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***Code Switching and Gender in SMS Texting
Among Algerian University Students***

***The case of Fourth Year Students at the English Department of the
University of Algiers***

***Dissertation Submitted in Partial Fulfillment of the Requirements for
the Magister Degree in English Linguistics and Didactics***

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Declaration

I hereby declare that the substance of this dissertation is entirely the result of my investigation and that due reference or acknowledgement is made, whenever necessary, to the work of other researchers.

Date:

Signed:

Acknowledgments

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Dedication

To my late father

I wish you were here to see me where you wanted me to be

With all my love and gratitude

Abstract

This study investigated the nature of SMS messaging, by focusing on gender differences in the amount and types of Code switching, on the one hand, and differences in language use between male and female texters, on the other hand. The study involved English Department students who evolve in an Algerian multilingual context. Data for the study was collected by using two research tools: a corpus of messages sent by the students and a questionnaire. Instances of Code switching and language use in these messages were identified, counted and analyzed. The study showed that there were two types of code switching occurring in messages: *Extrasentential* and *Intrasentential* switching types, with the last mentioned as the most frequent type. In terms of gender, the results showed that there were significant differences in code switching behaviors between males and females, with females code switching more and using Intrasentential Code switching type more than men. As far as Extrasentential Code switching type is concerned, the results showed that both males and females rarely use this type when texting. In terms of language choice, English was the most frequently used language by both male and female texters. Despite the fact that both sexes use English in their messages, the data showed that males and females use languages differently and for different reasons. In fact, the results revealed that French was more popular among females who mostly use it to maintain social relationships, while males tended to avoid French and use English instead for practical and cultural reasons. More specifically, the results showed that texters' linguistic and cultural backgrounds are crucial in determining language choices with both female and male Berber speaking texters switching to French more often than their Non standard Arabic speaking male and female peers.

List of Abbreviations

1. CS	Code Switching
2. TN	Total Number
3. ON	Observed Number
4. ISCS	Intrasentential Code Switching
5. ESCS	Extrasentential Code switching
6. M	Male
7. F	Female

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General Introduction

Given the new technological advances that prevail all over the world today, online interactive media such as SMS (Short Message Service) messaging or texting (used interchangeably to refer to both the medium and the language variety) is surely one of the most influential and important inventions that have greatly influenced human language. Language with the use of mobile phones is becoming neither speech nor writing, a novice and intelligible linguistic form that is evolving slowly but surely into a sort of pidgin variety that has succeeded in imposing its rules and mode in a highly distinctive way (Tagg, 2009). Consequently, SMS messaging has created a new language that is becoming an integral part of the multilingual world and one of the best reflections of language change and innovation.

The revolution of SMS messages as a new way of communication started in the late 1990's with the rapid growth of the mobile telephony. In 2009, the United Nations reported that more than 60% of the world's population-about 4.1 billion people- had access to mobile phones (Thurlow and Poff, 2011). The SMS texts' unobtrusive, asynchronous and non-expensive aspects, made messages very popular among people, mainly teens, "*surpassing therefore instant messaging, e-mail, voice mobile telephony and even traditional fixed line telephone calls*"(Ling, 2005:1).

In this respect, this study is intended to contribute to the field of digital communication by analyzing the nature of SMS messaging practices among multilingual English students at the department of English of the University of

Algiers. The use of several languages, we believe, will possibly result in various switchings that highlight the dynamic phenomenon of languages in contact. Thus, the study focus will be on the identification of the amount, the types of code switching and languages used in messages. Besides, the overall results will be considered from a gender perspective as an additional attempt to account for male and female differences while switching languages in SMS texts . It is worth noting at this point that the topic of SMS texting in multilingual contexts and in connection to Code switching and gender , has received very little attention in today's research agendas, and further research is needed to throw additional light on the subject.

Theoretical Groundings

Within the late two decades, growing research from different countries pinpointed the importance of SMS texting as a new mode of communication, by investigating its properties from sociolinguistic, pragmatic, cross-cultural and meta-linguistic scopes. The main objective of all these studies was to account for language change and bring evidence for the dynamic aspect of human language and its potential creativity and variation.

One of the most investigated aspects of this variation focused on the use of SMS texting among youngsters considered to be the heaviest users of messages when compared to older people. The linguistic data analysis confirmed this assumption in many cases and countries by disclosing also differences between men and women texting styles. Indeed, youngsters are prone to SMS use in general, but research showed that among youngsters, females outpass their male

counterparts in both the number of messages they daily send and the syntactic structures used in the texts produced. While boys prefer using short and brief messages occasionally, females seem to prefer using longer sentences, including phrases and clauses , as frequently as possible.

One major problem with these studies though is that the majority of the reviewed works missed to bring explanations for these differences by focusing mostly on the linguistic forms of messages and by discarding the social, cultural and psychological aspects underlying these differences.

Substantial light came out of studies conducted in other fields such as Sociolinguistics, Cognitive Psychology and more importantly Feminist Linguistics, called also Language and Gender . That gender differences emerged in SMS texting is not surprising mainly for Language and Gender scholars who firmly claimed that sex variable is a significant factor in language use and choices (Lakoff, 1973; Trudgill, 1998; Tannen, 1994). Additionally, many sociolinguistic studies accounted for these differences by providing several and varied explanations that highly contributed to the understanding of gender linguistic differences. In fact, for many researchers (Brown, 1980; Cameron, 2003; Tannen, 1997), these differences are attributed to psychological, symbolic or socio-cultural factors that make women and men use language differently in communication.

Further arguments for the communicative differences between men and women emerged from studies on gender and talkativeness which highlighted the fact that men talk (i.e: communicate) more in public contexts where they see the

opportunity for negotiating status and preserving their social identity of the dominating sex. In contrast, women seem to be more interested in establishing connections and discussing inter-relational topics. This is what Deborah Tannen (1997) called rapport talk, which means talking about personal experience in order to establish connections, as opposed to men's report talk that aim at exchanging information about impersonal topics.

These arguments can rightly be used to explain the differences in SMS texting between women and men. In fact, many works showed the heavy use of texting by girls, often placing greater emphasis on providing emotional exchanges and maintaining inter-personal relations by using longer and more syntactically complex sentences. Conversely, males place greater emphasis on speed with messages that tend to be brief, informative, practical and facts-oriented (Kasesniemi, 2003; Ling, 2005).

Statement of the Problem

Based on these findings, research says very little about SMS texters and their language use and choices in multilingual contexts where more than two languages are used. Indeed, when reviewing the literature on SMS research, we noticed that most studies were carried out in monolingual contexts (where only the native language is used) , or bilingual contexts (where two languages are used: the native language in combination with English as a second language). The very few studies conducted in bilingual contexts, referred to as multilingual cultures by Thurlow and Poff (2011) concerned countries such as Kuwait, South Africa, Finland and Nigeria. For these particular bilingual countries, research

displayed heavy use of code switching that was characterized by a mixture of English with the national language by the users of SMS.

In Kuwait for example, Haggan (2007) found that texters heavily use English in addition to a mixture of English and Arabic. Similarly in South Africa, Deumert and Masinyana (2008) reported about the use of a blended form of isiXhosa (an indigenous language) with English by writing English nouns with isiXhosa prefixes. Likewise, Kasesniemi (2003) displayed the Finnish teenagers mix of Finnish with a medley of foreign language words and expressions from any language mastered by the user. Conversely, Chilwa (2008) found that Nigerian texters completely avoid using their national language or any indigenous languages, even in their personal texts and prefer using standard (British) English. This striking finding revealed that even in bilingual contexts, code switching may not occur and SMS users may decide to adopt different texting strategies and language choices for reasons that deserve deeper investigation.

Summing up, it goes without saying that the contrasts in results reported in these studies bring evidence that further research is needed to set a clear and comprehensive picture on the topic on the one hand. On the other hand, we believe that the obtained results and the drawn conclusions remain specific and limited to those particular social and linguistic contexts and cannot, therefore, be generalized to include multilingual contexts where more than two languages are used. In fact, it is not wrong to assume that in multilingual contexts, one can possibly predict different and specific language uses such as a mixture of two,

three or four languages at the same time, a mixture that comes as a natural consequence of languages in contact on the one hand, and/or a consequence of the texters selected strategies for communication on the other hand.

Many linguistic features that are inherent to speakers evolving in multilingual social environments are generally represented by code switching, interferences or borrowings. Nowadays, these aspects are extensively studied by sociolinguists in bilingual and multilingual contexts but then have received very little attention in SMS texting research.

Purpose of the Study

In the light of what has been stated so far, and in regard to the growing significance of messaging as a social phenomenon and as a subject of academic interest in many countries in the world, further investigation in the field that aims at understanding the mechanics of SMS texting within a multilingual context can represent a significant contribution to the research area. Moreover, analyzing SMS texting in relation to gender and code switching is motivated by our interest to deal with the topic of SMS texting from three different lenses and exert the benefits of adopting an inter-disciplinary approach in research.

By exploring the three sided link between the three topics that are usually studied independently or one in combination with another: Code switching with SMS texting or SMS texting with gender, the interaction between the three topics will hopefully bring an in-depth understanding and a more comprehensive view of the topic. As noted earlier, SMS messaging has extensively been studied in many countries and from different angles , and by conducting the present

research, we wish to argue that studying it in a multilingual country like Algeria can throw a lot of additional light on the subject.

For this purpose, a case study that concerns multilingual female and male university students mastering four languages: Non standard Arabic or Berber, Standard Arabic, French and English, is carried out. Meanwhile, it is important to mention that this linguistic situation is specific to the participants of our case study and any generalization of results to include all the Algerian people is not possible in this case.

Indeed, Algerian people in their everyday life interactions evolve in a linguistic environment where both diglossia and multilingualism are present. This environment is characterized by the existence of social and regional varieties being used in ways that reflect a formal as well as a functional separation of these language varieties. The diglossic feature is represented by the functional specialization of two varieties of the same language. In the Algerian context, Standard Arabic and Non standard Arabic are respectively the High variety and the Low variety of the same language. Non standard Arabic is therefore functionally restricted to informal conversations (i.e. friends, family and work conversations) whereas Standard Arabic is used in literature, the media and is also restricted to administrative and instructional purposes.

In parallel, French language which is studied early in the elementary school, is limited to conversations between French language users in some particular fields such as the media (mainly newspapers) and among intellectuals in general. Regional dialects are also present in the Algerian context to include

Berber, Chaoui, Chenoui, Chelhi and Mozabit which are varieties of Tamazight language. These latter are functionally restricted to informal conversations between family members and friends of the same speaking community. As should be clear, in diglossic settings, the selection of which language to use is not free, but determined by community norms whereas Code switching is understood *“as an individual phenomenon where in a speaker chooses when, why and how to alternate between languages”* (Bullock and Toribio, 2009:6).

At this point, it is worth noting that the participants involved in our case study share this linguistic background but with one additional particularity which is the fact of being advanced learners of English. English language, which is compulsory starting from the middle school, is taught as a foreign language till the end of high school studies. After passing the Baccalaureate examination, some choose to follow graduation studies in English language and literature. Given the length of time covered in studying this language, that is to say from the middle school (four years in the middle school and three years in high school) up to university (four years of university studying English as a major), our participants who are 4th year graduate students can be considered therefore as advanced learners with excellent command of the English language.

As a consequence, it is not uncommon to find these students using French and English between friends and classmates, Non standard Arabic or Berber among friends and family members also and standard Arabic at school or in the media. In addition, this linguistic diversity gives rise to language contact which in turn provides a favorable environment for Code switching to take place.

Societal multilingualism (Sridhar, 2009) thus emerges from various social and linguistic forces and historical events including colonization and Algerian migration to France among others. These factors may be responsible for “*short terms or sustained language contact, which can have different outcomes in terms of language dominance and linguistic practices*” (Bullock and Toribio, 2009:13).

In this scope, our aim is to analyze multilingual texters language behaviors by looking deeply into their messaging practices and uses in terms of Code switching types and language choices and in terms of differences in gender texting styles. As mentioned, the topic of SMS texting in multilingual contexts and in connection to Code switching and gender has received very little attention in today’s research agendas either in or out of Algeria and therefore, further research is needed to better understand the nature of SMS texting.

Research Questions’ Statement

As a matter of fact, our study seeks to fill this gap in research on SMS messaging, and in order to reach this aim, four research questions are asked:

1. *Do female students of English texters code switch more than male student texters?*
2. *Do female students of English texters differ in their code switching from male student texters in terms of Intrasentential code switching type vs. Extrasentential code switching type?*
3. *Do female students of English texters differ from male student texters in terms of language choice? If yes, how?*

4. *Do female students of English texters differ from male student texters in terms of Code switching practices and language preferences? If yes, why?*

Organization of the Dissertation

The thesis is organized around the four research questions stated above. The remainder of the study consists of four (04) chapters. Chapter one deals with the theoretical background of the study which is a review of literature that covers the three fields: SMS messaging, gender and Code switching, including the different streams and approaches adopted in each domain. We believe in fact that going through the different moves in every area by describing the early concerns and the more recent ones, is an essential step to help the readers of our work have a general view of the possible correlations between the three topics and eventually account for the need for a multidisciplinary approach to study the topic under scrutiny.

Despite the fact that the majority of the research studies reported in this chapter dealt with Code switching in oral production, the theoretical background will serve as a standing stone for all the explanations and arguments to interpret the findings. As research on written Code switching is at its embryonic state, we believe that insights from early studies on the topic, be it in spontaneous speech, can help , to a certain extent, to understand some aspects of written Code switching in particular, and written discourse in general.

Furthermore, operational definitions concerning Code switching types are provided in this chapter. Code switching will be analyzed according to Poplack's distinction between Intrasentential code switching type which involves the

inclusion or use of Nouns, Noun Phrases , Verb Phrases , Adjectives, Verbs, Complements, Relative clauses and Sentences ; and Extrasentential code switching type which refers to the use of tags, idiomatic expressions, interjections and exclamations.

Therefore, both Intrasentential and Extrasentential switching types will be used to refer to all the movements from one language (or languages) to the native or matrix language (or languages) and the insertion of complete sentences or single words within sentences from the target or guest language to the matrix one. Hence, the two concepts will be adopted in this study and will constitute the major tenets of our research methodological framework.

Chapter two presents the methodology used in the present work. It first starts with the rationale underpinning the choice of exploratory/ qualitative methodology and data collection instruments used in this study. This is followed by detailed descriptions of the participants linguistic and educational backgrounds and the procedures adopted to analyze both the SMS corpus and the questionnaire's data.

In chapter three, the results obtained by SMS corpus examination, are presented in conjunction with the discussion and analysis of the findings. This gives more consistency to the results' reading and interpretation in the light of what has been discussed in the review of literature , on the one hand, and in the light of our research questions, on the other hand. The chapter ends up with a summary and conclusion that are provided in connection to the research questions.

In chapter four, the results obtained through the use of the questionnaire are presented. Again, the results are analyzed and discussed hand in hand and accordingly. All the results are categorized and tabulated to facilitate the reading of the responses in percentages. This is followed by the discussion and interpretation of the findings in the light of the review of literature and the research questions stated in the introduction. As it is the case in chapter three, a summary and conclusion is provided at the end of the chapter.

Last, a general conclusion that contains a general account of all the results obtained in relation to the research questions raised in this study is presented. Besides, possible research directions are proposed to invite further scrutiny and deep exploration in the field of SMS texting as an attempt to pave the way to future research studies in Algeria in particular.

Chapter One

Theoretical Background of the Study

Introduction

SMS texting as a new communication medium and phenomenon cannot be understood independently from the social context in which it unfolds mainly when we know that variables such as Code switching and gender are involved in the shaping of this phenomenon . Obviously, these variables are relevant for analyzing texting behaviors as they are often inter-related and their relative importance may change according to the social context they pertain to . Henceforth, reference to some of the principal works in which SMS messaging, gender and Code switching have been investigated , is required as a first step in investigating and illuminating the different facets of the topic.

The purpose of this chapter then is to present an overview of SMS texting field from the different research perspectives with an additional view towards delineating the various approaches to the study of Code switching and gender. This is done by presenting every field's concerns and directions that will help cover properly the subject of our study and, eventually, build bridges between the three research areas.

1.1. SMS Messaging in Research

The term SMS refers to the brief typed messages sent using the Short Message Service (SMS) of mobile/cell phones, Personal Digital Assistants (PDAs), Smartphones or Web browsers (Thurlow and Poff , 2011). Because of its

technical restrictions, allowing only 160 characters per message, texting does not always follow the standard rules of any language and limits its production to simple sentence structures or abbreviated linguistic forms in communication. For that reason, text messaging is broadly defined as an asynchronous text based technological mediated discourse that pursues simple sentence structures in writing messages (Thurlow, 2003; Baron, 2005).

Growing interest in the SMS language use started in the late 1990's by several attempts to look into the linguistic properties that define texting as a new language variety. A number of studies were conducted in many countries and in different topics that covered scholarly and public concerns. The research covered a wide range of disciplines such as medicine, business and commercial uses, to extend to political campaigning and media broadcasting. In many studies, research addressed the role of texting as a social-communicative resource in people's everyday life, where sociolinguistic, pragmatic and discourse analytic research attended to messaging.

In this line, and in order to understand the interplay between what technology offers and what the user himself or herself brings to the technology, different strands of investigation tried to highlight the extent to which texting differs from standard language and how SMS users, by fulfilling interpersonal goals, actively and creatively shape their interactions. Henceforth, interactional, metalinguistic, pragmalinguistic and cross-cultural studies were conducted and in each context, a focus was placed on a particular aspect of the subject.

Many scholars for example were interested in interactional aspects that deal with the social functions of messages and the ways they are used to build and maintain relationships. Aspects such as speech styles and their relation with different types of social relationships, privacy considerations (Weilenmann and Larson, 2002) and thematic contents or functional orientations of SMS users messages (Chiluwa, 2008) received considerable attention from the researchers.

Moreover, particular attention was given so far to the linguistic context in which messages evolve. Referred to as the ideological debate to define the public reactions to the medium, texting was questioned for its negative impact on good communication and conventional literacy. While a few scholars (Siraj and Ullah, 2007) claimed that texting have a negative impact on standard language writing, many empirical studies supported the view that texting do not affect standard English learning and use. According to Chiluwa (2008), this was justified by the fact that message users in general do not view texting as formal writing because of their awareness of the communicative intent and pragmatic contextuality of the messages.

Another area of research that received equal attention was the Pragmalinguistics' domain. One of the favorite topics of Pragmalinguistics' researchers was the investigation of the validity of the stereotyped assumptions of messages for being collections of abbreviated forms. The focus therefore was on the analysis of lexical and stylistic features represented in abbreviations, number homophones, non-standard spelling and the use of emoticons. Interestingly, the reported results showed that even at that level of analysis, many

cross-cultural differences were noticed. In Sweden for instance, research (Hard af Segerstad, 2005) reported the texters alteration of standard language by spelling phonetically, splitting compounds and omitting vowels. In contrast, their Norwegian peers (Ling, 2005) displayed a weaker tendency toward alteration or abbreviation for instance.

In addition to lexical and stylistic features, syntactic and textual properties were investigated by looking into the composition, the organization and the coherence of messages. Research showed that Swedish text messages are longer than German ones (Doring, 2002 cited in Thurlow and Poff , 2011) whereas American and Norwegian messages are the same length (Ling and Baron, 2007). At the level of complexity, i.e. messages containing multiple clauses, Norwegian teenager girls messages were revealed to be more complex than their male counterparts (Ling, 2005). Additionally, the omission of auxiliary verbs, personal pronouns and function words were very common in most research results conducted either in Germany, Sweden or Norway.

The fourth and last research strand concerned cross-cultural studies, where research particularly focused on lingua-cultural (Agar,1994), age and gendered differences. Many researchers were interested in social/demographic groups within countries such as Italy (Spagnolli and Gamberini , 2007) and Kuwait (Haggan, 2007), where texting behaviors were said to be tightly connected to the local norms where sending formal and eloquent messages (Kuwait), or lengthy and elaborated refusals to invitations (Italy), were more a matter of culture than any linguistic practices.

In addition, many researchers were interested in examining SMS texting in terms of age and gender differences. Comparative studies that targeted differences in texting between teenagers and adults were conducted to find with no surprise that both categories used texting differently (Spagnolli and Gamberini, 2007; Ling, 2005). The second point of interest was the examination, within the category of teenagers, of possible differences between males and females. Conclusions showed then that female teenagers and young adults text more frequently, with more than 40 % of females texting daily (Ling, 2005). In fact, Ling reported that young Norwegian women send a greater number of longer and more syntactically complex messages, with 52% containing complex sentence structures compared to 15% of boys messages. In addition to that, they use capitalization and punctuation more prescriptively and prefer to coordinate events in the immediate future contrary to boys who prefer coordinating events in the middle future. Besides, females likely use more messages to manage emotionally loaded communication when compared to males (Ling, 2005).

In Finland, Kasesniemi (2003) for example, found that Finnish teenage girls are heavy texters who place greater emphasis on providing emotional exchanges and discussing how incidents affect them , contrary to their male peers who place greater emphasis on speed, with messages that tend to be brief, informative and facts oriented.

In sum, the four strands have greatly helped shedding light on the various facets of SMS messaging by displaying many disparities in results from a study to another, and by displaying one major point which is common to the

four strands, that SMS texting is highly marked by culture and gender differences. In fact, though the medium is the same all over the world, the use made by the texters will considerably differ from a culture to another and from one sex to another. More and more studies are corroborating the view that both males and females use messages differently and most of them have shown that females are heavy users and tend to use longer, more sophisticated and complex language compared to their male counterparts.

However, one major problem with most of these studies lies in their tendency to describe SMS use from a linguistic point of view which is actually dominating the whole field. More insight can be provided by looking into the subject from a psychological, sociolinguistic and cognitive standpoints to drive more explanations about SMS texting behaviors. The complexity of the subject, therefore, would require a more nuanced, multi-faceted approach in order to provide plural perspectives and draw a clear and overall picture of the subject.

1.2. Language and Gender in Research

Language and Gender as a field is probably one of the most illuminating and appropriate fields that can serve SMS research to explain gender differences reported in many investigations mentioned earlier. The field's contribution consists of the varied and valuable research findings and works provided by many researchers from different disciplines. From the second half of the twentieth century, many social science researchers among them scholars in Linguistics, Anthropology, Speech communication, Social psychology, Sociolinguistics and other disciplines, have been concerned with documenting

gender-related patterns of language use, years before *Language and Gender* stands as a distinct field in its own right.

Starting in the 1960's, sociolinguists, working as urban dialectologists and concerned initially with social and class differences, started drawing descriptions of characteristics that were said to distinguish women's and men's speech. Labov's (1990) works are the best representation of the sociolinguistic approach to gender. Labov found that men and women use different forms at the phonological level and within every social class and that, unlike men, women use more standard and prestigious forms of language. Labov's findings were confirmed by Trudgill (1974) study in Norwich, who found that women tend to use more standard forms because of their prominent status consciousness while men prefer using non-standard forms to convey masculine solidarity such as toughness.

It was only in 1973 that *Language and Gender* was established as a distinct field right after the publication of Robin Lakoff's (1973) "*Language and Woman's place*". This work's importance resides in the fact that it emerged as a reaction to the predominance of the identification of male norms as human norms and the biological attributions of women's and men's behavior. Additionally, the work was acknowledged for representing one of the major starting points to explore the complexity of gender and discourse by pointing at the linguistic inequality as a reflection of the social unequal distribution of roles.

For Lakoff, girls learn to use a non-forceful style because unassertiveness is a social norm of womanhood and doing otherwise will expose

girls to shame and ridicule. His analysis of women's language was interesting and relevant in the sense that it displayed the weakening of linguistic force tendency of women, which was due to men's distribution of roles and denial of power that reinforced social inequalities. In his study, he referred to linguistic forms such as weaker expletives in sentences like: oh dear instead of damn or trivializing adjectives in words like divine instead of great or the use of tag questions , to express speakers' opinions (Lakoff 1973).

Lakoff's (1973) work was criticized by O'Barr and Atkins (1980) who examined features of women's language in courtroom discourse and argued that women use Lakoff's identified linguistic features in everyday interaction because of their lower-status position. By arguing so, both researchers shifted the attention from women language differences as a sex attribute to social class, occupation or experience as a witness. Later studies , however, showed that this was not necessarily the case. The examination of conversational facilitators (Cameron, 1991) and women managers discourse (Tannen, 1994) showed that even high status position women tend to use more tag questions, more tentativeness features and more strategies including indirectness to save face for subordinates when making requests and delivering criticism (Tannen and Kendall, 2003).

Subsequent attempts to consider gender language differences dealt with social behaviors by examining everyday conversational practices. In an early study conducted by Zimmerman and West (1987), the researchers found that men interrupt women more than the reverse in thirty one dyadic conversations tape-

recorded in private residences, in coffee shops, stores and public places. The researchers concluded that these asymmetries in everyday conversations are but perfect mirrors of the male dominance through their control of the micro and macro institutions in society (Zimmerman and West, 1987).

In this line, further research was conducted by Fishman (1983) who examined naturally occurring conversations, tape-recorded by three heterosexual couples in their homes. The study revealed that women perform more conversational support work by producing more listening cues such as : mhm, uhuh and by actively pursuing topics raised by men. In contrast, men are more likely to not respond to turns and topics initiated by their female partners by using more declarative statements than questions. Fishman concluded that women' supportive role in private conversations reflects and reproduces sex-based hierarchies of power within the public sphere. Further support to Fishman arguments was provided by Tannen and Kendall (1997) who suggested that this imbalance is due to "*the central role of conversation in establishing intimacy among women, in contrast with the primacy of co-presence and shared activity in creating intimacy among men*" (Tannen and Kendall, 1997: 550).

However, research starting in the early 1980's extended its scope by shifting from a focus on women's speech, sex discrimination through language and asymmetrical power relations, to a focus on gender , language and social differences as a new paradigm in language and gender research. Many different innovative perspectives were proposed and several attempts explored gender and discourse with one major commonality, that of considering gender and discourse

as an organizing component of social interactions. This new perspective paved the way to many ethnographic, anthropologic and linguistic investigations that highly contributed in the understanding of the different facets of gender and language.

In an ethnographic work carried out by Brown (1980) to examine the politeness phenomenon in a Mayan community, data revealed that Tenejapan women use strategies that are qualitatively more polite than those used by men. Moreover, women tend to use irony and rhetorical questions in place of direct criticism more often than men. Men's communicative style was characterized by "*a lack of attention to face and the presence of such features in sex-related joking*" (Brown, 1980: 129). Brown explained that women's and men's linguistic choices are communicative strategies that lift humans to be "*rational actors who choose linguistic options to achieve certain socially motivated ends in particular circumstances*" (Brown, 1980: 113).

As a consequence, Brown's contribution marked a real breakthrough in the field because it shifted the framework from a system one acquires to a set of strategies one develops to manage social interactions. Within this scope, relevant descriptions of males and females' discourse revealed that language functions not merely as a medium but more importantly as a symbolic resource to create and manage personal, social and cultural meanings and identities. The representation of male vs. female distinctions brought about the recreation of gender through the social and cultural changes that are salient in the reshaping of gender selves. The notion of image and identity has become, therefore, unstable because mainly of

constant attempts to challenge and break social and cultural norms via language manipulation.

1.2.1. New Directions in the Field

In the 1990's, a noticeable move in the field occurred through the exploration of new perspectives and directions from its earlier focus on women's language to include the language of men and the language of other social groups that had not been included in earlier studies. Many sociolinguists, anthropologists, experts in communication extended the field by investigating unexplored areas such as gender in literary texts (Livia, 2003), gender and family interaction (Tannen, 2003), gender and power in on-line communication (Herring, 2003) and gender and ethnicity in children's peer negotiations (Goodwin, 2003). Research reported less typical cases including those which Bucholtz (2003) described positively as bad examples. These examples concerned gay, lesbian and transsexual categories that assume social and sexual roles differently from those attributed by their cultures.

At last, while considering the current moves made by research in the field, most researchers ended up with many similar conclusions. First, that gender is socially constructed, second, that there is an indirect relationship between gender and discourse, third, that gendered discourse is used as a resource, and fourth and last, that gendered discourse is used as a constraint.

In sum, most of the studies mentioned earlier briefly traced the enormous amount of progress realized in the field of Language and Gender and the significant move from the ideological gender perceptions to a more realistic

use of language in everyday practices. In fact, from Lakoff's (1973) basic conception of a unified women's language to today's highly elaborated theoretical configurations of a socially constructed gender, individuals (males or females) seem to be involved in the creation of gendered identities by constantly negotiating power and connections on the one hand, and by opting for specific linguistic choices and strategies to maintain pragmatic and interactional goals on the other hand.

1.3. Code switching in Research

Switching codes, whether it is a language, a dialect, a style or a register is a habitual and often a necessary part of social interaction in many bilingual and multilingual communities where two (in bilingual communities) or more than two languages (in multilingual communities) are daily used. For many years, Code switching has been considered as a sign of linguistic decay, evidence that *"bilinguals are not capable of acquiring two languages properly or keeping them apart"* (Hoffman, 1994: 109).

According to Wardhaugh, Code switching is described as *"the move from language A to language B"* (Wardhaugh, 1992: 107). To Hoffman (1994), Code switching is defined as *"the alternate use of two (or more than two) languages or linguistic varieties within the same utterance or during the same conversation. In the case of bilinguals speaking to each other, code switching can consist of changing languages; in that of monolinguals, shifts of styles"* (Hoffman, 1994: 110). Likewise, Poplack (1980) defined Code switching as *"the alternation of two languages within a single discourse, sentence or*

constituent and it is categorized according to the degree of integration of items from one language (L1) to the phonological, morphological and syntactic patterns of the other language (L2)” (Poplack, 1980: 581).

Therefore, and based on these definitions, CS switching will refer to all the moves from a language to another as well as the alternate uses of two or three languages or linguistic varieties within the same utterance, which will stand as the operational definition of Code switching in this present study.

Three major approaches to the study of Code switching (hereafter CS) have been reported by Bullock and Toribio (2009) to represent the three major concerns and directions in studying the issue of CS. The three strands are the structural, psycholinguistic and sociolinguistic approaches.

The structural approach as the name suggests, refers to the linguistic analysis of CS in terms of structure at all levels: lexical, phonological, morphological, syntactic and semantic levels (Bullock and Toribio, 2009). From the structural perspective, CS is not a mere “*random phenomenon*” (Montes-Alcalà, 2001:281) but a highly systematic and rule-governed linguistic phenomenon as supported by Bullock and Toribio (2009) who claimed that :

Just as monolingual speakers possess intuitions about what constitutes well formed utterances in their native language, bilinguals have the capacity to differentiate ill formed from grammatical patterns of CS.....CS does not constitute a distinct or third grammar, instead CS forms emerge from and conform to the constraints of both language systems (Bullock and Toribio, 2009: 15).

In parallel, the psycholinguistic strand attends to the cognitive and neuro-anatomical features of bilingual speech by looking into the psycholinguistic mechanisms involved in the control of two languages. Basically,

this is achieved via “*the simultaneous activation of two languages commonly examined through language switching tasks which can be used to assess lexical access, working memory, bilingual control and attention*”(Bullock and Toribio: 15), that account for the bilinguals production, perception and acquisition.

The third and maybe the most prolific and diverse strand is the sociolinguistic approach. In fact, major sociolinguistic studies situated code switching behavior within the bilingual social contexts that are in turn highly related to the societal norms. This involves “*the integration of external factors such as age, class, gender social networks, community norms, identity and attitudes that offer insights into social constructs such as power and prestige*” (Bullock and Tribio:16).

CS captured researchers’ interest from the beginning of the 1960’s, who were firstly concerned with a variety of other contact phenomenon such as Borrowing, Interference and Syntactic convergence. Gumperz (1971) was the first researcher who focalized on CS by looking into language social functions and linguistic constraints. In his works, he took up CS as a conversational strategy through which two types of CS were distinguished: the Situational and the Metaphoric code switching types.

According to Gumperz, situational code switching occurs to account for language alternation when changes in language choice coincide with change of interlocutor, setting or topic. This is demonstrated in cases of French speakers living in English dominating countries, who use French at home, in school and church, and English in the workplace and in government offices. The Metaphoric

code switching, which is motivated by factors within the conversation, is used by minority groups as the “We code”, for identifying themselves as belonging to a certain community that speaks that language. This sociolinguistic orientation helped determine motivations for CS as well as its function and relation to identity and solidarity.

In this line, many scholars (Wardhaugh, 2006; Gumperz, 1982; Gal, 1988; Myers-Scotton, 1995) seem to agree on the fact that CS is obviously not a mere linguistic play and interplay of the systems. Instead, it serves other individual, social and symbolic functions that are highly complex. CS for Wardhaugh (2006) for example can arise from individual choice or be used as a major identity marker for a group of speakers who must deal with more than one language in their common pursuits (Wardhaugh, 2006). Moreover, Gal (1988) views CS as “*a conventional strategy used to establish, cross or destroy group boundaries, to create, evoke or change interpersonal relations with their rights and obligations*”(Gal, 1988 , Cited in Wardhaugh, 2006: 102).

Many subsequent sociolinguistic studies conducted in bilingual contexts have stressed this complexity by highlighting the impact of social factors and norms on Code switching production. For Gumperz (1982), the norms vary from a group to a group, even within what might be regarded as a single community and whereby factors such as region of origin, local residence, social class and occupational status are involved in defining these norms. Additionally, Myers-Scotton (1995) has pinpointed the face dimension in the situations the speakers are involved in. Speakers know who they want to be identified with, how they

want to appear to others and how they want others to behave towards them. As a consequence, speakers by using CS can do many things such as asserting power, declare solidarity, express identity and maintain a certain neutrality when both codes are used.

1.3.1. Why do Bilinguals Code switch?

Given this multi-faceted definition that enclose individual choices, social motivations and conversational strategies that aim at building or rejecting group boundaries, CS was revealed to be interestingly complex. As a consequence, many researchers in the 1960's and 1970's restricted themselves to analyzing the social meaning of the occurrence and non occurrence of CS in interactions in general.

Grosjean (1982) stated that when a bilingual speaks to a monolingual, he will use one language only, but when he or she speaks to another bilingual, he or she can choose to speak either of the two languages or code switch between them. As a matter of fact, what makes a speaker choose a variety of a language instead of another or even a language rather than another, or switching from a variety to a language, becomes a difficult question to answer.

Nonetheless, tentative answers were suggested by many researchers who attributed the choice of language in a bilingual or multilingual to a variety of factors such as *context* (Wardhaugh, 1998) or *domains*, that include the general subject area under discussion, commonly referred to as topics (religion, family, work), the *role- relationships* between the participants, whether intimate or formal as between mother and daughter, boss and secretary or friends, and the

setting of interaction including local and time of days and places such as church, home office, which are generally culture specific (Saville-Troike, 2003: 42).

Additionally, Hymes (1967) argued that besides the factors mentioned above, CS can occur because of the functions that it serves. To Hymes, CS can be used to attract attention, impress people, give an equivalent term in the matrix or guest languages, persuade or joke. Eventually, in a more recent work, Hoffman (1991) has added a few more reasons underlying CS. Hoffman added 1) quoting somebody else, 2) being emphatic about something , 3) interjections, 4) repetition used for clarification, 5) intention of clarifying the speech content for the interlocutor and last 6) expressing group identity (Hoffman, 1991: 116)

However, one major issue with CS is that speakers' motivations are not systematically conscious, for many speakers are not aware that they have used one particular variety of a language or even that they have switched languages either between or within utterances. For Wardhaugh, CS is often quite subconscious: "*people may not be aware that they have switched or be able to report, following a conversation, which code they used for a particular topic*" (Wardhaugh, 2006:105). As a matter of fact, these two opposing parameters reveal the particular additional complexity to deal with CS as a variation in the linguistic systems.

1.3.2. Types of Code switching

At the linguistic level, numerous attempts to provide a precise linguistic characterization of conversational CS ended up with the establishment of various and distinct types. Hoffman (1991) in an attempt to summarize these types of CS

pinpointed two major types that most literature agreed on: *Intersentential* and *Intrasentential* CS types. By Intersentential CS, Hoffman refers to what is acknowledged in CS literature as the bilingual capacity to switch above and between sentences, by including complete sentences and that comprise a complete shift in language (Myers-Scotton, 1995) as in the following example:

Example 1: Puerto Rican- English bilingual: (...*But I wanted to fight her* con los punos (with my fists), you know. (Poplack, 1980: 589).

In contrast, Intrasentential CS type involves the insertion of single words in a sentence as in the following example:

Example 2: Puerto Rican- English bilingual: (...Siempre esta *promising* cosas (he is always promising things).(Poplack, 1980:589)

Nevertheless, it is important to mention that these proposed types are not the only ones suggested by the researchers. In fact, Poplack distinguished two types of CS: the *Intrasentential* and the *Extrasentential* CS types. To Poplack, *Intrasentential CS* involves languages switching by using Nouns, Noun phrases, Verb phrases, verbs, Complements, Relative clauses and full Sentences. Conversely, *Extrasentential or Emblematic CS type* refers to the inclusion or use of tags, idiomatic expressions, exclamations and interjections. To Poplack, tags, idiomatic expressions, exclamations and interjections are freely moveable constituents which may be inserted almost anywhere in the sentence without fear of violating any grammatical rule (Poplack, 1980). Besides, they serve as an emblem of the bilingual character by introducing items such as sorry, hey or ay, as demonstrated in the following example:

Example 3: Puerto Rican- English bilingual: (..Vendia arroz (he sold rice) ‘*N SHIT*’). (Poplack, 1980 : 589).

1.3.3. Code switching and Language Proficiency

For many years, CS has been regarded as a deviation or distortion from the bilingual norms and a sign of language incompetency and decay. This attitude towards CS has stemmed from the Structuralist domination that has supported the view that bilingualism implies the easy move from one language to another where switching within the same sentences is not tolerated. To Weinreich (1963): “*an ideal bilingual switches from one language to another according to appropriate changes in the speech situation.....but certainly not within a single sentence*” (Weinreich, 1963:73).

Myers-Scotten (1995) argued that the demonstration of one language or the other, mainly at the Intersentential level, is generally due to the bilingual’s degree of language command. To support Myers- Scotton claims, MC Clure (1977: 10) reported that children tended to use more Intrasentential type by using only English nouns in their Spanish, whereas older children opted for Intersentential type by switching over phrases and sentences in addition to the words switches.

In the same line, Poplack (1980) , by comparing the fluent Puerto Rican bilinguals and the non fluent ones, assumed that in the bilingual cases she studied, the fluent bilingual Puerto Ricans used both English sentences and single words , that she called *Intrasentential CS* , much more than the *Extrasentential CS* type. The examination of the data showed that full sentences were the most

frequently used constituents, making up 20% of the data , followed by single nouns to be the most frequently switched categories when compared to other constituents such as tags, idiomatic expressions or exclamations (Poplack , 1980: 603) .

To Poplack, this denotes high knowledge and command of syntactic, morphological and phonological systems that govern both languages to allow the speakers to draw from each system only those rules which the other shares when alternating one language with another “ *since a code switched segment and those around it, must conform to the underlying syntactic rules of two languages which bridge constituents and link them together grammatically*” (Poplack, 1980: 589). In contrast, the Extrasentential type is mostly used by non-fluent bilinguals “*which requires less knowledge of two grammars since they are freely distributable within discourse ...and their insertion in discourse has few , if any ramifications for the remainder of the sentence*” (Poplack, 1980: 589).

Building on these contributions, many researchers reached a consensus on the fact that bilingualism is a distinctive sign of perfect bilingualism and a mark of language competency whereby “*Code switching remains a verbal skill requiring a large degree of linguistic competence in more than one language rather than a defect arising from insufficient knowledge of one or the other*” (Poplack, 1980:581).

1.3.4. Code switching, Code mixing, Borrowing and Interference

Code switching involves a broad range of contact phenomena and is difficult to characterize definitely. Firstly because its linguistic manifestation may extend

from the insertion of single words to the alternation of language for larger segments of discourse. Given these factors, it is not surprising to find that there exists debates in the literature concerning the precise characterization of CS and how various kinds of language contact varieties are to be classified.

Indeed, while reviewing CS literature, a clear definition of the term has proved problematic because it is mostly found in conjunction with other terminology such as Code mixing, Borrowing or Interference. What follows is an attempt at clarification that will hopefully help explain the differences that exist between these concepts and establish clear cuts among them.

1.3.4.1. Code switching and Code mixing

Code switching and Code mixing are both products of Bilingualism. Nonetheless one should not confuse between the two. In fact, the proliferation of definitions and labelings blurred the distinction between the two in many aspects. Hoffman (1991) reported three types of CS.

The first CS type is referred to as the true CS that occurs above sentence level, when using two languages and stopping using one language to move to another, as in cases of Intersentential CS type. The second type is referred to as Intrasentential CS that occurs within sentences, including either small constituents such as nouns, verbs or complements, to include longer and more complex constituents such as phrases and clauses. The third and last type is the Extrasentential or Emblematic CS type that occurs when bilinguals use tags, exclamations, interjections and idiomatic expressions (Hoffman , 1991: 104).

However, Code mixing is widely equated in the literature and in many instances to Intrasentential CS. To Wardhaugh, CS is defined as “*the move from language A to language B, whereas any mixing of languages at the sentences level and within the sentences are referred to as Code mixing*” (Wardhaugh, 1992: 107). Similarly, Sridhar (1996) defined Code mixing as “*a common mode of Code switching which is the switching of languages within sentences which many researchers refer to as Code mixing*”(Sridhar ,1996: 57) .

As we can read in the cited definitions, the proliferation of types and definitions has made the distinction between the two concepts quite difficult but not impossible. A more recent tendency in research literature seems to agree on this distinction of CS and Code mixing by reserving the word Code switching when moving from one language to another, that is above the sentence, and Code mixing to refer to code switching within sentences either when using clauses, phrases or single lexical items.

1.3.4.2. Code switching and Borrowing

Another terminological problem in this study area lies in the differentiation between CS and Borrowing. One common evidence, though, is that it is not very easy to tell whether a word is a switch or a loan when it is ‘imported’ from one language to another by a speaker. However, some attempts have been made to distinguish between the two. To Sridhar (1996) , Code mixing (used interchangeably by the author to mean Code switching as well) is distinguished from Borrowing in the following respects: 1) Borrowing is usually restricted to single lexical items while CS involves both lexical and syntactic structures

including words, clauses and sentences, 2) Borrowing can occur even in the speech of monolinguals whereas code mixing supposes a certain degree of bilingual competence, 3) CS is not used to fill lexical gaps, but Borrowing is used in cases where a language do not have the adequate terminology for an item, 4) Borrowing occurs mostly with nouns and occasionally a few adjectives and other categories, where as CS draws on every category and constituents in grammar (Sridhar, 1996:58).

Further, Grosjean (1982) added one major characteristics of borrowing which consists of the morphological and phonological adjustments. Unlike CS, borrowed items undergo morphological and phonological changes that make them distinct from switches as illustrated in the following examples:

Example 1: Ca a poppé (from the verb popped) meaning “It popped”.

Example 2: Ca m’étonnerait qu’on ait code switché autant que ca (It would really astonish me that we had code switched that much” (Grosjean, 1982: 308).

Additionally, Poplack (1980) noted that some borrowed items can result from the fact of using repeatedly one item that ends up to be “habitualized” (Poplack, 1980:598) into the host language unlike code switches that are never assimilated into the Matrix language. The frequently repeated items, therefore, become integral parts of the native language. Examples of Borrowing in the Algerian society are: *petit pain, croissant, pizza, les unites, le portable* for the items that would probably not find equivalents in the host language, and other items such as Slt, Bonjour, or tomobile / tomobil/ (meaning automobile) for

items that are so much repeated that they integrated the native language and become very common in conversations.

1.3.4.3. Code switching and Interference

Interference was firstly defined by Weinreich (1953) as a deviation to the norms of both languages which occurs in the speech of a bilingual speaker. Interference can be observed in all language levels: phonological, morphological, syntactic, semantic and lexical. This is perceived when the bilingual speakers include some aspects of another language into the ones he or she is speaking, under the form of a foreign intonation or accent, a wrong inflection, an unusual word order that made many researchers refer to as an ultimate demonstration of a negative transfer (Selinker, 1969 , cited in Faerch and Kasper, 1983).

An example of interference at the phonological level appears when the speaker transfers a sound from his native language to the target language as in the following example: /ʃip/ for / ʃIp/ (Faerch and Kasper, 1983: 5). Likewise, Interference at the syntactic level is illustrated by the speakers transfer of his native language system for indirect object pronouns to the target language as in the example proposed by Faerch and Kasper where the word order in the target language is affected by that of the native language as the :Dio A ELLOS instead of LES dio A Ellos (Faerch and Kasper, 1983: 5). At the morphological level, the use of the rule to form the possessive for example, may lead the speaker to use sentences such as *The book of Jack* instead of *Jack's book* (Faerch and Kasper, 1983: 5). In lexicon, Faerch and Kasper referred to the speakers use of a word meaning in his native language and how it can be used for an already

existing word in the target language as in the case of : *Je sais Jean* instead of *Je connais Jean* (Faerch and Kasper, 1983: 5).

The distinction between CS and Interference, however, is not always clear as Interference may lead the bilingual speaker to activate his/ her bilingual language mode and therefore activate interlanguage or communication strategies that are part of language acquisition processes and production (Faerch and Kasper, 1983).

Yet, one major difference between CS and Interference is suggested by Grosjean (1982) who has assumed that Interference is different from CS because it entails the involuntary influence of one language on another. The important point here is that CS is commonly regarded as a voluntary behavior whereas Interference is taken to occur involuntarily due to the influence of one language on the other along the process of the target language acquisition and production. Grosjean has added that such interference is particularly observed in conversations between a bilingual and a monolingual where the bilingual consciously avoids code switching, which may impede communication, but cannot avoid unconscious interference.

1.4. Code switching Research in Algeria

Noticeable research works were conducted in Algeria as a multilingual context where a shift from Non standard Arabic to French and Berber, mostly in the region of Tizi – Ouzou , was reported in many studies conducted by Kahlouche (1981; 1992), Rahal (1992) and Zaabot (1990). One major concern of the four studies consisted in examining the different linguistic behaviors of multilingual

speakers and determining the characteristic of these when evolving in a culturally multilingual linguistic environment.

All the researchers ended up with the conclusion that in a multilingual context, using three languages at the same time could only be a reflection of languages in contact and the expression of naturally occurring linguistic behaviors with all the complexity that it held in terms of the motives behind the use of CS in that particular context.

1.5. Code switching and SMS Texting

CS in SMS messaging has emerged recently as an attempt to look into language deviations in what is broadly called CMC (Computer Means of Communication) as a new means of communication. The early attempts have firstly been concerned with the study of internet language via the analysis of email texts and chat groups' language on the net (Crystal, 2009) to determine the characteristics of this newly adopted medium.

Crystal has concluded that, in addition to the peculiarities that are typical to CMC which consist of the extensive use of abbreviations and emoticons, some CMC texts have more commonalities with writing and others with speaking. Most studies on CMC data have corroborated Crystal's findings and have ended up with the conclusion that CMC language has the characteristics of both spoken and written genres that help to define CMC language as a "third medium" (Dorleijn and Nortier, 2009: 129).

Accordingly, research has extended to cover SMS language in both monolingual and bilingual countries as mentioned earlier. The very few studies

carried out in bilingual countries such as Kuwait, South Africa, Finland and Nigeria, have focused mainly on the examination of the use of English in connection with the national language of each country. In Kuwait for example, Haggan (2007) has reported the texters' use of a mixture of Arabic and English in their messages. Similarly, South African texters mix English with isiXhosa by writing English nouns with isiXhosa prefixes (Deumert and Masinyana, 2008). By contrast, Chilwa (2008) has found that Nigerian texters completely avoid the Nigerian language even in their personal texts and prefer using exclusively standard British English.

In multilingual contexts, Ait Mouloud (2011) has investigated the use of SMS among Algerian youngsters belonging to the region of Tizi Ouzou, by looking into the Code switching types and languages used. The results have shown that French is the language which is mostly used in SMS texts, followed by Non Standard Arabic and then Berber (which is spoken by 69% of the population under study). The study has shown also gender differences in CS type's choice by demonstrating females' extensive use of Intersentential CS type when compared to male texters. Ait Mouloud has concluded that despite the fact that participants are Berber and Arabic speakers, the participants use French language in most SMS messages as a communicative strategy to guarantee a wider communication among young texters.

Last but not least, it is important to add that CS is also found in written communication and it is not confined to speech (Sridhar, 1996). Tay (1989, cited in Sridhar, 1996:65) reported the use of two or three dialects of

Chinese in the written media investigated. The evidence of CS as a speech and a written discourse phenomenon in language becomes an interesting issue to observe mainly in SMS writing which is commonly defined as written speech. As a matter of fact, this study will analyze the nature of SMS texting as a new written discourse and look upon the different CS types used, and more importantly account for CS differences among male and female students of English.

Summary and Conclusion

This chapter covered the theoretical background of SMS texting, gender and CS. Reference to differences between CS, code mixing, borrowing and interference was also made. Besides, brief reference to CS in the Algerian context and an account of SMS texting in relation to CS was provided as well.

Building on this review of literature, we concluded that further research is needed to distinguish between bilingual and multilingual linguistic behaviors in matters of CS and SMS texting. Indeed, any results and conclusions drawn in regard to bilingual contexts cannot be generalized to multilingual ones where more than two linguistic systems are used.

Moreover, studying CS in written discourse as it is the case in SMS texting, can widen the scope of both fields by exploring and defining the characteristics and peculiarities of both behaviors in regard to written communication. As the study of digital CS is a very young field, a lot is left to be done to unveil the nature of SMS messaging in connection to both CS and gender, as it is the case in this study.

Besides, the discussion above highlighted the linguistic terminological problems related to CS when associated with confusing concepts such as Code mixing, Borrowing or Interference. In addition, the proliferation of CS type' definitions, with the different categories that include *Intersentential*, *Intrasentential* and *Extrasentential* made the distinction between the three types difficult. As a result, we feel it necessary to avoid confusion by adopting one single terminology throughout this study.

In this respect, CS types will be analyzed according to Poplack's definitions of CS types by distinguishing between *Intrasentential* CS that involves Nouns, NP, VP, Adjectives, Verbs, Complements, Relative clauses and Sentences ; and *Extrasentential* CS type which refers to the inclusion or use of tags, idiomatic expressions, interjections and exclamations.

Therefore, both *Intrasentential* and *Extrasentential* CS types will be used to refer to all the movements from one language (or languages) into the native or matrix language (or languages) as being a switch from one language to another. This will concern the total switch from one language to another, the insertion of complete sentences or single words within sentences from the target or guest language to the matrix one. Hence, the two concepts will be adopted in this study and will constitute the major tenets of our research methodological framework.

At this point, it is worth noting that this distinction is done purposefully .Building on the discussed arguments on the link between CS types and language proficiency provided by many researchers (Myers Scotten, 1995; Poplack, 1980; Mc Clure, 1975), the use of full sentences, or single lexical items referred to as

Intrasentential CS in this study, is widely supported by the view that the recourse to both types requires distinctive language proficiency in contrast to *Extrasentential CS* type that requires less language competency. These arguments may substantially help to draw possible differences between the proficient and less proficient students in terms of CS type use and choice, and more importantly answer our research questions properly.

Furthermore, borrowed items are excluded in this study to focus mainly on code switches per se. This is because we believe that nativized or habitualized words or expressions are so commonly used and widely spread that they tend to belong to the native language more than to the guest one and hence create a certain ambivalence on the real nature of the borrowed items . Additionally, we believe that the inclusion of such items as parts of guest languages would distort the findings and thus the interpretation of the results.

Chapter Two

Research Methodology and Design

Introduction

The present chapter describes the methodological procedures adopted to conduct our research. It starts with the presentation of the methodological approach used, the statement of the research questions, the presentation of the subjects who took part in the study, the materials used for gathering data and the procedures adopted to analyze these data.

As mentioned earlier, the main objective of the present study is to analyze the nature of SMS messaging among English students at the Department of English and examine gender differences, by focusing on the types of CS used by male and female texters. For that purpose, an exploratory/qualitative method through which all conclusions are data driven is conducted. The examination of the qualitative data obtained goes through the quantification of the results obtained basically via the use of a corpus of students' messages and a questionnaire. The analysis of the corpus will help to answer three research questions by presenting and interpreting the findings.

And because the topic of CS is too complex to be treated with the analysis of a single type of data, a questionnaire is designed mainly to answer the fourth research question of this study, by eliciting more information about the psychological drives that underpin CS in connection to SMS texting and gender. By doing so, we wish to demonstrate how incorporation of both linguistic and

socio-psychological factors into a single analysis is necessary to account satisfactorily for CS behaviors.

2.1. The Method Choice

Considering the complexity of the topic, the use of an exploratory / qualitative method is revealed to be crucial and probably the most appropriate methodology to use .This is mainly motivated by the fact that our knowledge of CS and texting behaviors in multilingual contexts in general and the Algerian context in particular, is so limited that the use of an exploratory/ qualitative methodology can highly contribute to a better understanding of the topic under scrutiny . This is generally made possible through the substantial spectrum it offers by getting closer to the practices of individuals and groups in a variety of ways as sustained by Higgs and al (2009):

Qualitative research is increasingly regarded as a powerful and credible tool for revealing and understanding the inherent complexity and variability of human behavior and experience. Indeed, pragmatic approaches to research design actively encourage us to adopt multi-disciplinary perspectives and mixed methods strategies for studying situations that involve different and complex layers of individual and collective practice (Higgs and al, 2009:8).

Moreover, one of the undoubted strengths of qualitative methodology as noted by Higgs and al (2009) is that *“it can tell us what people believe about their practice, it can explore the results of what they actually do, and it can explore the gap between the two”*(Higgs and al, 2009:8).

Bearing this in mind, our work aims to explore and account for the expected and unexpected features of the topic, whereby all the interesting and

pertinent aspects of SMS texting will be carefully examined. By doing so, we wish to illuminate our understanding by providing insights into the issue of CS in SMS in relation to gender by answering our research questions, on the one hand, and by opening up further possible research directions, on the other hand.

2.2. Research Questions' Aims

In the light of what has been mentioned above, four research questions have been asked to address the issue of CS in SMS messaging and account for possible gender differences between male and female groups. The stated questions are:

- 1. Do female English student texters code switch more than male English student texters?*
- 2. Do female English student texters differ in their code switching from male English student texters, in terms of Intrasentential Code switching vs. Extrasentential Code switching types?*
- 3. Do female English student texters differ from male English student texters in their language choice? If yes, how?*
- 4. Do female English student texters differ from male English student texters in their code switching practices and language preferences? If yes, why?*

By asking the first research question, our purpose is to determine the amount of CS demonstrated by both female and male texters. By doing so, our intent is to see whether any differences can be observed and whether any gender differences can be reported. Most of the studies conducted and cited in the review of literature on SMS texting have stressed the fact that females tend to be prolific and prone to SMS use more than their male counterparts. Concurrently, it

will be interesting to see whether they code switch more as they use SMS messaging. The first research question therefore tries to look into this issue of CS by counting down the number of switching occurrences in every group and consequently draw correlations between male and female students.

The second research question comes as an attempt to go deeper in the analysis by looking closely at the CS types both males and females use. Most researchers that have dealt with language proficiency in connection with type choice have pinpointed the close relationship between the two. As it has been reported in the literature above, in both *Intersentential* and *Intrasentential* CS types (referred to as *Intrasentential Code switching type* in this study), a certain amount of language command in the languages used is an essential prerequisite to switch between two or three grammatical systems efficiently. Fluent bilinguals are the ones who are said to shift from one language to another easily and to use *Intrasentential* CS type more frequently than the *Extrasentential* type (Poplack, 1980).

The third research question is asked to account for the texters' language choices by considering the different aspects that impact on language preferences when messaging and more importantly, look for language choice among male and female students.

The fourth and last research question is asked to account for the texters' code switching behaviors and language use by highlighting the social and psychological motives of CS mainly in a multilingual context. Major attempts to explain the reasons behind CS have tapped the bilinguals' needs to express

themselves via language manipulation as communicative strategies to assert power, to show alignment to a given class, to demonstrate language capacity and so on. The recourse, therefore, to a questionnaire in our study is justified by our wish to look closely into the motives that concern the participants in this study and bring some light that hopefully help understand the phenomenon of CS and language preferences in SMS texting.

In what follows, a detailed description of the participants' characteristics, the procedures used to analyze the corpus data and the questionnaire design and aims, are provided to explain the different steps followed to answer our research questions.

2.3. The participants

The informants are 40 English language students at the Department of English of the University of Algiers, Bouzareah. Twenty (20) of the participants are female students and twenty (20) informants are male students. The forty students belong to 4th year classical system, with an advanced level in English. Both males and females groups include Non standard Arabic speakers (10 males and 10 females) and Berber speakers (10 males and 10 females) which are considered as the participants mother tongues. Both groups also master standard Arabic as being the Algerian official language and language of instruction from primary school to high school, in addition to French and English which are considered as foreign languages.

Native or mother tongue variable was carefully controlled for three major reasons: the first concerns the fact that the majority of students in the English

department are young Algerian students who speak both Berber and Non standard Arabic. This study does not contain students belonging to other nationalities (namely African countries, as a number of them are following their studies at the English department). By working with this group of students where Berber and Non standard Arabic co-exist in the classroom, we felt the need to provide a certain representativeness of the real population belonging to the Algerian English student classes of the University of Algiers.

The second reason for selecting Berber and Non standard Arabic speakers lies in our interest to explore additional research paths by looking into the linguistic behaviors of both, mainly when dealing with language choice and preferences. The third and last reason is motivated by our interest to work with ideal multilinguals who use three and sometimes four languages in their everyday life interactions, which is the case of the students taking part in this study.

Besides, the selection of this kind of population is guided by our interest in the use of English in the students' messages and tentatively draw correlations between language command and CS in SMS texting. Indeed, many scholars (Myers-Scotton, 1995; Poplack, 1980; Mc Clure, 1977) who have observed bilingual behaviors for years, have agreed on the fact that CS easily from one language to another or within the same sentence is a perfect mark of the full bilinguals. Thus, they have concluded that CS requires a certain level of linguistic proficiency which is undoubtedly a valuable social skill. Additionally, given the prestigious aspect of English as the language of technology and

knowledge, students of English will be expected to use it extensively in their messages.

However, it is worth mentioning that due to the fact that we are dealing with SMS as a written discourse, many SMS features should be taken into consideration. In fact, most message texts are not often in the form of standard written English; as a result, accurate written English is not expected in our study. And because SMS users usually use written forms of sounds that replace the ability to hear spoken utterances, the language produced will be unique and very limited to SMS texting.

Unfortunately, one social variable that could not be controlled was the participants' socio-economic background that informs about the participants social and economic conditions that certainly have an impact on their educational level and language choices. Nonetheless, the subjects enrolled in this study have been selected according to their actual educational level of English, age, mother tongue and gender, and these are the variables that are taken into account in our investigation.

2.4. The Sampling Procedure

Given the nature of our study, two distinguished groups according to sex are made up by using a *Stratified Random Sampling* procedure. By definition, a stratified random sampling is a process where the population is divided into strata or subgroups and samples are drawn randomly from each stratus or group. The 4th year Classical System level contains 750 registered students (the official

number provided by the administration of the English Department) for the year 2011 and 2012.

There are two types of stratified random sampling: *Proportional* and *Non-proportional*. For the *proportional sampling*, the sample size will be different for each subgroup because the same proportions are used with reference to the size of the subgroups. The major benefit in using this type is the possibility to obtain more precise estimates due to lower sampling error. For *Non-proportional* sampling, different proportions are used in reference to the subgroup's sizes resulting in a need to adjust or "weigh" the results for any analysis. The subgroup sample sizes for *non-proportional* are the same regardless of the proportion of the subgroup in the population (Schreiber and Asner-Self, 2011:87).

As far as our sample is concerned, the selection of a small group (40 students) obeys to the nature of our research methodology which is exploratory and qualitative. In most qualitative methodologies, the size of samples is less important than what the research can tell about the topic under scrutiny. Thus, any generalization of results is made impossible at this stage and can only be possible with larger samples and longitudinal studies that can be carried out in the future.

In sum, and building on the literature, the arguments provided above offer an interesting starting point in the sense that we are expecting students participating in the case study to use the language they master best, that is to say English. Nonetheless, we believe that the topic is far more complex to be limited

to one explanation and looking deeply into the subject will certainly help explore the various possible explanations that would justify the texters' language choices in terms of types and language, provided the data collected.

2.5. Data Analysis Procedures

2.5.1. SMS Corpus Analysis Procedure

The corpus of SMS texts gathered from the 40 students consists of the content of the last three messages sent by the subjects. This has resulted in a body of 120 messages which have been analyzed, counted and interpreted. For ethical reasons, the participants were first asked to write the last three messages sent as opposed to those received. This is because it is not possible for any researcher to ask for messages a respondent has received since implicitly this includes data from persons who have not given consent to participate in the study. Second, the participants were requested to write down and reproduce exactly the same texts without any alteration. This is done to preserve the texts authenticity and, therefore, give more validity to our research.

However, one major problem with this type of data lies in the de-contextualized nature of the messages which make a discourse analysis of the data almost difficult but not impossible as far as this case study is concerned. In fact, a tentative approach to analyze the messages content in terms of the texts functions, topics and the receiver as important aspects of discourse is initiated in this study mainly in connection with language choice, to account for the possible environment of messages and its importance in shaping CS and language use phenomena.

As a first step then, the content of the messages is analyzed to determine the amount of CS occurrences, the CS types and last , the language choices according to gender . For the amount and CS types' occurrences, the major criteria adopted in this study deals with the grammatical categorization of the switched items. Accordingly, *Intrasentential* CS type will involve the identification of Nouns, Verbs, Complements, Determiners, Noun phrases, Verb phrases, Relative and Subordinate clauses and complete sentences. In contrast, *Extrasentential* CS type will concern the identification of tags, idiomatic expressions, interjections and exclamations.

Based on these two CS types, the second step in our study consists of the quantification of these types' occurrences via the calculation of the number of sentences, clauses, nouns, verbs and complements that entered the matrix languages. In this respect, all the words and sentences that enter Non standard Arabic or Berber are counted and reported. Thereafter, the reported numbers are cross tabulated to account for possible similarities and /or differences between the two groups. The comparison between the females and males results will help to answer our first research question.

Still, as mentioned, unlike in Poplack's study that deal with bilinguals using two languages: Spanish and English, our participants are multilinguals and the nature of switching is far more complex to be equated to that particular context. Possible configurations of CS behaviors may display sentences where two, three or four languages are mixed in the same messages. Another option would be the use of only one language be it the mother tongue or another, the

fact which is going to be explored in the present study. Nonetheless, the switching to two or three languages may eventually suggest a certain command of the languages used as well as a demonstration of languages in contact phenomenon where all these languages are simultaneously performed.

For stability sake , though, all the switches are counted with regard to the native language (in our case from Non standard Arabic and Berber) presupposing that our participants will be using both as matrix languages and any switching will take place from these two languages into Standard Arabic, French or English and may be the three of them as guest or embedded languages. This argument is justified by the fact that most bilinguals generally use their mother tongues as a base language and then mix up with other languages, be it a second, a foreign language or a dialect in some circumstances.

Therefore, to answer our first research question: *Do female student of English texters code switch more than Male students?* , a chart that represents the total number of code switches in SMS texts is proposed to help identify the amount of switching occurrences in both groups. The comparison of the results will enable us to draw correlations between males and females' tendencies to CS.

However, the major limitation when counting the number of switches is the SMS texts' length that varies from a message to another and from a participant to another. The general observed length ranges from 2 to 25 words in both groups. By words, we mean all the functional and lexical morphemes, be it a verb, a noun, an article a preposition or an abbreviation present in messages.

To answer our second research question: *Do female English student texters differ in their CS types?*, two charts are proposed. The first is a representation of the amount of Intrasentential CS instances by comparing both males and females' amounts in reference to the total number of CS occurrences. The second chart represents the amount of Extrasentential CS instances by comparing both males and females amounts and recourses to this CS type. By presenting the amount of every CS type and cross tabulate the results, we will be able to draw the significance of every type in connection to gender

In the light of the theoretical background on SMS and gender , we can argue that one of the major expectations of the results may be that females might surpass their male counterparts in the number of code switches at the *Intrasentential* level more than at the *Extrasentential* level. Females were reported as being prone to SMS writing and the use of language alternation can denote a high degree of language command that females consciously or unconsciously aim at demonstrating.

As far as the third question is concerned, that is: *Do female English student texters differ from male English student texters in their language choice? If yes, how?*, the different language options and combinations are set in categories, and every category is counted according to the number of occurrence in the messages. The frequency of every category accounts for the languages preferred and used by each group and the results are cross tabulated to help answer our research question properly.

The next step in our study then concerns the analysis and interpretation of the results in the light of our findings and review of literature. Again, in the light of the theoretical background, predictions can be made by pointing the females' possible use of English and French as prestigious and overvalued languages (Labov, 1990; Trudgill, 1974; Tannen, 1994), more than their male peers. The females' recourse to prestigious languages as assumed by many scholars will be interpreted as a means to acquire higher status and demonstrate alignment to a distinctive class in society. Conversely, the use of less prestigious languages might be observed among males who, for solidarity reasons with other men, might tend to use Non standard Arabic or Berber in this particular case.

However, evidence for or against these arguments can only be possible through the analysis of the Corpus and the questionnaire's data, which are able to bring evidence to answer the research questions properly.

2.5.2. The Questionnaire

2.5.2.1. The Questionnaire's Aims and Description

The participants are administered a demographic, behavioral and attitudinal questionnaire concerning SMS texting and code switching use. The objective of the questionnaire is threefold: first it seeks to account for the social and individual behaviors towards this medium and its place in the participants' everyday life interactions, second, it looks into the texters' motives that justify their use of code switching and third, to identify the students perceptions of CS and language use in relation to prestigious languages such as French and English.

The factual questions are used to find out certain facts about the respondents demographic characteristics such as: age, gender, linguistic background (that is the number of languages mastered) and mother tongue. Behavioral questions are used to find out what the respondents do with SMS messaging, focusing on actions and habits and personal history. Attitudinal questions are used to find out what people think, covering attitudes, opinions, beliefs, interests and values (Dornyei, 2003).

For practicality reasons, we have chosen to add a last section in the same questionnaire's worksheet which is devoted to the reproduction of the last three messages sent by the participants to avoid soliciting them for a second time.

Questionnaires can consist entirely of closed questions, easy to quantify and open questions that are mostly categorized, or a mixture of both. As closed questions are assumed to be too direct and limitative in answers scope, the open questions are mostly used to obtain more useful information that accurately reflect the respondents ideas and reflections, a qualitative interpretation which is not generally favored by the scientific community. In all cases, some quantification of the results is needed for the research sake and a compromise is offered by the semi-structured questionnaires that prone the balance between the accuracy of the results and the interpretative power of the open questions.

Thus, our questionnaire contains both close and open questions in a semi-structured frame to hopefully help to answer satisfactorily our research questions. Yet, the construction of valid and reliable questionnaires is "*a highly specialized business and a very complicated enterprise*" (Nunan, 1997: 143) mainly for

novice researchers who are trapped in mountains of data that are sometimes irrelevant and that do not serve the purpose of the study. For this reason, a piloting phase was initiated to avoid these kinds of pitfalls and ensure more validity to the questionnaire.

In addition to that, we are very much aware that explaining motives behind SMS linguistic choices or CS uses is a hard and difficult task. We believe in fact that exhaustive explanations require the contribution of other sciences such as psychology, psycholinguistics, sociology and sociolinguistics. Nonetheless, the use of a questionnaire in our study has no pretention to fully answer the question of switching motives but it aims to tentatively approach the issue to understand the complex causes of CS use and language choice among Algerian university students.

The questionnaire is edited in English and, as mentioned, contains an array of open or unrestricted and close ended or restricted questions. This is done to provide a certain variety in questions' formulation to enlighten the questionnaire, on the one hand, and to elicit as much information as possible from the informants, on the other hand. At this point, it is worth noting that thanks to insights and input provided from the pilot test carried out with 43 informants and the suggestions and feedback of some friends and colleagues who kindly accepted to proofread the questionnaire's first draft, we opted for more open ended questions which revealed to be more insightful and rich in data as compared to close ended questions. In this respect, most restricted type of

questions used in the questionnaire are followed by “Why” to elicit more data and provide more insights on the topic.

The only problem, however, lies in the amount of data provided by the open questions. In fact, researchers usually face huge amounts of data as the questions comparatively reveal more unexpected varied answers that are difficult to analyze and therefore score (Nunan, 1997:143, Bell, 1988:59). Nonetheless, and given the nature of our study which is by definition exploratory and descriptive, an effort is made to deal with open ended questions as the major source of data to guarantee more authenticity to the answers and draw as much information as possible from the respondents. The following examples are illustrations of the types of questions used in the questionnaire.

2.5.2.2. Types of Questions

a. Open questions: This type of questions is set to give the respondents total freedom to decide “*what to say and how to say it*” (Nunan, 1997:143) as a means to gather some unforeseen and unpredicted responses and this is what the pilot phase clearly revealed.

b. Closed questions: which we wanted in fact semi-closed or semi-open because of the combination of both Yes/No items with a follow up “Why?” question, are used. We believe that this option may hold many benefits of illuminating and explaining the respondents choices when answering very restricted questions present in the questionnaire.

c. List questions: this type of closed questions provides the informants with a list of items from which they can select one or more options. The list questions

present in the questionnaire are two types. In the first type, the respondents are asked to tick one or several options provided with the question. Likewise, the second type of list questions asks for the selection of one or more items from a list of options provided in the questionnaire. Yet, the major particularity of this second type is in the form of the questions that are extended by adding “Why” questions at the end of every option.

d. Category questions: In these closed type of category questions, the informants are provided with a set of options they are asked to select. The informants however are asked to “*select only one option unlike the list questions*” (Bell, 1988:59) because the respondents cannot fit into two different categories at a time.

2.5.2.3. Questions Wording and Appearance

For designing a questionnaire, most research methodology books stress on the importance of words and sentence choice which is crucial for the elaboration of a good and valid questionnaire. In fact, most researchers (Bell, 1988; Wallace, 1998; Nunan, 1997; Verma and Mallick, 1999; Dornyei, 2007) highlighted the necessity to carefully write the questions by avoiding ambiguity, imprecision, ambivalence or using double sentences, leading sentences or technical words in questionnaires.

Therefore and despite the respondents’ command of English language, the selected questions is very straightforward, simply stated and contain one-idea sentences to facilitate the items reading and understanding. The vocabulary for instance is simplified to avoid any unnecessary confusion as in the choice of

“mixing languages” instead of very technical words such as “code switching, or the use of the word Berber instead of Kabyle to refer to all the Berber speaking areas in Algeria, including therefore the Chaoui students, the Tergui or the Chenoui ones.

In terms of appearance or layout, the questionnaire contains 20 items which are , according to our pilot test respondents , not very long. Additionally, the questions’ highly structured layout and spacing is carefully designed to avoid boredom and confusion. All the headings and the questions are written in bold type to mark a distinction between the questions and the answers that are given enough space to help the respondents edit their responses at ease. This is to follow Verma and Mallick (1999) suggestions and recommendations concerning the importance of both carefully written and attractive questionnaires which are judged by the respondents themselves as being the ultimate users:

Potential respondents are more likely to take seriously a document that has been carefully and attractively produced than one that looks as if it has been casually thrown together. They are in no position to judge its inherent intellectual quality and they may well take the view that , if it was not worth the researcher’s time and effort to produce it attractively, it is not worth their time to complete it (Verma and Mallick ,1999:120).

In this line, the questionnaire is made as user friendly as possible by starting with introductory items, common and easy questions to account for the informants’ background in terms of mother tongue, sex, age and languages knowledge. More consistent and relevant questions follow by carefully grouping the same and related questions and by creating five (05) distinct sections which are called parts. This is mainly done for structure and organisation sake and also

for a better completion of the questionnaire as the respondents would smoothly move from a section to another with the least difficulty.

The questionnaire first part is devoted, as mentioned earlier to the questions related to the respondents' personal information as sex, age, mother tongue or Second and foreign languages studied at school and the different languages spoken by the informant. Part two, is devoted to the respondents texting habits and messages' use. The third part refers to SMS messaging users and their language choices and uses. Part four is devoted to the informants' opinions and perceptions concerning gender differences when using CS in SMS texting. The fifth and last part is the section reserved for the corpus collection which represents the record of the three last messages sent by the respondents.

2.5.3. The Questionnaire Analysis Procedure

The questionnaire contains close questions easy to quantify and open questions that will be categorized to facilitate their quantitative and qualitative interpretation. The quantitative data are defined by Nunan (1997) as the data *“which are recorded in numerical form... the type of information that can be counted or measured in some form or another”*(Nunan,1997: 231). The quantitative data obtained through the use of close questions will be processed and analyzed using tabular representations and by counting the number of informants who share the same opinions and the percentages of each group.

In contrast, the qualitative data which are non-numerical and concern mostly open ended questions will be quantified by generating categories that stem from key words analysis of the statements made by the respondents. Every

category presented in one word or a one idea sentence, therefore, is assigned a score that will help us in the counting in percentages of the data collected. This procedure will help synthesize big amounts of data in such a way to reveal possible and insightful patterns that will be represented in tables.

Summary and Conclusion

In this chapter, we extensively described the methodology adopted in the collection of data which is a two step methodology that deals with two main research tools, the first concerned the collection of a corpus of SMS texts , and the second refers to the collection of data through the questionnaire intended to look more deeply into the qualitative side of the research questions. Afterwards, we explained the analysis procedures used to process the data collected from the different sources and research tools.

The next chapter is devoted to the presentation and analysis of the results elicited from the SMS corpus, to end up with the discussion and interpretation of the findings. Analysis of the questionnaire's results are discussed in a further chapter.

Chapter Three

SMS Corpus Analysis and Discussion

Introduction

This study seeks to examine SMS nature in a multilingual context through the investigation of messaging practices among multilingual students studying English. The overall results will be considered as well from a gender perspective as an additional attempt to account for male and female differences while switching in SMS messaging. The data collected via SMS corpus are analyzed and interpreted to answer the three research questions as stated previously.

As mentioned, the corpus content is analyzed regarding two aspects: the number of *Intrasentential* CS and *Extrasentential* CS types and the distinction of the preferred languages used to switch when messaging. Any other CS configurations will be reported and interpreted as well. It is worth noting here that the calculation of the amount of the two types of CS and languages choice will be done in regard to gender in order to draw possible correlations between the two groups. Besides and due to the exploratory nature of our study, any unexpected and salient aspects that may crop up while analyzing our data, will be reported and interpreted accordingly.

Along with studies on SMS texting and gender, differences are expected between females and males while texting. And because women are said to use longer and more syntactically complex messages (Ling, 2003; Kasesniemi, 2003), on the one hand, and the demonstration of language proficiency (Poplack, 1980;

Myers-Scotton, 1989; Mc Clure, 1977) , on the other hand , we would argue that women might use more *Intrasentential* type of switching than men as an expression of language command and supremacy. Moreover, this may be attributed to the differences in the communicative styles that refer to women' tendency to use language as a rapport communication rather than a report one, and therefore use texting in a more prolific and distinctive way (Tannen, 1994).

Concerning language choices and preferences, it is worth mentioning first that the use of foreign languages in many countries, including Algeria, is explained by many researchers by users' need to show a certain alignment to a relatively high socio-economic class and a social sign of education and prestige (Trudgill, 1974; Labov, 1990). In our case, code switching to English would supposedly be preferred by female students more than males because of the language symbolic reference to the American power and technological dominance over the world which gives the language an acknowledged prestige. Consequently, their recourse to English more than any other languages in their messages may denote their need to indirectly assert power and display symbolically their supremacy over their male counterparts. Males instead , given the power of social norms establishers might show less recourse to English by using more Non standard Arabic as an attempt to display solidarity between peers (Trudgill,1974; Lakoff,1973; Eckert,1992).

However, the study does not focus on the reasons underlying the use of *Intrasentential* and *Extrasentential* CS types, but we choose to calculate the number of their occurrences and then compare the results of both sexes.

3.1. Data Analysis and Discussion

In this part of the study, we analyze and discuss the major findings elicited from the examination of the messages sent by the English students by returning to each research question that has guided the study and by connecting it to the theoretical background and literature review presented in chapter one.

Research question 1: Do female students of English texters code switch more than male student texters?

As mentioned in chapter two, the first research question's purpose is to determine the amount of CS demonstrated by both female and male texters. By doing so, our intent is to see whether any gender differences can be observed and reported. The first research question, therefore, tries to look into this issue of CS by counting down the number of switches' occurrences in every group and consequently draw correlations between male and female students.

To achieve this goal, the total number of both types of CS frequencies is calculated and the results are presented in the following table:

<i>Gender</i>	<i>TN of CS</i>	<i>ON of ISCS and ESCS types</i>	<i>Percentage (%)</i>
<i>Male</i>	<i>274</i>	<i>114</i>	<i>41.60%</i>
<i>Female</i>	<i>274</i>	<i>160</i>	<i>58.39%</i>

TN= Total number
ON= Observed number

ISCS= Intrasentential Code switching
ESCS= Extrasentential Code switching

Table 3.1: Intrasentential Code switching type and Extrasentential type Amount according to Gender

From this table, we can see that when calculating the total amount of CS, including both types, the results show that females switch more than their male counterparts with a number of **160** code switching times compared to **113** times

for males. These results suggest that females are more prone to language alternation either at the word level or the sentence one. These findings may also support and confirm the different assumptions about the females' conscious or unconscious attempts to demonstrate their superiority over men. According to Poplack (1980) and Myers-Scotton (1995), CS is undoubtedly a good demonstration of language command, be it at a word level or at the sentence level, and females in the present study displayed both.

As displayed by the findings, we can answer our first research question by stating that in fact there is a significant difference between the amounts of CS where females tend to switch more than males when writing messages.

Research question 2: Do female students of English texters differ in their code switching from male student texters in terms of Intrasentential code switching type vs. Extrasentential code switching type?

The second research question comes as an attempt to go deeper in the analysis by looking closely at the CS types both males and females use. Most researchers that have dealt with language proficiency in connection with type choice have pinpointed the close relationship between the two. As it has been reported in the literature above, in *Intrasentential* CS type, a certain amount of language command in the languages used is an essential prerequisite to switch between two or three grammatical systems efficiently. Further, fluent bilinguals are the ones who are said to shift from one language to another easily and use *Intrasentential* CS type more frequently than the *Extrasentential* type (Poplack, 1980).

Throughout this study, the data show the co-existence of two different patterns of CS. In the first one, a total code switching to “one language only” is used by our participants, that is to say messages written exclusively in one language namely English and French. 19 (out of 60) observed messages are written in “English only” among females and 18 messages among males. For the use of “French only” language in messages, 16 messages (out of 60) are observed among females and only 9 messages among males. The 59 remaining messages are the ones that contain a mixture of different languages as illustrated in the second pattern.

The second pattern consists of the use of *Intrasentential* Code switching *type* where simple or complex grammatical constituents such as complete sentences , single nouns, single verbs, conjunctions are mixed up and simultaneously used; constituents from French, English, Non standard Arabic, Standard Arabic and Berber languages. However, borrowed lexical items were excluded in this study because of the ambiguous and ambivalent aspects of the borrowed words as noted in the outset. The observed borrowed items found in the messages consisted of a few words such as: Ok, lportable, SMS, negosyiw, profiti, bipiliand les unités.

The two first patterns that are 1) the complete switch to one language only and 2) the use of a mixture of constituents from different languages, are considered in this study as parts of the *Intrasentential* CS type occurring in the 120 messages collected. The following examples are illustrations of the two patterns:

Pattern 1: The “One Language Only” messages which are free of any other switching or mixing of other languages as in these examples:

Ex 1: See you in the department

Ex 2: How was the day guys?

Ex 3: Hi Rima what’s up, please bring me brit civ lessons. Thanks, see you

Ex 4: Slt Sofiane, jspr k tu va bl. Je voulais juste te souhaiter bon chance dans l’examen du bac.

Ex 5 : Slt, sa va, je suis très fatiguée et j’évite le tel au maximum. Je suis saturée physiquement et moralement.

Pattern 2: The use of two, three or sometimes four languages in the same message including sentences and isolated lexical items as shown in the following examples:

Ex 1: Slt Hanouna, tu me manque grave ma bellesœur , nchalah tkouni mliha, matensaycht9olili winta tji ledar bach natlakaw, ok, je t’aime bokou, bisou

Ex 2: Bonjour mama, comment va tu? bonfête, tu es tout pour moi. Rabi ykhalik lina, je t’aime très fort.

Ex 3: Salut, j’espere que tu aurais un avis favorable a ta demande. Take care of yourself. a+

Therefore, the observed number of *Intrasentential* CS type’s occurrences and repartition is presented in the following table:

<i>Gender</i>	<i>TN of CS</i>	<i>ON of ISCS</i>	<i>Percentage (%)</i>
<i>Male</i>	274	113	41.24%
<i>Female</i>	274	160	58.39%

TN= Total number

ON= Observed number

ISCS= Intrasentential Code switching

Table 3.2: Intrasentential Code Switching type Number according to Gender

The results reveal that *Intrasentential* CS type, including either the recourse to “one language only” pattern, or a mixture of several languages pattern, is more frequent among females than males. The reported number of **274** that refers to the total number of both males and females recourse to *Intrasentential* switching helped determine the share of every gender. There are

therefore , **160** observed code switches that is **58.39%** for females, and 113 switches that represent **41.24%**, for males. Broadly, the present study reveals that females outpass their male counterparts in this type of CS.

Concerning *Extrasentential* type's occurrences and repartition , the results obtained are presented in the table below:

Gender	TN of CS	ON of ESCS	Percentage (%)
Male	274	01	0.36%
Female	274	00	0.00%

TN= Total number

ON= Observed number

ESCS= Intrasentential Code switching

Table 3.3:Extrasentential Code Switching type Number according to Gender

As we can see from the table above, *Extrasentential* switching type is inexistent among females and present among males with only one switch where the use of “Hey” as an interjection is used most probably to mean hello. Yet, the reported number of one (**01**) that refers to the total number of both males and females recourse to *Extrasentential* switching type helped determine the share of every gender in this type by demonstrating **0.36%** for males and **0.00%** for females. Broadly, the results show that males and females similarly almost never use *Extrasentential* CS type in their messages.

This low frequency in the use of interjections, exclamations or idiomatic expressions in messages is probably due to the fact that these latter may pertain to the spontaneous speech mode of interaction where simultaneous reactions or comments come as a natural act of oral communication. According to these results, texting seems to operate differently may be because of the artificial and asynchronous nature of messages. People send messages and the reactions to these messages can come simultaneously or days after, a thing that may alter the

spontaneity of the answers and as a consequence may result in a more reflective type of writing which is specific to SMS writing mode.

Henceforth, and in an attempt to compare between the two types of CS results, the following table is presented:

<i>Gender</i>	<i>ON of ISCS</i>	<i>ON of ESCS</i>
<i>Male</i>	<i>113</i>	<i>01</i>
<i>Female</i>	<i>160</i>	<i>00</i>

Table 3.4: *Intrasentential Code switching Number vs. Extrasentential Code switching Number: Cross-tabulation of Results according to Gender*

When examining both code switching types as demonstrated in the table above, the most frequent type of switching occurring in messages is *Intrasentential* CS type with a higher number obtained by the female group. This type of CS , as suggested by Poplack (1980), involves the switch at the sentence level and above. By above, we can understand the move from one language to another with no mixing occurrences at all , as it is the case in many messages found in the corpus.

To many scholars (Poplack, 1980, Myers-Scotten, 1995, Mc Clure, 1977), this ability to switch at the level of sentences is a good demonstration of bilinguals, in our case, multilingual’s language proficiency and capacity to handle language in a very proficient way. The following examples are data samples of *Intrasentential* CS type that are illustrations of the type of messages provided by the participants and where the exclusive use of one language is observed.

Slt sofiane,jspr ke tu va b1. J voulais juste te souhaiter bonne chance dans l'exam d Bac.	<i>(Hi Sofiane, I hope that you are fine. I just wanted to wish you good luck in the Bacalaureat exam)</i>
Tu me manques beaucoup. Je supporte jamais etre loin de toi.	<i>(I miss you a lot. I can't stand being far from you)</i>
Wash raki khalti. Raki daymen f lbal.	<i>(How are you aunt. You are always in my mind)(Berber speaker)</i>
How was the day guys.	// // //

Table 3.5: Code switching above Sentence

From the table above, it can be noticed from example 3 that some CS variations take place depending of course on the matrix language they moved from to the guest language they switched into. In this respect, the two matrix languages are Non standard Arabic and Berber. In this particular context, Non standard Arabic is a guest language for Berber texters as well as Standard Arabic, French and English. Likewise, Berber is a guest language for Arabic speaking texters as well as Standard Arabic, French and English.

Intrasentential CS type is present also within sentences and this occurs in the middle of sentences. In this study, SMS users, either in females or males' groups , switch to one, two or three languages to end up with messages that enclose three to four languages at the same time. The following examples are data samples of CS within sentences to illustrate this texting behavior.

Saha amine. Rani nestena fik kima departement.	(Hi amine. I am waiting for you at the department)
Azul a chabiw. Ca va.En fait, j'espere que tu passeras une belle journée avec tafamille. Hamlaghkam atas athawizts.	(Hi beauty, how are you. By the way, I hope that you will spend a nice day with your family. Love you so much precious)
Salam khaled. Wash ca va. Win rak? 3ayatli nahtajk. Ok. See you.	(Hi Khaled, how are you? Where are you? Call me I need you. Ok. See you)
3id milad sa3id wa koul 3am wa anta bi elf Kheir. La3koba 1 100 ans inchalah. Happy birthday Salah.	(Happy birthday and best wishes. May you live a hundred year with God's will. Happy birthday Salah.)
Saha kho. La soutenance de Billal et demain a 11h, fi dali Ibrahim. Bonne nuit et a demain.	(Hi brother, Billal's viva is tomorrow at 11.00 at Dely Brahim. Good night and see you tomorrow)

Table 3.6: Code switching within Sentence

Thus, the results help us to answer our second research question by concluding that females use more *Intrasentential* type of CS but use almost similarly the *Extrasentential* type and , therefore, argue for the existence of both differences and similarities in male and female texting behaviors .

Research question 3: Do female English student texters differ from male English student texters in their language choice? If yes, how?

This third research question is asked to account for the texters' language preferences when messaging and more importantly, examine the students' language manipulation and use. To answer this question, therefore, we have been very interested to know what languages male and female texters prefer using when texting. To reach this aim, we have proceeded by counting down the number of times texters used a given language. The examination of messages have helped us to set a number of patterns or instances that we have called

categories. By doing so, twelve (12) categories have been reported along with the number of frequency for each category and by gender as demonstrated in the following table:

<i>Language Choice Categories</i>	Gender		
	<i>Male</i>	<i>Female</i>	<i>Total</i>
English only	17	19	36
French only	09	16	25
Non Standard Arabic+ French	12	10	22
Non Standard Arabic only	05	02	07
French+ English	03	04	07
Non Standard Arabic + English	04	02	06
Non Standard Arabic+ French + English	00	02	02
Non Standard Arabic+ French + Berber	01	01	02
Non Standard Arabic+ French + English+ Berber	00	01	01
Non Standard Arabic+ Standard Arabic +French + English	01	00	01
Berber+ French	01	00	01
French+ English+ Berber	00	01	01

Table 3.7: Languages used in SMS messaging by Gender

We can see from the data that the respondents switch to “English only”(36 times) more than any other languages. The reason might be because the data is taken from English department students who are familiar and comfortable with the language. This use is noticed in both males (17) and females groups (19) that help to conclude that there are no significant gender differences at this level. Therefore, the language repertoire which is most often used in messages among our participants is English. The second most used language is “French only” with (25 times). The familiarity with French as a well implemented language in the Algerian environment seems to be preferred to Non standard Arabic by both males and females (only 7 messages were written in this language, 5 for males and 2 for females).

As far as gender differences are concerned, French seems to be used mostly by girls (16) when compared to boys (09). The third language used by our participants is a mixture of Non standard Arabic and French (with 22 messages) with a slight difference between males (with 10 messages) and females (with 12 messages) . Most of the other languages are rarely used in SMS texting as shown in the table above.

However, it is worth mentioning here that whatever language used in SMS messaging, the issue of language choice is far more complex than it seems. In fact, using one particular language or languages may be explained by providing possible reasons such as good command of a language, the prestigious dimension of the language, real lexical need, expressing group identity by signaling group membership and solidarity with the addressee, but this is still building on arguments that can rightly or wrongly fit the issue of language choice and switching in our particular case.

Henceforth, there is no doubt that a deeper investigation concerning the reasons of language alternation is needed, and chapter four of this study is a tentative contribution towards the issue of language preferences in SMS texting where many reasons are provided by the respondents to justify their language choice and preferences while messaging.

3.1.1. Language Choice and Intra-gender Differences

While examining the material, one emerging and interesting observation has concerned the use of languages within gender itself. In fact, we have been very surprised to notice that significant differences exist between the participants of

the same gender who speak different mother tongues and between males and females speaking the same mother tongue.

A comparison between males and females speaking the same mother tongue that is to say Non standard Arabic, shows that males are prone to use “English only” language (13 Messages for males and 11 for females) in addition to Non standard Arabic and French with 12 messages for males and 08 for females. A few references to “Non standard Arabic Only” language are observed among males and females with 04 messages for males and only 01 message for females, as shown in the following table:

<i>Language Choice Categories</i>	Gender		
	<i>Arab male</i>	<i>Arab female</i>	<i>Total</i>
English only	13	11	24
Non Standard Arabic+ French	12	08	20
Non Standard Arabic only	04	01	05
Non Standard Arabic + English	03	02	05
French only	01	03	04
Non Standard Arabic+ French + English	00	02	02
French+ English	00	02	02
Non Standard Arabic+ Standard Arabic +French + English	01	00	01

Table 3.8: Language Choice according to Matrix Language Variable: Non Standard Arabic Speaking Participants

Following the same approach, Berber speaking participants have been divided into males and females groups and the analysis of data has shown contrary results when compared to Non standard Arabic speakers. In fact, Berber females tend to use more “French only” language (13 messages for females in contrast to 08 messages for males), the second language used is English and even when using this language, gender differences are noticed. Females use English much more than males with 08 messages for females and 05 for males. Non

standard Arabic is also used at a third position with males outpassing females with 05 messages for males and 02 for females as shown in the following table:

<i>Language Choice Categories</i>	Gender		
	<i>Berber male</i>	<i>Berber female</i>	<i>Total</i>
French only	08	13	21
English only	05	08	13
Non Standard Arabic+ French	05	02	07
French+ English	03	02	05
Non Standard Arabic only	01	01	02
Non Standard Arabic+ French + Berber	01	01	02
Non Standard Arabic + English	01	00	01
Non Standard Arabic+ French + English+ Berber	00	01	01
Berber+ French	01	00	01
French+ English+ Berber	00	01	01

Table 3.9: Language Choice according to Matrix Language Variable: Berber Speakers Participants

Interestingly, Berber, which is the participants' mother tongue, is rarely used in SMS messages. No messages are reported when dealing with "Berber only" language whereas 02 messages containing Berber, French and Non standard Arabic, 01 message for males and 01 for females are observed in addition to 01 message that contain both Berber and French which belongs to males group.

A third salient observation which we deemed worth reporting, deals with the differences that occur within the same gender. Indeed while examining gender difference in relation to mother tongue, many differences have emerged within the males group and the females group and within the same gender.

<i>Language choice</i>	Gender					
	<i>Arab male</i>	<i>Berber male</i>	<i>Total Number</i>	<i>Arab female</i>	<i>Berber female</i>	<i>Total Number</i>
English only	13	05	18	11	08	19
French only	01	08	09	03	13	16
Non standard Arabic+ French	07	05	12	08	02	10
French+ English	00	03	03	02	02	04
Non standard Arabic only	04	01	05	01	01	02
Non standard Arabic + English	03	01	04	02	00	02
Non standard Arabic+ French + English	00	00	00	02	00	02
Non standard Arabic+ French + Berber	00	01	01	00	01	01
Non standard Arabic+ French + English+ Berber	00	00	00	00	01	01
French+ English+ Berber	00	00	00	00	01	01
Berber+ French	00	01	01	00	00	00
Non standard Arabic+ Standard Arabic +French + English	01	00	01	00	00	00

Table 3.10: Language Choice according to Matrix Language Variable: Cross- tabulation of Results of Berber and Non Standard Arabic speaking Participants.

As demonstrated in the table below, males and females similarly switch to English first , then to French and at a third position to a combination of Non standard Arabic and French. Nonetheless, when looking carefully, we can notice that even when using English, Arabic speaking males, with 13 messages, outpass Berber males (with 05 messages), who themselves are outpassed by Arabic speaking females (with 11 messages) and Berber females (with 08 messages). This is may be due to the position of English as a language of instruction that Arabic speaking boys and girls feel confident to use in everyday life in general and in SMS writing in particular.

Moreover, English when compared to French seems to be culturally closer than French to Arabic speaking texters, which is in turn closer to Berber speakers due to historical and socio-cultural reasons. The implementation of the

French colonizer in some regions of Algeria, mainly in Kabylie, was followed by the building of schools to teach French language to the natives. The accepted co-existence of both French and Berber could have an important role in tightening the relations between Berber and French while the socio-cultural distance has probably kept French as a language of the colonizer for Arabic speakers in general.

This possible argument may explain the fact that the second preferred language used in SMS writing is French. As we can notice, French is mostly used by Berber participants (with 13 messages for females and 08 for males) when compared to Non standard Arabic speakers (with 03 for females and 01 for males). Broadly, females outpass their males counterpart in the use of French, but the Berber males outpass the Non standard Arabic female texters.

Therefore, arguments for language superiority which is demonstrated by females as an attempt to gain status (Labov, Trudgill) , can be partly right when we know that even linguistic and socio-cultural factors can have a significant role to play in language use and choice, as shown by the results obtained in this study.

Additionally, the examination of “Non standard Arabic only” use and “Berber only” use shows that very few messages are written in these two languages. Both males and females use a mixture of both Non standard Arabic and French to convey meaning, much more than “Non standard Arabic only” or “Berber only” languages. This may be due to SMS texting keypad requirements of using Latin characters that favors the use of standard languages such as French and English, instead of Non standard ones. This is on the one hand. On the other

hand, writing with high varieties of language may consciously or unconsciously be overvalued more than low varieties such as Non standard Arabic or Berber. Hence, using these varieties may mean belonging to the lower class of uneducated people. Thus, and because of the social status of students as educated people, these latter might want to display and signal this position via language choice by opting for more standard languages to express their social identity.

As a consequence, the findings come to support Sridhar (1996) arguments concerning the distribution of languages in multilingual contexts where differences are highlighted in terms of functionality and context. In fact, to Sridhar, the phenomenon of “ *the Asymmetric Principle of Multilingualism*” (Sridhar, 1996: 50) is very common in the multilingual contexts where all the languages in the repertoire of a multilingual community are not equally distributed in terms of power, prestige, vitality or attitude and where some languages are more valued than others (Sridhar, 1996). This is justified by the number of roles played by any language as explained by Sridhar in the following quotation:

The position of a given language on a hierarchy is determined by very pragmatic considerations. The larger the number of desired roles a language enables its speakers to play in a given society, the higher its place on the hierarchy. The more restricted the range of valued roles a language provides, the lower its place on the hierarchy (Sridhar, 1996: 52).

In our case, English serves as a medium of instruction at the department of English of the university of Algiers, and eventually, as a link with the civilized world that reflects modern knowledge, science, technology, international commerce and western culture. Similarly , French is lifted up to the top of the

hierarchy in conversational settings because of the wide range of roles it plays in the media, literature, commerce and administration when compared to the rest of the existing languages.

In addition to that, multilingual speakers' linguistic competence is tightly linked to what Sridhar called "*Selective Functionality*" (Sridhar, 1996: 50). To Sridhar, every multilingual develop competence in each of the codes depending on their psychological needs and the context in which each of the languages is used:

A multilingual might have an excellent reading, writing, speaking, comprehending knowledge of one or two languages but might be more comfortable using one language for academic or professional purposes, and another for intimate or emotional expression. This is in part a function of differential command of registers (functional variety) but also of habitual association between language and context (Sridhar: 50).

As a result, every language in a multilingual context has a distinctive position depending on the roles and functions it fulfills in society which help to represent distinct identities and consequently serve "*the complex communicative demands of a pluralistic society*" (Sridhar, 1996: 53).

3.1.2. Written Speech in Participants' Messages

One additional and interesting aspect that has been observed while examining the corpus is the high degree of formality used by our texters. Contrary to the widespread view of messages as being written speech which is full of abbreviations, emoticons and colloquial forms, we have been very surprised to find that our texters do not use abbreviations or emoticons very often. The very few abbreviations concern mostly opening and closing expressions such as Slt,

Bye. Most of the words are written in their complete forms and with very few mistakes like in writing where editing mistakes are very rare. This is may be due to the students' carefulness to write correct language as a sign of language command or eventually to avoid misunderstanding in cases of abbreviations' use.

In addition, some mobile telephones provide the writer with the ability to automatically capitalize certain words and suggest spellings which provides texters with the capacity to reduce mistakes and achieve some kind of accuracy when messaging as seen in the following examples:

Example 1: I'll call you later

Example 2: I'm in class

Example 3: Please, call me. I don't have enough units.

Moreover, most messages use salutations and closings frequently, giving their messages a tone of being a formally constructed letter despite the fact of the high degree of personal disclosure in the SMS messages. In our participants' messages, most messages are sent to friends, classmates or family members where the sender and receiver have a high degree of insight into each other's lives. This suggests the use of less formal and less accurate use of language, with abbreviations and emoticons, but the examination of the students' messages show the contrary.

Thus, several features associated with SMS in relation to writing and speaking have been overviewed in the present study to suggest an additional research direction that deserves greater attention by looking closely to the properties of both writing systems.

3.1.3. SMS Functions, Topics and the Addressees in Messages

In addition to the characteristics that are more like writing or speaking, the messages collected have provided us with a certain number of directions that are highly insightful and worth studying. In fact, throughout the analysis of the data, many similarities in terms of SMS functions, topicality and role relationship have been noticed among both the female and male groups.

In an attempt to understand these aspects as parts of the social nature of SMS messaging, we have tried to look into the uses or functions that SMS texting serve, the topics dealt with in messages and the receivers' profiles, referred to as the role relationship or the addressees, and account for their importance in determining CS behaviors in general and language use in particular.

As claimed by Saville-Troike (2003), the use of CS as part of languages' use in communication is highly determined by the functions it serves, the topics of interaction and the role relationship that refers to the addressee as a receiver of any message, be it oral or written. In this line and assuming that message writing with CS as one of its major constituents in a multilingual context is a message which is delivered by a sender to a receiver as it is the case in oral interactions, a tentative exploration and explanation of these aspects is made to better understand the role and impact of these latter on SMS writing. In fact, SMS messaging is not an individual enterprise but a highly social one where many factors come into play to shape the texting production, and obviously, covering

these factors will represent a significant step in understanding the social nature of SMS in our particular context.

3.1.3.1. What do English Student Texters Use SMS for?

The first step adopted in the analysis of the data has consisted of sorting out the different functions that SMS serve and that are clearly displayed and shared by both males and females. In this respect, a table that contains 08 categories has been elaborated, with some selected examples from the corpus to illustrate these categories as follows:

<i>Uses or Functions</i>	<i>Examples</i>
Coordinating social life	I'll call you later Where have u been?
Expressing feelings	Rah nahbal Raki dima fi lbal, twahachtek
Informing	Saha kho, la soutenance de Billal et demain a 11h fi dali brahim Ils ont affich� exams plan, on commence Saturday eng lit . Good luck
Greeting	Hey beauty, how are you? Salam, how do you do?
Presenting wishes and greetings on special events	Happy birthday to u happiness and long life full of joy andwhatever Wish you a good luck for your bachaloriate darling
Discussing school matters	J'aurai besoin que tu passe a ma chambre pour ce soir pour qu'on revise Brit civ Bonjour, stp demain jebli les cours ta3 heart of darkness bech ndir 3liha copie. Merci. Bon courage
Requesting	Please call me 3ayatli nahtajk
Commenting events	Vive real Madrid, mazel tgoli Barca ma netfahmouch Je sais que ca ta fait du mal mais ca passera, prend soin de toi

Table 3.11: SMS Uses/Functions

The second step has consisted of coding these categories and counting down the number of messages according to each category and according to

gender .The 120 messages were often only a single reply in an ongoing dialogue. Given this caveat, the major categories that arose from the data are common to both sexes and the results are cross tabulated as illustrated in the following table:

<i>Use or Function</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Coordinating social life	10	12	22
Expressing feelings	07	14	21
Informing	10	10	20
Greeting	09	07	16
presenting wishes and greetings on special events	08	07	15
discussing school matters	03	06	09
Requesting	07	03	10
Commenting events	06	01	07
Total	60	60	120

Table 3.12: SMS Use/Function' Differences by Gender

When looking across the various categories, the first observation we can make is that both males and females use SMS texting almost similarly to achieve specific functions in their messages. When looking closely though, the second observation is that in addition to these similarities, some major differences between males and females are noticed. Females, for example, are slightly more prone to using SMS messages to coordinate and arrange meetings with friends and classmates in 12 (out of 60) messages, as it is the case with men who use messages to plan activities in 10 (out of 60) messages. Women, however, use SMS more likely than men to express their feelings in 14 messages, where love and affection are expressed either with family members, classmates and friends. 07 messages only are used to express feelings among men.

This distinction comes to confirm the general assumptions that women use communication more to maintain affective relationships. It is widely agreed in the literature nowadays, that women tend to focus on their feelings and their relationships by seeking intimacy and relationship maintenance. In contrast, men are said to be more prone to display knowledge and experience and to involve in sports and politics quite frequently (Tannen, 1994, 1997).

This argument again is supported by one distinction we can observe in the data when dealing with commenting events where males seem to be prone to providing feedback and comments mainly when dealing with football events.

Besides, differences are noticed in the number of messages sent to deal with school issues and requests. In fact, girls seem to be more interested in school matters by interacting more about their school life and by sending 06 messages in comparison to 03 messages only for males. In addition, women tend to use half the number of messages than males in asking for favors or help from their receivers. Both texting behaviors may be explained by the fact that in the Algerian context and due to the status of the dominated sex, women might see in school achievements and independent personalities the only way to beat the powerlessness (Eckert, 1989) imposed by males and society.

Last but not least, less significant degrees are reported when dealing with informing or telling the news, greeting, expressing wishes for special occasions. In these particular cases, both girls and boys use messages nearly in the same way and with the same amounts.

3.1.3.2. Topics in SMS messaging

Dealing with topics in SMS messaging has come as an additional attempt to shed light on the students' messages contents, on the one hand , and to draw possible correlations between topic and language choice , on the other hand. To do so, we have tried to look into the different topics dealt with in the messages and the languages used to deal with these topics, and finally compare both males and females results .

The first step, therefore, has consisted of identifying the different subjects and next the different languages used to deal with these subject. The second step has consisted of counting down the number of messages with regard to both parameters. By examining the content of the messages, we have ended up with seven (07) categories of topics that have been shared by both males and females . The categories have been put under one major heading as illustrated in the following table:

Topics Categories	Content
Feelings	Love, friendship and affection expressions
Special occasions	New year's eve, Birthdays and Aids
Activity	Plans, hang out, playing Football, meeting arrangements, watching football events
Health and welfare	Asking about health and welfare
School matters	Studying issues and concerns, asking for copy books and informing about exams schedules.
Telephone issues	Talking about telephone and connection problems.
Internet	Talking about Internet and Facebook

Table 3.13: Topics Categories and Contents

As demonstrated in the table above, English students use SMS texting to talk almost about the same topics. These vary from feelings, greetings in special

occasions, planning activities, interacting about school issues, telephone problems or Internet. Throughout the analysis of this issue, we have been stimulated to know whether males and females use the same languages when dealing with the same topics or not.

To answer this inquiry, we have tried to examine the main object of the messages and identify the languages used to deal with every topic. The following table is an illustration of the results obtained in connection to gender.

Topic categories/ Gender	Language use variations										Total
	Non Standard Arabic		Standard Arabic		French		English		Berber		
	F	M	F	M	F	M	F	M	F	M	
Health and welfare inquiries	02	02	00	00	05	04	08	04	00	00	25
Activity	02	02	00	00	00	04	05	07	00	00	20
Feelings	01	02	00	00	07	02	03	02	01	01	19
Special occasions	01	01	00	03	06	03	05	02	00	00	19
School matters	00	01	00	00	05	03	06	02	00	00	17
Internet	00	00	00	00	00	00	02	02	00	00	04
Telephone issues	02	00	00	00	02	00	00	00	00	00	04
Total											108

Table 3.14: Topic, Language Choice and Gender

From the data, we can see that females, more than males, tend to express their concern about their receivers' health and welfare, by using mostly English then French languages. Further, activity plans and social life is mostly expressed by males by using respectively English then French as well. In contrast, talking about feelings is noticed among females who prefer expressing their feelings in

French. Wishes for special occasions are made mostly by females who use both French and English to do so. School matters are reported mostly among females who prefer talking about school and studies life in English and then French.

The findings indicate that in most messages, English and French are used either to talk about love, social life or very neutral topics such as birthdays or telephone issues. This is probably due to the fact that students are texting almost classmates, friends and family members who supposedly understand and master the languages used by the texters. Therefore, texting in these languages remains a mark of distinction students of English probably use to identify themselves as educated students of English.

Further, gender differences are noticed especially when dealing with feelings whereby most females prefer expressing in French rather than English or any other language. By sharing details of lives, women feel intimately and continuously connected to one another and French language seems to be the only language that can serve this purpose. Males' friendships seem to be more important and they are mostly maintained via the use of English and French as well. The use of Non standard Arabic could suggest the texters' attempts to display inclusiveness and solidarity with other male peers as argued by many researchers, but very little reference to this language is reported in this study.

3.1.3.3. SMS Messaging and the Addressees

The addressees' feature in communication (or role relationships as referred to by Saville- Troike , 2003) , is as important as the topic in the determination of language choice in general and CS in particular. In what follows, a description of

the receivers' profiles and their indirect role in determining language choice in SMS messaging has been elaborated. To achieve this, the texters at the questionnaire's completion level have been asked to write between brackets the person whom they sent the message to. By doing so, we have been able to identify three (03) categories of people who received the messages. The three categories are: Classmates, Friends and Family members. The last category has included brothers, mothers, sisters, fathers, cousins and aunts. Despite our insistence to write down the receivers' role relationship, only 49% of the messages contained this mention.

Nonetheless, all the messages that have contained the addressees as receivers in the 41 messages reported have been analyzed in relation to the languages used to address the receivers, on the one hand, and in relation to gender, on the other hand. The following table is an illustration of the results obtained.

Language use variations/ Gender	Addressee categories						Total
	Classmates		Friends		Family Members		
	F	M	F	M	F	M	
English	09	10	03	08	07	01	38
French	03	00	10	03	03	00	19
French + Non Standard Arabic	00	01	07	08	03	00	19
English + Non Standard Arabic	01	02	01	03	01	00	08
English + French	03	00	00	00	00	00	03
Non Standard Arabic	01	00	01	01	01	00	04
Standard Arabic + French+ English	00	00	01	00	00	00	01
Standard Arabic	00	00	00	01	00	00	01
Total							41

Table 3.15: SMS Messaging, Language Choice and the Addressees

From the data, we can see that both female and male texters address classmates, friends and family members mostly in English. This is probably because we are dealing with English students who are comfortable with the language and want to show it. Additionally, SMS users tend to address their friends particularly in a mixture of French and Non standard Arabic. Probably, this is due to the fact that most of the receivers are people who understand both languages and , therefore, use the languages of the addressee as well. In some messages, some explanations are provided to explain linguistic options. In fact, for some texters, language choice is bound to the addressee's educational level and language knowledge as shown in the following examples:

Example 1: Il fait chaud donner l'eau a mes chat (*I wrote it to my sister to take care of my cats, my sister is educated and understand standard French*)

Example 2: Wash raki kheti. Raki daymen fi lbal. Twahachtek (*here my sister is not educated she is married and stays at home. I know she does not understand French*)

In relation to gender, some differences are observed concerning the use of both English and French in messages. Females tend to use English with classmates but also with family members such as fathers, mothers and brothers. This may be due to the fact that girls tend to care more about their image of English students who are doing well with the language and therefore with their studies. This may be explained by the face dimension which is supported by Myers-Scotton in his study.

To Myers-Scotten, speakers know who they want to be identified with, how they want to appear to others and how they want others to behave towards them as parts of social interactions. Moreover, females contrary to males address their friends in French more than English. This may suggest that despite the fact that female students master English, they apparently feel more comfortable with French when addressing friends.

Thus, the results help us to answer our third research question by concluding that language choice may be highly influenced by psychological and social needs but also by the knowledge texters have of their receivers educational and linguistic backgrounds , a fact that make both male and female students choose the appropriate language and adjust the message content accordingly.

However, one major limitation of these results consists of the very limited number of messages that were used to draw these conclusions. In fact, the analysis of the addressee in connection to language use and gender concerned the examination of only 41 messages of the corpus. Henceforth, the results cannot be generalized to include the whole messages of this study.

Summary and Conclusion

This chapter presented the results obtained by the SMS corpus analysis and discussion in line with the research questions. At the linguistic level, the results indicated that similarities and differences exist between women and men and these similarities and differences highly depended on CS types. Women tended to use more *Intrasentential* CS type than men in their messages. Conversely, both males and females used *Extrasentential* code switching type almost similarly . At

this point, we argued that the absence of tags, interjections and idiomatic expressions in both sexes' messages might suggest that we were probably dealing with a unique and distinct mode of communication with its own properties and which was different from oral or written modes. In addition, this came to disconfirm the fact that women generally use tags extensively as a mark of women's language as stated by Lakoff (1971).

To Lakoff (1975), women more often use tag switching at the end of declarative sentences to display politeness but also to indicate lack of self confidence. Further, the use of *Intrasentential* CS type either by alternating two languages or using several codes in messages suggested that females , contrary to males , demonstrate higher degrees of language command as an attempt to socially prove their superiority over men.

At language choice level and contrary to expectations, males and females used English almost equally in their messages . This was justified by the fact that the data were taken from English department students as advanced learners, and all the people they sent the messages to were either classmates, friends or family members who either know or understand English. They used English naturally in virtually all domains: academic and social matters to talk about different topics including activity plans, school issues and feelings, aiming mostly at coordinating everyday life activities and maintaining social relationships with classmates, friends and family members.

In addition to these similarities, the examination of the material suggested that gender differences do exist, by displaying women's tendency to use mostly

French especially to deal with feelings. In contrast, males tended to use English more than French when dealing with activity plans mainly with friends. These texting behaviors were revealed to be important namely to signal speaker's identity and adaptation to the addressees' linguistic and cultural backgrounds.

Chapter Four

The Questionnaire Analysis and Discussion

Introduction

This chapter presents the results of the questionnaire administered to the participants of this investigation. The aim was to seek information about the respondents' attitudes, texting habits and language perceptions to answer the fourth research question of this study . The data are presented in the form of tables which are followed by the analysis and discussion of the results. At this point, it bears repeating that the piloting of the questionnaire is of paramount importance and that engaging in this phase is crucial to the questionnaire's success. A pilot test has several functions , principally to increase the reliability, validity and practicality of the questionnaire.

4.1. The Pilot Testing Questionnaire

The first step undertaken in the elaboration of the questionnaire, therefore, was the testing of the items and layout validity. This testing phase has the great benefit of revealing possible problems with the content and the form in terms of instructions, questions wording and practicality, before the final administration.

Before completing the questionnaire, the 43 respondents belonging to 4th year English students were briefed about the aim of the research and reassured of anonymity. Explanations about the content of the questionnaire were given. Answering all the questions was made necessary and important but the respondents were let free to answer or not answer questions that they feel too

personal or embarrassing as it is the case with the last section of the questionnaire where the respondents were asked to write the three last messages they sent.

As the respondents were completing the questionnaire, their reactions and feedback were observed and recorded by moving between the rows to check the students understanding of the instructions and to make sure that the students were completing the totality of the form. In addition, the respondents were provided with compliments and encouragements when completing the questionnaire. After 3 quarters time, the pilot tests were collected and the students were asked if there were any other questions that they think interesting to ask and not found in the questionnaire. No suggestions were made and the students were thanked for their collaboration.

While there is no doubt that questionnaire writing and administration is a labor-intensive activity, it remains worthwhile and critical for the final administration. In fact, when reviewing the students answers, two major problems were depicted. The first dealt with the non- conformity to the instructions especially when dealing with open-ended questions that required more than checking a box, which were left unanswered. The second problem dealt with two redundant questions which were found unnecessary and cumbersome. As a consequence, many adjustments based on these sources of input and the input provided by the respondents feedback , made the final editing of the questionnaire possible by suppressing and reformulating some questions to elicit more comments from the respondents.

4.2. The Questionnaire Analysis and Discussion

As mentioned in chapter two, the questionnaire's goal was to answer the fourth research question, by investigating the social and psychological motives of CS practices and language preferences. Major attempts to explain the reasons behind CS behaviors and language choice have tapped the bilinguals' needs to express themselves via language manipulation as communicative strategies to assert power, to show alignment to a given class, to demonstrate language capacity and so on.

Research question 4: Do female English student texters differ from male English student texters in their CS practices and language choice? If yes, why?

To answer this question, the questionnaire's first part contains demographic questions that account for the respondents' age, sex, mother tongue, second language, and number of spoken languages. The answers show that the students participating in this study range from 22 to 28, belonging to Algerian Arab and Berber communities. All the students belonging to other countries and speaking other languages are excluded from the study to focus on Algerian students mainly.

Therefore, 20 female students and 20 male students are selected. In every group, 10 were Berber speakers and 10 Non standard Arabic speakers. The same is for the males group where 10 are Berber speakers and the remaining 10 are Non standard Arabic speakers. The twenty Non standard Arabic respondents speak for most four languages: Non standard Arabic, Standard Arabic, French

and English, and five languages that are Non standard Arabic, Standard Arabic , French, English and Berber for Berber speakers. The second part consists of attitudinal questions intended to assess the participants tendencies to SMS use and their perception of the importance of this latter compared to other means of communication such as telephone calls, Emailing and social media.

Part II, labeled “*SMS messaging use*” that include three (03) questions, used to account for the participants’ daily use and communication habits while interacting in everyday life in general and in SMS texting in particular. Most studies on texting pinpointed youngsters’ enthusiasm towards SMS use by considering the number of messages used by both males and females. Broadly speaking, females were said to be more prolific and more eager to use SMS in their everyday life interactions, much more than male teenagers or adult males.

However, this is not the case with our participants who display their lack of interest in SMS writing by sending only 1 to 3 messages a day for both males (41,03%) and females(41,03%). Both sexes express their preferences in using both telephone calls and SMS texting among 19.05% of males and 21.43% of females. SMS texting as a favorite means of communication concern only 2.38% (males only) of the participants, less than emailing and social media with 7.14% for males and 4.76% for females. When considering gendered differences, the data show that females are prone to both telephone calls and SMS texting more than males, while males tend to use much more emailing and social media than females.

These results are justified by the answers which are provided to the second question: “Do you think that SMS messaging will replace telephone calls someday? where 63.16% of the respondents answer “No” , for the following reasons :

	Male	Female	Total
Because we need to communicate orally	4%	20%	24%
Because phone calls are more direct	12%	12%	24%
Because phone calls are more intimate and human	12%	8%	20%
Because some topics need to be communicated orally	12%	4%	16%
Too lazy to write messages	4%	4%	8%
Because I need to hear the voice	00%	8%	8%
Total	44%	56%	100%

As we can see in the table above, 24% of the participants claim that telephone calls are very important because of the need to communicate orally and to have direct contacts with people. This communicative aspect seems to be more important for females (20%) than for males (4%). Males give more importance to the human and intimate aspects with 12% of the respondents for only 8% of the females.

Thus, this first section reveal that telephone calls as a means of communication seems to have an important place in everyday interactions and that both males and females look for verbal, human and intimate communication that SMS messaging is lacking.

Part III, entitled “SMS messaging and Code switching” that enclose eight (08) questions aims to look into the mechanisms of CS in relation with language preferences, CS practices , mental representations and attitudes towards mainly French and English . The questions go through the participants’ opinions and beliefs concerning the use of CS in messages and the reasons behind gender

differences in the use of French and English. More importantly, questions 7 and 8 (see appendix A) look into the symbolic features of language use as an attempt to uncover the unconscious side of language choice in CS, especially when we know that the majority of the questions call for the conscious side of CS and language choice.

In question 1 of part III (see appendix A) for instance, the participants are asked to answer the following question: “*Which language do you prefer using when writing messages?*” the following results are obtained:

	Male	Female	Total
French	12%	17.74%	30.65%
Non Standard Arabic	14.52%	12.90%	27.42%
English	14.52%	12.90%	27.42%
Berber	4.84%	3.23%	8.06%
Standard Arabic	4.84%	1.61%	6.45%
Total	51.61%	48.39%	100%

As mentioned in the table above, 30.65% of the respondents answer French language, with 17.74% of females and 12% of males, followed by Non standard Arabic and English with equal percentages that are 27.42% of the participants, with 12.90% of females and 14.52% of males, and last Berber (8.06%) and Standard Arabic (6.46%).

Surprisingly enough, the results reveal a contrast in the respondents’ language preferences as provided by the questionnaire’s answers and the actual SMS practices which have been displayed in the corpus . In fact, in the corpus data analysis, the results have shown that the majority of the messages examined are written in English, then French and last a mixture of French and non standard Arabic.

Nonetheless, the reasons which are provided to explain the choice of French as the highest percentage are attributed to the fact that French language is probably the most language understood by all the Algerian people and because it is an easy language to use, a fact that suggests that the respondents high degree of French language command makes them feel more comfortable with that particular language and apparently much more than any other languages. The following table is an illustration of the reasons which are provided by our participants:

<i>If French, please say why</i>	Male	Female	Total
Because it is understood by all	23.81%	33.33%	57.14%
Because it is easy	4.76%	23.81%	28.57%
I use it with friends I know they understand French	4.76%	9.52%	14.29%
Total	33.33%	66.67%	100%

English as a second favorite language is used mostly because the respondents are English students and use English in their messages to signal membership, to practise and improve themselves in the language as it is demonstrated in the table below:

<i>If English, please say why</i>	Male	Female	Total
Because I'm an English student	26.32%	15.79%	42.11%
To practise my English	15.79%	10.53%	26.32%
To communicate mainly with classmates	15.79%	5.26%	21.05%
Because it is easy	00%	5.26%	5.26%
To use it with English speaking friends	5.26%	00%	5.26%
Total	63.16%	36.84%	100%

With similar percentages, Non standard Arabic is said to be used to serve communicative needs mostly on the basis that Non standard Arabic is the language which is used by the majority of the Algerian people, apparently less

than French which is their first choice. In fact, the use of Non standard Arabic is justified by the fact that maximum understanding may be attained by using this latter while texting as it is shown in the following table:

<i>If Non standard Arabic, please say why</i>	Male	Female	Total
Because it is understood by all	33.33%	12.50%	45.83%
Because it is the language which is used in everyday life	12.50%	29.17%	41.67%
Because it is easy	4.17%	8.33%	12.50%
Total	50%	50%	100%

Therefore, French and Non standard Arabic (and French more than Non Standard Arabic) are similarly used as neutral languages to communicate with all the categories of society, be it Arabic or Berber speakers. In contrast, English is used as an identity mark and for practicing purposes which is limited to classmates and some friends who speak the language.

Code switching as a linguistic and social phenomenon is highlighted by questions 2, 3, and 4, where the informants are asked to answer whether they code switch languages and the reasons why they do so. In question 2: “*Do you mix languages when you write messages?*”, 82.05% of the respondents answer Yes, with 38.46% of females and 43/59% of males, by demonstrating higher percentages among males.

However, SMS corpus analysis has revealed that females tend to use more CS than males. This is may be due to the fact that writing messages requires more spontaneity from the part of the respondents whereas completing a questionnaire may require more reflection from the informants and , therefore, call for more awareness in language use and choice. Further, the corpus size is very limited and limiting to generalize to all the messages that students send

everyday and any conclusions are very difficult to make at this stage of the study. Nevertheless, we believe that CS is highly complex to rush to easy conclusions and both consciousness and unconsciousness tenets of language choice and switching are worth being considered while studying the issue of CS in general.

As far as the reasons for CS are concerned, the respondents are asked to answer the following question: “*Do you mix languages when you write messages? If yes, please say why?*”, and the following reasons are provided:

	Male	Female	Total
To be understood	26.67%	13.33%	40%
Because I don't find a word in one language, so I use another one	6.67%	16.67%	23.33%
For fun	6.67%	10%	16.67%
It is just a habit	10%	00%	10%
Because I write as I speak	00%	3.33%	3.33%
To be quick	00%	3.33%	3.33%
To intimidate my friends	3.33%	00%	3.33%
Total	53.33%	46.67%	100%

The majority of the respondents (40%), that is 26.67% of the males respondents and 13.33% of females answer that they use CS to ensure more understanding from the part of the receivers. Given the multilingual context of our respondents, the participants explain their choice of CS as being an attempt to cover all the speakers of the community as if choosing one single language would mean taking risks to use a language that will not be understood by the addressee.

Broadly, the results reveal that CS is used as a communicative strategy whereby the texters ensure maximum understanding through the use of two, three or four languages in a message. Further, 23.33% of the respondents explain their CS recourse by the need of lexical items that do not exist in the base language, be

it the matrix language or a code switched one. Additionally, 16.67% of the informants answer that switching languages is done for fun, as a play with language that make messages more interesting.

Despite the low percentages that are obtained in the answers calculations, other reasons such as the need to be quick, the use of CS as a habit in SMS writing and the fact of writing messages as an extension of speech , are insightful reasons that are interesting and worth considering to understand CS phenomenon as a whole .

Along this line, question3 seeks to account for the respondents switching habits and the languages used for that purpose. To the question “*what are the languages you usually mix?*”, every choice is followed by a why question to elicit more details concerning the reasons of the selected languages used in CS .

	Male	Female	Total
Non Standard Arabic + French	19.61%	29.41%	49.02%
Non Standard Arabic + English	11.76%	5.88%	17.65%
Non Standard Arabic + Berber	5.88%	3.92%	9.80%
Non Standard Arabic + Standard Arabic	3.92%	1.96%	5.88%
Berber + French	1.96%	3.92%	5.88%
Non Standard Arabic + French + Berber	00%	3.92%	3.92%
Berber + French + English	1.96%	1.96%	3.92%
French + English	00%	3.92%	3.92%
Total	45.10%	54.90%	100%

As we can notice in the table below, CS concerns firstly Non standard Arabic and French with 49.02% of the respondents. The second choice concerns Non Standard Arabic and English (17.65% of the respondents), then Non standard Arabic and Berber with 9.80% of the respondents. Other choices are

disregarded due to the low percentages obtained. In regard to gender, Non standard Arabic and French CS option is reported with higher percentages among females with 29.41% against 19.61% of males, whereas in Non standard Arabic and English, males tend to outpass females with 11.76% of boys and 5.88% of girls. These percentages again reveal males' preference in using English more than French, in contrast to females who prefer using French either in isolation or mixed with other languages.

Interestingly, these answers come to confirm partly the results obtained through the corpus analysis by confirming students' recourse to Non standard Arabic in their messages. Concerning the use of Non standard Arabic and English or Non standard Arabic and Berber, very little reference was demonstrated by the corpus results. Apart from that, one has to acknowledge the fact that the three messages sent and used in the corpus analysis cannot be a complete representation of the usual switching habits of our participants.

Nonetheless, the majority of our participants claim that they use Non standard Arabic and French, Non Standard Arabic and English and then Non Standard Arabic and Berber for different reasons. In fact, to the question "*why do you use Non Standard Arabic and French?*", most of the informants give the following reasons:

	Male	Female	Total
Because they are both used in everyday conversation	29.17%	29.17%	58.33%
Because when I don't find a word in Arabic, I switch to French	4.17%	4.17%	8.33%
Because they are both acquired at an early age	4.17%	4.17%	8.33%
Because it is a habit	00%	8.33%	8.33%
To be understood	4.17%	4.17%	8.33%
Because I master both	00%	4.17%	4.17%
To express our feelings easily	00%	4.17%	4.17%
Total	41.67%	58.33%	100%

As seen in the table, 58.33% of the informants claim that they use Non standard Arabic and French because these are the two languages which are mostly used in everyday life interactions. The popularity of both languages either among the Arab or Berber communities is made obvious may be because in the mind of the texters, everyone knows or is supposed to know both languages. Other reasons make reference to “lexical need”, “to be better understood” or “good command of both languages” with no significant gender differences observed.

Besides, the use of Non standard Arabic and English is explained by our participants' command of both languages and also their need to use English as students' language of studies and classmates as well ,as it is demonstrated in the following table:

<i>Non standard Arabic and English, please say why</i>	Male	Female	Total
Because I master both languages	22.22%	11.11%	33.33%
Because I study English and my friends too	22.22%	00%	22.22%
Because it is quicker when I mix languages	11.11%	11.11%	22.22%
To convey meaning better	11.11%	11.11%	22.22%
Total	66.67%	33.33%	100%

One additional important reference is made to “speed” when code switching both languages. To 22.22% of the respondents, Non standard Arabic

and English are used because it is said to be quicker and to convey meaning better. However, gender differences are noticed mainly when dealing with language command. 22.22% of males claim that the use of Non standard Arabic and English is a demonstration of languages' command whereas only half of the number that is 11.11% of the females claim so. Displaying language command, therefore, seems to be important to men more than to women, as a probable attempt to show knowledge and experience as suggested by Tannen (1995) in the review of literature.

The third and important choice concerns the use of Non standard Arabic and Berber. To the majority of the respondents, both languages are limited to the environment where both languages are used and also as an attempt to recover lexical shortage in one language which is common to all the other choices made previously.

Thus, CS as a usual practice among English students seems to be used more for psychological, social and pragmatic reasons that enable the participants to practice their language of instruction, on the one side, and to facilitate their interactions with all the receivers of the different linguistic communities in the Algerian multilingual context, on the other side.

Concerning the participants' beliefs and attitudes towards CS in general and CS in French and English in particular, three (03) questions are asked to assess the texters' opinions concerning CS in messages and the reasons that make people code switch when texting.

To the question “*Why do you think people mix languages in messages?*”, the following reasons are provided and summarized in the following table:

	Male	Female	Total
Lack of vocabulary in one language	13.15%	16.22%	29.73%
To be understood	16.22%	10.81%	27.03%
To facilitate communication	8.11%	8.11%	16.22%
They write as they speak	5.41%	5.41%	10.81%
Because we live in a bilingual community	5.41%	00%	5.41%
To show their languages ability	2.70%	2.70%	5.41%
For fun	00%	2.70%	2.70%
Because it depends on the receiver’s language	00%	2.70%	2.70%
Total	51.35%	48.65%	100%

As we can see in the table above, the majority of the participants (29.73%, 16.22% of females and 13.15% of males) seems to agree on the fact that the first major reason of CS in messages is the lack of vocabulary in one language. The second important reason has to do with the texters concern to be understood by the receivers of the messages. This concern seems to be more important among males with 16.22% when compared to females who only 10.81% of them provide this argument. The third important reason has to do with the role of CS in facilitating communication among both males and females groups. The fourth reason which is provided deals with the view that SMS writing is just a reproduction of oral practices whereby most speakers’ code switch naturally.

Some other insightful reasons are provided including the impact of the bilingual environment on language use; the texters need to show language ability; the playful aspect of using a mixture of languages and finally the need to adjust one’s language to the receivers’ linguistic knowledge to ensure understanding.

The next question aims to explore the reasons of the use of French in messages. To the question “*Why do you think students use French in their messages*”, the following reasons are reported:

	Male	Female	Total
Because it is our second language	15.79%	21.05%	36.84%
Because it is a language used in everyday life	5.26%	13.16%	18.42%
Because they are good at it	7.89%	7.89%	15.79%
Because French is like a second mother tongue for us	2.63%	7.89%	10.53%
Because mobile phones keypads are in Latin	00%	5.26%	5.26%
Because using standard languages is better than using dialects	5.26%	00%	5.26%
For prestige	5.26%	00%	5.26%
Because Non Standard Arabic cannot express all the meanings	2.63%	00%	2.63%
Total	44.74%	55.26%	100%

As mentioned in the table above, the majority of the respondents (36.84%) justify this choice by the fact that French is the students’ second language and thus a language they are familiar with since early age. This familiarity with the language helps the students to be comfortable in using it either in everyday life interactions or in messaging. Accordingly, the second reason comes to confirm this argument by assuming that French is a language used in everyday life by 13.16% of the females and only 5.26% of the males. French as it is noticed, seems to be more popular among girls than boys for reasons that further coming questions will be able to provide. The third reason which is provided by 15.79% of the respondents’ concern language command which may be partly due to the long education background that make French a second mother tongue for 10.53% of the respondents. Other reasons like “prestige”, “the use of standard language is better than the use of dialects” or “the keypad which is in Latin”, are very insightful but occur with low frequencies in the answers.

A similar question is asked but focusing on English this time and the motives which are provided are presented as follows:

	Male	Female	Total
To improve their English	16.22%	13.51%	29.73%
Because they study English	8.11%	13.51%	21.62%
To show off	8.11%	8.11%	16.22%
To look fashionable	5.41%	8.11%	13.51%
Because they are good at it	5.41%	2.70%	8.11%
To communicate with English speakers only	2.70%	5.41%	8.11%
Because they master it	00%	2.70%	2.70%
Total	45.95%	54.05%	100%

As seen in the table above, most of the respondents (29.73%) with higher percentages among 16.22% of males and 13.51% of females, attribute English use to the students' desire to improve their English. This is supported by the students' second choice with 21.62% of the respondents who argue that this is due to the fact that English is the language of studies not more. This argument seems to find more support among females with 13.51% and only 8.11% of the males. The third reason refers to the students' need to show off (16.22%) and look fashionable (13.51%) to demonstrate a positive social image either within the group or outside the group, that is to say, among friends and family members for instance. Other reasons are provided to include "the good command of the language" and "the need to communicate efficiently with English speakers".

In sum, the most important and recurrent reasons that are provided at this point either by the questions above or the previous ones, tend to agree on five major points which are summarized as follows: signaling membership and marking identity, practicing needs, ensuring understanding , facilitating communication and demonstrating language ability. These five motives are

shown either when providing reasons for CS in general, in the use of different languages in messages, or in the questions dealing with language preferences. In other words, language choice and languages' switching can be driven by the same motives which are but a perfect manifestation of both conscious and unconscious drives which are obviously the two major tenets that affect SMS texting in this study in particular.

In this line, trying to deal with the unconscious motives that underpin CS in texting behavior is deemed hard and requires psychology specialists to cover the topic properly. Still, what follows are questions that are asked to tentatively look into the symbolic aspects of language use through the participants' language mental representations. By asking the question “*what does French represent to you?*”, we have tried to look deeply into the texters attitudes towards French which is described as a second language in this study , but also for years the language of technology, education and educated people. The following table illustrates the different representations that are given by both males and females to the question stated above:

	Male	Female	Total
A second language	19.51%	19.51%	39.02%
Nothing	9.76%	7.32%	17.07%
My favorite language	00%	14.63%	14.63%
A colonial language	9.76%	2.44%	12.20%
Prestige	2.44%	4.88%	7.32%
Language of the administration	2.44%	2.44%	4.88%
Fashion	00%	2.44%	2.44%
Language of literature	2.44%	00%	2.44%
Total	46.34%	53.66%	100%

As noticed, 39.02% of the respondents consider French as a second language with the same proportions of females and males. 17.07% of the

respondents though, answer that French means nothing to them which probably means that French is just a language for them not more. Interestingly, 14.63% of the participants who are exclusively females answer that French is their favorite language. This may explain the extensive use of French in females' messages. Further, 12.20% of the respondents view French language as a colonial language mainly among males (9.76%) more than females (2.44%). French as a symbol of fashion, of the administration and of literature is reported but with very low percentages.

The same question is asked to account for the texters' perceptions and symbolic representations of English and the following table is a summary of the answers that are provided:

	Male	Female	Total
My favorite language	10%	20%	30%
The language of Studies	17.50%	7.50%	25%
A universal language	12.50%	7.50%	20%
Civilization	7.50%	5%	12.50%
Language of technology	5%	2.50%	7.50%
An important tool in Business life	00%	5%	5%
Total	52.50%	47.50%	100%

To the majority of the students (30%) in the table above, English is described as their favorite language. Yet, significant differences are noticed between males and females (20% of females and only 10% of males). This probably means that females are more prone to languages than their male counterparts. English for males is much more the language of studies (17.50%) when compared to females (7.50%). This is may be due also to the fact that males are more aware of the practical side of languages and the position of the language as being a universal language (12.50% of males for only 7.50% of

females) and the language of civilization (7.50% of males and 5% of females) and technology among 5% of males and only half the number of females. Additionally, this may denote the males' need to be associated to modernity and the civilized world which both carry a positive and overvalued meaning that constitute important ingredients in shaping males' social image.

In sum, the two questions on language perceptions and representations highlighted many aspects of CS by providing interesting insights that explain the texters' use of languages in their messages. In fact, the findings reveal that French is considered as a second language which is very close to the students because of the long years of education and because of the good command that resulted from their educational background. English in contrast, represents for most respondents the language of studies which is important to improve and practice.

Gender differences are observed as well by pointing at the affective tendency of females who favor French and English much more than their male peers. Males in contrast, express more practicality in their language perceptions and use. Males, indeed use French to communicate in society and English to practice the language with classmates and English speakers as a possible attempt to display both language ability and alignment to the language of civilization and technology.

Part IV labeled "*SMS messaging and Gender* " is an additional attempt to investigate CS in relation to gender by asking the participants who they think code switch more in SMS texting. The three questions which are

included in this part , are intended to account for texters' beliefs concerning the sex who switches more and the sex who switches more in both French and English.

Thus, to the question “*who do you think code switches in messages more?*” 53.85% of the respondents answer “Both sexes” for the following reasons:

	Male	Female	Total
Because both want to show their languages ability	18.18%	6.55%	24.73%
To express themselves better	9.09%	13.64%	22.73%
Because both lack vocabulary	16.18%	4.55%	20.73%
Because both live in a bilingual community	18.18%	00%	18.18%
Because it is a question of fashion	00%	9.09%	9.09%
Because both like using messages	00%	4.55%	4.55%
Total	63.64%	36.36%	100%

The major reasons that are provided deal with students' needs to show language ability (24.73%) and express themselves better (22.73%) with the same concern of being understood (22.73%). Further significant reasons deal with lack of vocabulary (20.73%) and the fact that both males and females live in a bilingual community where switching languages is just a natural consequence of languages in contact. Fashion is the last reason which is provided, with only 9.09% of the respondents who answer so. Concerning the 38.46% of the respondents who choose girls as the ones who CS more, the reasons are as follows:

If Girls, please say why	Male	Female	Total
Because girls like languages	7.69%	23.08%	30.77%
To show off	7.69%	15.38%	23.08%
Because they are very talkative	15.38%	7.69%	23.08%
Because they are more communicative than Boys	00%	15.38%	15.38%
Because Girls like SMS texting more than Boys	00%	7.69%	7.69%
Total	30.77%	69.23%	100%

To most students who answer girls as a second choice, these latter are said to use CS more because they like languages. Gender differences are noticed though with females (23.08%) obtaining higher percentages when they are compared to males (7.69%). The same differences are observed while referring to the second motive which consists of the girls' need to show off and for being talkative (23.08% respectively). Females (15.38%) believe that girls need to mix languages to show off and attract people's attention, contrary to their male peers (7.69%). This may justify the females' reactions to males' denial of valued social status which is probably done via the demonstration of standard languages' use as a sign of superiority and as argued by many researchers (Labov, Trudgill, Eckert). Moreover, males' beliefs concerning females CS is more attributed to girls talkative characteristic that make them use many languages at a time. The third and last important difference lies in the fact that women are thought to be more communicative than men (15.38%), a view which is provided by females only.

Concerning the question of "*who switches to French more in messages?*",the answers show the dominance of girls with 85% of the respondents. However, 15% answer Both and no answer is reported for Boys choice. The reasons that justify this choice are summarized in the following table:

	Male	Female	Total
To show off	23.68%	21.05%	44.74%
Because it is a feminine language	13.16%	5.26%	18.42%
For prestige	5.26%	5.26%	10.53%
Because it is trendy	5.26%	2.63%	7.89%
Because they are better than boys at French	2.63%	5.26%	7.89%
Because it is the language of intellectuals	2.63%	5.26%	7.89%
Because it is a romantic language	2.63%	00%	2.63%
Total	55.26%	44.74%	100%

To most students (44.74%), the major reason of girls' switching to French in their messages is attributed to their need to show off and attract attention on them. The second reason is that French is described as a feminine language for both males and females but with higher percentages among males (13.16%) than females (5.25%). The use of French by girls in everyday life conversations make many boys qualify French language as girls language. The notion of prestige is mentioned this time and reported as a third reason for females' CS in French, in both males (5.26%) and females groups (5.26%). This may indicate the social value which is attributed to French in the Algerian society which mirrors a highly positive image.

Besides, the same question is asked in regard to English use more specifically, and most of the respondents (56.41%) answer that both sexes use English in their messages but for different reasons as it is shown in the following table:

	Male	Female	Total
Because it is an international language	11.11%	22.22%	33.33%
A third language used between classmates only	18.52%	3.70%	22.22%
For practicing purposes	14.81%	3.70%	18.52%
Because they master it	3.70%	7.41%	11.11%
For prestige	00%	7.41%	7.41%
To show off	00%	7.41%	7.41%
Total	48.15%	51.85%	100%

As mentioned in the table above, English is regarded as an international language for the majority of our respondents (33.33%). This view is mainly present among females (22.22%) than males (11.11%) who think also that it is a third language that is used between classmates only (18.52%). Further, the use of English is done for practicing purposes mostly for males (14.81%) when they are compared to females (3.70%). The command of language seems to be another reason for CS in English mainly for females (7.41%) who consider CS in a given language as an indication of language mastery and proficiency. Prestige and showing off are the last reasons that are provided by 7.41% of the females exclusively. This probably suggests that English is not as prestigious as French can be for females when comparing the two tables above about French and English perceptions.

4.2.1. Significance of the Questionnaire's Results

In the general process of research data analysis, corpus and questionnaire's results contributed a great deal in answering the study research questions and more importantly, in disclosing many aspects that are inherent to SMS texting in relation to CS and gender. Yet, there are times where we need to know whether any relationships exist between the corpus and the questionnaire's outcomes. To achieve this goal, we have engaged in a triangulation of both tools' results to draw possible correlations and determine the questionnaire's significance and contribution to the understanding of the corpus' results in general, and the topic in particular.

Furthermore, comparing students' responses with their actual practices may reveal interesting correlations in patterns of use which may tell us more about the students' linguistic behaviors and their perceptions and opinions' impact on CS and language use. On the other hand, if the types of data differ, this in its turn may be revealing of the role of spontaneous vs. planned language production.

As shown previously in this chapter, the examination of the findings indicated some disparities between the corpus' findings and the questionnaire's outcomes. The three major contradicting results dealt with CS practices and language preferences as found in the corpus analysis, and the students' responses to the use of CS and language choice when messaging.

As such, the first observed contradiction concerned CS practices and gender. The examination of the corpus displayed girls tendency to CS more than boys, which is contrasted by the questionnaire's responses which referred to the use of CS by both sexes. In fact, 53.85% of the respondents answered that girls and boys code switch equally. However, 38.46% of the respondents answered that girls were the ones who code switch more because of their tendency to like languages, to be willing to show off and to be more communicative than boys.

The second disparity concerned the corpus's conclusions concerning the use of English as the most frequent language used in messages and the students' arguments concerning the language they use in SMS texts. To 30.65% of the respondents, French seemed to be the language which is preferred by the students, followed by Non standard Arabic among 27.42% of the respondents

and then English for 27.42% of the respondents. In contrast, English was revealed in the analysis of the corpus as the most used language among students, followed by French, and then a combination of French and Non standard Arabic. Besides, very little reference to Non standard Arabic was found in the corpus of messages.

The third depicted contradiction referred to the respondents' answers concerning the use of Non standard Arabic and French, then Non standard Arabic and English and last, Non standard Arabic and Berber as being their three major options when switching languages. Despite the fact that students use Non standard Arabic and French , which is confirmed by the corpus findings, recourse to Non standard Arabic and English or Non standard Arabic and Berber was revealed very scarce in the messages.

At this point, it is worth noting that these contradicting results take the issue of CS and language use a step further and leads to consider both the conscious and the unconscious sides of any written production, mainly when we know that texting, unlike filling a questionnaire, may involve a great deal of spontaneity from the SMS texters. This point of view leads to consider both aspects as the two faces of the same coin that shape CS processes and language use behaviors.

Besides, it is worth pointing out here that some bilinguals code switch simply because they can and often may not be aware that they have done so. Conversely, it is also made obvious that although bilinguals may possess the

linguistic resources that allow for CS, this does not suggest that all bilinguals do code switch as reported in the review of literature.

Despite all the contradictions pinpointed above, the questionnaire was revealed as a valuable tool in highlighting many aspects of the topic and supporting many arguments which were presented to explain and interpret the corpus findings. In fact, thanks to participants' answers, we can now firmly state that students taking part in this study code switch mainly to be understood, to communicate easily and to remedy to vocabulary shortages in one language, in addition to both girls and boys using CS to show language ability and communicate better .

Moreover, and despite the fact that the corpus showed females tendency to code switch more than males, this switching behavior is supported by the view of girls tendency to like languages, in general, and their need to show off , in particular . Again, showing off is justified by the females' need to demonstrate languages' command in society and their general attempt to demonstrate linguistic supremacy.

Switching by using French is also attributed to girls and their needs to show off, as French is viewed as a prestigious, a trendy and a language of intellectuals by many students. Switching to English in parallel, is attributed to both sexes because of the fact that English is an international language which is studied at school and which is used for practicing and improvement purposes.

Additionally, the use of several languages in the same message , namely a combination of Non standard Arabic and French is supported by the fact that

both languages are used in everyday life interactions and its use is revealed crucial to successful communication mainly in the Algerian multilingual context. This is arguably used as a communicative strategy that aims to cover all the linguistic communities that co-exist in society.

Concerning language use, English to most students is used because of their belonging to the English students' community and because of their needs to practise and communicate with classmates mainly. This is also justified by the students' needs to show off as English arguably is seen as a prestigious language by most students. French though, is used for different reasons that include the students' command of the language for being their second language, and for being a language which is well spread in society and easy to understand by all. Again , these answers corroborate most of the arguments provided in the findings' discussions mainly when dealing with the corpus interpretation of the data.

Understanding these arguments went also through the investigation of students' perceptions and symbolic representations of both English and French. This step highly contributed in highlighting the attitudes' importance in shaping CS and language preferences. In fact, for most students (mainly males) , English is used because it represents the students' language of instruction, and a universal language that represents western civilization. French, in parallel, is described as a second language which is widely spread in society, and girls' favorite language, whereas males view French as a colonial language which almost means nothing to them.

In this line, the relationships between code switching behaviors and attitudes are made prominent, given the research findings of both corpus and questionnaire's outcomes. It should be noted that attitudes about CS and language choice are just parts of the CS processes whereby social and cultural factors are integral components as well. We now know that students do choose to code switch, a decision that is influenced by a number of social and psychological factors.

At the community and the individual levels, the use of CS for many students seems to carry overt prestige in addition to the use of prestigious languages such as English and French which reflect the covert prestige ascribed to these latter . In particular, CS is proved to serve as a marker of group membership and solidarity by demonstrating students code switching mostly with people with whom they share a dual language identity such as classmates and friends.

Despite the fact that CS and language choice have been shown to index multilingual linguistic and communicative skills , CS remains a complex issue in SMS texting and no definite conclusions can be drawn about the reasons for language manipulation and the possible disparities between groups , without considering all these aspects as important parts of the data.

Summary and Conclusion

What does all this tell us about the social and the psychological reasons that made male and female students of English use CS and specific languages in messages?. First, the data showed that both groups used languages and CS almost

similarly but for different reasons. In fact, both males and females used CS and various combinations of languages to signal membership, demonstrate language ability, to communicate better, to practice English language and ensure understanding. CS among both sexes was mostly justified by the fact that both girls and boys live in a multilingual environment where CS comes just as a natural manifestation of all the languages in contact and as a safe communicative strategy used to guarantee better understanding within the different linguistic communities evolving in the Algerian context.

However, the examination of the findings helped to identify gender differences mainly when dealing with code switching motives and language preferences. In fact, males tended to believe that CS by both sexes occurs as an attempt to show language ability (18.18% of males and only 4.55% of the females believed so), whereas the reason of expressing and communicating better seemed to be females' major concern with 9.09% of females giving this reason, compared to 00% of males.

Language choice and perceptions also showed disparities between the two groups. In fact, French seemed to be girls' most preferred language for affective and social reasons, whereas English was more popular among males who saw in the language a good vector of modernity, technology and civilized world. Moreover, males were more prone to the use of English as an attempt to show alignment to students' social category, to improve themselves in that language and use it with classmates mainly.

This practical aspect of language use marked a big difference between males and females texting styles that consciously or unconsciously used languages apparently for different reasons. These differences were partly explained by both girls and boys positive and negative attitudes towards mainly French and English. For females, French and English were positively viewed as their favorite languages, whereas males viewed French negatively as the language of colonialism and English positively as an international language. These psychological attitudes can possibly be responsible for males and females' recourse to one language instead of another when writing messages.

More similarities and differences were reported and tentatively explained in the light of the literature reviewed in chapter 1. By doing so, the results helped us to answer our fourth research question and understand, though partly, the issue of SMS texting in connection to CS and gender in a multilingual context as the one described in this study.

General Conclusion

This study raised out of a need to examine the nature of SMS texting as a new medium of communication among multilingual subjects, represented by Algerian advanced students of English. While most approaches to SMS focalized on messaging in monolingual and bilingual linguist contexts, this study aimed to examine texting behaviors in a multilingual environment. Further, the existing studies seemed mostly to focus on the linguistic aspects rather than on the social and psychological factors which , we believe, are crucial in the production of linguistic variations namely among SMS texters.

Our goal therefore, was to focus on CS behaviors and language choice which are considered as two natural linguistic phenomena occurring when languages come into contact, and to show possible differences and similarities between male and female texting practices. In this scope, we wanted to investigate the way girls and boys use CS, by focalizing on the types used in their messages, the languages they prefer texting with and the reasons that justify these practices.

Such an investigation went through the analysis of a corpus containing 120 messages which made possible the answering of the four research questions of the study. Concerning the first question: Do female students of English texters code switch more than male student texters?, significant differences in the amounts of CS were reported , with females switching more than males when writing messages. To answer the second research question: Do female students of English texters differ in their code switching from male student texters in terms

of Intrasentential vs. Extrasentential code switching types ?, the results showed that females used more *Intrasentential* type of CS , but used almost similarly the *Extrasentential* type. Moreover, the examination of the results helped to answer the third research question: Do female students of English texters differ from male student texters in terms of language choice? If yes, how?, by concluding that language choice might be highly influenced by psychological and social needs on the one hand, and the knowledge texters have of their receivers educational and linguistic backgrounds , on the other hand.

Concerning the fourth research question: Do female students of English texters differ from male student texters in terms of Code switching practices and language preferences? If yes, why?, the findings showed that both groups used languages and CS almost similarly but for different reasons. In fact, both males and females used CS and various combinations of languages to signal membership , demonstrate language ability, to communicate better, to practice English language and ensure understanding.

Besides , further conclusions were made essentially when comparing and analyzing both groups' texting behaviors . The analysis outcomes highlighted several differences and similarities in the ways males and females act in that particular context while using almost the same linguistic resources.

Initially, by examining the types of CS used by both males and females, we found that girls used significantly higher amounts of *Intrasentential* Code switching than did the boys. Despite this difference, the study found that both boys and girls similarly use another type which is the *Extrasentential* code

switching type by demonstrating almost no interjections, exclamations or idiomatic expressions. This was basically explained by the fact that Speech and SMS writing are two operating modes that may differ by taking into account the particularities of each mode. In fact, the asynchronous character of messages may explain the fact that spontaneous reactions that result in interjections and exclamations use, as it is the case in spontaneous speech , may occur less in messages because of the late reply provided by the receiver.

Additionally, two patterns of CS were reported in both groups that concerned a total switching to French and English languages. No exclusive use of mother tongues such as Non standard Arabic or Berber in messages was observed. This was mainly explained by the limited roles attributed to both languages that made their use in messages very restricted, on the one hand, and the position of both languages as being low varieties of the country, on the other hand.

Throughout this study, I tried to disclose the power of language use to mirror individuals' social and psychological needs. Many of our participants were aware of the social and cultural position of every language and this was obviously displayed by the texters' use of the same linguistic resources to create two different individual identities through language manipulation.

In the Algerian context, using French and English as foreign languages has a highly symbolic value that refers to higher education and intellectual status. With this in mind, it is not totally wrong to assume that in a conservative society like Algeria where men are dominant, attempts from women to challenge this

power by demonstrating linguistic competency over men may exist by using prestigious languages such as English and French. This might be reflected in women's amount and use of these latter when texting as a sign of linguistic dominance and intellectual supremacy.

Against all expectations, the study revealed the dominating use of English, French and a mixture of Non standard Arabic and French by both males and females. Likely, male and female students used English with almost the same amounts of messages. French was reported as the second most used language that was followed by a mixture of Non standard Arabic and French which represented the students third choice. However, the study found gender differences among the two groups that showed that boys are less likely than girls to use French. In addition, very rare exclusive references to Non standard Arabic or Berber were made in this study.

When discussing these findings, we argued that these linguistic choices were due, in part, to the fact that our participants were advanced students of English who felt comfortable with English that they produced naturally. The use of this language, therefore, became natural and evident, mainly when we know that it remained one of the best representations of their social identities as English students and educated ones. French, which was mostly used by females, seemed to be more popular among Berber speakers, be they males or females as demonstrated in a closer examination of the results. In fact, while analyzing the data, we were triggered by the fact that mother tongue variable and socio-cultural aspects could have an important impact on language choice.

By examining Intra-gender differences, we found that both female and male Arabic speakers outpassed their Berber speaking peers in the use of English. In addition, both male and female Berber speakers outpassed Arabic male and female speakers in their use of French language. Concerning the use of Non standard Arabic + French, the analysis showed that Arabic speaking boys and girls are the ones who mostly use that particular option, far more than male and female Berber speaking texters. The very rare occurrences of Non standard Arabic were observed among Arabic speaking boys, far more than their Arabic female peers or male and female Berber speaking ones.

In the discussion of these findings, we argued that these differences in the same gender and between the two groups highlight the cultural facets of language use that are complementary to the social and psychological features mentioned earlier. Indeed, the results showed that texters who were from the same speaking community, acted almost in the same way as it was the case with male and female Arabic speaking participants who demonstrated the same linguistic behaviors when compared to Berber speaking texters. The cultural and historical reasons that created distances or closeness towards some languages, in our case French, showed how these aspects could build negative or positive attitudes towards the existing language in a society that can , in a way or another , lead to the over use of one language or/ and the rejection of another.

In this study, the Arabic speaking texters' negative attitudes towards French, which was described as the language of colonialism, made most respondents opt for English language. As seen in this work, this latter might be

defined as a less psychologically and historically loaded language in comparison to French.

All along this work, many salient features cropped up and their analysis provided many insights that helped understand the sociolinguistic nature of SMS writing. These features included the writing forms of messages, the functions they serve in communication, the topics dealt with by the texters and the addressees' importance in the determination of CS and language choice.

The first striking observation made about SMS texting among students concerned the written form of messages. Contrary to the stereotyped assumptions about SMS texts as being collections of abbreviated forms, very few abbreviations and colloquial forms were noticed. Most messages showed a high degree of formality that was much closer to the written form than to the written speech. Students' texts looked much more like letter writings with openings and closings that entailed very few mistakes. This demonstrated awareness to the form and correctness when texting in English or French were attributed to the fact that both girls and boys were consciously or unconsciously performing a certain ability of language command that was expressed through the use of academic English and French even when communicating with friends, classmates or family members.

The second interesting observation concerned the SMS uses in everyday life communication. The examination of the data revealed much communality between the two groups. Both girls and boys used SMS to coordinate everyday life activities and make meeting arrangements, express feelings, give news, greet

in special events and occasions and discuss school matters. Broadly, girls and boys used messages almost equally to coordinate and arrange meetings, to inform the others about some particular news, and greet each other by asking after each other health state and welfare and also exchange special events greetings and wishes.

Yet, the study showed some gender differences in the number of messages used to express feelings, school matters and commenting events. In fact, girls used more messages than boys to express feelings either towards friends or family members, as well as messages to ask for school issues such as schedules, exams and course contents. Conversely, boys outpassed girls in the number of messages which were used mainly to ask friends to do things for them or comment sports events.

Broadly, these differences came to support Tannen's (1997) distinction between "rapport vs. report" uses of language to fulfill two different and distinct social and psychological individual needs. These needs were represented by females' attempts to coordinate and maintain emotional and affective relationships with the others, contrary to males who used language communication mostly for practical reasons and to display knowledge and experience.

Additional insights emerged from our tentative analysis to deal with the topics that both sexes dealt with in their messages. More specifically, we tried to focus on the languages used when dealing with every topic to find out whether any gender similarities and differences could be drawn. Seven domains or topics

were set out from the data, and the seven topics were similarly used by both groups when messaging. A deeper investigation of the languages used in every topic showed that in most messages, English and French were used by both groups either to talk about love, social life or very common and neutral topics such as telephone issues. Yet, one major finding concerned the use of French to express feelings among females while boys prefer using English and a mixture of Non standard Arabic and French to talk about social activities such as hang outs, organizing football events or meeting friends.

The addressee was also one of the relevant features that emerged in the study. Indeed, we were interested to know who the texters address in their messages and more importantly in what language. Three categories of addressees were distinguished in both groups. In this study, girls and boys similarly used SMS mostly to address friends, classmates and family members and both used mostly English to do so. A mixture of French and Non standard Arabic were also observed when communicating with friends in both groups. Yet, French seemed to be more popular among females who used it far more than their male peers to address friends, classmates or family members.

These options were justified by the possible need of both groups to display alignment to a distinct group of educated people of English, on the one hand, and the texters' awareness about the addressees' linguistic background and knowledge, on the other hand. The results revealed also that the role relationship factor played an important role in the determination of the texters' language selection and use.

The second part of our research concerned the questionnaire's data interpretation and discussion. This research tool was essentially used to account for the socio-psychological reasons that underpinned texting practices mainly those connected to CS, Language choice and gender. In the first part of the questionnaire, the data revealed that SMS use was not the students' favorite means of communication. Both sexes preferred using telephone calls and SMS messaging in their interactions mainly because both males and females looked for verbal, human and intimate communication that SMS did not offer.

Moreover, CS was revealed as a usual practice among English students who used the language mostly for pragmatic reasons mainly to serve communicative intents and facilitate interaction with the receivers, on the one side, and reduce texters' awareness and anxiety of not being understood by the addressees, on the other side. Eventually the use of CS with two or three languages came as an attempt to avoid communication breakdowns and improve students' English more specifically.

Again, gender differences were observed at that point by highlighting the different reasons that made males and females use languages differently in their messages. The examination of the data showed that French was more popular among females than males. By contrast, English was more popular among males than females. That girls preferred using French in messages was justified by the fact that French language was the only language that could bring all the addressees together, for being an easy language which was understood by all. Males in contrast, identified themselves as English students who preferred

using English to communicate with classmates mainly and to improve themselves in that language.

By going further in the analysis of the perceptual aspects of both French and English languages use, the results showed that this could be attributed to the languages representations in the texters' minds. French for females for instance was represented both as a favorite language and a second language that was well mastered. Conversely, males viewed French as "just" a second language which , in some cases, meant nothing and , in other cases, meant negatively the language of colonialism. Unlikely, English was viewed by male texters as the language of instruction which was enhanced by their perception of English as a universal language and language of civilization and technology. For females though, English was considered as their favorite language rather than any other considerations.

Here again, this disparity in language perceptions and symbolic representations reinforced gender differences by establishing a bipolarization of motives that distinguished between females as "an affective gender" and males as "a practical gender". By affective, we essentially refer to the females tendency to place the emotional and personal relationships in the center of their interactions by expressing feelings and maintaining relationships , mostly via the use of languages that are understood by all. On the other hand , practical is meant to refer to the males tendency to provide more rational and practical reasons such as self improvement and the need to be affiliated to English students' category or group.

Nevertheless, whether these differences exemplify changing norms for males and females' practices through the use of prestigious languages mainly, the results interestingly showed that contrary to Labov (1990) and Trudgill's (1974, 1998) arguments, both males and females use prestigious languages namely English and French when texting . By way of explanation, these languages were supposedly used to demonstrate language superiority and alignment to the socially acknowledged class of students and educated people. Very little reference to Non standard Arabic was observed among males and females. Therefore, arguments for the use of Non standard languages by men to display solidarity among male peers were also disconfirmed in this study.

Further, females seemed to be more concerned with successful interactions where both French and English were used as important means to maintain social relationships. By doing so, we argued that both males and females were involved in a process of identity and image construction which was made possible via the different conscious and unconscious uses of languages.

Finally, by concurrently studying SMS texting from sociolinguistic and structural perspectives, we have been able to shed new light on messaging practices in connection to CS and gender. By doing so, we have demonstrated that language use within the same social group can lead to different but sometimes related structural outcomes which in turn give rise to different switching and language varieties.

Limitations of the study

As any other research, this study contains a number of limitations:

First, this study concerned only 4th year students of English , by focusing on their possible gender differences in CS practices in SMS writing . Therefore, the results cannot be generalized to include the whole students of English of the University of Algiers. Besides, we believe that language choice can be affected by many other factors such as social status, level of education, the topic and the person to whom we address messages. Some of these factors have been dealt with briefly in this study, and can represent interesting and relevant future research directions.

As stated earlier in the description of this study, our investigation is a small scale exploratory examination of SMS messaging in a multilingual context. Follow up studies, with data collected from a larger sample of students , are needed to explore the SMS field from different scopes and with the contribution of other domains. This will undoubtedly enhance our understanding of SMS practices, in general, and SMS practices in a multilingual context in particular.

Another limitation is related to the incapacity to control both the participants' social status, on the one hand, and the messages de-contextualized aspects which may potentially influence SMS texting production, on the other hand. In fact, we believe that the participants' social and intellectual conditions can shape languages command and hence, CS and language uses .Besides, taking messages out of their contexts made the analysis of the objectives of the messages very limiting. Losing the main stream of the messages by limiting

ourselves to the text as a codified discourse may color the results and weaken the validity of this study.

Henceforth, further studies are needed to validate our findings by using a larger sample size, with subjects from different social and linguistic backgrounds and different age ranges. Furthermore, deeper linguistic and sociolinguistic studies might reveal stronger patterns of language differences between males and females covering different informants' profiles, ages and linguistic backgrounds.

Future Directions

This exploratory / qualitative study represents a tentative contribution to a threefold and complex issue. This three way link study that comprises SMS texting, CS and gender, is unique in Algeria. In fact, every topic has been extensively studied in its own right and in different disciplines mainly in western countries and to date, very little attention is paid to the interaction between the three topics. For this reason, we wish to argue that studying the connection between the three topics can shed new light on the topic as a whole and/or on each area of research. The results obtained in this study can only be a baseline for further studies that will hopefully pave the way to future research directions mainly in Algeria.

Throughout the analysis of both the corpus and the questionnaire, we have been able to describe the informants' texting behaviors, perceptions and beliefs and in the light of these, we could see how males and females' languages' manipulation is made rich and complex at the same time. In this light, more research is needed to document actual language use in a wide range of different settings, with more diverse groups of texters. More importantly, we need to learn more about the different texting strategies in wider range of communicative situations. We also need to recognize that language norms and cultural factors, as revealed in this study, can play considerable roles in actual language uses in messages.

It goes without saying that social organizations and realities are shaped by social constraints that define the role of every gender, and language whether

used exclusively or by code switching to other languages, remains one of the most indirect routes and strategies to challenge power and social norms. Obviously, this social dynamic is also recreated in SMS texting and more research is needed to account for the sociolinguistic aspects of messaging mainly the ones that deal with power, gender and social class to achieve social and cultural understandings of these categories.

Additionally, this study has revealed some interesting facets of messaging mainly at the stylistic and the structural levels. The examples shown in this study concerning the high degree of formality at the stylistic level , represent the performance of adult students with almost the same educational background. Thus, this writing style and language choice and switches might not be found in the performance of other multilinguals whose educational backgrounds or age may yield different linguistic styles and language variations. In fact, most studies that involved teenagers showed high degrees of abbreviations and colloquial forms which is not the case with the adult texters who took part in this study. This instability and inconsistency in the form may offer promising possibilities in the study of messages' stylistic aspects.

At the structural level, many insights have emerged from the examination of the use of abbreviations. We need to learn more about the reasons that make people contract words in messages and also understand the reasons why the contractions occur in some particular constituents and not others. We also need to look into the syntactic aspects of messages mainly when dealing with code switching practices. In fact, Code switching, as described in the

literature, is viewed more as the speakers' capacity to integrate two or three grammatical systems with the same proficiency. In this light, we need to learn about the constituents that are mostly code switched and how texters, even when using two or three languages, manage to keep the languages' grammatical structures intact and the messages understandable and coherent.

Moreover, SMS texting can be considered as a literary device in itself and further research is needed to validate this assumption by looking closely into the characteristics of both oral production and written speech, on the one hand, and written speech and writing mode, on the other hand. These comparisons may help establish similarities and differences between the different modes and, hence, determine the characteristics and properties of SMS writing that make it a unique literary device.

Further, this writing device can be analyzed from a gender lens by looking into the differences in style in males vs. males and males vs. females texting practices and, eventually, in females vs. females and females vs. males interactions. Such approach to the study can provide more insights on SMS practices on the one side, and more importantly document our understanding concerning possible differences and similarities in gender texting styles, on the other side.

Last but not least, varying tools and methodologies is crucial to capture the incredible ability of the texters to tailor their languages, their CS types' uses and writing styles while messaging. And because of the complex nature of SMS texting, a lot of benefits can be gained by using highly elaborated questionnaires,

interviews and large corpuses. Moreover, using quantitative and mixed methodologies to bring stronger arguments to validate research results are needed to unveil the nature of SMS texting.

Finally, it should be pointed out that the way is still endless for researchers to disclose more and more detailed differences between males and females as well as their specific causes either in SMS field or other related fields, mainly in Algeria.

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APPENDICES

Appendix A: The Questionnaire

Dear participant,

This questionnaire is part of a research project I am conducting on SMS texting among young college students and their use of code switching. I appreciate you taking time to fill this questionnaire as honestly and frankly as possible. The information you provide will be of great help and importance to answer my research questions. The information enclosed in this questionnaire will remain confidential and will only be used for research purposes. Thank you.

Nora Achili Ibersiene, English language post graduate student, Department of English. Bouzareah, University of Algiers 2

1. Identification questions:

1. Sex:

- Male
- Female

2. Age:

3. Native language or Mother tongue:

- Arabic
- Berber
- Other, please specify:.....

4. Second language:

- French
- English
- Other:.....

5. What languages do you speak?(You can tick more than one box)

- Non standard Arabic
- Standard Arabic
- French
- English
- Berber
- Other, please specify:.....

II. SMS Messaging Use

1. Which means of communication do you prefer most in everyday life interactions?

- SMS texting
- Telephone calls
- Both SMS texting and telephone calls
- Other, please explain:

2. Do you think that SMS messaging will replace telephone calls someday?

- Yes
- No, please say why.....

3. How many messages do you send a day?

- 1 to 3 messages
- 4 to 8 messages
- More than 8 messages

III. SMS Messaging and Code Switching

1. Which language (or languages) do you prefer using when writing messages? (you can tick more than one box)

- Non standard Arabic, please say why
- Standard Arabic, please say why
- French, please say why
- English, please say why
- Berber, please say why
- Other, please specify and say why

2. Do you mix languages when you use messages?

- Yes, please say why.....
- No, please say why.....

3. What are the languages you mix? (You can tick more than one box)

- Non standard Arabic and Standard Arabic , please say why.....
- Non standard Arabic and French, please say why.....
- Non standard Arabic and English, please say why.....
- Non standard Arabic and Berber, please say why.....
- Other, please specify

4. Why do you think people mix languages in messages?.....

5. Why do you think students use French in their SMS?.....

6. Why do you think students use English in their SMS?.....

7. What does French represent to you?.....

8. What does English represent to you?

IV. SMS Messaging and Gender

1. Who do you think mix languages more in messages?

- Girls, please say why
- Boys, please say why
- Both, please say why

2. Who do you think use French more in messages?

- Girls, please say why
- Boys, please say why
- Both, please say why

3. Who do you think use English more in messages?

- Girls, please say why
- Boys, please say why
- Both, please say why

V. SMS Corpus

Please write the three last messages you sent. This questionnaire is anonymous and your messages will be used for data analysis only. Thank you for your cooperation.

- 1.
.....
- 2.
.....
- 3.
.....

Appendix B: The SMS Corpus

I. Females' messages

1. Berber speaking females

Informant 1 :

- Slt c Kenza, j'avais pas assez de credit. Envoyez le sous le nom de fatima. Merci
- CC Kahina ca va ? hadi ghiba. Ehi thallay fi rohak, bn soirée et bn n8.
- CC c pour te dire kil vaut mieux k'on se parle pas cette semaine, g d exam à passer é semett 3lik.

Informant 2:

- Il fait chaud donner l'eau a mes chat
- Wash raki khti. Raki daymen fi lbal. Twahachtek
- Ok no problem, see u.

Informant 3:

- Desolée je peut pas venir demain, j'ai mal au ventre, pardon sœur.
- Salam, j'espere tu vas bien. Please demain rammene moi les cours de Af civ pour faire photocopie. By
- A l'occasion de to anniversaire, je te souhaite une très bonne anniversaire, plein de joie, de bonheur et de succès. By.

Informant 4:

- Slt sofiane, jspr k tu va b1. J voulais juste te souhaiter bonne chance dans l'examen du Bac. Bye
- Akhir a yi, jspr c v. Iktsilim, chedhaghkem atas, atas. Tselim fellasen ak d guekham. Bay
- Azul, c Mira. I'm F la fac. 7 semaine adassagh a rou-zeffoun nchallah. Bay

Informant 5:

- Cc Meriem sa va? Stp ramene moi les cours de af civ. Merci a tte. Bisou
- Merci. T un ange
- Tkt sa va, je suis juste très fatiguée et j'évite le tel au maximum. Je suis saturée physiquement et moralement.

Informant 6 :

- C le num 2 Assia. Ki tbipilek bih okhorji.
- Happy Birthday sister. I didn't forget you. Supposed to call you at 00.00 but I slept before. See you next week, by
- Morning, we're in the campus.

Informant 7:

- Hi Rima what's up. Please bring me brit civ lessons. Thanks. See you.
- Hi Nadia .don't wait for me. I'm not coming. Bye
- I wish you a good luck for your Bachaloriate darling. Take care.

Informant 8:

- Slt, ca va. J'ai essayé de te joindre depuis ce matin, mais j'arrive pas, enfin bref, j' voulais te dire que je suis entrain de t'attendre devant le department. a+
- Cc fréro, stp informe ma mère que je ne pourrais pas venir car j'ai des exams à passer. By et porte toi bien.
- Bsr, ca va, j'voulais te souhaiter b8 et de te dire que demain je vais venir.

Informant 9:

- Je t'aime beaucoup mon amour. Je pourrais jamais me séparer de toi. Tu est mon mari et l'homme de ma vie.
- Je t'aime aussi mon amour. Je t'embrasse très fort.
- Tu me manques beaucoup. Je supporte jamais être loin de toi.

Informant 10 :

- Iwish you a prosperous new year. No longer I haven't seen you.
- How was the day guys
- See you in the department

2. Non Standard Arabic speaking females:

Informant 11:

- Hi . The exams make me tired and I want to have a deep sleep.
- I miss you so much my mom.
- Happy birthday dady.

Informant 12:

- Ils ont affiché exams plan, on commence Saturday eng lit. Good luck.
- Hi dad, I finish at 11h.
- Kan tu sera libre bip.

Informant 13:

- Rani jaia, ma ntewelch.
- Bonne anniversaire, la39oba l 100 sna
- The exam started, where r u?

Informant 14:

- Joyeux anniversaire cher frère, je te souhaite une longue vie pleine de joie, argent et enfants.
- Happy birthday.
- Bonne année, meilleurs vœux.

Informant 15:

- Hi Brother, I wish you good luck in ur Bac Exams. Love you ☺
- Soum Soum, I 'm in B 310, join me.
- Hi, me not coming. May be tomorrow. By

Informant 16:

- Salima stp flexili et demain nmadlak adraham.
- Yatik asaha mon frère. Nta tasthal tout le respect du monde.
- Hi Rana. It's Mazia. Plz matansaych the copy book of American civilization.

Informant 17:

- Have a good luck in your Bac Exam today and trust your information . Take care. Talk to you soon.
- Mr Bensaou asks from us to do: “in the eyes of many readers, Macbeth is less concerned with the uncovering of the crime of others than with the uncovering of criminal to himself. Discuss.
- Do you know, this is the first time since this year began that I feel really like I’m attending a class. God bless Mr Bensaou.

Informant 18:

- Slt Sousa, si Hiba, désoli ma chérie. Ki 3ayatili kont ghal9 lportable, hada win rani jani SMS ta3ak.
- Happy birthday my sweet friend, nchalah kol 3am wnti bi alf saha and great happiness in your life. By
- Slt hanouna, tu me manqué grave ma belle soeue, nchalah tkouni mliha, matensaych t9olili winta tji ledar bach natlakaw ok, je t’aime, bizou.

Informant 19:

- Sbah el khir washraki ? goulî rabi3a nkemel les examens w nji liha direct goulha matert9ale9ch. Salmi 3lihoum thalay fi rohek, bye.
- Salam, washraki inchallah tkouni bkhir twahachtek matgoulîsh nsatni raki dima fi bali mais manich neflixi ki neflixi n3ayatlek. Thalay fi rohek. Salam
- Bonjour mama . Comment va tu ? Bon fete tu es tout pour moi .Rabi ykhalik lina. Je t’aime très fort winchallah yji nhar li nrodelkom khirkoum, bisou.

Informant 20:

- Bonjour, désolé ma chère je peux pas venir le matin, la route est presk bloké chez nous. J v le faire seule au cyber prés de chez moi ok, see you.
- Slt Toufik, ana omama rana fi dar khali. Appelle moi fa lfix.
- Slt, makemelnach hata 5h. Ahhh. By. Rah nahbal

II. Males’ messages:

1. Berber speaking males:

Informant 1:

- Good luck in your Bac exam
- Please, would you come to revise together.
- Happy feast, I wish you all the best and success in your life.

Informant 2:

- Hi darling. I miss u so much, tonight, I’ll call u plz wait me after the classico.
- Salam Amine rani nestena fik kima departement
- Salam Salah, kifach rak dayar nchalah tji beslama fi a9rab wa9t.By.

Informant 3:

- Merci Paola, bonne sieste à toi et bisou pour ta petite fille.
- Merci, ne m’ecrit plus.

- Hello, I find your school's services in Internet, it pleased to me so much. Now I hope get more details to be a student in your campus. Thank you.

Informant 4:

- Si les portes du ciel s'ouvrirent en me demandant de faire un souhait, je leur demanderais de bien veiller sur la personne qui va lire ce message.
- J'aurai besoin que tu passe a ma chambre pour ce soir pour qu'on revise Brit civ, a+
- Ne m'enveue pas, je te vois aprèsok , a plus

Informant 5:

- I miss you a lot. Je sais que ighadikem lhal mais bon ca va passer. Prend soin. Love u.
- Désolé, je suis en class.
- I adore u Sarah. Surtout si tu as besoin de quoi que se soit, n'hésite surtout pas a me dire.

Informant 6:

- Merci bcp chere Rym. Année 2013 plein de joie et de bonne santé. Meilleurs vœux.
- Slt Kami comment vas mon cher, inchallah tout vas bien. Twahachtek ya rabak.
- Slt 3ayniya, ca va chwiya, ani hab nchoufek waktach natlakaw.

Informant 7:

- Les num sont..... et vive la république.
- Ben demain, je ne les pas compris, ca coute rien de reprendre pour moi.
- J'espr que tu as compris le message, sinon?

Informant 8:

- Salut, j'espere que tu auras un avis favorable a ta demande. Take care. a+
- Azul a chabiw, ca va. Enfin, j'espère que tu passeras une belle journée avec ta famille. Hemlaghkem atas athwizts.
- Bonjour, on va se voir au café, a tout a l'heure.

Informant 9:

- Twahashtek dj itou les deux tnegosiyw avec les plu bo mec o mond entier.
- Chui pa en couple t3ayi g dotre truc à te dire ya khi djayah, aya dodo, bo rêve, nomni.
- Bonjour je ss avec mon ami a l'hospital et est asmatik g pa pu aller a la fac mai demain j'y serai surement inchallah. Bye

Informant 10:

- Bonne année 2013 boubaker nchallah 3am esaha wlehna w enajah. All the best for you.
- Bonne année 2013 Lamia nchallah 3am esaha wlehna w enajah. All the best for you.
- Que l'aid fera ta joie que la foi soit ta voie que to chamin soit droit que dieu entend ta voie et te fera roi d'un paradis de to choix. Saha aidkoum.

2. *Non standard Arabic speaking males:*

Informant 11:

- Salam, Yacine, there is a new about jobs and application
- Salam, saha aidkoum, wa kolo 3am wa antom belkhair.
- Salam, how do you do?

Informant 12:

- Please, call me, I don't have enough units.
- I'll call you later
- I'm in class.

Informant 13:

- Wech kidayra sahib? Cha radi nchoufek lyouma? Aya thalla frassak
- How's goin bro? hru doin I seeking 4 u.
- Where have u been? BCNU....PEACE

Informant 14:

- Ok, no problem, take care of yourself you too.
- Not at all, it is a duty
- I am asking you, I just prefer to talk by phone instead of messages, if you don't mind!

Informant 15:

- Hey beauty! How are you?
- In an exam
- C réglé

Informant 16:

- We meet today?
- Ed3ili ☺
- This is my fb page.....send me an add

Informant 17:

- Bonjour Ossama. Je suis Seif, répondi ya mossiiiba.
- Slt shikh, nchalah rak b1.3andna championnat b el sebt fi el kalitousse besh twajed rouhk hhhh !!
- Vive Real Madrid. Hala Madriiiiiiiid.3/2 fi new camp w zid bahdel bikoum varam 19 ans hhh, M Mazel tgoli Barca ma netfahmouch. Mdr

Informant 18:

- Bonjour, stp demain jibli les cours ta3 Heart of Darkness bech ndir 3liha copie. Merci, bon courage.
- Happy birthday with u happiness and long life full of joy andwhatever.
- Saha kho, la soutenance de Billal et demain a 11h fi dali Ibrahim. Bon nuit. A demain

Informant 19:

- 3id milad sa3id w kol 3am w nta b elf khir w l3koba l 100 ans nchallah. Happy birthday Salah.
- Kiii lyoum machi kol youm profité chouiya. Khlasoli les unites.
- Saha Karim nkamal 3la 4 khoya

Informant 20:

- Saha Khaled, wash ca va ? Win rak? 3ayatli nahtajk ok. See you.
- Wach chaft Match. Gotlek Real Madrid dima fort.
- Slt, ca va. Win raki, natla9aw f Bensalem 3la 11:00, ok.

ملخص البحث

تغيير اللغات و الجنس في الرسائل القصيرة (SMS) بين طلبة الجامعة الجزائرية

دراسة حالة طلاب السنة الرابعة بقسم اللغة الانجليزية بجامعة الجزائر

• المقدمة:

تعتبر خدمات أجهزة الإعلام التفاعلية و منها أل "أس أم أس" (SMS ,خدمة الرسالة القصيرة) من إحدى الاختراعات المهمة في التواصل . إن استعمال لغة SMS عبر الهواتف النقالة يعكس القدرة الإنسانية على الخلق و الإبداع وهو نمط لغوي جديد ذو قواعد و أنماط مميزة يشكل لغة جديدة غير شفوية ولا كتابية تسهل على الإنسان التواصل السريع و الفعال.

ظهر هذا النوع السريع للإرسال عبر الهاتف النقال في بداية التسعينات حيث ذكرت الأمم المتحدة أن أكثر من 60 % من سكان العالم أي حوالي 4.1 بليون شخص ، يستعملون الهواتف النقالة و أنه أكثر شعبية عند المراهقين ، لا سيما لكون النصوص القصيرة غير مكلفة وسهلة للاستعمال ، مما جعل هذا النوع يفوق استعمالات البريد الإلكتروني ومكالمات خط الهاتف الثابت.

من هذا المنظور ، تسعى هذه الدراسة إلى المساهمة في مجال اللغات الإعلامية التفاعلية ، من خلال تحليل ممارسات SMS من قبل طلبة اللغة الإنجليزية ، في قسم الإنجليزية (جامعة الجزائر) المتواجدين في وسط متعدد اللغات، حيث نعتقد بأن استعمال عدة لغات سيؤدي حتما إلى استعمالات مختلفة للغات المتحدث بها من قبل الطلبة وهذا ما سيؤثر على ممارستهم الاجتماعية واللغوية ل SMS. بالإضافة إلى ذلك، تهدف هذه الدراسة إلى التعرف على كمية و أنواع التغييرات اللغوية (Code switching) و استعمالاتها عند الذكور و الإناث المستعملين ل SMS.

• الإطار النظري للبحث:

بدأ الاهتمام في العقدين الأخيرين في عدة بلدان ب SMS كنمط جديد للتواصل من خلال استكشاف الخصائص اللغوية لهذه الوسيلة الجديدة، و في هذا الإطار، ركزت معظم الأبحاث على

استعمال SMS عند الشباب باعتبارهم أكثر المستعملين للرسائل القصيرة مقارنة مع البالغين و الأشخاص الأكبر سنا. ولقد أظهر تحليل البيانات اللغوية اختلافات بين الذكور و الإناث في أساليب الكتابة، فالإناث تفوق الذكور في كمية استعمال SMS في طبيعة الجمل والتركيبات اللغوية المعقدة للنصوص المنتجة . ولقد جاءت تفسيرات عديدة من دراسات أجريت في علم الاجتماع وعلم النفس الإدراكي و علم اللغة و الجنس، تؤكد أن الاختلافات الجنسية الظاهرة في رسائل SMS متوقعة جدا على أساس أن متغير الجنس عامل مهم في استعمال و اختيار اللغة و أرجعت ذلك إلى العوامل الاجتماعية والنفسية والرمزية التي تجعل النساء و الرجال يستعملون اللغة بشكل مختلف للتواصل.

ولقد أثرت هذه الاختلافات في استعمال SMS بين الجنسين حيث بينت الدراسات الاستعمال الكبير للرسائل القصيرة من قبل الإناث اللواتي يركزن في غالب الأحيان على تزويد التبادلات العاطفية و المحافظة على العلاقات الشخصية باستعمال جمل أطول و أكثر تعقيدا عكس الذكور الذين يركزون على استعمال رسائل ذات جمل قصيرة و عملية التي تميل إلى التعبير عن الواقع.

• طرح الإشكالية:

بناءا عليه، لاحظنا بأن أكثر الدراسات قد أنجزت في سياقات أحادية اللغة - حيث أن اللغة الأصلية هي المستعملة فقط -، أو سياقات ثنائية اللغة - باستعمال لغتين. فاللغة الأصلية تتمازج مع اللغة الإنجليزية كلغة ثانية-. ولقد بينت الدراسات التي شملت بلدان ثنائية اللغة مثل الكويت و جنوب إفريقيا و فنلندا و نيجيريا. المزج اللغوي الكبير بين الإنجليزية و اللغة الوطنية من قبل مستعملي SMS.

في الكويت على سبيل المثال، ذكر Haggan (2007) الاستعمال الكبير لدى مستعملي SMS للغة الإنجليزية بالإضافة إلى مزج بين الإنجليزية والعربية. بنفس الطريقة ، لاحظ Kasesniemi (2008) الاستعمال المماثل من قبل المستعملين الفنلنديين الذين يمزجون اللغة الفنلندية مع كلمات و تعابير من اللغات الأجنبية المستعملة في فنلندا، بالمقابل ذكر Chiluya(2008) ، أن مستعمل SMS

النيجيري يتفادى استعمال اللغة الأصلية بالكامل حتى في مسائلهم الشخصية مع تفضيل استعمال اللغة الإنجليزية في جميع الأحوال.

كشفت هذه النتائج أنه على الرغم من تواجد المتصلين في سياق ثنائي اللغات، فإن التغيرات اللغوية قد لا تحدث وذلك حينما يتبنى المستعملون لغة واحدة في نصوصهم على سبيل اختيار شخصي، وهذه الإستراتيجية في التواصل تستحق اهتماما أكثر من طرف الباحثين لإيجاد الأسباب العميقة لهذه السلوكيات اللغوية .

• أهداف البحث:

على ضوء ما ذكر أعلاه، و نظرا للأهمية المتزايدة لدراسة طبيعة الرسائل النصية القصيرة كظاهرة لغوية و اجتماعية ، فإن التحقيق في مجال SMS الذي يستهدف فهم محتويات و ميكانيزمات كتابة SMS ضمن سياق متعدد اللغات، يمثل مساهمة جدية في مجال البحث العلمي، علاوة على ذلك، يعتبر تحليلنا للغة SMS إضافة للجهود المبذولة سابقا مع العلم أن هذا التحليل يأخذ بعين الاعتبار عاملين أساسيين و هما الاختلافات بين الذكور و الإناث و التغيرات اللغوية عند كل جنس.

لهذا الغرض، فإن هدفنا الرئيسي هو تحليل السلوكيات اللغوية عند مستعملي SMS من خلال النظر إلى الممارسات و الاستعمالات اللغوية من ناحية مزج و تغير اللغات من جهة، و الاختيارات اللغوية من جهة أخرى.

• أسئلة البحث:

يسعى بحثنا إلى فهم طبيعة SMS و لإدراك هذه الغاية، تم طرح التساؤلات التالية:

1- هل طالبات اللغة الانجليزية يستعملن مزيج أكبر من اللغات بالمقارنة مع طلاب اللغة الانجليزية في نصوصهم القصيرة؟.

2- هل طالبات اللغة الإنجليزية يستعملن مزيجا أكبر من نوع « Extrasentential » و « Intrasentential » بالمقارنة مع طلاب اللغة الإنجليزية في نصوصهم القصيرة؟.

3- هل طالبات اللغة الإنجليزية يختلفن في اختياراتهن اللغوية بالمقارنة مع طلاب اللغة الإنجليزية، إن كان نعم، فكيف ذلك؟.

4- هل طالبات اللغة الإنجليزية يختلفن في أنماط المزج و اختيارات اللغة بالمقارنة مع طلاب اللغة الإنجليزية إن كان نعم. فلماذا ذلك؟.

• منهجية البحث:

يعتبر استعمال المنهج الاستطلاعي النوعي من بين الطرق المنهجية الأكثر ملائمة لموضوع بحثنا هذا. وذلك نظرا للطبيعة المعقدة و الجديدة لهذا الموضوع من جهة، ونظرا لمعرفتنا المحدودة للأنماط الجديدة للتواصل من جهة أخرى.

- المشاركون في الدراسة : لإنجاز هذا البحث، شارك 40 طالبا من قسم اللغة الإنجليزية لجامعة الجزائر بوزريعة , 40 طالبا ينتمون إلى السنة الرابعة للنظام الكلاسيكي، 20 منهم إناثا و 20 ذكورا. و تتضمن المجموعتان إناثا وذكورا يتحدثون باللغة العربية العامية (10 بنات و 10 ذكور منهم) و آخرون يتحدثون باللغة البربرية (10 بنات و 10 ذكور منهم). و اللغة العربية العامية و البربرية تعتبران اللغة الأم بالنسبة للمشاركين.

من المفيد أن نشير أن كل المشاركين يتقنون اللغة العربية الكلاسيكية التي تعتبر اللغة الرسمية في الجزائر و المستعملة في التعليم منذ الأطوار الأولى حتى المرحلة الثانوية. كما يجيد هؤلاء اللغة الفرنسية والإنجليزية كلغات أجنبية. ولقد عمدنا أخذ متغير اللغة الأم في بحثنا هذا و ذلك لأسباب ثلاثة هي:

1- إن أغلب الطلبة في قسم اللغة الإنجليزية شباب تتراوح أعمارهم من 22 إلى 28 سنة و يتكلمون كلا اللغتين فكان من الضروري تقديم عينة يمكنها تمثيل مجمل طلبة اللغة الإنجليزية.

2- كانت رغبتنا اكتشاف مدى تأثير اللغة الأم على السلوكيات اللغوية للمشاركين و أساليبهم التواصلية.

3- كان اهتمامنا منصبا على استعمال اللغة الإنجليزية في الرسائل القصيرة كنتيجة طبيعية لقدرتهم اللغوية على استعمال و التحكم في اللغات الأجنبية.

• منهجية تحليل البيانات:

إجراءات تحليل مدونة البحث: تم جمع مجموعة نصوص قصيرة من قبل الأربعة مشاركا و التي شكلت مدونة تحتوي على مجموع 120 رسالة قصيرة. كخطوة أولى عمدنا إلى تحليل محتوى الرسائل لتحديد كمية التغيرات اللغوية طبقا للجنس و لقد تبنت هذه الدراسة معايير رئيسية تمثلت في تصنيف نوعين من التغيرات اللغوية « Extrasentential » و « Intracentential »

يعرف نوع Intracentential بكل الأسماء و الأفعال و العبارات الاسمية و الفعلية و الجمل الكاملة المأخوذة من اللغات الأخرى و الدخيلة على اللغات الأم للمشاركين. أما نوع Extrasentential ، فإنه يتضمن فقط صيغ الهتاف و مختلف المصطلحات التعبيرية استنادا على هذين المعيارين ، كانت خطوتنا الثانية حساب عدد الجمل و الأسماء و الأفعال الدخيلة على اللغة الأم (اللغة العربية العامية و اللغة البربرية) في الرسائل القصيرة و ذلك للإجابة على سؤال بحثنا الأول المتعلق بكمية التغيرات اللغوية و ارتباطهما بمتغير الجنس.

للإجابة على سؤال بحثنا الثاني ، تم حساب عدد أنواع « Extrasentential »

و « Intracentential » على حد سواء لتحديد كمية و عدد الاستعمالات و ربطها بعامل الجنس لتحديد الاختلافات في الاستعمالات بين الذكور و الإناث أما فيما يتعلق بالسؤال الثالث المتمثل في تحديد الاختيارات اللغوية ، تم تحديد أصناف اللغات المستعملة في الرسائل القصيرة و حساب كل صنف طبقا لعدد حدوثها في الرسائل المختارة من قبل جنس لتمكيننا من اكتشاف اللغة الأكثر استعمالا بين الذكور و الإناث.

وبالنسبة للسؤال الرابع و المتعلق بأسباب هذه الخيارات فقد تم استعمال وثيقة استبيان

كوسيلة تمكننا من استكشاف و معرفة الأسباب المهمة في تحديد خيارات واستعمالات اللغات عند الطلبة

ألمتعددي اللغات. يحتوي الاستبيان على أسئلة مفتوحة قدمت لنا أجوبة متنوعة و عديدة بعد تصنيف وتلخيص كل الأجوبة حسب مضمون كل جملة مع تحديد و حساب عدد المشاركين في نفس الآراء ثم تمثيلها في جداول تحتوي على نسب مئوية لكل مجموعة.

• تحليل و مناقشة المعطيات و النتائج:

كما سبق الذكر، لقد تم تحديد إشكالية البحث و الإجابة على الأسئلة المطروحة باستخدام أداتين مهمتين و هما تحليل مضمون الرسائل القصيرة للإجابة على الأسئلة الثلاث الأولى بينما استعملنا أداة الاستبيان للإجابة على السؤال الرابع.

إن الإجابة على السؤال الأول كشف أنواع التغيرات اللغوية من قبل الذكور و الإناث. حيث أظهرت النتائج أن البنات يستعملن قدرا أكبر من نوع « Intrasentential » بالمقارنة مع الذكور . كما كشفت الدراسة أن كلا من الذكور و الإناث يستعملون بنفس الطريقة النوع الثاني من التغيرات اللغوية المتمثل في نوع « Extrasentential » مع استخدام نادر للكلمات التعبيرية و صيغ الهتاف المختلفة في رسائلهم القصيرة.

في مناقشتنا لهذه النتائج، فسرنا ذلك على أساس أن كلا من اللغة الشفوية و كتابة SMS قد يمثلان نمطين مختلفين حيث أن ردود الأفعال التلقائية التي تعبر عن الصيغ التعبيرية و الهتاف يستعملان في الخطاب الشفوي التلقائي أكثر منه في الخطاب الكتابي البحث.

بالإضافة إلى ذلك حاولنا كشف سبب كثرة استعمال اللغة للتعبير عن حاجيات الأفراد النفسية والاجتماعية. فالعديد من المشاركين كانوا على دراية واسعة بالدلالة الاجتماعية و الثقافية لكل لغة مما أدى إلى استعمال الطلبة نفس المصادر اللغوية لخلق هويتين فرديتين مختلفتين.

في السياق الجزائري، يلاحظ استعمال اللغة الفرنسية و الإنجليزية في هذا النوع من التواصل، فهذه اللغات تحمل دلالات رمزية كبيرة تشير إلى التعليم العالي و المنزلة الثقافية الرفيعة. لذلك فانه ليس من الخاطيء في مجتمع محافظ مثل الجزائر إيجاد محاولات من قبل النساء لتحدي هيمنة الرجال

بعرض كفاءات لغوية تفوق كفاءات الذكور و ذلك باستعمال ملحوظ للغات رقيقة مثل الإنجليزية و الفرنسية التي تعكس الهيمنة اللغوية للنساء على الرجال. زيادة على ذلك كشفت الدراسة بأن معظم الرسائل كتبت باللغة الإنجليزية كاختيار أول. ثم الفرنسية كاختيار ثاني و بعده مزيج من اللغة العربية العامية و اللغة الفرنسية. كما أظهرت الدراسة اختلافات بين الذكور و الإناث، فالإناث تميل أكثر من الذكور إلى استعمال اللغة الفرنسية بالإضافة إلى استعمال نادرة للغة العربية العامية و البربرية.

عند مناقشتنا هذه النتائج، تبين لنا بأن هذه الاختيارات اللغوية مبنية على أساس أن المشاركين استخدموا اللغة الإنجليزية وهو أفضل استعراض لهويتهم الاجتماعية كطلبة اللغة الإنجليزية التي أضحت تحتل مكانة ثقافية و اجتماعية مميزة.

أما فيما يخص استعمال اللغة الفرنسية ، فلقد أظهرت الدراسة المعمقة للنتائج بأن هذه الأخيرة أكثر شعبية بين تكلمي البربرية إناثا كانوا أو ذكورا مما جعلنا نؤكد بأن العوامل الثقافية و الاجتماعية قد يكون لها تأثير فعلي على اختيار لغة التواصل. بالمقابل فلقد أدى فحصنا للاختلافات داخل الجنس إلى اكتشاف أن المتكلمين باللغة العربية العامية ذكورا أو إناثا يفوقون نظائرهم المتحدثين بالبربرية ذكورا و إناثا في استعمال اللغة الإنجليزية. كما بينت النتائج بأن الذكور و الإناث المتكلمين باللغة البربرية يفوقون نظائرهم الذكور و الإناث المتكلمين للغة العربية العامية في استعمالهم للغة الفرنسية . أما فيما يتعلق باستعمال مزيج من اللغة الفرنسية و اللغة العربية العامية أظهرت النتائج أن هذا الاختيار شائع أكثر عند الذكور و الإناث المتحدثين باللغة العربية العامية منه عند الذكور و الإناث المتحدثين باللغة البربرية. كما ساهم التحليل في إبراز مميزات هامة ساعدت على فهم الطبيعة الاجتماعية لكتابة SMS التي تضمنت شكل الكتابة و الوظائف المستخدمة و المواضيع المعالجة و أهمية و مكانة المرسل إليهم في تحديد و اختيار لغة الكتابة .

من بين النتائج المهمة المتوصل إليها في هذا السياق، الشكل المكتوب للرسائل حيث وجدنا عددا قليلا جدا من المختصرات و الأشكال العامية و الشفوية التي تميز عادة رسائل الشباب ، فالرسائل

المكتوبة أظهرت درجة عالية من الشكلية التي كانت أقرب من الكتابي منه من الخطاب الشفوي فبدت نصوص الطلبة مثل كتابات الرسائل المتضمنة للافتتاحيات وعبارات الاختتام مع استخدام قليل جدا للأخطاء. إن هذا الوعي بشكل الكتابة ننسبه إلى إرادة شعورية أو لا شعورية للذكور و الإناث إلى إظهار قدرات لغوية من خلال استعمال اللغة الإنجليزية و الفرنسية حتى عند التواصل مع الأصدقاء و الزملاء و أفراد العائلة.

شملت الملاحظة الثانية الاستعمالات المختلفة للرسائل الأخيرة التي أظهرت نقاط تشابه عدة بين الذكور والإناث، فالذكور و الإناث يستعملون SMS لتنسيق نشاطات الحياة العادية و التعبير عن المشاعر و التعليق على الأخبار الجديدة و التحية عند المناسبات الخاصة و مناقشة أمور الدراسة بشكل عام.

أما فيما يخص المواضيع المتناولة في الرسائل ، أظهرت الدراسة أن الذكور و الإناث يستعملون الرسائل تقريبا على حد سواء لتنسيق و ترتيب اللقاءات ، لنقل الأخبار و التحية و تبادل التهاني في الأعياد و المناسبات الخاصة.

بالرغم من ذلك ، كشفت الدراسة عن بعض الاختلافات بين الإناث و الذكور في عدد الرسائل المستعملة للتعبير عن المشاعر و مناقشة أمور الدراسة و التعليق على الأحداث. فالبنات استعملن عدد أكبر من الرسائل بالمقارنة مع الذكور للتعبير عن المشاعر نحو الأصدقاء وأفراد العائلة بالإضافة إلى رسائل المتعلقة بالاستفسار عن قضايا الدراسة المتضمنة جداول التوقيت و محتويات الدروس و الامتحانات ، بالمقابل تفوق الذكور في عدد الرسائل التي استعملت بشكل رئيسي لطلب خدمات من الأصدقاء أو التعليق على الأحداث الرياضية.

كما أظهرت التحليلات الإضافية التي شملت المواضيع المطروحة في الرسائل القصيرة وجود سبعة مواضيع كشفت عنها البيانات إضافة إلى إظهار نقاط التشابه بين الجنسين حيث استعمل الطلبة نفس المواضيع عند المراسلة كما جاء استعمال اللغة الانجليزية والفرنسية حاضرا بكثافة عند كلا الجنسين

لتحدث عن العواطف والحياة الاجتماعية ومواضيع مشتركة مثل مشاكل الاتصال عبر الهاتف النقال . ولقد أثبتت البيانات كذلك اختلافات في استعمال اللغة الفرنسية من قبل الإناث أكثر من الذكور خاصة للتعبير عن المشاعر بينما يفضل الذكور استعمال اللغة الانجليزية ومزيجا من الفرنسية واللغة العامية للتحدث عن النشاطات الاجتماعية وتنظيم مباراة لكرة القدم أو مقابلة الأصدقاء .

زيادة على ذلك ، أظهرت الدراسة أن المرسل إليه هو عامل من بين العوامل البارزة في تحديد لغة التواصل بين المرسل والمرسل إليه فلقد انصب اهتمامنا في معرفة من كان الطلبة يرسلون وكيف كان لهؤلاء الدور في تقرير لغة التخاطب في الرسائل القصيرة في هذا السياق قمنا بتمييز ثلاثة أصناف من المرسل إليه وهم الأصدقاء، الزملاء، وأفراد العائلة. وقد تبين أن المستعملين سواء كانوا ذكورا أو إناثا يستعملون اللغة الانجليزية في غالب الأحيان كما تبين استعمال مزيج من اللغة العربية العامية والفرنسية للاتصال مع الأصدقاء. رغم ذلك بدت اللغة الفرنسية أكثر شعبية بين الإناث اللواتي استعملناها من نظائرهم الذكور لمخاطبة الأصدقاء ، الزملاء أو أفراد العائلة . هذه الخيارات بررت التحيز والرغبة في الاصطفاف إلى المجموعة المتميزة من طلبة اللغة الانجليزية ووعي المرسلين حول الخلفيات اللغوية للمرسل إليهم بحيث أظهرت النتائج . بأن عامل المرسل إليه لعب دورا مهما في تحديد الخيارات اللغوية و استعمالاتها من طرف الذكور و الإناث على حد سواء.

وأخيرا قمنا في الجزء الثاني من بحثنا بمناقشة معطيات الاستبيان، إذ يعتبر الاستبيان أداة بحث جوهرية تستعمل غالبا لتفسير الأسباب النفسية و الاجتماعية المتعلقة باستعمال و اختيارات اللغوية عند الجنسين. ففي الجزء الأول للاستبيان ، كشفت المعطيات بأن استعمال الرسائل القصيرة لم يكن الوسيلة المفضلة للاتصال عند الطلبة حيث فضل كل من الذكور و الإناث استعمال المكالمات الهاتفية بالإضافة إلى SMS في تفاعلاتهم بشكل رئيسي لأن كلا من الذكور و الإناث يبحثون عن اتصال حميمي إنساني و شفوي في حياتهم اليومية . كما بينت النتائج أن استعمال اللغات و تغييرها في نفس الجملة مع مزيج لغة أو لغتين يعتبر ممارسة عادية بين طلبة اللغة الإنجليزية الذين يستعملون اللغة في

الغالب لتسهيل التواصل بين المرسل و المرسل إليه من جهة. وتحسين مستواهم في اللغة الإنجليزية بممارستها عبر كتابة الرسائل القصيرة من جهة أخرى .

ولقد لوحظت كذلك اختلافات بين الذكور و الإناث بإبراز الأسباب المختلفة التي جعلت كلا المجموعتين تستعمل اللغات بشكل مختلف في رسائلها. فبينما كانت اللغة الفرنسية أكثر شعبية بين الإناث، كانت اللغة الإنجليزية أكثر شعبية عند الذكور على العموم. إن تفضيل استعمال اللغة الفرنسية يرجع أساسا إلى كونها سهلة ومفهومة من طرف الجميع، على النقيض من ذلك. فأن طلبة اللغة الإنجليزية يفضلون استعمال هذه اللغة لتحسين مستواهم اللغوي بممارسة عبر كتابة الرسائل القصيرة.

بعد التمعن في هذه الأسباب، كان اهتمامنا هو النظر في المثيلات الذهنية للغات عند مستعملي الرسائل القصيرة و مدى تأثيرها على الاختيارات و الإستعمالات اللغوية . كشفت البيانات بأن الفرنسية عند الإناث تمثل اللغة المفضلة لديهن لأنهن متمكنات من اللغة بشكل جيد. بالمقابل نظر الذكور إلى اللغة الفرنسية على أنها لغة كأى من اللغات و في بعض الأحيان لا تعني لهم شيئا أو إنها تعني سلبيا لغة الاستعمار و المستعمرين بالتباين ، نظر الذكور إلى اللغة الإنجليزية على أنها لغة التمرس و لغة عالمية و لغة الحضارة والتكنولوجيا أما الإناث. فتعتبر الإنجليزية لغتهم المفضلة بالإضافة إلى اللغة الفرنسية.

أفضت هذه الدراسة إلى عدم التكافؤ في التصورات للغة بين الذكور و الإناث ، بدت الإناث أكثر اهتماما بالتواصل اثر استعمال كل من الفرنسية و الإنجليزية للحفاظ على العلاقات الاجتماعية . أما الذكور فاهتمامهم منصب لتحسين مستواهم اللغوي و التواصل بين الأصدقاء مع إظهار ميولاتهم للاصطفاف إلى صنف الطلاب المثقفين.

بدا بديهيها إذا أن كلا من الذكور و الإناث يشتركون في عملية بناء هويتهم الاجتماعية عن طريق اختياراتهم و استعمالاتهم الواعية أو الغير واعية للغات.

• الخاتمة:

ساعدت نتائج هذا البحث على فهم السلوكيات اللغوية لمستعملي الرسائل القصيرة في الأوساط المتعددة اللغات عبر الكشف عن نقاط الاختلاف و التشابه بين الذكور و الإناث في اختياراتهم لأنماط التغييرات اللغوية واستعمال اللغات في المراسلة عبر الهاتف النقال.

حيث أظهرت المعطيات أن الإناث يستعملن نوع « Intrasentential » وهو النوع الأكثر شيوعا في الرسائل القصيرة بالإضافة إلى استعمال كل من الذكور و الإناث لنوع « Extrasentential » و كان استعماله استعمالا نادرا في نصوصهم القصيرة.

بالإضافة ، بينت النتائج الاستعمال الكبير للغة الإنجليزية من قبل كلا من الذكور و الإناث مع توضيح الفروق بين الجنسين في استعمال اللغات وأسباب استعمالها حيث أظهرت الدراسة بأن اللغة الفرنسية كانت أكثر شعبية عند الإناث التي استعملتها في الغالب لإبقاء العلاقات الاجتماعية بينما مال الذكور إلى تقادي اللغة الفرنسية باستعمال اللغة الإنجليزية لأسباب عملية و ثقافية ونفسية. في هذا الإطار ، لوحظ بأن الخلفيات اللغوية و الثقافية للمرسل حاسمة في تقرير اختيارات اللغة مع الإناث و الذكور المتحدثين باللغة الأمازيغية و الذكور و الإناث المتحدثين باللغة العربية العامية.