to-day speech is the best evidence on that. As a final argument held by respondents who were against CS and considered as an indication of Moroccan language loss is that through the use of CS Moroccans are contributing to the marginalization of their language as well as culture, and the reason behind this marginalization is that Moroccan language is not considered as a language of socio-economic advancement as their French and English counterparts.

The aim behind this section was to answer the first question related to the attitudes of young Moroccans towards the use of CS in Facebook. The first alternative hypothesis (H₁) postulated that young Moroccan Facebook users hold positive attitudes towards CS and do not consider it as a sign of Moroccan language attrition. However, on the basis of the results displayed in Figure 1 and Figure 2, it seemed that respondents held contradictory attitudes towards CS, as majority of them held positive attitudes towards it, considering it an effective communication. However, at the same time, majority also perceives it as an indication of language attrition. To better understand this contradiction, in terms of attitudes towards CS as well as to answer research questions and test hypotheses, the relationship between variables will be examined by the means of statistical tests mainly chi-square test of independence and multinomial logistic regression.

4.2. Analysis of Findings through Inferential Statistics

This section aims to answer the second and third research questions as well as to test hypotheses by the means of statistical tests, mainly chi-square test of independence and multinomial logistic regression. The purpose behind this section is also to find out the motivations behind young Moroccans' attitudes towards CS in Facebook (previously elicited in section 4.1), mainly through examining relationship between the dependent variables 'attitudes towards CS as an effective communication strategy in Facebook', 'attitudes towards CS as an indication of language attrition' and the independent variables 'age' 'level of education' and 'type of school'.

4.2.1. Statistical Analysis of Relationship between Attitudes towards CS as a Communication Strategy in Facebook and Socio-Demographic Variables

Q2: What are the factors that determine the attitudes of young Moroccans towards CS in Facebook as an effective communication strategy?

The second research question was an attempt to find out the possible factors determining the attitudes of young Moroccans towards CS as an effective communication strategy in Facebook, based on the assumption that their attitudes are determined by their age, level of education and type of school. Therefore, to answer the second research question, relationship between each independent variable (age, level of education and type of

school) with the dependent variable ‘attitudes towards CS as an effective communication strategy in Facebook’ will be examined by the means of cross- tabulations and chi-square test of independence. The second alternative hypothesis (H₂) postulated that there is a relationship between the dependent variable ‘attitudes towards CS as an effective communication strategy and the dependent variable ‘age’. Thus, to test this hypothesis, cross-tabulation of both variables will be designed along with chi-square test of independence.

a. Relationship between Respondents’ Attitudes towards CS as an Effective Communication Strategy in Facebook and their Age

H₂: Age determines the attitudes of young Moroccans towards CS as an effective communication strategy

H₀: Age does not determine the attitudes of young Moroccans towards CS as an effective communication strategy.

	Age			Total
	14-17	18-21	22-25	
Undecided	7	11	7	25
I agree	31	27	15	73
I disagree	19	23	11	53
Total	57	61	33	151

Table 1: Attitudes towards CS as an effective communication strategy by Age

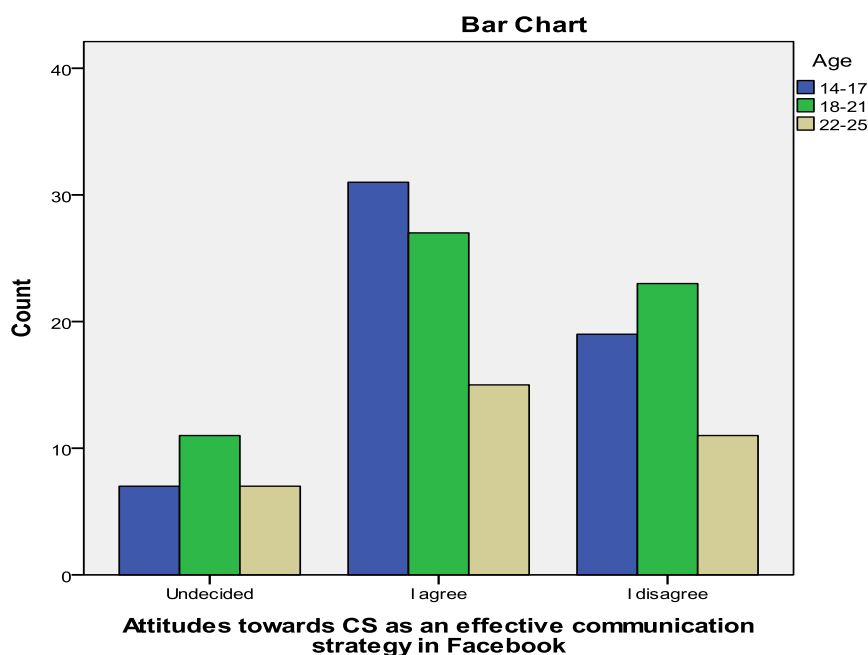


Figure 3: Attitudes towards CS as an effective communication strategy by Age

Based on the statistical information reflected in both Table 1 and Figure 3, it is evident that there is no link between age and attitudes of respondents towards CS as an effective communication strategy in Facebook. Results obtained from the joint distribution of ‘attitudes towards CS as a communication strategy’ and ‘age’, were also confirmed by chi-square test of independence, and as Table 2 shows, there is no association between the two variables given that the chi-square asymptomatic significance is higher than 0.05 ($p\text{-value}=0,729 > 0,05$). Therefore, the second alternative hypothesis (H_2) is to be denied, whereas, the null hypothesis (H_0) is to be confirmed, and age of respondents does not determine their attitudes towards CS as an effective communication strategy.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,037 ^a	4	,729
Likelihood Ratio	2,051	4	,726
Linear-by-Linear Association	,301	1	,583
N of Valid Cases	151		

*Table 2: Association between Age * Attitudes towards CS as an effective communication strategy in Facebook*

b. Relationship between Respondents’ Attitudes towards CS as an Effective Communication Strategy in Facebook and their Level of Education

H₃: Level of Education determines the attitudes of young Moroccans towards CS as an effective communication strategy

H₀: Level of Education does not determine the attitudes of young Moroccans towards CS as an effective communication strategy

The third alternative hypothesis suggested during this research, is that respondents’ ‘level of education’ determines their ‘attitudes towards CS as an effective communication strategy’. In other words, it is believed that respondents with a low level of education are the most to agree with the fact that CS is an effective communication strategy in Facebook. In order to determine whether there is any association between the two variables, cross-tabulation will be designed along with chi-square test of independence.

The results obtained from joint distribution of variables under analysis and displayed in Table 3 and Figure 4 assumed the absence of any significant relationship between the two variables. To further evaluate the validity of this finding we will resort to chi-square test of independence, and as obvious in Table. 4 there is no association between the two variables given the fact that given that the chi-square asymptomatic significance is higher than 0.05 ($p\text{-value}= 0, 270 > 0,05$). Thereupon, the second alternative hypothesis was denied as well whereas the null hypothesis was confirmed, and respondents’ level of education does not determine their attitudes towards CS as an effective communication strategy.

Attitudes of Young Moroccans towards the Use of Code-switching

		Level of education			Total
		Higher Education	High School	Secondary School	
	Undecided	17	4	4	25
	I agree	39	11	23	73
	I disagree	30	13	10	53
Total		86	28	37	151

Table 3: Attitudes towards CS as an effective communication strategy in Facebook by Level of education

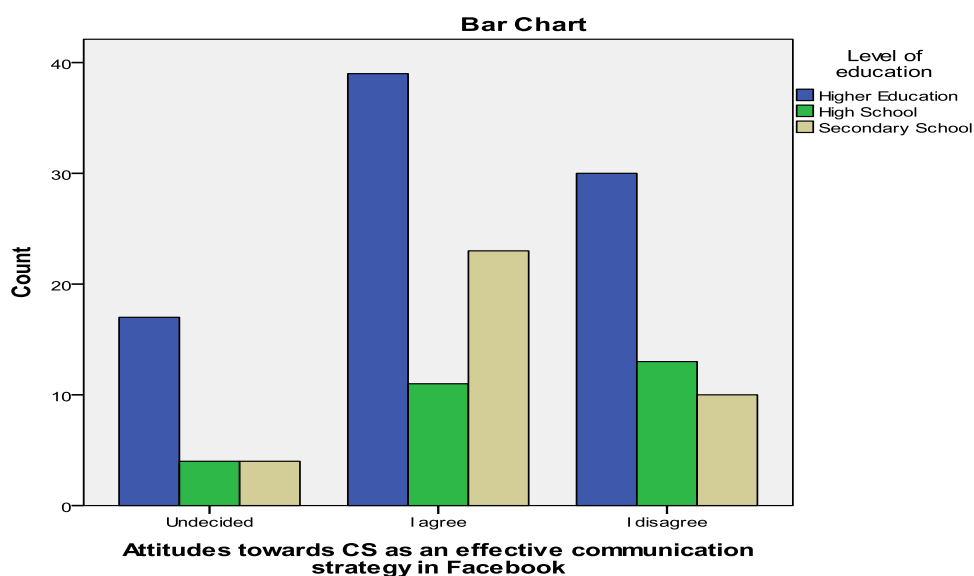


Figure 4: Attitudes towards CS as effective communication strategy by Level of education

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,169 ^a	4	,270
Likelihood Ratio	5,124	4	,275
Linear-by-Linear Association	,084	1	,772
N of Valid Cases	151		

Table 4: Association between Attitudes towards CS as effective communication strategy by Level of education

c. Relationship between Respondents' Attitudes towards CS as an Effective Communication Strategy in Facebook and Type of School they attend

H₄: Type of school determines the attitudes of young Moroccans towards CS as an effective communication strategy

H₀: Type of school does not determine the attitudes of young Moroccans towards CS as an effective communication strategy

The fourth hypothesis postulated that type of school young Moroccans attend determines the way they perceive CS. In other words, young Moroccans attending private schools may hold more positive attitudes towards CS and consider it as an effective communication strategy than those in public schools. This hypothesis was in fact based on the assumption that young Moroccans attending private schools use more CS between MA and French as their schools put more emphasis on the teaching of this language thing that may explain the deep influence French exerts on their Moroccan language.

To find out whether there is any relationship between respondents' attitudes towards CS as an effective communication strategy and type of school they attend, cross-tabulation of both variables will be designed along with chi-square test.

	Type of School		Total
	Private School	Public School	
Undecided	7	18	25
I agree	16	57	73
I disagree	15	38	53
Total	38	113	151

Table 5: Attitudes towards CS as an effective communication strategy in Facebook by Type of School

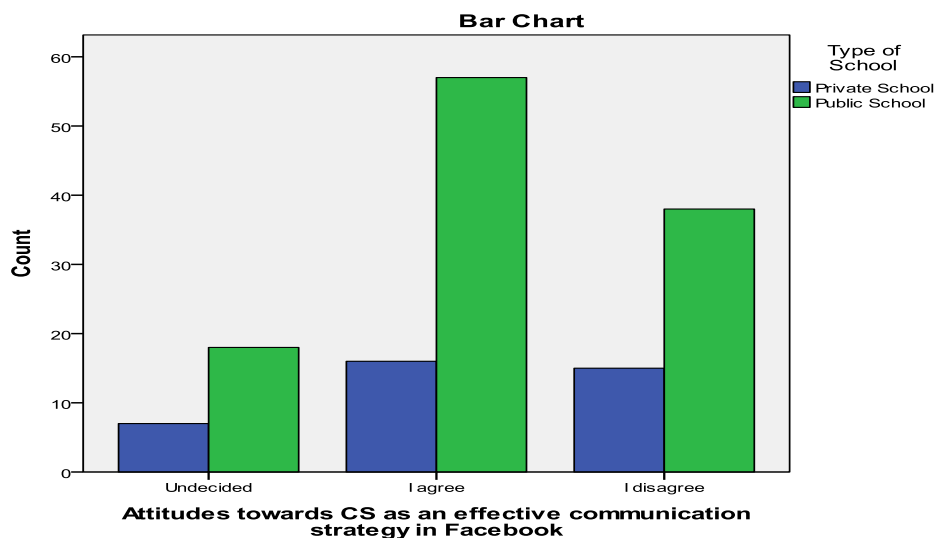


Figure 5: Attitudes towards CS as an effective communication strategy by Type of school

The results obtained from joint distribution of variables under analysis and displayed in Tables 5 and Figure 5, assumed the absence of any significant relationship between the two variables. To further evaluate the validity of this finding we will resort to chi-square test of independence, and as obvious in Table. 6 there is no association between the two variables given that the chi-square asymptomatic significance is lower than 0.05 (p-value= 0, 270 > 0,05) thus the fourth null hypothesis was confirmed, and the respondents' level of

education does not determine their attitudes towards CS as an effective communication strategy.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,792 ^a	2	,673
Likelihood Ratio	,795	2	,672
Linear-by-Linear Association	,066	1	,797
N of Valid Cases	151		

Table 6: Association between Attitudes towards CS as an effective communication strategy & Type of school

4.2.2. Statistical Analysis of Relationship between Attitudes towards CS as an Indication of Moroccan Language Loss in Facebook and Socio-demographic Variables

Q3: Do the attitudes of young Moroccans towards CS as an indication of language attrition in Facebook vary by their age, level of education and type of school they attend?

a. Relationship between Respondents' Attitudes towards CS as an Indication of Moroccan Language Attrition in Facebook and their Age

H₅: Age determines young Moroccans' attitudes towards CS as an indication of language attrition

H₀: Age does not determine young Moroccans' attitudes towards CS as an indication of language attrition

The third research question sought to find out whether the attitudes of respondents towards CS in Facebook as an indication of Moroccan language loss (dependent variable) are determined by their age (independent variable). To put it differently, it is believed that respondents belonging to younger age (14-17) hold more positive attitudes towards code switching than older ones (22- 25) and do not consider it as an indication of Moroccan language attrition, and vice versa. In order to find answer to this question, and test the above-mentioned hypotheses H₅ and H₀, it is first crucial to investigate whether there is a link between these two variables by the means of cross-tabulation and chi-square test.

	Do you think that code switching in Facebook is an indication of Moroccan language loss					Total
	Neutral	I strongly agree	I agree	I disagree	I strongly disagree	
Age 14-17	10	4	12	23	8	57
Age 18-21	9	16	29	6	1	61
Age 22-25	1	11	19	2	0	33
Total	20	31	60	31	9	151

Table 7: Attitudes towards CS in Facebook as An indication of Moroccan Language by Age

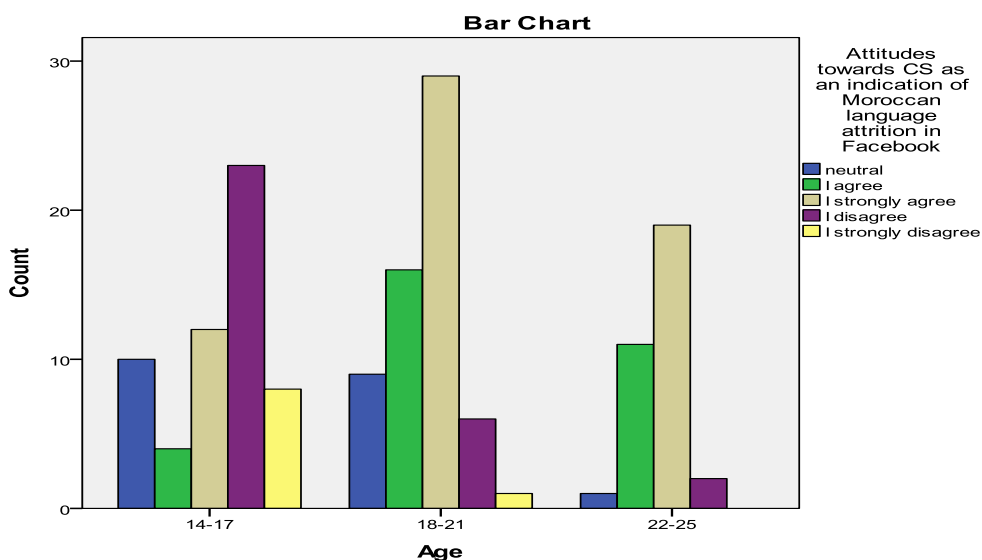


Figure 6: Attitudes towards CS in Facebook as An indication of Moroccan language attrition by Age

Based on the statistical information reflected in both Table 7 and Figure 6, it is evident that there is a link between age and attitudes of respondents. As noticed in Figure 6, the more the respondent’s age increases, the more s/he agrees with the statement that CS in Facebook is an indication of Moroccan language loss, and the more his/her disagreement decreases as well.

In correspondence with the results of the joint distribution of the two variables, chi-square test of independence also confirms the existence of dependence between the two variables ‘age’ and ‘attitudes towards CS as an indication of Moroccan language attrition’. Henceforth, the link between the two variables is significant as the chi-square asymptotic significance is lower at the 5 % level.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	48,539 ^a	8	,000
Likelihood Ratio	52,275	8	,000
Linear-by-Linear Association	8,663	1	,003
N of Valid Cases	151		

Table 8: Association between age and attitudes towards Code-Switching as an indication of Moroccan Language Loss.

In a view of making decision about the nature of the relationship between age and attitudes towards CS as an indication of Moroccan language loss, it is crucial to relegate this question to the multinomial logistic regression. Table 9 provides the results of logit

Attitudes of Young Moroccans towards the Use of Code-switching

estimation model, which again confirmed that the variable ‘attitudes towards CS as an indication of Moroccan language loss’ is really explained by ‘age’.

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	-0.171841	0.051180	-3.357551	0.0008

*Table 9: Nature of the Relationship between Age *Attitudes towards Code-Switching in Facebook as an indication of Moroccan language loss*

The results mentioned in Table. 9 are a clear indication that the variable ‘age’ acts negatively (negative coefficient: -0, 171841) on the dependent variable ‘attitudes towards CS as an indication of Moroccan language loss’, noting that its coefficient is statistically significant at the 5% level (critical probability: prob=0, 0008<0, 05). On the basis of statistical results achieved from the multinomial logistic regression test, we can safely reject the null hypothesis, and the link between the two variables under study is statistically significant, based on the fact that the more the respondents’ age decreases the more s/he disagrees with the statement that ‘CS in Facebook as an indication of Moroccan language loss’ and the more his/ her agreement increases as well.

b. Relationship between Respondents’ Attitudes towards CS as an Indication of Moroccan Language Attrition in Facebook and their Level of Education

	Attitudes towards CS as an indication of Moroccan language attrition in Facebook					Total
	Neutral	I strongly agree	I agree	I disagree	I strongly disagree	
Higher Education	7	28	43	7	1	86
High School	6	1	10	11	0	28
Secondary School	7	2	7	13	8	37
Total	20	31	60	31	9	151

*Table 10: Attitudes towards CS as an indication of Moroccan language loss Cross- tabulation * by * Level of Education*

H₆: level of education determines young Moroccans’ attitudes towards CS as an indication of language attrition

H₀: level of education does not determine young Moroccans’ attitudes towards CS as an indication of language attrition.

The sixth hypothesis suggested that there is a relationship between respondents’ attitudes towards CS as an indication of language attrition and their level of education. In other words, it is believed that Moroccan Facebook users with a low educational level hold

more negative attitudes towards CS in Facebook and consider it as an indication of language attrition than respondents with a high educational level. Before deciding which of the two hypotheses (H_6 or H_0) is correct, it is first deemed important to determine whether there exists any relationship of dependence between the two variables based on the results of cross-tabulation and chi-square test of independence.

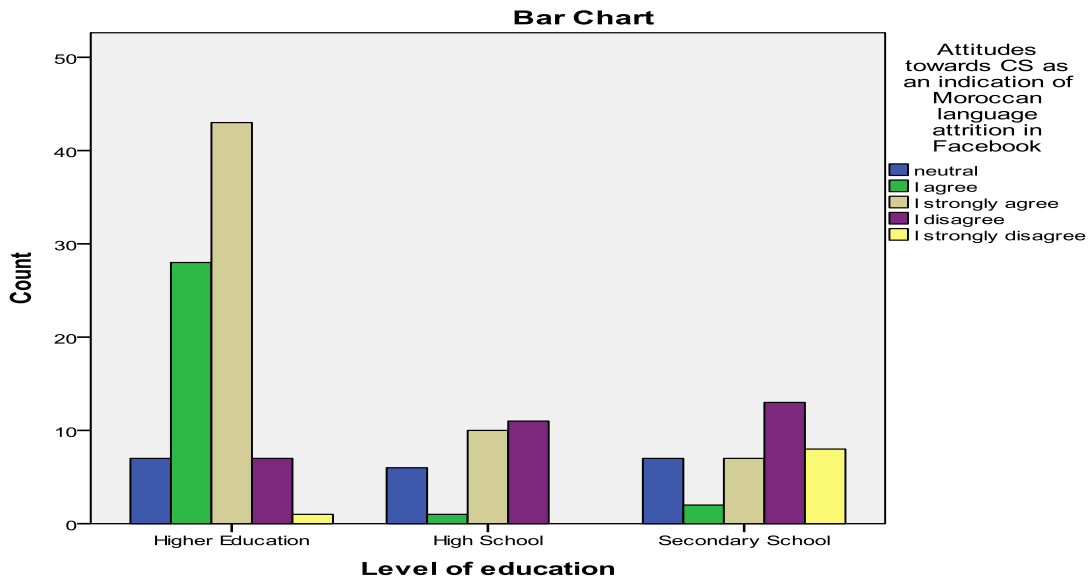


Figure 7: Association between level of education and attitudes towards CS as an indication of Moroccan language loss

Considering the results obtained from both Table 10 and Figure 7, we can presume that the more the respondent’s level of education decreases, the more s/he disagrees with the statement that CS in Facebook is an indication of Moroccan language loss and the more his/her agreement increases as well. Taking into consideration the results achieved through cross-tabulation of the two variables, the respondents who mostly agreed with the fact that CS in Facebook may be considered as an indication of language loss were those at the tertiary level, and the least to agree were respondents at the secondary level, this might somehow reveal a kind of relationship of dependence between the variables ‘level of education’ and ‘attitudes towards CS as an indication of Moroccan language loss’.

In order to evaluate the results achieved from the joint distribution of both ‘level of education and ‘attitudes towards CS as an indication of Moroccan language loss’, chi-square test of independence is employed. As represented in Table 11, chi-square test of independence emphasizes the existence of a relationship of dependence between the two variables. Accordingly, H_0 is rejected and the link between ‘level of education’ and ‘attitudes towards CS as an indication of Moroccan language loss’ is significant, given that the chi-square asymptotic significance is lower at 5 % level.

Table

Chi-Square Tests

11:

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	59,832 ^a	8	,000
Likelihood Ratio	60,821	8	,000
Linear-by-Linear Association	12,100	1	,001
N of Valid Cases	151		

Association between level of education * attitudes towards CS as an indication of Moroccan language loss.

In a view of taking decision about the nature of relationship between the two variables under analysis, it is crucial to relegate this matter to the multinomial logistic regression test. The following table represents the logit estimation of the variable ‘attitudes towards CS as an indication of Moroccan language loss’ and the variable « level of education’.

Variable	Coefficient	Std. Error	z-Statistic	Prob.
LEVST	-0.871428	0.204173	-4.268079	0.0000

Table 12: Nature of the Relationship between Level of Education *Attitudes towards CS in Facebook as an indication of Moroccan Language Loss

The results displayed in Table. 12 are a clear evidence that the independent variable ‘level of education’ coded as « LEVST » acts negatively (negative coefficient: - 0,871428) on the dependent variable ‘attitudes towards CS in Facebook as an indication of Moroccan language loss’ coded as« DISAGCODSWL », noting that its coefficient is statistically significant at the 5% level (critical probability: prob=0,0000<0,05).

To sum up, and based on to the results obtained from both the multinomial logistic regression test, as well as from the chi-square test, the sixth alternative hypothesis (H₆) was confirmed, and that the level of education determines attitudes towards CS as an indication of Moroccan language attrition.

c. Relationship between Respondents’ Attitudes towards CS as an Indication of Moroccan Language Attrition in Facebook and Type of School they attend

H₇: Type of school determines young Moroccans’ attitudes towards CS as an indication of Moroccan language attrition

H₀: Type of school does not determine young Moroccans’ attitudes towards CS as an indication of Moroccan language attrition

The seventh hypothesis (H₇) sought to find out whether the type of school the respondents attend determines their attitudes towards CS in Facebook as an indication of Moroccan language attrition. To determine whether there exists any relationship between the two variables cross- tabulation along with chi-square test are designed.

		Attitudes towards CS in Facebook as an indication of Moroccan language loss					Total
		Neutral	I strongly agree	I agree	I disagree	I strongly disagree	
Type of school	Private School	5	5	9	15	4	38
	Public School	15	26	51	16	5	113
Total		20	31	60	31	9	151

Table 13: Attitudes towards CS in Facebook as an indication of Moroccan Language Loss by type of school.

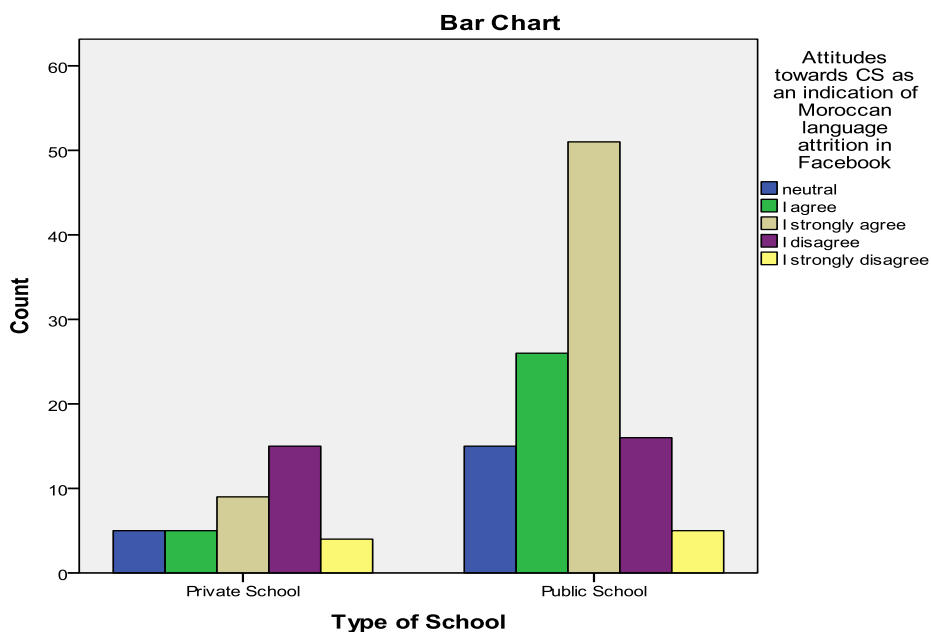


Figure 8: Type of School Respondents attend by Attitudes towards CS as an indication of Moroccan language loss

Taking into consideration the results achieved through cross-tabulation of the two variables ‘type of school’ and ‘attitudes towards CS as an indication of Moroccan language loss in Facebook’ displayed in Figure 8, it is assumed that respondents who mostly agreed with the fact that CS in Facebook is an indication of Moroccan language loss were public school students, and the least to agree were private school students. With this in mind, we will resort to chi-square test of independence to determine if there really is an association between ‘type of school’ and ‘attitudes towards CS in Facebook as a an indication of Moroccan language loss’.

Attitudes of Young Moroccans towards the Use of Code-switching

In fact, the chi-square test of independence confirms the existence of dependence between the two variables. Thereupon, H_0 is to be rejected, and the link between ‘type of school’ and ‘attitudes towards CS in Facebook as an indication of Moroccan language loss’ is significant, as the chi-square asymptotic significance is lower at 5%.

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15,289 ^a	4	,004
Likelihood Ratio	14,454	4	,006
Linear-by-Linear Association	5,529	1	,019
N of Valid Cases	151		

Table 14: Association between Type of School the Respondents attend Attitudes towards Code Switching as an indication of Moroccan Language Loss*

To make decision concerning the nature of the relationship between the two variables, the multinomial logistic regression test will be employed. Table. 15, provides the results of logit estimation model of ‘attitudes towards CS in Facebook as an indication of Moroccan language loss’ and ‘type of school’.

Variable	Coefficient	Std. Error	z-Statistic	Prob.
PUBPRIVSC	-0.978810	0.363755	-2.690847	0.0071

*Table 15: Nature of the Relationship between ‘Type of school’ * ‘Attitudes towards CS in Facebook as an indication of Moroccan language loss’*

The results displayed in Table 15 are a clear indication that the independent variable ‘type of school’ coded as « PUBPRIVSC » acts negatively (negative coefficient: -0,978810) on the dependent variable ‘attitudes towards CS in Facebook as an indication of Moroccan language loss’ coded as « DISAGCODSWL », noting that its coefficient is statistically significant at the 5% level (critical probability: prob=0,0071<0,05). Therefore, and based on statistical data provided by both the chi-square test and the multinomial logistic regression, H_7 is confirmed, and the relationship between the two variables under analysis is significant, based on the fact that respondents belonging to private schools were the least to agree with the statement that ‘CS in Facebook is an indication of Moroccan language loss’, whereas those at high school and secondary school levels were the more to disagree with the proposed statement.

5. DISCUSSION

Quantitative research was conducted by the means of survey questionnaire through which respondents were invited to answer questions related to their code-switching practices in Facebook, along with their attitudes towards this kind of language. During this phase of research, eight hypotheses were postulated, which had for purpose to identify, through statistical analysis of relationship between dependent and independent variables, attitudes of young Moroccans towards the use of CS in their Facebook interactions, and whether they consider it as an effective communication strategy that enhances their interactions in Facebook, or as an indication of Moroccan language attrition. It also sought to find out whether variables, such as the use of Facebook via smartphones and daily Facebook consumption, could be considered as factors behind the increasing use of CS among young Moroccan Facebook users.

The analysis of questionnaire's answers revealed that CS is common pattern among young Moroccans, as majority of them reported to frequently switch between MA and other foreign languages, mainly French, in their Facebook interactions. The results also showed that among the common reasons behind using CS in Facebook is that because respondents find it easier and more practical to use MA, besides other languages, like French and English, than using only MA.

The study also gives light about attitudes of young Moroccans towards the use of CS in Facebook. Respondents were invited to give their attitudes (either positive or negative) towards two statements related to their perception of the use of CS in Facebook. The first statement suggested that, CS is a communication strategy that eases the flow of conversation in Facebook. Whereas, the second statement assumed that CS is a lack of competency in Moroccan language, and therefore could be considered as a sign of language attrition. According to findings, it seemed that respondents held positive attitudes towards both statements, which means that they hold contradictory feelings towards CS in Facebook. In other words, even though they consider CS as a communication strategy that facilitates their interactions in Facebook, they still believe that it is an indication of Moroccan language attrition, and that those who use this kind of language are unable to fully express themselves in Moroccan language, or even unable to show a proper pride of their Moroccan language.

Similar findings in terms of contradictory attitudes towards CS were found in a study conducted by Mahbub-ul-Alam & Quyyum (2016) of CS among Bangladeshi young people towards CS, as results showed that although majority of participants held positive attitudes toward CS and practice it on a daily basis, however, they showed strong positive attitude towards the statement that CS is destroying their mother tongue, which was explained by the fact that "speakers are destroying their mother tongue at a conscious level of mind" (Mahbub-ul-Alam & Quyyum, 2016). In the present study, these contradictory attitudes towards CS might be related to the status that each language occupies in Morocco. For example, while MA is a symbol of national identity and ethnic belonging, foreign languages like French, on the other hand, are indexical of modernity and prestige; therefore, the use of both languages, interchangeably, by young Moroccans in Facebook might be interpreted as a desire to preserve their Moroccanity, and at the same time keep up with modernity, which is represented through the use of French and other foreign languages. This finding is in line

with Myers-Scotton's markedness model (1993), suggesting that speakers have a kind of indexicality towards the choice of language; giving the example of the status of French in Morocco which is indexical of prestige and socio-economic advancement and high level of education, while Moroccan Arabic, on the other hand, may index solidarity among Moroccan native speakers.

The study further examined the role of socio-demographic variables, such as age, level of education and type of school respondents attend, in determining young Moroccan Facebook users' attitudes towards CS. Previous studies on the attitudes towards CS in offline conversations suggested that these variables were found to have a significant effect on the attitudes of the studied subjects towards CS. For example Gardner-Chloros, McEntee-Atalianis, and Finnis (2005), in their study of the attitudes towards CS of the London Greek Cypriots, found that younger respondents mainly between fourteen and nineteen showed more positive attitudes towards CS, considering it more advantageous and fashionable than the older ones. These findings are found to be also applicable to CMC contexts as well. Based on statistical analysis of relationship between variables, it was revealed that younger respondents between the ages fourteen and eighteen held the most favourable attitudes towards CS in Facebook and do not consider it as an indication of Moroccan language attrition but rather a communication strategy; whereas the least favourable attitudes towards CS were common among older respondents between the ages twenty-one and twenty-five.

Level of education appeared to have a significant relationship with attitudes towards CS, as it was reported in Dewaele and Li (2013) that highly educated participants showed more positive attitudes towards CS than less educated ones, and assumed their constant use of this kind of language at a daily basis. Although level of education seemed to have a significant effect on the attitudes of young Moroccans towards CS, however, the results seemed to contradict with those of Dewaele and Li (2013). To more clarify this idea, questionnaire's findings showed that respondents with low education, primarily secondary and high school students, held more positive attitudes towards CS and do not consider it as a sign of language attrition than those with high levels of education mainly university students.

Bentahila & Davies (1992) investigating the CS patterns between two groups of Moroccan bilinguals, also found that the use of CS by bilingual speakers is controlled by the extra-linguistic factors age, level of education are responsible for the different CS behaviours of their subjects. Besides age and level of education, school type also appeared to have a significant effect on the attitudes of respondents towards CS as well, given that majority of respondents, who held positive attitudes towards CS and did not consider it as an indication of language loss, were primarily young teenagers attending private schools. This finding agrees with the results of Abdullah Mustafa (2011), in a study of CS in SMS among teenagers in Jordan, where he found that among his respondents, the ones who showed more positive attitudes towards the use of English-Arabic CS in text-messaging were private school teenager students. He relates this finding to the fact that this category of teenagers is more proficient in English than public school teenager students, and this explains their constant insertion of English words and expressions in their text-messages more than Arabic ones. In Morocco, most of private schools are putting more emphasis on the teaching of French, thing that makes students, attending those schools, more eager to speak French and use it on a daily basis, either in face-to-face conversations or CMC contexts, which may

explain the more positive attitudes towards CS in Facebook among respondents attending private schools, than those studying in public ones.

In short, the overall results achieved from quantitative research indicates that CS is an accepted behaviour among young Moroccan Facebook users, as majority of respondents assumed their regular switching between MA and other foreign languages, mainly French, in their Facebook interactions. Age, level of education, and type of school the respondents attend appeared to be responsible for the different attitudes they hold towards CS.

6. CONCLUSION:

This aim behind this research is mainly to trace the attitudes of young Moroccans towards the use of CS in their Facebook interactions. Results achieved from statistical analysis of questionnaire's answers indicate that CS is perceived as a normal behaviour among respondents, since most of them assumed their regular switching in their Facebook interactions between MA and other foreign languages, mainly French. The results also revealed that regardless the constant use of CS respondents, however, still hold contradictory attitudes towards this behaviour, as they consider it both an effective communication strategy in Facebook, and an indication of Moroccan language loss. The contradiction in terms of attitudes seems to be explained by differences at the level of some socio-demographic variables mainly age, the level of education and type of school.

The contradiction in terms of attitudes of young Moroccan Facebook users towards CS can also be explained in terms of the current linguistic situation in Morocco as it is characterized by complexity. This complexity is manifested through the existence of many languages; some languages have a higher status (mainly French) while others are relegated to a lower position (Moroccan- Arabic). This gap between languages makes the Moroccan youth in a confusing situation, as they are torn between two conflicting desires. Their desire to keep up with modernity and Westernization, which is manifested through the adoption of French and its cultural components, while still eager to preserve their Moroccan identity with all its cultural and religious aspects.

REFERENCES:

- Abdullah-Mustafa, R.A. (2011). SMS code-switching among teenagers in Jordan. [Master's Dissertation, Middle East University]. Available from http://www.meu.edu.jo/libraryTheses/586cbe23a5504_1.pdf.
- Auer, P. (1984). *Bilingual Conversation*. Amsterdam/ Philadelphia: John Benjamins.
- Bassiouney, R. (2009). *Arabic Sociolinguistics*. Edinburgh: Edinburgh university press.
- Bentahila A. & E.E. Davies. (1992). Code-switching and language dominance. *Advances in Psychology*. Vol. 83: 443-458. doi.org/10.1016/S0166-4115 (08)61510-1.
- Bentahila, A. (1983). *Language Attitudes among Arabic-French Bilinguals in Morocco*. Clevedon.
- Blom & Gumperz, J. (1972). Social meaning in linguistic structure: Code switching in Norway. In *Directions in sociolinguistics*. New York: Holt, Rinehart and Winston.
- Blommaert, J & Meewis, M. (1994). The 'Markedness Model' and the absence of society: Remarks on codeswitching. *Multilingua: Walter de Gruyter*: Berlin.

- Boikanyego, S. (2014). First language attrition in the native environment. 6 (2014) 53-60. *Language Studies Working Papers*. Retrieved from <https://pdfs.semanticscholar.org/fd63/55111b565ca433c0776dbdb9bcc52ccf4ef0.pdf>.
- De Bot, K., & Clyne, M. (1994). A 16-year longitudinal study of language attrition in Dutch immigrants in Australia. *Journal of Multilingual and Multicultural Development*, 15(1) : 17-28.
- Dewaele. J.-M., Li Wei, (2013). Attitudes towards code-switching among adult mono- and multilingual language users. *Journal of Multilingual and Multicultural*.
- Gardner-Chloros, P; L, McEntee-Atalianis; K, Finnis. (2005). Language attitudes and use in a transplanted setting: Greek Cypriots in London. *International Journal of Multilingualism*, 2 (1) : 52-80.
- Gumperz, J. (1982). *Discourse Strategies*. Cambridge: Cambridge University Press.
- Halmari, H. (2005). I'm forgetting both: L1 maintenance and codeswitching in Finnish-English language contact. *International Journal of Bilingualism*, 9(3): 406- 420.
- _____ (1992). Code-switching strategies as a mirror of language loss : A case study of two child bilinguals. The proceedings of the Twelfth Second Language Research Forum. In *Papers in Applied Linguistics Michigan*.
- Mahbub-ul-Alam. A & S. Quyyum. (2016). A Sociolinguistic Survey on Code Switching by the native Speakers of Bangladesh. *Journal of Manarat International University* 6 (1).
- Montés-Alcala, C. (2007). Blogging in two languages: code-switching in bilingual blogs. *Selected Proceedings of the Third Workshop on Spanish Sociolinguistics*, ed. Jonathan Holmquist et al., 162-170. Somerville, MA: Cascadilla Proceedings Project.
- Myers-Scotton, C (1998). A way to dusty death: The Matrix Language turnover hypothesis. In L. A. Grenoble & L. J. Whaley (Eds), *Endangered languages: Language loss and community response*. Cambridge: Cambridge University Press.
- _____ (1995). *Social Motivations for Codeswitching: Evidence from Africa. (2nd Edition)*. Oxford: Clarendon Press.
- San, H. K. (2009). Chinese English code-switching in blogs by Macao young people (Master Dissertation). Available from <https://www.era.lib.ed.ac.uk/bitstream/handle/1842/3626/Dissertation.pdf;sequence=1>.