

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH  
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ABOUELKACEM SAADALLAH  
FACULTY OF FOREIGN LANGUAGES  
DEPARTMENT OF ENGLISH



## **SMS Texting Lexical Deviations and Gender in an EFL Academic Context**

The Case of Licence and Master 1/2 Students at the English  
Department of the University M'hamed Bougara, Boumerdes

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and Didactics*

*Presented by: Achili Noura*

### **Board of Examiners:**

Prof. Bensafi Zoulikha, University of Algiers 2	Chair
Prof. Hamitouche Fatiha, University of Algiers 2	Supervisor
Prof. Nedjai-Mebtouche Fatima Zohra, Higher School of Fine Arts, Algiers	Examiner
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Dr. Bouchama-Sari Ahmed Fiziya, University of Algiers 2	Examiner



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Achili Noura

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## **DEDICATION**

To my beloved mother, sisters, and brother

To my family, husband and children, for enduring hard and stressful moments while making this project through and for providing me with moral support and constant encouragement that made the dream come true.

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## LIST OF ABBREVIATIONS

ARPT	Autorité de Régulation des Postes et Télécommunications
ARPCE	Autorité de Régulation de la Poste et des Communications Electroniques
CMC	Computer-Mediated Communication
EFL	English as a Foreign Language
Freq	Frequency
Gp diff	Group differences
LMD	License, Master, Doctorate
L1	First language
M	Mean
Non-conv	Non-conventional
NS	Non-significant
ONS	Office National des Statistiques
S	Significant
SMS	Short Messaging Service
SD	Standard Deviation

## ABSTRACT

The current study aimed at exploring texters' lexical deviations in an EFL academic context. A mixed-method that integrated both a corpus-based methodology and a semi-structured questionnaire was implemented to achieve a complete view on texting linguistic and sociolinguistic features. The data covered a corpus of 808 text messages in English, collected from young Algerian EFL students attending the five educational levels at the Department of English of the University of Boumerdes. The examination of the corpus focused on the lexical deviated forms and posed the questions of the most deviated forms, the most prevalent types of deviations in light of Lyddy et al (2013) categorisation, and variation in the use of deviation types according to the students' gender and academic level. This step was complemented with a questionnaire to look into the texters' perceptions and drives to account for their texting motivations. In this light, five research questions were raised along with two null hypotheses. The examination of the corpus showed that 14.96 % of word content used nonstandard spelling, the most frequently occurring category involving omission of capital letters. The latter was followed by letter/number homophones, contractions, misspellings, and phonetic/non-conventional spellings. Less occurring types were accent stylisation, other clippings (or end clippings), and initialisms which were followed by shortenings, onomatopoeic/ exclamatory forms, G clippings, missed punctuation, and last, semantically unrecoverable types of deviation. The results also highlighted the insignificant role of gender in the use of deviant forms as both genders text almost similarly. Regarding the students' academic level impact on the use of deviant forms, the data showed a noted increased use of deviations with the students' language proficiency as Master students were revealed as the most prolific users of deviations. Despite the noted discrepancies in the findings across levels, the statistical calculation displayed an insignificant relationship between the students' instructional level and the use of nonstandard forms. In conjunction with the corpus analysis, the questionnaire highlighted the students' inclination to employ the deviation types for language economy, brevity, and phonological approximation, on the one hand, and their contextual awareness and accommodation to the communicative circumstances, on the other hand. At the gender level, both similarities and differences were spotted. While the similarities reported the intentional analogous use of texting language for brevity and language economy reasons, differences highlighted females' prominent inclination to text more significantly than males to maintain social relationships. As concerns formal vs. informal language use, the data revealed that females were more inclined to informal language employment when texting in different languages than English whereas texting in the English language underscored their higher predisposition to formal language use when compared to male texters.

**Key words:** SMS Texting; Lexical deviations; Gender differences; EFL academic context; Students' academic level; Corpus linguistics; Corpus-based approach.

# GENERAL INTRODUCTION

## GENERAL INTRODUCTION

Over the past two decades, SMS texting has succeeded to foster its presence as a mainstream communicative practice in virtually all social spheres. With the rapid advancement in mobile phone technologies, cell phone users have been offered elective opportunities to communicate differently in their everyday life interactions. In a very unanticipated way, SMS texting use resulted in a typical mode of interaction that transformed people's conventional uses of both language and communication.

Given the early technical restrictions of cell phones which limited the length of messages to 160 characters, texters' concern over communicating with minimum words led to the proliferation of unconventional lexical and syntactic forms that framed a new writing mode of communication. Steadily, this newly-embraced interactive behaviour enables users to revolt against the standard rules of language, and eventually, creates unusual linguistic forms acceptable amongst texters (Ong'onda et al, 2010a; 2011; Ling, 2005, 2007).

From the original employments of SMS texts, texting was represented by the public and media spheres mainly, as the continuing assault of technology on formal written languages which is announcing the doom of conventional languages (Lee, 2002). SMS writing was accused of ruining standard languages by portraying messaging as penmanship for illiterates, drab shrink talk comprehensible only to initiates who are savaging sentences and raping vocabulary (Sutherland, 2002; Humpherys, 2000; Lee, 2002).

Thus, the etymological characteristics represented namely by abbreviations, shortenings and emoticons, amongst other linguistic features, generated considerable public and academic debates on the disastrous vs. beneficial impact of texting on the use of standard languages . Yet, as the negative effect of texting was not theoretically and empirically grounded, scholars began contending for the need to considering texting language, not as an impure and "chaotic language.....but more likely as a new global vernacular" (Velghe, 2011, p. 3) with its own norms and modes that deserve extensive exploration and examination (Crystal, 2001, 2008; Velghe, 2011; Shortis, 2001, 2007a, 2007b).

Consequently, growing academic interest started in the late 1990s with scholars exploring texting language distinctive facets. While scholars' early concern over the use of abbreviations, shortenings and emoticons amongst youngsters was reported, subsequent and recent research have expanded to cover multi-dimensional approaches including grammatical, discursal and pragmatic aspects related to gender, texting styles, age, and many other features. In this line, a diffuse body of research related to SMS texting has emerged. In Algeria, however, the academic interest in SMS language remains exceptionally meagre and rare.

### **The Background of the Study**

SMS texting expansion has been associated with cell phones expansive development. Mobile era initiation is dated back to the 1940s when the very first endeavour to utilise portable phones was made by researchers working on car phones first, and on mobile phones years later, in 1982 (Al-khatib & Sabbah, 2008, p.37). Despite the early availability of the mobile phones, Short Message Service (SMS) is recent and its use gained momentum only from 1998 onward (Crystal, 2001).

The 2000s saw a critical advancement in the use of mobile phone technologies worldwide. In Algeria, more specifically, the mobile phone technology accessibility and popularity can be noted through the considerable reported number of mobile telephony lines. The ARPT<sup>1</sup> 2017 annual report gave an account of 45.85 million mobile phone lines for 41.7 million inhabitants in 2017, surpassing , hence, the number of the inhabitants, on the one hand, and the reported number of 4.05 million fixed-line holders, on the other hand (www.arpt.dz, 2017 Annual Report, p.18).

The reported cell phone number covers subscribers to the three official telephony operators in Algeria namely ATM (Algerie Telecom Mobile/ Mobilis, an Algerian operator), OTA (ORASCOM Telecom Algerie/Djezzy, an Egyptian operator) and WTA (Wataniya Telecom Algerie /Ooreedo, a Qatari operator). Both OTA and ATM started officially servicing at the beginning of 2002, whereas WTA entered the mobile

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<sup>1</sup>Autorité de Regulation de la Poste et des Telecommunications, renamed ARPCE in 2017, Autorité de Regulation de la Poste et des Communications Electroniques

telephony services market in 2004. The three operators offered prepaid and postpaid services including calls, SMS/MMS, and voice messages services, amongst others, with varying offers and charges.

Regarding the mobile phone users' profile, a national survey conducted in 2003 by ARTP on mobile telephony users of OTA and ATM then, confirmed the extensive use of mobile telephony mostly (83%) by businessmen (28%), high-ranking officials (27%), officials (15%), and liberal professionals (13%) (www.arpt.dz, p.10). Besides, gender differences were highlighted as the majority of the reported users were males (86% of males and only 14% of females) that were ranging in age from 30 to 39 years old (www.arpt.dz, pp.7-8).

Interestingly enough, a younger population, referred to as the students' category in the survey, were rare users of the cell telephony (4%). The Algerian youngsters' timid adoption of the mobile technology can be explained, firstly, by way of the financial dependency of this latter, compared to the first surveyed working categories, and secondly, the operators' early costly services which seem now not to be affordable for the non-working categories namely students, housewives and retired people, as shown in the survey (p.10). However, the introduction of WTA as a third operator in 2004 marked the beginning of a noted competitive era in the field. This resulted in growing offers of more cost-effective and exceptionally basic mobile phone devices which succeeded to shift the mobile telephony use conception from 'the rich man's toy technology' (Abdilova, 2011, p. 104) to a public and mainstream technology accessible to all.

Years after 2004, the mobile telephony services growth promoted SMS use through easy access and attractive commercial pricing strategies that made SMS texting affordable to the public. While considering the three operators SMS pricing offers (ARTP, Observatoire des tarifs, 2004 and 2005), SMS messages are, by far, less costly than phone calls. The three operators are supplying SMS services for nearly 5 Algerian dinars per message, which is half the proposed charge of phone calls amongst the three operators. Cheaper SMS offers are supplied by ATM/Mobilis which is proposing local SMSs for 1.4 dinar in her WinPro/ Mobilis service which are destined to companies and organisations (www.mobilis.dz, 2019).

Very indicative of the SMS expansion and popularity is also the number of messages reported by ARTP in the 2009 annual report. In 2009, ARTP gave an account of 1.9 billion messages including the three official mobile operators. The reported overall number includes 1.09 billion messages sent and received within the same operator (Intra-reseau /on-net), 407 million of received messages and 408 million of sent messages to different operators (off-net) (ARTP Observatory, 2009 annual report, p.5). This particularly impressive number of 1.9 billion messages is indicating the substantial widespread of SMS texting as a new dominating means of communication. A more recent account of the SMS use amongst mobile users could have been more significant and enlightening. Unfortunately, all attempts to obtain updated statistics or information about SMS traffic amongst users, was made impossible.

The contacted people in charge of the commercial and public communication parts of the telecommunication market seemed to agree on the same commercial strategy. This latter consists of keeping highly confidential the data, on SMS traffic mainly, either by ARPT communication services or the operators' websites and services. Nonetheless, all the above-cited data disclose the important place held by SMS texting in people's everyday life communication. More importantly, SMS significance is felt in its remarkable contribution to bringing about a unique and widespread mode of communication which was clearly announcing the birth of a new language that is inherent to SMS texting use.

### **The Rationale of the Study**

Given the early mobile particular screen interface, SMS users were likely motivated to use shortenings and different abbreviated forms. This was stimulated by way of the initially-proposed mobile model devices which consisted of a limited editing space that is confining texters to 160 characters per message. The users of messages, at that point, were not allowed more than the required number of characters, which possibly made the recourse to abbreviated patterns much more frequent.

SMS texting took a momentous innovative leap with the introduction of smartphones. By supplanting the traditional keypad type with a more sophisticated and proficient interface, smartphone keypads are replaced by computer-like boards that

display letters autonomously so that letter typing is facilitated. Besides, one recently introduced facility resides in suppressing the 160 character limitation. This gives texters extra freedom and flexibility in composing longer and more complex SMS texts.

As previously stated, with the gained notoriety of SMS texting amongst people worldwide, texting steadily set up itself as an exceptional language that attracted distinctive scholarly attention. This academic interest fuelled a considerable body of research related to SMS texting properties. Issues such as textual complexity, syntax, punctuation as well as abbreviation have been covered (Anis, 2007; Bush, 2005; Crystal, 2001, 2006; Doring, 2002; Bieswanger, 2007; Grinter & Eldridge, 2001; Hard af Segerstad, 2002, 2005a, 2005b; Ong'onda et al, 2009; Ong'onda et al, 2010a, 2010b; Shortis, 2001, 2007a, 2007b; Thurlow & Brown, 2003). Eminently, one of the foremost researchers' focal points has been the examination of the validity of the stereotyped presumptions of messages as being collections of abbreviated and deviant forms.

Briefly presented here (as further studies shall be presented in the review of literature chapter), most scholars confirmed the special employment of vocabulary, punctuation and syntactic structures, but not in the publically-perceived and exaggerated proportions. Indeed, several reported studies revealed the scanty and inconsequential use of deviated forms in messaging (Farina & Lyddy, 2011; Crystal, 2001, 2008a, 2008b). In that manner, scholars started reconsidering SMS texting issue by varying methodologies and tools that integrate multiple variables for a better coverage of the topic.

Evidence for SMS texting complexity came also out of studies on language variation in messages which showed notable incongruities between male and female texters. Concurrently, numerous works displayed the heavy use of texting by girls mainly. Female texters frequently put more emphasis on emotional exchanges and inter-personal relations maintenance by utilising longer and more syntactically complex sentences. On the other hand, male users, in general, place greater emphasis on speed with messages that tend to be brief, informative, practical and facts-oriented (Kasesniemi, 2003; Ling, 2005).

Overall, most related studies on SMS texting display a noted variety in the addressed issues and approaches in various countries and cultures. Yet, exceptionally little reference to the Algerian context was observed while reviewing the SMS studies literature. Besides, despite the substantial body of research on texters' linguistic properties from its various facets, the existing investigations focused on messaging in texters' first language (L1 here after) where very little concern over texting in English as a Foreign Language (EFL here after) either in Algeria or western countries was noted. Shortly, it is against this backdrop that the present study is suggested.

### **The Purpose of the Study**

The current study has been stimulated by the noted importance of SMS texting use in both public spheres and western academic agendas. It is intended as a contribution to efforts to cover the subject of SMS texting from a different perspective as most reported conclusions on the topic involved mostly native users of messaging. We believe, in fact, that tackling the issue from an EFL academic context can prompt a new and different understanding of texting, on the one hand, and stimulate future studies in the Algerian and western research areas, on the other hand.

By exploring EFL texters' lexical deviations from the Standard English language, the study aims to describe features which characterise texting as a language variety in the Algerian students' messages created in the English language, and account for the variation in use according to their gender and academic level. Gender and language proficiency have been placed in the centre of this study to fill an additional noted gap in research. Most overviewed studies missed to account for both variables namely in EFL academic contexts in both Algerian and western research. Thus, by looking closely at lexical deviation behaviours from gender and language proficiency angles, we wish to distinguish significant highlights of SMS language that are not seen, so far, in the reported studies. Besides, distinguishing conceivable lexical deviations utilised by EFL texters may inform about possible patterns inherent to SMS writing in EFL contexts that might be significantly different from naturalistic contexts.

In addition to the linguistic approach adopted throughout the data investigation, attempts to look beyond the word spelling variation are made by exploring texters'

sociolinguistic and psychological perceptions and reasons for texting. By doing so, more knowledge can be gained through the adoption of a multidisciplinary perspective which has the acknowledged benefit of portraying the finest details of complex issues in both linguistic and social sciences research.

More importantly, this study is primarily a corpus-based study which differs in three distinct ways from the exceptionally few studies reported on texting in an EFL academic context. Firstly, it differs at the methodological level by implementing a quantitative approach that is based on a large corpus of 808 messages. This significantly contrasts with the most exploratory-type of studies in the literature that are based on small-size corpora. Secondly, at the sociolinguistic level by integrating gender as a variable that will bring more understanding through the sociolinguistic interpretation of the linguistic deviations, and thirdly, at the psychological level, by revealing the crucial reasons for texting practices, in general, and across genders, in particular.

Henceforth, four major methodological steps are assigned to the current study to attain the stated purposes. The primary step concerns the identification and codification of all the lexical deviations found in the students' messages. The second step deals with male and female students' distinctive lexical deviations by comparing their lexical deviation similarities and differences. The third addresses the distinction of the identified deviations in terms of the students' academic level to account for the plausible effect of the instructional level on texting deviations. The fourth and final step seeks to uncover the texting reasons that triggered off these deviations and examine the possible differences and similarities in terms of males and females' perceptions and practices.

### **The Research Questions and Hypotheses**

The study at stake seeks to reach the above-mentioned objectives by asking five research questions. The raised questions are as follows:

1. What are the lexical components of Standard English language that are deviated in EFL students' SMS texts?
2. Do the deviations differ according to Gender? if yes, how?

3. Do the deviations differ according to the students' academic level?, if yes, how?
4. How do EFL students perceive and use messaging?
5. Do EFL male and female texters differ in texting perceptions and use?

With reference to the second and third research questions mentioned above, two null hypotheses are adjoined to confirm or reject gender and instructional level effect on language deviation.

Ho 1: There is no relationship between the EFL students' gender and the use of texting language deviations.

Ho 2: There is no relationship between the EFL students' academic level and the use of texting language deviations.

Briefly presented here (as more details shall be apparent in the subsequent methodology chapter), the first question is raised to uncover the lexical deviations in students' messages composed in the English language. This is carried out to find out conceivable regularities in linguistic deviation behaviours so that deviation rules can be drawn. Furthermore, the sociolinguistic variation approach is utilised to clarify the reasons of the emergence of these aspects in SMS language by taking into consideration, more specifically, male and female categories which are addressed in the second research question. Looking into the disparities and likenesses that exist between the texting practices among the two genders can add valuable insights into gender impact on texting.

For more empirical considerations, hypothesis one is adjoined to question two to find statistical evidence on the effect of gender on texting language construction. By looking throughout the literature on the topic, a growing dissatisfaction with most conclusions on the topic was felt among scholars in the field as most works were based on exploratory types of research and case studies which bear rare empirical evidence on the issue. Thus, forming a null hypothesis, that is *there is no relationship between gender and the use of texting language deviation*, is motivated by our need to build the present study conclusions on more objective and empirical grounds by adopting a

correlational type of research that will assess the impact of the gender variable on the language deviation behaviour.

One additional concern that deals with the effect of students' level on their lexical deviating behaviour is raised in the third research question. By including the students' English academic level, possible correlations between students' language mastery and deviation are sought. By assuming that deviation high occurrence is related to students' poor English language, this last can represent an interesting research route to uncover texting practices in light of language command. Here again, a second hypothesis is appended to this question in an attempt to bring more statistical evidence to the impact of language proficiency on the deviation behaviour. By supposing absence of correlation between the two, the hypothesis intent is challenging former investigations on the topic which presented exceptionally disputed conclusions for methodological considerations. Also, given the very nature of the present investigation context and population, starting with a null relationship between the two variables is deemed crucial for objectivity sake.

The main concern of the fourth question is revealing the psychological drives in terms of texters' perceptions and uses. By understanding the EFL students' driving reasons for texting and modifying language, valuable light can be thrown on texting mechanisms in terms of perceptions and motivations. This complementary step is highly needed to better appreciate the corpus analysis of the data, provided the view of the text producers to gain more depth on the topic. The fifth and last question addresses the issue of gendered similarities and differences in terms of perceptions and use. This is chiefly initiated to explore the foremost covered parts of SMS texting that are rendered visible by collecting the texters' views on texting, in general, and differences in perceptions and use among male and female texters, in particular.

### **The Research Methodology**

With the perspective to answer the aforementioned questions and confirm or reject the hypotheses previously established, a mixed-method design is implemented. The ultimate aim of adopting a mixed-method framework is gaining maximum insight into the lexical deviations in EFL students' text messages through the analysis of a

corpus of 808 messages and sub-corpora created according to the students' gender and academic level. The corpora analysis which represents the quantitative part of the methodological design is intended to answer the three research questions mentioned earlier. The latter is completed with a semi-structured questionnaire, which represents the qualitative part of the study, to answer the two remained questions, and eventually unveil the students' texting perceptions and drives and their variation across gender.

Conducting a corpus-based study on texting language could have been realised by limiting the analysis to the quantitative method only; nevertheless, supplementing the study with the use of a questionnaire as a qualitative tool was necessary to compensate for the numerical representation of the data provided by the quantitative approach. It is firmly believed that varying data and research methods would not only enrich the study but would also help in satisfactorily answering the questions and corroborating the findings.

### **The Significance of the Study**

The implications of this study for research in Algeria and other countries are significant in several ways. In terms of research in Algeria, dealing with SMS texting from linguistic and sociolinguistic angles will help to inform research efforts on issues of digital language use by providing a more comprehensible picture of its working process and shaping elements. Likewise, the study can be considered as a fine start to other researchers who might be interested in building on the provided corpus to formulate additional and new research inquiries and hypotheses.

Worldwide, this research is significant as it provides valuable insights into foreign language users of English while texting. By considering texting from totally different angles, namely academic and gender, this study can potentially trigger off similar or different studies based on the provided corpus. Examining texting practices, for example, from native/non-native language users' perspectives can certainly foster new ways of enhancing our knowledge and understanding of the complex nature of SMS texting.

As previously mentioned, the thesis first and foremost intention is stimulating future studies on the topic, basically in the Algerian setting. Given the significance of

the subject, studies endorsing multidisciplinary approaches based on large corpora are needful. The contention is then put forward for further similar studies in the light of the one presented here to unravel texting practices from diverse and singular scopes. In the same perspective, in achieving the aims of the study, the thesis can pave the way for further research by exploring and outlining the benefits of a corpus-based approach to the study of language use and variation.

### **The Limitations of the Study**

There are several limitations that should be considered in the present study. Perhaps the most important one is the hard access to up-dated and recent statistics on SMS use, given the high confidentiality of the data related to the telephony market in Algeria. Another limitation concerns the biased corpus of this study as the messages have been re-edited by the students and possible alterations could have been made by the texters themselves. Direct access to students' messages is often a major problem for most researchers. Yet, efforts to keep messages language authenticity were made by urging the students to keep the texts original form while reporting their messages.

Additional limitations of this research are the case study type of research and generalisability of the results. Both can be viewed as one generating the other as case studies, by definition, deal with definite individuals within specific contexts and, therefore, no possible generalisation of the results to other individuals from different contexts can be made. Because this study uses convenient sampling involving EFL students, the results, hence, cannot be generalised to native language users or other academic settings.

Nevertheless, several attempts to vigorously control every mentioned variable are made through a full description and presentation of the methodological framework and components. By providing important research directions and raising essential questions, this investigation may provide a potential approach and instrumentation for developing a more complete understanding of digital language use and divide issues. Besides, varying instruments in the present study will allow for triangulation from various points of view and perspectives, thus allowing for more validity and reliability in the analysis and interpretation of the findings.

## **The Structure of the Dissertation**

This thesis is divided into two major parts, the theoretical part and the empirical one. As far as the first part is concerned, chapter one and two are devoted to the theoretical groundings of the present work. The first chapter is divided into three main sections. The first gives a brief overview of SMS texting literature and highlights the various inquiry subjects and research directions. The outlining of the main research starting points and the evolution of the major concerns in the field was a necessary step to clarify the major trends and standpoints in SMS texting studies over time and across countries.

Parallel to that, the second section provides a brief account of SMS texting in connection with gender, with a particular reference to findings and conclusions of some research studies. The third and last section covers research concerns and studies conducted in Algeria. A reference to the existing literature on the topic aims at drawing on a more specific view on the research state and interests when dealing with SMS studies. The main theoretical objective of the three sections is relating the present work to a broader research perspective which is essential in shaping the significance of the current investigation. Hence, in light of the reported research conclusions, the relevance of this work is drawn by attempting to fill some gaps within the related areas.

Chapter two is sub-divided into two sections as well. The first considers the distinctive nature of texting language based on the most discussed issues in the field. Texting distinguishing features are presented in conjunction with the issues of conventional vs. unconventional nature along with the comprehension of messages and the texting sociological and psychological drives. Additionally, section two covers the major benefits and challenges in using corpus-based approaches in SMS texting studies. The section traces the methodological considerations required in any corpus-based investigation through the application of basic requirements to attain an accurate corpus-based study. Accordingly, aspects of sample size, sample representation, balance, and annotation, amongst other features, are discussed.

As concerns the practical part, chapter three, four and five form the empirical grounding framework of the study. In the third chapter, a detailed description of the

methodological frame and the research strategies used to answer the research questions are presented. The need for a corpus-based study, combined with a questionnaire, is justified by the felt necessity to initiate studies based on large corpora, on the one hand, and draw insights on the human side of texting by using a questionnaire, on the other hand. Data gathered from both tools will be scrutinised quantitatively and qualitatively to gather rich and empirical data. Besides, data collection procedures and challenges confronted while compiling the data to form up the study corpus and the confinements experienced are reported and explained.

Chapter four covers the analytical part of the investigation by presenting the corpus findings. The chapter is divided into three main sections. The first one reports the presentation and analysis of the findings related to the general corpus deviations to answer the first research question. The second section deals with the presentation and analysis of the data according to gender and aims at answering the second research question. The third and last section covers the presentation and analysis of the data regarding the students' academic level in an attempt to answer the third research question.

The fifth chapter is devoted to the presentation and discussion of the results of the questionnaire. This latter comprises two complementary sections. By targeting students' general texting practices and perceptions in the first section, basic and general features that foster the students' texting practices are sought to bring more profundity to the investigation. The second section tackles more specifically gender differences in the reported practices, perceptions and use. The data collected and examined will serve to answer the fourth and fifth questions of the study.

Finally, the concluding part of the dissertation is the general conclusion. This part provides a summary of the conclusions and contribution to the field of SMS studies, in general, and Algerian research field, in particular. Additional limitations are provided along with future directions to open up the field to more research avenues and scopes.

PART ONE  
THEORETICAL FOUNDINGS

# CHAPTER ONE

## SMS TEXTING TRENDS, GENDER, AND SMS TEXTING STUDIES IN ALGERIA

### 1.0 Introduction

Texting via cell phones encompassed within the more specific labelling of Computer-Mediated Communication (CMC, hereafter). This latter is used as an umbrella term to refer to all kinds of communication delivered by utilising electronic or digital support or devices, between one and a group of participants in the interaction. As such, the term does not only incorporate communication employing the Internet as it is the case with emailing, chat rooms exchanges and instant messages; it integrates SMS texting through cell phones as well (Crystal, 2009).

Despite the notable popularity of SMS texting in the public spheres, academic interest in the topic was slow to follow as the first scholarly endeavours were geared towards examining the Internet language. By scrutinising email texts and the language of chat groups, Crystal's (2009) pioneering work on digital languages highlighted the peculiar use of abbreviations and emoticons among other features. CMC language, then, has been distinguished as a combined mode of communication that integrates both spoken and written characteristics.

This unique "third medium" (Dorleijn & Nortier, 2009, p.129) paved the way to several researchers' future investigations on other CMC digital channels (Crystal, 2008; Beiswenger & Storrer, 2008; Plester et al, 2009; Powell & Dixon, 2011; Thurlow & Brown, 2003). In an attempt to disclose further CMC language distinguishing features, succeeding studies have extended to cover Instant messaging language, Social media communication use through Facebook, Twitter, Instagram, and SMS texting language.

With the perspective to draw a comprehensible account of SMS texting studies and concerns, this chapter starts by covering the main terminological concepts that will serve as the main operational definitions the present study is grounded on. The chapter is subdivided into three focal sections. The first begins with a brief account of the major current trends noticed in the literature. This is followed by the second section

that presents a summary of SMS studies in connection to gender. Lastly, the chapter is completed with a third section which reports SMS study directions and concerns in Algeria more specifically. Clearly, a reference to some of the principal works on SMS messaging and research directions is highly required to properly cover the subject, and eventually, enhance the present study significance by illuminating the different facets of the topic.

### **1.1 SMS Texting: Definition and Terminology**

The term SMS commonly refers to the brief typed messages using the Short Message Service (SMS) of mobile/cell phones, Personal Digital Assistants (PDAs), Smartphones or Web browsers (Thurlow & Poff, 2011). As previously stated, SMS texting is defined as a mode of communication that is covered within Computer-Mediated Communication (CMC). This last-mentioned is characterised in terms of two basic properties namely synchronous and asynchronous CMC (Crystal, 2001, p.11). While synchronous communication occurs in real-time, as it is the case with online chats or Instant messaging, asynchronous CMC type occurs in postponed time as in cases of SMS and e-mails messages whereby the response can be delayed for an unlimited period of time (Hard af Segerstad, 2002; Baron et al, 2005).

The term SMS is also utilised by academia to refer to both the medium and the text in numerous western works. Some terms are suggested to portray the language of texting and, amongst these, we can find *textspeak/texting* (Crystal, 2008), *digitalk* (Johnson, 2012), *textese* (Farina & Lyddy, 2011), *phone shorthand* (Sutherland, 2002), *textism* (Lyddy et al, 2013), and *Txt* (Shortis, 2007a). In the current study, the term *SMS*, *text* and *message* are preferred and used interchangeably to refer to the single-text message, while the composition of messages is interchangeably referred to as *texting* and *messaging*. Users of texting are labelled *texters* in all instances of the present work. Besides, the terms *Text messaging*, *SMS messaging* and *Texting* are used interchangeably to refer to both the medium and the language variety.

Moreover, *texting practices* and *texting behaviours* are also used similarly in the study to refer to the texters' etymological productions and composition. The concepts of *deviation*, *alteration*, and *modification* are used as synonyms here to mean all the

non-conventional or non-standard words of language that do not comply with the lexical norms or rules of the standard language. Further concepts which are widely used in this work are *forms*, *units*, *components*, and *elements* which are interchangeably used to refer to the English language lexemes, to use Crystal's (2003) terminology, implying words or groups of words that hold meaning in the English language.

More peculiar to this study is the use of the word *Lexism* (plural *Lexisms*) to refer to the existing deviated forms, be they words, phrases or full sentences. The word *Lexism* is coined here after Crystal's (2003) general reference to words by lexemes. The intention here is not to add to the already-existing list of terms but suggesting the closest terminology which, in our sense, mirrors best the lexical aspects that are both specific to texting language and instances already existing in the Standard English language, and the spoken and informal use of language. It is within the texters' eclectic use of language perspective that the term is construed and positioned in this study.

## **1.2 Section One: SMS Texting Current Trends**

Despite the labelled characteristic of SMS texting as a CMC mode of communication, the present study is etymologically encompassed within the field of Internet linguistics. Initially introduced by Crystal (2005), Internet linguistics is a newly-acclaimed field of linguistics that integrates the diverse linguistic forms that divert from the conventional forms of the English language. In Crystal's words (2005), Internet linguistics is described as "a synchronic analysis of language in all areas of Internet activity, including email, the various kinds of chat-room and games interaction, instant messaging and web pages and including associated areas of computer-mediated communication (CMC), such as SMS messaging" (p.1).

In his contentions, "the time is right to recognise and explore the scope of putative Internet linguistics as "a significant change in the way people use languages over the past 15 years is substantial and well-documented enough to conduct research on digital languages" (Crystal, 2005, p.1). To Crystal, diachronic and synchronic approaches are possible and should be encouraged to achieve a real account of the various changes either in vocabulary, grammar, spelling or pronunciation (Crystal,

p.1). Hence, a scholarly rising agreement is reached concerning the worthwhile exploration of the impact of technology on the newly-adopted modes of communication. The ways languages are shaped and reshaped to cope with the newly- proposed media of communication becomes, clearly, an appealing subject for academia worldwide.

SMS language studies in western countries such as England, France, and the USA, among others, are notably advanced now as prior investigations are traced back to the 1990s upward. In an attempt to supply a coherent and comprehensible overview of the fast-growing but fragmented field of SMS texting, three major marked research trends have been identified and presented here to match the three major scholars' concerns and research focal points.

The first stand falls under the scope of studies that looked into the effect of texting on writing skills and literacy. Many scholars have been particularly interested in describing the texting impact on texters' literacy. The second stand covers the studies that deal with the linguistic approach to texting, by considering various levels of the language study namely lexical, phonological, syntactic and discursal levels, among others. The third stand refers to the studies that focus on texting as a pragmatic tool to manage communicative and social interactional exchanges.

At this ultimate point, it deems mentioning that the three specified stands are not found in the literature but are proposed here as a personal effort to organise the substantial literature in a more structured way. Indeed, a careful reading of SMS texting literature revealed the fragmented nature of the research, hence, framing the reviewed literature, in the way subsequently suggested, will certainly bring a clear and more comprehensible appraisal of the literature on SMS texting subject.

### **1.2.1 SMS Texting, Literacy Skills, and Writing Proficiency**

In the early years of SMS use, texting popularity amongst teenagers prompted public and academic concerns regarding the damaging effect of the unconventional use of languages in messages on the youngsters' academic writing and literacy. This is often grounded on the observed distorted language employed in messages that most young people write or receive in their everyday exchanges. Thus, the growth of SMS

use and its wide popularity contributed critically to the growing public tension over texting. To Taiwo (2010), the reported fear of the critics of texting stems from the fact that “the more young people text, the more their likelihood to forget about syntactic rules since texting de-emphasises the importance of correct spelling and grammar” (Taiwo, 2010, p. 5).

From the 2000s onward then, a longstanding debate on SMS texting impact has marked a clear divide between the public and scholarly community concerning the negative and positive effect on the use of standard languages and literacy. While some media figures (Lee, 2002; Sutherland, 2002; Humpherys, 2000) claimed vehemently the felt devastating effect of texting, some scholars believed that specific consideration should be given to SMS texting to affirm or disconfirm the negative (or positive) impact of the latter on empirical grounds.

To put an end to the growing public tension over texting disastrous influence, a considerable amount of studies using different methodologies and studying different aspects of texting emerged. Broadly, these aspects concern SMS texting in connection with language proficiency, reading skills, writing skills, and grammatical performances across distinctive age categories (Drouin, 2011; Drouin & Davis, 2009; Plester & Wood, 2009; Plester et al, 2009).

One early considerable investigation concerns a longitudinal study carried out on British preteen texters involved in Plester and Wood’s (2009) successive investigations on the plausible relationships between what they named traditional and new media use at schools. The study was considered at that point as a first blow to the advocates of the negative effect of texting as the results affirmed the positive impact of messaging on literacy.

According to Plester and Wood (2009), a positive connection between children’s use of text abbreviations and their verbal abilities was reported. The tests used outlined appreciable meta-linguistic knowledge by slipping between standard school English when it was required, and casual register text language when that was appropriate. The study concluded that although preteens use playfully text abbreviations, contractions, letter/number homophones, nonconventional spellings, and accent stylisations; their awareness about texting language use according to register didn’t

contribute to the deterioration of preteen children's literacy aptitudes (Plester & Wood, 2009, Wood et al, 2011).

In much the same vein, Johnson (2012) attempted to evaluate adolescents' reading comprehension skills by providing traditional reading samples and text messages with idiosyncratic written forms and centring on both the comprehension of deviations and standardised reading achievement. The participants were asked to translate five common abbreviations used in text messaging and, under identical conditions, complete two measures of Standard English literacy. The results showed that teenagers who accurately defined deviated forms demonstrated prevalent skills in reading fluency and sentence comprehension than participants unable to define the common texting terms.

Likewise, Kemp (2010) looked into young adults' reading and texting capacities, by examining Australian university students' reading and writing text messages in Standard English and texted English language. The results showed that students were faster to type but slower to read with both frequent and infrequent texters' same proportion of abbreviated words (about half). Overall, those who did not regularly use deviated forms were no worse at reading them than those who use deviated words. In other words, faster text typing of both conventional and unconventional messages was significantly linked to texters' high reading and writing skills. Besides, the results showed that fewer errors in reading both conventional and unconventional messages were correlated with better reading. The findings at this stage backed the proposal that young adults with stronger linguistic abilities can better employ these qualities to create and decipher deviated language than those with weaker linguistic aptitudes who displayed better abilities to restrict their use of deviations to appropriate contexts (Kemp, 2010, p. 21).

Thurairaj et al (2015) in a recent study sought to account for the possible relationship between abbreviations and English proficiency. The study included informants from private universities in two states in Malaysia and pointed at assessing the language used in day-to-day SMS language following students' multiple levels of English proficiency. The findings showed that little recourse to frequent SMS use has no significant effect on the participants' English language proficiency. The study

showed that the participants seemed to accommodate their answers to the examination requirements where misspelling and deviant forms of English language are sanctioned by bad scores. Accommodation was revealed exceptionally much impacting as participants appeared to know when to abbreviate, when to shorten the sentences and when not (Thurairaj et al, 2015). In like manner, SMS texting use is seen more as an advantageous reason to employ standard and correct forms of English language to communicate with the greatest number of recipients worldwide. This, in turn, enhances texters' proficiency as most messages are written in English, which make texters learn the language by default (Thurairaj et al, 2015).

At the syntactic level, Kemp et al (2014) examined the grammatical unconventional forms elicited by British children, adolescents and young adults. The study main emphasis was discovering the possible interface between deviating texting language and poor performance on tasks of grammatical knowledge. By asking participants to translate syntactically unconventional text messages into Standard English, the results reported the occurrence of errors consisting of punctuation omission, word grammar errors, and capitals omission with exceptionally few varieties amongst the three participants' categories.

As a result, grammatical violations in naturalistic messages were inconsistently anticipated by grammatical task performance as primary school children, who made poorer grammar-based spelling choices, were more likely to form more syntactic violations in their ordinary messages in the same way as the university students. In contrast, no noteworthy connections were pointed out amongst secondary school students. The study conclusions upheld the proposition that using unconventional grammar when texting is not a consistent sign of poor grammatical abilities as texting deviations can have social and psychological reasons as revealed with the adolescents' category (Kemp et al, 2014).

Provided a recent review and discussion on the current state of research on texting impact on literacy and scholarly abilities, Waldron et al (2015) summed up the issue by taking age as a crucial variable and highlighting the differences between different age categories. The drawn conclusion maintained the suggestion that texting behaviour is specifically related to diverse abilities in different age groups. With

primary school children, for instance, texting language is emphatically linked with measures of spelling, reading, and phonological awareness, while the relationship with grammar is more blended, with no link or negative links between the deviations found in texting language grammatical task performance. With secondary school learners, participants displayed largely negative connections between texting language use and performance on language assignments. On the other hand, adults exhibited more varied sets of results, with a mix of neutral and negative correlations between texting behaviour and language task scores (Waldron et al, 2015).

The conceivable given reasons to clarify these inconsistencies amongst categories concern the learners' long or short experience with technological devices. This latter incorporates experience with different keyboards and predictive text that adults and teenagers experience at a late stage; a stage where both categories have largely solidified their literacy skills. Then again, children's poor performance was interpreted in terms of brief involvement with technology use which made them being exposed to texting language while still improving their reading and writing abilities. To Waldron et al (2015),

Although it is not yet clear whether adults' use of unconventional spelling in text messages could be a cause or a result of poorer linguistic skills, at least some of the variation in adults' textisms use probably comes not from their literacy skills, but from other sources instead, including differences in phone technology, conscientiousness (rather than knowledge) about spelling, and social norms about composing messages in their particular friendship groups (Waldron et al, 2015, p. 18).

In light of Waldon et al (2015) contentions, the picture seems to be fairly blurred as the real reasons provided to justify texting deviations over age categories are not clearly set. This certainly calls for deeper investigations to account for the intricate nature of texting impact, by eventually considering more experimental approaches in future investigations. Yet, given the fact that many more studies report positive relationships between texting and literacy, negative relationships have been spotted as well in the literature.

By exploring educators' opinions and perceptions on messaging and its influence on learners' written language skills, grades, and knowledge of correct Standard English, Geertsema et al (2011) explored South African high school educators'

encountering of spelling forms framed as SMS language categories namely shortening of sentences, incorrect punctuation use and sentences length. The assessment of the degree of the influence of SMS language on written assignments highlighted the SMS language negative impact on the written language skills of namely grade 8 and 9 learners. The reported influence was perceived in learners' spelling, punctuation, and sentence length detected in their written productions. The same negative effect on written language skills was reported by De Jonge & Kemp (2010) who noted the frequent texting interference with literacy in a study they conducted among Australian high school and University students.

In spite of the above-mentioned negative effect of texting on language use and literacy in some studies, several researchers sustained that only a minority of scientific works affirm that texting has a negative influence on the standard writing, grammar, and spelling. On the contrary, most empirical studies suggested that texting does not pose a threat to standard language learning (Plester et al, 2009, cited in Thurlow & Poff, 2011, p. 171), and that facility with text language is associated with higher achievement in school literacy measures (Plester et al, 2008: p.143).

More importantly, the forgoing account on the effect of texting on academic abilities emphasised the centrality of texters' high language capability in the production of deviating language. Notably, the majority of academically-skilled learners are the ones who are reported to use the least number of deviations, on the one hand, and the ones who demonstrate higher pragmatic capacities to distinguish between the use or the non-use of deviations depending on the context (Rosen et al, 2010; Tagliamonte & Denis, 2008), on the other hand.

This asserted notion of context stimulated many researchers who suggested possible connections between texting use and language teaching (Javed & Mahmood, 2016; Crystal, 2008; Plester et al, 2009; Wood et al, 2008, 2011; Powell & Dixon, 2011). To Javed and Mahmood (2016), "there is a distinguishing line between formal English and text language. Text language has its own medium of use, while formal language has its own" (p.80). Therefore, texting can be beneficially used in language classes and can represent a promising teaching option to improve spelling knowledge as texting integrates both reading and writing skills (Javed & Mahmood, 2016).

The future instructional challenges, therefore, would be rising awareness on what almost makes correct standard forms of language, on the one side, and stressing the variation in texts' production regarding the context of production, and the audience, on the other side. This can likely be accomplished by considering texting language in formal assignments as productive occasions to discuss the issue of formal and informal writings depending on the context (Vosloo, 2009).

Besides, texting benefits can be extended to the early instructional stages. Children's use of abbreviations in an inventive and playful way can greatly help to acquire and enhance reading and writing abilities (Crystal, 2008; Plester et al, 2009; Wood et al, 2008, 2011; Powell & Dixon, 2011). To Wood et al (2008), texting provides children with an additional resource for learning about and experimenting with letter-sound correspondences for reading and decoding text (Wood et al, 2008, cited in Vosloo, 2009). Frequent exposure to texting language can also improve knowledge of the words by contrasting to standard spellings as classroom activities (Powell & Dixon, 2011).

Clearly, the issue of SMS texting in connection to literacy development is not satisfactorily established as further empirical investigations are required to conclude on firm and empirical grounds. Nonetheless, most of the related studies concerns and conclusions are fairly enlightening regarding the possible correlation between language proficiency and texting. In sum, research, at this specific point, support the view that deviations decrease with texters' increasing linguistic skills along with the texters' meta-cognitive capacities to distinguish between texting contexts. Those conclusions are deemed important as they will serve as a potential ground to answer the advanced question of the impact of the students' academic level on their lexical deviation behaviour.

### **1.2.2 SMS Texting and Linguistic Characteristics**

SMS texting gained over time to be considered as a typical mode of communication. To Velghe (2011), "what looks new, chaotic, creative and experimental is a strictly ordered and conventional language in practice" (p. 3). Consequently, a growing body of literature has examined texting idiosyncratic

properties to probe the issue from its more specific linguistic angles. The emerging studies (Grinter & Eldridge, 2001; Doering, 2002; Bush, 2005; Crystal, 2001, 2006; Hard af Segerstad, 2002; Ling, 2005; Shortis, 2007a, 2007b; Thurlow & Brown, 2003; Tagg, 2009, 2015) targeted SMS texting etymological characteristics by looking closely at issues of lexical deviations, messages length, textual complexity, syntax, and punctuation.

In this respect, early works primary concern consisted of verifying the stereotypic pervasive beliefs that portray texting as an incomprehensible language due to the abbreviations, coined vocabulary, and emoticons used in messages. Years after, the scholarly concern has extended to cover the variation of the indicated aspects from age, gender, culture, and texting experience perspectives, as it will appear in the upcoming review.

In a leading work conducted by Thurlow and Brown (2003), insights into SMS linguistic features were provided. By examining British texters' orthography, the findings highlighted components that incorporate shortenings (i.e. missing end letters), contractions (i.e. missing middle letters, G-clippings and other clippings (i.e. dropping final letter), acronyms and initialisms, letter/number homophones, misspellings, typos, non-conventional spellings, and accent stylisations. A few other aspects such as onomatopoeic, exclamatory spellings were signalled as a means to express texters' inventiveness, playfulness, and informal linguistic style. The reported forms served to partly distinguish the deviated forms found in the English language within the general conventional uses of this latter. Interestingly enough, the reported unconventional forms accounted only for 19% of abbreviations in the examined messages, which highlighted a low presence of emoticons, symbols, and letter/number homophones.

Similar findings were reported in a subsequent study conducted by Ling (2005) on non-standard use of Norwich language among young Norwegian texters. Instances of shortenings, abbreviations, letter-number homophones, and acronyms were spotted. The results showed also that only 6% of words in the texts provided were abbreviated. Consistent with the preceding works, the same deviations and low percentage were also spotted among American texters who displayed only 5% of text messages comprising abbreviations in a study conducted by Ling and Baron (2007).

In a more substantial work, Farina and Lyddy (2011) supported the previously-mentioned scholars' findings by highlighting the existence of phonetically-based forms including non-conventional spelling, accent stylisation, and onomatopoeic spellings. More importantly, the study affirmed the rare prevailing nature of deviations by reporting only 10% of texts containing abbreviations while 75% of the content contained standard spelling. To some scholars (Farina & Lyddy, 2011; Ling, 2005; Thurlow & Brown, 2003; Ling & Baron, 2007; Lyddy et al, 2013) then, content messages clearly contain non-standard forms but not within the exaggerated extents as represented by the media.

At the phonological level, Kul (2007) conducted a study that consisted of analysing ten examples of text messages collected from various sources. The very aim of the research was looking at the effect of phonology on abbreviated and shortened forms that are shaped by letter deletions. Besides, the study set up to validate the resistance of consonant letters to deletion, especially initial letters in words or consonants in stressed syllables. The general developed assumption was formulated in accordance with speech by claiming that deletion in messages likely corresponds to a reduction in speech, and more specifically, in text messages whereby speech-like instances are found.

According to Kul (2007), "the letters which represent vowels in unstressed positions would be deleted within the domain of the weakly accented syllable" (p. 5). Therefore, Stress plays a restricted role which appears not impacting on the nature of deletions as final consonants in unstressed position are likely to be preserved while vowels are deleted in stressed positions as well. In conclusion, the study showed that consonants are more likely preserved while vowels are not. Additional observations concerned the notable reduction of lexical words rather than functional ones.

Parallel to that, SMS texting syntactic features have also been considerably researched. By examining syntactic characteristics in Kenyan texters' messages written in the English language, Ong'onda et al (2011) found new syntactic arrangements that diverge from the English grammar. The dissimilarities concerned pronoun *I* omission and auxiliary verbs such as *have*. Other types of omissions referred to the omission of objects, articles and *to* infinitive. Contractions were also used

namely in the middle of words (such as *birthday*, *nobody*, *come on to bday*, *nbody*, and *cmon*) and the middle of phrases (for example, *wev* for *we have*, *Ihv* for *I have*, *heznt* for *he is not*) (Ong'onda et al, 2011, p. 5).

The grammatical disagreement was also reported with various violations of grammatical agreements between lexemes in terms of number, tense, person, and gender. Tense agreement seemed not to be respected in numerous instances (*finished* and *missed* contractions in examples such as *Baby have you finish(ed) meeting, really (i) have mis (sed) you badly and am alone and bored. Please come* (Ong'onda et al, p. 5). The observed examples were justified by the texters' non-conformity to use standard forms of the English language despite their knowledge of these aspects of the language.

Word order was also altered by a notable omission of subjects of sentences. English SVO sentence structures appeared to be violated in many occurrences as well. Instances of VOV (*got the money. Thanks*), and V S V O (*Thanks, I got the cash*) were also noticed (Ong'onda et al, p. 6). The reference to these varieties was explained by the intentional emphasis on the theme of the sentences instead of the doers of the actions (Ong'onda et al, 2011). Likewise, phrasal abbreviations were also reported. Most observed abbreviations mentioned in the literature dealt with lexical abbreviations.

However, possible sentential modifications took place correspondingly. To Ong'onda et al (2011), this is illustrated by abbreviated shapes of the phrase that are shorter than their conventional full forms. Cases of *gudmo* (good morning) and *lavya* (love you) were reported (Ong'onda et al, p. 6). Their use was explained by the texters' confinement to the limitations of the device and their willingness to express collective identity function (Ong'onda et al, 2011).

Along with the syntactic considerations, Adebileje (2014) examined Nigerian young students' messages to account for the variation in frequency and distribution of deviations across the register. By register, Adebileje implied lexical and grammatical characteristics which incorporate phonological features (pauses, intonation patterns), tense, aspect markers, pronouns, and pro-verbs, questions, nominal forms (nouns, nominalisations, gerunds. In Adebileje's (2014) terms, to recognise common terms

used by texters, lists can be established with indexed variants of the same terms which can concurrently show noteworthy idiosyncrasies in the use of specific words and sentences.

The study ended up with the conclusion that text messaging is lexically and syntactically distinctive from formal writing and speech. Seemingly, no guiding rules in the use of text messaging exist. Besides, noticed sources such as figures, symbols, phonics, and pidgin (English words written with Yoruba spellings being the predominant L1 of the students) were observed as a reflection of informality involved in text messaging. With all these distinct features, Adebileje (2014) supported SMS typicality as it uncovered the absence of significant similarities with writing or speech modes.

In one more scenario, punctuation was investigated in a number of studies. In an examination of Kenyan students' messages, Ong'onda et al (2010b) targeted some aspects of punctuation namely capitalisation, end marks (full stops and exclamation marks), hyphens, apostrophes, and quotation marks use. The study findings revealed the unusual and creative employment of punctuation in several messages. The four studied aspects were assigned diverse functions and meanings. In cases of capitalisation, for instance, the data showed a noteworthy violation of the standard use of capitalisation aiming at showing emphatic and expressive purposes.

As for the end marks such as full stops, question and exclamation marks, the results showed texters' propensity to double or triple these last-mentioned in order to convey strong feelings, to emphasise the main ideas (the case of exclamation marks), express dissatisfaction, and anger through the use of a blend of the three punctuation marks. Hyphens, apostrophes, and quotes unconventional use accentuated the originality and specificity of the utilisation of punctuation by displaying the use of hyphens to signal pauses, and apostrophes to signal the shortening of phrases (Ong'onda et al, 2010b).

In short, the non-conventional use of punctuation looks chiefly to indicate emotions and personal expressions covered through the exaggerated redundancy of a few marks; the exclusion of some others, and the combination of some marks to communicate specific meanings. The non-attendance of para-linguistic clues such as

facial expressions, voice tone, and body language in texting are, thus, recovered via the employment of these marks. Through para-linguistic restitution and phonological approximation (Thurlow & Brown, 2003), the meaning of punctuation is reinvented to suit messaging written requirements and specificities.

Discourse features received also particular attention from the academia. In this vein, Spilioti (2011) addressed the issue of closings to account for politeness and impoliteness in SMS texting exchanges. The study concerned the examination of three Greek young peer groups exchanged messages. By observing and interviewing the participants, Spilioti focused on the types of closings used and the underpinning reasons that justify these uses. To Spilioti, the intent of the study was to challenge the established considerations of closings as an integral part of the message pattern in asynchronous interaction.

To this end, a close look into closings in messages revealed the non-attendance of SMS closings specificities as the instances used looked more as a combination of already-existing modes of communication such as signatures of traditional letter writing, parting formulae of face-to-face (e.g., “see you”), and mediated (e.g., φιλάκια “kisses”) communication. The results showed that texters can shift between asynchronous and synchronous uses of the same medium and use closings, accordingly, to signal relevant expectations of “reciprocity and immediacy” (Spilioti, p. 80).

However, the use of closings was notably conditioned concurring to “the position of the text in the SMS sequence and, more importantly, to the participants’ relational concerns. In other words, these formulae originate in a variety of genres that span the range of a spoken–written continuum” (Spilioti, 2011, p.80). In like manner, Spilioti suggested more flexibility in considering the genres when dealing with SMS texting as the study revealed some instances that are specific to SMS texting language per se. Closings, contrary to written or spoken modes, are utilised only, and more specifically, in occurrences where participants unequivocally engage in what Spilioti called relational work. This takes place in cases where texters “need to reaffirm relationships that have been inactive for a long period or because they perform an act that is considered face-threatening in the specific context” (Spilioti, 2011, p.80).

Overall, studies published from 2003 onward exhibit scholars' varied interests in understanding texting linguistic characteristics. They reveal that texters' use of abbreviations, shortenings, and typographic features is common and widely shared among texters from different countries and cultures. The shared conclusions concern also the dispelled myth of texting being a hieroglyphic language that is deciphered only by its users. For the majority of the reported scholars, messages contain exceptionally few instances of deviated linguistic forms while the majority of forms is standard. The combined nature of the linguistic deviations and conventional forms can be seen as a new-fangled type of writing. This "informal writing" (Shortis, 2007b, p. 1) is revealed as a unique mode of communications that has been seen in almost all the investigations carried out and reported so far.

### **1.2.3 SMS Texting and Communicative Functions**

SMS texting as a social means of communication is also a wide area that has pulled in academic consideration. A number of studies regarding the effect of digital technology on communicative practices among youngsters, more specifically, have been conducted in this respect. What young texters do with messages and what functions texting serves were the two major questions raised by most researchers interested in the pragmatic purposes of messaging.

In their seminal work on the sociolinguistics of youngsters' text messaging, Thurlow and Brown (2003) succeeded to identify nine texting communicative functions used by British youngsters. The mentioned categories, named communicative orientations by Thurlow and Brown (2003) incorporate: 1) informational-practical orientation; 2) informational-relational orientation; 3) practical-arrangement orientation; 4) social arrangement orientation; 5) salutary orientation; 6) friendship maintenance orientation; 7) romantic orientation; 8) sexual orientation; and 9) chain messages (jokes or word-plays that are fixed passages that are shared between texters) (Thurlow & Brown, 2003, p.3). In this light, texters seem to use messages to inform, maintain social interactions, and express sexual and romantic feelings, with friendship maintenance orientation signalled as the most utilised orientation.

More specific functions that corroborated Thurlow and Brown's findings were furthermore detailed. While examining messages belonging to German texters, Doering (2002) detailed five main communicative functions specifically: 1) contact; 2) information; 3) appeal; 4) obligation; and 5) declaration. The study revealed the noticeable use of contact function amongst participants. Contact, as stated by Doering, deals with appointments arrangements, greetings, relationship statements and emotional support (Doering, 2002, p. 23).

In the same vein, Ling's (2005) sociolinguistic study on Norwegian teen and young adult texters found that 75% of the text messages were used for coordinating everyday life activities, grooming, and performing requests. The remaining messages tended to provide information, command, and share personal news. In the same line, when exploring American young texters' communicative functions, Ling and Baron (2007) showed that most participants use messages to keep in touch with acquaintances, arrange meetings, and exchange news. In the same line, Battestini et al (2010) displayed American undergraduate and graduate students using messages mainly for planning, maintaining relationships, chatting, information seeking, commenting sport/Tv/News, in that specific order. Likewise, Grinter and Eldridge (2001) study reported British youngsters' use of messaging to coordinate with family and friends, and chat with close friends.

Consistent with these conclusions are other researchers' findings that stressed the overall relational purpose so being primarily affective, phatic, and socio-coordinative. According to Thurlow and Poff (2011), young people when using SMS messaging are generally performing two distinct functions which are namely the relational and transactional functions that are practically impossible to dissociate (Thurlow & Poff, 2011). While transactional function expresses the exchange of information amongst texters, the relational function serves more interpersonal purposes by maintaining and building social relations, and hence, preserving "the sociality principle that serves social and phatic purposes" (Thurlow & Poff, p.9).

To Thurlow and Poff (2011), the examination of a collection of messages showed the prevailing *relational* orientation of the majority of texts. Messages were employed to sending friendly salutations, making social arrangements, and solidifying

friendships. Meanwhile, the exceptionally few reported transactional messages (accounted for only 15% of all messages) were used to serve information exchanges, coordination of activities, and daily life arrangements (Thurlow & Poff, p.9). Broadly, the same conclusions were noted and corroborated in some other studies (Androutsopoulos, 2000; Kasesniemi, 2003; Ling, 2005; Bernicot et al, 2012b) that stressed the affective/relational functions supremacy over the transactional/practical functions.

In conjunction with western studies on the issue, investigating the communicative functions in messages was seen in a few Arab and African studies and contexts. In Saudi Arabia, a study conducted by Al Rousan et al (2014) identified five communicative functions used by Saudi undergraduate students. Consistent with western conclusions on the topic, the findings showed the students' inclination to use messaging to achieve friendship maintenance, socialisation, school collaboration, coordination, and exchanging information.

Additional insights into the subject were gained from Chilwa's (2008) investigation on Nigerian texters. The findings helped to distinguish three main categories that enclose economic (business and commerce), social (religion, politics, education, and other social concerns), and personal functions (greetings, feelings, prayers, etc.). Consistent with previously-mentioned scholars' conclusions (Thurlow & Poff, 2011; Thurlow & Brown, 2003; Ling, 2005), the study revealed that 60% of text messages were relationally-oriented as the majority of texts served the personal mentioned category or function.

Taking the western and Arab/African investigations together, most of the findings suggested the existence of more communalities than differences among texters. Most of them use SMS texting to maintain, reinforce friendship, manage public and school life to build social networks and sociability. Yet, beyond the most obvious convergence in texting functions and categories, the outlined results need to be interpreted with great care. Most of the conclusions mentioned so far were built on small-size collections of messages which, to some extent, call into question the validity and reliability of the findings. Besides, the provided references here are not

exhaustive and are just presented to account for the most insightful and illustrative works on the topic of texting in relation to communicative functions.

In sum, this section has been offered as a preliminary attempt to present an overview of the major research trends and findings. Despite the limited account on the issue from the selected studies, the review has gone some way towards enhancing our understanding concerning texting distinctive features and communicative functions. However, the picture is still incomplete as a full coverage based on more academic references is highly needed and recommended.

The following section moves on to consider SMS texting in connection to gender. The studies published in the last decade on the relationship between texting and gender showed a mixed pattern of results across countries, with studies reporting more texting similarities than differences. Clearly, gender is increasingly becoming a crucial factor in shaping texting language, and by integrating this latter as a variable in the present study, we wish to throw additional light on the issue and enrich the present work.

### **1.3 Section Two: SMS Texting and Gender**

Gender differences in SMS messaging were not the researchers' primary concern in early SMS studies. Prior research was centred on the analysis of linguistic features represented in abbreviations, number homophones, non-standard spelling, and the use of emoticons, amongst other linguistic features. Subsequent sociolinguistic approaches to texting issue revealed a clear correlation between texting and gender in many studies and countries.

This section set out to outline gender studies related to SMS texting, with a view to inform about gender impact on messaging in the literature. Thus, a reference to some relevant works in SMS messaging will certainly help reconstruct the whole picture on the topic and unveiling the different facets of the issue. The outlined research studies and concerns will, eventually, serve as a theoretical framework for the present study findings argumentation and discussion, and set a strong grounding for the study analysis and conclusions.

The gender divide was documented in some studies and across countries. In England, for example, Thurlow and Brown (2003) highlighted gender discrepancies in abbreviations use, by showing females' (89%) supremacy over males (57%), concerning the number of abbreviated messages. Likewise, Ling's (2005) study showed contrasts in texting language in 52% of Norwegian females' messages containing complex sentence structures, in comparison to 15% of boys' messages. Additional differences were spotted at the communicative level, with girls' inclination to employ messages to manage emotionally-loaded interactions contrary to males' messages that endorse practical texting orientations (Ling, 2005).

This last-mentioned finding was corroborated by Kasesniemi's (2003) study on Finnish young texters' language. Kasesniemi found that teenage girls text more than boys by placing greater emphasis on emotional exchanges and maintaining social relationships. Conversely, male peers tend to place greater emphasis on information transmission in a very brief way (Kasesniemi, 2003).

In Iran, Heidari and Alibabae (2013) looked at gender differences in Iranian EFL learners' messages by examining the linguistic and discoursal features of girls and boys. The linguistic features cover the initialisation, alphanumeric homophones,

logographic emoticons, punctuation, in addition to discorsal features such as opening, closing, message complexity, use of English words, and abbreviations, for the most part.

Consistent with the prior research findings (Ling, 2005; Kasesniemi, 2003), the results showed females' inclination to text differently from males by using more punctuation than boys (females, 64.5%, males 58.54%). In fact, the study reported the absence of exclamation marks and the rare use of full stops amongst boys. Also, differences were spotted in emoticons use. The data showed that females are prone to the use of emoticons in its various forms as the use of winking “;-)”, tongue sticking out “:-p”, and kissing “:-\*” , while men rarely use such signs and prefer using the happy and sad faces only (Heidari & Alibabae, p. 62).

At the discorsal level, the obtained results revealed Iranian females' tendency to write more complex sentences with formal openings and closings. In conjunction with the openings and closings, females' messages were relation-oriented and were used exclusively to express their thoughts, feelings, and emotions. On the other hand, males compose simple, brief, and direct types of messages that are made up of three to five words, and which tend to address the recipients without any use of emotional forms. Interestingly enough, the data uncovered males' extensive use of imperative verbs which are conversely rare in females' texts.

In a subsequent study, Goumi et al (2011) addressed the question of gender differences by focusing on message length and functions (relational /informational) in the French adolescent girls and boys' messages. Contrary to boys, the data showed that girls' messages are longer and relationally-oriented. However, a fine examination of the findings showed that only girls who were 15-16 years old with longer texting experience displayed the relational orientation in their messages. This same function was found in boys' messages but only amongst the 17-18 year texters.

The interwoven relationship between gender, age, and texting experience has been spotted in Bernicot et al (2012a, 2012b) works as well. In an attempt to assess gender, age, and texting experience impact on texting amongst French adolescents, differences were observed in the length of messages (number of characters and number of words), dialogue structure (with or without an opening and a closing), and

messaging functions (informative vs. relational). Interestingly, girls tended to compose longer messages when they are 15 and 16 years old, while both genders' messages have the same length when they are 16 and 17-year olds.

In terms of dialogue structure, the data showed that experienced 15 to 16-year-old boys generally write messages without openings or closings, whereas inexperienced ones type messages in a standard way by counting the usual expressions of greeting or leave-taking format. At the level of functions, the results were significantly consistent with previous studies (Thurlow & Brown, 2003; Ling, 2005; Kasesniemi, 2003) which displayed girls' higher tendency to compose far more relationally-orientated messages.

Gender differences were also sought by Al Rousan et al (2011) who examined Jordanian undergraduate students' use of the typographical features in their text messaging. By using questionnaires, diaries, and interviews, students were inquired about their use of punctuation, letter and number homophones, phonetic spelling, and emoticons. The study analysis revealed gender differences notably in the use of punctuation.

Even though punctuation is underused in both groups, girls tended to use punctuation more extensively than boys. Letter and number homophones were noticeably used amongst boys than girls; the same with phonetic spellings where 44.2% of them were used by boys in comparison to 40.1% by girls. As for the employment of emoticons, the results showed females' distinction with emoticons appearing in 37.9% of their messages in contrast to 28.8% of males' messages (Al Rousan et al, 2011).

The same findings were noted amongst Pakistanis' students who demonstrated several gendered differences while texting. In an attempt to find whether students use the same lexical and syntactic forms, and whether they use punctuation and capitalisation similarly, Rafi (2007) reported gender differences at these levels of language, with girls tending to write longer and more complex messages contrary to their male counterparts (Rafi, 2007).

In addition to the linguistic, communicative, and discoursal texting concerns, insights into gendered differences from a psychological point of view were offered by

Paul (2011). By seeking the link between texting practices and personality traits, Paul's analysis of the content of 20 messages showed disparities in sexual words use in messages. The results showed that sexual words are more frequently employed by females who score low on aggression while boys use more sexual language when they are more aggressive. In Paul's contention, "this may imply that females, especially non-aggressive ones, are more likely to feel comfortable expressing sexual language via text messaging.... males are generally the sexual aggressors in direct forms of communication" (p. 14).

Hence, text messaging may be a medium for females to express themselves sexually "that is more socially acceptable" (p.14). As such, messaging asynchronous and discreet nature seems to suggest numerous opportunities for secretive and intimate exchanges with more possibilities to escape and divert from social and cultural constraints put on women in most traditional societies.

Lastly, Herring and Zelenkauskaitė (2008) interest in looking into gender variations in abbreviations and messages length in mobile phone text messages (SMS), posted to an Italian public interactive music television (iTV), revealed females' use of longer SMS texts and a noted use of non-standard forms of language. The overall number of insertions and abbreviations were found more in females' texts, which made their language look less standard than males' language. To Herring and Zelenkauskaitė, those findings came as a counter-argument to the often-reported claims on women extensive use of standard languages in sociolinguistic studies (Labov, 1972; 1990; Trudgill, 1974; Fasold, 1990) and CMC (p. 89).

The study conclusions were explained by the local and contextual norms of what Herring and Zelenkauskaitė called "an implicit iTV SMS dating market" example (p.90), where SMS messages posted to the program display two distinct profiles, with two distinctive objectives. "In this market, men may index their seriousness and respectability as potential husbands and providers via more standard language use. In contrast, women's greater use of non-standard typography may communicate feminine qualities of expressiveness, friendliness, and playfulness (childishness)" (Herring & Zelenkauskaitė, p. 90).

Overall, most reviewed studies on SMS texting corroborated the view that both males and females use messages distinctively and creatively. Yet, females are uncovered to be heavier SMS users with a clear inclination to use longer, more complex language structures, and more relation-oriented messages than their male counterparts.

That differences in language use exist in communication is not surprising when viewed from sociolinguistic and gender studies perspectives. For many scholars (Lakoff, 1975; Trudgill, 1972; Tannen, 1994; Brown, 1980; Cameron, 1998, 2003; Tannen, 1997), sex significant impact in face-to-face communications is confirmed in several well-documented works. Mostly, the differences are explained by psychological, symbolic, and socio-cultural reasons that make women and men use language in unpredictable ways.

Besides, the reference to the relational vs. informational orientations in messages seems to be consistent with some scholars (Tannen, 1997; Tannen & Kendall, 1997) arguments about the importance of interactions in establishing intimacy among females in face-to-face interactions. By highlighting females' need to establish and maintain relationships via longer and more emotional use of language, symbolic uses of language as a reflection of underlying socio-cultural roles and sex-based hierarchies of power are put forward (Tannen, 1997; Tannen & Kendall, 1997, Fishman, 1978; Zimmerman & West, 1987). In this instance, males, contrary to females, seem to communicate more in public contexts where they seek more opportunities for negotiating status and preserving their social identity of the dominating sex.

Yet, in spite of the valuable insights offered by sociolinguistics and feminist studies, covering digital and virtual communication bears an extended knowledge of digital uses of language specificities in dissociation with face-to-face communication features. Even though gender contrasts were spotted to the extent to see face-to-face mechanisms reproduction in many instances of power distribution, language use, and stylistic preferences in SMS texting, research on gender in messaging (Herring & Zelenkauskaitė, 2008; Paul, 2011) insightfully challenge the traditional view adopted

so far concerning standard languages use by suggesting new behaviours in SMS texting.

In this light, understanding gender in SMS communication necessitates revising the complex aspects of culture, social constraints, psychological needs, and communication style preferences from digital language use perspectives. More to the point, alternative comparative approaches to the topic ought to be envisaged by tackling SMS gendered communication specificities in comparison to face-to-face interaction characteristics (Herring, 1996).

Undoubtedly, most of the reported research studies in SMS texting helped significantly to shed light on the various facets of SMS messaging. The reported studies depicted several disparities in results over countries and over studies. More importantly, in spite of the medium likelihood across countries, population, and gender, the use made by texters is revealed inconsistent and unstable. This certainly informs about the complex nature of SMS texting as being importantly stamped by other factors such as age, context, and texters' messaging experience.

Ultimately, the digital divide persists, and the scholars' task would be striving to unravel texting differences and provide documented accounts on the real impact of gender on texting and the factual contribution of the related variables. At this point, it could be argued that an understanding of how texting is being shaped by gender is increasingly necessary to cover and challenge the issue more extensively and comprehensibly.

Thus far, this section has attempted to provide a summary of the literature related to SMS texting and gender. As previously stated, the reported studies will serve as a theoretical grounding for future discussion and interpretation of the present study findings on gender impact on EFL students' texting practices. By approaching the issue from a sociolinguistic perspective, this study will certainly gain in enlightening further unexplored areas within an academic context.

#### **1.4 Section Three: SMS Texting Studies in the Algerian Research**

Evidence for new linguistic practices, based on texters' first language across different countries, is reported in the previous parts of this chapter. Most of the results helped to distinguish spelling, syntactic, and discoursal features that divert from the conventional use of texters' standard languages. As far as texting in the Algerian context is concerned, different linguistic behaviours were observed as concerns the texters' multilingual environment that likely leads to the employment of two to three languages simultaneously in messages.

In early attempts to cover SMS texting subject in an Algerian context, Zitouni (2009) looked into the linguistic features of SMS language in the region of Oran. By examining a corpus containing 200 text messages, the results pinpointed the creative use of languages by referring to phonetic spelling, syllabograms, logograms, and creative uses of punctuation. Both unconventional spelling based on a mixture of the French language along with a romanised version of the Algerian Arabic were reported as well. Zitouni concluded that the Algeria participants' demonstrate the significant impact of speech in their messages by referring to oral language norms than the written standards of the used languages.

In the same ultimate vein, Mostari (2009) examined a corpus of 50 SMS texts composed by young participants from different Algerian regions. The results showed a clear reference to reduced forms, acronyms, initialisms, and non-conventional spellings. Emoticons and other typological symbols were also observed in the languages texted with. The languages used were a mixture of the Algerian Arabic and French languages found in 41.5% of messages; Modern standard Arabic mixed with French in 31.5% of texts, and English in 0.2% of messages through the use of tags (Mostari, p. 382).

Similar results were observed in Benabid's (2014) work on messages pertaining to the students' of the University of Bordj Bou Arreridj. The study looked at a corpus of 60 messages and focused on the linguistic forms and structures. The findings showed students' inclination to use abbreviations, letter and number homophones, rebus language emoticons along with an unconventional use of punctuation. Mixing languages was also noticed with a noted use of a Non-standard Arabic and French

mixture along with other mixtures including the Berber language and English. A special use of the French language “verlan” was also reported with the students’ marked tendency to use a speech-like form of the French language.

In more sociolinguistic-oriented studies, Ait Mouloud (2011) 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 in 60 messages, the results demonstrated the French language dominant use in most SMS texts, followed by Non-standard Arabic, and then Berber. The study showed also gender differences in the choice of code-switching types by underscoring females’ extensive use of Inter-sentential code-switching type when contrasted to male texters. Ait Mouloud concluded that despite participants’ mother languages, namely Berber and Non-standard Arabic languages, the participants use the French language in most SMS messages as a communicative strategy to ensure a wider communication among young texters.

Likewise, Achili’s (2014) sociolinguistic analysis of 120 messages belonging to EFL Algerian students of the University of Algiers revealed very specific uses of code-switching and languages. The results showed significant similarities in the way male and female code-switch. Mixing languages was noted and concerned the mixture of Non-standard Arabic and French which was reported as the most used combination. Other combinations concerned a mixture of Non-standard Arabic, French, and English languages, among others. Moreover, the study uncovered eight communicative functions of texting. These last were employed specifically to coordinate social life, express feelings, inform, present wishes, greet on special events, discuss school matters, request, and comment events.

Interestingly enough, the above-cited studies highlighted the regular texting practices and behaviours in both monolingual and multilingual settings. Seemingly, texters, either when using one or more languages, seem to use texting language quite similarly. However, regarding the exploratory nature of the reported investigations and the methodological shortcomings related to the small-size corpora, future investigations should try to integrate more quantitative and longitudinal methodologies that ought to be built on larger corpora to achieve valid and reliable conclusions.

## 1.5 Chapter Summary and Conclusion

In this chapter, a provisional outline of the major SMS texting trends has been presented. From research, we have seen that a range of findings is presently available to support the previously-mentioned assumptions regarding the variation of certain characteristics across language, age, gender, texting experience, and context, among others. What texting and literacy, linguistic, pragma-linguistic and gender research trends have also established is the substantial offered data and opportunities to learn about the linguistic, syntactic, and discourse features that can be further explored and expanded. From theory, texting idiosyncrasy and heterogeneity has been stressed as well. SMS messaging clearly holds specific linguistic features that differ from the traditionally-used modes of writing and speech.

Despite the offered promises, the research findings are incomplete. In this regard, it is premature to conclude on the real nature of texting on the published works only as gaps in the outlined literature were spotted. First, most reported studies are based on small-size corpora and are exploratory in nature which made some scholars (Tagg, 2009; Farina & Lyddy, 2011; Lyddy et al, 2013) call for the necessity to build future studies on larger corpora and adopt more experimental frameworks and methodologies.

Second, the reported studies dealt mostly with texters from diverse nationalities texting in their L1 more specifically. Exceptionally little has been said about texters messaging in English as second or foreign languages, apart perhaps Haggan (2010) and Ong'onda et al (2011) who worked on the English language use in messages comprehension and grammar. Third, a further noticeable gap concerns the limited number of research studies on SMS deviations in the Algerian context. Throughout the literature review, exceptionally few studies dealing with the Algerian context were found either in naturalistic or educational settings.

Fourth, a further gap concerns the lack of research on texting in the EFL academic context that integrates students' language proficiency impact on texting. Prior in the literature review, variables such as age, texting experience, and gender were examined and documented. Conversely, EFL language proficiency effect on

messaging was not considered and a need is felt for more data on this latter to establish a possible correlation between texting deviations and EFL proficiency.

Consequently, the present research aims to fill these gaps in the existing research. By building a corpus and examining the lexical deviations in the light of gender and EFL students' academic level, we point at the issue from a fairly different perspective either in Algerian research area or worldwide. Overall, research will continue to establish findings relevant to SMS texting from different scopes, but it is only by seeking more empirical approaches and methodologies which are based on large corpora that researchers can overcome the limitations of the past studies and account satisfactorily for texting topic.

The following chapter considers the nature of texting in greater detail by putting forward the SMS language major characteristics and distinctive features. The chapter starts by pointing out the most debated and researched issues that make up SMS texting studies as a whole. This latter is jointly described in light of a corpus-based approach by drawing on the methodological considerations that are needed to achieve an accurate linguistic analysis of the deviated forms on empirical bases.

## **CHAPTER TWO**

### **SMS TEXTING LANGUAGE, CORPUS LINGUISTICS, AND THE CORPUS-BASED APPROACH**

#### **2.0 Introduction**

Drawing on the related uniqueness of SMS texting language variety, this chapter outlines the most debated issues in the field and stresses the major benefits of investigating the issue from a corpus linguistics perspective. The argued need for empirical investigation alongside the quantitative corpus-based framework is detailed here to explore the SMS texting nature from a more naturally-occurring data basis. This step is worthwhile as it provides additional insights that can document more accurately the scrutinised topic suggested here.

The present chapter is subdivided into two sections. The aim of the first half is reporting the most reoccurring and debated issues of texting conventional/non-conventional nature, the driving reasons for deviations in messages, and the problem of messages comprehension, among others. In the second half, greater details on corpus-based approach terminology and proceedings are presented. Issues of corpora construction, size, and representation are discussed in light of the difficulties and challenges faced when dealing with SMS texting language variety.

#### **2.1 Section One: Some Major SMS Texting Issues**

The starting-point for this section is the influential standard vs. non-standard dichotomy. This latter is followed by considering the defining texting parameters in light of the spoken vs. written varieties spectrum. The explicit focus on texting mode in this study recognises that differences between spoken and written language constitute a widely-explored question that yield insightful conclusions. The third discussed issue deals with the problem of texting comprehension and universality. Regarding texting language as a coded mode of communication, which is deciphered only by its users, is challenged here. Lastly, aspects of texting drives is tackled also to account for messaging complexity that draws on psychological, social, cultural, and symbolic resources, along with individual, contextual conditions and purposes.

### 2.1.1 Standardness vs. Non-standardness in SMS Texting

Beyond the noticed impact of technology on texters' communicative practices, the overstated statement of SMS texting as an exclusively deviated language has been challenged in some scholarly discussions. In Crystal's words, what happened in fact with the rise of netspeak and textspeak languages (referring to SMS messaging here), is the extensive use of non- standard forms of writing, "something which has not been seen in English since the middle ages, and which was largely lost when standard English came to be established in the 18<sup>th</sup> century" (Crystal, 2008b, p. 2).

The concept of *Standard English*, meaning a codified language, didn't exist before the eighteenth century. Its emergence came as a result of colonialism by which the English language was carried to various parts of the world (Hickey, 2013, p 1). The need for a Standard English, which was intended to manage the public use of the English language in England and all her colonies, led to the codification of the London speech of the English educated class in England and thereafter the standardisation of the language. Once a variety is codified, it remains so and also retains the socio-political status which this codification confers on it, and this is what happened with the London speech of the 15<sup>th</sup> and 16<sup>th</sup> century Britain (Hickey, pp. 16-17).

The standardisation process which was sustained by scholarly efforts and publications dealing with the codification of the grammar of English, its pronunciation and lexis was conducted by a number of authors (Thomas Sheridan, 1780; John Walker, 1791; Samuel Johnson, 1747, 1755, cited in Hickey, p. 1) respectively. These efforts and works helped the elaboration of the Oxford English Dictionary at the beginning of the twentieth century (Hickey, p. 2).

Yet, for centuries now and since the emergence of Standard written English in the 18<sup>th</sup> century, many non-standard forms including abbreviations, shortenings, acronyms existed and lived in prosperity long enough to be integrated as new words in the English language. In fact, words such as laser, pros, and cons, DJ and Mr or Mrs are distinctive examples of non-standard forms commonly used by English native writers, " other deviations such as cos (for because) is there from 1828 and wot (for what), or gissa (for give us a) from 1829" (Crystal, 2008b, p.4).

As noted in the previous section review, the analysis of the non-standard forms (Crystal, 2008; Thurlow & Brown 2003; Shortis, 2007a, 2007b) showed that only a few linguistic forms were deviant and within these new forms, all the items were comprehensible even when taken from their discursive context. Thus, Shortis (2007a, 2007b) supported the need to consider the standard vs. non-standard boundary between the two. In his words, “spelling choices have become part of the stylistic repertoire by which users can express their multiple identities rather than a forcing ground of compliance to the standardised conventions of published print” (Shortis, 2007b, p. 24).

As for SMS seemingly prevailing non-standard forms, these last-mentioned are partly triggered off by the technological limits of the medium that holds a restrictive ergonomic value concerning the use of a complete standard language. More imperatively, the deviated language to Crystal (2008a) “bears a direct relationship to time and energy..... the whole point of the style is to suit a particular technology where space is at a premium, and when that constraint is dropped, abbreviated language no longer has any purpose” (pp.81-82).

Even so, the technological constraints seem not to be the only reason for the non-standard use of language. In text-messages, young people use informal language in an attempt to keep writing as they speak to enhance friendship. The language, therefore, is made coherent and very appropriate to the overall communicative purposes, despite the lexical and syntactic alterations that are taking place while messaging (Thurlow & Brown, 2003). This is exceptionally justified by SMS users’ need to a certain degree of intelligibility to communicate effectively which also stems from texters’ meta-pragmatic and linguistic awareness when sending messages (Thurlow & Brown, 2003, p. 24). The linguistic and para-linguistic forms commonly used are Thx, c u , msg , lol, 2 ( referring to two, too, to and the figure 2), 4 ( referring to for, four, and the figure 4), ltr, tmrw, to name a few of them, and which have the particularity to be semantically easily recoverable.

However, arguing that texting deviations are predictable is questioned as long as no texter is completely consistent either in his/her deviations within the same message, or two texters similar use of the deviations. As shown above, while some deviations can be considered as commonly recoverable without any recourse to texting glosses or

dictionaries, other deviations may not. According to Crystal (2008), texters come with various instances to represent the same entity as it is the example with “good to c u” which can be reproduced under different forms of GTCU, GTSY, G2CY or G2SY; while “thanks” can be found under the form of / THKS, THX, TX or TNX (p. 81). These deviated forms may hold semantic impenetrability as some forms can be consistent from the senders’ point of view but ambiguous from the recipients’ prospect (Grinter & Eldridge, 2001; Crystal, 2008).

Thus, the recipients’ of messages will be confronted to choose the meanings of the items used from a single item that may have more than one connotation as in the examples of BN (which would mean been or being), CID (consider it done or crying in disgrace), CYA (see u or cover your ass) (Crystal, 2008, p. 81). To set this existing confusion, Grinter & Eldridge (2001) stressed the need to codify texting language by establishing standardised or new standardised forms that should be prescribed to texters.

Ultimately, standardising an assumed non-standard language as SMS texting, we believe, goes counter to the nature of deviations which are mostly intuitively and playfully produced. At this level, we can hardly envision texters while delivering a message taking some time to check the deviated word existence or congruity in a gloss or any texting dictionary. What is worth investigating, though, is identifying and understanding the origin of ambiguity in some deviated items and the source of clarity in others.

Besides, the real challenge lies in changing people’s perceptions about standard language as being the most preeminent and highest form of written communication. To Shortis (2007b, p. 21), “ the traditional discourse around codified Standard English spelling and its associated binary evaluations of competence and incompetence has given way to criteria based on appropriateness and the pragmatic issue of what works for the user in a given context”. In the same ultimate vein, Hickey (2013) calls for the demystification of the concept of *Standard* given the fact that the term refers more likely to the written language than speech.

The dynamic and changing nature of the standard language is also highlighted by considering the variation in the use of English in England and English across the

English-speaking countries which consider the Englishes they write and speak as Standard English language as well. To Hickey (2013):

Part of the popular conception of Standard English is that it is a single form of language. But this view refers only to the written language and even there it is not wholly true. Across the English-speaking world there is variation in spelling, grammar and vocabulary in those forms of language which would be regarded by its users as standard. When it comes to the spoken word the variation among publicly used varieties of English is considerable, from country to country or often from region to region. (p. 1).

Besides, the idea of modifying the language to suit the medium is considered by a number of scholars as an old practice that is not SMS texting-specific (Crystal, 2005, 2008; Velghe, 2011; Shortis, 2007a, 2007b). All through history, from the birth of writing on clay tablets and walls, pictograms, ideograms, and rebus symbols were used presumably to cope with the confinements of the device. More recent uses of the aforementioned non-standard uses of language have been noted in telegraphs, printing press, online chatting, and SMS texting. Punctually, the same skeptical reactions were noticed. As put by Crystal (2005):

The prophets of doom emerge every time a new technology influences language, of course, they gathered when printing was introduced in the 15<sup>th</sup> century, as well as when the telephone was introduced in the 19<sup>th</sup>, and when broadcasting came along in the 20<sup>th</sup>, and they gathered again when it was noticed that the Internet writing broke several of the rules of standard English in such areas as punctuation, capitalisation and spelling (p.2).

Henceforth, the emergence of non-standard writing should not be demonised as it provides diversified and inventive forms of language (Crystal, 2008a; Thurlow & Brown, 2003; Veghe, 2011; Shortis, 2007a, 2007b). Despite the standard language de-regulating nature (Shortis, 2007b, p.21) of SMS texting, its reinvention of standard languages should be tolerated as a natural process of the emergence of new-fangled language varieties which are prompted by technology use to create new forms of language or new language varieties with inflecting subtleties of meaning.

### 2.1.2 SMS Texting Language: A (new) Language Variety or (new) Register?

The issue of SMS texting language as part of speech or writing modes has been tackled at early stages of texting examination. Most studies concluding notes highlighted the consensual decision to consider SMS texting as a unique mode of communication which shares much specificity of both modes but not only that. As noted by Crystal (2001) in the outset, SMS language is ought to be considered as a third medium that can display the characteristics of both writing and speech (by being closer to writing), in addition to electronically-mediated properties (Crystal, 2001, p.48).

Building on what has been developed so far, the next emerging issue concerns the linguistic status of SMS texting in regard to the established definitions of language variety and register. The notion of language variety has long been discussed amongst sociolinguistics scholars who seemingly differ in the way they look at SMS messaging language. According to McEnery et al. (2006, cited in Clancy, 2010, p. 88), language variety can be defined in terms of sets of language variants of the same language that are systematically and coherently recognisable. In his contentions, variety covers standard language, dialects, sociolects, idiolects and jargons.

Likewise, variety for Crystal (2001) includes a system of expressions that are inherent to spoken or written languages as two different varieties of the same language, regional and class dialects and different creative styles of expression, “that are easily recognisable and predictable, as one can easily predict how people from a specific region would use language, or a television commentator when presenting a TV program” (Crystal, 2001, p. 6). These varieties can also be affected by situational factors such as e-mail, synchronous chat groups, asynchronous chat groups (e.g., bulletin boards), virtual worlds (e.g., MOOs and MUDs), and the worldwide web, that can impose a specific way of language use (Crystal, 2001, p. 6).

However, the definition of variety, as presented earlier, is further complicated here as the word *variety* in corpus linguistics is revealed much more complex than expected. To Clancy (2010), “One of the reasons for the variety of varieties ...is that corpus linguists have a different method of conceptualising language variation from sociolinguists” (p.81). In Corpus linguistics, the most frequently used terminology is

register or genre (Biber et al, 1999), though used interchangeably to mean variety. As sustained by Clancy (2010): “registers are delimited in non-linguistic terms, with respect to situational characteristics such as mode, interactiveness, domain, communicative purpose or topic” (p.81).

In this respect, while sociolinguistics is based more on geographical and regional language users, corpus linguistics seems to focus more on language use under specific circumstances and aims. Broadly, variety can be seen from two different perspectives, one geographical and the other situational; and in both cases, corpus builders are in charge of deciding for which variety according to these two variety classifications.

Consequently, a variety can be defined geographically and is tightly related to the user (speakers of a given dialect speak that particular dialect and their use is fairly predictable). Alternatively, a variety can be defined situationally and is tightly related to the use rather than the user, whereby language is used to achieve specific discourse purposes (Clancy, 2010). Yet again, choosing the concept of variety or register is definitely linked to the study research objectives and the research questions stated beforehand. As far as this study is concerned, language variety is preferred here as the general purpose of the study and the related research questions and hypotheses are geared towards the exploration of the users’ texting conditions and the situation of the conception and realisation of messages.

### **2.1.3 SMS Texting Linguistic Properties**

Part of the popular conception of SMS language is that it is a derivation or a dialect of the English language, or any standard language which linguistic rules have been violated and recreated (Huang, 2008). This may not be so regarding the insignificant reported proportions of deviated forms in messages across cultures and countries along with the noted degree of formality in SMS contents (Ling, 2005; Kasesniemi, 2003). Presumably, texting language alterations have risen from the mobile phone restrictive number of words in the early stages of its conception and distribution. Besides, texters’ measures to minimise space, time, and cost constraints along with personal and interpersonal needs to maintain sociability, add to the distinct properties of SMS language variety.

Texting language is manifestly different from any conventional language referred to, be it English, French, Norwegian or Swedish languages, and this can be seen in the ways the morphology of words is changed; punctuation is used, and also in the unique way letters are used to reproduce specific sounds and emotions. General agreement on the major texting properties is well-documented in the literature (Crystal, 2008, 2008a, 2008b; Shortis, 2007a, 2007b; Thurlow & Brown, 2003; Lyddy et al 2013; Thurlow & Poff, 2011; Ling, 2005) whereby distinguishing features are reported and exemplified.

In this line, classifications have been made and proposed by Thurlow and Brown (2003), Shortis (2007b), Crystal (2008), and Lyddy et al (2013). Despite variation in categorisation and definitions, most marked properties involve the employment of almost the same representative features. What follows is a summary of the most salient reported characteristics in the literature which are supported with the related definitions and examples.

To start with, abbreviations are reported to be the most prominent characteristic which is extended to cover various strategies used by texters to shorten words. Abbreviation is commonly presented in the literature as a generic word to mean “a reduced version of a word” (Crystal, 2008, p.176). The latter takes place by omitting letters from one or more parts of the word, and reflected in shortenings, contractions, initialisms, acronyms, and clippings. In Crystal’s words, initialism is a kind of abbreviation consisting of only the first letters that are pronounced separately such as CPU for Central Processing Unit and OMG for Oh my God. On the other hand, acronym is an abbreviation formed from the initial letters of all words and pronounced as a whole word for example, LOL for Laugh Out Loud, YOLO for You only live once (Crystal, 2008, p.178).

In parallel, shortenings are words with missing end letters. More commonly shortened words are the days of the week and months as in cases of Sun for Sunday and Feb for February (Thurlow & Brown, 2003; Lyddy et al, 2013; Shortis, 2007b). Conversely, contractions are words with omitted middle letters, usually vowels as in cases of msg for message or tmr for tomorrow (Crystal, 2008; Lyddy et al, 2013; Shortis, 2007b). A clipping is defined as a word reduction achieved with the omission

of the end letter G (Lyddy et al, 2013). Examples of clipping are goin for going, doin for doing, and excitin for exciting.

Far more typical is the use of letter/number homophones which are also termed logograms or phonetic reductions (Thurlow & Poff, 2011). Letter/number homophones use a letter or a number to represent a word or part of a word as in cases of c for see, u for you, 2 for to, and l8r for later. Emoticons are typographic symbols or combinations of symbols which are single or multiple characters that represent whole words (Bieswanger, 2007; Crystal, 2008a), and convey an emotion with the use of punctuation marks or other objects like :- ) happy, :-( sad. The latter can be likened to rebus abbreviation through the employment of pictograms and logograms to represent whole words as in <3 pictogram used to represent love and xoxo representing kisses and hugs (Ong'onda et al, 2011; Watt, 2010).

As body language and facial expressions are missing in digital communication, in general, and SMS texting, in particular, using emoticons is viewed as the texters' ultimate attempt to compensate for paralinguistic aspects of communication by assigning emotions and expressions through the special use of punctuation or rebus expressions and pictograms. The latter seeks to enforce semantic information which recipients can use to attain a more accurate interpretation of the message conveyed through texters' illocutionary force and intention.

Marks of speech simulation are also seen in the use of instances of accent stylisation. In spite of the written format of messages, some words such as cuz for because, gonna for going to, dis for this (Lyddy et al, 2013), goin for going and wiv for with (Shortis, 2007b) closely resemble normal speech in that it reproduces the speakers' casual use of the English language. Far more speech-like characteristics are also infused in texting via the employment of phonetic/nonconventional words which are based on the spelling of a word from sound such as fone, nite, and luk (Lyddy et al, 2013).

Special use of punctuation, either through an exaggerated use of punctuation or its limited use is also reported when expressing emphasis or intensity of emotion through tone of voice such as what!!!! for what!' or don't understand ????? (Crystal, 2008). Cases of missed punctuation that refer to the omission of periods and spelling

with missing apostrophes are also spotted. The latter refers to instances such as dont, cant, wont or ill that are found in messages (Lyddy et al, 2013; Crystal, 2008).

To Crystal, despite the forms ambiguity, texters commonly rely on co-textual and contextual cues to disambiguate potential incomprehensible forms. Missed apostrophes are used in the main to gain time even so the insertion of mobile phone auto-correct feature alters the frequency of apostrophes in SMS use given the fact that the latter are automatically inserted, even without the user's awareness, in many common words such as she's for she is, I'll for I will, and I am for I'm (Crystal, 2008, p.23)

Archetypal use of capitalisation is also observed in messages under three major forms reported by Ling (2005). While the first form deals with absence of capitalisation when messaging, the second refers to instances where capitalisation is seen only in the first word of the message. The third and last use concerns full capitalisation whereby texters conform to the appropriate grammatical rules in every instance in the message. To Ling (2005), the use of capitalisation on the first word of a message may in fact, not be intentional, and may likely be due to the default capitalisation setting of devices.

As concerns the capitalisation of the first word in messages, this may likely be caused by the texters' omission of mid-periods given the semantically-weak value of punctuation and capitalisation that can easily be overlooked by texters. Meanwhile, capitalisation is also used for its prosodic features where the full capitalisation of words may signify the textual equivalent of a raised voice to indicate heightened emotion (Watt, 2010; Rafi, 2010).

Further texting properties concern the repetition of some letters (Crystal, 2008; Lyddy et al, 2013) to express emphasised emotions via the illocutionary force of the repeated letters such as loooove for love, yeeeees for yes or hhhhhh and khkhkh to express laughter. Other uses of the repetition of some letters concerns onomatopoeic/exclamatory instances which consist of non-word sound based exclamations such as haa, arrrrgh, waaaou (Lyddy et al, 2013). In addition, there is a range of misspellings which consists of misspelled words that demonstrate supposedly

distinctive and novel linguistic forms such as dont't, remeber (remember), thought (taught), juut (just) (Lyddy et al, 2013).

Evidently, the mobile phone technology is exploited in a number of ways to cope both with the phone constraints and texters' personal choices and styles (Thurlow & Poff, 2011, p.12). Although texting language does not always obey to the conventional norms of standard languages, it is clear that most unconventional forms are managed in a way to facilitate communication by reference to co-textual and contextual cues that recipients use to interpret the abbreviated, stylised or misspelled words.

Thus, assuming consistency and homogeneity of texting language variety is here challenged considering the so far reported generic idiosyncrasies and stylist variations across gender, cultures, countries, and age categories. SMS texting has yet to be accepted as a unique variety in its own right given the marked features which are not found in Standard languages written language or spoken language characteristics.

#### **2.1.4 Texting as a Universal Code? The Comprehension of Messages at Stake**

Assumptions over texting being a corrupted and incomprehensible language have been constantly confronted with scholars' attempts to dispel this myth via documented and empirical evidence. In practice, what is currently agreed on is that, first, the device technical restrictions are not the only cause of the language deviations. More linguistic, psychological, and pragmatic reasons are disclosed and considered. Second, only a few forms are incomprehensible while the majority of forms are decodable and semantically recoverable (Lyddy et al, 2013; Farina & Lyddy, 2011; Thurlow & Brown, 2003; Shortis, 2007a, 2007b; Crystal, 2008b). According to Crystal (2008b):

People think that the written language seen on mobile phone screens is new and alien, but all the popular beliefs about texting are wrong. Its graphic distinctiveness is not a new phenomenon, nor is its use restricted to the young ....and only a very tiny part of it uses a distinctive orthography. A trillion text messages might seem a lot, but when we set these alongside the multi-trillion instances of standard orthography in everyday life, they appear as no more than a few ripples on the surface of the sea of language (p. 2).

Presumably, the negligible number of deviated forms is clarified by the texters' awareness of the necessity of producing comprehensible messages (Dabrowski, 2011;

Shortis, 2007b; Thurlow & Brown, 2003; Crystal, 2008b). Despite the offered freedom to compose virtually in a diversified manner, texters' use of language economy strategies seems to be controlled to some extent. In Crystal's contentions, "...although many texters enjoy breaking linguistic rules, they also know they need to be understood. There is no point in paying to send a message if it breaks so many rules that it ceases to be intelligible" (Crystal, 2008b, p. 2).

In the same line, Shortis (2007b) argued that texting language is not that chaotic as some principles can be discerned. To Shortis (2007b), 'Although the choices made by users are heterogeneous, the resources of non-standard orthography are relatively homogeneous and linguistically circumscribed....there seem to be a finite set of orthographic principles which account for the overwhelming majority of Txt respellings" (p. 24). By a finite set of principles, Shortis refers to three motivational highlights (based on Werry's model of the linguistic features of Internet Relay Chat, 1996) that explain orthographic deviations. The first deals with features for economy and text entry reduction; the second concerns features for giving the respelling a simulation of spoken language; and the third deals with features which involve a shift to multimodal visual and graphical effects and iconicity.

Firstly, by features for economy and text entry reduction, Shortis (2007b) refers to vowels omission (gd for good), letter and number homophones (r for are, 2 for to), initialisms and acronyms for key bindings and phrases (G2G for got to go), clippings in which words are shortened by losing word ending (congrats for congratulations). Secondly, features for giving the respelling a simulation of spoken language comprise eye dialect (tuff for tough), accent simulation (goin for going, wiv for with), semiotic features such as capitals to indicate paralinguistic details such as volume or emphasis (AUFAUFAUF for dog barking loudly). Thirdly, features which involve a shift to multimodal visual and graphical effects and iconicity that include the use of emoticons, sometimes from emoticon banks, use of colour, movement, and pictorial imagery (Shortis, 2007b, p. 25).

Here again, texters general concern over delivering comprehensible messages seem to direct texting practices. This is done through a cautious selection of deviated forms that seemingly obeys to the equation of "the more unusual the word, the more it

needs to be spelt out in full” (Crystal, 2008, p. 81). Besides, considering deviations in texting as a totally new practice is not fully right as a number of non-standard orthography existing in texting pre-dates the mobile phone invention. As mentioned by Thurlow & Poff (2011), “the use of z as in girlz, the k in skool, as well as phonological approximations such as Americanised forms like gonna, bin, and coz, as well as g-clippings like jumpin, havin” (p. 8).

Moreover, messages comprehension triggered an even greater issue of messages universality. This latter has been tackled as many deviations are effortlessly deciphered from almost all the readers of messages regardless the readers of messages first language, gender or age. In a pilot study invested by Haggan (2010), a collection of native English speakers’ messages (taken from various internet sites), and non-native Kuwaiti EFL students’ messages written exclusively in English were analysed by English-speaking judges who were unsuccessful in discriminating between the native and non-native English messages.

According to Haggan, “text messaging language may provide a basic type of universal English which can be picked up and used by young native speakers and non-native speakers alike” (p. 156). Besides the inspection phase of messages, the same native and non-native messages written in English, which were used in the judging task, were presented to the participants who were asked to rewrite the messages in a complete form using Standard English. The key objective of the procedure lied in assessing the students’ understanding of the abbreviations and contractions. The study showed that the majority of messages were semantically recoverable “ while only 29.6% of the messages composed by native speakers and 15.8% of those composed by the non-native speakers were problematic” (p. 159)

The fact that the percentage of native English speakers’ incomprehension of messages was significantly higher than the non-native speakers’ messages suggested potential texting contrasts between native and non-native English language users. To Haggan (2010), this, implies contrasts in local styles and texting preferences that deserve further in-depth investigations. “It is only by conducting wide comparative studies that include texters’ languages either as L1 or L2 that insights into texting universality can be reached” (Haggan, 2010, p.162).

Yet, many questions remain unanswered as concerns the topic of universality in SMS texting. Examining the linguistic characteristics that are concerned with universality; the collective rules that govern these characteristics and their variation across culture can presumably be worthwhile issues to investigate on small and large scales. By considering the linguistic reasons that explain shared characteristics across languages and cultures, insights into the topic can be gained and documented.

### **2.1.5 SMS Texting Deviations: Major Texting Reasons**

Understanding texting drives has also fuelled a considerable amount of debates as part of SMS texting academic concern. One crucial step in uncovering the texting issue is looking very closely into the psychological, social, cultural, and pragmatic reasons underpinning texting behaviours. In this regard, many scholars put forward plausible explanations for the noticeable deviations in messages.

Valuable insights were drawn from Shortis's (2007b) explanations concerning the importance of texters' messaging styles which vary with the texters' personality, gender, age, linguistic, and cultural backgrounds. This idea of texting heterogeneity is evidenced as people are different and have different social and psychological needs. Therefore, how people perceive context, social relationships, and identity representation are revealed fairly impactful on texting deviation choices and practices. In Shortis's (2007b) words:

People routinely respell in some contexts and expect and provide standard forms in others. These 'people' are not homogeneous and all individuals exercise their choices and positions heterogeneously and in response to their sense of identity, social affiliations and their perception of the exigencies of the particular situation (p. 21).

Variation in texting choices and practices are highlighted as well in the literature to cover differences in connection with age category. Deviations are more likely present in youngsters than adults' messages (Ling, 2005; Kasesniemi, 2003). The marked incongruities accentuated youngsters' tendency to utilise deviations more inventively and ludically than adults, with conspicuous differences in messages' amount of deviation choices and length. In Thurlow and Brown's contentions, "Non-standard orthography is a powerful but also a playful means for young people to affirm

their social identities by deviating from conventional forms; in doing so, they differentiate themselves (from adults) and align themselves with each other (Thurlow & Brown, p. 16).

In parallel, Kemp (2011) explained the use of unconventional language forms as a means to reduce writing time for a quick response as the main purpose of language is sharing some information, or to convey a message. This last can save time, space and money in addition to the symbolic function referred to indicate a cool and stylised language enjoyed by many young people (Kemp, 2011). In the same vein, Collister (2015) explained the use of unconventional forms namely emoticons and symbols to show a kind of creative repurposing and adjustment to the medium. However, despite the texters' adoption of texting language, they are always aware of the fact that the comprehension of messages is of paramount importance either for the sender or the receiver of messages.

Theoretically, this can partly explain SMS texting ubiquity amongst youngsters. As sustained by Brosch (2008), "Young people have very few places in which they can have private conversations with peers and lovers, thus the mobile phone has become a device for teens to construct a place for private communication that is not monitored by adults" (p. 92). This "carved sphere of privacy" (Brosch, 2008, p. 92) seems to be the only playground cleared out to youths to play in.

In addition to the recreation side of texting amongst youngsters, Reid and Reid (2004) advanced the existence of a marked interplay between identity and texting that should be taken into account. Young texters don't only seek privacy and autonomy but identity presentation as well:

Texting permits visual anonymity and its asynchronous nature allows for editing and self reflection. Texters may feel at greater ease being their 'real-self' through a text message reducing the potential repercussions that may otherwise take place in a traditional face-to-face or telephone encounter... As such the mobile may become more a matter of identity than a simple communication tool (Reid & Reid, 2004, p.9).

Likewise, extended SMS use covers some specific psychological needs as well. By interviewing British phone users, Rettie (2007) noticed the texters' masking of relative incompetence of involving in ongoing phone conversations. This is mainly due

to lack of confidence that makes phone users vulnerable to manipulation in the ongoing interactions. According to Rettie (2007), “presentation of self is less demanding in SMS, because it is asynchronous. This gives the interactants time to deliberate on their performance..... For texters, who find phone conversation awkward, SMS affords remote, and safe social interaction” (p. 52).

However, assuming that texting is used to prompt and maintain interpersonal connections and personality expression only is not completely accurate as studies on texting purposes revealed other facets that highlight the compelling power on people’s social and political lives. In an attempt to account for the creative use of English in messages among Nigerian texters, Taiwo (2010) found that beyond the interpersonal maintenance and consolidation, messages serve other socio-cultural purposes. To Taiwo (2010), “Though SMS is now subtly being used amongst the Nigerian people to deride the state, its agents and the people, it has the potential of becoming an instrument for active agitation for social reforms” (p. 16).

Here, the recognised potential of SMS texting is acknowledged by texters who intentionally use it as a medium for ethnic identity and power expressions. Through the use of metaphor, hyperbole, pun, and symbolism that draw on socio-cultural symbols, messages are used both to communicate humour, affection prayer, and more importantly, to criticise the government and its agents (Taiwo, 2010, p. 16). With this said, it becomes clear that texters when composing or answering messages do not only perform linguistic contents for interaction but, more importantly, they are engaged in highly performative acts of identity expression, ethnic realizations, and socio-political identity assertion and fulfilment.

By exploring additional facets of deviation reasons, Dąbrowska (2011) by comparing English and Polish texting language tried to understand the reasons why texters in both languages use economy strategies and how these strategies differ from a language to another. The studied economy strategies incorporate word clippings, vowel deletion, word-letter substitution, word-number substitution, non-standard spelling, and pronoun deletion.

The preliminary examination of the corpus showed that English and Polish texters vary in the use of shortening strategy and this was more likely due to the

linguistic specificities of each language more than any other aspect. Notably, the results demonstrated a much more prominent preference to economise on the length of text messages in English rather than in Polish with the use of clipping and contraction strategy. Clipping and contractions seem to be more prevalent amongst English than Polish texters. Specifically, this latter is not related to texting individual styles but to the linguistic nature of some Polish language words.

Notably, Polish vocabulary contrary to English is polysyllabic and highly inflectional in nature, which implies that any clipping or contraction can be a serious source of ambiguity. Most of the clipped examples do not terminate at a syllable boundary but mostly before a vowel, by attaching the consonants of the syllable which follows to the preceding part which is kept (Dąbrowska, 2011, p.20).

Vowel omission, word-letter substitution, word-number substitution, non-standard spelling, deletion of pronouns, auxiliaries, and apostrophes as found in English were revealed scarce amongst Polish texters who avoid using these strategies for the aforementioned reason of vocabulary polysyllabic nature of Polish language. This etymological characteristic renders the use of language deviation difficult as these make texters run high risks of ambiguity which are minimised by the recourse to conventionally-used deviations. As contained by Dąbrowska:

This feature of the Polish language is probably also the main reason why the Polish users are not able to use other strategies, such as word-number or word-letter substitutions, since the form of particular words is not fixed, but changes depending on their position and function in the sentence.... Regarding the apostrophe deletion, least preferred by English senders, this strategy has no application in Polish, as the Polish language does not make use of the apostrophe at all (p. 20).

Admittedly, recognising the influence of the linguistic specificities and constraints on the use of deviated forms in texting insightfully informs about the intricate and complex dimensions of the deviations. The study is interesting in many ways as it is adding a new and fresh look at the issue. It is clear now that deviations will always exist in messages, but its frequency will vary from a language to another (Dąbrowska, 2011). Reconsidering deviations from the perspective of languages inherent specificities perspectives may represent interesting research paths to follow, basing on more comparative studies and approaches.

Last, Thurlow and Brown (2003) while considering the use of texting alterations either at the word or sentence levels ended up with three key sociolinguistic maxims. These concern: 1) brevity and speed, 2) paralinguistic restitution, and, 3) phonological approximation. The maxim of brevity and speed can be seen in the use of the abbreviation and the minimal use of capitalisation, and standard grammatical punctuation to prompt the ease of turn-taking and fluidity of social interaction. On the other hand, the use of capitalisation, multiple punctuation, and emoticons can be regarded as the reflection of the paralinguistic restitution maxim among interlocutors. Thurlow and Brown (2003) also identified various linguistic parameters such as letter/number homophones, nonconventional spellings, and accent stylisation that obey to the phonological approximation maxim.

In conclusion, this section has attempted to give a summary of the discussed issues related to the ultimate nature of SMS messaging. The assumed conclusions underscored clearly the complexity of the issue which calls for considering texting as a multi-faceted linguistic system. As sustained by the previously-cited scholars, there is no more doubt that SMS texting is a unique mode of communication that stands in its own right. The latter encompasses distinctive linguistic features, syntactic conventions in addition to the interactional functions that notably vary according to the texters' messaging styles, personalities, and the texted languages' idiosyncratic features.

## **2.2 Section Two: The Corpus-based Approach and SMS Texting Language**

The current study draws partly on the methodology and tools of corpus linguistics. This term covers various approaches which draw on large bodies of naturally-occurring data to explore a range of linguistic questions. Given the growing academic interest in texting, a corpus study according to Tagg (2009), can add a lot to “our understanding of language variation and bring this significant medium to the attention of corpus linguists and language variation researchers” (p.4).

This section set out to present in greater detail the major characteristics of a corpus-based approach and the main challenges faced during the corpus construction and application. As was previously mentioned, a crucial intent of the current study is filling a noted gap in SMS studies in the Algerian research. This latter can be presumably said to be at its embryonic stage as the exceptionally rare efforts to explore texting language were grounded on small-size corpora (Ait Mouloud, 2011; Achili, 2014; Benabid, 2014; Mostari, 2009; Zitouni, 2009).

Despite the informative contribution of the reported studies, Ait mouloud’s work was based on 60 messages, Achili’s work on 120 messages, Benabid’s study on 60 texts, Mostari on 50 messages, and Zitouni’s work on 200 ones. At the methodological level, the current study is groundbreaking by drawing on 808 text messages to reach its conclusions. By implication, it is not wrong to say that researchers ought to see in this precarious situation an open avenue for rich and insightful studies to be initiated. This implies the need to base language descriptions on large databases that cover maximum expressions of texting language which will help to frame future research on solid grounds and explore any craved linguistic research questions.

Moreover, the reasons that led to the examination of messages written in the English language are twofold: first, the choice of the English language is triggered off by our intent to unveil the issue from an EFL academic context. Second, dealing with the English language deviations is also directed by the degree major as doctoral students of English are mostly required to work on and with the language of study which is English. These are the basic reasons that explain the construction and examination of a corpus of messages written in the English language while dealing with the Algerian context.

### **2.2.1 From Corpus linguistics to Corpus-based Approach: Aims and Perspectives**

Handling large amounts of data contained in a corpus is humanly strenuous and labour intensive. Hence, the extensive use of computers for corpora analysis is gaining more importance in the present linguistic analyses due to the computing device efficiency in terms of time and effort saving. Scholars (Biber, 1993, 1995; Mc Carthy & O’Keeffe, 2010; Sinclair, 1991, 2004; Reppen et al, 2002; McEnery & Wilson, 1996) particular attention to the benefits of using electronically-stored data contributed to the development of corpus linguistics. This latter is commonly associated with computerised language corpora of naturally-occurring discourse used for language study from diverse perspectives. In Vo and Carter’s (2010) terms:

Corpora and corpus analyses to date confine themselves to being large electronic databases which offer invaluable statistical information about co-occurrences, trends, tendencies, frequency and distributions with accompanying software to allow a large number of searches and analyses to be carried out faster than any other manual method (p.305).

Corpus linguistics gathered momentum in the 1950s with a marked interest in real language use that highly benefited from the technology advances. As Tognini-Bonelli (2010) admits, “It was not the linguistic climate but the technological one that stimulated the development of corpora” (p.15). Initially based on lexicology (McCarty & O’Keeffe, 2010), Corpus linguistics was driven by wordlists and concordance principles based on increasingly large texts or a collection of smaller texts. Historically, the adopted method can be traced back to the thirteenth century, with clerical endeavours to account for words and phrases indexation. For McCarty and O’Keeffe (2010):

This method of exegesis based on detailed searches for words, phrases in multiple contexts across large amounts of text ..... when biblical scholars and their teams of minions pored over page after page of the Christian Bible and manually indexed its words, line by line, page by page. Concordancing arose out of a practical need to specify for other biblical scholars, in alphabetical arrangement, the words contained in the Bible, along with citations of where and in what passages they occurred (p.3).

From 1960s onward, more recent attempts have covered larger and more varied compilations of texts by including both written and spoken texts (Francis & Kucˇera,

1964 for the written language; Sinclair, 1963, for the spoken, cited in Tognini-Bonelli, 2010). The subsequent language corpora proliferation and expansion incited a real breakthrough at the methodological standpoint as Corpus linguistics is built on computer counting which is interpreted qualitatively. This controversial approach to data analysis broke with the traditional bi-polarisation of quanti-quali paradigms in research by bringing about a hybrid version of examination that is prevailing presently in linguistic studies. As stated by Tognini-Bonelli (2010):

Not only could language researchers speed up the process of analysis, they could carry out procedures which were just not feasible before computers became available. The difference of scale led to a qualitative difference in the observations. It is strange to imagine that just more data and better counting could trigger philosophical repositionings, but that indeed is what has happened (p.18).

Given these premises, one major methodological concern refers to texts as the basic constituent of the analysis. In contrast with the functionalist viewpoint on the text as a coherent and meaningful unit (Halliday, 1994), Corpus linguistics is not that much interested in the communicative event meaning but most importantly on the frequency of occurrences and their repetition. “The significant elements in a corpus become the patterns of repetition and patterns of co-selection. In other words, in corpus linguistics, it is the frequency of occurrence that takes pride of place” (Tognini-Bonelli, 2010, p.19). Henceforth, the formalist approach is rather favoured as the key concern of Corpus linguistics is to scrutinise a language sample and try, accordingly, to generalise it to the whole language. Eventually, looking into language patterns that are relevant to the selected sample can bring insight about the general norms of the language and its specificities.

### **2.2.2 Building a Corpus: Methodological Considerations and Challenges**

So far, one major broad believed presumption on corpora resides in their evident disposal to both public and scholarly uses. In reality, access to online corpora worldwide is hampered by inaccessibility for open use as they are mostly confidential and protected (Dürscheid & Stark, 2011). As far as SMS corpora are concerned, the academic corpora databases unavailability online is explained by the self-evident result

of “privacy issues” (Dürscheid & Stark, 2011, p. 302) that stems from ethical considerations of confidentiality preservation in most research studies. For the majority of the analysts, the ethical question of confidentiality and anonymity are pre-established before engaging in any study, therefore, the messages publication is tightly bound to texters’ agreement, and on “the off chance that this last-mentioned is not given by the participants, data remain private and blocked off” (Dürscheid & Stark, p.302).

One extra issue with some corpora comprises the methodological constraints and approaches utilised in data collection when messages were transcribed by the participants themselves. By asking texters to rewrite their messages, they are intentionally or inadvertently threatening the authenticity of the original texts as texters may make transcription errors or changes which make researchers running the risk of working on different texts from the original ones. Thus, in an attempt to overcome this methodological pitfall, some researchers inquire texters to forward their content messages directly to a free mobile phone to ensure texts originality and authenticity.

Needless to say that larger electronically and automatically-assembled databases are seriously required to assist researchers efficient move on consistent and reliable extents of messages. Obviously, larger is the sample, more substantial and reliable are the conclusions. Besides, larger databases may better illuminate and document researchers’ studies on SMS texting patterns and properties. This will allow further forward studies that will aim at comparing samples depending on different factors such as register, age, gender, native language, and educational background , to name only a few of them.

A good example of building large data-bases is reported among Belgian scholars who launched a project of a research network. First launched in 2004 by Cedrick Fairon and his research group at the Institute for Computational linguistics CENTAL of the Catholic University of Louvain, Belgium, the project pointed at collecting expansive amounts of messages electronically within a scheme called “Faites don de vos sms a la science” (“Donate your text messages to science!”) (Dürscheid & Stark, 2011). The next step consisted of calling for researchers’ contribution in Corpus

linguistics, sociolinguistics, and language variation from different countries to take part in the project. Fifteen universities in nine countries (Belgium, Canada/Quebec, France, Great Britain, Greece, Italy, Romania, Spain, and Switzerland) are working hard to construct larger and cross-continental databases. The most objective of the network is building a worldwide network that permits more mutually comparative corpora studies of text messages stemming from different countries and languages (Dürscheid & Stark, 2010).

A comparable project that involved scholars from the Belgian group, the University of Zurich, and the University of Neuchatel, was started in 2008 under the name of “*sms4science.ch*”. The involved scholars in the project, with the assistance of Swisscom, inquired people to send their messages for scientific purposes in a period of approximately two months (from November 2009 to January 2010). As mentioned by Dürscheid and Stark (2011), the project in its beginning succeeded very quickly to collect 7000 text messages sent by 2,627 different people speaking Swiss-German language as their mother tongue, Standard German, French, Italian, Romansh languages (Dürscheid & Stark, 2011). As it was the case with “Donate your text messages to science!” project, *sms4science.ch* main objective was to build a database accessible to all the academics around the world to encourage research progression and allow variety in SMS studies globally.

As can be noted from the literature on Corpus linguistics, the exponential development of computer use over the last twenty years generated several types of corpora that are sorted out according to research purposes, size, and contexts. Corpora thus, can be of general language corpora, speech corpora, historical corpora, specialised corpora, ESL/EFL learner corpora or corpora for comparison, amongst other types (Lee, 2010).

One additional inconvenience with any corpora on the web, or another given source, concerns the corpus idiosyncrasy as any corpus is compelled by the research questions addressed and the research nature per se. As supported by Reppen (2010): “there is not an existing corpus that meets your needs” (p.31), especially when addressing new issues that are poorly-documented as it is the case with the current study.

As concerns Algeria, much remains to be done in the field as almost no corpora exist online or in any other source. The rare studies spotted in the literature offer a very limited number of messages which are not always indexed to the published works for likely ethical reasons. Besides, the few samples provided are edited in a mixture of languages that reflect the Algerian multilingual context. Consequently, building a corpus is the best starting point to conduct the present investigation in the light of the research questions established. Inevitably, this latter will frame the corpus design that will subsequently determine the data interpretation and discussion.

### **2.2.3 Building a Corpus: Size, Representativeness, Sampling, and Balance Challenges**

One major step in any corpus building and design is deciding for the size of this latter as it is part of a greater issue of corpus representativeness. Any corpus ought to be representative of the texts selected and typically associated to the corpus size. Yet, this question is quite problematical as a consensual belief in the difficulty to decide for a corpus size is noted amongst the majority of corpora field scholars (McEnery et al, 2006; Hunston, 2002; Reppen, 2010; Nelson, 2010, Biber, 1993; Sinclair, 1991). According to Reppen (2010):

The question of corpus size is a difficult one. There is not a specific number of words that answers this question.... However, for most questions that are pursued by corpus researchers, the question of size is resolved by two factors: representativeness (have I collected enough texts (words) to accurately represent the type of language under investigation?) and practicality (time constraints) (pp. 31-32).

In this respect, scholars' safest strategy has consisted of considering large corpora as a grounding prerequisite in any initiated corpus-based study. As mentioned by Nelson (2010), "The question of the size of corpora has been central to recent corpus development, and there has been the overriding belief amongst many corpus creators that 'biggest is best....Briefly, the discussion can be seen in terms of creating corpora to be as large as possible" (p.54). In this ultimate vein, the contention set to support the need for larger corpora has been explained by some scholars who believe in the random parsing of words in texts (Sinclair, 1991, 2004). Some words are found

typically once only, and the most practical way to describe the sample is to maximise the number of occurrences in texts via the use of very large corpora (Sinclair, 2004, p.82).

However, the question of sample size is increasingly challenged presently by valuing the benefits of small and specialised corpora in research. To Koester (2010) , two distinguished and opposing directions are noted in corpora studies nowadays, with some researchers distinctively calling for a need for more and more larger corpora building, on the one hand, and those opting for small and specialised corpora as a basement for their studies, on the other hand.

Despite the limited contribution of small corpora results, some scholars (Carter and McCarthy, 1995, cited in Koester, 2010) sustained the great benefit of the use of small corpora mainly while assessing grammatical entities such as pronouns, prepositions or verbs, and their frequencies in the selected corpora. As for lexis and phraseology, large corpora are recommended as their frequency remains unstable and invariable (Koester, 2010).

Here again, the question of what is intended by small and specialised corpora and how can researchers decide whether a corpus is small or large has been challenged. As Koester (2010) puts it: “The answer to this question depends very much on what the corpus will be used for: that is, the purpose of the research” (p.67). Broadly, spoken corpora are said to be smaller than written corpora and a spoken corpora of over a million words of speech is considered as large while in written corpora the number of words should not be under five million words, if it is the case, it is considered as small. (O’Keeffe et al, 2007, cited in Koester, 2010). More specifically, small corpora by agreement supposedly contains up to 250,000 words at least (Flowerdew, 2004, cited in Koester, 2010).

In this light, the present study corpus contains 8843 words, which is noticeably small when compared to the announced number of words that make up small corpora in general. This number was obtained within the research framework of a case study perspective where ethical considerations of voluntary participation which substantially limited the number of collected messages. Yet again, the obtained number represents a sample of the targeted variety which conforms to the required number in specialised

corpora as sustained by Evans (2018) who claimed that “samples of 2,000 to 5,000 words are sufficient enough to be significant” (p.1).

Besides the issue of corpus size, the type of corpora is also specifically addressed. Whether a corpus is general or specialised, the question of large size is not necessarily attributed to general corpora as many specialised corpora are of large size as well. This brings about also the idea of results validity and reliability as small systematically means not valid and not reliable which is not right to Koester (2010) who sustained that:

While specialised corpora may vary in size, an important point is that such corpora do not need to be as large as more general corpora to yield reliable results. The reason for this is that as specialised corpora are carefully targeted, they are more likely to reliably represent a particular register or genre than general corpora (p.68).

Admittedly, small and specialised corpora seem to gain extensive value. Given their noted capacity to report accurate words patterning and distribution, small amounts of data are more likely easier to handle and examine in general ( O’Keeffe et al., 2007, cited in Koester, 2010).

#### **2.2.4 Sampling in Corpora**

Sampling is agreeably viewed as one main key to achieve representativeness in any type of corpora. The sampling issue should, therefore, be seriously considered as the data analysis conclusions are drawn on the adopted sampling procedures. In the current case study, the sampling issue is of paramount importance as assuming the data conclusions coverage of all the EFL university students is inadequate and inaccurate. More detailed and comparative studies are expected to account for the conceivable patterns that may exist within each group and each context.

In line with the previously-mentioned issue of language variety and register, sampling implies full language knowledge in order to decide for the extent of a sample to represent a whole language. To provide samples of a language, variety or register (used interchangeably here), one needs to know what this language constituents in terms of norms and characteristics. To Nelson (2010), “ In order to study language, be it general or specific, one must first decide what that language is, what defines it and

where it can be found”(p. 57) . At the lexical level, for instance, no perfect knowledge of the exact number of words that are contained in a language such as English is possible even with very large corpora (Moon, 2010). In fact, what corpora provide is a detailed account of the occurrences of words in the examined texts and their main frequencies and concordances.

Given the potentially understudied nature of texting language, this latter is revealed far much complicated as achieving representative language samples of text messaging means having ideally an accurate knowledge of the texting language typical vocabulary, governing rules, and characterising patterns. At this point, providing word frequency lists can likely be an excellent starting point to achieve a culminate understanding of the texting language components and mechanisms, especially when we knowing that our own knowledge of the texting language used by EFL students , more specifically, is exceptionally limited.

As far as the current study sample is concerned, it deems important to mention that the sampling stage was revealed quite intricate given the case study nature of the investigation. As voluntary participation and informed consent were adopted, the number of 808 messages forming the corpus was the highest number we could obtain from the students. By asking the students to reproduce the last ten messages sent, an attempt to collect the maximum number of text contents was made to achieve the sample representativeness and balance. Evidently, the representativeness and balanced samples are not exact science as corpora that represent language as a whole is relatively impossible to attain (Evans, 2018).

Nonetheless, one possible manner to improve and test sampling balance and thus representativeness in small corpora is suggested through lexical saturation or closure (McEnery et al, 2006). Saturation is generally tested by dividing a corpus into equal sections that contain the same number of words whereby the number of new lexical items does not change with the addition of new segments or sections (McEnery et al, 2006). To achieve corpus lexical saturation, and thus, stability (Tagg, 2009), this study corpus, which contains 8843 words, was divided into 3 sections of 3055 words each. By using Tropes software package to sort out wordlists of the most frequent words in each section and add the second section to the first and then to the third section, the

results showed a relatively stable tendency in the three sections in terms of the most frequent word forms.

This operation has been reiterated on the created sub-corpus sample used to account for gender differences. In this case, two sections of 2633 words were built as two samples divided by gender. The calculation of the most frequent word forms in the first section when combined with the second, showed relatively very little variability in terms of the most frequent word forms. Likewise, the same method was applied in regard of the students' academic level by creating five sub-corpora comprising 2433 words in each level. When dividing the total number into three categories and then calculate each category most frequent words, the results displayed consistent forms all along the process across the five levels.

Against these sampling and representativeness threats to validity and reliability, though, sampling to Biber (1993) should not only seek the number of words or texts that form a sample, but also to the population and the techniques used to select the sample from this population. Biber (1993) notes that:

Representativeness refers to the extent to which a sample includes the full range of variability in a population. Any selection of texts is a sample. Whether or not a sample is 'representative', however, depends first of all on the extent to which it is selected from the range of text types in the target population; an assessment of this representativeness thus depends on a prior full definition of the 'population' that the sample is intended to represent, and the techniques used to select the sample from that population (p. 243).

In this respect, opting for a maximum collection of the data from the maximum number of the population was sought to enhance validity and reliability. Yet, achieving complete language representation either at the level of text samples or population is evidently hard to attain. Representativeness is though conceivable in a few specific cases of small and specialised corpora. These cases can be jointly backed by the exploratory nature of studies that contain specific questions and exceptionally specific contexts (Reppen, 2010).

The confronted difficulties should not be considered problematical but challenging opportunities instead, as a comprehensive coverage of the texting language patterns and norms will offer a clear and insightful view through an adequate

sampling step. The sample used in the present study is intended as a tentative representation of texting language within the selected particular case of the investigation. By capturing the major elements of the language and its specificities in the light of the recurrence of words, can undoubtedly unravel texting language working mechanisms and understanding SMS texting amongst EFL learners, in particular.

### **2.2.5 Balance in Corpora**

Like representativeness and sampling, balance is another important issue that should be sought as it is highly interwoven with sampling and representativeness. Balance refers to that capacity of a text sample to represent all possible genres or a particular genre or subject field or topic (Kennedy, 1998, cited in Nelson, 2010). This entails the capacity of a sample text to include all the text categories, genres, and styles that are supposed to be representative of the language variety under study.

Again, this is arguably difficult to attain objectively in this particular case as texting language is confined here to the texting language that is used by EFL students in an academic context. This implies difficulty to represent the texting language as a whole. Clearly, texting practices and language use may vary according to several factors such as age range, social status, different social settings, and personal differences, amongst others. Thus, the only possible way to make the current study corpus balanced is the inclusion of samples from almost similar populations, similar contexts, and eventually take samples from every corpus. Unfortunately, this is made impossible as almost no databases that contain messages from other university students are available presently in Algeria.

### **2.2.6 Annotation and Normalisation in Corpora**

Additional decisions corpus designers should make concern the adoption (or not) of annotation while examining languages. This entails the addition of textual and contextual information related to the targeted aspects in the scrutinised language. However, no mark up is used in the present corpora for both theoretical and practical reasons. At the theoretical level, the absence of annotation is motivated by Sinclair's

(1991) view on the precarious importance of annotation. According to Sinclair (1991), “the safest policy is to keep the text as it is, unprocessed and clean of other codes’ (p.21). Corpus analysis is often followed by researchers’ marking up by using some annotation conventions which are problematical. In Sinclair’s view, most of the annotation conventions researchers employ are highly subjective and may divide analysts in the way they view language study priorities in terms of lexical categorisation, in addition to the lack of standard analytical procedures.

At the practical level, the exclusion of Sinclair’s (1991) clean-text policy here is justified by the study major concern over the accurate representation of the existing non-conventional forms and the assignment of the exact frequencies accordingly. As the study focus is on the building of wordlists and accounting for the deviations frequencies, contextual and discursive features are, therefore, excluded here too.

In addition to annotation, deciding (or not) for the normalisation or standardisation of the texts is general practice in corpus-based studies. Adopting the clean-text policy implies the standardisation of the unconventional forms of language to permit clear readability and usability. In our case, deciding not to standardise texting language is a vital step in data analysis as the core of this study is ultimately based on reporting the unconventional representative forms of texting language. We believe that any corpus should be a truthful representation of naturally occurring discourses; and identifying its characterising patterns should be the intent of any corpus-based approach.

Needless to say that SMS texting variety is far from being conventional and one would think of the potential contradictions with clean-text policy that imposes lemmatisation amongst other techniques to attain accurate frequency counting. In our case, all the variations from Standard English are taken into account as the ultimate expression of language typicality and creativity. This implies coined or modified forms of language represented by initialisms, clippings, shortenings, and accent stylisation, among others.

Here again, the notion of creativity and uniqueness should seriously be considered as in the literature, the newness or uniqueness of words do not only include coined units but also modified forms, phonetic respellings through letter or

number homophones, or initialising as mostly seen and used in texting language. Therefore, prior to deciding what is new and unique and what is not, a comparative background to which creativity should be measured should be adopted. As mentioned by Vo and Carter (2010), “ individual texts can be explained only against a background of what is normal and expected in general language use, and this is precisely the comparative information that quantitative corpus data can provide” (p.304).

The most used approach includes the comparison made against the standard form of any language. Texting in English can then be compared to the Standard English by referring to its conventional phonetic, phonological, lexical, syntactic, and discursal rules. This goes along a need to account for texting properties and language creativity and evolution that is triggered off and fuelled by digital media use. On this score, corpus-based approach can be revealed as a useful and insightful tool for describing language change, when properly conducted and analysed. As put by Vo and Carter (2010), “ Corpora, if carefully compiled (or properly chosen) will be far more representative of the norms of contemporary English than any existing set of prescriptive rules, providing much more accurate backgrounds for analyses of creativity/uniqueness” (p. 304).

Along this line, context is revealed also as a crucial element in language creativity as the nature of interaction and the addresser/ addressee relationships are exceptionally seminal in creativity use and density. To Carter (2004), creativity has little to do with speech or written modes of communication, but with the context more specifically. In fact, “creativity is mostly noticed in informal and intimate interactions where less social and conventional constrains are felt, in contrast with formal settings where less creativity is noted and reported” (Carter, 2004, cited in Vo and Carter, 2010, pp.209-210) .

### **2.3 Introducing Tropes**

As previously indicated, corpus-based analyses are closely associated with large electronic databases that offer invaluable statistical information about co-occurrences, trends, tendencies, frequency, and distribution of linguistic units. The data processing

itself is principally assisted by software tools and programs to allow lexical and grammatical analyses to take place within a much faster pace than any manual data processing.

Tropes, among other corpus processing softwares (WordSmith, MtM, to name a few of them), is widely used in corpus linguistics studies. It is a free of charge online statistical software which is available for students and researchers interested in texts analysis, or corpora made of single texts, a collection of texts, or a comparison of two, three, or more texts. One of the principal uses of Tropes consists of providing a lexico-metric account of words and their frequencies. The elaboration of wordlists and their corresponding frequencies can be used to answer pre-established research questions set by the researcher and support the data discussion and interpretation.

Both standard and deviated words in their original forms are easily spotted in the main text when clicking on the targeted words. Just after clicking on the words in the lists, phrases that contain these words are presented automatically within phrases only. This option can be extended to see the word in the whole text by requesting the targeted word in its occurrences in the whole text by clicking again on the button of linguistic context.

However, not all the deviated forms are identified and represented as a quick look to the corpus showed the absence of number homophones such as 2, that refer not only to the figure itself, but also to referents such as *to* or *too*. As the software is programmed to account for lexical identification not numbers, manual search, in this particular case, was used to account for the frequency and the occurrence of these numerical values as well as all the other possible forms that are depicted by the software.

### **2.3.1 Tropes Design and Content**

As was pointed out in the introduction of Tropes, the software is a lexico-metric tool that is used to account for lexical occurrences, distributions, and frequencies. In terms of design and content, Tropes offers in its front screen many analytical options that start with *text style* which accounts for the most dominating writing style of the text (whether narrative, expository, argumentative). In this respect, the software

provides contextual references with instances highlighted in paragraph or whole text frames.

The second option refers to *reference fields (1 and 2)*, which offers lists of words classified according to semantic classes or themes and their respective frequencies. Another important option is *References* which covers the text most frequent instances grouped together by classes as well. Both deviant forms and standard ones are given in this part of the software. The full account of all these instances and their frequencies will be presented and discussed further below in the presentation and discussion of the results' chapter.

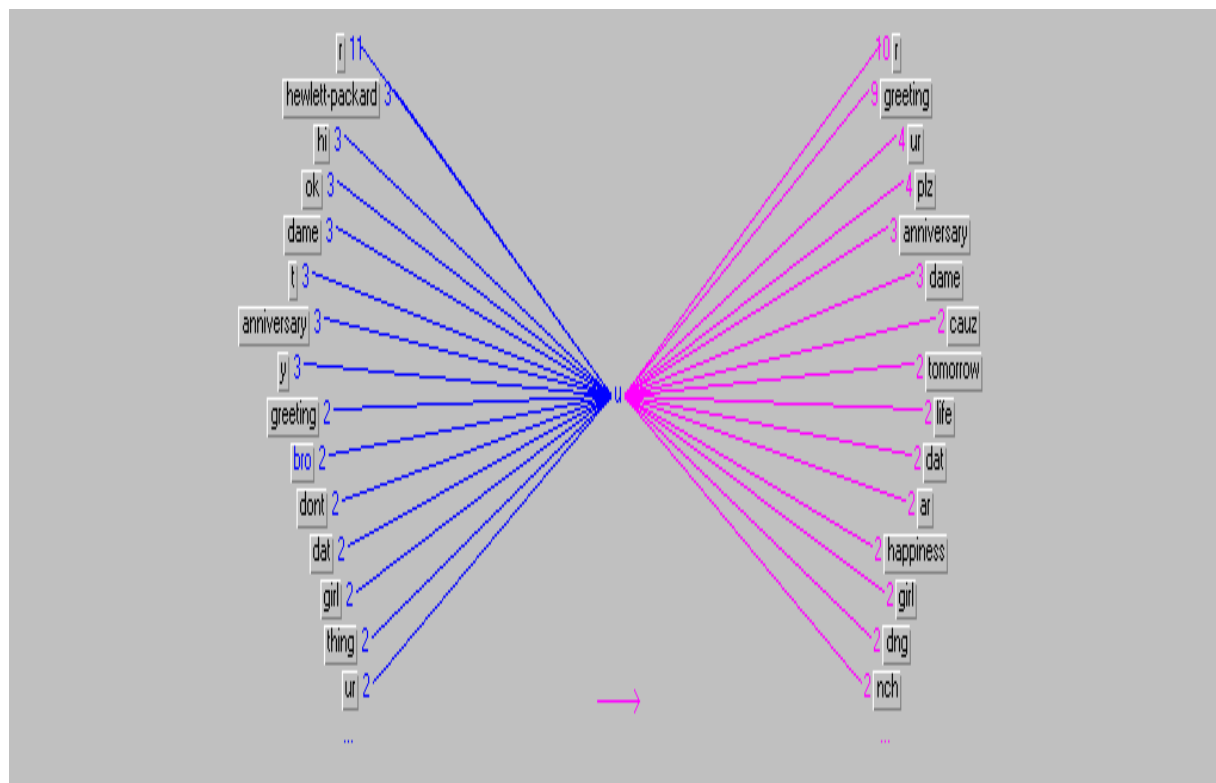
As regards deviated forms, a careful look into these instances presentation showed the absence of grouping as they are not recognised by the software as any pre-existing classe. The only possible processing provided by the tool concerns the frequency and the co-textual setting that represents the deviated forms major occurrences in the text. To some extent, this can be seen both as an advantage and a disadvantage as the absence of groupings provide an accurate calculation of the frequencies contrary to the standard forms where within the word greeting, instances like hello, good morning, good night, are integrated within the semantic class heading of greeting.

In contrast, every single deviated instance is suggested as a semantic group in its own right. Identifying the variants of a standard form is not offered by the machine, and the researcher manual intervention was necessary in that case to make up lists of deviated forms according to their equivalent conventional forms. This step was facilitated by the software as easy access to the targeted items was provided with a click on any pointed word, be it deviant or not.

Subsequent to the *references* option, Tropes comprises also the *Relations* data processing option. Relations processing displays the possible connections occurring before and after the selected items so that concordances can be established. By concordances, researchers might be interested in determining binary instances that are more frequent occurrences in language to account for language grammatical orderings. This can be achieved by displaying two possible and occurring patterns, the preceding position and the following one. The main objective of this tool is to provide

researchers with the different bundles of words that go together in the language as illustrated in Figure 2.1 below.

**Figure 2.1 Selected Concordance Lines for the Deviated Form <u>**



A more grammatical approach is made possible with the next tool *word frequency categories* that offer a classification of words according to grammatical class groupings such as verbs, connectors, modalities, adjectives and pronouns. These categories are sorted out according to general occurrences and frequencies in the text as well. A fine exploitation of these categories resides in the examination of the use of verbs, for instance, by looking into the types of verbs used whether they are stative, performative, or factive. Such analysis can highlight many aspects of language variation and use in the light of the nature of the selected items and corpora.

The last suggested tool includes *scenarios option* which consists of a number of semantic groups that can be created by the user. The tool offers different options for adding verbs, nouns or adjectives to a pre-existing list. Regarding the lists provided within the references tool, the data processed was far relevant and sufficient to conduct our research and answer the research questions set in the present study.

In summary, the literature identifies corpus linguistics methodology and concerns in terms of corpora building, representativeness, sampling, and balance. In this section, it has been explained that texting language idiosyncrasy raised various challenges as earlier corpus-based studies have been dealing with likely conventional forms of language to achieve the researchers' questions. Considering the texting variety nature and its linguistic characteristics, some methodological decisions in regard of sampling, balance, and annotation have been made. As concerns the question of representativeness, the generalisation of the findings is, clearly, made possible only in light of the selected sample regarding the case study nature of the present study.

### **3.9 Chapter Summary and Conclusion**

This chapter began by describing SMS texting in light of scholars' major debated issues and arguing that texting language variety is shaped not only by the device constraints but also by the users' deliberate manipulation of the medium to accomplish diverse interpersonal functions. In achieving these functions, texters incorporate selective linguistic features realised in spelling variation patterns which reflect written and speech-like lexical and syntactic aspects, along with some digital communication features.

This language is easily recognisable and partly predictable as it is solely found in digital languages which use digital communicative features that differ from the face-to-face communicative ones. Its peculiarity is drawn on the texters' deliberate choices to construe brevity, use formal/informal language according to the context, indicate group membership, and deviate from the conventional rules of the language as an ultimate performance of the freedom in writing which is offered by texting.

Besides, of significance in the chapter is the intent of the study to explore SMS language from a corpus linguistics prospect. Corpus analysis specification and procedures were addressed alongside considerations concerning corpus size, representativeness, balance, and sampling. Applying corpus linguistics methodology and tool is revealed complicated given the intimate nature of texting namely at the spelling level, and the difficulty to build representative and balanced samples.

Hence, building arguments on a small and specialised-type of corpora is cautiously explained in light of the case study type of research that limits the generalisation of the results to the selected samples. Further challenges were faced in terms of balance as texting language is complicated already by the lack of comprehensive knowledge we have about texting working mechanisms and norms. By presenting the study methodological framework and challenges, this chapter provided detailed guidelines which researchers can consider and adapt to their future corpus-based works on the subject.

PART TWO  
EMPIRICAL RESEARCH

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY AND DESIGN**

#### **3.0 Introduction**

A properly-designed research framework is inextricably the key to a fine empirical research project. Accordingly, many efforts have been conceived to make the present study design as accurate and detailed as possible. This chapter describes, in greater detail, the implemented methodological framework. It starts with a detailed presentation of the followed methodology, coupled with the statement of the research questions; the presentation of the participating subjects; sampling method; the instruments used for gathering data, and the procedures appropriated to explore the elicited data.

As stated earlier, the central objective of the present study is to probe EFL texters' lexical deviations and additionally account for variations across the students' gender and academic level. In addition to a corpus of messages, a questionnaire is appended mainly to unravel the psychological drives that underpin texting behaviours in the selected context. By varying linguistic, sociolinguistic, and psychological methodologies in a single analysis can be propitious for a thorough apprehension of texting practices in this singular case. This triangulation brought by the mixed-method approach is preferred for its research gains whilst tackling any complex and entwined topic such as the one inducted here. By approaching the issue quantitatively and qualitatively, the study aims at reaching meaningful findings to fitly answer the research questions raised and learn more on texting subject from different prospects.

#### **3.1 The Method Choice**

The present research is a triangulation mixed-method case study. Broadly, research methods are markedly related to the research questions proposed and the main ends of the research project itself. In our instance, a mixed-method approach has been embraced as quantitative and qualitative types of questions were posed. Subsequently, data is scrutinised quantitatively, through the use of word frequency computation and statistical numerals as concerns the corpus, and qualitatively through the use of a key

word analysis procedure while analysing the questionnaire. By considering the complexity and novelty of the topic in Algeria, more specifically, the use of a mixed-method is revealed to be crucial and plausibly the most appropriate methodology to analyse in-depth the topic at hand.

By definition, mixed methodologies approach is defined as “...a study that involves the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research” (Creswell et al, 2003, cited in Flick, 2015, p.218). This latter suggests the use of structured questionnaires in surveys that seek to collect data to account for facts and independent from the participants as it is generally the case in quantitative studies, along with the use of interviews, semi or unstructured questionnaires or observation when interested in the subjective beliefs and experiences of its particular participants.

Mixing methods is a recently established research practice instated at the end of the 1990s (Flick, 2015, p.218). Using one and only one paradigm at a time was commonplace among researchers who contended for keeping qualitative and quantitative methods separate and opposed as much as possible for epistemological and philosophical reasons. According to Newby (2014), this research position originates from the growing academic works that compelled researchers to choose a “camp” depending on the subjects and preferences for a research method. The practice itself led to “an intellectual iron curtain....behind which the two research traditions defined and refined their operating principles in such a way as to promote exclusion” (Newby, 2014, p.110).

Over time, then, qualitative research was perceived as non-science as it lacks the numerical and statistical power found in exact sciences. The objectives of the approach, which were principally based on exploration and researchers' interpretations, intensified this view. According to Coles and McGrath (2010),

The purpose of qualitative research is to generate theories not to verify them....Data can be collected using observations, interviews, questionnaires, focus groups, and will describe attitudes, beliefs and feelings.....The nature of the data that qualitative researchers are interested in will be complex, impressionistic, personal, soft and rich and it's impossible to communicate this adequately using numbers (p. 57).

On the other end of the argumentation, quantitative research objectives are considered contrasting and somehow conflicting. For Coles and McGrath (2010) again,

Very often the purpose of quantitative research is to test a theory or verify a claim. This may involve carrying out controlled experiments, counting or measuring some phenomena such as exam results.....The idea is to be as objective as possible.....The nature of the data they're interested in is hard, impersonal and factual and they seek to generalise their findings across time and beyond the location in which they collect the data (p.57).

Qualitative studies are, thus, further inquisitive about understanding people's experiences, feelings, and life meanings by adopting several approaches amongst them ethnography, action research, and case studies. On the other hand, the quantitative approach is chiefly geared towards theory building and hypotheses verification by adopting experimental, quasi-experimental, non-experimental, quantitative/descriptive, and quantitative/ correlational approaches to deal with research issues and increase knowledge.

More original efforts to settle the persisting "paradigmatic wars" (Flick, 2015, p.217) between the two approaches have been regarded. Combining both methodologies is reported amongst some advocates of the mixed-methods in research, by exerting and sustaining the complementary nature of mixing the two methodologies. This is distinctly made viable through the substantial spectrum offered by mixing two different research designs and plans. The latter is seen by some scholars as a third highly recommended methodology that currently stands in its own right in the social sciences (Dornyei, 2007; Creswell et al, 2003; Lazaraton, 2005; Stake, 1995; Yin, 2003; Merriam, 2001; Murray & Beglar, 2009). To Murray and Beglar (2009):

Mixed-methods are attractive to many researchers because they logically allow them to take advantage of the strengths of each approach while simultaneously overcoming their weaknesses to some degree. Essentially, proponents of mixed-methods approaches propose that, in most instances, researchers who make use of more types of data collection tools and analyses will come to understand the object of inquiry better than those who restrict themselves to a more limited set of purely quantitative or qualitative tools (p.50).

Building on the nature of the present research and the questions suggested, both qualitative and quantitative research methods are applied to benefit from the strengths of both. For practical and methodological purposes, we consider that the mixed-method compensatory and complementary contribution will positively serve the study goals and render a more accurate account of the issue when applied. By coupling both quantitative and qualitative methodologies, our additional objective is to bring about the rigour and objectivity of the quantitative approach along with the interpretative power of the qualitative methodology.

### **3.1.1 Mixed-Method Design**

The evolution of the mixed-method as a distinguished research paradigm was not problem-free as mixing methods was reported complex and complicated. For several researchers (Newby, 2014; Schreiber & Asner-Self, 2011; Dornyei, 2007; Tashakkori & Teddlie, 2003; Creswell, 2003; Miles & Huberman, 1994), the distinctiveness of the approach should be clearly defined and established. This latter should start with changing the consumption of mixed-methods as being “an unstructured fusion” or “an anything-goes disposition” (Dornyei, 2007, p.166) of the quantitative and qualitative methodologies.

The immediate association of mixed-methods to a random combination of qualitative and quantitative methods in an unprincipled frame has been discarded by some researchers, as rigour, precision, and accuracy were sought in delimiting mixed-method terminology and procedures (Newby, 2014; Schreiber & Asner-Self, 2011; Dornyei, 2007; Tashakkori & Teddlie, 2003; Creswell, 2003). Thus, in an endeavour to explain the mixed-method functional concern, Newby (2014) sustained that a methodology is said to be distinctive when genuinely it has “rules of procedure” (p.111).

Along this line, several supporters of the mixed-method approach tried to reach a comprehensible description of the guiding rules by providing special blueprints and design types to inform about mixed-method research steps and strategies. Plainly, whilst conducting a mixed-method study, one needs to understand the involved

mechanisms in designing practically this type of research and the forms associated with the study.

As indicated previously, strives to systematise and codify mixed-method designs were introduced in various works (Tashakkori & Teddlie 2003; Creswell 2003). To Creswell (2003, cited in Flick, 2015, p.217), for instance, three forms of mixed-methods exist to encompass: 1) phase design, wherein qualitative methods are implemented separately, one after the other (regardless of what order); 2) dominant/less dominant design, which is mainly committed to one of the approaches and uses the other only marginally; 3) mixed methodology design, which links the two approaches in all phases of the research process.

More effectively, four supplementary designs have been suggested by Creswell (2003) and Plano and Clark (2007, cited in Murray & Beglar, 2009). The design consists of: 1) the triangulation design; 2) the embedded design; 3) the explanatory design, and 4) the exploratory design. The triangulation layout is specially framed in instances where the researcher favours to compare and contrast quantitative and qualitative findings or elaborate on the quantitative results using qualitative methods. For Murray and Beglar (2009), this means “the mixture of results handled statistically and wherein differences among groups are noticed. And in order to understand those differences, a qualitative tool, inclusive of interviews, is used to recognise the reasons underpinning these differences” (p. 50).

The embedded design, which is the second type, refers to the use of a data set which cannot be meaningful by itself if not connected to the previous data set, as it is not adding anything new to the first. In Murray and Beglar’s (2009) contentions, this implies using a quantitative/ experimental design whereby the researcher decides to ask participants to answer open-ended questions about the experimental treatment. The participants’ responses would not make a lot of sense, however, without knowledge of the experiment (p. 50).

The explanatory design is described as a two-phase design adopted whilst researchers start with a quantitative study and then seek qualitative data to explain the quantitative data. This happens when a researcher tests participants’ willingness to communicate with others and forms groups based on the test results and then selects

several participants from each group to discover more details about the reasons for their differing levels (Murray & Beglar, 2009).

The fourth and last design is the exploratory type in which the data obtained in a qualitative study will serve as a basement to develop a quantitative study. By approaching an issue qualitatively, the researcher can look for variables that will be accurately measured to develop a theory. Like the explanatory design, this type is also performed in two phases, with the quantitative section following a potentially long qualitative phase (Murray & Beglar, 2009)

As far as the present study is concerned, the triangulation design is possibly the most suitable type to carry out the proposed investigation. Given the moves followed throughout the investigation, the adoption of a two-phase design that starts with a quantitative study based on a corpus analysis, which is supported by a qualitative data to shed light and explain the quantitative data, is purposely conducted to benefit from the discriminating contribution of both methods. By actively seeking multiplicity in approaching the same issue from different angles, mixing methods and tools can certainly take us “beyond some of the limitations of one-sided research.... making possible a more comprehensive understanding of the issue under study” (Flick, 2015, p.221).

### **3.1.1.1 Mixed-Method Limitations**

Combining qualitative and quantitative methodologies is a highly structured and methodical operation. Yet, opting for a mixed-method approach cannot by itself solve the problems of research in the whole (Flick, 2015). The qualitative and the quantitative methods selected are themselves confining some limitations. Researchers’ general leaning to focus on some aspects and disregard some others poses the problem of data selection and researchers' subjectivity. According to Flick (2015, “each of the methods used remains selective in what it can capture”. Eventually, both methodologies draw on two extreme stances by setting very rigid priorities, with very contradicting frameworks in terms of objectives of research and strategies to use” (p.224).

Notwithstanding, mixed methods are gaining momentum with researchers' consent (Lazaraton, 2005; Dornyei, 2007; Flick, 2015; Angouri, 2010) concerning the weight of advantages observed while using multiple designs in a single study. According to Duff (2008), one crucial value of mixed-approaches is looking for "ideally more valid insights into observed or tacit linguistic behaviour and knowledge, with converging perspectives sometimes, but such disjunctions themselves can be important findings" (p.144). Hence, developing more on the positive features than the limitations can open up new research options that are worth considering and implementing.

### **3.2 Case Study Design**

Parallel to the research methodology described above, this investigation is fundamentally a case study which is approached from a triangulation mixed-method perspective. As the study concerns the particular case of EFL students evolving in a formal educational setting, we are very much informed that conclusions cannot be generalised to texters from other categories and texters from different contexts than the one selected here. Results and inferences limitations are anticipated and efforts to built validity throughout methodological decisions are presented to overcome the known pitfalls of case studies.

Case studies are broadly set to explore given phenomena in different domains with one general aim, that of accounting and explaining thoroughly specific targeted issues. Put simply, "doing case study research means identifying a topic that lends itself to in-depth analysis in a natural context using multiple sources of information" (Hancock & Algozzine, 2006, p.16).

Further, case studies are driven by researchers' interest in unraveling new and mostly complex phenomena in diverse viable domains that span from linguistics, psycholinguistics, cognitive, neurobiological/ neuropsychological, sociolinguistic, socio-cultural, political, discursive, textual, or educational fields (Duff, 2008, p.17). As stated by Hancock and Algozzine (2003):

Many people think of case studies as clinical descriptions of people with unique characteristics or symptoms and of treatments used to help them. Case study research represents a much broader view. It means conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence. The topics of case study research vary widely. For example, case studies of programs, events, persons, processes, institutions, social groups, and other contemporary phenomena have been completed (p.15).

In this ultimate vein, many explanations have been offered in the literature to illustrate the diverse implementing conditions of case studies in research. To Coles and McGrath (2010), case studies are viewed as “the exploration of a bounded instance using multiple data collection methods which results in a highly detailed picture of the person, place or thing under examination” (p. 81). By instances, the two scholars refer to the subjects of a case study that can be a person, a group of people, a process or an event that reflects a phenomenon with “a discernable identity which marks it out as separate” (Coles & McGrath, 2010, p. 82).

Besides, a case study to Nunan (1992, p.79) derives from a case that is defined as ‘a single instance of a class of objects or entities, and a case study is the investigation of that single instance in the context in which it occurs’. This implies structured research steps and methodology that comprises the research questions asked, the data collected, the duration, and the context of a study, among other features. In this regard, case studies can be implemented to disclose precise aspects in a survey, for instance, or can be used to start up a wider investigation.

In Bell’s (2005) words, “Case studies may be carried out to follow up and to put flesh on bones of a survey. They can also precede a survey and be used as a means of identifying key issues which merit further investigation, but the majority is carried out as free-standing exercises” (p.10). To many other scholars (Duff, 2008; Bell, 2005; Newby, 2014; Hancock and Algozzine, 2006; Flick, 2015), Case studies are described as insightful research frameworks as they seek to unravel complex and intricate issues that provide rich and relevant descriptions and explanations.

As maintained by Duff (2008):

Case studies have a number of characteristics that make them attractive. When done well, they have a high degree of completeness, depth of analysis, and readability. In addition, the cases may generate new hypotheses, models, and understandings about the nature of language learning or other processes. This is chiefly achieved by incorporating clear characteristics of the investigated sites, that is supplemented by a “thick” or “rich” description, besides the implementation of triangulated perspectives from other participants or observers (p. 43).

By doing so, case studies can reach precise and accurate descriptions that can be related to similar cases that take place at the same time, in similar places or organisations or with a similar group of people, or similar circumstances (Duff , 2008; Bell, 2005; Newby, 2014; Hancock & Algozzine, 2006; Flick , 2015).

### **3.2.1 The Limitations of Case Studies**

So far, case studies have been described by most scholars as valuable and insightful research frameworks in terms of data generation and knowledge enhancement (Duff, 2008; Bell, 2005; Newby, 2014; Hancock & Algozzine, 2006; Flick, 2015). Nonetheless, their use is revealed quite challenging as they are often criticised on the ground of generalisability, on the one hand, and data validity and approach, on the other hand.

Difficulty to find the exactly similar cases is spotted by many scholars who were fairly skeptical about the empirical value of case studies. In Coles and McGrath’s ( 2010) claims, “one problem with case studies is that it is very unlikely that you will find examples of the same case study in the literature and because it is unique to your situation the findings won’t be generalisable to other situations” (p. 82).

The devaluation of (single) case studies concerns also the researchers’ deliberate selection of some data that would suffer from manipulation and distortion (Bell, 2005, p.11). This argument was highlighted by several scholars (Nunan, 1992; Bell, 2005; Duff, 2008) as many additional disadvantages related to this issue have been subsequently drawn. To Duff (2008), the noted limitations deal with “generalisability, “abnormal” cases to construct a model of “normal” behaviour, subjectivity, and constraints on quantitative analysis of small-sample, among others” (pp.44-45).

Additional weaknesses were highlighted by Gravetter and Forzano (2012) concerning the analytical approach adopted in most case studies. In Gravetter and Forzano's (2012) view, case studies generally limit themselves to the description of the selected case instead of identifying the underlying mechanisms that explain people's behaviour (p.389). This likely increases risks of lack of internal validity due to high degrees of bias, on the one side, and external validity due to the highly context-based nature of cases, on the other side (Blaxter et al, 2010; Gravetter & Forzano, 2012). On the question of the approach itself, agreement on the exploratory nature of the latter is criticised due to the researchers' focus on the identification of categories of behaviour and events rather than prove relationships or test hypotheses (Hancock & Algozzine, 2006, p. 16).

Nevertheless, case study design remains a valuable research option for its detailed descriptions and analyses. Their descriptive power is widely acknowledged in generating hypotheses or models that can be tested at later research stages. Besides, the generated hypotheses might be excellent starting research actions which might use the same or other research designs, namely larger cross-sectional designs, experimentation or additional case studies (Duff, 2008, p.44)

### **3. 3 The Current Study Design**

Given the contextualised nature of the sample selected and the specificity of the Algerian educational context, a case study framework is intentionally adopted to explore the issue from a multi-disciplinary perspective. By describing and explaining texting lexical occurrences and looking at those from the students' gender and educational level prospects, possible satisfactory answers may be added to illuminate some dark sides of the texting issue.

More specifically, regarding case studies criticism due to their weak scientific evidence and lack of objectivity, it is accordingly reasonable to argue that the implementation of a mixed-method strategy which incorporates a quantitative tool (the corpus) and a qualitative instrument (the questionnaire) is deemed relevant to empirically cover the issue under scrutiny.

As a reminder, the triangulation mixed-method design that is implemented here is developed in a five-phase design during which diverse research strategies are implemented. The five phases are presented as follows:

- **Phase one:** This phase consists of examining the general corpus of the 808 collected messages, by using a corpus linguistics methodology which integrates the elaboration of word frequency lists that are subsequently described and explained. The overarching objective of this step is answering the first research question which raises the issue of the most deviated forms in the students' messages created in English.
- **Phase two:** It concerns the grouping of the deviations according to Lyddy et al's (2013) 13 deviation categories as an additional attempt to synthesise the identified deviations into their corresponding lists and, henceforth, achieve a fine-grained representation and analysis of the data. The categories frequency is then calculated and cross-tabulated to account for the most occurring categories in messages.
- **Phase three:** This phase consists of examining the frequencies and occurrences of the deviation categories according to gender. It aims at assessing the students' use of texting deviations and their frequencies to account for gender impact on texting behaviours. Two distinct sub-corpora are created in this regard by taking into consideration the males and females' number in each group, along with the number of words in each sub-corpus. Given the nature of the research question raised in regard to gender relationship with deviation use and frequency, a shift towards a quantitative/correlational method is necessary with the introduction of the dependent variable (texting deviations use, here) and the independent one (here, gender). This step is completed with statistical tests to account for the possible correlation between the two variables and draw conclusions on more empirical bases.
- **Phase four:** In this subsequent phase, the frequency and occurrences of the deviation categories are considered in relation to the students' academic level. By raising the question of the students' language

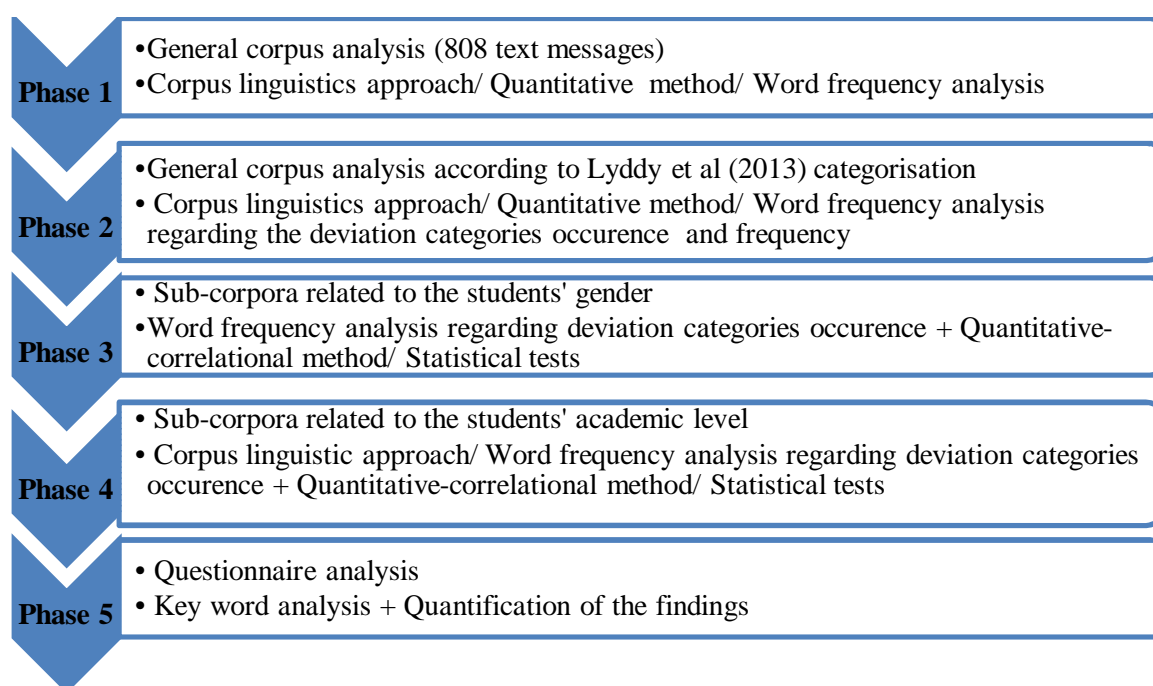
proficiency and instruction impact on the employment of texting deviations and their related frequency, the same quantitative/correlational approach is adopted to look at the relationship between the dependant variable (the texting deviations use) and the independent one (the students' academic level). Five sub-corpora are created in this respect by taking into account the students' number in each level and the number of words in each sub-corpus by the five academic levels. The correlation between the variables is assessed through the employment of statistical tests as well to draw the final conclusions on solid empirical groundings.

- **Phase five:** This final phase is considered here as a complement to the early four phases. While the early phases are quantitative in nature, phase five represents the qualitative part of the study which comprises the use of a semi-structured questionnaire. The objective of the selected tool is two-fold: first it seeks to drive the participants' perceptual, behavioural and pragmatic uses and motivations; second, it looks at gender differences in texting perceptions and drives. By adopting a key word analysis procedure, headings (or categories) are drawn according to the data obtained through the elaborated items. The categories are quantified and cross-tabulated in such a way to provide the reader of the dissertation a clear read of the findings and conclusions. The interpretation of the questionnaire outcomes is intended to shed extra light on the quantitative data analysis so that a more comprehensive view of the subject can be reached.

With reference to what has been described earlier, a summary of the procedure followed in the current study is provided in figure 3.1 below. In sum, regardless of their general relation with the qualitative paradigm in research, case studies can combine quantitative approaches or research analysis strategies to gain more validity and reliability in research (Duff, 2008, p.33). Even so, internal and external validities are sought by carrying out a fine and detailed description and explanation of the case context, nature, methodology, participants' description, and texting practices.

In sum, regardless of their general relation with the qualitative paradigm in research, case studies can combine quantitative approaches or research analysis strategies to gain more validity and reliability in research (Duff, 2008, p.33). Even so, internal and external validities are sought by carrying out a fine and detailed description and explanation of the case context, nature, methodology, participants' description, and texting practices.

**Figure 3.1 Research Procedure Representation**



### 3.4 The Statement of the Research Questions and Hypotheses

It is commonplace in academia to consider the questions researchers ask as the starting point in any research and not the set of methods. Obviously, the types of questions are the principal generators of the methods and research designs. In this particular case, the questions raised led to the research framework described and discussed earlier. The set of the questions asked include both quantitative and qualitative question types and address the issue of texting deviations and differences in terms of the students' gender and instructional level. Accordingly, five research questions are posed:

1. What are the lexical components of Standard English language that are deviated in EFL students' SMS texts?
2. Do the deviations differ according to Gender? if yes, how?
3. Do the deviations differ according to the students' academic level?, if yes, how?
4. How do EFL students perceive and use messaging?
5. Do EFL male and female texters differ in texting perceptions and use?

With reference to the second and third research questions above-mentioned, two null hypotheses are added to confirm or reject gender and instructional level effect on language deviation.

Ho 1: There is no relationship between the EFL students' gender and the use of texting language deviations.

Ho 2: There is no relationship between the EFL students' academic level and the use of texting language deviations.

By advancing the first research question, the purpose is principally identifying the Standard English lexical components that are subject to deviation in EFL students' texting language as a first step. The second step consists of sorting out the deviated forms according to Lyddy et al' s (2013) thirteen (13) deviation categories to facilitate data handling and examination. The related categories are examined in terms of frequency and distribution in messages. Those same categories are analysed and cross-tabulated according to gender to account for plausible correlation between the deviation behaviour and gender variable to answer the second research question.

As regards gender and SMS texting, most cited works in the literature have stressed the existing gender divide in SMS use. Concurrently, the second research question is set to document and verify the previously-mentioned findings and, eventually, draw possible correlations between male and female students' texting practices. This last is complemented with a null hypothesis which seeks statistical significance of the results.

The third research question is intended to generate insights into the students' instructional level effect on their texting language. Presumably, deviating from

standard language norms can be assumed to result from the students' poor English language command. The question is supported by a null hypothesis to gain more evidence to confirm or disconfirm this assumption on solid and documented argumentation.

While the preceding questions are concerned with linguistic properties in general, and linguistic properties in the light of gender and academic levels, in particular, the fourth and fifth research questions are more interested in the psychological underlying reasons of deviation production. By uncovering texters driving motives and accounting for perceptual gendered differences, the two questions are posed to cover the topic from an extended angle and exert the benefits of a multidisciplinary approach in SMS studies field.

Ultimately, assessing the participants' views, perceptions, and texting practices will bring the human facet missing in the first quantitative stage of the study. This triangulated approach will possibly contribute to a better comprehension and appreciation of the study concern, on the one hand, and texting behaviour styles and practices in EFL academic contexts, on the other hand.

### **3.5 Participants and Sampling Procedures**

Text messages are collected from a convenient sample of Algerian EFL students attending the Department of English at the University M'hamed Bougara of Boumerdes. The participants range in age from 17 to 25 years old (Mean= 19.90, SD = 1.42) and speak Berber and Non-standard Arabic as first languages. Additional to the French language that is likely used among students; English language represents the students' foreign language and language of instruction. Besides, the students' participation was based on their agreement to take part in the study. By assuring the ethical principles of voluntary participation and informed consent, students eagerly accepted to embark on the investigation as the majority of them were actual students who attend or attended the researcher's classes.

The sample of 780 subjects comprises 546 females and 234 males. The disparity within the number of participants by sex is imposed on us as the number of females in the Department of English was clearly marked. In this line, the majority of students are

females in almost the five academic levels as illustrated in the following table which shows gender distribution across levels.

Approaching texting from a multi-dimensional perspective implies multiplicity in sampling as well. Considering general participants' deviations in the first phase of the study, and gendered differences in the second one, and the effect of the educational level on students' texting behaviour, in the third phase, led to the implementation of a multi-phase sampling procedure.

**Table 2.1 Students' Distribution by Gender across Academic Levels (2015-2016)**

Academic Levels	Number of participants	Male	Female
		First year	198
Second year	183	65	118
Third year	176	52	124
Master 1	147	45	102
Master 2	76	15	61
<b>Total</b>	<b>780</b>	<b>234</b>	<b>546</b>

Multi-phase sampling consists of moving from a general to a specific sample. This is carried out by taking the former sample to answer a specific research question at a first stage. At a second stage, the sample is subdivided into smaller samples based on different criteria, and lastly, subdivided into narrower samples to account for different other set criteria (Cohen et al, 2007, p.102).

In this distinct case, the first sample that accounts for the total number of informants will be used to answer the first research question. At a second level, the sample is stratified to form gendered groups and answer the second research question. Lastly, the sample is subdivided into the students' levels to answer the third research question. Notably, the number of participants will change at each phase of the research with the change of the research questions.

Despite the case study nature of this investigation, building representative samples was sought all throughout to minimise sampling pitfalls. This is carried out through the calculation of the most accurate number of students required to achieve the representativeness of the first sample. Hence, with a total population of 1123

registered students for the academic year 2015-2016 (Administration data), 780 participants (representing 69.45% of the students' overall population) were involved. By calculating the norms of representativeness of the total population, the designed sample was significantly representative by attaining the 99% confidence level and 3% of standard error margin. Given the significant obtained ratios, the results can be generalised to the whole population as far as the first research question is concerned.

Concerning the observed distinction in the number of students according to gender, challenges were faced while carrying out the sampling process. Seeking consistency in gendered groups, the same number of 234 males and females was selected by keeping the total number of males as a reference. This step is followed by the calculation of the most accurate required number to achieve a representative sample among the two groups.

Therefore, with a total number of 546 female students, the selected number of 234 out passed the required number of 226 participants, as an ideal number, and thus, conforms to the norms of sampling representativeness with 95% confidence level and 5% of standard error margin. Likely, the indicated percentages show the selected sample possibility to generalise the results obtained on the given sample to the full-wide number of the female texters. This step is deemed methodologically essential as it helped to level up the size of the samples and achieve more validity and reliability through representative samples and sampling procedures.

As a third and last sampling phase, the students' academic level was targeted to answer the third research question. At this point, groups' stratification was not necessary as the levels and groups were already pre-established. Here again, a balance was sought as discrepancies across levels were observed. The following table gives a detailed account of the students' distribution across levels.

As indicated in the table below, a marked variation in the number of students across levels added some difficulty to the sampling process. Levelling up the number of students by applying the minimum stated-number of Master 2 students, that is 76, and use it as a reference to make up the groups of the other levels, was offered as an option to attain balance within the samples. The equal number of 76 across levels is revealed problematical as it was far being representative of the students' number

across groups when taken individually. Therefore, representativeness, at this point, was not possible.

**Table 2.2 Students' General Distribution by Academic Level  
(2015-2016)**

Levels	Registered number of students	Number of participants	Participants' percentages
First year	310	198	25.38%
Second year	287	183	23.46%
Third year	242	176	22.56%
Master 1	185	147	18.84%
Master 2	99	76	9.74%
<b>Total</b>	<b>1123</b>	<b>780</b>	<b>100%</b>

As concerns the relationship between the students' academic level and proficiency, we are very much aware that students' language ability is not ideally mirrored by the instructional level the students pertain to. The heterogeneity that characterises language classes is real and sensed daily by teachers of English as the students' linguistic competency might be fluctuating and varied across students and levels. With this said, more control over the students' level is required via placement or performance tests to empirically assess the students' actual level of English.

Ultimately, despite all the threats to validity and reliability presented so far, efforts to overcome methodological pitfalls were made to gain maximum validity and reliability when possible. This should be viewed in the general spectrum of providing empirically-based data based on controlled variables that ought to be acknowledged at every stage of the investigation.

### **3.6 Data Collection Procedures**

A corpus of SMS messages and a semi-structured questionnaire represent the two major pillars of the data collection phase. What follows is a detailed presentation of the tools and the experienced challenges faced when implementing both the corpus and the questionnaire. The aims of the two instruments are also drawn in regard to their respective potentials and corresponding limitations.

### **3.6.1 The SMS Corpus Presentation**

The corpus of SMS texts consists of the content of the last ten messages sent by the participants. The corpus compilation procedure consisted of answering the last indexed part to the questionnaire where students were asked to transcribe their texts verbatim onto paper. Yet, adopting this procedure may pose the problem of the messages' selection and representativeness as texters may be tempted to select the short and easy messages and disregard long and complex ones, or invent messages just to answer the question (Tagg, 2009). Provided this reality, transcription errors are acknowledged here. To overcome this particular problem, the students were insistently instructed to provide an authentic reproduction of messages by paying careful attention to capitalisation, punctuation, spacing, and use of symbols.

The compilation phase started on October 12<sup>th</sup>, 2015 and ended on December 15<sup>th</sup>, 2015. The questionnaire was administered by the researcher and concerned all the students attending her sessions. As concerns the other classes, the valuable contribution of colleagues, who kindly accepted to take part in the research project, made possible the collection of 808 text-messages with a total of 8843 words including non-word units (symbols, emoticons and special use of consonants to express feelings, as well as semantically unrecoverable units). The compiled messages were subsequently transcribed into an electronic document.

The students' messages content consisted of text communication between friends, classmates, and family members. Yet, as students were informed of their freedom to fill this part, not all of the collected questionnaires contained the ten requested texts. While some questionnaires contained a maximum number of five messages, a few of them contained two or one, and in some other cases, some questionnaires were returned blank. As mentioned previously, the 780 participants are the ones who accepted to take part in the investigation and whose questionnaires were fully completed. Almost 10% of the questionnaires were returned blank or partially answered. For validity considerations, uncompleted questionnaires were excluded from the data counting and examination.

An immediate first look at the data showed distinct heterogeneity in the number of messages across levels and gender. First-year students' category, for instance,

displayed girls' higher proportion of messages by composing 163 messages contrary to boys who produced 43. The same was observed amongst second-year students with girls producing 121 messages and 43 for boys. The third-year students revealed girls' participation with 73 texts and 43 for boys. As concerns Master 1 students, females produced 147, while boys produced 60 messages. Last, Master 2 students provided 104 messages, with girls producing 57 messages and boys 47 texts.

These disparities are partly due to the number of participants in each gendered group by level as illustrated in Table 3.

**Table 2.3 Number of Messages Distribution across Gender and Academic level**

Academic Levels	Messages number by Gender		Total
	Male	Female	
First year	43	163	206
Second year	43	121	164
Third year	43	84	127
Master 1	60	147	207
Master 2	47	57	104
<b>Total</b>	<b>236</b>	<b>572</b>	<b>808</b>

As pointed out in the introduction of this chapter, the quantitative data will serve a three-stage analysis. The first step consisted of the examination of the 808 messages to account for the lexical deviations that are produced by the whole participating students. The second step comprises the analysis of 430 out of 808 messages across the students' gender and instructional levels. A gender-balanced subset of 215 messages for each gendered group, all levels included, was made by limiting the number of messages to the minimum observed number among males across undergraduates, and eventually, generalised to include 43 messages for Master 1 and Master 2 students.

Narrowing down the number of messages across gendered groups and levels allowed more precision in the data handling and examination. Yet, that did not solve the noted problem of the variation in the number of words within messages. In spite of the equal number of messages throughout gender and levels, the difference in messages length was noticed as a single text varied from 2 to 47 words. Hence, two

messages or three in one group may not contain the same number of words correspondingly in another group category. Table 2.4 below is an illustration of the adopted analytical steps in terms of the number of messages.

**Table 2.4 Number of Messages New Distribution across Gender and Academic Level**

Academic Level	Messages number by gender and level		Messages number new distribution by gender and level	
	Male	Female	Male	Female
First year	43	163	43	43
Second year	43	121	43	43
Third year	43	84	43	43
Master 1	60	147	43	43
Master 2	47	57	43	43
<b>Subtotal</b>	<b>236</b>	<b>572</b>	<b>215</b>	<b>215</b>
<b>Total</b>	<b>808</b>		<b>430</b>	

Therefore, to remedy the reported inconsistency in the number of words by gendered group and level, again, we finally came to consider the number of words as the unit of analysis. Thus, messages were sorted manually by setting the same number of messages containing the same number of words. A minute calculation of the number of words in messages according to gender resulted in a set of 215 messages, with a total of 2023 words in each group as shown in Table 2.5.

**Table 2.5 SMS Distribution according to the Number of Words by Gender**

Gender	Number of messages	Number of words
Male	215	2023
Female	215	2023
<b>Total</b>	<b>430</b>	<b>4 048</b>

As far as the students' academic level is concerned, the same computational step was applied by opting for the same number of words in the messages according to the students' levels. This last-mentioned resulted in a set of 104 messages in each level, with an equal total number of 2011 words for each. The following table is a summary of the counting procedure as explained above.

In summary, the number of 8848 words for the general corpus of messages, along with the number of 2023 of words by gender, and lastly, the number of 1211 of words by academic level served as a basement to the analytical part of the study, provided the future calculation of the frequency of the deviations and the corresponding statistical treatment of the data.

**Table 2.6 SMS Distribution according to the Number of Words across Levels**

Academic level	Number of messages	Number of words
1 <sup>st</sup> year	104	1211
2 <sup>nd</sup> year	104	1211
3 <sup>rd</sup> year	104	1211
Master 1	104	1211
Master 2	104	1211
<b>Total</b>	<b>520</b>	<b>6055</b>

### 3.7 Data Analysis Procedures: The Framework of the Research Study

As stated earlier, this study is a triangulation mixed-method case study which mingles a corpus analysis procedure and a questionnaire analysis representing the qualitative paradigm of the investigation. What follows is a detailed explanation concerning the corpus and the questionnaire analysis procedures. Major steps and analysis challenges are reported as well in light of the methodological considerations and the limitations of the study.

#### 3.7.1 Corpus Analysis Procedure: Some Methodological Considerations

As explained in the second chapter of this dissertation, building a corpus may be challenging due to some methodological issues that are shared by the majority of corpora compilers. The latter pose the crucial issues of the ideal corpus size, representativeness, sampling procedure, and ethical considerations.

First and foremost, it is increasingly recognised amongst academia (McEnery et al, 2006; Sinclair, 2001; Scott, 2001) that the size importance and relevance of any corpus is not gauged by its *largeness* but alternatively by its potential to achieve the objectives of the study along with the pragmatic considerations delineated by the

researcher himself. As reported by some scholars (McEnery et al, 2006; Sinclair, 2001; Scott, 2001), corpora size depends on research purposes and pragmatic considerations in the first place.

A specialised type of corpora is generally smaller in size than general reference; yet, they are considered as valid and significant regarding the targets set by the researcher (Tagg, 2009, p.74). For pragmatic considerations, the present study corpus size depended mostly on the texters themselves who, for ethical reasons, were made free to participate (or not) in the study. This highly impacted on the size of the corpus as some questionnaires were returned blank or uncompleted, which reduced, to a certain extent, the expected number of messages.

One additional challenge concerns the representativeness of the collected messages which is made impossible because of the corpus size and the convenient type of sampling. Indeed, the compiled texts are very restrictive in many ways as the texts are produced by students of foreign languages, thus, excluding messages produced by other students from other departments of English in the Algerian universities, on the one hand, and students producing messages written in native languages, on the other hand. In both instances, corpus balance and representativeness, being the two faces of the same coin, cannot be achieved under these circumstances as precise representativeness implies accurate knowledge of texting language that ought to be assessed and reported through extensive research on the texters' messages production within different populations and age ranges.

Being aware of the difficulty in attaining balance and representativeness in the present study, attempts to build a corpus of messages from students of all the instructional levels who belong to different age ranges were made. Here again, the interpretation of the results should be narrowed down to be generalised to the particular texters selected sample with all its specificities. The corpus evidence will be seen as the representation of that particular corpus and not a representation of the whole texting language or representation of all students' texting practices.

### **3.7.1.1 A Word about the Word *Word* in SMS Texting : Toward an Operational Definition**

The study framework is built on the research endeavour to distinguish lexical deviant forms. By lexical deviation here is meant the deviation made at the word level. Defining the word *word*, in this particular case, is important as the subsequent results analysis and discussion will be based on this latter. This goes via the framing of some operational definitions that are needed to set, as some SMS linguistic forms are expected to be different from the conventional forms seen in standard languages, in general, and Standard English language, in particular.

Defining accurately the word *word* in both corpus linguistics and linguistics has long been debated for the substance it encloses in the exact counting of these words to determine their frequencies distribution and significance in the language (Sinclair, 1991, 2004; Mc Carthy & O’Keeffe, 2010; Biber, 2003). One intricate and complex difficulty lies in the linguists’ instability in the word *word* definitions which remain scattered and problematic. Broadly, in the lexicological tradition, conceptual meaning generally refers to the basic and essential components of meaning that are conveyed by the literal use of a word and recognised through their spacing in a text (Yule, 1985; Stubbs, 2001).

However, defining the term word in the English language is far more complex as the language contains many compound nouns, idiomatic expressions, and abbreviations that cannot hold meaning by referring to the meaning of words separately, or referring to words’ spacing to deduce meaning (Crystal, 1994, p. 118). The same difficulty is considered with words that are sometimes written in one word and sometimes in two as in examples of flower pot written differently as flowerpot or flower-pot in other instances. Other mentioned issues concern the abbreviated forms that turn to be acronyms as it is the case with laser, for instance, which is not clear whether it is a word or a collection of initial letters of several words (Crystal, 1994, p.118).

In this light, deciding for words on the ground of spacing should, in this case, be taken with great care given all the examples provided above. In this ultimate vein, Crystal (1994) suggested the term *lexeme* as a replacement of the common use of

*word* to cover all the linguistic forms that are seen as units of lexical meaning per se. These units of lexical meaning in Crystal's (1994) words "exist regardless of any inflectional form endings or the number of words it contains" (p.118).

As far as SMS words are concerned, the definition of the word *word* is rendered remarkably difficult and challenging as texting does not necessarily obey the linguistic rules of standard languages. Omitted spaces may occur as well as abbreviated words and sentences. Hence, the term *word* within SMS language should be set as it embeds some notional considerations regarding texting which, again, entails specific units of meaning that are not conventionally acknowledged.

Even with the unusual word forms, number and letter homophones which are notably used in texting language, word forms remain meaningful though represented in cases of shortenings, initials, abbreviated words or phrases as in cases of LOL or ASAPS, or gn8. A particular knowledge of these deviated forms is required to decipher texting language. This should be covered as well in this study as very few of them are found in English language dictionaries or other glossaries.

In short, to answer the question of what a word is in SMS language, adopting spacing is revealed inconvenient when we know that abbreviated words, phrases, and sentences in the absence of texting glossaries and dictionaries cannot be used to decipher texting language easily and properly. Building accordingly on Crystal's *lexeme* terminology, and given the very nature of texting as a partially-grasped language and a potentially growing language variety, we decidedly opted for *lexism* (*plural lexisms*), a coined word suggested as an alternative term to the general labelling of *lexeme* to differentiate between the conventional forms of the English language and all the deviant forms that are typical to texting language.

Therefore, *lexism* will refer in this analysis to all the existing deviant units of meaning such as shortenings, words abbreviations, phrase and sentence abbreviations, letter and number homophones, special uses of consonants that convey meaning, and special symbols used as meaningful entities. The lexical features that form the basis of this enquiry will be presented in tables containing the standard linguistic forms, on the one side, and on the other side, the deviant forms along with exemplifying occurrences.

### **3.7.1.2 Corpus Logging and Treatment**

The first adopted step after the collection of the questionnaire was the elaboration of an electronic version of the compiled messages. The Word processor program was used to prepare the corpora to the automatic processing by Tropes software package. The corpora were then logged in a plain text format (.txt ) carried out by using Microsoft word processor, a crucial step, though, as Tropes does not allow files which are not stored as *text-only* files. As a reminder, the study went through several phases.

The first phase concerns the construction of the general corpus containing the messages total number of 8848 words to answer the first research question. The second stage dealt with the building of a corpus of 4046 words subdivided into two corpora that contain 2023 words each by gender to answer the second research question, and the last phase, which comprised the building of a corpus containing 6055 words, which was subdivided into five corpora comprising 1211 words by academic level to answer the third research question.

Seeking the frequency of lexisms across these eight (08) corpora will result in wordlists based on frequency tendencies proposed by Tropes. This analytical procedure will be adopted throughout the elaborated corpora to support the descriptive and explanatory methodological framework set by the study to shed light on the main lexical texting characteristics.

### **3.7.1.3 Calculation and Coding Procedures**

The calculation of the frequency of lexisms was conducted by Tropes which provided word-frequency lists. More specific word-frequency lists were also generated in light of the students' gender and instructional level. In both the general corpus and the created sub-corpora , the lexisms were codified and sorted out according to a list of 13 deviation categories (types or taxonomies, used interchangeably here to mean categories) elaborated by Lyddy et al (2013). The given taxonomy is itself based on Thurlow & Brown (2003) and Shortis's (2007a, 2007b) classifications, but it was extended to cover a larger number of categories than the ones proposed by both scholars.

For reasons of the richness and comprehensiveness of the selected list, Lyddy et al taxonomy includes missed capitalisation, accent stylisation, letter/number homophones, missed punctuation, phonetic/unconventional spelling, G clippings, shortenings, initialisms, onomatopoeic/exclamatory, misspellings, other clippings, contractions, and semantically unrecoverable units. Table 2.7 provides a detailed account of the categories' definitions and illustrations.

**Table 2.7 Lyddy et al (2013) Types of Deviation, Definitions and Examples**

	Type	Definition	Examples
1	<b><i>Missed capitalisation</i></b>	Words spelt without appropriate capital letter	john, i'd ....
2	<b><i>Accent stylisation</i></b>	A word spelt as it is pronounced in casual speech	cuz, gona, dis...
3	<b><i>Letter/ Number homophones</i></b>	A letter or number used to take the place of a phoneme , syllable or word of the same sound	2 (to), 4(four), l8tr, u (You), C (see), gr8, 2nit...
4	<b><i>Missed punctuation</i></b>	Omitted periods and spelling with missing apostrophe	dont, cant, wont, ill
5	<b><i>Phonetic/Nonconventional spelling</i></b>	A spelling of a word from sound	fone, nite, luk, cum
6	<b><i>G clippings</i></b>	Omitting the final G in a word ending ing	goin, talkin, comin
7	<b><i>Onomatopoeic/Exclamatory</i></b>	A non word sound-based exclamation	ha, arrrgh, waaaou, yay
8	<b><i>Shortenings</i></b>	Omitting the end of a word , losing more than one letter	prob, bro, mon, tues...
9	<b><i>Misspellings</i></b>	Misspelled words	dont't, remeber (remember) ,thought (taught), juut (just)
10	<b><i>Other clippings</i></b>	Omitting other final letters	tel, i's, hav, wil, com
11	<b><i>Initialisms</i></b>	A word or group of words represented by initial letters	tb (textbook), gf (girlfriend), poa ( plan of action)
12	<b><i>Contractions</i></b>	Omitting letters from the mid of words	txt, wknd, dnt, plz, bday, gng
13	<b><i>Semantically unrecoverable</i></b>	Words apparently not correct, or where texters' intended word is not clear	

Source: An Analysis of Language in University Student's Text Messages. Lyddy et al, 2013, Journal of CMC, p.551)

As can be noticed from the table, most reported texting features in the literature are found in Lyddy et al's (2013) list. Instances of phonological representation, missed capitalisation, speech-like instances, and even incomprehensible linguistic units are referred to. Yet, the current study will not be limited to the given categories as all existing deviations will be reported as well and analysed within the course of the data analysis process.

Henceforth, the wordlists and frequencies provided will be sorted out manually in accordance with the listed categories. This preliminary quantitative step is followed by a detailed qualitative analysis based on the description and explanation of the frequencies to give more significance to the obtained numbers. The strength of corpus linguistics approach lies in its capacity to use fast and accurate techniques in identifying patterns that human analysts would not notice without the use of the software. Clearly, corpus-based analysis draws its significance not only on the quantitative formulation of the data but also on the power of the qualitative description of that data (Baker, 2010, p.111).

#### **3.7.1.4 Toward a Statistical Representation and Interpretation of the Results**

Along with the calculation of the deviation frequencies, meaning is sought as well by resorting to *significance tests*. Once all the frequencies calculated, one needs to start the statistical presentation and interpretation of these results namely to confirm or reject the hypotheses formulated in the outset. This crucial step is necessary to make this work gaining more validity and reliability as accuracy and exactitude in results are targeted as well. Besides, the confirmation or rejection of the stated hypotheses can insightfully inform about the impacting role of individual variables and their importance in construing texting language.

To achieve this research objective then, the adopted significance test is the *Chi-square test* ( $\chi^2$ ) which is widely used while testing a nominal (or qualitative) variable such as gender and academic level with an ordinal (or quantitative) variable which comprises ordinal numbers such as frequencies. Most commonly, the correlation coefficient varies between -1 (a strongly negative correlation) and +1 (a strongly positive correlation), while a 0 value indicates the absence of a correlation. These

mostly indicate that a change in the value of one variable will be systematically associated with a change in the other variable (Flick, 2015, p.174).

Here, it is important to mention that the implementation of the correlational type of quantitative studies is dictated by the descriptive nature of the research as well as the type of questions asked concerning the students' gender and academic level relationship with the use of deviated forms in messaging. Such an analytical approach can yield exceptionally insightful results which add to the enlightening of the issue at stake.

### **3.8 The Questionnaire Presentation and Analysis Procedure**

Questionnaires are considered as one of the most favoured data collection tools among researchers in social research (Newby, 2014; Bell, 2005; Blaxter et al, 2010). Still, every researcher adopting this technique knows that designing questionnaires is labour-intensive and critical regarding the researchers' degree of expertise to design good and efficient questions. Designing questionnaires requires a certain degree of expertise as questionnaires to Newby (2014), "are far more than just writing a series of questions related to the research issue. It requires that we work at two scales, at one extreme deciding on the appropriateness of the individual words we use and at the other ensuring that the layout and appearance of the questionnaire are both meaningful and attractive to respondents" (p.310).

Concurrently, Nunan (1992) argued that the construction of valid and reliable questionnaires is "a highly specialised business and a very complicated enterprise" (p.143) for non-experienced researchers who are not usually familiar with the construction of questionnaires. Nonetheless, when well-designed, questionnaires can be excellent tools to collect data and inform about the targeted issues in many insightful respects (Newby, 2014; Blaxter et al, 2010; Bell, 2005; Nunan, 1997).

#### **3.8.1 The Aims and Description of the Questionnaire**

Questionnaires are both qualitative and quantitative in nature, depending on their type, whether standardised/ structured as the ones used in surveys, or semi-structured, like the ones used to account for attitudes, practices, and beliefs as used mostly in

qualitative studies. Broadly, this goes along the nature of the questions included whether open or closed. In our case, the questionnaire is used as a qualitative instrument and is constructed to deal with the students' perceptions, beliefs, and practices to answer the fourth and fifth research questions of the study.

As stated earlier in this chapter, this qualitative tool is used along with the quantitative approach to maximise the benefits of mixed-methods design. One of the undoubted strengths of adopting qualitative designs and tools is to turn the invisible phenomenon into visible and generate meaning to understand the participants' evaluation and interpretation of their social reality (Denzin & Lincoln, 2000; Mason, 2002; Bryman, 1988). As sustained by Higgs et al (2009):

Qualitative research is increasingly regarded as a powerful and credible tool for revealing and understanding the inherent complexity and variability of human behaviour 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 (p.8).

Building on these contentions, the present study questionnaire is designed to tackle the issue of texting in more depth and explore the various facets of the topic from the participants' perspective. In this scope, the participants are administered a demographic, behavioural, and attitudinal questionnaire concerning SMS texting, and gender differences / similarities from both gendered groups' viewpoint.

More specifically, the objective of the questionnaire is threefold: first, it seeks to account for the social and individual behaviours towards this medium and its place in the participants' everyday life interactions; second, it looks into the texters' motives that justify their use of SMS in daily interactions; and third, identify the students' gendered perceptions to account for possible similarities and differences.

The questionnaire contains twenty three (23) items which are encompassed in 6 distinct parts. The form starts with an introductory paragraph that explains the overall purpose of the study by insisting on voluntary participation and assuring anonymity. The paragraph provides also the necessary instructions to explain the answering procedures. The introductory paragraph is followed by factual questions labelled *Identification questions*, which represents the questionnaire first part. The

latter comprises three questions which are designed to account for the respondents' demographic characteristics such as age, gender, and academic level in order to facilitate the formation of the groups according to the instructional level and gender.

Part two of the questionnaire is labelled *SMS messages use* and contains five questions (05) that are devoted to the respondents' texting habits and reasons for the use of messages. The questions asked aim at determining the texters' messages frequency and importance when compared to other media such as telephone calls or the Internet. The third part, named *SMS texting and language modifications* contains five (05) questions that refer to SMS messaging and language modifications. The objectives of the questions are primarily identifying texting behaviours and understanding their underpinning mechanisms. Broadening the scope of language deviations by focusing on the reasons for the deviation and the reasons that shape this behaviour seem to be a step forward to better understand the issue of language modifications.

Part four labelled *SMS messaging and the English language use* contains four (04) questions devoted to uncover and understand the informants' texting practices when using English more specifically. The fifth part named *SMS texting and the English language modifications* contains four (04) questions set for reasons underlying their language deviations when using the English language per se. Being the major concern of the current study, the use of the English language by the students is essentially relevant as deviations are seen from the Standard English perspective. The sixth and last part which is labelled *SMS corpus* comprises one question whereby the students are requested to share the last messages sent by the respondents to make up the present study corpus.

### **3.8.2. The Language and Questions of the Questionnaire**

The questionnaire is edited in English and contains an array of open and close-ended questions. This is done to provide a certain variety in the formulation of the questions to enlighten the issue, on the one hand, and to elicit as much information as possible, on the other hand. To move past ambiguity and irrelevance in the formulation of the questions, a piloting phase was initiated to ensure more validity to the questions.

The pilot phase was a two-stage phase as colleagues and students were solicited for the revision and evaluation of the questionnaire.

Insights into the significance of the questions were drawn on the basis of comments and feedback provided by forty three (43) informants along with ten (10) lecturers who kindly accepted to proofread the first draft of the questionnaire. The students were asked to comment on the questions while answering. Eliciting feedback from both teachers and students on the questionnaire length, visual impression, questions difficulty, clarity, and completion time was very insightful as it helped to reshape, correct, and improve the final version of the questionnaire.

Given the widely-acknowledged benefits of the open-ended type of questions and their capacity to yield rich and insightful data, open-ended questions are the most prevailing type in the questionnaire. Additionally, a second type of questions which comprises the close-ended questions are used by including “Why” by the end of each question to elicit more insights on the topic. However, one major problem with open-ended and semi-closed types of questions lies in the amount of data yield by these last-mentioned. In fact, researchers usually face substantial amounts of data as the questions comparatively provide relatively unexpected and varied answers that are difficult to analyse and score (Nunan, 1997; Bell, 1988).

The third type is list questions. This type of close-ended 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 one, the respondents are asked to tick one or several options provided with the question. Likewise, the second type asks for the selection of one or more items from a list of options. Yet, the major particularity of this second type is in the form of the questions that are extended by adding “Why” at the end of every option.

The fourth and last type concerns the category questions. In this close-ended type of 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, p.59) as the respondents cannot fit into two different categories at a time.

### **3.8.3. The Wording and Appearance of the Questions**

For many researchers (Bell, 1988; Wallace, 1998; Nunan, 1992, 1997; Verma & Mallick, 1999; Dornyei, 2007), making accurate and successful questionnaires ultimately depend on the layout design and the quality of the words and sentences. Most research methodology references stress on the importance of the sentence and word choice which is crucial for the elaboration of a good and valid questionnaire. Careful word choice and sentence construction are recommended to avoid ambiguity, imprecision, and ambivalence in questionnaires.

Despite the respondents' command of the English language, the elaborated questions were made very straightforward and simple with one-idea sentences to facilitate the understanding and completion of the items. Technical words were avoided to rule out any possible confusion and ambiguity. In terms of appearance or layout, the questionnaire was made short and orderly, by dividing the questions into parts to give the illusion of shortness to the questionnaire.

Additionally, the layout and spacing are carefully designed to avoid boredom and discouragement. 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 properly. This is to follow Verma and Mallick (1999) recommendations concerning the importance of both carefully-written and attractive questionnaires that reflect the researchers' intensive efforts to make easy and practical questionnaires.

In Verma and Mallick's (1999) view, this latter affects notably the respondents' appreciation of the presented form as it is mostly based on the quality of this latter in terms of appearance and attractiveness. Ultimately, the participants 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" (p. 120). Overall, the questionnaire can represent an excellent data collection instrument provided the efforts researchers make to design and produce quality questions either at the form level or content one. Participants, with no possible doubt, are active actors who can sense the researchers' seriousness and endeavour to make worthwhile completing questionnaires.

### **3.8.4 The Questionnaire Analysis Procedure**

Building on the consensual arguments on the significance of employing questionnaires in research, the suggested one here is much more interested in the valuable insights provided than the confirmation of any type of hypothesis. By designing questionnaires one may condense information into the form of tables that facilitate data transparency, accessibility, and interpretation. The framed tables as well can help achieve comparative analysis as it is the case in this study which seeks to unravel gendered texting in practices, perceptions, and texting behaviour. As supported by Flick (2015):

A major issue in presenting qualitative research is how to make the data trail from raw data to categories and presentation transparent to readers.....The art of writing about this kind of research is how to find a way to allow readers to develop their own picture and understanding of your work, not only how to convince them but also how to allow them to assess what you present and found (p.254).

The quantification of data is carried out through the counting of the answers that are processed and analysed via the use of tabular representations and counting of the number of informants who share the same opinions. Additionally, the qualitative data which are non-numerical and concern mostly open-ended questions are quantified by generating categories that stem from the key word analysis of the statements made by the respondents. Every category, which is presented in one word or one-idea sentence, is assigned a score that will help us in the counting of percentages related to the data. This procedure will help synthesise big amounts of data in such a way to reveal possible and insightful patterns that will be represented in tables. The whole counting process and table presentations will be carried out by *Ethnos* which is a software package that is used in qualitative research studies as concerns the analysis of questionnaires.

### **3.8.5 The Limitations of the Questionnaire**

Opting for questionnaires as a research instrument in social research is mostly motivated by the prospects they offer to inquire a large number of participants in different settings. Questionnaires have also the great advantage of being quick, cheap,

and easy (Bell, 1988; Nunan, 1997; Flick, 2015; Walliman, 2006). They offer additional possibilities to respondents to provide truthful answers far from the influence of the researcher or any other part.

Further, a well-designed questionnaire can provide accurate details that contribute both in qualitative and quantitative studies depending on the objectives of the research as respondents have enough time to think about the answers and correct them whenever it is felt during the completion (Walliman, 2006). To Rasinger (2010), one major benefit of questionnaires is their capacity to “generate a large amount of data which is comparatively simple to process...with their neat tick-boxes seem like a blessing” (p.60). In this respect, some edition conditions should be met as “questionnaires must be perfect before we distribute them: we must be confident that they work well and that they reliably generate valid data. A questionnaire that is in the hand of respondents cannot be changed, it either works, or it does not” (Rasinger, 2010, p.60).

Despite the reported advantages, the use of questionnaires holds several drawbacks. The first deals with the limitation of the number of questions and the limiting scope of the questions themselves. Indeed, trying to understand an issue may not be reported by a set of questions that might be important to the researcher and might not be to the respondents (Bell, 1988; Nunan, 1997; Flick, 2015). The questions themselves as simplified are not convenient especially when researcher desire to explain complex and complicated aspects.

The second problem with questionnaires resides in the quality of the questions themselves that should be designed and elaborated by skilled researchers in the construction and design of questionnaires. The required expertise may not be found in all the researchers and this may make the elicited data unreliable and weak in some respects. The third disadvantage lies in the rigid format of the tool as no prompting and probing are possible. This, in some extents, limits the scope of the respondents’ authentic answers and the researchers’ understanding of the reasons underlying the given answers.

The fourth problem deals with the uncompleted returned questionnaires as respondents answer only the questions they consider relevant and interesting to them,

not to the researcher. Being instructed and urged to answer all the questions is not enough in this case as respondents may truthfully (or not) complete the questionnaires. The fifth and last disadvantage consists of the low response rates that most users of questionnaires face. In most cases, having back the questionnaires filled is a real challenge to most researchers who have to constantly remind respondents with filling the questionnaires and handing them as soon as they can, but this again is not easy to attain.

As far as our questionnaire is concerned, many attempts were made to reduce the cited pitfalls by including a piloting phase to build a sound and attractive questionnaire as explained above. As for the returned questionnaires, the ones that were not satisfactorily completed or left blank were excluded from the analysed data. The excluded questionnaires were 12, which is quite inconsequential regarding the larger total number of completed questionnaires. As for controlling questionnaires return rates, all the questionnaires were returned at the end of the students' sessions in the amphitheatres and classrooms. Almost all the questionnaires were collected and sorted out accordingly and sequentially.

Lastly, using questionnaires to explain psychological motives is not enough to cover fully a complex social and individual phenomenon. More approaches and tools such as interviews, focus groups, and introspection may also yield insightful and valuable data to gain more knowledge on the different aspects of texting issues. We further believe that exhaustive explanations require the contribution of other sciences such as psychology, psycholinguistics, sociology and sociolinguistics that are recommended when dealing with such novice and intricate topics. Still, the planned use of a questionnaire in the present study was made to benefit from the wide enumerated advantages of the instrument and, more importantly, to include the participants' voices and contribution in explaining texting practices and mechanisms.

### **3.9 Ethical Considerations**

Ethics in research is an overriding issue that underscores all the research steps and decisions taken all along the research process. Largely, this does not only include the participants' respect and dignity protection (Cohen et al, 2007), but also the respect

and honesty of researchers when designing their research project (Gravetter & Forzano, 2012; Blaxter et al, 2010). Consistently, Gravetter and Forzano (2012) asserted that “research ethics concerns the responsibility of researchers to be honest and respectful to all individuals who are affected by their research studies or their reports of the studies’ results...In research, ethical issues must be considered at each step in the research process” (pp. 108-109).

This presupposes the researchers’ responsibility toward the participants and the public with accurate and honest accounts of their studies (Gravetter & Forzano, 2012, p.109). These shared principles or “professional ethical standards” (Abbott & McKinney, 2013, p. 61) in all sciences aim to “ensure that researchers are able to make their procedures transparent (necessity, aims, methods of the study), that they can avoid or eliminate any harm or deception for participants, and that they take care of data protection” (Flick, 2015, p.33).

Ethics in research starts with honesty in terms of the respect of the intellectual property and the avoidance of plagiarism. This entails the researchers’ acknowledgement of previous works by the systematic citing of the sources. It goes also along the researchers’ faithfulness in reporting and accounting for all the details of the research. Researchers have clear responsibilities toward the public, other researchers, and academia. These responsibilities reside in the honesty in the substance of any research study conducted. “Accurate descriptions are required of what you have done, how you have done it, the information you obtained, the techniques you used, the analysis you carried out, and the results of experiments – a myriad of details concerning every part of your work” (Walliman, 2006, p. 149).

Being as objective in data analysis and reporting is also considered as an important ethical issue in research. Keeping objectivity as a rule of thumbs all along the study would minimise data interpretation from being distorted and biased. To Walliman, “It is difficult, and some maintain that it is impossible, to be free from bias. However, distorting your data or results knowingly is a serious lapse of honesty.....It is good practice to admit to limitations of competence and resources” (p.150). At this stage, bias should be differentiated from subjectivity, as both seem to be clearly distinct. As put by Kumar (2011):

Bias is different from subjectivity. Subjectivity is related to your educational background, training and competence in research, and your philosophical perspective. Bias is a deliberate attempt either to hide what you have found in your study, or to highlight something disproportionately to its true existence. It is absolutely unethical to introduce bias into a research activity....it is the bias that is unethical and not the subjectivity (p. 245).

Ethics deals also with the researchers' responsibility to protect the participants' privacy. To Cohen et al (2007), this term should not be limited to confidentiality as "privacy is more than simple confidentiality. The right to privacy means that a person has the right not to take part in the research, not to answer questions, not to be interviewed ...and to engage in private behaviour in their own private place without fear of being observed" (p.64). In this particular case, anonymity and confidentiality was guaranteed all along the study by offering complete freedom to take part in the investigation and deceiving the participants' names in the questionnaire.

Data protection is guaranteed as well by reassuring full confidentiality and eliciting consent as for the messages use and disposal. Despite the highly-codified and institutional frameworks, a relative flexibility is tolerated depending on the perceived degree of risk, the nature of the study, and the purposes of the study. To Tagg (2009), "ultimate responsibility for making ethical decisions rests, however, as evident in legal and ethical frameworks, with specific consideration of the data and project in question" (p.81).

As far as the students' messages are concerned, the first reading of the content of the texts reveals a relatively low degree of intimacy or privacy as the majority of the provided messages were written to serve interpersonal and phatic purposes with no compromising or harmful contents to the participating students. In some extents, this helps to reduce the researcher responsibility as messages use and disclosure to the larger population via the dissertation appendices, will not threaten the participants' image or reputation, given the inconsequential and neutral character of the messages.

### **3.10 Chapter Summary and Conclusion**

This chapter outlined the methodological framework design, procedures, and the challenges faced during data collection and processing. It began with the description of the case study frame and the mixed-method strategy benefits and limitations. Sampling procedures were also regarded in terms of the elaborated corpora and the participants' representativeness and validity. The corpus specifications and challenges raised by the compilation, coding, and exploitation of text message corpora, were addressed as well by including corpus size, representativeness, and sampling considerations.

The corpora and participants' sampling was revealed complex and difficult to achieve given the observed heterogeneity either when making gender groups or groups according to the students' educational level. In this view, explanations were put forward to explain some methodological decisions made throughout the sampling, the data collection, and analysis procedures. The major data collection methodological attempts were justified by our intention to provide possibly representative samples by explaining the best way for corpora to be deemed representative and defining the parameters and limitations to the generalisation of the samples (Tagg, 2009).

Besides, the questionnaire design and analytical procedures were extensively described. The use of the questionnaire was supported by our intent to approach the issue from the participants' perspective and prompt further insights to explain the qualitative data collected. Major ethical considerations concluded this part by referring to the most ethical prerequisites in any research project.

This chapter has placed the thesis in the methodological framework of the lexical analysis by laying in full its various implications, challenges, limitations, tools, and latterly, the ethical necessary conditions for research. The next chapter is consecrated to the presentation and analysis of the results obtained from the SMS corpus, to conclude with the discussion and interpretation of the findings. It considers the first three questions noted above, the one concerned with the deviations, the deviation types, and variation across the students' gender and academic level.

## **CHAPTER FOUR**

### **CORPUS DATA ANALYSIS AND DISCUSSION**

#### **4.0 Introduction**

Chapter four is, by far, the longest chapter of the dissertation. It offers, in substantial detail, the results of the general corpus and the related sub-corpora used to look at the lexical typifying features that shape the texting language. As expressed in the outset, the overarching objective of the study is, primarily, to acquire a more profound understanding of texting mechanisms, and ultimately, investigate viable correlations between text messaging, the students' gender, and academic level.

Considerably, most articulated studies on text messaging seem to concur on the apparent distinguished language of texting as a final product of various factors of the communicative situation, namely physical constraints, pragmatic, intimate functions, and motivations (Tagg, 2009; Crystal, 2008a; Thurlow & Brown, 2003; Hard af Segersteg, 2002). To various extents, the distinction in the conventionality and non-conventionality of the language of messages is well-documented in western academic works. Yet, some questions remain unanswered with respect to the etymological components which are more subject to deviation and informality in EFL academic settings and their variation across gender and texters' language EFL ability.

The current study is essentially based on a corpus-based approach to refine past understanding of texting regarding language variation in an academic setting. The distinguishing of deviated forms in an EFL academic context can constitute a real leap forward within the field as it gives an extensive view of the issue from a different perspective as the larger part of studies have been conducted in naturalistic and L1 environments as already detailed in the literature (Velghe, 2011; Crystal, 2008; Sebba, 2007; Shortis, 2007a, 2007b).

Equally, the investigation extends the Algerian researchers' works which are basically grounded on small corpora that are based on Algerian linguistic contexts where instances of code-switching and language use were investigated. By adopting a corpus-linguistics methodology, based, presumably, on a larger corpus of 808 text messages, the present investigation might be unique in Algeria in terms of

methodology choice, corpus size, and also in terms of the selected EFL academic context. The EFL students' messages composed solely in English are analysed with specific reference to the Standard English lexical forms. Points of comparison against this latter is provided as a first step. This is followed by the classification of the identified deviated forms by implementing Lyddy et al's (2013) texting language taxonomy to point out the foremost prevailing forms and their corresponding categories.

Building on the three first stated research questions, this chapter is partitioned into three main sections respective to the questions. The first outlines the general corpus analysis and discussion by setting up wordlists that will be presented and discussed in light of the identified frequencies. Section two is devoted to the examination of the results concerning gender. A closer examination of male and female wordlist frequencies will be carried out to advise around the conceivable impact of gender on texting language production. Section three covers the examination of the corpus to account for the frequencies and distributions across the students' scholarly levels within the ultimate goal to draw a plausible relationship between the texters' academic level and texting features.

#### **4.1 Section One: The Lexical Analysis of the General Corpus: An Introduction**

The following analysis starts with a thorough presentation and examination of the existing lexisms within the general corpus and after that move on to classify them according to Lyddy et al (2013) deviation taxonomy. To begin, the corpus data processing helped to identify 399 lexisms. Along with the identified lexisms, the number of occurrences of each lexism is presented from the foremost frequent to the least frequent lexisms. The calculation of the occurrences of the deviated forms brought about 1323 variant forms reflecting the occurrence of the indicated number of lexisms.

Based on the occurrence number of lexisms, i.e. 1323, the prevalence of lexisms with its diverse variations accounts for 14.96% of the total lexeme content. This rate is significant in two ways. First, it provides a clear idea about the minor proportion of lexisms in regard to the entire corpus; and second, it confirms some scholars'

statements sustaining the idea of the use of deviations in a very limited extent, and thus, demystifying the public preconception of texting as a predominately codified and incomprehensible language (Crystal, 2008; Lyddy et al, 2013; Farina & Lyddy, 2011; Thurlow & Brown, 2003).

The first direct look at the data displays a particular variety in lexisms that ranges from instances of initialisms, contractions, speech-like examples, shortened formulaic expressions, and phrases. One noted difficulty, though, concerns the confronted incapacity to differentiate between some spelling mistakes and lexisms. Forms such as <cridites> (*credits*), <harry up> (*hurry up*), <bey> (*bye*), or <alife> (*alive*), <depprtmnt> (*department*), <peaces> (*pieces*), for example, can barely be classified as mistakes or lexisms in the absence of the texters' real motives for producing such forms. In this respect, all deviant forms are unequivocally detailed as lexisms and tallied as such for lack of evidence to explain both purposeful and inadvertent texting practices.

Some other instances reflecting spoken English such as <wanna>, <gonna>, <gotta>, <yah> and <yo> are also considered as lexisms in the study. These instances are largely restricted to speech as a pure reflection of colloquial contractions featured in songs, comic strips, jokes, and humour (Tagg, 2009, p.113, based on Weber, 1986). The contention that texting is partly reflecting speech is widely discussed among scholars (Crystal, 2008; Shortis, 2007b; Thurlow & Brown, 2003; Velghe, 2011; Lyddy et al, 2013). This, in turn, calls for the tolerated degree of informality in messages that vary according to the texters and the texting context alike. In this way, the examination of instances of spoken language is intended to account for the informality of messages, on the one hand, and the predominance of the latter in texting language, on the other hand.

A few linguistic forms are excluded from the 399 list of lexisms, specifically borrowed and code-switched instances such as *inchalah*, *fturkum*, *flexy*, *polycopy* and *bis* (*bisou*). Additional to these are clipped first names or nicknames such as *Sousou*, *Mira*, *Mina* and *Mimi*. More commonly used abbreviations such as fb (Facebook), SMS or TCF (Test de compétence en langue Française) are also overlooked for not

being typical to texting language. Similarly, emoticons are not reported here as they do not hold any linguistic properties.

For practical considerations, all lexisms are grouped with reference to their corresponding standard forms and frequencies to make possible the enclosure of all lexisms in a single table. The number of lexisms is differentiated from the occurrences of lexisms as one standard form may have more than one deviated form. Some standard lexemes have from one to thirteen different deviant forms but this does not analytically mean that they are the most frequent ones. In fact, the number of lexisms in the table shows how the instance *you*, for example, includes only eight (08) distinct forms but is on top of the frequency list whereas *tomorrow* includes thirteen (13) deviant instances but ranked as the fourth most frequent deviated lexeme.

#### **4.1.1 General Corpus Analysis and Discussion**

The general table of results contains 399 lexisms that are compared against 240 Standard English language lexemes. The 240 lexemes encase linguistic and non-linguistic expressions that are represented linguistically. By non-linguistic we mean expressions of laughter, anger, and emotions that are represented by consonants, vowels or a combination of both. To that list are intentionally added four semantically unrecoverable instances that seem to escape standard reference as no possible equivalence is found in the Standard English language. These last-mentioned are left to serve the ensuing categorisation stage where semantically incomprehensible lexisms are part of Lyddy et al's (2013) types of deviation.

In the present section, a two-phase analytical procedure is adopted. The former concerns a lexical examination and discussion of the totality of the identified forms. The distinguished features are, thus, highlighted and explained in like manner to present a comprehensive view on the different deviations existing in the corpus. The second analytical step moves on to analyse and discuss the results by considering the general findings in terms of Lyddy et al taxonomy.

For practical considerations, the exhaustive list of the results is placed in the appendices part of the dissertation due to the substantial amount of data and length of the list which exceeds five pages. Thus, the table is decidedly shortened here by

providing the fifty (50) most frequent lexemes to provide the reader with a better account of the most frequent lexemes along with their lexical variations, frequencies and percentages. Note to mention that the analysis and interpretation of the results are not constrained to the condensed table but expands to cover all the cases found within the corpus.

**Table 4.1 The Top 50 SMS Lexisms Variant Forms and Frequency, Number of Lexisms, Lexisms Group Frequency and Percentages**

<i>Standard English reference lexemes</i>	<i>Lexism variant forms and frequency</i>	<i>N° of lexisms</i>	<i>Group freq</i>	<i>Group freq %</i>
1. You	u (379), y (28), yu (13), yo (02), uuuuu (01), ya (05), youuu (02), yo (01), yoo (01)	09	432	4.88%
2. Are	r (74), ar (05), re (16)	03	95	1.07%
3. Please	plz (33), plis (02), pls (02), pease (01), pleaz (01), pliz (01), ple ( 01), p (01), pleaaase (01)	09	43	0.48%
4. Your	yr (06), yur (05), ur (26), ure (01), you (01)	05	39	0.44%
5. Tomorrow	tmrw (09), tomrw (04), tom (04), tomorw (02), tmr (04), tomrow (01), tomoro (01), tomorow (01), tomor (01), 2morrow (01), tmw (02), tommorrow (02), tommorow (01)	13	33	0.37%
6. Good	gd (11), g (11), gud (01), g'd (01), god (01)	05	25	0.28%
7. Brother	bro (18), brothr (01), brothe (01)	03	20	0.22%
8. Because	bcz (10), cuz (05), cauz (02), bec (01), bcs (01), cause (01)	06	20	0.22%
9. Love	luv (10), lov (04), lv (04), looove (01)	04	19	0.21%
10. See	c (13), se (04)	02	17	0.19%
11. And	n (05), nd (11)	02	16	0.18%
12. Thanks	thnx (10), thanx (02), tks (01), thank's (01)	04	14	0.15%
13. Sister	sist (07), sistr (01), sis (06)	03	14	0.15%
14. Have	hav (05), hv (05), ve (02), hve (01)	04	13	0.14%
15. Will	wil (08), wl (01), ll (04)	03	13	0.14%
16. You are	ur (12)	01	12	0.13%
17. I am	Iam (02), im (02), I'am (05), I m (02),	04	11	0.12%
18. Don't	dnt (05), dont (04), do't (01), dn (01)	04	11	0.12%
19. Am	m (10)	01	10	0.11%
20. To	t (04), 2 (06)	02	10	0.11%
21. Hope	hop (05), hp (03), hpe (01)	03	09	0.10%
22. Take	tk (07), t (01), tak (01)	03	09	0.10%
23. Good night	g8 (04), good n8 (03), gd ngt (01), good nit (01)	04	09	0.10%

24. Hello	helo (06), helloooo (01), hell (01), helle (01)	04	09	0.10%
25. For	4 (07), fr (02)	02	09	0.10%
26. Babe	bb (07), bab (01)	02	08	0.09%
27. Good morning	gm (03), good m (02), G. mornng (01), good mrng (01), g morning (01)	05	08	0.09%
28. Too	2 (07)	01	07	0.07%
29. When	wen (02), wh (01), wn (02), where (02)	04	07	0.07%
30. Something	sth (05), smtng (01), smthg (01)	03	07	0.07%
31. Hi	hii (03), hiiii (02), hy (02)	03	07	0.07%
32. Today	2day (05), to day (02)	02	07	0.07%
33. That	dat (05), da (01)	02	06	0.06%
34. Doing	doin (04), duing (01), dng (01)	03	06	0.06%
35. Cannot	cnt (02), cant (01), c'nt (01), cann't (01), cn't (01)	05	06	0.06%
36. Lots of laugh	Lol (05)	01	05	0.05%
37. H	hahaha (02), hhhhh(02), hahahaha (01)	03	05	0.05%
38. Yourself	urself (03), youself (01), yslf (01)	03	05	0.06%
39. Care	cr (03), car (01), c (01)	03	05	0.05%
40. Madam	mdm (04), madm (01)	02	05	0.05%
41. Message	msg (04), mg (01)	02	05	0.05%
42. Come	com (03), cm (01), kom (01)	03	05	0.05%
43. With	wid (03), withe (02)	02	05	0.05%
44. Bye	bey (02), byby (01), bay (01), babay (01), by (02)	05	05	0.05%
45. Not	nt (04)	01	04	0.04%
46. This	dis (04)	01	04	0.04%
47. Very	vry (04)	01	04	0.04%
48. Waiting	waitin (04)	01	04	0.04%
49. Where	whr (02), wr (01), wher (01)	03	04	0.04%
50. The	th (03), di (01)	02	04	0.04%

The first immediate observation when looking through the general findings list, and the presented list above, consists of the clear inconsistency in the frequencies and percentages of the lexisms. Some lexemes seem to be more deviated than others, with 135 lexisms reported once only compared to 105 lexisms occurring twice or more. Less frequent or occurring once-only lexisms include cases such as *believe* <believ>, *alone* <alon>, *suffer*<sufer>, *course* <cours>, *everything*<evrthing>, *next*<nxt>, *problem*<prbml>, *back*<bck>, among other examples. More intricate are some once-occurring cases which are notably challenging in nature as no indication of whether these are editing mistakes due to poor language command and/ or non-proofread contents, or real deviations.

As absence of evidence exists on the texters' real motivations for producing such deviated cases, we decidedly consider them here as individual deviation style rather than common texting behaviour. These, according to Tagg (2009), suggest the texters' distinction between common and uncommon words, with the underlying idea that common lexemes tend to be more subject to deviation than others. This conceivably clarifies deviation in words such as *tomorrow*, *you*, *please* or *thank*, rather than complex words such as *pretty*, *beautiful*, *obliged*, or *lose*. Yet, the idea of common and uncommon words should be taken with great care here as no clear definition of what is common or uncommon to texters is established in the literature.

**Figure 4.1 Examples of Problematical Forms Occurring Once Only**

Wether	weather
Beasy	busy
Oblgde	obliged
Looocked	looked
With	withe
Preaty	pretty
Loose	lose
Wish	whish

The second discernible feature lies in the significant occurrence of some lexemes over others in the corpus. The identified lexisms concerns namely the instances of *you* (4.74%), *are* (1.04%), *please* (0.47%), *your* (0.42%), *tomorrow* (0.36%), *good* (0.27%), *brother* (0.21%), *because* (0.21%), *love* (0.20%), *see* (0.18%), *and* (0.17%), *thanks* (0.15%), *sister* (0.15%), *have* (0.14%), *will* (0.14%), *you are* (0.13%), *I am* (0.12%), *don't* (0.12%), and *am* (0.10%), among others.

Evident with these lexemes, and the subsequent ones, is the number of occurrences which seems not to be restricted by the lexeme category as the examples provided, and the ones present in the corpus, show indistinctively lexemes from different categories namely pronouns, auxiliaries, nouns, adverbs, adjectives, and prepositions. No preferences are noted at this level nor at the length of lexemes level as the most frequent deviated forms are mono-syllabic forms such as *you*, *are*, *your*

that are followed by longer syllabic forms such as *tomorrow*, or *because*, almost with very close percentages.

Other longer and compound instances such as *good morning* (0.08%) or *good night* (0.09%), *good bye* (0.04%), *good luck* (0.02%), *mothers' day* (0.01%), *happy birthday* (0.01%), are present as well with varied occurrences as illustrated in these examples. Yet, longer but rare identified phrase or sentence instances namely *as soon as possible* (0.01%), *how are you* (0.02%), *I have got to go* (0.01%), *I would like to know* (0.02%), are present but with very low occurrences.

These observations helped to conclude that neither the length nor category of lexemes represent a determinant element in the deviation behaviour. In fact, deviation appears to obey more likely to the phonological approximation maxim sustained by Thurlow and Brown (2003) as seen in the top three patterns namely *you*, *are* or *your*. Again, this cannot be generalised to the rest of the cases as some forms which can be represented phonetically such as *for*, *me* or *be* are less frequent, and present exceptionally low percentages.

One additional note concerns the second aspect dealing specifically with the number of the deviated forms connected to each lexeme. The results uncovered subtle details about the number of deviated forms that the same lexeme has. In this line, texters showed a notable inclination to respell the lexeme in various ways with some particular deviated forms more than others. These variations within the same lexeme are not related to the first ranking of lexemes according to concurrencies percentages, proposed earlier, but looks more particularly at the number of variant forms in the same lexeme. Consequently, a new ranking is proposed here to account for the most occurring forms according to the number of variant forms related to each lexeme.

With this said, the representation of variant forms of lexisms shows disparities in the ranking of the deviated forms. The variant forms, in this line, varied between one, as the least number, to thirteen as the highest number, with *tomorrow* as the most deviated lexeme with thirteen (13) deviant forms, followed by *you* and *please*, with 9 deviated forms respectively; *because*, with 6 deviated forms; *good morning*, *bye*, *good*, *your*, with 5 deviated forms respectively, and *love*, *thanks*, *have*, *I am*, *don't*, *good night*, *hello*, *when*, *miss* (verb), *good bye*, with 4 deviated forms correspondingly.

#### Figure 4.2 Selected Lexemes with their Corresponding Variants

Tomorrow	tmrw (09), tomrw (04), tom (04), tomorw (02), tmr (04), tomrow (01), tomoro (01), tomorow (01), tomor (01), 2morrow (01), tmw (02), tommorrow (02), tommorow (01)
You	u (379), y (28), yu (13), yo (02), uuuuu (01), ya (05), youuu (02), yo (01), yoo (01)
Please	plz (33), plis (02), pls (02), pease (01), pleaz (01), pliz (01), ple ( 01), p (01), pleaaase (01)
Because	bcz (10), cuz (05), cauz (02), bec (01), bcs (01), cause (01)
Your	yr (06), yur (05), ur (26), ure (01), you (01)
Good	gd (11), g (11), gud (01), g'd (01), god (01)

Despite the fact that *tomorrow* is seen as a long lexeme, shorter or mono-syllabic lexemes such as *you*, *good*, and *please*, tend to have high and significant frequencies as well. Clearly, the examples highlight the texters' inclination to deviate almost all the standard forms presented in the table. Besides, category and length seem not to be determinant in the number of variants that every lexeme has.

Here, evidence that some lexemes display higher numbers of variants can be explained by the plausible tendency of some lexemes to be more deviated than others. In this particular instance, it seems that when lexemes are highly clustered, this may give more opportunities for shortening to take place by keeping consonants, more likely, or keeping the beginning of the word itself to the extent of the new word understanding. Notably, shortening words is not done randomly and seems to comply with comprehension principle referred to by several scholars in the literature (Stubb, 2007; Crystal, 2008, 2008a, 2008b; Shortis, 2007b; Tagg, 2009).

One additional note concerns the texters' adoption of shortening strategies when contracting an already-short lexeme. These strategies can be represented by the use of speech-like instances such as <dis>, <dat>, <yo>, <ya> (you), or letter/number homophones as in cases of <u> (you), <b> (be), <2> (to), and <4> (for). Interestingly, the numbers displayed by the frequency of the variants seemingly show that most lexemes are deviated either by omitting vowels or consonants.

The freedom to modify lexemes by repeating the same letter is noted as well. Lexemes such as <pleeease>, <looove>, <thaaaank> and <youuuu> are seemingly

used for interpersonal reasons. By elongating some vowels or consonants, texters aim to express feelings or surprise, deep love or calling for attention which calls for the expressive function played by language.

Occurrences of phrases that are nominal and verbal are also found with instances such as *good night*, *good morning*, *see you*, *take care*, and *good luck*, but with low frequency. Non-linguistic instances that express laughter, emotions and feelings are also observed. Laughter is represented in five variants, in an elongated frame to indicate the laughter degree and extent as in cases of <hhhhh>, <haha>, and <khkhkh>. Kisses and hugs are also represented linguistically by using <xoxo> spelling once, and disgust, represented by <ugh> once as well.

One additional note concerns the deletion of the final vowel letter in lexemes such as *love* <lov>, *take* <tak>, and *care* <car>. This again coincides with some scholars' contentions concerning the vowels undermined value in comparison to consonants (Crystal, 2008; Shortis, 2007a; Kul, 2007). As Crystal (2008) points out, vowel omission is very much predictable either at the end or the middle of lexemes, provided the texters' awareness of the high informative value of consonants as opposed to vowels.

Clearly, the findings preliminary examination revealed the frequent and less frequent occurrence of some deviated forms which reflect significantly the use of abbreviated forms and speech-like deviations. To some extent, the findings provided a resourceful and rich data that will be exploited to achieve a fine-grained analysis. The latter will be based on the categorisation of the lexisms according to Lyddy et al (2013) categories in an attempt to synthesise the large amount of data in a more significant manner to add information on deviation mechanisms.

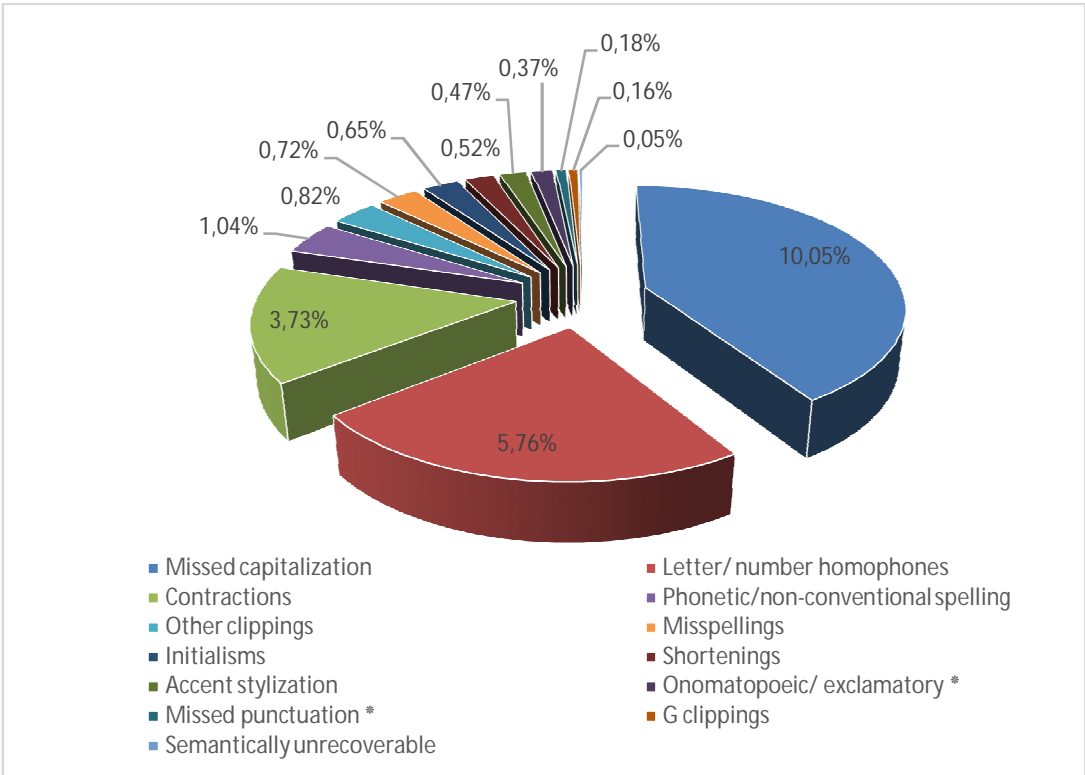
#### **4.1.2 The Corpus Results Presentation and Discussion according to Lyddy et al (2013) Taxonomy**

The classification of the identified patterns within Lyddy et al's (2013) taxonomy was exceptionally arduous and labour intensive, but worthwhile and insightful. The lexisms were sorted out manually based on the wordlist frequencies established by Tropes. Exceptionally difficult was the missed capitalisation categorisation as it is not

treated by Tropes. Consequently, all the examples were identified manually and calculated accordingly.

As a reminder, the taxonomy contains 13 categories that vary from abbreviated forms covered by shortenings, contractions, initialisms, G clippings, and other clippings that concern end letter omission. The taxonomy comprises also instances of accent stylisation and phonetically represented forms which consist of letter/ number homophones, phonetic/ unconventional spellings, and onomatopoeic/ exclamatory forms. Besides, typological forms are featured with special use of capitalisation, missed punctuation and misspellings. The final category concerns the semantically unrecoverable patterns that do not appear to follow any informal or deviated use of the language as no possible decoding is possible in this particular case. Based on the categories percentages, the following figure shows clearly the respective proportions and prevalence.

**Figure 4.3 The Statistical Representation of the Corpus Results according to Lyddy et al Taxonomic Distribution**



More examples and details of the results are shown in Table 4.2 which provides the number of lexisms, their frequencies and the frequency percentages.

**Table 4.2 The Corpus Results according to Lyddy et al (2013) Taxonomic Distribution**

<i>Lexism type</i>	<i>Examples</i>	<i>Lexism number</i>	<i>Lexisms freq</i>	<i>Freq Perc %</i>
<i>Missed capitalisation</i>	i (43), hi (03), hello (02), if (02), gm (01), we (02)	445	889	10.05%
<i>Letter/ number homophones</i>	u (379), 2morrow (01), c ( see 11), g8 (good night 04)	13	510	5.76%
<i>Contractions</i>	madm (01), fild (filled, 01), beliv (01), fr (for 02)	152	330	3.73%
<i>Phonetic/non-conventional spelling</i>	pleaz (01), pliz (01), gud ( 01), luv (10), thanx (02)	31	92	01.04%
<i>Other clippings</i>	by (bye 01) ,yo (02), ar (05), brothe (01), lov (04)	42	73	0.82%
<i>Misspellings</i>	hy (hi, 02), Classrome (01), vibre (viber 01), helle (01)	48	64	0.72%
<i>Initialisms</i>	hru (how are you?, 02), g (good, 11), t (take, 01)	23	58	0.65%
<i>Shortenings</i>	tomor ( 01), tom (04), bro (18), sist (07), sis (06)	15	46	0.52%
<i>Accent stylisation</i>	yah (yes , 01), ya (you, 05), cuz (05), dat (05), gotta (01)	22	42	0.47%
<i>Onomatopoeic/exclamatory *</i>	hahaha (02), hhhh(02), hahahaha (01), khkhkh (01)	26	33	0.37%
<i>Missed punctuation *</i>	dont (04), wont (01), didn't (01) , doesnt (01), im (02)	11	17	0.18%
<i>G clippings</i>	doin (04), goin (02), givin (01), askin (01)	08	15	0.16%
<i>Semantically unrecoverable</i>	pnd (01), ol (01), o (you or oh ? 01), BCNU (02)	04	05	0.05%
<i>Total</i>		840	2174	

Interestingly enough, the examination of the results shows the significantly low percentage of *semantically unrecoverable* lexisms. Only four instances namely <pnd> (01), <ol> (01), <o> (you or oh? 01) and <BCNU> (02) were reported here which is quite insubstantial when compared to the general number of lexisms. This is seemingly ruling out the public preconception of texting as being a hieroglyphic language that is deciphered by the texters only. Most of the lexisms found in the corpus are easily decoded either by reference to the surrounding linguistic context of the lexism, the

*Missed punctuation \** omitted periods and spelling with missing apostrophe: dont, cant, wont, ill (*periods are not taken into account here*)

*Onomatopoeic/exclamatory \** category here includes not only non word sounds but also all non verbal expressions of surprise, enthusiasm, love and affection displayed by elongating some specific vowels and consonants used here to express specific emotional states

phonological reference, and the properties of the lexism itself. Evident here is texters providing enough linguistic clues in most cases to effortlessly decode the deviated forms to ensure maximum understanding.

#### **Figure 4.4 Semantically Unrecoverable Deviations in Messages**

BCNU:        Wat's up r u coming tomorrow. BCNU  
              Hi, I left my jacket in your place so can u get it BCNU for me.  
pnd:         I'm pnd more than u bcz 4 so  
o!!:         where are u? are u fine?  
ol:          But I will not be OL 4 2day.

The next important observation is the highly significant percentage of the deviations which resulted from the use of missed capitalisation (9.75%). Remarkably, missed capitalisation that concerns the capitalisation of proper nouns and words at the beginning of sentences or new sentences in the middle of long messages is one important source of deviation from standard forms. Some examples are provided here to illustrate the corpus findings as in examples of <i> (43), <hi> (03), <hello> (02), <if> (02), <gm> (01), <we> (02), <gby> (01), and <mr> (01).

Building on our knowledge of cell phone use of capitalisation, initial letters are systematically capitalised and this at the beginning of every sentence and after a period when appropriate spacing is performed. When seeking explanation of this particular texting behaviour, the data show that capitalisation is mostly found at the beginning of messages and is quickly abandoned in the middle and at the proper nouns levels for two possible reasons.

The first possible reason has to do with the required activation of capitalisation button that is provided on the keyboard which seems to be ignored by texters more likely for brevity and rapidity reasons. Capitalising lexemes requires the shift to capitalisation mode which, in our sense, slows down messages editing speed, essential to text production. Besides, when composing a message, texters may be more concerned with the message itself and undermine the form especially when it has to do with capitalisation which has a very weak impact on the understanding of lexemes. Editing proper nouns or beginning lexemes in lower case frame does not affect the

message content understanding; therefore, its omission can be encouraged and produced unintentionally.

The second reason that generates missed capitalisation in messages deals with the noticed omission of periods. For speed and brevity reasons, the texters' concern with time and rapidity in delivering messages might be at the origin of the creative use of punctuation by replacing periods by commas in some cases. Besides, periods are more likely used at the end of sentences in some messages and omitted in many other instances.

The second most used lexism type concerns letter/number homophones. The results show the texters' tendency to represent lexemes in letter or number homophones mainly with specific instances such as <u> (379), <2morrow> (01), <c> (*see* 11), <g8> (*good night* 04), and <n8> (*night*, 03). All the existing letter and number homophones are easy to recover semantically as they observe Thurlow and Brown's phonological approximation principle, so difficulties to understand the referent lexemes are not faced in this particular case. In addition to the phonological approximation reason, the use of letter/number homophones can be further explained by the texters' need for brevity as substituting whole lexemes such as *night* that is replaced by <8>, or <u> replacing the pronoun *you* can show the significant contribution of letter/number homophones in terms of language economy and reduction.

As it is the case with letter/number homophones, contractions, which are reported within the third most frequent type of lexisms, show existing patterns of variation as well. Most frequent are <plz> (33), <yu> (13), <tmr> (09) <bb> (*babe* 07), <helo> (06), and <sth> (05). Along with some other lexisms, these display a number of variations including double-letter reduction as in the example of <helo> (06), <sufer> (01), <hury> (01), <nd> (*need* 01), and <bn> (*been*, 01). With no particular distinction, double letter reduction concerns both vowels and consonants as illustrated in some examples provided with some other types of deviations in Figure 4.5 below.

Moreover, the data analysis displays the rare deletion of the initial letter except in singular cases which start with a vowel as in the examples of *about* <bout>, and <nd>.

and *are* <re>. The major examined contractions seem also to keep consonants rather than vowels, by noting the significant omission of the vowels in most circumstances.

#### Figure 4.5 Examples of Contractions

hi dear i com to se y at 1 *bt i dnt fnd y cld i met y tmw* if *ys wn bay*.

hello *madm*, we need t *met y tmr plis* if *posibl wen thnk* bye.

*Helo* dear i hop now y are feeling good *tk* car of *yur* self gbay.

gm. we are waiting *fr yu* in the usual place see y.

y are *wlcmd*, by the way i *hve* no idea *abt th d.dline* Take care . By.

Noticeably, the deletion of consonants seem not to threaten the word understanding as it is seen in cases of *good* <gd>, *message* <msg>, *tomorrow* <tmrw>, <tmr>, <tomrow>; <madm>, <fild> (filled), <beliv>, <fr> (for), and <dn> (doing) which are semantically clear. Here, texters seem to be aware of the high informative value of consonants as opposed to vowels. This behaviour is enhanced with the omission of consonants in major cases where double consonants are found in lexisms. As the next examples show, this texting practice includes examples such as *filled* <fild>, *tomorrow* <tomorrow>, and *suffer* <sufer>.

Further salient patterns denote forms represented by consonants only as in <wknd>, <prblm> , <qsts> , <bcs> , <wlcmm>, <mrng> , and <cr> . These again stress the significant reported value of consonants as discussed above. Other deviations include one letter omission as in <fnd> (*find*), <bck> (*back*), and <hw> (*how*). Less usual patterns are <g'd> and <l.k> (luck) which are exceptional in the way apostrophes and periods are used. Indeed, the improper use of the period and apostrophe can be interpreted here either as an accidental use or intentional texting behaviour for reasons of creativity, more likely.

The omission of double letters is not restricted to consonants as some instances of lexisms reflect the loss of double vowels as well. For illustration, lexisms such as *been* <bn>, *good* <gd>, *need* <nd> and *about* <abt> are fine examples of the latter. These examples again underscore the difficulty to draw any possible rules of deviations as contractions seem to be randomly-performed. In this context, the texters' individual style can be put forward partly to explain the deviation heterogeneity of the

contractions in the majority of cases. Along with the texters' individual style, brevity can also be a major reason for the reported number of contractions in the students' messages.

The fourth deviation category deals with the phonetic/ unconventional spelling type. This category includes all the non-standard spellings that are basically framed according to the phonetic production of the lexemes. This type includes words such as *love* <luv>, *your* <ur>, *thanks* <thankx>, and *you are* <ur> which are noted as the most frequent patterns. Less frequent are <bay> (*bye*), <haw> , <ini> (*any*), and <shud>, among others.

Further patterns of letter substitution are observed in some lexisms. The substitution concerns the replacement of almost all <o>, <oo> or <ou> letters with <u> letter as in cases of *love*<luv>, *good*<gud>, and *should*<shud>. Other observed patterns concern the substitution of <ea> with <i> in <pliz> , <plis>, and <liv> (*leave*). Moreover, other consonant substitutions are observed in most lexemes ending in <s> and <se>. The identified patterns are phonetically rewritten in <z> as in <friendz> and <pleaz>. Yet, this cannot represent a rule in itself as noticed patterns ending in <s> do not obey to this norm as in the case of <plis>, for example. Consonant substitutions are noted also in cases of <x> replacing <ks> in <thanx>, and <z> substituting <ds> in <frienz>, for instance.

Other seemingly regular forms result from the omission of the <h> silent letter in <wat> , <wen> , and <wats>. Obviously, the semantic weak value of the letter is reflected in all cases where silent letters are found. Less usual, though, are the uses of <y> to represent /aɪ / in <lyk>, <may> (*my*), and *bay* (*bye*). More salient also is the extended use of <i> to reproduce the sound /aɪ/ as in the example of <nit> (*night*).

Here again, all the examples provided in the table are easily decoded by any reader of the messages as phonetic spelling of words seems to be unproblematic and convenient for texters as well. Yet, this requires a certain amount of knowledge of the English language phonetic system as <luv>, for instance, may be quite misleading for some readers of messages, given the language background they may refer to. While /u/ in *love* is pronounced /ʌ/ in English, for example, this same letter might be pronounced and read as /louve/ in French or other Latin languages.

Other clippings is the fifth category used by texters. By other clippings, Lyddy et al refers to the final letter omission which are quite noted in the corpus. By considering some examples from the corpus such as <by> (bye), <yo>, <ar>, <brothe> , <thank> (thanks), <lov> and <wil>, a careful examination of the lexims shows a clear evidence of the omission of vowels rather than consonants in many respects. In fact, the identified lexisms lost their final letter but this latter doesn't alter the meaning of the lexeme itself at any time.

The sixth grouping concerns misspellings. This category, in our belief, is exceptionally important as it highlights again the intricate issue of what is deviated intentionally and what is resulting from poor language command. In fact, no clear cut is possible between some deviations and spelling mistakes as no clear reasons for the production of the advanced misspellings can be given contrary to the other deviation techniques. On this line, one can easily understand contractions, shortenings, homophones, or missed capitalisations texting behaviour as they serve some specific purposes in texting, but it is very hard to understand why texters, for instance, add the *e* letter to <whene>, or why they replaced /o/ with /e/ in <helle>, or why texters add /e/ letter to classroom in the case of <classrome>.

As all these elements cannot be explained in the light of the economy principle, the phonological maxim, or the rapidity principle suggested by some scholars (Thurlow & Brown, 2003; Shortis, 2007b), tentative justifications might include two major reasons: the first might be the texters' lack of knowledge concerning the written lexemes due to poor language, and the second might deal with the lack of proofreading due to the haste in delivering the composed messages.

The next grouping concerns initialisms. As stated in previous sections of the dissertation, the use of initialisms is an old practice which existed in early uses of the English language. While examining the findings, examples of initialism are seen in <asap> (as soon as possible), <lol> (lots of laugh) or <OMG> (oh my God). Consistent with Crystal (2006) and Shortis (2007a, 2007b) investigations on SMS texting and the Internet language, the identified forms are confirmed here as typical components inherent to digital communication be it SMS texting or the Internet language.

Less typical and recurring lexisms show interestingly high degrees of creativity in the produced forms which are not commonly found in the general English language use. In fact, some lexemes are represented by one initial letter as it is the case with <t> for *take*, <c> for *care*, <p> for *please*, <h> for *happy (01)*, and <g> for *good*. Longer lexemes are concerned as well with the initialisation process in examples such as <gm> to refer to *good morning*, <HB> to represent *happy birthday*, and <tc> to refer to *take care*. Less common initialism cases deal with the two sentences such as *how are you?*, represented by using <hru> (02) and *I would like to know* that is referred to as <idk> in the corpus.

A careful look at these two examples reveals that both <hru> and <idk> are not authentic initialisms as texters tend to use the same principle, yet by combining both initial letter production and letter homophones. Besides, in the <idk> example, texters took the end letter of the lexeme *would* and the initial letter of *know* and the initial letter of *know* to make up one lexeme to represent *I would like to know*. Yet, these two examples are weakly represented statistically, so no possible generalisation can be made to refer to a stable and recurrent texting practice. As mentioned earlier, all instances that are representing one occurrence are mostly found among one texter. And this again may be interpreted as an individual texting style that cannot be generalised to the rest of the messages.

Accent stylisation is the ninth category which represents the texters' attempts to reflect lexemes in the mostly spoken English here. Some lexisms are written as they are uttered in real life by replacing /th/ with /d/ in cases of <dis>, <wid>, and <dat>. More common and spread are patterns such as *yes* <yah>, *you* <ya>, *see you* <sya>, <wonna>, and <gotta>. Apparently, these patterns draw on both the American English accent and the English one as these are found in both languages (Tagg, 2009). Some examples of accent stylisation are presented in Figure 4.6 below.

#### **Figure 4.6 Examples of Accent stylisation**

Hii its zz! I know ur worry about dads! we come back home...they wanted him to stay but he doesnt take care.... Sya  
 Hii sis.... wanna tell u I cant bear not talkin to me...anyway ...just take car ... luv u.  
 We're gonna win in the Classics.

Despite the extended phonological properties reflected in this category, all examples are considered here as accent stylisation simply because they do not include phonetic unconventional forms as they are much more intended to draw on speech norms. Thus, based on the reported amount of accent stylisation patterns, a need to reconsider the widely believed preconception of texting language as a purely spoken language is felt here. In fact, the relative existence of accent stylisation instances in the corpus and their respective occurrences are not significant enough to support the spoken nature of texting language. Most of the observed examples are produced with one or two occurrences, which in our sense cannot represent a real texting practice but rather a personal texting style chosen by the text producer.

Shortenings type is reported as the eighth used category. This type of abbreviation concerns the lexemes that are made shorter than the conventional forms by keeping the beginning parts of the lexemes and omitting the last parts. This category involves lexisms such as <tomor>, <tom>, <sis>, <univ>, <bec>, <ple>, and <wh>, to mention a few examples. More frequent patterns are <bro>, <sis>, <num>, which represent texting language informality. Indeed, cases of <bro> and <sis>, for example, are widely used in spoken and informal written language uses.

One additional note concerns the clear incongruence in the lexisms themselves as one may think that shortenings should concern only long lexemes such as *tomorrow*, *beautiful* or *university*. In reality, some shortenings are also noticed among shorter lexemes such as *there* <the> and *when* <wh>. Other shortenings are <answ> (answer), <ple> (please), <the> (there), wxxxxxq<µ% which are less frequent in the corpus.

Onomatopoeic/exclamatory type is the subsequent category of deviations used by students. This type of deviation refers to the employment of interjections and non-verbal exclamatory features that are usually used to express emotional states and reactions. In most face-to-face interactions, interactants when communicating interpret each other utterances via the use of both verbal and non-verbal cues. While verbal cues refer to the words or linguistic units used to interact, non-linguistic or non-verbal cues are also available to the receiver to properly interpret the content of messages. Exceptionally rare uses of exclamatory/onomatopoeic expressions are found

in formal writing as these two aspects are mostly inherent to the informal and speech-like type of discourse.

In informal written discourse, surprise, disgust, astonishment or happiness, for example, are expressed linguistically via adjectives, adverbs, nouns, and onomatopoeic expressions such as *ugh*, *hein*, *hum*, among others. The same expressions of <ugh>, <hein> and <yo> are noticed in the corpus, along with creative uses of exclamatory cases. Laughter, for instance, is produced via the use of <hahaha>, <hhhh>, <hahahaha> , and <khkhkh>. Laughter extent is shown through the multiplication of one exclamatory syllabic articulation that is triplicated in cases of <hahaha> and <khkhkh> and quadruplicated in cases of <hhhhh> and <hahahaha>.

More frequent are the cases of elongated lexemes that are altered by repeating one or two letters from the same lexeme as it is the case with <pleaaaaaase>, <thaaaaank>, <loooooove>, <helloooo>, and <surpriiiiiiiiise>. The elongation behaviour is commonly employed as an expressive function in communication, mainly spoken one, to remedy to the absence of non-verbal cues as all the emotions and reactions are usually covered with body language such as facial expressions and voice tone.

Additionally, some expressions of feelings and reactions are expressed very creatively by assigning some specific letters particular functions and meanings as the letter *x* <xx>, to refer to kisses and *xo* <xoxo> to mean kisses and hugs. A mixture of punctuation and letters is also reported in the example of <:xx> which is used to mean the texter's kissing face. Contrary to the preceding examples, the last three examples are not straightly decoded because of the arbitrary nature of the created symbols. While <hhhh> or <khkhkh> examples are easily interpreted thanks to their phonological approximation, the three last examples of <xx>, <xoxo> and <:xx> are quite difficult to understand as they don't correspond to any body language or voice, nor to any economy or phonological approximation reasons seen so far.

These examples might be explained in light of the texters' creative manipulation of language to compensate for emotional expressions not existing in written discourse. This is apparently covered by imitating the body features as <xx> refers to the shape of kissing lips, <xoxo> refers to both kissing lips and wrapping arms, and <:xx>

representing the texter's eyes and kissing lips. This combination of forms of punctuation and uncommon use of consonants and vowels is interesting as they indicate the texters' tendency to draw over punctuation and orthography to generate new meanings in language.

Other genuine noted aspects of punctuation concern the omission of the latter. The eleventh category, referred to as missed punctuation type of deviation does not refer to punctuation as usually known, but to the omission of apostrophes in some lexemes and, thus, producing deviant forms from the known standard components. One general observation of this category deals with the absence of apostrophes in all the categories of language be it auxiliaries, auxiliary sentences or possessive apostrophes.

The identified lexisms concern negative auxiliaries such as <dont>, <wont>, <doesnt> , <cant> , and also personal pronouns in combination with auxiliaries as in cases of <Im> (02), <im> (02), <its> (*it's* ) and <Ill> (I'll). Other examples such as <lets> and <mothers day> are identified. In the first example, the apostrophe used in informal English language is omitted as it is with the second example of <mothers day> whereby the apostrophe referring to possession is omitted as well. Noteworthy to mention in the two examples of <lets> and <mothers day> is that both cases display high originality in forms which are neither written nor spoken. The omission of apostrophe in the cases, and some other cases in the corpus, indicates the apostrophe weak semantic value as its omission does not likely impact on the meaning and comprehension of lexisms.

Regarding the low frequency of the missed punctuation type, this can be explained by possible correction provided by the auto-correction option found in most mobile phones. The latter are equipped with predictive texts when the language used is intentionally activated by the texters. Correction in this particular case cannot be efficient if the English language is not activated in the keypad. If the language is activated, all the typed lexemes are presented in their corrected form automatically.

The identified missed punctuation instances seem to be intentionally left as meaning is not systematically altered. Besides, missed punctuation lexisms occurrence can also be explained by economy reason, which is enhanced by fast typing and rare

proofreading. Clearly, the omission of apostrophes, be them in possessive cases or auxiliaries, seem not to be important to texters as meaning is not compromised.

G clipping is the twelfth type of deviation. The alterations concern the clipping of some verbs ending G letter and, here, only eight verbs are identified namely <doin>, <going>, <givin>, <askin>, <celebratin>, <writin>, <talkin>, and last <waitin>. These lexisms are possibly produced in the texters' attempt to incorporate some informality while texting. The omission of /ing/ form is commonly observed in spoken discourse and reflects the texters' freedom and opportunity to write in the desired form of language, be it formal or informal. The tolerated presence of spoken features in texting language is made possible as no rules of editing are previously set to follow or build on. It is confirmed now that texting is not fully spoken language, as only a few instances of the latter are reported in the corpus.

Semantically unrecoverable lexisms are the least and last type used in messages. As stated in the outset of the data examination and discussion, only four lexisms are observed. The identified forms are <pnd>, <ol>, <o> (you or oh? ), and last <BCNU>. These cases are reported as incomprehensible because of the difficulty faced to understand the pointed lexisms either via the use of linguistic or co-textual cues. Indeed, when trying to decode the meaning at the linguistic level by looking for possible uses of phonological approximation, contraction, shortening or accent stylisation, none helped as no possible meaning could be drawn.

A second attempt consisted of using co-text cues and there again, the lexisms couldn't be deciphered. While the two examples of <BCNU> and <pnd> were revealed semantically unrecoverable, <ol>, which was approximated to *all* because of its phonological similarity, was revealed inappropriate in the context where the lexism was given. The same was for <o> example which was ambiguous as it could have referred to a contracted forming of *you* or *oh*, but none of these could adequately fit within the message content.

In summary, the findings reveal the marked difficulty to determine the texters' constant texting behaviours as most patterns are always confronted with exceptions that question the noticed norms. Nonetheless, the data allows us to speculate on some texting practices. Firstly, long lexemes are more likely subject to high deviation but

again with some short and mono-syllabic lexemes that are easily converted into phonetic equivalents found in the texters' linguistic spoken or written repertoires. As noted in the discussion, some lexemes are more easily represented phonetically while some less inclined lexemes to phonological representation have deviated via the employment of different texting strategies namely contractions, letter missions, and letter replacements.

Deviation consistency is observed in the top fifty most frequent identified lexisms. The most frequent lexisms concern *you, are, please, your, tomorrow, good, brother, because, love, see, and, and thanks*, among other. Interestingly, some similar lexisms are found in Tagg's (2009) list of abbreviations. This suggests possible common rules for both Native English texters and EFL ones. Plainly, patterns, as the ones mentioned above, extends the borders of texting language use to include linguistic specificities that are common to every user of the English language.

This, again, evokes the potentially principled feature of texting as many patterns highlighted texting predictable practice through deviating more prominently some specific lexemes than others. The highly phonetic feature of *you* and *are* sustains the view that the absence of phonological substitutes in some cases, can lead the texters to opt for alternative texting strategies namely initialisms, misspellings, missed punctuation, G clippings, and shortenings.

Other resources are taken from speech namely accent stylisation, phonetic/unconventional patterns or letter/number homophones. Given the less-restrictive nature of texting language, students seem to get advantage of the knowledge they have of spoken and written modes to make up distinctive forms in messages. This implies the activation of the texters' linguistic background, be it phonological, speech-like, morphological, and semantic.

In line with the semantic background, the texters' awareness of deviation risks seemingly led them to construe understandable texts by opting more often for consonantal patterns than vowel ones. The consonants value is demonstrated in several occasions where lexisms lost vowels more than consonants. Moreover, special use of punctuation, consonants, and vowels to achieve brevity or express emotions add to what could be believed to be the most creative and unusual performance of language.

Contractions, initialisms, shortenings, and accent stylisation are, to some extents, found in the English language; Yet, attributing letters or some punctuation marks different referents in texting language might evoke the saliency of some patterns over others while describing texting language originality and creativity.

Concurrently, the reported categories of lexisms presented so far helped to synthesise the substantial amount of the data collected, by referring to phonologically-based deviations as in cases of accent stylisation, letter/number homophones, phonetic/non-conventional spelling, and onomatopoeic/ Exclamatory deviated forms. On the other hand, deviations classified under the economy principle include missed punctuation, contractions, G clippings, initialisms, shortening, and other clippings types.

The two remaining categories of missed capitalisation and misspellings seem to obey to the rapidity principle sustained by Crystal (2008) and Thurlow and Brown (2003). In fact, missed capitalisation is considered as intentional by assuming that all cell phones are equipped with the capitalisation device which is automatically activated at the beginning of every written lexeme, or the end of every sentence. Obviously, the underuse of punctuation and its reported irrelevance in texting messages made possible the pervasive use of missed capitalisation forms that go counter to the rules of the standard forms of the English language.

And because the missed capitalised lexemes are most of the time deviated and kept intact, so missed capitalisation would comply more likely with rapidity or speed principle than any other reason. In parallel, given the unconventional nature of the misspelled lexisms, this type of deviation is explained by the students' willingness to rapidly deliver the messages, their dismissing of the auto correction, and/or to their poor level of English language. In all the mentioned cases, lexisms are easily understood and are proven to be highly context-dependent.

The conducted analysis through the use of Lyddy and al categorisation is insightful in a number of ways. The data analysis show that deviations exist within SMS language but not with the exaggerated and believed proportions. In fact, the results show that deviated forms represent only 14.98% of the total number of

lexemes. Assuming that texting language is informal and non-standard is not totally right as students seem to employ standard forms more often in their messages.

Major evidence, though, concerns the comprehensibility of messages as the majority of deviating and non-standardised forms of lexisms were decodable and semantically recoverable. Very rare cases of semantically unrecoverable lexisms are reported. Texters purposely and consciously manipulate texting language in a way to achieve maximum content in minimal comprehensible form. In this vein, texting language seems to be subject to the underlying principle of comprehension (Stubb, 2007), with brief, short, but meaningful text contents.

Henceforth, coping with the device may stand as a plausible argument for deviation use, but here again the findings show that texting language remains mostly a deliberate process of production that does not involve ergonomic constraints but personal and pragmatic objects, more distinctively. Students' texting choices can be described in terms of texting strategies that draw on the texters' awareness of all the orthographic *pallette* to use Shortis's (2007a) terminology.

These *palettes*, which are based on formal and informal writing modes, are putting into contribution the various linguistic options texters may choose from to construct their messages. These choices might vary according to purpose and context. This allows us to go beyond the restricted option of linguistic performance to a wider perspective of accommodation to given communicative circumstances and objects.

## 4. 2 Section Two: SMS Language and Gender

The next issue of the research is to establish the impact of gender on texting behaviour as well as the specificities related to each gendered group. By identifying male and female students' deviation similarities and differences, we have been curious to know whether deviations vary according to gender and look at the topic from a different and enriching angle. In an attempt to build the discussion of the results empirically solid bases, a number of methodological steps have been followed namely when dealing with the sample representativeness, the corpus consistency, and the statistical representation and interpretation of the results.

As mentioned in the methodology chapter, the sample is revealed representative given the accurate number of the participants involved in this second part of the study. Besides, accuracy in the results is sought by adopting the same number of words in both groups to include 2023 words in each sub-corpus. Lastly, a statistical treatment of the findings will be carried out to give the study more credibility. The analysis of the data will consist of analysing each gender results separately, as a first step, then cross-tabulate the findings according to gender, as a second step. It is only by doing so that we can have a clear picture of the differences/ similarities, and answer the second research question.

In what follows, the examination starts with the presentation and discussion of the results related to the females' deviation tendencies in light of Lyddy et al (2013) classification. The grouping of the identified lexisms in females' corpus ended up with the results presented in the Table 4.3 below. As seen in the table, one clear note should be made concerning the percentage of 18.78% which refers to the general percentage of lexisms' frequency found in the corpus.

The percentage is in a way important as it accounts for a fairly significant proportion of the lexisms found in the data. More important is the missed capitalisation category that is revealed as the most used type of lexisms (8.20%). This is, as previously explained, probably due to the weak value of capitalisation and to the texters' compliance to the rapidity principle that implies very little proofreading and less attention to the form.

**Table 4.3 Females' Lexisms Number, Lexisms Group Frequency and percentages according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Number of lexism	Group freq	Group freq %
Missed capitalisation	80	166	8.20%
Letter/ number homophones	10	82	4.05%
Contractions	41	54	2.66%
Misspellings	17	21	1.03%
Phonetic/non-conventional spelling	06	12	0.59%
Accent stylisation	08	11	0.54%
Other clippings	08	10	0.49%
Initialisms	05	09	0.44%
Shortenings	04	07	0.34%
Onomatopoeic/ exclamatory	03	03	0.14%
G clippings	02	02	0.09%
Missed punctuation	02	02	0.09%
Semantically unrecoverable	01	01	0.04%
Total	187	380	18.78%

As stated before, capitalisation is probably one of the easiest options in all cell phones as they are activated automatically at the beginning of every message or after marked periods. Noticeably, female texters seem not to pay much attention to that provided their unusual use of punctuation which likely made capitalisation occurrence less present. Indeed, texters, in general, do not use punctuation conventionally as found in written discourse, but tend to either omit it or replace it by commas as noted in the corpus examination. This also can explain the pervasive use of missed capitalisation among female students.

Letter/ number homophones category is the second type of lexisms used by females (4.24%). Here again, female texters seem to be attracted by the phonological properties of lexemes as letter/number homophones is one type of lexisms that offers potential possibilities of language economy and playfulness. In both cases, female texters tend to refer to this category more often when compared to all the other types. This tendency is supported by the subsequent type of lexisms that consist of contractions (2.66%). The use of contractions shows also females' concern over language economy which, in turn, informs about their concern with the content of messages than the form.

The fourth used type is misspellings (1.03%). As noted earlier, equating misspellings to spelling mistakes is somehow risky, as no evidence for the exact

reasons for the production of misspellings is acknowledged. Misspelling causes can be multiple and varied. The first might concern females' lack of knowledge concerning the exact spelling of the lexeme. Second, absence of proofreading due to rapidity in delivery, and three, females' concern over content than form as auto correction is available in all cell phones. Any omission of correction can be explained by females' intentional ignorance of the correction because of the editing slow pace which hampers the rapid delivery of messages.

The phonetic /non-conventional spelling category is the fifth type of lexisms used by female texters. Despite the low percentage displayed by this category (0.24%), the examples show girls' tendency to reproduce words phonetically as it is shown in the example of <welcomed>, <wats> and <bay> (*bye*), for instance. This behaviour shows the texters' sensed freedom to compose messages in the forms they feel more comfortable with, even if the forms are not conventionally appropriate.

The sixth identified category concerns accent stylisation (0.54%). The reported examples show female texters' recourse to spoken language, but with low references. Texters seem to use spoken accent forms as evidence for the presence of spoken language features in texting language. As stated earlier, viewing texting language as written speech, is fairly wrong as very few instances are reported here to support this assumption. Notably, the first mostly-used categories seem to illustrate female texters' tendency to use language unconventionally to fulfill notable purposes of economy, rapidity, and brevity.

However, accent stylisation is preferred to other clippings type (0.49%), initialisms (0.59%), and shortenings (0.34%) types. Despite the high economy potentials offered by these types of lexisms, this questions the arguments provided to sustain economy and rapidity principles in a very significant way. At this point, reasons for accent stylisation might refer to the freedom provided by the medium to create messages regarding the females' texting purposes and contexts.

Onomatopoeic/Exclamatory type (0.14%) is identified as the tenth category used by texters. Females, who are portrayed as being emotionally more expressive than males in many aforementioned gender studies, show rare uses of exclamations or onomatopoeic expressions to indicate expressive acts. Here, three lexisms are

identified namely the common <khkhkh> used for laughter, <ugh> for disgust, and the less common <xx> used to demonstrate kissing behaviour.

G clipping (0.09%) is the eleventh type of lexisms used. The percentage shows the weak reference to the latter, but this is not surprising as the total number of G clippings, as reported in the general findings table, is limited to eight cases only. G omission, as explained earlier, can be seen here as the reflection of some spoken language features as it is not specific to texting language but more likely to speech whereby verbs ending in G are omitted in real face-to-face conversations.

Despite the very low percentage noted with missed punctuation category (0.09%), this type remains very interesting to consider as it enlightens some aspects of texting deviations which are typical to the properties of the phone itself. Missed punctuations here refer to missed apostrophes. Broadly, when texters set their phones keyboards on the English language, missed apostrophes are systematically corrected via predictive texts. Here again, the highlighted missed apostrophes are not indicated if texters are using the Arabic or French languages set keyboards.

Again, stating that missed apostrophes are keyboard-dependent and are unintentional is not accurate as texters have enough time to make decisions concerning the languages to use while editing as well as the degree of conformity to the standards of the language. At any time then, female texters could have chosen to correct or not the missed apostrophes or opt for apostrophes making by using the apostrophe symbol available on the keyboard. Reasons for rapidity, lack of proofreading or intentional omissions can be put forward to justify females' employment of missed punctuation type of lexisms.

Interestingly enough also is the very rare use of semantically unrecoverable instances. In fact, only the case of <pnd> is reported among females. The widespread consumption that messages are full of incomprehensible deviations is revealed inaccurate given the semantically recoverable nature of all the lexisms referred to in the data analysis and discussion. This is also supported by the negligible percentage of incomprehensive lexisms reported in both the general corpus and the current one.

Ultimately, regardless of the deviant forms found in the corpus, female texters seem to be careful about transmitting clear and understandable messages. Besides, and

despite the deviant forms provided by texters, many strategies are used by female students. The latter refer to the lexemes' phonological reproduction, contraction of lexemes by keeping consonants that hold the most information about the contracted lexemes, or the reproduction of spoken forms.

Parallel to the analysis of the females' corpus, the examination of males' messages followed a similar step by sorting out the 2023 lexemes according to Lyddy et al' (2013) taxonomy. From the table of results, one first observation deals with the noted close similarities between male and female texters total number of lexisms. In fact, males' reported total percentage is 19.32% and females' percentage is 18.71%. One obvious conclusion here will be considering the occurrence of lexisms as a linguistic event that doesn't seem to be affected by gender variable. This is quite important as the subsequent lexisms' categories are reported to be the same, namely when referring to the three most occurring types of lexisms.

**Table 4.4 Males' Lexisms Number, Lexisms Group Frequency and Percentages according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Number of lexisms	Group frequency	Group frequency %
Missed capitalisation	72	132	6.52%
Letter/number homophones	09	117	5.78%
Contractions	31	50	2.47%
Shortenings	04	22	1.08%
Misspellings	13	19	0.93%
Accent stylisation	08	14	0.69%
Onomatopoeic/exclamatory	09	11	0.54%
Other clippings	06	08	0.39%
G clippings	03	05	0.24%
Missed punctuation	04	04	0.19%
Phonetic/non-conventional spelling	04	04	0.19%
Initialisms	03	04	0.19%
Semantically unrecoverable	01	01	0.04%
Total	167	391	19.32%

As it was the case with females, missed capitalisation is reported as the top lexisms category used (6.52%), followed by letter/number homophones (5.78%), and then contractions (2.47%). The use of the three types by both sexes almost similarly reveals the pragmatic potentials of the reported types which apparently have little to do

with gender as both males and females see in the absence of punctuation, or little use of punctuation, a possible way to gain time and energy.

Yet, the language economy dimension is much more valued by males who use shortenings in the fourth position of the categories. Shortenings seem to be utilised by male texters for its benefits of language economy as well. The examination of the examples shows that shortening, once again, is not confined by the length of lexemes as short lexemes such as *you* <y> is identified. Misspellings category is reported at the fifth position with *tomorrow* as one shared misspelled lexeme. The other examples show personal misspellings as they occur once only in the whole corpus. The question of how much these misspellings account for males' language proficiency is raised here as well. No conclusive response can be drawn as these latter can be also caused by hasty composition, lack of proofreading, or both.

Accent stylisation (0.69%) is the sixth type used by male texters. Despite the weak reported percentage, accent stylisation as pointed out in females' use of this category, is very enlightening as far as the occurrence of speech features in texting is concerned. Evidently, spoken language represented by accentuated forms that are coloured by informal language use, highlights the mixed nature of texting, on the one hand, and the amount of spoken language features which are believed to be extensive in texting, on the other hand.

Interestingly enough, if spoken language is limited to accent stylisation only, this would mean very little use as the percentage related to this type is quite insignificant. This is not totally exact as a close examination of the data shows informal language use in other categories such as shortenings with the expression of <bro>, in G clippings with all the participle verbs pronounced as in ordinary conversation, or in missed punctuation, with the example of <lets> which is used in informal language situations.

Onomatopoeic /exclamatory type of lexisms is found at the seventh position in males' messages. While males were expected to be less expressive than females, the results show just the opposite. Indeed, male texters use more exclamatory and emotional expressions than females with one distinct fashion of elongating the lexisms by multiplying one letter, as it is the case in <uuuuuup>, <thaaaaank> and the use of

letters to express affection as in cases of <x> and <o> letters used to mean kiss and hug.

Thus far, jumping to the conclusion that males are more expressive in the selected corpus is not recommended here, as we need to examine larger corpora with more diversified contexts to achieve a more accurate and objective conclusion. Despite the gained reputation of females being more expressive and rapport-oriented, the examination of the listed examples, with the low percentages they display, can only be seen as relevant insight than conclusive analysis of the data.

Other clippings type is reported as the eighth category used by males. Omitting the final letter is less favoured by males who prefer using other techniques such as letter/number homophones or contractions. When considering the other clipping deviations, final letter omission concerns mainly long lexemes such as *beautiful* <beautifu> and *boumerdes* <boumerde>. G clippings type is the ninth reported category, with a weak representation given the related percentage (0.24%). This is made obvious as the total number of G clippings as reported in the general results table is fairly weak as well.

One possible explanation lies on the use of participles in messages which seems to be disfavoured as using participles would mean complex written structures which go counter the spirit of messages writing purposes of brevity, economy, and rapidity. The second possible reason may deal with the males' tendency to incorporate informal/spoken language features, as mostly /ing/ endings are omitted in face-to-face conversations. Interestingly, the use of G clipping is revealed to be shared with female texters with very approximating percentages.

Missed punctuation, phonetic/unconventional spellings and initialisms are reported sharing the same percentages and the least occurrences (0.19% respectively). The use of apostrophes seem to be respected in males' messages almost in the same way as in females' ones. Uses of phonetic spellings are rarely noted as it is the case with initialisms. Males seem not to incline to initialisms type use in spite of the economic advantages it offers. They apparently seem to prefer using other techniques such as contractions, letter/number homophones, and shortenings.

Clearly, the use of categories is highlighted here as part of personal preference but not only. Varied uses of other categories are reported as well. The insignificant differences in terms of percentages helped to disclose some shared plausible reasons for the use of each category. In a subsequent attempt to establish males and females' similarities and differences, the findings related to both genders are cross-tabulated and presented in Table 4.5 below.

As shown in the table, similarities and differences among male and female texters are noted. Clearly, males and females use the three top types of lexisms similarly with slight differences in the occurrence of percentages though. Despite the noticed use of missed capitalisation which is considered as the first used type among both genders, females (8.20%) seem to violate capitalisation rules more often than males (6.52%). The need for rapid editing and the importance given to the content over the form are more likely present among girls than boys given their respective percentages.

**Table 4.5 Males and Females' Cross-tabulated Similarities and Differences according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Females lexisms freq	Ranking	Males lexisms freq	Ranking
Missed capitalisation	8.20%	1	6.52%	1
Letter/ number homophones	4.25%	2	5.78%	2
Contractions	2.66%	3	2.47%	3
Accent stylisation	0.54%	6	0.69%	6
Semantically unrecoverable	0.04%	13	0.04%	13
Shortenings	0.34%	9	1.23%	4
Misspellings	1.03%	4	0.93%	5
Onomatopoeic/exclamatory	0.14%	10	0.54%	7
Other clippings	0.49%	7	0.24%	8
G clippings	0.09%	11	0.24%	9
Missed punctuation	0.09%	12	0.19%	10
Phonetic/non-conventional spelling	0.24%	5	0.19%	11
Initialisms	0.59%	8	0.19%	12

Letter/number homophones type is also used and comes at the same position among both sexes, with a small noted difference as males (5.78%) seem more inclined to this type of lexisms than females (4.25%). The economy, playfulness, and brevity aspects, apparently, make this type more popular than the other types among both

groups. The same benefits are found also with the use of contractions which are similarly used among female (2.66%) and male texters (2.47%).

Accent stylisation type is also used by both in a closely comparable way. A small and insignificant difference is noticed among females (0.54%) and males (0.69%). Visibly, accent stylisation is equally used among both groups to highlight the informal use of language which was thought to be more common among males than females. Interestingly enough, the use of formal language forms reported in gender studies is challenged here as both sexes are inclined in a very similar way to the use of spoken/ informal types of language.

Considering the comprehension of lexisms across gender, the percentages of semantically recoverable type are almost the same among female and male texters with 0.04% respectively. The consistency in the type proportions is a clear demonstration of the legible and understandable nature of texting. However, notable gender differences are observed in the subsequent and less frequent types of lexisms namely shortenings, misspellings, onomatopoeic/exclamatory, other clippings, G clippings, missed punctuation, phonetic/non-conventional spelling, and initialisms.

In an attempt to account for male and female texters ordering of the use of types according to the importance given to each type, the following table reports the differences noted in the corpus.

**Table 4.6 The Use of Types and Gender Differences**

Males		Rank	Females		Rank
Shortenings	1.23%	4	Misspellings	1.03%	4
Misspellings	0.93%	5	Phonetic/non-conventional spelling	0.24%	5
Onomatopoeic/exclamatory	0.54%	7	Other clippings	0.49%	7
Other clippings	0.24%	8	Initialisms	0.59%	8
G clippings	0.24%	9	Shortenings	0.34%	9
Missed punctuation	0.19%	10	Onomatopoeic/exclamatory	0.14%	10
Phonetic/non-conventional spelling	0.19%	11	G clippings	0.09%	11
Initialisms	0.19%	12	Missed punctuation	0.09%	12

As reported in the above table, female texters, contrary to males, seem to prefer shortening strategies much more than females. While males use this type as a fourth

texting habit, females use it at the ninth position of the rating with quite a low percentage than the ones reported among males. In fact, while males' percentages are reporting 1.23% of the type frequency, females demonstrate a lower rate of 0.34%. More likely, these two percentages can be a good indication of gendered texting preferences.

In this regard, males seem to incline more to economy principle and brevity while females, by reporting misspelling type of lexisms (1.03%) at the same ranking, seem to be much more concerned with rapidity than economy, given the proportion of intentional misspelled type of lexisms demonstrated. However, misspellings category is reported as the fifth category used among males (0.93%), with a lower percentage than the one reported among females.

In contrast, females at the fifth position prefer using phonetic/non-conventional spelling type with 0.24% of type frequency. Here again, contrasted results are observed as males seem to use this category of lexisms as the eleventh preferred used category with 0.19% type frequency. This can show females' inclination to the freedom provided by texting to edit messages in a creative way, and optionally, writing messages by using the phonetic spelling of the lexemes. This, in parallel, seems not to be very attractive to males who prefer using other techniques than the one mentioned here.

Additional differences are noticed in the use of onomatopoeic/ exclamatory type of lexisms, which, in turn, seem to be more important to male texters than female ones. Males report higher percentages on the use of this category (0.54%) by using it as a seventh texting option, while female texters use it as a tenth texting option with a lower percentage (0.14%). Considering the expressive power of this particular type of lexisms, the initial expectations were finding females expressing themselves more prominently than males, but this is not what the results show.

Despite the low frequency percentages, the data examination showed males' tendency to express their feelings and reactions in more indicating and significant ways. The reported findings are surprisingly interesting in a way that challenges previous stereotyping of females being more expressive than males. Here again, the

pragmatic dimension of texting seem to take over the expressive function to place messages writing into the scope of practicality and efficiency while communicating.

Besides, other clipping type is used at the seventh position among female texters instead, by relegating onomatopoeic /exclamatory type of lexisms use to the tenth position with 0.14% in type use frequency. Minor gender differences are noted when dealing with this category use with approximate observed percentages of 0.24% for males and 0.49% for females.

Initialisms type is the next category used by females. This type is probably the most prominent gender difference noticed in the table. Indeed, while initialisms type is classified as the eighth category of lexisms, we can see it at the twelfth position, before the last semantically unrecoverable category, among males. Clearly, both males (0.19%) and females (0.59%) have contrasting views concerning the importance given to initialism texting practice. While females seem to appreciate the contracting value that helps achieve language economy, males tend to prefer using other techniques to achieve the same purposes.

The subsequent categories are clear examples of males' partiality in the use of G clippings and missed punctuation with more significant percentages. Whilst G clipping and missed punctuation are positioned at the ninth and tenth position respectively, among males (with 0.24%, for G clipping and 0.19%, for missed punctuation), females tend to underuse these two categories by demonstrating lower percentages. In fact, G clipping is ranked eleven and missed punctuation twelve, with 0.09% of type frequency for both categories.

Evidently, males and females share commonalities in lexisms types use in almost half of the categories suggested, but seem also to differ in some other types use and sometimes in a very discriminating way. Overall, while both females and males employ almost similarly the most advantageous types in terms of language economy, brevity, and rapidity, other techniques are less popular among both groups, and even if they are used, the importance given to each type in terms of utility seems to vary from male and female texters' texting use and preference.

### 4.2.1 The Statistical Treatment of the Results

Subsequent to the categorisation of the deviations among the two genders, the next step consists of using a series of non-parametric Chi-square tests to examine the following hypothesis: Ho 1: There is no relationship between gender and the use of texting language deviations. This step is deemed important to build conclusions on empirical grounds as the calculation of frequencies is often not sufficient for drawing possible correlations between variables.

Testing the relationship between gender and the use of lexisms is deemed crucial to account for the real impact of gender on texting language use. To answer the question of whether a relationship exists between the two set variables, one possible way is testing whether there is enough difference between the observed and the expected values. By comparing the expected and the observed values, null hypotheses can be established and tested significantly.

To this end, the data gathered from the frequency counts are analysed by utilising the statistical package XL Stats, a software package which is commonly used in descriptive/quantitative studies in social sciences. The results of the Chi-square tests show that the p-value is of 0,238 which is superior to the p-value  $\alpha = 0,05$ . This indicates that the test is not significant, i.e. no significant relationship between gender and lexisms use exists. Provided the relevance of the tests, the results prove that both male and female students text in broadly the same way.

**Table 4.7 Chi-square Test Results**

Chi-square observed value	13,914
Chi-square expected value	19,675
DDL	11
p-value	0,238
alpha	0,05

Despite the overall insignificant impact of gender on texting behaviour, a minute examination of the results shows slight disparities in the use of some types of deviations. The stratification of the results into types of deviation shows inconsistency in the use of two distinct categories, namely missed capitalisation and letter/number homophones. The results are obtained by calculating the observed number of

occurrences corresponding to each type, and compare them to the expected number of occurrences. This step was necessary to determine the mean value and the standard deviation corresponding to every type of deviation as illustrated in Table 4.8 below.

**Table 4.8 Statistical Results by Gender and Types of Deviations**

Type	Male			Female			Gp diff
	Observ value	Expect value	Mean (SD)	Observ value	Expect value	Mean (SD)	
Missed capitalisation	132,00	151,13	150,51 (13,22)	166,00	146,86	145,03 (11,03)	S
Letter/Number homophones	117,00	100,92	101,43 (9,86)	82,00	98,07	98,11 (9,911)	S
Contractions	50, 00	52,74	52,880 (6,93)	54,00	51,25	52,81 (6,88)	NS
Misspellings	22,00	21,80	22,32 (4,40)	21,00	21,19	21,60 (4, 38)	NS
Phonetic/unconventional spelling	19,00	15,72	15,01 (3,60)	12,00	15,27	15,08 (3,481)	NS
Accent stylisation	14,00	12,67	12,75 (3,81)	11,00	12,32	11,94 (3,76)	NS
Other clippings	11,00	10,65	10,61 (3,80)	10,00	10,35	10,55 (3,72)	NS
Initialisms	8,00	8,62	9,15 (2,68)	9,00	8,37	8,53 (2,69)	NS
Shortenings	5,00	6,08	6,04 (2,44)	7,00	5,914	6,43 (2,43)	NS
Onomatopoeic/exclamatory	4,00	3,55	3,81 (2,10)	3, 00	3,45	3,27 (1,86)	NS
G clippings	4,00	3,04	3,12 (1,77)	2,00	2,95	2,92 (1,72)	NS
Missed punctuation	4,00	3,04	2,81 (1,49)	2,00	2,95	2,29 (1,57)	NS
Semantically unrecoverable *	//	//	//	//	//	//	//

Despite the observed insignificance in the overall use of deviations, females use missed capitalisation far more than their male counterparts (with 132, 00 observed value for males, and 166, 00 for females). On the other hand, the results show that males utilise letter/number homophones far more than their female counterparts with respectively 117, 00 observed value for males and 82,000, for females.

Significance at  $p=0, 05$

Gp diff : Group difference/ S= significant / NS= non significant

\* No value calculation as the test requires minimum number of 5 occurrences.

Obser= observed value/ Expect= expected value

SD= standard deviation

This, seemingly, points out the inaccurate perception of women marked inclination to conventionality in language use, on the one hand, and the accuracy of males' casual language use, on the other hand. Both findings imply special consideration to communication via SMS texting specificities and norms as peculiar behaviours can denote general but also very discriminating texting practices.

Ultimately, confirming the absence of gender impact on the use of lexisms is quite challenging in diverse ways as it goes counter to most sociolinguistic theories mentioned previously in the literature (Lakoff, 1975; Eckert, 1992; Labov, 1972, 1990; Trudgill, 1974; Tannen, 1993, 1994, 1997; Fasold, 1990). Most of the cited-scholars sustained the gender divide by attributing the informal use of language to males and the standard forms of language to females for social and symbolic reasons. As conventional/ standard language use is likely viewed as a sign of sophistication and education, women are said to employ more formal language to avoid association with the lower class. At this point, using texting language quite similarly by the two genders in SMS communication calls for reconsidering the well-established conception of the gender divide in light of the new medium use of communication.

That almost irrelevant difference exists in the overall results can be explained by the fact that SMS use is, by essence, highly individual and socially-safe as it involves only the senders and the receivers' exchanges. These last-mentioned seem to escape from face-to-face social constraints and norms. Given the discreet feature of messages writing, texters likely see extra possibilities for the expression of the self in more authentic and less constrained frames.

Challenging as well are the results in regard to the previous studies on gender in SMS studies stated so far. That male and female texters' use deviated forms likewise goes counter to all the previously-mentioned studies (Ling, 2005; Thurlow & Brown, 2003; Kasesniemi, 2003). This is possibly explained by the fact that most related studies were case studies in which researchers adopted exploratory method frameworks. In fact, very little experimental or correlational type of research are found in the field, knowing that no possible and complete explanation of gender differences can be achieved without investigating the impact of the gender variable on the texting behaviour. Thus, it is not farfetched to conclude that more correlational/ experimental

types of investigation are needed to set the future conclusions on firm empirical groundings. Building the conclusions on statistical significant tests can, undoubtedly, provide the vigour of quantitative studies even in case studies as the one initiated here.

### **4.3 Section Three: SMS Language and the Students' Academic Level**

Concerns over the positive and negative effects of texting language use have marked the early works on SMS texting employment and literacy. Most studies found a positive correlation between texting and literacy while a few others report negative correlation or a mixed correlation depending on some literacy aspects (Verheijen, 2013). Most studies (Bernicot, 2012a, 2012b; Rosen et al, 2010; Tagliamonte & Denis, 2008; Plester et al, 2008) revealed that the variation in literary scores is highly related to texters long or short experience in texting, frequency of texting, language proficiency, and age. These may impact differently on reading, writing and spelling. Yet, widely accepted among scholars is the existing interrelation between texting use and academic abilities.

For several scholars (Rosen et al, 2010; Tagliamonte & Denis, 2008; Plester et al, 2008), academically high-skilled learners are the ones who use the least number of deviations in messages. This texting behaviour is sustained by the reported extra meta-linguistic capacities among skilled learners who demonstrate higher pragmatic abilities to distinguish between the necessary use and non-use of deviations according to the context. This facility with text language is associated with higher achievement in school literacy measures is increasingly acknowledged in the field.

Yet, this conclusion is recently questioned on methodological grounds. For Verheijen (2013), most studies were based on cross-sectional and exploratory methodological frameworks and designs. Despite the correlational analyses conducted in most studies, clear causality between literacy and texting use is lacking and more causal, longitudinal, and experimental designs are needed to establish firm relationship between text messaging and literacy.

The present section intent is neither setting the issue of texting and literacy nor conducting a causal study to fill a gap in the related literature. This part of the study has been prompted by our desire to account for plausible correlation between EFL academic level and text messaging language use. To date, the majority of studies drawing on literacy and texting have been conducted in regard of the texters' first language. Presumably, approaching the issue from an EFL academic context

perspective can add insights into the topic, and eventually, suggest alternative routes in research field.

The next tables are intended to account for the students' texting behaviour, in regard to their five selected academic levels, and examine plausible relations between their university grade and use of deviation types. The analysis procedure follows the same steps as the preceding sections by examining tables related to each level in terms of number of lexisms, lexisms group frequency, and frequency percentages. The percentages obtained are calculated according to the general number of words in each level. For accuracy considerations, this general number was levelled up to the whole levels by taking the same number of lexemes in each level. Henceforth, the adopted number of words is 1265 in each sub-corpus, and the percentages drawn were exclusively based on this definite number.

**Table 4.9 1<sup>st</sup> Year Level Number, Group Frequency and Percentages of Lexisms according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	N° of Lexisms	Group freq	Group frequency %
Missed capitalisation	57	105	8.30%
Letter/ number homophones	09	67	5.29%
Contractions	20	20	1.58%
Misspellings	15	16	1.26%
Other clippings	06	08	0.63%
Accent stylisation	04	08	0.63%
Shortenings	04	07	0.55%
Phonetic/non-conventional spelling	05	06	0.47%
Onomatopoeic/exclamatory	05	05	0.39%
Initialisms	03	05	0.39%
Missed punctuation	02	02	0.15%
G clippings	01	01	0.07%
Semantically unrecoverable	01	01	0.07%
<b>Total</b>	<b>134</b>	<b>251</b>	<b>19.78 %</b>

One first observation concerning lexisms' types within first-year students' results highlights the four main categories, namely missed capitalisation (8.30%), letter/number homophones (5.29%), contractions (1.58%), and misspellings (1.26%). One interesting note deals with the almost equal use of contractions and misspellings. Indeed, the approximating percentages and the remarkable proportions of misspellings, are quite interesting in light of the students' academic level. At this point, we are much

tempted to assume that the noted proportions might be related to the students' low level of English proficiency.

It is quite evident that contractions and misspelling are very close in terms of lexisms' shaping, but again, contractions can be explained by the economy principle, whereas the way misspellings are produced might not be explained by any other principle except spelling mistakes. Once again, any quick conclusions are not recommended here, as quick editing of messages and lack of proofreading that result from hasty composition and delivery can be crucial reasons that justify the misspelling proportions.

Final letter omission or other clippings type of lexisms is the fifth type of lexisms used among students (0.63%). Seemingly, the students' use of this type may denote their attempt to use the English language in the most safest way as other clipping lexisms consist of omitting the final letter only despite the long examples used by students ( *beautifu*, *boumerde*...). Yet, other clippings type includes also short lexisms such as *<yo>* or *<bab>*, which are reported in the data.

The next type of lexisms deals with accent stylisation (0.63%) that displays same proportions as final letter clipping. As noted earlier, accent stylisation refers mainly to the spoken features found in speech. This is interesting in a way as first year students seem to favour this type instead of more efficient types such as shortenings or initialisms which hold better options for producing shorter and faster messages. The possible freedom offered by texting with no obligation to confine to specific grammatical or linguistic rules, made the introduction of speech features tolerated and accepted by most texters.

Shortenings type of lexisms is reported as the seventh category to be used. Despite the potential characteristic of shortenings to make brief and short messages, students seem not to be attracted that much by this type. Indeed, omitting almost half of the lexemes may be felt by students as holding serious threat to the understanding of messages. Assuming here the risky side of shortenings might be one explanation of shortening ranking in the first students' classification of lexisms. Within the same vein, phonetic/non-conventional type of deviation is also relegated to the eighth position with 0.47%. Unconventional spelling, for first year students, may not be the

most adequate use of English mainly if students while using English seek to practice their English to achieve language proficiency.

Onomatopoeic/ Exclamatory category is the ninth category used in the corpus. One noted aspect with this category concerns the students' tendency to elongate the lexemes in a very specific way. No unfamiliar exclamatory forms are used and a small percentage (0.39%) is reported here as well. Among the 134 number of lexisms identified, only five exclamatory instances are reported. This clearly denotes the students' lack of interest in using this type while messaging.

Initialisms type is the tenth reported category among first-year students. Visibly, initialisms type is not favoured by students as only three instances are noted. In spite of its advantageous use in making shorter and faster messages, students' reluctance to use this type can be interpreted in light of possible students' care for producing correct lexemes, with the least amount of risks of being misunderstood by the receivers.

While contractions, which are the third category used, could be seen as risky due to the omitting amount of letters, texters seem to omit to the extent of the understanding of lexemes. This is not the same with the use of initialisms which consists of omitting the whole lexeme letters and keeping the initial one. These precautions are also seen with the three last categories namely missed punctuation (0.15%), G clipping (0.07%), and semantically unrecoverable lexisms (0.07%), with percentages indicating the possible consideration given to correct English writing and understanding.

In Table 4.10 below, we can see that the same three categories are used among this category of students as well. Missed capitalisation (5.61%), letter/number homophones (5.61%), and contractions (2.60%), as it was the case with the first-year students, are used quite similarly. While similarities are identified with the use of the three top categories, differences are observed in the use of the subsequent types. In fact, second-year students, more than first-year students, seem to appreciate the benefits of using texting to write short and brief messages.

**Table 4.10 2<sup>st</sup> Year Level Number, Group Frequency and Percentages of Lexisms according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Number of lexisms	Lexisms group freq	Group freq %
Missed capitalisation	44	71	5.61%
Letter/ number homophones	05	71	5.61%
Contractions	22	33	2.60%
Shortenings	06	16	1.26%
Other clippings	06	09	0.71%
Misspellings	08	08	0.63%
Phonetic/non-conventional spelling	06	07	0.55%
Accent stylisation	03	03	0.23%
Onomatopoeic/exclamatory	03	03	0.23%
Initialisms	03	03	0.23%
G clippings	02	02	0.15%
Missed punctuation	00	00	00%
Semantically unrecoverable	00	00	00%
Total	108	226	17.81%

This is quite evidently displayed by the use of shortenings at the fourth position (1.26%) and other clipping type (0.71%). Both categories are acknowledged for providing language economy and brevity and promoting rapidity in the delivery of messages. Misspellings are reported as the sixth category with 0.63%. Interestingly enough, it is classified in a farther position than the one observed in first year students findings. Misspellings are also found at this students' level data and are quite significant as they are occurring far before other techniques such as phonetic/unconventional spellings.

Non-conventional spellings (0.55%) and accent stylisation (0.23%), which are supposed to be speech forms are, assumedly, more frequent among young texters. Texting features which are commonly found are <lol>, <bbf> or <idk>. No creative forms of initialisms are observed, meaning probably that even at this level use, caution is taken by producing familiar forms that are decoded by all recipients.

Only three forms of Onomatopoeic /exclamatory lexisms are identified (0.23%), which is fairly denotes the students' poor inclination to the use of the type to express their emotions and reactions. G clipping type is rarely used as well (0.15%) which expected as the general reported frequency of occurrences of the latter was already weak in the general corpus results. In the second-year students' messages, G clipping is shown in two instances only. This, in some extents, reveals the importance given to

this last category in texting. Interestingly enough, no instances of missed punctuation (00%) and semantically unrecoverable lexisms (00%) are reported, which in our view denotes the students' compliance to the correct forms of the language whenever possible.

**Table 4.11 3<sup>st</sup> Year Level Number, Group Frequency and Percentages of Lexisms according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Number of lexism	Lexism group freq	Group freq %
Missed capitalisation	52	81	6.40%
Letter/ number homophones	06	56	4.42%
Contractions	22	32	2.52%
Shortenings	05	15	1.18%
Phonetic/non-conventional spelling	04	08	0.63%
Other clippings	07	07	0.55%
G clippings	03	03	0.23%
Misspellings	03	03	0.23%
Initialisms	02	02	0.15%
Semantically unrecoverable	01	01	0.07%
Accent stylisation	00	00	00%
Missed punctuation	00	00	00%
Onomatopoeic/exclamatory	00	00	00%
Total	105	208	16.38%

As far as third-year students' results are concerned, only ten categories are identified. Accent stylisation, missed punctuation and onomatopoeic/ exclamatory types are not employed. This suggests the possible extended degree of formality in the students' texts as spoken features of accent stylisation and exclamatory expressions are inexistent. More importantly, apostrophes are not omitted which can reveal the students' intentions to keep messages as grammatically-correct as possible.

As for the rest of the categories, the three top categories are the most familiar ones as they are used among first and second-year students' messages. Here again, missed capitalisation is the first category used with the highest percentage (6.40%), followed by letter/ number homophones (4.42%), and then, contractions (2.52%). Students' concern with language economy is highly felt with the use of the subsequent categories, namely shortenings (1.18%), phonetic spelling (0.63%), other clippings (0.55%), and G clippings (0.23%). Despite all these deviated forms, misspellings are reported among one of the last categories, with a significantly low percentage (0.23%).

Initialisms and semantically unrecoverable categories are also reported with very weak percentages (0.15% for initialisms and 0.07% for semantically unrecoverable type). Only two instances of initialisms are noted, and one instance of semantically unrecoverable category is reported. Clearly, students prefer using other types than initialisms and seem to consider the importance of texting in a comprehensible way as almost no incomprehensible entities are noticed in their messages.

As concerns Master 1 students' findings, one immediate observation deals with the reported deviation percentage which is significantly higher (24.68%) than the preceding percentages which are related to the undergraduate students. While deviation percentages were expected to decrease with the students' level of language competency, it is apparently increasing with language mastery level. More likely, Master 1 students seem to gain more confidence with English language use and seem to be increasingly comfortable with the language. This can be related to texting maturity which is gained through time and the long practice in texting in the English language.

**Table 4.12 Master 1 Year Level Number, Group Frequency and Percentages of Lexisms according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Number of lexisms	Lexisms group freq	Group freq %
Missed capitalisation	65	105	8.30%
Letter/ number homophones	06	99	7.82%
Contractions	31	42	3.32%
Shortenings	12	20	1.58%
Other clippings	09	12	0.94%
Phonetic/non-conventional spelling	07	11	0.86%
Accent stylisation	08	10	0.79%
Onomatopoeic/ exclamatory	04	05	0.39%
Missed punctuation	04	04	0.31%
Misspellings	02	02	0.15%
Initialisms	02	02	0.15%
G clippings	01	01	0.07%
Semantically unrecoverable	00	00	00%
Total	151	313	24.68%

This can be noticed also in the second observation made from the findings which show misspellings at the tenth position with 0.15 % only, on the one hand, and the

absence of semantically unrecoverable lexisms (00%), on the other hand. This may convey the Master students' language ability as very cases of misspellings are reported, and their attention to produce clear and understandable forms of the language as no semantically unrecoverable instances are noted.

The results show also their concern with rapidity and economy as well. In fact, in addition to the three top-rated categories, namely missed capitalisation (8.30%), letter/number homophones (7.82%), and contractions (3.32%), the subsequent categories are reveal their significant concern about rapidity and economy as the list shows shortenings (1.58%), other clippings (0.79%), phonetic spellings (0.63), as the three following categories.

The last mentioned categories concern onomatopoeic/exclamatory (0.39%), missed punctuation (0.31%), misspellings (0.15%), initialisms (0.15%), G clippings (0.07%) and last, semantically unrecoverable category, with the least percentage (0.07%). Based on the mentioned results, it is clearly noted that Master 1 students besides their concern about economy, seem to care about some other linguistic correct forms such as apostrophe making and G ending forms which are found in very insignificant proportions in their messages.

As far as Master 2 students are concerned, one interesting observation concerns the total deviation percentage that is revealed significantly higher than all the levels preceding percentages. Apparently, deviations seem to increase with the students' level of English as more deviating behaviour is noted. Interestingly enough the categories used seem to display the students' language proficiency with deviated forms but not with misspelled instances as misspellings (0.07%) interestingly is found at the twelfth position with one misspelled instance out of 181 instances.

More deviations , therefore, with the least spelling mistakes and semantically unrecoverable instances (00%), added to very few noted instances of missed punctuation (0.23%) and G clippings (0.31%) , is the evidence displayed by Master 2 findings. In addition to that, all the other categories are reported with the highest percentages when compared to the other students' levels results. Missed capitalisation is, again, the most used category with 11.38%, followed by contractions with 7.43%, and letter/number homophones with 5.77%.

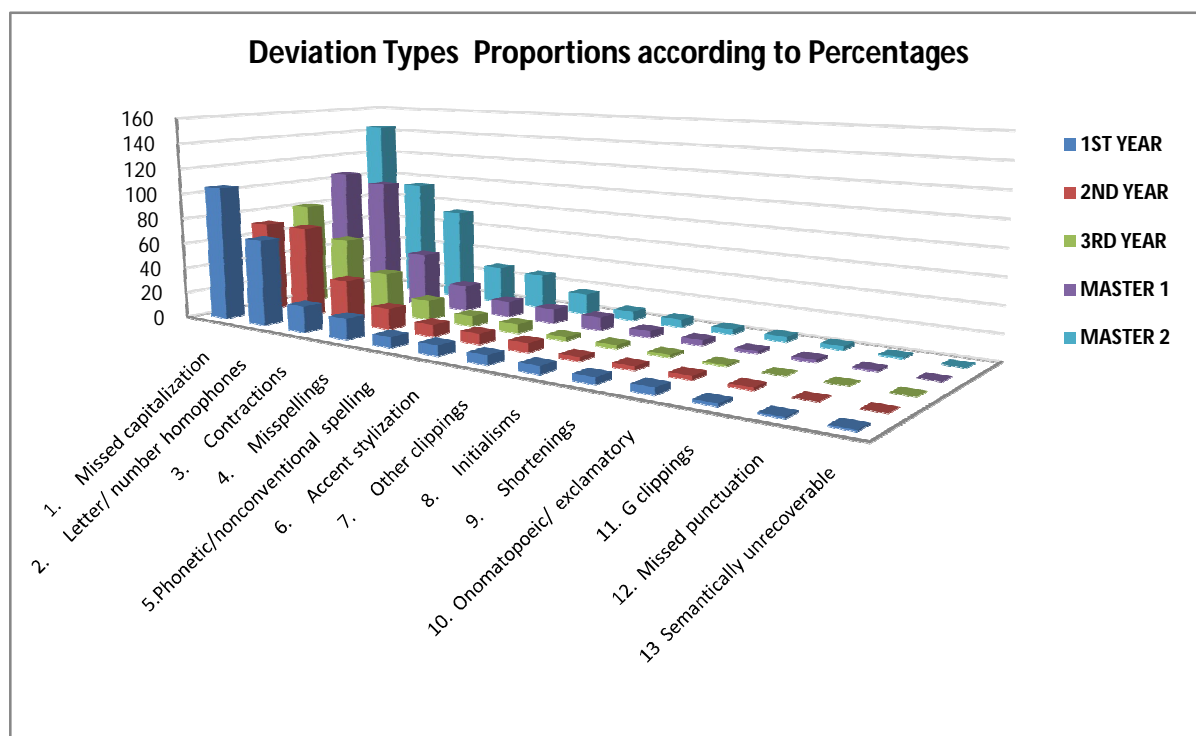
**Table 4.13 Master 2 Level Lexisms Number, Lexisms Group Frequency and Percentages according to Lyddy et al (2013) Taxonomic Distribution**

Lexism type	Number of lexism	Lexism group freq	Group freq %
Missed capitalisation	75	144	11.38%
Contractions	57	94	7.43%
Letter/ number homophones	04	73	5.77%
Shortenings	08	29	2.29%
Other clippings	13	27	2.13%
Phonetic/non-conventional spelling	07	16	1.26%
Initialisms	03	07	0.55%
Onomatopoeic/exclamatory	04	06	0.47%
G clippings	03	04	0.31%
Accent stylisation	04	04	0.31%
Missed punctuation	02	03	0.23%
Misspellings	01	01	0.07%
Semantically unrecoverable	00	00	00%
Total	181	408	32.20%

Clearly, Master 2 students are more likely inclined to the use of contractions than any other type of deviations, far more than letter/number homophones type which is displayed as the most popular category among the students of the preceding levels. The examination of the examples show that letter/number homophones used by Master 2 students are very limited in number; only four instances are identified, namely the most common ones such as <*b*> (*be*), <*r*> (*are*), <*u*> (*you*), and <*n*> (*and*). The contractions are shown as covering the majority of the edited lexemes.

One additional explanation concerns the texting maturity gained through time. Notably, Master 2 students seem to be very comfortable with contractions which is reported as the most preferred category. Nonetheless, shortenings are also used with fewer proportions (2.29%), along with other clipping type that is used subsequently with 2.13%. Phonetic/ unconventional spelling type (1.26%), G clippings (0.31%), and accent stylisation are used in later stages with fewer proportions. This can indicate the students' possible tendency to integrate fewer speech features which gives messages an informal tone supported by the significant use of contractions.

**Figure 4.7 Statistical Representation of Deviation Types according to Percentages**



In an ultimate attempt to summarise the whole students' levels findings, the figure 4.7 provides an accurate view on the prevalence and frequency of the categories in the corpus. As the figure shows, analogies at the level of the use of types are observed with a noted decrease in the proportions at all levels. Noticeably, Master 2 students are presented as the most prolific users of deviation types. In parallel, first-year students demonstrate higher proportions when compared to second and third-year undergraduate counterparts.

In an endeavour to provide an in-depth account of the variation and distribution of the described proportions across levels, Table 4.14 draws on the calculated percentages, along with the ranking of the types. This step is deemed important for a more precise analysis of the results, on the one hand, and to gain more insight into the exact proportions and their distribution across levels, on the other hand. As see in the table, total percentages are varying according to the students' levels with slightly discriminating results from first-year to Master 2 level.

While first-year students are reported to be the most prolific users of deviated forms at the Licence level, Master 2 students are noted to be the ones who are using lexisms more likely among the Master and the undergraduate students alike. Broadly,

the highest proportions are seen among master 1 and 2 students, which is quite interesting as lexisms were expected here to diminish with the students' advanced level, given the evidence provided so far in the reviewed literature on the correlation that exists between language proficiency and texting language use.

**Table 4.14 The Percentages of the Types of Deviation and Ranking across Levels**

<i>Lexism type</i>	<b>1<sup>st</sup> Y % (Rank)</b>	<b>2<sup>nd</sup> Y % (Rank)</b>	<b>3<sup>rd</sup> Y % (Rank)</b>	<b>M 1% (Rank)</b>	<b>M 2 % (Rank)</b>	<b>Total</b>
Missed capitalisation	8.30 (1)	5.61 (1)	6.40 (1)	8.30 (1)	11.38 (1)	<b>39.99</b>
Letter/ numb homophones	5.29 (2)	5.61 (2)	4.42 (2)	7.82 (2)	5.77 (3)	<b>28.91</b>
Contractions	1.58 (3)	2.60 (3)	2.52 (3)	3.32 (3)	7.43 (2)	<b>17.45</b>
Misspellings	0.55 (7)	1.26 (4)	1.18 (4)	1.58 (4)	2.29 (4)	<b>6.86</b>
Phonetic/non-conv spelling	0.63(5)	0.71(5)	0.55 (6)	0.94 (5)	2.13 (5)	<b>4.96</b>
Accent stylisation	0.47 (8)	0.55 (7)	0.63 (5)	0.86 (6)	1.26 (6)	<b>3.77</b>
Other clippings	0.55 (4)	0.55 (6)	0.23 (8)	0.79 (10)	0.55 (12)	<b>2.67</b>
Initialisms	0.63 (6)	0.23 (8)	00 (11)	0.79 (7)	0.31 (10)	<b>1.96</b>
Shortenings	0.39 (9)	0.23(9)	00 (13)	0.39 (8)	0.47 (8)	<b>1.48</b>
Onomatopoeic/exclamatory	0.39 (10)	0.23(10)	0.15 (9)	0.15 (11)	0.55 (7)	<b>1.47</b>
G clippings	0.07 (12)	0.15(11)	0.23 (7)	0.07 (12)	0.31 (9)	<b>0.83</b>
Missed punctuation	0.15 (11)	00 (12)	00 (12)	0.31 (9)	0.23 (11)	<b>0.69</b>
Semantically unrecoverable	0.07 (13)	00 (13)	0.07(10)	00 (13)	00 (13)	<b>0.14</b>
<b>Total</b>	<b>19.78</b>	<b>17.81</b>	<b>16.38</b>	<b>24.68</b>	<b>32.20</b>	

In fact, assumptions regarding texting decrease with the increase in the language command and literacy were put forward by some scholars who stressed the texters' inclination to use more formal language forms (Rosen et al, 2010; Tagliamonte & Denis, 2008; Plester et al, 2008). The forgoing account on the effect of texting on academic abilities showed how the majority of the reported skilled-learners use the least number of deviations, on the one hand, and how they demonstrate higher pragmatic capacities to distinguish between the appropriate and inappropriate use of deviations according to context (Rosen et al, 2010; Tagliamonte & Denis, 2008; Plester et al, 2008).

Likewise, the assumption of maturity in terms of age and texting experience sustained by Bernicot et al (2012a, 2012b) shed light on the texting abilities acquired through time and age. The reported differences assuming younger and inexperienced texters tendency to compose longer and more standard forms of language while texting

is, by far, insightful as it evokes the importance of both age and texting experience which are adjoined to the context.

As far as the participants of this study are concerned, the Licence students' general tendency to deviate less than their Master students' counterparts can be partly explained in light of Bernicot et al (2012a, 2012b) contention by assuming the students' given consideration to standard forms of the language because of age and inexperience in the use of phone technology. Yet, consideration to the students' EFL academic context requires the inclusion of the students' plausible intent to message in the standard language in an attempt to practice and improve the language while texting. This assumption can also be embraced in regard to the use of standard forms through the students' language level development.

Experiencing the target language upgrading, on the one side, and gaining experience in the use of the device, on the other side, might explain the Master students' noted inclination to deviation. This view can also be sustained by the reported meta-linguistic and pragmatic capacities among advanced students who, seemingly, display higher distinction in texting use according to context (Rosen et al, 2010; Tagliamonte & Denis, 2008; Plester et al, 2008). In this respect, given the students' age rang and context, the variation in the students' deviation use probably comes not from their academic level, but from other sources which include differences in phone technology, context-awareness, and norms about composing messages in their particular groups (Waldron et al, 2015).

In this vein, the results demonstrate some similarities across all the levels in terms of ranking. Six categories are almost similarly ranked, namely missed capitalisation, letter/number homophones, contractions, misspellings, phonetic/non-conventional spellings, and semantically unrecoverable spellings. As concerns the missed capitalisation category, which is reported as the first and highly frequent type, Master 2 students are the most prolific users who are followed by Master 1 and first-year students.

A subsequent observation concerns first-year slightest employment of contractions and misspellings that are conversely noticed with higher proportions among Master 2 students. Here again, minimum use of the two categories among first-

year students may denote the students' concern over the formal use of the English language either for practicing reasons or/and inexperience in the use of texting language. In contrast, Master 2 students' higher proportions can be explained by other factors such as high texting experience, on the one hand, and consciousness concerning the texting informality that is shared among friends, on the other hand.

Notwithstanding the previously-mentioned problematical distinction between spelling mistakes and misspellings, this type of lexisms reveal crucial insight concerning the occurrences of the latter according to the students' academic level. In fact, in spite of the varying percentages reported among all the students from different levels, one interesting observation concerns misspellings decreasing number with the decrease in the level of the students. The findings show Master students as the heaviest users of this type, on the one extreme, and first-year students with the least percentage, on the other extreme.

This decline in percentages might indicate the rising number of misspellings in regard to the degree of formality sought in messages. However, this conclusion should be taken with a lot of caution as we suggested above that misspellings might not be attributed to students' levels solely, but also to the students' rapidity and haste in delivering messages as well. In these particular cases, very little proofreading takes place, and this in itself can be an important source of misspellings in messages.

An observed agreement concerns the fifth ranked type of deviation which is semantically recoverable category. This latter is correspondingly used among the five levels in terms of percentage and ranking. The reported scores are insignificant here given the fact only third-year students used one instance of incomprehensible lexisms while the rest of students scored zero occurrences. While high percentages are noticed among Master students overall, students concern about delivering comprehensible and meaningful texts is stressed here.

Indeed, modifying language seems to be limited by the students' high consideration to clear communication as almost all the deviated forms are comprehensible to the researcher except one instance that might be comprehensible to the message sender and receiver. Messages comprehension is clearly targeted when texting. This, in a great extent, challenges the public opinion concerning the codified

and permeable nature of texting language. Consistent with some scholars conclusions (Crystal, 2008; Shortis, 2007a, 2007b; Sebba, 2008; Tagg, 2009; Lyddy et al, 2013; Farina & Lyddy, 2014), almost all of the reported deviations in the sample are easily deciphered and recognised. Thus, the findings bring extra evidence to previously-cited studies which corroborated messages legibility and formality which make them meaningful and coherent.

Less consistency is observed in the use and ranking of the other categories, with varying proportions and rankings. These categories concern accent stylisation, other clippings, initialisms, shortenings, onomatopoeic/exclamatory, G clippings, and lastly, missed punctuation. Here again, in spite of the observed discrepancies in percentages, the findings reveal Master 2 students' higher proportions within these seven last categories. Here, accent stylisation, other clippings, initialisms, shortenings, and the other types use among Master students may suggest the students' confidence and ease in manipulating language creatively by integrating speech-like instances represented by accent stylisation, G clippings, and more informal writing instances such as other clippings, initialisms, shortenings and missed punctuation.

Ultimately, not many similarities are reported after the last-mentioned categories above. In fact, more discrepancies and variation in types' percentages and category ranking are pointed out. While occasional similarities in other clippings type use is noted among first, second, and Master 2 students who employ exactly in the same proportions among both first and second-year students, all the rest of the categories are differently used by the rest of the students belonging to the other levels. One additional similarity is noted among first and Master 1 students' use of shortenings, which is reported at the ninth position with contrasting ranking across levels.

A general overview of the results unveiled three major and important aspects concerning the use of deviation types. The first concerns the Master 2 students' higher tendency to deviation compared to the students from different levels. The data show that higher is the students' level in English, more deviations they make while texting. The second outcome concerns the similarities and differences in percentages and ranking. Notably, despite variation in percentages, all students use six categories in roughly the same order. The identified categories are missed capitalisation,

letter/number homophones, contractions, misspellings, phonetic/nonconventional spellings, and semantically unrecoverable categories.

Clearly, the students' similarly ranked six categories signify the pragmatic aspects that are inherent to texting behaviours far more than the students' levels. In fact, opting for the use of the same types whatever language level students have may mean that texting is significantly related to other related texting factors such as experience, age and meta-linguistic abilities inherent to students.

Interestingly, the instances reported within each category showed significant similarities in the way the lexemes are deviated via missed capitalisation, contraction, letter/number representation, misspellings, and phonetic/non-conventional spellings, as if specific norms are followed by the majority of students when it deals with these specific categories. The number of lexisms reported and their frequency in messages is certainly evidence that rules of economy, in addition to meaning is respected. Other effective reasons are also the application of the phonological approximation and restitution principles previously mentioned by Thurlow and Brown (2003).

Commonalities in these types use show also how the students' alternative resources are provided by cell phones. Seemingly, all the students get advantage of these resources in a very similar way by highlighting the students' inclination to language economy, brevity and rapidity attributes of missed capitalisation, letter/number homophones, contractions, and phonetic/non-conventional spellings. An additional shared concern about messages understanding is pointed out via the absence of ambiguous or incomprehensible instances. Despite the missed capitalisation, letter/number homophones, contractions, shortenings, Other clippings high potential to produce non-conventional and thus incomprehensive lexisms, this was not the case.

In fact, very rare cases were identified in the corpus, which in turn, brought more evidence of the meaningful nature of messages. Besides, missed capitalisation operates no alterations on words except on the capital letters, contractions are made by keeping the maximum of consonants which are more valuable at the level of lexemes decoding ,shortenings and final letter omission are also revealed not very risky as the shortenings use respects the minimum number required to understand the shortened lexeme, and last letter and number homophones which are relying on a phonologically

approximating basis that is shared by all the speakers of the same language, therefore easy to decode and understand.

The third concluding note concerns differences in the use of the remaining types namely accent stylisation, other clippings, initialisms, shortenings, onomatopoeic /exclamatory spellings, G clippings, and missed punctuation. These are revealed less popular among students, with insignificant and inconsistent percentages and rankings across levels. Accent stylisation which informs about speech-like contribution in texting is seen in very slight proportions given the probable fact that students might be much more concerned with more types that offer better advantages in terms of brevity, and economy. Accent stylisation as one additional expression of spoken language is also reported with different percentages among all levels.

As stated above, the presence of speech features in students' messages doesn't mean the pervasive use of this latter as very few instances are noted in all the students' messages. No consistency in the reported percentages among students is found, and here again, the very low percentages denote almost all the students under use of this type of deviations in messages. Clearly not very much appreciated among students who prefer using a more contracted, shortened language, but a formal one.

Other clippings or end letter clippings are also insignificantly used in messages. Despite its economic value which extends to the omission of one final letter, students seem to prefer much more potential types such as letter/number homophones or contractions to achieve their communicative goals. Initialisms are also poorly reported among almost all the students, with varied percentages and rankings for the major part of participants. Initialisms, as known in the English language are rarely used in messages. The very few examples reported concern familiar initialisms in digital language such as <lol>, <omg>, and <asap>, which are commonplace today in online and cell phone texting language.

All over again, even with the extraordinary potential of initialisms to help producing brief and rapid messages, this latter is revealed rare among students. This may be due to the singular nature of initialisms based on the arbitrariness of the produced lexemes that are not understood in a systematic way by all the receivers of messages. The complete phrases, which can be initialised, were not reported in the

corpus, and instances of initialisms were noted with single lexemes that are represented with the initial letter, but not frequently, to make a rule out it. Besides, all the reported initialisms are context dependent as their understanding cannot be achieved at the linguistic level, as the initialised lexisms are very much related to the texters' texting individual style than any linguistic properties of the deviated lexeme.

Likewise, shortenings are inconsequentially reported among students across all the levels. As it is the case with initialisms and other clippings assumed high potentials in language economy and brevity, shortenings are irrelevantly used as well. The results might be explain by students' individual texting styles that do not consider shortenings as efficient as the most preferred types such as contractions, letter/number homophones or phonetic/non-conventional spellings.

Parallel to that, Onomatopoeic /exclamatory lexisms are also rare in the corpus. The reported instances, though, were very insightful in terms of occurrences and existing speech proportions in students' messages. In fact, expressive instances that are basically found in face to face conversation are very rare in the students' messages. More likely, this is due to the pragmatic use of messages which may be destined to serve specific purposes such as improving English language through practicing as it is the students' language of study. Additionally, students may prefer using other means of communication that are more convenient in emotions/ reactions expression such as telephone calls, which might be more convenient in these particular situations.

One interesting remark, however, concerns the use of elongation as a texting technique to express emotions or reactions extend or degree. Nonetheless, the very low reported percentages and frequencies showed the individual use of the latter, which cannot be generalised as a texting practice or to the students' general use of this category. Indeed, the varied percentages among the different students' levels showed clear inconsistency in their use of this type of deviation which obviously cannot represent a rule by itself, the way it is presented in the corpus.

G clippings percentages are also very fluctuant across the students' levels. As noted earlier, G clippings can also be viewed as the presence of speech features in texting. G omission in spoken language and everyday conversation are commonly used in the movies and the media (Tagg, 2009; Sebba, 2007). What is interesting about this

particular type of deviation, though, is the significantly low percentages reported among students. In fact, one general observation concerns the very few instances of G clipping in all messages which is, in our sense, revealing the texting language nature.

Students while texting seem to prefer simple sentences with simple tenses, as the use of present participle means moving one step towards complex sentences which seems to be non convenient for the majority of students. Tense use in messages is certainly interesting as a topic to deal with, but it is not the concern of this study. More research should be carried out to understand the types of tenses used while messaging and the degree of conformity to grammatical tenses and students preferences in terms of tenses' use and motives. Such research direction will certainly provide extra detail on texting behaviour, mainly among EFL students.

One last but insightful finding points out missed punctuation use. This type is remarkably interesting in the way it is used by the students. The significantly low percentages indicate the students' conformity to the apostrophes use in language and their possible concern with the language form of messages. This is clearly helped by the auto correct option set in cell phones that students can use at any time while texting. Auto correct function is undeniably a serious impacting feature that can explain the significantly reduced amount of lexisms with missed apostrophes. Besides, despite students' varying percentages, very close ranking positions are noted, which in a way accounts for the least deviating type used among students, and a consistent tendency to use texting language almost in the same way.

In summary, the students' texting practices are divided into two major categories, the most frequent and popular types among all the students of all levels, and the least frequent types which are inconsequentially represented by low percentages. The percentages and ranking examination revealed six main categories that mostly obey the economy, brevity, rapidity and phonological approximation principles. All these were observed in the corpus and discussed in light of students' plausible need for composing short, rapid but comprehensible messages. Besides, rare occurrences of speech instances are reported with discriminating results among students. The results showed that in spite of spoken/ informal instances existence, these are scarcely used, which emphasise language formality use among students.

More importantly, the data underscored Master 2 students' heavier inclination to deviations almost across the major part of types. That deviation amplifies with the students' advancement through their academic levels challenged previous contentions on the opposite effect of language proficiency over texting language employment. The examination of the data also highlighted the use of formal and informal forms of language that challenged the established notion equating deviation with informality. Presumably, the non-conformity to the standard of a language might be seen as falling in the trap of the spoken language.

The results showed that very few instances of spoken language features were identified in the students' messages. This suggested reconsidering the dichotomous presentation of informal (spoken) and formal (standard and written) in light of the students' texting strategies which alternate between formality and informality in very distinguished and circumstantial ways.

#### 4.3.1 The Statistical Treatment of the Results

Parallel to the first readings of the findings, a statistical significance was sought at this level as well to account for possible correlation between the academic level and deviation behaviour to confirm or reject the null hypothesis set in the outset. Likewise, Chi-square tests are used to assess the variables correlation and confirm or disconfirm the second null hypothesis stipulating no significant difference in deviation according to the academic level. The non-parametric Chi-square tests show that the overall p-value is superior to 0.05 (p-value 0,594), which indicates that the test is insignificant, and thus prove the insignificant impact of the students' academic levels on the use of deviated forms while texting. Table 4.5 presents the results of the Chi-square results.

Chi-square (Observed value)	45,059
Chi-square (Expected value)	65,171
DDL	48
p-value	0,594
alpha	0,05

Similar to the gendered stratification of the results, the statistical treatment of the data shows how the overall types are used with an insignificant difference. The tests

reveal the results tendency to consider deviation as a common behaviour existing at the students' different academic levels. A close examination of the results, however, shows noteworthy variations within the three first categories namely missed capitalisation, letter/number homophones, and contractions.

In fact, higher statistical proportions are noticed among Master 2 participants regarding missed capitalisation and contractions (0.102 and 0.052 respectively), and Master 1 students concerning letter/number homophones (0.067). Missed capitalisation is seen with similar scores among both first-year and Master 1 students (see Table 8 below). That first-year students employ missed capitalisation far more than their undergraduate counterparts doesn't likely designate the students' higher tendency to language deviation. In fact, missed capitalisation is considered here as the least deviated form of texting language as the complete form of the lexemes is kept integral and not modified in messages. Absence of capitalisation, as explained earlier in the discussion, might be due to the texters' rapid delivery of texts and also their absence of marking punctuation in the middle of messages, which subsequently affects capitalisation occurrence and production.

**Table 4.16 Lexism Statistical Total Results across the Academic Levels and Types**

Types	Year 1	Year 2	Year 3	M 1	M 2	Total	Gp diff
1. Missed capitalisation	0,075	0,050	0,058	0,075	0,102	0,360	S
2. Letter/ number homophones	0,048	0,050	0,040	0,070	0,067	0,275	S
3. Contractions	0,014	0,023	0,023	0,030	0,052	0,142	S
4. Misspellings	0,011	0,011	0,011	0,014	0,021	0,068	NS
5. Phonetic/nonconven spelling	0,006	0,006	0,006	0,009	0,019	0,046	NS
6. Accent stylisation	0,006	0,006	0,005	0,008	0,011	0,036	NS
7. Other clippings	0,005	0,005	0,002	0,007	0,005	0,024	NS
8. Initialisms	0,004	0,002	0,002	0,004	0,004	0,016	NS
9. Shortenings	0,004	0,002	0,001	0,003	0,003	0,013	NS
10. Onomatopoeic/ exclamatory	0,004	0,002	0,001	0,001	0,003	0,011	NS
11. G clippings	0,001	0,001	0,000	0,001	0,002	0,006	NS
12. Missed punctuation	0,001	0,000	0,000	0,001	0,001	0,002	NS
13. Semantically unrecoverable	0,001	0,000	0,000	0,000	0,000	0,001	NS
Total	0,179	0,161	0,148	0,223	0,290	1,000	

**Gp= group difference / S= Significant/ NS= Non-significant**

Very insightful as well is the observed increase of deviation scores with the raise of the students' level in regard to the three mentioned-categories. Despite first-year

and Master 1 equal scores concerning missed capitalisation use, the scores show how missed capitalisation, letter/number homophones, and contractions broadly increase with the increase of the students' academic level. In light of the literature review, these findings are notably challenging in possibly two ways.

First, the results show inconsistency with a number of conclusions made in previous studies related to the students' levels impact on texting use. In fact, several scholars stipulated the plausible decreasing use of texting with the increasing level of language command in regard to context. This, in greater extents, shows how EFL contexts may reveal different behaviours by the students focusing on language correctness in early levels and finding more freedom with language use only when better language command is attained.

Second, the assumption of maturity in terms of age and texting experience which are put forward by Bernicot et al (2012a, 2012b) can be presented here as evidence for the texting abilities acquired through time and that prompt distinguished language manipulation and change. The reported differences stipulating younger and inexperienced texters tendency to compose longer and more standard forms of language while texting is by far insightful as it evokes the importance of both age and texting experience which are added to the context.

Nevertheless, it is worth noting that one cannot conclude, based on these results, that the academic level is determinant in texting language use, since the latter is grounded on non-representative samples. While the overall results exhibited communalities in lexisms use, the specific distinction made between levels ultimately informed about texting complexity and possible heterogeneity across the various academic proficiencies. This distinction could be, however, the focus of further research based on larger samples of participants and corpora alike.

#### **4.4 Chapter Summary and Conclusion**

This chapter set out to examine the textual characteristics of EFL students' messages, with a view to identifying the most deviated forms and types to answer the three research questions raised in the study. To answer the first question: *What are the lexical components of the Standard English language that are deviated in EFL*

*students' SMS texts?*, the analysis went first on looking at the most deviated lexemes in the English language and ended up by setting a list of 399 modified lexemes occurring 1323 times and accounting for 14.96 % of the total word content. Consistent with previous research (Tagg, 2009; Thurlow & Brown, 2003; Lyddy et al, 2013), the results showed that the language of the students' messages was largely standard, and that some lexemes were more subject than others to deviation.

Among the high-frequent identified lexemes, a list of the top fifty deviated lexemes was established. The list included namely *you, are, please, your, tomorrow, good, brother* and *because* which were significantly used and deviated in various ways. The deviated forms were revealed principled and meaningful in terms of the phonological and linguistic properties existing in the language as texters drew on their knowledge of the phonological, typographic, semantic, spoken, and written discourses to achieve specific functions through texting.

In a significant extent, the findings were explained by the texters' tendency to extend existing practices seen in the English language and draw upon pre-existing conventions of non-standard spelling (Shortis, 2007b) as documented further by Crystal (2008a) and Tagg (2009). Language deviations have always existed in the written English language; yet their prevalence in texting as a digital form of communication highlighted language users' everlasting inclination to manipulate language purposefully and similarly in both digital and traditional written modes.

Evidence for texting linguistic uniqueness was enhanced in many respects. In addition to the speech-like instances drawn on spoken discourse and the contracted and shortened forms, presumably imitated from existing written forms, many instances were revealed neither specific to speech nor writing. This last is reflected in instances of missed capitalisation, missed punctuation, misspellings, and exceptional use of initialisms. The idea of considering texting from speech and writing spectrums was challenged on the ground of the texters' deliberate variation in texting forms that stem from various linguistic, phonological, pragmatic, spoken, and written discourses alike.

The arguments put forward were also based on the observed heterogeneity in forms and types employment which suggested the texters' informed and elective texting behaviours. Variation in texting was revealed in the most and least frequent

lexisms that denoted some facility to modify some lexemes and difficulty with some others. Texters' personal style was highlighted mainly in the least frequent lexisms that escape speech-like or written norms. This presumably evoked the texters deliberate choices to creatively modify lexemes in the absence of phonological and language economy resources as well.

Interestingly, one shared communality between the least and the most frequent lexisms employment implied the texters' awareness about meaning and comprehension that were preserved in most lexisms. The findings highlighted the texting principled and meaningful character (Sebba, 2007) that commonly goes beyond the medium physical constraints to extend functions and forms chosen intentionally from their knowledge of the language and other discourses.

The description of texting in terms of types of deviations sustained these assumptions by displaying missed capitalisation as the most frequently occurring category involving the omission of capital letters. The other types varied from letter/number homophones, contractions, misspellings, and phonetic/non-conventional spellings. Less occurring types were accent stylisation, other clippings (or end clippings), and initialisms. These were followed respectively by shortenings, onomatopoeic/ exclamatory, G clippings, missed punctuation, and last, semantically unrecoverable types of deviation.

Missed capitalisation accounted for the highest proportion of deviations, which is followed by letter/number homophones, contractions, misspellings and phonetic/nonconventional spellings. Inconsistent with Lyddy et al (2013) conclusions drawn on an analysis of British text messages, accent stylisation and missed punctuation were less frequent among Algerian EFL students. Yet, consistent with Lyddy et al analysis was the least used category of semantically unrecoverable type which displayed the least proportions incomprehensible lexisms, by assuming that these forms might well have been understood by the texters themselves.

As concerns the second research question: *Do the deviations differ according to Gender? if yes, how?*, some gendered similarities and differences were suggested within Lyddy et al's (2013) categories. In terms of similarities, both male and female students used, with slight variations in percentages, missed capitalisation,

letter/number homophones, contractions, accent stylisation, and semantically unrecoverable categories. Slight differences were also noted in the distinct use of the other types namely shortenings, misspellings, onomatopoeic/exclamatory, other clippings, G clippings, missed punctuation, and last, initialisms.

Broadly, male students were more likely than females to use shortenings; misspellings; onomatopoeic/exclamatory type; other clippings; G clippings; missed punctuation; phonetic/nonconventional spellings, and last initialisms, in that specific order. On the other hand, females were much more inclined to use misspellings; phonetic/ nonconventional spellings; other clippings; initialisms; shortenings; onomatopoeic/ exclamatory; G clippings, and last, missed punctuation.

While the pointed similarities reflected the pragmatic common use of the most efficient categories in terms of brevity and language economy, the divergence in some other types highlighted male and female texting preferences and styles. These two notions of preference and style can rightly be extended to the well-established beliefs on gendered linguistic use differences depending on the situation of communication and related contextual elements such as the addressee and the purpose (Cameron, 1998; Tannen, 1997; Tannen & Kendall, 1997).

The importance of the accommodation of texting behaviour to given situations is revealed useful in explaining male and female texters' linguistic choices. Given the students' academic context, the observations made as concern the large extent of standard language use and the relatively marginal number of deviations informed about the EFL texters' tendencies to take from pre-existing non-standard forms and make use when required. Contracting lexemes, representing them phonetically with letters or numbers, as well as drawing on speech to shape informality in messages suggests texters' active involvement in pushing the boundaries of the mobile physical constraints to produce efficient and meaningful contents driven more likely by texting strategies which are based on the texters' phonological, orthographic, semantic and the knowledge of the register properties.

Alongside the high-frequent forms and categories, the texters' negligible variation in deviation frequencies and types use was statistically proven. That male and female deviate almost with the same proportions and frequencies across almost all

deviation categories challenged the pre-established binary opposition that broadly characterises gendered use of language. Despite the slight reported variation in ways of texting, the proposed explanations induced the male and female similar and shared concern about producing meaningful texts that reflect both texters' selective behaviours within a framework of related discourses, technological factors, interpersonal relations, and contextual circumstances (Tagg, 2009; Shortis, 2007a, 2007b).

Regarding the third research question: *Do the deviations differ according to students' academic level? if yes, how?*, the importance of the texters' individual features reflected partly by the students' instructional level and linguistic proficiency, was also observed. As shown in the third section of this work, deviation significantly increased with the increase of language proficiency as Master 1 and 2 students were revealed as the most prolific users of deviations than their undergraduate counterparts. This finding puts forward past texting experience possible contribution as well as the students' decreasing concern about English language formality in messages. The fact of using more standard forms in early stages of instruction was explicated by the students' possible concern about correct language production for language enhancement purposes. This concurred with the significant difference in percentages between master students and the undergraduates who seemingly used more deviated types and forms.

Alongside the frequency counts analysis, the statistical treatment of the results showed no significant relationship between the instructional level and language deviation. That students' text almost with close and slight proportions revealed their plausible concern about accurate language use given their academic context. Texting in the English language standard form might suggest students' shared intent to improve and acquire the target language in the most academic and formal ways to attain individual texting purposes.

In this chapter, major deviated forms and types have been presented in regard to the students' whole population, firstly, and the students' gender and academic level, secondly. In a complementary attempt to understand the previously- mentioned texting behaviours, the chapter that follows moves on to consider the underlying motives that

explain the students' SMS use in daily interactions and their related perceptions concerning language deviation, in general, and language deviation when using the English language, in particular.

## CHAPTER FIVE

### THE QUESTIONNAIRE RESULTS PRESENTATION AND DISCUSSION

#### 5.0 Introduction

Within the generic framework of the mixed methodology implemented in this study, the findings presentation and discussion of the questionnaire are presented here. As noted initially, examining the participants' views and perceptions is deemed crucial in drawing a more comprehensive view of the topic provided the informants' most driving reasons for specific behaviours and practices while texting. Building on the acknowledged value of the questionnaires in addressing complex human issues, the questionnaire used here is intended to construct and reconstruct the data findings interpretation from the actors' of the events themselves and enable a better grasping of the data previously obtained via corpus analysis.

The present chapter pursues two overriding aims. One, it seeks to identify the perceptions of students' texting behaviour by defining, in highly condensed form, the main shaping elements of the texting language. Two, it looks profoundly at the students' perceptions and motivation in light of gendered practices and perceptions. The questionnaire examination and discussion will be accordingly divided into two main sections. The first will be dealing with the analysis and discussion of the results from a general scope by considering the findings from the whole participants' perceptions to answer the fourth question. The second section will concentrate on the examination of the findings and discussion from a more gendered perspective to answer the fifth and last question of the present study. The data are displayed in the form of tables that are followed by a thorough analysis and discussion of the results.

At this point, it bears repeating that testing the questionnaire went through a pilot phase to assess the clarity and comprehension of the items. The pilot phase was conducted with a selected number of students and teachers from the department of English, and whose feedback helped to shape the final version of the questionnaire and enhance both the validity and practicality of the questionnaire.

## **5.1 Section One: The Questionnaire General Presentation and Discussion of the Results**

As specified in the outset, the 780 participating students helped to build a corpus of 808 messages. Taking part in the experiment was made optional to respect one of the most important ethical considerations of voluntary participation. In this respect, the respondents were informed about the main target of the study and the questions sets to respect the second ethical value of informed consent with participants. As explained in the methodology chapter, the questionnaire contains 23 items that are assorted into six specific parts. The first introductory part labeled *Identification questions* covered items devised to account for the respondents' demographic characteristics such as age, gender, academic level.

The second part entitled *SMS messages use* looks at reporting the students' texting perceptions and practices. Parallel to that, the third part named *SMS messaging and language modifications* sought to understand students' motives on deviating languages from their standard forms in general. Part four designated *SMS messaging and the English language use* was intended to explain the conditions of the English language use in messages. The fifth part titled *SMS texting and the English language modifications* aimed to account for deviations by using the English language and looking for the circumstantial reasons that justify students' deviation practices in that language. The sixth and last part represents the corpus-building part whereby students were asked to provide the corpus-forming messages.

Overall, the questionnaire is devised in a way to look into the psychological and social motives framing the texting understanding. By scrutinising texters' underpinning reasons and disclosing their needs to use language distinctively by deviation, answers can be put ahead to seize the issue of deviations in language and assess texters' noted attempts to shape and reshape language in the most distinctive ways.

### **5.1.1 EFL Students' Use and Perceptions of Text messaging**

To answer the question of "*How do EFL students perceive and use messaging?*" the questionnaire is designed in such a way to proceed from general to specific. Indeed

by starting from identification questions and more general questions of SMS use, follow up parts tackle the specific issue of language modification, in general, and modifications while using the English language, in particular. More content questions are found in the four subsequent parts which represent the ultimate core of the questionnaire. With this said, the analysis concentrate only on part two, three, four, and five of the questionnaire.

What follows is the presentation of the results that are sustained by the discussion of the data corresponding to each question. This analytical procedure, in our belief, will provide the readers with clear and detailed accounts of the reported figures along with the possible explanations to each question. A summary of the results is supplied by the end of the every section to draw a full picture of the related discussion and presentation of the findings. For methodological considerations, each part will be discussed independently under its corresponding heading. By so doing, more visibility is offered concerning the enclosed questions and the conclusions made regarding each part.

#### **5.1.1.1 Identification Questions**

The identification questions' introductory part contains three items that are interested in identifying students' age, gender and academic level. The age variable is deemed important to recognise texters' age range and draw the present study conclusion on the identified age category. Likewise, gender is intentionally targeted here as texters' sex category will serve the questionnaire's sorting out to answer the study fifth research question. The third item concerns the students' instructional level which is also intentionally designed to set students' groups according to their levels to answer the third research question of the present study.

Accordingly, the participants are male and female students belonging to first, second, third, Master 1 and Master 2 EFL classes. The participants are ranging in age from 17 to 25. Other variables such as socio-economic status and linguistic backgrounds are not taken into account in this analysis. Taking all the students from all the academic levels, social classes and linguistic backgrounds is deliberate as the prime objective of the study is to build a comparatively large sample to build a

possibly large corpus. Yet, the discussion of the results and conclusions should be regarded as ones concerning only the selected variables and no possible generalisation to cover different categories or populations can be made at this stage.

#### **5.1.1.2 EFL Students SMS Use**

This part contains five broad questions directed to enquire students' practices and texting habits. It starts with items that aim at identifying the importance of texting in students' interactions in comparison with other means of communication. Along with the importance of SMS use in students' lives, texting frequency and the general reasons of texting are spotted as well as the messages language form.

In the perception of participants responding to the question of "*Which means of communication do you prefer most in everyday life interactions?*" The results reveal that students have an equal interest in SMS texting and telephone calls (48.29%). This latter is followed by telephone calls with 29.43%, then SMS with 15.14%, and the Internet with 14.29%. As noted in the reported percentages, SMS texting is relatively employed in students' interaction and seemingly equated to the traditionally used phone calls. Yet, the students' second option showed students' clear preference towards telephone calls more than SMS or any other forms of communication.

In an attempt to gauge texters' use of the SMS, a supplementary question concerning the number of messages sent daily is asked. The results show participants' majority displaying the average use of SMS by sending about 5 messages (35, 65%) a day, followed by 26.67% of students sending more than 10 messages a day, along with 18,55% of the participants who send less than 5 messages a day. Conversely, 15.05% of the respondents expressed their occasional use of messaging by rarely employing the medium and 4.06% of the respondents assuming their preference to use Facebook messaging instead.

Additionally, students are asked a more direct question to distinguish the underpinning sources of this behaviour by formulating "*Why sending messages?*" question. When analysing the provided data, the answers reveal answers expressing reasons while others expressing purpose (see Table 5.1). Broadly, SMS is markedly used for pragmatic reasons to serve the main purpose of peer communication (26,

87%), that is followed by communication with family, which represents only half of the firstly-mentioned percentage (13.21%). The provided reasons are followed by emergency cases (7.51%) and, lastly, asking for favours (3.75%). Notably, the provided arguments underlined more pragmatic motivations as texters mostly text to manage some specific goals that are made more attainable via SMS writing.

**Table 5.1 Reasons for Sending Messages**

To communicate with friends	26,87%
Freedom to express feelings and emotions	23,51%
To communicate with family members	13,21%
It is cheap	07,66%
In emergency cases	07,51%
When short of time	06,24%
It is practical and easy	04,65%
Asking for favours	03,75%
It is fun	03,60%
Total	100%

As for the reasons mentioned, reference to freedom to express oneself feelings and emotions was provided (23.51%) at a second position followed by the convenient side of texting for being cheap (7.66%), time-saving (6.24%) and for the texting convenience as it is felt practical and easy to use (4.65%). Interestingly, the least percentage refers to the entertaining aspect of the medium with only 3.60% of the answers expressed using texting for fun. Apparently, the recreation features of texting do not attract students who mostly use texting for more communicative intents and pragmatic purposes as the ones mentioned in the outset.

Asked more specifically about the exclusive use of SMS in communication through the question: “*When do you feel the need to use SMS more than any other means of communication?*” the answers widely confirmed the above-mentioned results of the students. Here again, the functional nature of SMS use is recognised in students’ answers as the bulk of messages emphasised the practical features of the medium when dealing with ordinary life issues. The instant contact with people unreachable via the phone (26, 88%) or avoidance of irritating face-to-face contacts (26, 56%), in cases of shyness and anger, are listed.

The presentation of self and its relation with asynchronous features of messages that allow editing and self-reflection is well-documented in the literature (Rettie, 2007; Reid & Reid, 2004). SMS, in this respect, is described as a more convenient and less constraining in shaping the “real-self” by reducing repercussions that might take place in face-to-face interactions. As SMS is described by its synchronicity, face loss is less probable to take place as SMS provide less face demanding encounters and thus safer social interactions.

Further, texting serves interpersonal functions such as keeping permanent contact with friends (18, 13%), money considerations (18, 13%), solving cases of emergency (16, 56 %) or when telephone calls are not answered (13, 75%). These aspects appear to be more important than the discreet aspect of texting (08, 44%) or the absence of the Internet (3.13%) (see Table 5.2).

**Table 5.2 Reasons for Using SMS more than any other Means of Communication**

When communicating with people directly is not possible	36,57%
To avoid direct contact with the receiver because of anger or shyness	26,56%
To keep permanent contact with friends	18,13%
A little credit	18,13%
In emergency cases	16,56%
When telephone calls are not answered	13,75%
When I am in the classroom	08,44%
When there is no Internet	03,13%
Total	100%

As far as texting language register is concerned, a question on the formal and informal nature of messages is asked. Unsurprisingly, the highest percentage (67.44%) reports the use of a mixture of both formal and informal language, followed by 22.48% of the answers accounting for the exclusive use of informal language in SMS writing while only 10.01% of the answers report the use of formal language. Obviously, different results are not expected as it is common knowledge that messages, in most cases, are composed by introducing great amounts of informality mainly among youngsters as shown in the reviewed literature of this study (Thurlow & Brown, 2003; Shortis, 2007b; Ling, 2005; Spilioti, 2011; Heidan & Alibabae, 2013; Rousan et al, 2011; Rafi, 2007; Crystal, 2008b).

When considering the overall findings, three main conclusions can be drawn. First, it is clear that SMS texting and phone calls are jointly used in students' interactions, with a particular preference for phone calls. Regarding the obtained results the number of messages sent and the reasons presented to explain SMS use, one might assume the moderate and relative employment of SMS in students' lives, by referring to phone calls as the main preferred means of interactions and SMS as an optional medium. Clearly, the related preference of phone calling over SMS use interestingly challenges the reported popularity of texting among youngsters. In many studies (Ling, 2005; Thurlow & Brown, 2003; Kasesniemi, 2003; Brosch, 2008; Reid & Reid, 2004), SMS texting has been revealed as youngsters' exclusive and most preferred means of communication. These conclusions confront here with the participants' displayed texting behaviours.

Second, messages' employment is enhanced with the presented opportunities that are lacking in phone calls use namely when direct contact is made difficult or face-threatening as well. Cases of emergency, little credit and place are highlighted as well. These aspects stress both the pragmatic and interpersonal intents where specific uses of SMS are felt. Third, SMS texting is described as a joint mode of communication which coincides with both Crystal (2009) and Dorleijn and Nortier (2009) statements on the third medium that comprises the simultaneous use of both formal and informal languages in most texters' messages.

### **5.1.1.3 SMS Texting and Language Modifications**

Part three encompasses five questions that deal with SMS texting mechanisms whilst using language in general. To the first question: "*Do you think that making grammatical and spelling modifications in messages is done on purpose?*" 70, 29% of the respondents answered *yes*, while only 29, 71% of them answered *no*. As interest in both the positive and negative responses to the question is methodologically assumed here, we consider examining both as an insightful step to understand the reasons given by both for better coverage of the issue.

Thus, for the students who answered *yes* (see Table 5.3), the re-occurring utilitarian feature of texting is also found in the answers as students justify their use of

language deviations by their concern with time and rapid communication (38, 95%). The practical aspect of texting seems to be at the core of the deviations but not only that as it is supplemented with the freedom provided by the medium to write unconditionally (30, 52%). This latter is supported by the argument set to account for the importance of content while texting (11.58%). Besides money concerns are stated as for the students deviating from the standard norms would mean writing less, therefore, paying less (20, 53%).

**Table 5.3 Reasons for Making Intentional Grammatical and Spelling Modifications in Messages**

To save time	38.95%
Freedom to write the way we want	30.52%
To save money	20.53%
Messages content is more important than form	11.58%
A matter of habit	10%
To hide texters language weaknesses	03.68%
Texting is fun	01.05%
Total	100%

Students' unconventional way of writing is also explained by some students' texting habit (10 %). Interestingly enough, language deviations seem to be related to language command as only 3.68% of the answers pointed to the absence of any possible relation neither between the linguistic competence and deviations nor with the creative use (1.05%) of the medium as very weak percentages were reported when dealing with these two last issues. On the other hand, students assuming the unconscious or unintentional use of deviations while texting build their arguments first on texters' spontaneous way of writing (43,08%), second, the texting habit (35,38%), third, hiding texters' language weaknesses (16,92%), four, speech-like language (6,15%), and five, on their desire to be quick (3,08 %).

Clearly, the two major reasons for deviation in texting are ascribed to the spontaneous mode of writing which seems to be set firmly as a texting habit. It becomes commonplace today that the language of messages is not standard and this accepted idea of texting as a unique mode of writing seems to be part of people's texting habit. Concurrently, these can also be explained by people's possible attempts to hide language weaknesses and their inclination to write as they speak. On the

question of rapidity, some students seem to be less convinced by deviating for speed reasons as for the respondents the spontaneity with which texters write is clearly the major reason for deviations in messages.

In an effort to gain more insights into the students' individual practices and motives, the third question of "*How about you? Do you modify messages' language?*" is asked. Accordingly, 81, 71% of the respondents answered *yes*, where only 18, 29% said *no*. For the students who answered positively, rapidity (40, 70%) is, by far, the most important reason for modifying language. This latter is much sustained by the follow-up provided reasons. Students express their use of deviations for language economy purposes to express themselves with the least possible number of words (32, 47%) and saving time (30, 30%) as well. Less prominent but insightful arguments concern credit or money issues (9, 09%), the entertaining nature of texting (6, 49%) or texting habit (3, 46%) that are also mentioned but with weaker proportions to be considered significant.

Examining the percentages confirms the students' overall concern about delivering fast, brief and instant messages. The special role of texting is also observed in the freedom offered to students to manipulate language in very personal manners. At this point, texting as a creative or playful tool is undermined by students' who consciously seem to use language for pre-determined and targeted purposes. As far as the students who express little interest in texting language use, the major part of the responses (75%) show their confinement to standard language use by largely avoiding deviated forms. Besides, 22, 92% of the responses show students absence of answer by replying *I don't know*, while 8, 33% of the respondents associated their language modifications with the receivers of their messages.

Asked about what they liked about abbreviating (see Table 5.4), rapidity (39.67%), brevity (20.66%) and language economy (18.50%) are presented as the three most dominant motivations for students' abbreviation preference and practice while texting. Credit concerns (5.33%) and texting as recreation (2.83%) are reported as the least reasons that can affect abbreviation use. These, in part, support the pragmatic motives highlighted earlier in previous responses.

In addition to the perceived benefits of texting, context or situation of communication is deemed critical at this point, with our full knowledge of the context impact on language use and variation. By context, we mean the situation of communication which implies situational conditions of production in terms of time, space, addressee status and channel.

**Table 5.4 Reasons for Enjoying Abbreviation in Messages**

It is quick	50.17%
It is brief	20.66%
It saves space	18.50%
It saves money	5.33%
It is fun	2.83%
I don't like abbreviating	2.50%
Total	100%

In this effect, to the question of “*When do you abbreviate?*”, the principal portrayed features that influence students’ texting behaviours rest, first, on language economy especially when the intended messages or words are long (34.64%); second, the addressee (32.23%); third, time constraints (29.17%), and four, lack of knowledge of the exact spelling of the words (3.98%).

First, students attribute specific importance to the channel benefits by using economy strategies while texting. Everything cannot be said in a message given the device limitations. As such, texters’ shaping of the language comes in an attempt to overcome the screen restrictions by altering language mainly when messages and words are exceptionally long. Less constraining situations would mean the recourse to other means of communication such as phone calls or the Internet where fewer restrictions are found.

Second, the related importance of the addressee is reported as students when texting seem to tailor their language by considering the receivers of messages in two major ways. The first way concerns texters’ attempts to make sure that the receivers (even when they are not friends) know the abbreviated words, and the second way when receivers are friends so freedom to text is generally taken into account as no possible judgments on the language quality is made given the informal nature of the exchange.

The third significant reason deals with time constraints. Texters' deviations seem also to result from students' rushing situations whereby lack of time is highly felt. Rated less important than the preceding motivations is the students' knowledge of words' spelling. This might suggest that texting major drives are more likely bound to practical and contextual motives than students' mastery of language in general.

As concerns the probable relationship between the deviation practices and the text recipients, students' answers to the question "*Who do you use abbreviations more with?*" show more frequent use of abbreviations with friends (59.80%), evidently for the degree of informality that is commonly known amongst youngsters. This latter is corroborated with the next displayed category of classmates (22.25%) which can be considered as the same age range category. Interestingly, deviations use decreases while shifting to the family members' category (16.97%) by likely introducing more formality when addressing parents, for example, or other members of the family.

Overall, it is with students' considerations in mind that three major conclusions are established. First, specific reference to texting use is guided by students' attraction toward the texting rapidity, brevity, language economy, and the unrestricted use of language in terms of spelling and grammar. In many respects, these findings corroborate most cited works on SMS use namely Shortis (2007a, 2007b), Spilioti (2011), and Thurlow and Brown (2003). Second, texting extensive use is significantly bound to the messages' recipients and the resulting informal context. Students' perceptions underscore the intentional nature of deviations that are clearly dissociated from students' mastery of the language texted with.

These findings clearly enhance researchers contentions on the meta-linguistic capacities related to texters' awareness of register shift according to context. For many previously-mentioned scholars (Plester & Wood, 2009; Kemp, 2010; Thurairaj, 2015; Rosen et al, 2010; Tagliamonte & Denis, 2008), texters' accommodation to the context is very important in shaping messages' language. Knowing where, when and with whom to use texting language is considered, partly, as texters' inherent capacity to deliberately use language promptly and differently from a context to another.

Besides, very indicative of the pragmatic and highly contextual nature of texting is the negligible reference to the playful and recreational aspects of messaging. Indeed,

students' concern with brevity, rapidity and language economy seem to dominate their specific uses of texting language, which challenges Thurlow and Brown (2003) contentions on the relation between deviating language and playfulness. Regarding Thurlow and Brown studied population and the present study one, the two populations are very close in age range. Yet, British and Algerian texters seem to differ on the most prominent goals of using texting language.

As indicated in the outset, the two preceding parts are devoted to the students' general texting perceptions and practices in light of students' linguistic background. More specific questions about texting with the English language and the students' modifications regarding this latter are provided in the next two parts.

#### **5.1.1.4 SMS Texting and the English Language Use**

This part comprises four questions which are set to find out whether students use English in their messages and if it is the case, what can be the driving reasons that explain students' inclinations. To the first question: "*How many SMS messages written completely in the English language do you send a day?*" less than five messages was the major answer given by the students (52.85 %). Notably, the provided number is not significant when considering the general number stated in previous questions on messages sent daily, which was said to include more than five texts a day and in other instances, more than ten texts. On average, the students' reluctance to texting exclusively in English is confirmed here. The last-mentioned result is corroborated by participants responses (32.93 %) claiming the non-use of the language in their messages. This latter is sustained by 13.43% of the respondents assuming their rare use of the language while texting.

Corresponding practices are observed regarding the language use frequency. For more than half of the respondents, the exclusive use of English occurs *sometimes* (57.47%). This latter is supported by 22.19% of the respondents assuming the rare use of messages completely written in English. Less significant is the proportion representing 16.97% of the students claiming the *very often* use of the language. Absence of the language in students' texts is reported in 3.37% of the respondents' answers. Drawing on the students' responses, the corresponding importance of the

English language in communication is revealed quite limited. In fact, students' responses show occasional use of the language and the clear subordinated place it has in the students' interactions.

As concerns the situation of communication and its impacting role on participants' use of English, the responses show higher percentages referring to texting classmates (40.88%). The answers prompt also interactions with friends who understand the language (39.84%), as well as foreigners (11.72%). Remarkably low percentages are related to the use of English with family members (5.29%) and teachers (2.27%). Unsurprisingly, the importance of texting in English is reflected in the students' restriction of the language to classmates and friends who understand the language. The employment of the language is extended to foreigners as well on the ground that English is an international language that is presumably understood by all people all over the world.

Interestingly enough, the academic context does not seem to include the interactions with the teachers. Likely, the percentage informs about students/teachers rare exchanges that are likely run in other languages than English presumably to save face as teachers can assess and thus judge students' English proficiency.

Asked about the major motives for the use of the English language, the elicited reasons are displayed as follows.

**Table 5.5 Reasons for Using the English Language in Messages**

Improving my English level	25.80%
I am an English language student	24.08%
Helps me to express myself better	20.64%
It is an international language	20.15%
For fun	4.42%
To show off	2.70%
To keep the messages private	2.21%
Total	100%

As table 5.6 shows, the largest share of percentages confirms the students' academic concern with the language use. The first and foremost reason stresses their desire to improve their English level as texting in the target language provides more opportunities for language practice and use (25.80%). This latter is concurrently

supported by a significant part of students (24.08%) who related the language use to their academic status. Texting in English is relatively an obvious practice which represents an integral part of their ongoing instruction and learning.

Parallel to that, 24.08% of the respondents highlight the freedom provided by the language while expressing themselves mainly with the classmates and friends. Seemingly, this is sustained by the important place of English being an international language, thus, an important language to learn and improve (20.15%). Less important are the percentages displayed by the data referring to the use of language for fun or showing off. Clearly, texting either in English or any other language is not employed for entertainment or any demonstration of language ability as English is seen much more as the language of instruction and a non-prestigious language to show off with. In addition, less comparatively significant is the percentage referring to students' need to keep messages' secrecy as English is not accessible and decodable by all.

Overall, the comparatively related results show the occasional use of the English language while texting. The reference and use of the language are explained in terms of language upgrading through interactions mainly with classmates and friends. Unsurprisingly, students use English to maximise opportunities to use and practise the target language. The idea of using a target language in messaging is not new as Thurairaj (2015) pointed similar behaviours among his participants as well.

For Thurairaj, texting use is seen as an advantageous reason to employ standard and correct form of English in an attempt to learn the language better. The answers reveal also the students' desire to improve the language because of their academic status, on the one hand, and the allocated importance to the language which is described as an international language that implies wider and more practical communicative purposes, on the other hand.

#### **5.1.1.5 SMS Texting and the English Language Modifications**

As for the modifications and their driving reasons in the messages written in English, a set of five questions is designed. This part starts with the first question of: *“How often do you use formal English in your messages?”*. The students' corresponding answers to the question show substantial use of grammatically correct

language with 47.77% of the participants referring to correct English use with *mostly*, and 37.37% with *sometimes* frequencies. When put together, both approximate percentages denote the students' concern with writing accurately which recalls the students' previously-stated purpose of improving the language. This evidently occurs through the adoption of correct and conventional forms of language. Parallel to that, relatively low percentages report students' rare use of Standard English language (10.39%) along with 4.47% of the answers reporting the students' who never use grammatically-correct English while texting.

This, again, coincides with Thurairaj (2015) conclusions on EFL students' shared intent to deliberately use standard language for language practice purposes. By implication, this enhances the reported pragmatic employment of SMS that covers languages' use as well. As concerns the participants' consideration of the conventional use of the language, the second question: "*Do you care about the kind of English language you use in your messages?*", the supplied answers strictly corroborate the previous results. The percentages show the extended degree of students' attention to the correct employment of English in its most academic aspects by 79.78% of the respondents who assumed that they highly care about the language they use, while 20.22% of the respondents answered negatively. In an attempt to understand the students' motives concerning the extensive use of formal English language, the following reasons are put forward.

**Table 5.6 Reasons for Using Formal English in Messages**

It shows my English level	34.48%
It helps to practice correct language	20.10%
It reflects my personality	16.47%
It depends on who you are texting	15.24%
To be understood is very important	13.71%
Total	100%

In conjunction with the reason for language enhancement provided so far, and found again here (20.10%), the majority of students likely adopt standard forms of language as their writing is perceived as a pure reflection of their English level to the receivers (34.48%). The idea of how the addressee sees the senders of the messages seems very important to the students who associated their self-image to the way they

text. This is emphasised by the succeeding third reason presented, as for students, texting is highly associated with the idea of personality as well (16.47%). Moreover, the importance of the addressee is noted again here (15.24%), which implies students' awareness about the situations of communication and adaptation to the formal vs. informal contexts of texts production. Last, the importance of understanding messages is also spotted (13.71%) as extensively deviating languages might make texters run the risk to write incomprehensible messages.

On the other hand, for the participants who display little concern about correct use of English (20.22%) explain their behaviour by the related importance given to the content than the form (44.25%). This takes us back to the idea of the pragmatic nature of messaging when students concentrate on the message idea more than caring about the code itself. This can be easily understood as the majority of deviated messages are sent to friends (20.35%) who themselves could be interested in the idea more than the language form.

Additionally, the results show students tendency to value the freedom offered by the medium (15.93%) as it provides several opportunities to write and express themselves formally, informally and even in a spoken written forms. Last, messages are described as "just messages" (15.04%) which may mean that texts are not considered as formal pieces of writing in the traditional signification. and, thus, conforming to the conventional writing norms is seen as an optional practice.

Asked about the linguistic components that are subject to modifications in students' messages written in English, very approximate percentages are observed as deviations seem to involve most English language components by including nouns (14.97%), all components (14.71%), adjectives (14.56%), sentences (14.10%), verbs (13.39%), and lastly, auxiliaries (11.66%). Ultimately, the students' responses reflect their overall tendency to modify indistinctively every aspect of the language. The deviations, thus, concern smallest units such as auxiliaries to larger ones such as sentences. No relevant discrimination at this level can be made on the question of the most deviated units as all the mentioned parts are closely related in percentages.

Further attempts to draw a correlation between deviations and the English language command are made by raising the question of: "*Do you think that*

*abbreviating and modifying words has to do with students' lack of English language command?*". Noticeably, the largest part of the respondents does not associate deviations with language command (66.76%). The idea of deviating to veil language incompetency is out ruled by the majority of students here. Interestingly enough, the findings correlate with a number of conclusions drawn by Kemp et al (2014), Waldron et al (2015) and Plester et al (2008) concerning the weak correlation between language mastery and texting use as shown in the literature review. Indeed, students seem to manipulate and modify language for more pragmatic and contextual reasons that are highlighted in the various provided responses.

Lastly, seeking the impact of predictive text use and its acknowledged role in shaping correct language is tackled in the fifth and last question. To the question, *“Do you use predictive text device when texting?”* the results reveal that half of the students use predictive text (49.56%) whereas 50.44% of the respondents do not. As far as predictive text users are concerned, the respondents put forth the device efficacy in terms of rapidity, usefulness when dealing with unknown words, concern about language correctness and precision (17.93%), and lastly, the playful aspect of the corrective option (see Table 5.7)

**Table 5.7 Reasons for Using the Predictive Text**

Texting is faster with predictive text	34.35%
Very useful when I don't know the word	34.25%
Useful to write correct language	17.93%
It is fun	13.46%
Total	100%

As noticed in the table, the predictive text users confirmed again the practical feature of the device. Mostly, students are likely to prefer the use of this latter as it offers more opportunities to text faster (34.35%). More benefits with the device use deals also with solving the problem of unknown spelling forms. Added to that is the presented advantage of editing and composing correct language (17.93%). Along the practical purposes and reasons, the predictive text is employed expressly for entertaining and fun (13.46%). Regarding the reluctant students who don't use

predictive text function while texting, this latter is said to be inconvenient for the following reasons:

**Table 5.8 Reasons for not Using the Predictive Text**

It slows down texting	44.25%
It is time consuming	24.35%
It is a source of errors	15.93%
I am free to write the way I want	15.46%
Total	100%

As table 5.8 shows, the predictive text is not popular among half of the participants for slowing down the texting process (44.25%) as misspelled words systematically prompt different word forms. Calling for texters' concentration on the different words' possibilities seems distractive to students' attention and effort. The expected corrective feedback is disregarded in this particular case as it is believed to be time consuming (24.35%). Besides, the predictive text is perceived as a potential source of mistakes (15.93%) mainly when texting fast with no editing is made for rapidity purposes. Finally, texters point out their lack of interest in using predictive text for the freedom supplied by texting in an unconventional and broadly-accepted way (15.46%).

Ultimately, the students' responses helped to draw three main conclusions concerning deviation in messages written in English. First, the data reveal the students' concern with producing correct English language in messages. The correct use of English is chiefly justified by their texting intent to improve the language by composing grammatically correct English. Deviations involve almost all the language components namely nouns, verbs and sentences among others. Moreover, the results show students' concern about their English language correct use as it is connected to their self-image and personality. Lastly, exploring the use of predictive text showed students' reluctance to use that latter for the inconvenience caused in terms of fast-composition hindrance and time consumption.

In conclusion, one of the main challenges of the first section was to find out how Algerian EFL students perceive and use messages in their everyday life interactions. The results of the questionnaire carried out within the study brought valuable insights

into the texting issue by identifying the major texting practices and drives. What do these results imply?

First of all, it is worth reconsidering the common belief of texting being the most preferred means of communication amongst young texters. Indeed, the reported answers in the two first parts of the questionnaire confirmed the relative place of SMS in students' interactions. Telephone calls are accorded far more importance by students who subordinate messages writing to very specific uses and purposes. Students, use messages in absence of opportunities to use phone calls to communicate. SMS employment is explained by the offered benefits of composing rapid, brief and instant texts. Further attributes refer to the freedom to manipulate language as texting is seen as a new mode that differs from the conventional-related mode of writing.

With slight nuances, texting language is described as a combination of both formal and informal language which, in turn, tightly related to the addressee. This latter informs about the texters' awareness concerning the context of situation and the most appropriate register to use depending on context as highlighted in many works cited in the literature. Next to the insights gained from part two and three, questions related to English use and deviations pointed in part four and five also revealed that the use of English is considerably more occasional than expected. Students' consideration to write more formal forms of the language is highlighted in several instances. This goes with their major intent to practice and perfect the target language. Interestingly enough, English use is revealed optional in many cases as students seem to prefer texting in other languages than English.

Besides, clear correlations between texting language and psychological drives are noted. Indeed, students when texting in relatively correct language aim at conveying a positive image of proficient language students. The notion of the other here is relevant as students' personality is also involved when texting. More importantly, deviations are said to be occasional and result mainly for practical and contextual reasons. Clearly, the factors driving the students' decision for deviation are reflected in rapidity and the addressee as students are far more interested by the instant and direct contact with principally other classmates and friends.

Overall, the questionnaire confirms the perception of texting as an occasional practical tool that serves instant and direct communication. In this particular case, exceptionally little reference to the entertaining or creative aspects of the mode are made. Using formal language seems to be the thumb rule, but this latter seem to vary according to the academic or relational context of the texter himself.

## **5.2 Section Two: The Results of the Questionnaire on Gender Differences**

The previous section showed how EFL students see and use texting by making reference to the importance of the different factors in shaping their messages. The following section seeks more depth in the answers by examining students' motivations from a gendered perspective. For practical but also for methodological reasons, the decision to create stratified samples rather than to draw random samples was made and explained in the previous methodology chapter.

In brief, the main advantage of a stratified sample in comparison to a random sample is the possibility to influence the size of sub-groups of participants and thus, to consolidate the results analysis at the level of these sub-groups. Thus, the following results are obtained from a sample of 223 students in each group. This implies obtaining different results from the first section one. The results are given in tables as previously conducted in the first section of this chapter. The scrutinised data is guided by our intent to answer the fifth and last question of the study that explores texters' gendered practices and perceptions.

### **5.2.1 Gender and EFL Students' Texting Use and Perceptions**

Gender differences have been reported in several previously-cited works in this study. Widely confirmed is the females' heavier use of messages and their noted eagerness to write more formal and syntactically complex sentences. On the other hand, male texters seemingly use less conventional forms of language by placing greater emphasis on speed with messages that tend to be brief, informative, practical and facts-oriented (Kasesniemi, 2003; Ling, 2005).

The related conclusions drawn either in sociolinguistic studies or SMS texting ones provide a perfect backdrop for the coming analysis and discussion of the results. The efforts made in this section are essentially geared towards exploring and examining the issue from purely psychological and sociological scopes to account for gender contribution in this particular case study. As previously carried out in the first section, the findings are presented and discussed regarding each part of the questionnaire. Subsequent summaries and conclusions are provided by the end of every part and section.

### 5.2.1.1 SMS Use and Gender

Evidence from the question of the most preferred means of communication for students shows similar preferences of telephone calls and SMS texting but with different proportions among genders. Females seem to out pass males in this particular case (21.64% for females and 16.42% for males), which is notably supported by the next argument that stresses males' preference to use phone calls more than girls (17.91% for males and 11.94% for females). SMS texting seems to be more popular amongst females (10.96% for females and 5.71% for males). On the other hand, the inclination toward the Internet use is revealed more significant among males than females.

**Table 5.9 Students' Most Preferred Means of Communication by Gender**

	Male	Female	Total
Both SMS texting and telephone calls	16.42%	21.64%	38.06%
Telephone calls	17.91%	11.94%	29.85%
SMS texting	5.71%	10.96%	16.67%
Internet	11%	5.42%	16.42%
Total			100%

As shown in table 5.9, phone calls are important in both gendered groups but inconsistently used as males seem to prefer verbal communication to written forms. Interestingly, more enthusiasm toward SMS use is observed among females. This latter reveals a clear consistency with the previously-stated conclusions on females' higher inclination to SMS employment more extensively than males (Ling, 2005; Kasesniemi, 2003).

Asked about the number of messages sent daily to gauge students' texting frequency, 5 messages is provided on top of the answers. Here again, the results reveal that females are more prolific and much more eager to use SMS messages in their interactions with 19.35% of the data contrasted with 14.52% for boys. This answer is enhanced with the succeeding option that concerns the use of more than 10 messages a day with higher noticed percentages amongst females. Evidently, the results are in total consistency with texting research findings that highlighted female teenagers' frequent use of texting when compared to their male peers.

Lower percentages are also observed amongst the respondents who claimed their use of less than 5 messaging, meaning from 2 to 4 messages a day and again the percentages showed females supremacy over males. This is partly explained by male students' rare utilisation of messages with 9.68% of the data while opposed to females with 5.65%. Lastly, contrary to female students, males seem to prefer far more the social media messages. Considering the stated results, one would conclude that the so-called popularity of texting amongst females is confirmed at this particular point.

Central to the study are the reasons explaining the SMS use. To the fourth question dealing with the main drives that direct males and females' messages employment, table 5.10 gives a summary of the provided motivations.

**Table 5.10 Reasons Justifying SMS Use by Gender**

	Male	Female	Total
To communicate with friends	17.07%	16.59%	33.66%
Freedom to express feelings and emotions	9.27%	9.75%	19.02%
To communicate with family members	7.32%	8.78%	16.10%
It is cheap	3.93%	3.88%	7.80%
In emergency cases	4.37%	3.44%	7.80%
When short of time	2.44%	2.93%	5.37%
It is practical and easy	2.44%	1.95%	4.39%
Asking for favours	1.46%	2.93%	4.39%
It is fun	0.48%	0.98%	1.46%
Total			100%

As seen in the table, notable similarities are pinpointed with very approximate percentages in all the arguments presented. In fact, both genders send messages to communicate with friends mostly (17.07% for males and 16.59% for females), followed by their need to express feelings and emotions almost similarly (9.27% for males and 9.75% for females) and to communicate with family members (7.32% for males and 8.78% for females).

As indicated earlier, the percentages are close enough to support gender similarities in this example and account for the major reasons for SMS use. Noticeably, SMS use is rather related to practical and interpersonal drives that are shared by both groups. In parallel, the subsequent reasons provided are also marked by the close percentage rates when asserting their use of texting for emergency cases

(4.37% for males and 3.44% for females), and for the messages cheap costs (3.93% for males and 3.88% for females).

Besides, time constraints (2.44% for males and 2.93% for females) and texting easiness and practicality (2.44% for males and 1.95% for females) are also pointed almost correspondingly. Sending messages is explained with special reference to additional practical uses of texting when asking for favours (1.46% for males and 2.93% for females). Lastly, low referring percentages to recreation is also mentioned with almost equal percentages (0.48% for males and 0.98% for females).

More depth is targeted with the next question concerning the particular cases where the use of SMS messages is most preferred. The answers are given in table 5.11 below.

**Table 5.11 Reasons for Using SMS more than any other Means of Communication by Gender**

	Male	Female	Total
When communicating with people directly is not possible	6.33%	7.29%	17.62%
To avoid direct contact with receivers (for anger or shyness)	7.77%	8.81%	16.58%
To keep permanent contact with friends	6.22%	10.77%	16.99%
A little credit	6.70%	6.77%	13.47%
In emergency cases	4.55%	4.26%	8.81%
When telephone calls are not answered	4.66%	3.11%	7.77%
To save time	4.15%	3.73%	7.88%
When I am in the classroom	2.59%	3.63%	6.22%
When there is no Internet	2.07%	2.59%	4.66%
Total			100%

Evidence for the pragmatic use of texting that serve both interpersonal and practical purposes is emphasised by both genders quite similarly. A quick look at the results reveals strong correlation between girls' and boys' reasons. Firstly, texting seems to be mostly used when absence of direct communication occurs and this is reported by both sexes with slight nuances (6.33% for males and 7.29% for females). Secondly, avoiding direct contact is also revealed but this includes some specific cases of shyness and anger that are, in our view, attenuated by the use of indirect means of communication such as messages (7.77% for males and 8.81% for females).

Interestingly, one significant difference is noted concerning girls' higher concern about relationship maintenance with 10.77% of the data, contrasted with 6.22% for males. That females are more involved in building and maintaining relationships by writing more emotionally-oriented texts is well-documented in both SMS and sociolinguistic studies' literature (Tannen, 1997; Tannen & Kendal, 1997; Ling, 2005; Kasesniemi, 2003; Goumi et al, 2011; Bernicot et al, 2012a, 2012b; Heidani & Alibabae, 2013; Rousan et al, 2011; Herring & Zelenkanskaite, 2008). The results can just be seen as supporting data in favour of females' special use of language, in general, and texting language, in particular. The rapport/report (Tannen, 1993) argument can be rightly used here to explain this behaviour in texting as well.

As for the other reasons provided, no significant differences are observed and all the remaining explanations presented denote the similarities more than differences in this respect. Both girls and boys use messages when they are short of money and in need to sort out emergency cases. In the same way, both genders send messages when phone calls are not answered or when they are short of time. Finally, males and females almost equally use messages when they are in the classroom and when connection to the internet is unavailable.

Part two ends with the fifth question concerning messages general language form. In this regard, students selected options display a comparable employment of a mixture of both formal and informal language among males (32.16%) and females (32.36%). Informal language use follows with significant nuances in percentages with girls' higher tendency (13.71%) to use informal language than boys (10.48%). This latter is supported by the succeeding percentages reporting males (7.26%) higher inclination to use formal language than females (4.03%) while texting.

The challenging nature of the findings bring into light the noticeable contrasts with the reported studies in sociolinguistic face-to-face interaction studies where women are said to be more inclined to standard uses of language (Labov, 1972, 1990; Trudgill, 1972; Brown, 1980; Fasold, 1990; Cameron, 2003). The results demonstrate an overriding contrast in formal language use with males' inclination to use formal language and females using more unconventional forms of language while texting. Yet, convergence with SMS texting studies' conclusions is found at this point. Indeed,

most of the cited scholars in the literature sustained females' marked tendency to abbreviate more than their male counterparts mainly in an attempt to write longer content messages (Thurlow & Brown, 2003; Kasesnieme, 2003; Herring & Zelenkanskaite, 2008)

Overall, three major conclusions can be drawn from the results presented in part two. First, arguments for the distinctive use of messaging are partly confirmed through the reported females' inclination to use and send more messages. Second, using SMS for similar pragmatic reasons is highlighted amongst genders. Seeking straightforward communication with friends and family provided the freedom to write short and direct messages is reported amongst both genders. Interestingly enough, maintaining social relationships is deemed more important among girls than boys. Consistently, females seem to use messages for almost the same purposes and functions characterising face-to-face interactions.

Third, inconsistent with the literature are the observed percentages dealing with the form of language used in messages. Despite the reported similarities between the gendered use of formal and informal language forms, the findings highlight females tendency to use more informal than formal language in contrast with their male counterparts. Indeed, males seem to use formal language more substantially, a fact that challenges some sociolinguists' contentions on females' higher tendency to use standard or conventional forms of language in general.

#### **5.2.1.2 SMS Texting, Language Modifications, and Gender**

Support for gender variation in messaging language use is reported at language modification level as well. To the first question: "*Do you think that making grammatical and spelling modifications in messages is done on purpose?*", 77.42% of the respondents agree on the fact that the here-called grammatical and spelling deviations are mostly done intentionally, with slight noticed percentages amongst the two groups (37.90% for males and 39.52% for females). As for the *no* answer, approximate percentages are also observed (12.10% for males, and 10.48% for females).

By taking a careful look into the reasons for the *yes* answers, the following clarifications are provided.

**Table 5.12 Reasons for Linguistic Deviations by Gender**

	Male	Female	Total
To save time	18.52%	9.26%	27.78%
Freedom to write the way we want	10.19%	10.19%	20.37%
To save money	5.56%	11.11%	16.66%
Messages content is more important than form	3.70%	10.19%	13.89%
A matter of habit	9.26%	1.85%	11.11%
To hide texters' language weaknesses	4.63%	0.93%	5.56%
Texting is fun	2.00%	2.63%	4.63%
Total			100%

From the table, boys' higher concern about time is noticed (18.52% for males and about half of the ratio for females, 9.26%). Agreement seems to be reached with the second reason that stresses the opportunity presented by the device to communicate unreservedly (10.19% for males and females respectively). Again, as noted in previous tables, females concern about money than males is noticed as well (11.11% for females and only 5.56% for males). In the same way, girls tend to deviate for meaning is significantly more crucial than the form to them (10.19% for females and only 3.70% for males).

Interestingly enough, this is partly explained by the succeeding argument presenting male texters' inclination to language deviation as a matter of habit (9.26% for males and 1.85% for females). Besides, males, more than females, attribute deviated language to people disposition to hide their poor language command (4.63% for boys and only 0.93% for females). Yet, they both view linguistic deviations as part of a game played by texters almost similarly but with exceptionally low percentages (2.00% for boys and 2.63% for girls).

As mentioned in the previous section, looking into both the positive and negative responses to the question is a deliberate analysis strategy as examining both will build a full account of all the participating students. Thus, for the participants who answered that students' grammar and spelling mistakes are unintentional, significant disparities in percentages are featured as well. For males mainly (15.39% compared to 11.54%

for females), modifications are due to spontaneous writing which induces rapid writing and absence or rare editing that shape the final form of messages.

Also, the idea of texting habit is reported. For the majority of male students (15.38% and 11.54% for females), in this particular case, deviated forms are perceived as part of texting practice that turn to be habitual among texters. The same idea of deviating language due to the texters' poor language ability is additionally supported by boys (19.23%) more than girls (3.85%). For girls, deviating language has more to do with texters' attempts to write down their spoken language (11.34%), which is not shared by males as no answer is reported. The last shared reason deals with texters' need for rapidity with a clear distinction between males and females. Need for speed is likely sustained by males more than females as seen in the reported percentages (7.69% for boys and 3.85% for girls).

As concerns the students' individual practices, the second question "*How about you? Do you modify the language of messages?, if yes or no, say why*", the answers reveal that the largest part of students (80.65%) confirm their modification of language while texting. This percentage is contrasted to 19.50% of the students who claim their standard or conventional use of language while messaging. For the majority of students who answered *yes*, the linguistic modification behaviour is justified by the reasons provided in the following table.

**Table 5.13 Language Deviation Reasons by Gender**

	Male	Female	Total
To communicate faster	24.22%	16.41%	40.63%
To avoid long sentences in order to write more	12.28%	13.50%	22.78%
To save time	10.38%	7.59%	17.97%
To save money	1.11%	8.91%	10.02%
A matter of habit	4.13%	2.13%	6.26%
For fun	1.56%	0.78%	2.34%
Total			100%

Consistent with the earlier-provided explanations, the issue of rapidity is further accentuated in the students' responses by prominent percentages amongst males mostly (24.22% for males and 16.41% for females). Male texters are significantly much more attracted by the practical and convenient aspects of texting as it presents

more opportunities to write and communicate faster and effortlessly. Describing males concern with delivering direct and fact-oriented forms of messages is also well-documented in a number of SMS studies.

For several scholars (Rafi, 2007; Ling, 2005; Kasesniemi, 2003; Goumi et al, 2011), females text differently, by demonstrating a marked tendency to write longer and more complex forms of sentences and messages. In contrast, males prefer brevity in messages by producing significantly short and direct content texts. One possible explanation to that difference resides in different gender psychological attributes namely in terms of personality traits, social and educational backgrounds among other factors that might exceptionally impact on both sexes' use of language.

Yet, similarities are seen as both males and females express their use of modified language for brevity and language economy reasons. Clearly, writing more is achieved through the shortening of long sentences mostly (12.28% for males and 13.50% for females), on the one hand, and to save time which is apparently important for both genders (9.38% for males and 8.59% for females), on the other hand.

Assumptions in favour of texting for brevity and language economy are also supported by some scholars' elaborated maxims. For both Shortis (2007a, 2007b) and Thurlow and Brown (2003), one of the most effective reasons for texting use is language economy and brevity. These elements are revealed common to all texters, regardless of nationality or country as they are found among Algerian texters as well. In this respect, possible accounting for common and universal texting practice is put forward. This can broadly delimit texting use in very specific manners and contexts.

Money concern is revealed again in the data and repeated with girls worrying more about money saving than boys (8.91% for females and only 1.11% for males). Modifying language as a habitual practice is reported again here with a higher percentage amongst boys. Lastly, the least percentage covers texting as a playful mode of communication which displays minor differences in numbers but marks higher scores amongst boys than girls.

As far as the respondents who answered *no* (19.50%) are concerned, the provided arguments refer to students' penchant to write conventionally-formed language with males' higher inclination with 31.74% of the answers compared to 21.74% for female

texters. This latter is noticeably sustained with the students’ second reason that stresses students’ dislike of mistakes or deviated forms in messages. Here again, boys seem to be much more concerned with correct language use with 13.04% to 4.35% for girls. Equal percentages (8.70% respectively) are noted in both groups while referring to language variation depending on the message receiver. This, of course, is understood in terms of messages sent informally to friends while more formal messages are sent to older people or strangers in general.

Further concern about the perceived benefits of deviating is presented in the third item by asking the question of: “*What do you like about modifying language?*” and the resulting responses are presented as follows.

**Table 5.14 Reasons for Enjoying Language Modification by Gender**

	Male	Female	Total
It is brief	16.29%	11.31%	27.60%
It saves time	10.86%	10.41%	21.27%
It is easy (simple grammar)	9.04%	11.86%	20.90%
It is quick	13.31%	3.88%	17.19%
It is fun	3.62%	3.17%	6.79%
It saves money	2.71%	2.26%	4.98%
I don’t like abbreviating	1.81%	0.45%	2.26%
Total			100%

From the table, both gender similarities and dissimilarities are observed. Regarding first the dissimilarities, the first concerns the percentages allocated to brevity as one major quality of texting. In this instance, brevity is seen as the first important feature amongst boys chiefly. Time saving reason is equally shared, with very close percentages. The notion of easiness is also highlighted in the provided responses. By easiness, the students refer to the language provided-flexibility and openness to language manipulation with scarce consideration for aspects of correct spelling, verbs agreement or opening and closing protocols that are mainly found in writing mode. However, the question of easiness seems to be more crucial amongst girls than boys.

The second notable discrepancy stresses the males’ focus on speed by demonstrating a higher percentage compared to females. As annotated so far, the idea

of speed or rapidity is far more marked amongst males. Yet, almost similar percentages are found concerning texting fun aspect and money economy, with special reference to their dislike of abbreviation with a slight difference between males and females. As for the circumstances of communication and the contextual features that affect students' texting behaviour, the fourth question of “*When do you modify language?*” is asked and the major explanations are given in table 5.15 below.

**Table 5.15 Context and Language Modification by Gender**

	Male	Female	Total
When I am in a hurry	13.14%	12.54%	25.68%
When addressing friends	11.19%	11.14%	22.33%
When the word is too long	10.81%	8.78%	19.59%
When too many things to write	9.46%	9.46%	18.92%
Not enough credit	1.35%	4.73%	6.08%
When lazy to write	3.70%	1.03%	4.73%
When I don' t know words spelling	00%	0.68%	0.68%
Total			100%

Situation of communication as explained in the previous section accounts for the effect of the addresser/addressee relationships, the topic, time, place, channel and code, amongst others, on texting language production. In this respect, gender similarities are the ones that are most observed in the table below, with percentages that are closely related to each other. Indeed, males and females almost equally associate texting language with occasions where both are rushed and limited by time. Similarly, reference to friends as addressees is noted with almost the same percentages.

A minor difference is noticed amongst boys and girls with the first ones favouring abbreviations when words are too long. As for long contents, both sexes demonstrate equal percentages. Money issue is also reported with girls' higher texting tendency for financial reasons. In addition, laziness is mentioned as one source of abbreviating or deviating with a slightly higher percentage among males.

The last but insightful cited mention concerns the texters' lack of knowledge of some words' spelling. In this particular case, low percentages attribute texting to the students' ignorance of words spelling or weak language command. In this regard, texting language seems to be considered far from the expression of poor language but

more likely as a conscious process that is affected by specific features as the ones mentioned in the presented table.

As concerns the addressee issue, this latter was tackled more specifically in the last question as former recurrent mention to the importance of this latter was observed all along the questionnaire. Thus, the fifth question of: “*Who do you use abbreviations more with?*” is asked. The results show specific reference to three main categories namely friends (66.48%), classmates (22.54%), and lastly family members (10.98%). Noticeably, the *friends* category is common for both genders and with close observed higher percentages (33.68% for males and 32.80% for females). Additionally, *classmates* are the ones that are also addressed with very close percentages (11.40% for males and 11.14% for females). Minor disparities are noticed amongst females who distinctively use more texting language with *family members* than their male counterparts (6.36% for females and 4.62% for males).

Eventually, this part of the questionnaire has contributed to draw clear distinctions between male and female texters’ perceptions and practices. Very significant are the findings revealing both similarities and differences across both groups percentages. As far as similarities are concerned, the results show both genders’ shared perception of texting deliberate use and the related benefits of modifying language for brevity and language economy motivations.

This latter is sustained by both genders joint consideration of the recipients of messages presented namely by friends and classmates. Given the informality of the situation, the form is undermined as meaning is considered of higher importance for both male and female students provided the freedom offered by the device to express themselves more freely. However, significant dissimilarities point out to males’ penchant for brevity, rapidity and time saving mostly, while females display a clear inclination to texting for language economy, the linguistic convenience offered by the language in terms of grammatical and vocabulary flexibility and easiness, and lastly, the economical affordability of messages that are considered as cheaper than phone calls.

### 5.2.1.3 SMS Texting, the English Language Use, and Gender

The current part is intended to look more closely into the issue of the English language use in messages. To achieve this, four questions are put forward. To the first question: “*How many SMS messages written completely in the English language do you send a day?*”, the highest percentage of 40.59% accounts for less than 5 messages a day, which is relatively significant as it reports the moderate use of messages written completely in English.

Notable differences are revealed by the data. Males seem to be less prolific in texting with the English language by sending less than five messages a day (21.51% for males and 19.08% for females). Differences are also reported with the second answer whereby girls writing more than five messages a day is reported and where they surpass their male counterparts (18.33% for females and 12.63% for males). These two disparities are sustained by the succeeding motive which stresses the non-occurrence of messages written exclusively in English. This is, yet again, present amongst males rather than females with significant differences (14.07% for males and 8.95% for female students). Last, more than 10 messages answer is noticed with very low percentages among genders which significantly support the restrained use of English in students’ messages.

Asked about the frequency of the English language use when messaging, the idea of the moderate employment of the language is found again in the provided answers. To the larger part of students, English is said to be used occasionally by opting for *sometimes* as the students’ highest frequency (44.35%), however, with a prominent percentage among males than females (25% for boys and 19.35% for girls).

Given the data results, gender similarities are also reported when referring to *very often* (10.55% for male texters, 10.52% for female ones), and *rarely* (10.48% respectively) frequencies. Male and female texters display almost equal percentages when expressing their exceptionally frequent and rare uses. Completely equal are the percentages observed as a third answer that reports the rare use of English. The last and lowest proportion reports the non-use of the language with males 08% surpassing females 5.62% this time.

Looking further into the situation of communication and the contextual features that impact on texting with the English language, the following motives are presented to answer the question of “*When do you use the English language in your messages?*”

**Table 5.16 Situations of the English Language Use in Messages by Gender**

	Male	Female	Total
When communicating with classmates	26.18%	26.08%	52.26%
When communicating with friends	10.99%	16.23%	27.23%
When communicating with foreigners	8.38%	4.70%	13.09%
When communicating with family members	2.62%	2.09%	4.71%
To communicate with teachers	0.52%	2.09%	2.62%
To keep the message private	0.98%	1.11%	2.09%
Total			100%

As noted in table 5.16, the English language is unsurprisingly far more utilised to communicate with classmates for both genders with almost similar percentages. However, gender differences are markedly seen in the second offered option that deals with using English with friends. Higher percentages are prominently observed amongst girls than boys. This might be explained by the addressee nature as not all the students’ friends understand English.

The third mentioned reason is related to the use of English mainly with foreigners which is noticed more amongst males. Family members are also addressed occasionally in English with almost comparable percentages. Different percentages are reported as well with females using English to interact with their teachers. Very low but insightful percentages are those indicating special circumstances of English use. Females, more than males seem to use the language to keep the messages’ privacy as the understanding of texts is restricted to the recipients who master the language.

Part four last question is intended to explore the intentional reasons that ground gendered uses of English while texting by asking the question of: “*Why do you use the English language in your messages?*”. Detailed explanations are provided in Table 5.17 below. To both sexes, English is used almost equally and more specially for academic purposes to enhance their English language command. Disparities are observed in some answers with varying percentages when dealing with English as an easy language to express one’s self with.

**Table 5.17 Reasons for Using the English Language in Messages by Gender**

	Male	Female	Total
To improve my English	21.72%	21.70%	43.42%
It helps me to express myself easily	14.86%	10.86%	25.72%
It is an international language	9.86%	7.43%	17.29%
Because I am an English student	5.71%	6.86%	12.57%
For fun	0.51%	1.77%	2.28%
To keep the messages private	00%	1.71%	1.71%
Total			100%

Notably, boys feel themselves more comfortable with the language which seemingly helps them to express themselves better. Further differences are seen when considering English as an international language. For boys more specifically, English holds some kind of value given the worldwide nature of the language. Besides, the idea of using the English language for fun is insignificantly reported amongst both sexes as it is the case with keeping messages secret which is cited by girls more specifically.

Ultimately, the findings' contribution shed light on the genders specific uses of the language and the major reasons leading this behaviour. Broadly, the occasional use of English is similarly reported among the two groups. Both male and female texters use English moderately in their messages, more specifically to address classmates and friends. Shared concern about texting in English is highlighted as the language use is intended more particularly to enhance both genders' proficiency through language practicing while texting.

#### **5.2.1.4 SMS Texting, the English Language Modification, and Gender**

As mentioned in the previous section, part five is designed to complete part four by extending the analysis to cover gender differences when modifying the English language. It starts with the general question of: "*How often do you use formal English in your messages?*", and the top answer highlights again the occasional use of Standard English (47.58%) with slight nuances in results amongst males (24.19%) and females (23.39%). Yet, dissimilarities are seen in females' higher tendency (17.74%) to use correct English more often than boys (14.52%). Lower and close percentages are noted amongst both groups mainly when referring to rare uses of correct English

(8.87% for males and 8.26% for females), along with the total absence of messages written in formal English (1.42% for male texters and 1.61% for female ones).

As for the main driving reasons that explain gender use of the language, answers to the next question of “*Do you care about the kind of language you use in your messages?*”, show 64.52% of the students answering *yes*, with equal percentages for both sexes (32.26% respectively). Regarding the remaining 35.48% of *no* answers, the responses show also similarities in percentages (17.74% respectively). For the arguments supporting the *yes* answer, the reasons are shown in the following table:

**Table 5.18 Considering the Kind of Language used in Messages by Gender**

	Male	Female	Total
It shows my language level	13.50%	19.19%	32.69%
To practice correct language	6.82%	11.36%	18.18%
It reflects my personality	10.09%	7.95%	18.04%
It depends on the receiver	8.05%	8%	16.05%
To send clear messages	7.09%	7.95%	15.04%
Total			100%

Noticeably, contrary to males, females seem to care much more about the correct form of the English language as it reflects their own level in a positive or negative fashion. How girls are socially represented is noticeably important in this case. Seemingly, Standard language use is far more important amongst girls who see an extended social and symbolic value as reported in previously-mentioned arguments in sociolinguistics (Labov, 1972, 1990; Trudgill, 1974; Fasold, 1990).

This symbolic use of standard language related to self representation is further enhanced by the third reason providing arguments for language use and its relation with personality reflection. Males appear to be much more concerned with their individual attributes than their social representation. This again calls for social, cultural, psychological and individual aspects that are inherent to every gender. The perceived heterogeneity in language use either based on personality, identity, social affiliation and alignment to a given class, is sustainably discussed in SMS literature.

For many scholars (Shortis, 2007a; Thurlow & Brown, 2003; Brosch, 2008), language use complexity lies in the intricate and interwoven factors that shape messages in different manners. Differences in drives might generate dissimilarities

such as the ones noted above. Not only that, differences in purposes and context can also be determinant in forming messages' language. In this regard, females' discriminating percentages concern also their texting goal of perfecting the language more prominently than their male peers. Correspondence between percentages is found as well mainly when referring to the messages' receivers. To both males and females, texting with correct English is not that much connected to the language but to the addressee.

In addition, considering language formal use is principally driven by both genders' concern about sending understandable and clear messages. In parallel, students' related answers to their inconsideration to formal language showed girls carelessness toward messages form as content is more crucial to them (22.50% for girls and only 15% for boys). Differences are also noted in the way girls and boys perceive messages (15% for females and 7.50% for males) as a completely different mode of writing that is far from the traditional conventional form of writing.

This distinction is denoting girls' awareness of operating in two different writing systems. In this perspective, girls score higher than boys as well (5% for girls and 2.50% for males) when expressing the writing advantages offered by texting. This latter is indirectly described as an open system to alteration which is not bound by any grammar or spelling correctness considerations. However, similarities are seen with close percentages in both groups. For both genders, the reported unconcern about language form is explained by the messages' recipients who are mostly friends (14% for males and 13.50% for females). Therefore, little attention is paid to grammar or spelling given the informal context of production.

Considering the major linguistic units that are modified while texting, the results show very little dissimilarity in percentages with significantly approximating scores. For both genders, pronouns are the most deviated linguistic units with 9.96% correspondingly. This latter is straightly followed by all components option with very approximate percentages with 7.93% for male students and 7.23% for female ones. For both males and females, all the components are almost similarly deviated.

The next component deals with adjectives category with approximating percentages (6.79% for boys and 6.63% for girls) which is followed by verbs with very

close percentages as well (7.36% for male texters and 6.06% for female ones). Additionally, nouns (5.76% for males and 6.79% for females), sentences (6.93% for male students and 5.63% for female ones), and auxiliaries (4.76% for male texters and 5.19% for female ones) are also reported with close percentages amongst genders. Lastly, Adverbs category is noted as the last option reported slight differences in percentages among genders (2.16% for boys and 0.87% for girls).

Attempts to uncover the plausible correlation between the students' English language level and the texting language use are made by asking the question of: "*Do you think that abbreviating and modifying words has to do with students' poor English command?*" For 78.55% of the respondents, the answer is *no*, while 21.45% of them answer *yes*. At gender level, very close percentages are noted among both groups either when answering with *yes* or *no*. Here, the results show that for the major part of male and female students, poor language command has relatively little impact on language deviations (with 39.68% for males and 38.87% for females) while the observed minority expresses the possible role of the language level on the texting language use (with 10.32% for males and 11.13% for females).

Finally, part five last question seeks to account for the perceived role of predictive text in the shaping of the texting language amongst genders. Evidently, the use of the device can predictably effect on the language correctness as immediate correction of the spelling mistakes and the varied spelling options are instantly provided. Thus, to the question, "*Do you use "predictive text" device when texting?*", 70.94% of the respondents answer *no*, while 29.06% refers to *yes* responses.

From the findings, evidence is provided for the infrequent and rare use of predictive text for both sexes with slightly divergent percentages (36.68% for females and 34.26% for males). On the other hand, the slightly divergent percentages are reported amongst gender when affirming their use of predictive text (15.74% for males and 13.32% for females). More significant and insightful are the reasons that clarify these responses. To the majority of students who affirmed their non-use of predictive text, the explaining motivations are put forward as follows in Table 5.18 below.

**Table 5.19 Reasons for the Non-use of Predictive Text by Gender**

	Male	Female	Total
It is time consuming	36.50%	28.50%	65%
I am free to write the way I want	14.50%	8%	22.50%
It is a source of errors	3.50%	4%	7.50%
It is fun	2.50%	2.50%	5%
Total			100%

From the table, time constraint seems to be the most important reason amongst males more specifically. By time consuming one may understand males' need for speed in writing and delivering messages. Evidence for rapidity purposes is provided to support even previous arguments provided for males seeking rapidity more notably than females. Freedom in writing is also expressed by boys. Males' limitation of predictive use is mainly due to their desire to write unreservedly without the intervention of the option.

This freedom in writing is also highlighted in the previous data of this section with joint reference to the informal language utilisation and context frames. Less significant are two gender communalities while referring to the inconvenient use of predictive text as a critical source of errors and a pleasant device used for fun. As for the respondents who expressed their frequent and regular use of the predictive text, rapidity is also at the heart of the respondents' motives.

Again, males are revealed to be more concerned about rapidity than females with significantly divergent percentages (24.50% for males and 18% for females). Divergence is also observed with respondents' interest in producing correct language with girls obtaining a higher percentage than boys (8% for males and 14.50% for females). Yet, approximate results are observed amongst both groups when pointing at predictive text usefulness when words spelling is not known (14% for males and 13.50% for females), and when referring to the playful aspect of this latter (3.50% for males and 4% for females).

Clearly, insights into the English language deviation are pinpointed in this last part of the questionnaire with noted similarities and dissimilarities again. Both male and female students expressed their occasional use of the Standard English by considering the receivers as a major impacting reason for language standard and

deviated language. For both sexes, messages' language is ultimately shaped by the texts' recipients and the major purpose of the message.

Besides, messages' understanding is revealed important for both groups as well, as deviation seems to be intentionally regulated in an attempt to deliver clear and comprehensible texts. This rightly concurs with several scholars reference to texters' consideration of meaning despite the deliberate use of deviated forms in language. For researchers like Crystal (2008a), Dąbrowska (2011), Shortis (2007a, 2007b), Velghe (2011) and Farina and Lyddy (2011), language modification is revealed more limited than it is broadly believed, given the importance accorded to the messages comprehension.

Similarities are also relating students' joint belief about the minor impact of students' linguistic command of the English language on texting language production. Indeed, the answers stress both sexes' deliberate use of deviated language that likely serve specific and predetermined purposes. The rare use of predictive text is also noted among the two genders. This latter is justified by the experienced inconvenient faced while using the texting option.

More important are the reported differences when dealing with the question of the English language deviation and standard language employment and reasons. Despite the related similarities presented above, the answers underscored the formal language use more prominently among females than males. This latter is justified by females concern about their social/ face value that is represented through standard language use.

While males connected standard language use to personality, which is in our sense, related to psychological motives, girls seem to consider peers evaluation more significantly. Additional consideration of the pragmatic features of texting is also reported in this part of the questionnaire. Males concern about rapidity and freedom to write are highlighted once more when dealing with predictive text employment. As seen previously, these same two reasons are noted mostly among male texters than the female ones.

To conclude, this section has attempted to identify the major key practices, perceptions and motivations in gendered texting. Broadly, the findings put forward the

females' marked inclination to use and send more messages. Despite the shared pragmatic reasons of direct, brief and grammatically and lexically- flexible mode of communication, maintaining social relationships is deemed more important among girls than boys. This likely relates to some sociolinguistic theories (Tannen, 1993, 1994, 1997) reporting females' characteristics in face-to-face interactions.

In addition to the noted scores related to the combined use of formal and informal language in messages, the findings highlight females tendency to use more informal than formal language in contrast with their male counterparts. Indeed, Males seem to use formal language more substantially, a fact that challenges some sociolinguists' contentions on females' higher tendency to use more standard or conventional forms of language.

Besides, the results stress both genders' shared belief in texting deliberate use and the related benefits of modifying language for brevity and language economy drives. This latter is mostly triggered by contextual considerations namely the addressee represented by friends and classmates. Given the informality of the communicative situation, the form is, thus, subordinated to the meaning which is accentuated by female and male desire to express themselves freely and completely.

However, significant dissimilarities have pointed out males' higher tendency to text for rapidity and time considerations. On the other hand, females display a clear inclination to texting for language economy, brevity and language flexibility along with the economical affordability of messages that are perceived as cheaper than phone calls.

Regarding the use of English among gendered texters, the occasional use of this latter is reported in both groups. Both male and female texters use English moderately in their messages and more specifically to address classmates and friends. Shared concern about texting in English is highlighted as the language use is intended more particularly to enhance both genders' proficiency level through language practicing while texting.

In this respect, for both sexes, messages' language is ultimately shaped by the texts' recipients and the major purpose of the message. The notional aspect of context is revealed by both groups as the most determinant motivation for male and female

texting practices. Males and females seem to modify language when communicating freely and rapidly is felt. This behaviour intentionally changes when the purpose changes, i.e. when practicing and improving the target language is intended by both sexes, a fact that explains the employment of more standard and conventional forms of language. Messages' understanding is revealed important for both groups as well, as deviation seems to be intentionally regulated in an attempt to deliver clear and comprehensible texts.

Related findings emphasised the joint perception of the insignificant impact of students' linguistic command of the English language on texting language production. The idea of the deliberate use of deviated language that serves specific and predetermined purposes is reported among the two groups. Yet, despite the indicated correspondences, the answers underscored the formal language use which is revealed more important for females than males in spite of their reported higher tendency to texting language use.

This latter can be justified by females' plausible concern with social/ face value that is represented through Standard English language utilisation. Girls seem to consider social evaluation more significantly than boys in this particular case. In contrast, males connected standard language use to personality, which is in our sense, much more related to psychological than social motives. Social, psychological and pragmatic motivations are highlighted throughout the results presentation and discussion. This certainly helped to reflect the complicate and insightful drives across gendered groups which , in turn, shed light on some crucial and effective factors that explain SMS use and texting language variation across gender.

### **5.3 The Limitations of the Questionnaire**

The present questionnaire involves a number of limitations which need to be taken into account when considering the analysis and interpretation of the findings. To begin with, the students' broad answers have been a serious limitation as the majority of answers have been difficult to grasp even when follow up questions have been inquired. This, in reality, goes within the common restrictions of questionnaires as a whole whereby respondents provide answers that are so broad that no correct

clarification may well be given. This results in a number of speculations about the possible meanings of the answers given by the respondents, which is another serious drawback as high degree of subjectivity is included when deciphering the data.

Besides, the students' supposed random messages selection may have been biased as possibilities to index only short, correct and impersonal messages is potentially possible in this specific case. Data representativeness is additionally threatened here as we are consciously aware of the participants' possibility of revamping messages when reproduced for the purpose of the research study.

While full care has been taken at each step in the questionnaire construction, errors might have occurred as well when transcribing the messages from phone to paper by students' intentioned and/or inadvertently adjustment of the messages' language. Subsequently, the students' selected texts can be overrepresented here and deviations maybe under or over employed depending on the students' messages motives which are exceptionally difficult to disentangle at this stage.

Moreover, messages have been collected from a population that is highly dominated by females, and the questionnaire's first section results are based on this category and a smaller category of males, with unbalanced proportions of messages that obviously have some bearing on the results orientations and interpretations of texting practices. Section two results examination is believed to be more accurate in this case as the same number of students in each gender group has been regarded.

Unnecessary to say that the results yield by both sections are diverse and differentiated, but once more, one major point of consideration of the current study is carrying out a linguistic and sociolinguistic investigation that is expansive enough to firmly construct precise and substantial knowledge and conclusions. Another potential bias can be generated by students' employment of predictive text as a corrective course for texting language production.

Despite the evidence that it is not that prevalent amongst students as detailed within the data, predictive text choice can be seen as determinant in texting language quality as numerous deviations can be out ruled or avoided through the utilisation of the indexed language digital corrector.

Thus, the nature and density of deviations can be possibly undermined and influenced. At this point, it considers vital to specify that the major concern of the study is examining texting language in a relatively large corpus by taking under consideration the occasional, if not the rare employment of correction in messages, on the one hand, and on the other, accounting for the psychological and sociolinguistic drives that influence texting behaviour.

Hence, predictive text, in this regard, is in our conviction not sufficiently consistent to represent a genuine threat to the analysis validity as no prove can be presented to the number of words that are concerned with the correction and the circumstances that make students utilise predictive text while texting. Obviously, deeper research is required to investigate the issue of predictive text impact and role within the era of smartphone applications which offer momentous keyboard choices for fast and error free texting language, and eventually make a clear difference in the future texting practices.

The finally-stated confinement concerns the educational setting selected along with the sample of university students of English which is limiting the findings to the chosen setting and population category. No conceivable generalisability can be accomplished in this occasion as the same characteristics of location, languages command and individual differences seem barely be met in other settings.

Nonetheless, despite the above-mentioned restrictions, the questionnaire has succeeded to underscore a number of valuable insights into students as a whole, and gendered students' texting practices, beliefs and inclinations. The findings, undoubtedly, have brought additional light into relevant and insightful questions concerning the ultimately complex issue of texting by enhancing our knowledge of texters' social, psychological, and pragmatic motivations that disclose and explain the EFL students' texting behaviour in daily communication.

#### **5.4 Chapter Summary and Conclusion**

One of the main challenges in the implementation of the questionnaire was to find out how Algerian EFL students perceive and practice texting. This step is deemed important to bring additional light to the complex issue of messaging by approaching

the topic from different and enriching perspectives. The results of the questionnaire carried out within the study are presented in detail in this chapter. What do these results imply? First of all, texting is strongly perceived as a non-conventional means of communication that offers huge opportunities for language manipulation and use. The commonly-believed idea of texting as the most preferred means of communication among youngsters has been challenged. Phone calls are revealed more important in this particular case whereby texting is relegated to more specific uses and purposes.

Texting is preferred when communicating with friends and classmates, more specifically, where opportunities to use a mixture of formal and informal forms of language are presented. This latter is explained by students' marked awareness about the contextual features of messages' production that make students move from a register to another in a very deliberate way. More importantly, the results reflected the students' driving reasons. These were, by order of preference, rapidity, brevity, and language economy.

As concerns English use and deviation, the language was occasionally employed in students' messages. The reported results showed students' tendency to deviate less while using the language for pedagogical purposes as texting in English is strongly perceived as a judicious way to practice and perfect their English academic level. Interestingly, standard language use is psychologically and socially related to the students' self-image and personality. In this case, occasional deviations were chiefly explained by students' intended rapidity while delivering messages and the addressee.

When it comes to gender similarities and differences, a number of insights into male and female distinctive perceptual and motivational features were displayed. With due account to the reported findings, the similarities confirmed genders' shared pragmatic perceptions and reasons for the use of messages and deviation. Direct contact, brevity, and the non-conventional frame of the mode that suits students' desire to write freely were noted.

Deliberate use of texting language for brevity and language economy drives was also common to both groups. This latter was mostly explained by the contextual considerations namely the addressee, represented by friends and classmates. More formal language use is reported to meet both genders' intent to improve the language

command. Regarding the use of English among gendered texters, the occasional use of this latter is reported in both groups as well. Both male and female texters use English moderately in their messages and more specifically to address classmates and friends for the objective of improving the target language. This last-mentioned notion of texting deliberate use was emphasised by both groups by disregarding any correlation between students' language command and language deviation.

Despite the shared pragmatic reasons based namely on texting direct, brief and linguistically-free characterising features, a number of findings underscored females' prominent inclination to use more messages and text more significantly than males. Texting to maintain social relationships was stressed among girls than boys. Next to the females' more phatic-oriented texting purposes, males' general texting habits were marked by their intended rapidity and time considerations. Females, on the other hand, showed a clear concern about texting language use for language economy, language flexibility along with the economical affordability offered by the device.

Additionally, informal language use was seen much more among females than males who seemed to employ formal language more substantially, challenging, thus, the some sociolinguists' contentions on females' higher tendency to use more standard or conventional forms of language. Interestingly, the answers stressed females' higher tendency to formal language use while texting in English, more specifically. This latter was justified by females' reported concern about the socially-communicated value of their academic status represented through the standard language utilisation. In contrast, males associated the standard language use far more to psychological than social factors such as personality.

As stated initially, Algerian and western studies conveyed a lack of information on EFL students' texting perceptions and motivations. Reporting participants' voices is intended to fill this gap in research and shed more light on the texting issue, in general, and in EFL academic settings, in particular. As noticed throughout the results findings and discussion, texting in general or via English, is driven by a variety of factors. The most important rationale behind the different practices is the flexibility offered by the device to manipulate language in different and alternative ways. Most students acknowledged the pragmatic and efficient aspects that allow direct and rapid

communication with less language and expense. Other reasons stressed the contextual conditions of language production that are revealed determinant in this particular case. Several gendered texting similarities and differences were noted in many respects as well.

Notwithstanding the mentioned limitations, this study shed light on a number of issues that might inform future investigations on the subject. The discussion of the results suggests an informed need to consider gender perceptions as a critical route to cover the subject from more comprehensive and multi-fangled perspectives. As text messaging is uncovered relatively complex in terms of use and purpose, linguistic-based approaches and studies may substantially benefit from incorporating psychological, social, and pragmatic variables that are revealed considerably impacting on texting language use and production among EFL students, in general, and among EFL gendered groups, in particular.

# GENERAL CONCLUSION

## GENERAL CONCLUSION

Twenty years after sending the first SMS text message, texting has succeeded to set firm foundations of a unique and mainstream mode of communication. In Algeria, the employment of cell phones has been on the rise for more than a decade, and with the widespread of the mobiles technology, SMS use becomes an integral part of most people. Across countries, texting has been widely acknowledged to integrate a significant number of unconventional forms which are readily-associated with the texting hieroglyphic nature that only the users of the latter can decipher.

Given SMS texting prevailing employment in different spheres of everyday life, early academic concern over the linguistic characteristics of messages fuelled a number of studies to uncover the issue of texting language from different linguistic, sociolinguistic, and pragmatic perspectives, among others. Various linguistic analyses of texting has also been reported for several languages including German (Doering, 2002), Swedish (Hard of Segerstad, 2005), Norwegian (Ling, 2005), and English (Thurlow & Brown, 2003; Tagg, 2009; Farina & Lyddy, 2011). Additional investigations reported in several national contexts including Nigeria (Adebileje, 2014), Kenya (Ong'onda et al, 2010a), Iran (Heidari & Alibabae, 2013), and Algeria (Mostari, 2009; Zitouni, 2009).

With reference to the review of the related literature on the topic and regarding the language and context sensitivity of the issue at hand, the study attempted to contribute to the related literature through investigating textual features created by the Algerian students in an EFL academic context. On the premise of the selected text messages among male and female English language students, the study focused on the lexical deviated forms and posed the questions of the most deviated forms, the most prevalent types of deviations in light of Lyddy et al's (2013) categorisation, and variation in the use of deviation types according to the students' gender and academic level.

The current investigation is significant in two major ways. First, it sought to fill a noted gap in western and Algerian research as exceptionally little concern over texting in an EFL academic context has been observed throughout the literature. Second, the

implementation of a corpus linguistics methodology was proposed as a prospective alternative to achieve a detailed analysis of texting features, by integrating a computer-assisted analysis to achieve a fine-grained analysis of lexical patterns in the students' message contents.

The integration of Tropes software in the analysis of texting language may be valuable in terms of the identification of patterns as many instances analysed manually can escape the analysts' classification. Regarding the limited range of studies which have applied Corpus linguistics methodology for linguistic and sociolinguistic purposes, the present study aimed at exploring texting language from a different scope and presenting documented implications for future corpus-based investigations.

Designing and compiling a corpus of messages, including 808 texts was fairly challenging, given the heterogeneity and the unconventional nature of texting language. Corpus size and representativeness, annotation and balance considerations complicated the process of data compilation and interpretation as meeting corpus representativeness and generalisability were revealed particularly difficult. Engaging in corpus-based studies implied considering the validity of the results in the limits of the corpus collected and the participants involved in the study. Clearly, limiting the conclusions of the study to the corpus used is seen as the best methodological decision to make, provided the most careful definition of the parameters adopted during the process of compilation and analysis.

Building on the very specific nature of texting, the pragmatic issues of the nature of the data and the objectives of the research were set in light of some researchers' contentions on the valuable insights that can be gained in regard to small and specific corpora use (Sinclair, 1991; Hunston, 2002; McEnery et al, 2006; Tognini-Bonelli, 2001, 2010). Throughout the discussion of corpora design issues in the general literature, arguments for the benefits of using small corpora were drawn. At the same time, corpus compilation and design criteria were explained along with the analytical procedures that may serve as a ground for subsequent research works on the topic.

The present study raised five main questions that are complemented with two hypotheses. By considering the frequency of the lexical deviated forms, and accounting for the most frequent forms and types, a list of 399 deviations (called

lexisms in the study), with 1323 occurrences, were analysed and sorted out according to Lyddy et al (2013) taxonomy. At the level of frequencies and occurrences, a list of the 50 most deviated forms showed interesting similarities with other researchers' frequency records namely Tagg's listing. At the level of the use of categories, the analysis showed several analogies with Lyddy et al (2013) findings in terms of the frequency and prevalence of the forms and types respectively. Building on these findings, EFL students, like L1 texters seem to modify some lexemes almost in the same way. This, in some instances, suggested the linguistically-related characteristics of deviations which denote specific linguistic predispositions of some features to be more subject to deviation than others (Dąbrowska, 2011). That native and EFL texters demonstrated significant communalities, this calls for considering deviations as a prospective linguistic behaviour whereby deviations can be anticipated and explained.

Another considerable contribution lies in the detailed description of texting language characterising features. Variation in spelling and deviation types highlighted the texting language distinctiveness which integrates several spoken, written, and texting-specific features which support contentions on the emergence of a third medium (Dorleijn & Nortier, 2009; Crystal, 2008a, 2008b; Tagg, 2009). This last likely draws on orthographic, phonological, speech, and written modes geared by maxims of brevity, phonological approximation, and existing non-standard forms in English as seen in several previous works (Tagg, 2009; Shortis, 2007a; Sebba, 2007; Hard af Segersteg, 2002; Thurlow & Brown, 2003).

The findings provided additional evidence on the texters' accommodation to both the medium physical constraints, and their creative manipulation of standard language to forge heterogeneous forms in the limits of meaning and comprehension. The variation in forms reflected the texters' meta-linguistic awareness on the contextual settings and the opportunities provided by language to perform the language in a very creative way. In spite of the noted variation in forms, the data showed that the language used in messages is largely standard, and this denoted the students' compliance to special pragmatic and communicative circumstances that impact on texting language production. Consistent with other lists (Tagg, 2009; Thurlow & Brown, 2003; Shortis, 2007a, 2007b; Crystal, 2008a), the deviations mostly suggested

reference to phonological approximation, brevity maxims, and selective options from various discourses (Thurlow & Brown, 2003; Shortis, 2007a, 2007b; Sebba, 2007).

More significantly, the study was enriched by approaching the issue from the students' gender and academic level perspectives. At the level of gender, data analysis showed slight variation in the use of deviation categories within Lyddy et al (2013) deviation types. Both similarities and differences were pointed out. In terms of similarities, both male and female students used, with slight variation in percentages, missed capitalisation, letter/number homophones, contractions, accent stylisation, and semantically unrecoverable categories. On the other hand, slight differences were noted in the distinct use of the other types namely shortenings, misspellings, onomatopoeic/exclamatory, other clippings, G clippings, missed punctuation, and last, initialisms.

In this perspective, similarities were justified by the pragmatic common use of the most efficient categories in terms of brevity and language economy, while the divergence in some other types highlighted male and female texting preferences and styles. These two notions of preference and style can rightly be extended to the well-established beliefs on gendered linguistic use differences depending on the situation of communication and related contextual elements such as the addressee and the purpose (Cameron, 1998; Tannen, 1997; Tannen & Kendall, 1997).

In spite of the gendered variation in the use of categories, the statistical computation of the results confirmed the absence of a significant relationship between gender and the use of deviations. Male and female students seemed to modify some English language components almost similarly. The arguments put forward stressed both groups' common concern over producing meaningful texts that reflect the texters' selective behaviours within a framework of related discourses, technological factors, interpersonal relations, and contextual circumstances (Tagg, 2009; Shortis, 2007b).

In terms of the academic level effect on the use of deviation categories and forms, similarities and dissimilarities in the employment of the categories were observed. Inconsistent with previous works on texting language use, linguistic proficiency and literacy, the data demonstrated an unexpected significant increase in

deviations with the increase of language proficiency as Master 1 and 2 students were revealed as the most prolific users of deviations. This finding put forward the possible contribution of the texting experience as well as the students' decreasing concern with the English language formality in messages. The fact of using more standard forms in early stages of instruction was justified by the students' possible concern over the correct language production for language enhancement purposes. This concurred with the significant difference in percentages between Master students and the Licence ones, who seemingly used more deviated types and forms.

Alongside the frequency considerations, the statistical calculation showed that despite the noticed correspondence and discrepancies, these were insignificant enough to prove that no significant relationship exist between the instructional level and the English language deviations. That students' text almost with close and slight proportions was explained by the students' conceivable inclination to the use of standard language forms given their academic context. Texting in the English language conventional forms and minimising deviated forms in messages were suggested in light of the students' shared intent to improve and acquire the target language in the most academic and formal ways to attain entirely academic purposes.

Interestingly enough, this assumption is substantially supported by the students' answers to the questionnaire used in the study to account for the participants' texting perceptions and motivations. In fact, regarding the texters' messaging reasons, in general, and messaging in the English language, in particular, the data offered a wide range of arguments that went past the linguistic considerations to perceive the contextual, psychological, and social constraints encountered by the texters' attempts to cope with the device and the texting circumstances.

Given the students' academic context, the observations made as concerns the large extent of standard language use and the relatively marginal number of deviations, informed about EFL texters' tendencies to take from pre-existing non-standard forms and construe messages correspondingly. Contracting lexemes, representing them phonetically with letters or numbers, as well as drawing on speech to shape informality in messages put forward the texters' active involvement in pushing the boundaries of the mobile physical constraints to produce efficient and meaningful contents. This is

more likely driven by the texting strategies which are based on the texters' phonological, orthographic, and semantic knowledge which are particularly adapted to the context.

Despite the reported prevalence of standard forms in messages, informality was largely explained by the students' contextual awareness and pragmatic purposes. Students seemed to use texting for the affordance presented by the device in terms of speed, brevity, and language economy, but not only that. The implications drawn on the analysis of the questionnaire stressed the importance of the students' accommodation to given situations far more than the accommodation to the device itself. The reported results showed the students' variation in deviation use with change in context. By context, the students' reference to the addressee and purpose as two major affecting factors in shaping the language of messages, was noted.

On the other hand, texting in standard forms of language was more particularly related to pedagogical purposes as texting in the target language was viewed as a judicious way to practice and perfect the students' linguistic proficiency. Interestingly enough, the use of the Standard English language was also connected to psychological and social motivations where self-image and personality were involved. Besides, language deviations were chiefly explicated by the students' intended rapidity while delivering messages and the addressee.

At the gender level, the intentional use of texting language for brevity and language economy drives was common to both groups. Considering the English language use among gendered texters, the data showed also the students' limited utilisation of conventional forms which were associated with friends and classmates' exchanges for academic purposes. Notwithstanding the shared pragmatic motivations reported so far, the data exhibited also some gendered dissimilarities with the females' prominent inclination to use more messages and text more significantly than males for different reasons. Females showed a clear concern over maintaining social relationships with more phatic-oriented texting purposes. Male students', on the other hand, displayed marked texting practices that were based far more on the intended rapidity and time considerations.

As concerns formal vs. informal language use when texting in general, females were seen as the ones who were far more inclined to informal language employment. Conversely, males seemed to enjoy formal language use more substantially, and challenging, thus, some sociolinguists' contentions on females' higher tendency to use more standard forms of language. Interestingly, data concerning texting in the English language underscored the females' higher predisposition to formal language use more than their male counterparts. The latter was explicated by the females' reported tendency to value the academic status represented through the standard language utilisation. In contrast, males associated the standard language use far more to psychological factors such as personality than any social reason.

As noticed throughout the presentation and discussion of the findings, texting in different languages, or texting in English, is driven by a variety of factors. The most important rationale behind the different practices is the flexibility offered by the device to manipulate language in different and alternative ways. Most students acknowledged the pragmatic and efficient aspects that allow direct and rapid communication with less language and expense. Other reasons stressed the contextual conditions of language production that are revealed determinant in shaping SMS texting language. More significant also is the texters' perceptions and motivations that forge texting language.

This study, as all the preceded and the forthcoming ones, has its own limitations. First, conclusions based on 808 messages cannot be generalised to make statements about texting in similar settings. Several attempts were made to ensure sample representativeness in terms of participants and messages, yet, statements made all along the data analysis and discussion remains specific to the selected samples and cases. Second, the study participants are EFL students' ranging from seventeen to twenty five whose texting practices are likely different from other texters with different age range, and other texters from different faculties.

Given these limitations, the findings and conclusions made here should be considered as preliminary. These initial findings, by overcoming the current study limitations, can hopefully inspire researchers to open further research avenues on the topic. By collecting larger sets of data, involving wider ranges of participants, controlling more accurately the variables, and respecting far more corpus-based

requirements and conditions, more reliability and validity might be significantly gained.

As suggested in this study, the corpus-based approach has a lot to offer to linguistic research with the huge amount of data which is processed automatically through softwares. The method implementation, as seen so far, has an extraordinary power to capture details of the language that might escape the researchers' attention and description. Besides, building large corpora through a massive compilation of messages can be in itself very useful for any conducted study and similar future investigations. The constructed corpora can prompt comparative studies on very empirical bases. Comparing language varieties on corpora bases can signify a real advancement in linguistics and other related fields such as conversation analysis, discourse, and lexicology, among others. Differences in texting across age, gender, social status might be conceived by comparing corpora related to each variable.

The comparison of corpora can be further constructive by comparing differences and similarities in relation to other digital modes of communication such as Instant messaging, Face-book, Viber, Instagram or Internet chat rooms communication. Furthermore, comparing native English texters' corpora against second and foreign language users of English should be particularly envisaged to draw a more accurate picture on texting characteristics and practices.

Similarities in terms of some deviated forms have been highlighted in the present study. Broadly, EFL students seem to use patterns of texting quite similarly as the British texters reported in several works. The findings, as stated earlier, might be criticised on the lack of representativeness and the case study design of the investigation; yet, the drawn preliminary conclusions can represent a very interesting point of departure in both Algerian and western research.

Given the expansion of digital modes of communication in everyday life interactions, we can assume that interest in research on SMS use and language is here to stay. Ultimately, variation in methodologies, precision in sampling procedures, and implementation of multidisciplinary approaches might be the finest options for future research in the field. Provided the dynamic nature of SMS texting, messaging should be subject to constant examination, by considering the complexity of the issue from

different perspectives which render them rewarding objects of linguistic and sociolinguistic research.

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# APPENDICES

## **APPENDIX A: GENERAL CORPUS MESSAGES ALL LEVELS**

### **I. MASTER 2 STUDENTS' MESSAGES**

#### **➤ Females' messages**

1. hi dear i com to se y at 1 bt i dnt fnd y cld i met y tmw if ys wn bay.
2. hello madm, we need t met y tmr plis if posibl wen thnk bye.
3. Helo dear i hop now y are feeling good tk car of yur self gbay.
4. G.aft. if it is possible i come to se y tom. Thnk y.by.
5. gm. we are waiting fr yu in the usual place see y.
6. y are wlcmd, by the way i hve no idea abt th d.dline Take care . By.
7. Thank yu vry much darling.gby
8. Helo dear saha fturkum, i hpe y re fine i know y re tird i wil nt disturb y agn, tk care of yslf plis, g night flowr saha shurkm.
9. Helo mother, wen i hear yr voice. Read yr sms i feel better, y are a candle that enlight my path of knowldg, i lov y sinserly dear.
10. I feel better now thnx, by nice dream dear.
11. helo mdm. It is ok, thnx, bye.
12. I lik yu dear be sur that i wil nevr forgd yu. i dont know yet, i wil inform you. i wil com to se yu mother. Babay.
13. hello dear we have received yr sms thank you see y Tuesday bay
14. Helo madam are y going to come tomorw if yes please tel me when i hv sm qsts gd night.
15. Hi, Hope u r fine, tomorrow we will have a course with Mdm Ibersian
16. Wait just a minute, I am coming.
17. plz can you call me now, I'v no credit.
18. Hello, Gigi, hope u doing fine. I just wanted to ask u about our English exam (CL).do u think they posted smthg? Thnx.
19. hey honey, where are u?
20. Hi! Plz send me the picture that we took together last time. Thank u dear.
21. Hi i wish ur fine i wanted to tell u dat tomrwr course of miss ibersienne wil be at 11.
22. They posted the exam of semiotics it wl b on Saturday at 9.40.
23. we wil hv a course wid ibersienne at 9.30 and dy wil giv us our proposals.
24. Hi there is no post so we hvnt course tmw
25. Hi they posted that the exam will be on Thursday at 13h
26. Hi thy told dat w'll gv them the proposal on Sunday and no news abt exams.
27. Helo dear hope yu re fine i wnt to sy: happy birthday to yu fild with happiness love fredm health.... Bye darling.
28. Hello flower i hope yu are fine y nd yur family. Gd bye.

29. hi, millions flowers with millions colors to say Ramadan karim mdm with yur family , god nigh dear.
30. Thank y it ok i wil inform them by email by by dear.
31. Hi misses i did nt receive yur emails by
32. ok thnk y darling see y.by
33. Hello madam, I just want to remind you about the software you promised. fatima. Good night
34. Gm it is ok. have a nice day
35. Hello ghani! i hope u doin good. I'm confused about some things i need your help urgently.please tell me whether i can call u or not.thank u
36. Hello friend! When you finish join me to the library of biology!
37. It was difficult especially at the beginning that we are obliged to work on errors
38. Hii its zz! I know ur worry about dads! we come back home...they wanted him to stay but he doesnt take care.... Sya
39. Hii ! hop ur ok! just wanted to ask about u nd about ur family! see u.
40. Hii sis.... wanna tell u I cant bear not talkin to me...anyway ...just take car ... luv u.
41. Hi, H r u call me when u are free.
42. Hi, we will have a course of MRU tomor inch
43. Call me pls.
44. Congratulations I wish you all the best
45. Hello sara thank you for the document you sent me and by the way check your email to see the question of last year
46. Hi, H. r. u pls send me my copybook.
47. Hi, tmr inch we will have course with mdm Ibersian.
48. g.morning, we'll meet at 11.
49. Hello, hw re u? where're u? I'm waiting for u in the new station...quick please Bye.
50. Hi, are u fine? any news at the fac? Have a good day bye.
51. Happy birthday to uuuuuuuu darling. I wish u all the best.
52. Lili where are you? I m going out right now.
53. Hi, Mis Ibersiane said that we have a course tomorrow of MRU at 11 , and it will be the last one.
54. Hi, H.B day my sist I wish all the best for u.
55. I m at home.
56. gd morning, have a nice day.
57. thanks a lot.

➤ **Males' messages**

1. I will be grateful if you could help me.
2. I hope you are doing well in your exams.
3. I am very happy to see you again
4. Just be one of the stars, shining at least one night of my life and let this moment be that night.
5. Call me I smile ignore me I cry.
6. When you'll be at home just tell me I call cuz I have something very important to tell you.
7. Gd afternoon madam, I hope u r doing well.sorry for disturbing u could u plz do me a favor to bring me those books u told me may help m in my research fr tmrw in chalah, thank u so much.g night.
8. Good morning madam. I hope you are alright. I need ur help and I don't know whether u are present here at the department. Thanks a lot
9. Hello there, could u please bring me my USB disk if u are working tomorrow? Thaaaank u soooo much. Take care of yourself. Bay
10. Ok madam thank u so much, good night
11. Hello madam, i hp u ar doing well.please, can i just com t see u cauz mr mftah asked me to do so in order u sign my memoir.thnx a lot madam.

## **II. MASTER 1 STUDENTS' MESSAGES**

### ➤ *Females' messages*

1. Plz give me the answ
2. Ok , tomrw
3. C u
4. We are in the same boat darling
5. In fact I want sth
6. I don't know even what u'r talking about
7. I'm so blessed 2 have a friend like u This comes with many loving thoughts. warm wishes I send 2 u , happy birthday my dear.
8. Hi, how r u, I am waiting u in 2.30 class
9. Hi sima, at what time we will met PLZ answer me? bye
10. Hi gays at what time we will have the exam of Miss Khelil
11. Hello flora, what time are we go?
12. Ok, Sisi I'll give u sth with me 2morrow.
13. thanx darling.
14. I ll kom 2 se u.
15. Good night
16. Thanks Sohila. I love u too take care urself see ya.

17. Happy birthday Hannaniii, wish u a happy long life love u <3
18. Hey Imene I miss u my sweet baby, I wish u re fine take care Joy
19. This is me joy how are u I'm way to 35 I think I am late plz could u record me  
mrs Meftah thanks
20. Inshalah u are fine we miss u take care brother be strong.
21. Salam, happy birthday sister. I wish all the best for u. C U.
22. Good morning, I want to ask you if we have a cutshap session today.
23. Hi, I miss u so much, I will never forget you, smile and good night.
24. Hi darling, I'm waiting you at the back.
25. Are you kidding?!
26. Plz don't b up 7.
27. Thnx 4 u 2;
28. where r u , u r 2 late.
29. Hi, what's up.... I was sleeping talk to u latter
30. Hi sara h r u? I wish u r fine.
31. Happy New year dear, I wish you a great and happy year full of prosper,  
happiness and joyful
32. I miss my dear, I want to see you as possible as you want. My wonderful eyes.  
LOVE U
33. Happy Birthday my beautiful , my sweety girl wishing you all the best in your  
life
34. Hello Haw r u! R u here in d univers? I need 2 c u asap, ok?
35. For god's sake lets not complicate thinkz, dis is not wht frienz shud b lyk hein!
36. Hey there! Miss u 2... its jst dis time..... cnt help it really. Plz TC.
37. Hi, tmrw I wont come bcz I'm not in the mood
38. Happy birthday sister wish a long happy life full of love, health and  
importantly money.
39. Hey, I hope u're ok. I so sorry for the last time. u know I <3 u u're my best  
friend ever.
40. Your file of subscription is not complete you need extrait de naissance please  
check scholarship
41. How do we write 43200 in Eng, plz hurry.
42. I don't have comments on your service, till now I find it a good one. However, I  
am always complaining about the quality of the signal because I have a big  
problem with. Would you please do your best to fix that problem.
43. Hi, bring some fd with u, bcz I'm vry sick, I cnt work 4 t8.bye, thnx 4 the gift, c  
u, lv u
44. happy birthday sistr, I wish u all the best. Love u so much.
45. We hav th exam of semio nxt Saturday ☹
46. am waiting 4 u in the department.

47. Hi sist miss u 2 more hhhhh . Lov u so much take cr bye.
48. My lovely sis miss u hope u'r doing well take care, see u soon bye
49. GD Mrng plz mr foudil is here or no?
50. Good morning darling, where are you?
51. oh, thanks dude, i appreciate, ur welcome.
52. Hi, sweetie, at least you made it, am proud of u, love u.
53. U R a weird person.....!!!
54. I miss u 2.....
55. It's okey but don't try to do this again.
56. Thanks a lot dear if u really missed me, u wouldn't liv me. Im kidding babe. I miss u 2.
57. I m waiting 4 u n front the bloc.
58. Happy birthday honey, I wish u all the best in yr life, and this year will be better than all the previous one. Lv u.
59. Hi, how r u, can u give the phone number of amira, plz?
60. OMG, this module drive me crazy. hey tell me, in which class we r going to have the exam.
61. G.morning R u ok, actually I've changed my clothes to go to university nd u?
62. Hi friend, hope u'r fine. Pease tell me what Ms Ibersianne told us to do. Thnx.
63. Hi Mom, I 'm so so so hungry, pleaaaaase I want u to warm the food, I have no time to do, I am dying <3
64. I missed u <3
65. Hi sweetie I'm at the university, plz call me when you arrived.
66. Thnks sweet heart
67. Good morning how are you? It's Houda. That's my new number I forgot to tell you that I changed the number ... hope you are fine..wish you all the best.  
Salam
68. Come to facebook!
69. My friend joy. I'm really sorry I cant meet u 2day , I hav things to do sorry
70. I don't know why there is always this misunderstanding between us.
71. I ws I still and I'll always be the same person OK dear.
72. Ur friend is so precious it's a treasure. The loser who doesn't find that person or who doesn't preserve it
73. Are we going to have a course tomorrow at 14.30?
74. Are u ok? Tell me wht happened?
75. Send me the courses, plz. Take care. G8
76. I am in the class call me later
77. G8 see u tomrw nchalah.
78. Hi my friend, I would like to ask for your help in my revision tomorrow at 9.00.  
Thank you.

79. I wish you a very happy birthday.
80. Would you like to come tomorrow for studying?
81. Hi sister! How are you my girl? I'm really tired and hungry too. See you dear.  
Kisses
82. Hi, I hope that you are okay and good, may Allah bless you baby. Love you
83. Hello! Please my darling give me back my copybook tomorrow because I need it see you dear.
84. Ok no problem, see u.
85. Happy Birthday sister. I didn't forget you. Supposed to call you at 00.00 but I slept before. See you next week, by
86. Morning, we're in the campus.
87. Hi Safi, what's up. Please bring me last lit lessons. Thanks. See you.
88. Hi sousou .don't wait for me. I'm not coming. Bye
89. I wish you a good luck for your driving exam darling. Take care.
90. I wish you a prosperous new year. see you.
91. How was the day guys
92. See you in the department
93. Hi . The exams make me tired and I want to have a deep sleep.
94. I miss you so much my mom.
95. Happy birthday dady.
96. Hi dad, I finish at 11h.
97. The class started, where r u?
98. Happy birthday.
99. Hi Brother, I wish you good luck in ur Exams. Love you ☺
100. Soum Soum, I 'm in B 310, join me.
101. Hi, me not coming. May be tomorrow. By
102. Hi Sara . It's Nadia . Plz don't forget the copy book of American civ.
103. Have a good luck in your exam today. Talk to you soon.
104. Happy birthday my sweet friend, and great happiness in your life. By
105. Yet I arrived at home.....I miss you.....
106. Ali, could you bring us bread.....if you can
107. Good morning baby.....have a nice day.
108. It really suits u if u put it on.
109. I'll be plain with u, I had many things to tell u, after sending the SMS i was eating, i didn't eat any more truly i was shaken.
110. Thanks u giving me a place in ur life bcz believe me i need it most of the time i feel that i'm created to be alone i'm proud more than u bcz u so.
111. G.night.
112. Amoula love u dear, ur my best friend u will always be :xx take care of yourself  
sist.
113. Fourty-three, sorry a typing mistake....
114. Good morning, please tell me if you have written the conclusion of our presentation ?if yes, send it to me please!

115. I am going to write the introduction and cheking wether there are some mistakes in the whole work
116. Thank you, good luck for you too. See you.
117. I miss you so much please call me .
118. I love you so much.
119. I'am waiting for you in the restaurant. please hurry...
120. I love you baby
121. Are we going to have any catch up sessions tomorrow?
122. Hi, I miss you. What are you doing right now?
123. Where are you ?
124. I love you
125. What about the conclusion ?
126. Hi, how re you ? where are you now ?
127. Good morning, I miss you so much, happy birthday
128. I am actually in Bloc 3 please hurry.
129. U r pretty !
130. I' have missed you.
131. Where have u been ?
132. I hate this kind of minds. He's a new friend....U know.
133. Happy women's day ever darliiiiiiiiiing..... such a surpriiiiiiiiise honey miiiiiiis u ....love youuuu....take care. Sima
134. Hello, can I help. I really want to participate, wat r u celebratin ?
135. I miss u brothr. please forgive me.
136. Hi Aicha, I am your classmate Houda, I hope u contact m later, I want talk with u about very important topic.
137. Happy birthday Nasro, I am sorry for the late, I was too busy cuz I pass exams. Love u. <3
138. I'm sorry for not being with you, you know that I care about you, and I told that you will find me anytime you need, you will operate and I'll be fine, just be faithful please, please, I swear
139. You have many friends who care about you.
140. Hi, how are you. I'm still shocked I really didn't believe what I heard today, just be faithful , and everthing is going to be okey.
141. Happy birthday my dear, I wish you all success in your life.
142. Happy birthday honey, wish u all success nd happiness in your life.
143. Call me back, no unites
144. Linda, I'll see u later
145. Hi, how r u
146. Congratulation, bride, I wish to you happy life. Good luck.
147. Hi, tell me if y come tomorrow or not.

➤ *Males' messages*

1. Good luck in your Bac exam
2. Please, would you come to revise together.
3. Happy aid , I wish you all the best and success in your life.
4. Hi darling. I miss u so much, tonight, I'll call u plz wait me after the class.
5. I miss you a lot. Love u.
6. Please, call me, I don't have enough credits.
7. I'll call you later
8. I'm in class.
9. How's goin bro?
10. Ok, no problem, take care of yourself you too.
11. Not at all, it is a pleasure
12. I am asking you, I just prefer to talk by phone instead of messages, if you don't mind!
13. Hey beauty! How are you?
14. In an exam
15. R we meet today?
16. This is my fb page.....send me an add
17. Happy birthday with u happiness and long life full of joy and .....whatever.
18. Wher ar u ?
19. DNT forget those cours.
20. I am in block 3 .
21. good night. I need to sleep now.
22. No please don't think this way
23. Lets take a minute and laugh about midoo HAHAAAAHA
24. I didn't send him a msg since a long time
25. Sorry I can't play football today because I have a headache.
26. Love you, good night
27. Ok Tata c u
28. Y haven't u been online for such a long period
29. I knw
30. Good night, have a nice dreams. I'll miss u
31. We will meet at 13h. Anyway I will call you once there.
32. Don't forget to bring my USB. Otherwise don't even come.
33. I have lost all the data, talk to u later.
34. Is it true that graduate studies in Finland are free???? HAHAAAA
35. Let's build a bridge from my side to yours, I will be the one to cross over
36. I must take a shower now, I will write after this.
37. you broke my heart.
38. I must get up tomorrow at 4.30 will be ok to go bed soon.
39. Hi, how r u.
40. Good night bro.

41. Take care, peace.
42. Bye xoxo
43. Never mention it bro tks
44. See u ltr thanx
45. Don't wait me , I w'ont come.
46. bring me my shoes with you
47. there will be a mach tomorrow, get ready bring your equipment.
48. Take care of youself and good bye, see you later ok.
49. I don't need your disturbance, please let me to sleep.
50. good luck for your exams, I wish for you all the best. God grant you success.
51. u cn't say dat u r an idiot. She is nt cuz I saw her last night.
52. hey chums, hw r things wid u. I hp dat u r dng vry well. Gd lck fr tmrw exam.
53. hey chums, tmrw we r gonna do our best to get so funny ends.
54. It was jst a comment on facebook dnt wrry.
55. Hello. Cant come tom, we meet Monday 11.30. See u then. Bye
56. It is still with me as i got no answer from him. Bring it tom. See u then
57. Ok madam thank u so much, good night
58. Hi, i hp u ar doing well.please, can i just come t see u cauz i really need ur  
hlp.thnx a lot.
59. Happy aid for you and all your beloved family, long life inchalah. Ur student  
Kamla
60. Can we meet tmrw at dpt, see u at 10.00. By

### **III. THIRD YEAR STUDENT' MESSAGES**

#### ➤ ***Females' messages***

1. be there I m comming
2. Good m Loubna, tell me are tomorrow going to university
3. Hi, Loubna don't forget the book of poems, please. I love u.
4. Slm, we ll study nchalah
5. Hi Many, meet on fb now.
6. Hi dad, already finish meet at entrance
7. I liked the book vry much. Thanks a lot.
8. Hi jaz I'm waiting u in room 2.30. Hurry!!!!
9. Miss u sist, where r u?
10. Plz take me some handouts, meet tmrw, thanks
11. Plz wait for me, I'm coming
12. Come to the class 3.14, the teacher is here
13. Hi, How are u? I am missing u, plz text me when ur free.
14. Hi dear, plz do u have handouts of linguistics, I will come to take them, I am  
waiting u tomrw at the university, by

15. Hi bb I wish ur fine, I am texting u at 00:00 to say happy birthday to u, I hope your life will be full of love. Love u so much.
16. Hi! I wish you are fine, ur absence oblgde me 2 send u this sms.
17. U hurt me with ur words that I can never forget them
18. Thanks 4 everything, I wish you the best in the rest of ur life full of happiness and prosperities.
19. Good morning sister, congratulations, you deserve all the best. Miss you, love u.
20. where are you?
21. Hi Sisi Ar u fn? Dn't forget my polycop, bec i need it tomorw. By.
22. Ther r som people who make me like the univ, only fr meeting nd seeing thm bcz I lv nd miss them nd u r 1 of thm, Dear ur heart is whiter nd purer, this is why it sees nd thinks of people positively. Gd night.
23. Sorry my dear, I just saw your call. I know it's late. call you tomorrow inshallah.
24. Happy birthday my sister.
25. What are you doing?
26. I want to be in your arms where you hold me tight. And never let me go.
27. Hi I am doing good.thanks for asking. Hope that you are fine too as well as you family
28. Hi, How are you? don't wait for me. I'll come late, by.
29. Sorry, it has been a long time (about 2 months) that I didn't send any message in English, thus I forget about others.
30. Good afternoon Mrs Enteghare. I am your student from group 2 am sending you that message to tell you about my topic presentation which is about Globalization with my best regards.
31. Please, can you send me the last lecture of the module of linguistics because I didn't attend
32. Do't forget to bring me my copybook of the module of didactics, I really need it.
33. Wait me in bloc 3
34. Hello, how are you doing ? I'm waiting for you at Bloc 3.
35. I did a presentation yesterday, what about you, what are u doing ?
36. I'm going with my mother to the doctor
37. Hi ! babe. Finally I decided to go home
38. This is my brother's num...PLZ Flexy
39. Call me plz it's too urgent and scared.
40. Hi Sara how are you ? are coming tody ?please answer me because I need you.
41. It was a long day. I'm so tired . I can't talk now can we talk later ??
42. I hope that you're fine ?? bcs u didn't answer me ??
43. Hello friend i wish you are fine please, I want you to lend me your copybook because I didn't write the last lesson of literature, thank you.
44. Good morning Zahra if are you in the university ask me mrs Heddouche if we will study with her tomrow.

45. Where are you now? I am waiting for you.
46. Hi if you are in the university call me I need to see you
47. Hi, please can you bring me the handouts of literature.
48. Where are you ??? I'm waiting for you.
49. U know yr prblm . is that u have a negative thoughts. try to avoid it for yr beneficts.
50. Ok, as I do, say it directly ; it is better, so , u are always in Jijel or u had come-back yesterday
51. Welcome lol. What are you doing, now ??
52. Hello, where are u ?
53. Have a nice holiday.
54. I called u 7 times, but u didn't answer, what's wrong with u.
55. I am at the campus, my key is not with me where are you ? call me I'm waiting
56. It seems that you've forgotten me ? good night have nice dreams. love u.
57. Bring for me your lessons, please I need them for tommorow.
58. Good morning sister I want to inform you that tomorrow we have catch up session in linguistic modul.
59. Hi, Selma how are you ?, why did not you come today at the university ?
60. Happy birthday to you my dear I wish all the best for you and god bless you inchallah.
61. Where r u girl ! waitin for u.
62. Hi Sara wat's up girl !! hop ur fine. I went 2day 2 bmrds but no news, tk care n c u w n i c u.
63. Hi dear, wats up. Is there news or no.
64. Hi bro I'm waiting u in the departement
65. miss u sist, where r u ?
66. Hi Mansour, I have not enter on your e-mail yet. I will do it later, because now I'am busy. Then I will choose a preferable book to buy for you.
67. I do not remember the last message because I talked too much in English, in different subjects.
68. Hi father, I really missed you. I ant to tell you to what extent I love you....
69. Good m Loubna, tell me are tommorrow going to university
70. Hi, Lobna don't forget the book of poems please. I love u.
71. PLZ take notes and a handouts for me. Oh if the teacher asks you write my name too. Thanks
72. PLZ wait for me, I'm coming
73. Come to the class 3-14, the teacher is here

➤ *Males' messages*

1. I talked to my friend yesterday and he said it was okey.

2. take care of yourself
3. I'll bring you the book tomorrow
4. I have to leave now, goodbye.
5. I want to improve my english, and I wonder if I'm obliged to travel to an english speakers country.
6. We're gonna win in the Classics.
7. I'm wanna to come there to get more experience, and for tourism.
8. U reject my call.....
9. Idk when you bck, but I will not be OL 4 2day
10. Sara sent me a letter in a good lge.
11. I sent her back an SMS in same lge.
12. thank u Bro I have received your message about the data you send me. thank you very much
13. Hello, what's up Bro do u study today ? I hope u don't. Peace
14. Salam, my Brothe have you finish study bcz it is time to go home. hurry and answer me.
15. Good night.
16. See u tomorrow.
17. Take care.
18. Please, would you come to revise together.
19. Happy feast, I wish you all the best and success in your life.
20. Hi darling, tonight, I'll call u plz wait me after the classico.
21. 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.
22. I miss you a lot. Love u.
23. Please, call me, I don't have enough units.
24. I'll call you later
25. I'm in class.
26. How's goin bro? hru doin I seeking 4 u.
27. Where have u been? ....PEACE
28. Ok, no problem, take care of yourself you too.
29. Not at all, it is a duty
30. I am asking you, I just prefer to talk by phone instead of messages, if you don't mind!
31. Hey beauty! How are you?
32. In an exam
33. We meet today?
34. This is my fb page.....send me an invitation please!!!
35. Happy birthday with u happiness and long life full of joy and .....
36. The exam started, where r u?
37. Happy birthday.
38. Hi Brother, I wish you good luck in ur Bac Exams. Love you ☺
39. Hi, I 'm in B 310, join me.
40. Hi, me not coming. May be tomorrow. By

41. Hi bro . dnt forget the copy book of American civilization.
42. Have a good luck in your exam today . Talk to you soon.
43. Happy birthday my sweet friend, and great happiness in your life. By

#### **IV. 2<sup>ND</sup> YEAR STUDENTS' MESSAGES**

##### ➤ **Females' messages**

1. Hello! How are you. I think you read my sms and send me the reply
2. Yes, I hope so much
3. Good by see you tomorrow.
4. Good morning father happy birthday I wish you all the best in your life nshlh ☺
5. Good morning Kate please just call me back when you'll be back home.
6. See you.
7. I'm waitin u 2 come
8. Happy birthday sister, I wish you live better life, see you!
9. Good morning father, I wish you are good. I want to tell you that I will come back tomoro.
10. Hi! How r y.
11. Sth is different.
12. What dreams. I can not sleep sleep well!!
13. I miss you always I wish you all the best my friend.
14. I hope one day y love me like I love yo my lover forever my friend
15. I can n't stay without I miss yu god bless you.
16. Please, Samira wait for sara she is coming there
17. Hello! Hello! how are you? I just want to ask you if we will go tomorrow or not.
18. Hi! dear, be tough, don't let the marks tears you down. I know you are strong.
19. Hello, I obliged to see you this morning please.
20. Good morning, How are you? Can you help me about the exams please.
21. Tomorrow we dn't hv any test or exam hv gd n8 sis.
22. Take care of urself honey plz.
23. Luv u 2 bb.
24. Hello, my father, How'are you. I'd like to send me sister's number bcz I nd it
25. Hi! darling. I miss u a lot. I hope u're fine
26. I missss youuuu so much my lovely sister.
27. Hi how r u? Hope u r fine! Please don't forget the copy book to bring it to me. ok. Tak care g'd night c u.
28. Hi, what's up. Miss you!
29. Where are you Selma hury I'm waiting for you since hour.
30. BB. G8, sleep well tomorrow nchallah. Kiss.
31. I am sorry for you my sister

32. are you going to go to university today?
33. can you come to explain the matter with you?
34. Hello, daddy mom told u to bring milk with u.
35. Babe where r u? can u come to my house I got to show u sth.
36. Hell Sissi bring me the keys am in the Uni.
37. see you later on.
38. can you help me please? I can't understand the last course of literature, it's so difficult.
39. can you meet me in the library?
40. I am very happy to phone me again.
41. Why do you call me, do you need sth.
42. thank you very much for the precious gift, I rly like it.
43. Hi how r u? I will meet you tomorrow at 8.00 in the bus station.
44. Thank u for everything my best friend.
45. I'm really destroyed because I don't get good marks in my exams.
46. U'r wlcmm
47. good nit
48. I <3 u sweet heart.
49. I'm sorry, we are late.
50. U+ me are not friends
51. Hello! How are you? My best friend I need the linguistic courses, ple don't forge! Please!
52. Happy birthday darling, I wish a long and happy life and all the happiness. take care G8 . by
53. Hi Mira, I'm in the classrome, I'll sow u in B3 after the class. ok.
54. I'm beasy now, I will call you back whene I done. by.
55. Listen, I am just waiting meet u at 9.30 ok.
56. I am near the subway, Hurry up.
57. I am in the second floor, come on or I will leave.
58. Hi Sara! hope u're fine? missed u a lot, GD Luck fr u r bac
59. Yasmine where ar u?
60. Mom! I can't come home today! may be next wknd
61. Hy how you doing? What we'll have today to study at 13.00.
62. Hy my darling, when we have the meeting today at what time.
63. Hi, How are u. Happy birth day, I wish u best in ure life. I m s u so much c u. My dr girl friend.
64. Morning bestie!hope you slept well!wanted to axe you bout the lit course is it at 8? Xoxo.
65. u went there means "I wanna stay alone" didn't know you wanted to sit with me ....you should've come to my side, it's simple I can't do first moves in these kinds of situations.
66. waky waky lit monkey! The monkey land is waitin for their princess. Luv yah. Xoxo.
67. Gm exam of phonetics will take place on Monday at 3 o'clock.
68. Happy New year. I missed you a lot.
69. I hope I can see you again.

70. Hi! r u fine. miss u soooo much! I'm waitin 4 u. c u later! ☺
71. No, never say that! I really didn't have time 2 do it, it's not bcz I wantd it.
72. Whr th Hell r u? Fool! hate u.
73. Hi mom hope u r doing fn? I rly miss u so mch dear looove u tk cr.
74. PLZ Send me ur nw phone nmbr.
75. Hpy Birthday Dad my all ur wishes come true Lov u tk cr ksz.
76. Hello! Hello! it's been a while, r u ok, I hope that you r fine tell me r u coming to the city or not please answer to me. bye.
77. Hello! Hello! I just want to ask u about the test r we going to make it or not, if we, please tell me g8.
78. Hello! Hello! it's been a while how r u? Hey do you hear the last song of 1D you should hear it, it's amazing, bye.
79. Hello darling, I think you are fine, I hope you will enjoy my party this evening. See you bye.
80. Hi, where are you ? please send me a message!
81. Hi my sweety, I miss you call me later, bye.
82. Call me
83. I'm studying now.
84. I'll call you later.
85. Till now ! u really miss her.
86. Hope for the best, but prepare for the worst.
87. I hope that u r not a ghost !lol
88. I m so in love wid ma self dat I dnt hv time to waste on diz people.
89. Dude seriously !
90. I m in deep shit bro ugh !
91. You wanted to talk ?!!!!
92. My soulmate you are the bestest :P lol.
93. I'm on my way, hold on !!!
94. Happy new year. Every year you are fine.
95. Our phonetics Exam will be on Wednesday at 9.40.
96. I missed you, I hope we see each other soon.
97. show me the road cause I'm lost
98. How did I do ?
99. Thank you for the opportunity
100. Hello ! Honey I miss you so much I hope I can see you soon
101. Happy Birthday I wish you a sweet year for you full of joy and success
102. Take care of your self Have a nice day bb !
103. Hello bb, I hop u are fine, what about ur health is it ok ? what do u do, call me when u read this msg. I love u.
104. Good morning sir, how are you ? Please tell me about the « tcf », did you read my documents , please answer quickly if you don't mind
105. Hi, Rania please bring withe you the copy book of CCE tomorrow

morning to much of love I bzz. G8

106. Salamus, ur txt msg r always welkomed evrytime .....Ready 2 hear from u.
107. Yo freak ! life is inpredictible u havnt lost any dear friend.
108. No need 2 thak me cuz i spent a joyful time 2 thank u !
109. I am not free now , I'll call you back.
110. Go to hell !!
111. you don't even need a gun. you don't even need a pill. If you ever wanna die fall in love and you'll get killed.
112. Happy Birthy my honie I hope for you sceded in you life and all the best I love you.big kiss
113. Hi, How are you ? my best friend I miss you please when you come speak with me.
114. happy aide my darling, I wish for you pass happiness times with your famill and friends I love you <3 <3
115. Hi, How are you ? I'm not fine. I feel bad.see u tomorrow and we will speak about the subject.
116. Happy birthday bb I hope that you are fine. I wish all the best for you. ☺
117. Happy 3id darling I hope you will enjoy this beautiful day. Good bay. <3 <3
118. Hello, my friend I will meet you at 10 :00 tomorrow.
119. Hi, Idk what's wrong with u today, I noticed that u wrn't fine.
120. Hi, Tita hope u're fine, u've got 8 in TTL , we've got the same mark lol, c u later.
121. you're my BBF, love u, gd luck.

➤ ***Males messages***

1. Hey bro, we have class tomorrow at 8 ?
2. All right. No problem.
3. I gotta go. Thanks.
4. Hiii ; How r u doing my sweet friend miss u so much. If u dn't hav study today we can meet, I will finish at 12. See u.xx.
5. See u later.
6. How are u. I was waiting ur call. Y u didn't come
7. I <3 u.
8. Where r u ?
9. I miss u
10. Good morning how r y ?
11. good morning, bro, I need you now. If there is chichen in the kitchen, bring me three peaces of chicken.

12. Give me some jokes to laugh with I 'm bored , please . I hate living without jokes.
13. if there is a group in Bloc 3 his emotion are destroyed. The group 3 who sufer from catch up session. I love you catch up session.
14. Hi, hope u r doing well, plz take care of u.
15. Happy birthday, wish u the best.
16. Hi, I hope u r doing well, I hope I can see u tommorrow, take care good night.
17. I love you, Good night.
18. Are you coming today
19. I heard that we have a test tomorrow.
20. Where r u
21. can u call me back
22. Do u went 2 school.
23. I need mony
24. Good night
25. I 'm busy now, I will call you back whene I done. by.
26. I am very happy to phone me again.
27. thank you very much for the previous party, I enjoy it.
28. Can you meet me in library ?
29. See you later on.
30. Hey bro bring me keys am in the university
31. I 'm writin 4 u 2 come
32. Good morning sisi please just call me back when you'll be back home
33. yes, I hope so much
34. Good by, see you tomorrow.
35. Hello ! How are you. I think you read my sms and send me the reply
36. are you going to go university today ?
37. I am sorry for you my sister
38. can u come to explain the matter with you ?
39. Hi ! How r y.
40. I hope one day y love me like I love you my lover forever my friend
41. I cann't stay without I miss u god bless you also my friend.
42. Hello, I obliged to see you this morning please.
43. Hi! dear, be taugh, don't let the marks tears you down. I know you are strong.

## V. *1<sup>ST</sup> YEAR STUDENTS' MESSAGES*

### ➤ *Females' messages*

1. G. Morng my friend. It's time. G. l.k.
2. Hi, Good morning. How are you, did you sleep alright last night?

3. I didn't call her sorry
4. Hello, my friend. How are you? How about your family are you fine? are you study in Bac exam nchlh to succeed and combined together
5. Hi, my life How are you? I miss you so much, there is long time I don't see? I love you so much, you are my moon, and my sun in my life.
6. Hello Hanane! I have a good news for you, please call me ☺
7. What's wrong, why did you speak with me like that!!!!
8. Hi! I need you white dress please can you send it with Mila? Thank's in advance.
9. Hi, How R U? I miss u so much. Don't worry I'll keep ya in mind always, love ya see ya soon.
10. CC Hello it's me I'm going now to my room and it's raining pliz bring me my coat with u.
11. Okey darling, have a good trip t.c.
12. Hi! What's up? why aren't u answering ur phone. I need you in something urgent ok. call me wh u get this mg
13. I don't knw i ll ask her today on Saturday i study Arabic.
14. oK sure i ll wait 4 u see u Tomorrow. Tak care bb.
15. Really believe me I have months and months I didn't send her any messages.
16. Call me, please
17. Answer in your fuking phone.
18. good nigh.
19. how are u . baby
20. Hi. What R yu duing
21. In this day you will be another one " Happy Birthday".
22. How are you? are you fine? sorry for the last time.
23. I'm busy to day.
24. Thanks for your message.
25. You look nice to day
26. wr r u ?
27. c u tmrw.
28. I lv u.
29. Call back! Please
30. Ok, take care of yourself.
31. Hello how are you, I wish that you are fine and good healthy.
32. see you Next time
33. Hello. How are you.
34. You should not say this
35. What are you doing
36. good night have a good dreams
37. I miss u it's b n a long time
38. u know the wether is wenderful here when y back we go to the sea but u know I c'nt swim
39. I hope that you are fine
40. I ask allah to guide you and help you every time
41. I will be very happy if you accept my invitation

42. good n8, see u <3
43. It'll be fine, don't worry!!!!
44. Thank u sis
45. bring me your english copybook when we will meet ☺ ☺
46. good night. I luv u <3.
47. call me plz... need ya :o!!
48. where are u?
49. Are u fine?
50. can I see u 2day?
51. Yo mama so fat she doesn't need the internet she's already worldwide.
52. Are you coming? Daaaaaaaaamn you're slow.
53. Are you playing hard to get? :3
54. Need 2 go girl gud n8 sweet dreams luv u baka.
55. Dis is stupid don't do dis again it's not sth funny --
56. Hi baby I wish you were fine and better than the previous days, may allah bless you and protect you, I miss you so much <3
57. Hey bab, wish u'r fine, I missed u so much <3 u. Take care nd good night.
58. Boy!! u'r distrbing me..... Just leave me alone.
59. hate that I lov u boy....--
60. Hi bro, did u enjoyed ur trip to ur grand mother's home
61. I was looking for u all the day, I will kill u.
62. U told me u lik horses, what do u like about them?
63. Hi, h r u??? hope u'r fine. I just wanted to check on u. Tk care plz bye.
64. Helloooo. r u alive??? haven't heard from u since a long time. hope ur fine tk care
65. Hi, I'm fine thnx, hope ur father is fine, wanna talk!!
66. Hi Mina hope you're doin fine so I just wanna say be happy with the vacation for now don't think about anything luv u bye.
67. Mina Mina crazy girl :\* miss u a lot already luv u sist, take care.
68. Hahaha luv u 2 have sweet dreams honey you're my sist not my friend.
69. Good morning Sr How are you? I need you to help me please. I need a paragraph of .....
70. Hi! Nesrine. How're you. I miss you so much BiBicha.
71. Hi Sarita miss you too, when we can meet?
72. Hi Luv hope u r fine Mina, what about studies all fine?
73. Hi sis don't forget to tell mom, I'm not coming next week home.
74. Hi, what's up?
75. Hi dandoun wish ur ok. See u ☺
76. U have suc a lovely family I really enjoyed my self today. believe me ur friendship means a lot to me I'm so glad we met. G night.
77. Yoo mis u, hw r u doing? miss u bae :/ hope ur good
78. hey bae, how's life? I'm gonna chill on da rule, ini givin thanks to di jah.
79. Wanna tell u smtng, hope u r fine. kind missing u.!
80. Do you think I'm fat?
81. The is a site named 8 tracks that search for a music with just the key words.

82. I know that I'm cut. :o
83. Good morning dude! i hope you are good, miss you, when you come back text me plz.
84. Lol! i don't usually text people first but when i do the conversation ends less than one minute.
85. Hi sleepy, Hope u r Good 2day, focuse on your study well, and when you u gonna start your exam?
86. Hi, How are u? you have long time u dont contacte me. are u ok.
87. Happy birthday sister, I wish u the best in your life. love u.
88. Hi friend. are u ok? I dont know if you come this Monday bcz we have to do a test mybe.
89. Call me
90. where R.U.
91. I love you baby
92. Do you speak English, just askin!!!
93. good morning. How are you?
94. I'm going to study now, don't wait for me☺
95. see you later, bye.
96. Cow!! Am waiting you ☹ harry up.
97. I m sorry honey, I am so sick, I call you tomorrow.
98. I am not coming, I have to go at the university I have an exam. Sorry!!!
99. Are you at home? I need your books.
100. I am going to the university, where are you?
101. Why you don't answer, I am calling you all the day.
102. Love u
103. Where r u ? i miss u silly.
104. The text saying whr u go was really old frm like a month ago it jst sent
105. I wrote only one yesterday to say my sister that I won't go out Wednesday 20 april because there will be conflict, good night
106. Hi I missed you I sent to you this message to check on you hope you be better now.
107. Hi dear is we have study today and when
108. I am living
109. Hi koko how r u I miss u so much I'll call u later. Your friend who love u.  
Houda.
110. Hi koki Happy Birthday. I wish all the best for u. have a nice holiday. UR Best  
Friend Hoda
111. I will call u know wait a minit.
112. Hi, not yet I am at home, please wait me there. take care.
113. I don't know when but I think next Thursday, ok bey lili, love you too
114. Oh, I am so sorry, I really forget forgive me I will try tomorrow, I promise,  
good bey see you.
115. Happy birthday my dear uncle I hop for you a successful year with a lot of  
love and happiness. Love you
116. Happy mothers day I love you mom I love you so much. I really love you.

117. Hicham I didn't see you for a long time where are you, I'm hungry right now  
let is meet in our restaurant see you at 11.45.
118. Mom, where are you? I am at home and you didn't come yet?
119. Ahlem my friend miss you so much, I called you last night but you didn't  
answer? god bless you, have a nice day.
120. Dad, my sweet Dady can you pleaz send me some cridites! I don't have.
121. Hi darling how're u doing today? I'm sorry the second message yesterday  
wasn't for u it was for sara please I know it's opened tmrw or not PLZ tell  
me  
gd ngt sweet heart see u
122. So may I meet u at 8 in Adl tmrw if u're in call me tomorrow
123. hiiii I'm fine thnx for asking what about u? I hop u'r fine I have no idea about  
the subject so take car see u mu sweety love u <3
124. happy birthday, hop u hav fun, and long life
125. happy birthday ninou, hop u are good sweety, I wana to say that I miss u love  
u Kiss
126. happy birthday hop u will have 99 year sweety.
127. I really sorry, I can't came I'm so busy today, < 3 <3 <3
128. Mumy , can't come at 15 :00 I will be late ok ?
129. You're all I need , please feel me !!!!
130. I don't have credit, can you call me
131. My friend do you go with me for shopping
132. Did you receive my letter, please tell me.
133. When did the summer camp start?
134. I need help.
135. Ok, so, am so sorry I don't vibre you I was ill and now am in university  
and the connection don't allow me to viber
136. You will return or stay in boumrdes ? me, tomorrow I will be there
137. Ok, thanks, so take care , good night honey.
138. Hi , wish yu are fine, so I'm not coming with you tommorrow I'm busy,  
see you
139. Hi my darling I wish you a happy birthday and a life full in happiness.
140. Good morning, I'm so sorry I can't go with you tommorrow because I'm  
sick. see you.
141. Hi Sio, I'm not coming with you tommorrow in the kouss i'm coming  
With kahina ok. Good night
142. I don't like it really.
143. They are saying that the 1st semester was the easiest one.
144. Hi !!! where r u !? I'm waiting for 15 mn.
145. I don't think m coming tomorrow I'm so tired sorry <3 ☺

146. I miss you too girl ! let's have lunch together tomorow.
147. how are you ? what are you doing ?
148. My days are boring I went back to study.
149. do you like your marks ? good bye
150. I'm not alone. mom is everything in my life.
151. I m close to Bouira c m n help m with bags
152. I didn't do well in the exam n srly didnt answer when u call I was busy
153. C m to the deppertmnt Mrs Kadi is givin marks
154. G M chichi How are u, I wait for you tomorrow, please come.
155. I can't write all this, please help me
156. Hi mimi I miss you so much honey. you are my best friend and I can't  
live without looking for you.
157. Hey mom I missed you so much today, love you ☺
158. Where are you !!?
159. U guys need to get here immediately! :0
160. My friend I'm very hasty can you come back to the university please.  
I'm waiting.
161. My sweetheart can you tell me how are you I'm very worry ?do you  
drink your drugs ?do you have fever ?...
162. no sis I didn't get a good one u know why ☺
163. sorry can't send my pick by.
164. miss u bro it been long time see u Saturday in the match khkhkh.
165. I am not the only one who struggle in life, every person has his battle  
but I am confident of myself.
166. Iam with you always and forever.
167. Just being with you, is enough to keep me alive. but where are you and  
Where Iam....always and forever.
168. A part of me is missing I was thinking ! A part of me is missing I was  
saying ! a part of me has a little beet changed this while this part is  
killing me softly. I need you.
169. I'm missing you my sweety.

➤ ***Males' messages***

1. Good morning baby love have a nice day I don't forget that I love you more than anything
2. Hey dude where are you?
3. Good night sweet heart love you so much
4. Hi. Sara I'm not coming today.
5. Hello, we didn't study today

6. I love the air over your head, and everything you touches and every words you says, I love all
7. Your looks, and all your actions and you entirely, I LOVE YOU
8. Bye last msg with a kiss :xx
9. Good morning have a lovely day enjoy and be well.
10. Good night sweet dreams and sleep tight.
11. it's ok dear wllh mrml, see you.
12. Wish u a nice day, sir.
13. Fine take care
14. I am working
15. just take it easy and do it
16. never mind
17. No there is only 3 cuz im 19, get out of there before u loose more of ur head come to study in my boring class.
18. Ok that looks great, and I ll repeat it again u look sssso cute.
19. Are u serious?-\_ - its not my birthday are u high? wake uuuup !!!!
20. Hi, How are you, I'm in Boumerdes and you?
21. I'm not afraid to stand alone.
22. Hey, Fati I missed u my girl is there any good news.
23. My ZaZa it looks beautifu, isn't it HHHHH
24. I 'm sorry i was studying at that time really sorry but we'll talk later ok take care.
25. Fxxxxx society I hate to pretend and you Know why because it's painful I do not pretend because am coward this is not the life i want to live i hope god forgive me.
26. the only thing that make us strong whene we're broken is having a complete faith that all matters are in the hands of allah and that life will go on no matters what happens.
27. I've been waiting u for a while! where are you bro
28. I been playing in a soccer club, I was a very intelligent player.
29. I'am just here bro, I'am feestyling, football of course, I'am really tired.
30. How r u my love
31. Thank you for this game I really liked it.
32. Lot of laught.
33. Hey girl, How r u ?
34. We r just friendz
35. How 're you doing.
36. The scurity is preaty good in our country.
37. See you later.
38. Wat's up r u coming tomorrow.

39. Hi, I left my jacket in your place so can u get it for me.
40. Hi have you seen the blonde chick the other day, man she loocked so good, I'm gonna talk to her.
41. I tell you that last time I was so tired because I was in a fete and I can go to you please forgive me ByBy
42. I am so happy to you because you are every day the one continued as this ?????
43. Tommorow please if you like go to me at shop

**APPENDIX B: GENERAL CORPUS RESULTS**

<i>Standard English reference forms</i>	<i>Lexism variant forms and occurrence</i>	<i>N° of lexisms</i>	<i>N° of lexisms occur</i>	<i>Lexism occur %</i>
You	u (379), y (28), yu (13), yo (02), uuuuu (01), ya (05), youuu (02), yo (01), yoo (01)	09	432	4.74%
Are	r (74), ar (05), re (16)	03	95	1.04%
Please	plz (33), plis (02), pls (02), pease (01), pleaz (01), pliz (01), ple (01), p (01), pleaaase (01)	09	43	0.47%
Your	yr (06), yur (05), ur (26), ure (01), you (01)	05	39	0.42%
Tomorrow	tmrw (09), tomrw (04), tom (04), tomorw (02), tmr (04), tomrow (01), tomoro (01), tomorrow (01), tomor (01), 2morrow (01), tmw (02), tommorrow (02), tommorow (01)	13	33	0.36%
Good	gd (11), g (11), gud (01), g'd (01), god (01)	05	25	0.27%
Brother	bro (18), brothr (01), brothe (01)	03	20	0.21%
Because	bcz (10), cuz (05), cauz (02), bec (01), bcs (01), cause (01)	06	20	0.21%
Love	luv (10), lov (04), lv (04), looove (01)	04	19	0.20%
See	c (13), se (04)	02	17	0.18%
And	n (05), nd (11)	02	16	0.17%
Thanks	thnx (10), thanx (02), tks (01), thank's (01)	04	14	0.15%
Sister	sist (07), sistr (01), sis (06)	03	14	0.15%
Have	hav (05), hv (05), ve (02), hve (01)	04	13	0.14%
Will	wil (08), wl (01), ll (04)	03	13	0.14%
You are	ur (12)	01	12	0.13%
Laughter expressions	hahaha (02), hhhhh(02), hahahaha (01), khkhkh (01), lol (05)	05	11	0.12%
I am	Iam (02), im (02), I'am (05), I m (02)	04	11	0.12%
Don't	dnt (05), dont (04), do't (01), dn (01)	04	11	0.12%
Am (10)	m (10)	01	10	0.10%
To	t (04), 2 (06)	02	10	0.10%
Hope	hop (05), hp (03), hpe (01)	03	09	0.09%
Take	tk (07), t (01), tak (01)	03	09	0.09%
Good night	g8 (04), good n8 (03), gd ngt (01),	04	09	0.09%

	good nit (01)			
Hello	helo (06), helloooo (01), hell (01), helle (01)	04	09	0.09%
For	4 (07), fr (02)	02	09	0.09%
Babe	bb (07), bab (01)	02	08	0.08%
Good morning	gm (03), good m (02), G. morng (01), good mrng (01), g morning (01)	05	08	0.08%
Too	2 (07)	01	07	0.07%
When	wen (02), wh (01), wn (02), whene (02)	04	07	0.07%
Something	sth (05), smtng (01), smthg (01)	03	07	0.07%
Hi	hii (03), hiiii (02), hy (02)	03	07	0.07%
Today	2day (05), to day (02)	02	07	0.07%
That	dat (05), da (01)	02	06	0.06%
Doing	doin (04), duing (01), dng (01)	03	06	0.06%
Cannot	cnt (02), cant (01), c'nt (01), cann't (01), cn't (01)	05	06	0.06%
Yourself	urself (03), yourself (01), yself (01)	03	05	0.05%
Care	cr (03), car (01), c (01)	03	05	0.05%
Madam	mdm (04), madm (01)	02	05	0.05%
Message	msg (04), mg (01)	02	05	0.05%
Come	com (03), cm (01), kom (01)	03	05	0.05%
With	wid (03), withe (02)	02	05	0.05%
Bye	bey (02), byby (01), bay (01), babay (01), by (02)	05	05	0.05%
Not	nt (04)	01	04	0.04%
This	dis (04)	01	04	0.04%
Very	vry (04)	01	04	0.04%
Waiting	waitin (04)	01	04	0.04%
Where	whr (02), wr (01), wher (01)	03	04	0.04%
The	th (03), di (01)	02	04	0.04%
Miss (verb)	ms (01), missss (01), miiiiis (01), mis (01)	04	04	0.04%
Good bye	gbay (01), good bey (01), good by (01), gby (01)	04	04	0.04%
Boumerdes	boumerde (02), bmrds (01), boumrde (01)	03	04	0.04%
Want to	wonna (02), wana (01), wanna (01)	03	04	0.03%
About	abt (02), bout (01)	02	03	0.03%
What	wat (03)	01	03	0.03%
Night	n8 (03)	01	03	0.03%
How	hw (03)	01	03	0.03%
me (03)	m (03)	01	03	0.03%
Just	jst (03)	01	03	0.03%
Really	rly (02), realy (01)	02	03	0.03%
Like (verb)	lik (02), lyk (01)	02	03	0.03%

So	soooo (02), ssoo (01)	02	03	0.03%
My	ma (02), may (01)	02	03	0.03%
How are	How're (02), how'are (01)	02	03	0.03%
Family	famil (01), family (01), famill (01)	03	03	0.03%
Credits	cridites (01), gredit (02)	02	03	0.03%
Luck	lck (03)	01	03	0.03%
Won't	w'ont (02), wont (01)	02	03	0.03%
Be	b (02)	01	02	0.02%
Block	B (02)	01	02	0.02%
Going	goin (02)	01	02	0.02%
Know	knw (02)	01	02	0.02%
Group	g (02)	01	02	0.02%
Haven't	havnt (01), hvnt (01)	02	02	0.02%
Language	lge (02)	01	02	0.02%
I would like to know	Idk (02)	01	02	0.02%
Them	thm (02)	01	02	0.02%
Was	ws (02)	01	02	0.02%
How are you?	hru (02)	01	02	0.02%
What	wht (02)	01	02	0.02%
Fine	fn (02)	01	02	0.02%
Department	dpt (01), deppartmnt (01)	02	02	0.02%
Give	giv (01), gv (01)	02	02	0.02%
Welcomed	welkomed (01), wlcmd (01)	02	02	0.02%
Friends	friendz (01), frienz (01)	02	02	0.02%
Tough	taugh (02)	01	02	0.02%
Some	som (01), sm (01)	02	02	0.02%
Happy	hpy (01), h (01)	02	02	0.02%
Number	num (01), numbr (01)	02	02	0.02%
University	uni (01), univers (01)	02	02	0.02%
Hurry	hury (01), harry (01)	02	02	0.02%
Good luck	good lck (01), g.l.k (01)	02	02	0.02%
How is	how's (02)	01	02	0.02%
When	whene (02)	01	02	0.02%
Didn't	didnt (01), didn (01)	02	02	0.02%
Thank	thaaaank (01), thak (01)	02	02	0.02%
How	haw (01), h (01)	02	02	0.02%
Everytime	every time (01)	01	02	0.02%
Alright	all right (01)	01	02	0.02%
Sweetheart	sweet heart (01)	01	02	0.02%
Yes	ys (01), yah (01)	02	02	0.02%
These	diz (01), dis (01)	02	02	0.02%
Classroom	classrom (01), classrome (01)	02	02	0.02%
????	BCNU (02)	01	02	0.02%
Birth	b (01)	01	01	0.01%
Weather	wether (01)	01	01	0.01%
Whether	wether (01)	01	01	0.01%
You have	u've (01)	01	01	0.01%

Need	nd (01)	01	01	0.01%
Deadline	d.dline (01)	01	01	0.01%
We will	w'll (01)	01	01	0.01%
Kiss and hug	x0x0 (01)	01	01	0.01%
Want	wnt (01)	01	01	0.01%
Find	fnd (01)	01	01	0.01%
Giving	givin (01)	01	01	0.01%
Worry	wrry (01)	01	01	0.01%
Help	hlp (01)	01	01	0.01%
Obliged	oblge (01)	01	01	0.01%
Sorry	srry (01)	01	01	0.01%
Fuck	fxxxxx (01)	01	01	0.01%
Fucking	fuking (01)	01	01	0.01%
Life	lif (01)	01	01	0.01%
Beautiful	beautifu (01)	01	01	0.01%
Many	mny (01)	01	01	0.01%
Leave	liv (01)	01	01	0.01%
Looked	looked (01)	01	01	0.01%
Next	nxt (01)	01	01	0.01%
Form	frm (01)	01	01	0.01%
Asking	askin (01)	01	01	0.01%
Been	bn (01)	01	01	0.01%
Maybe	mybe (01)	01	01	0.01%
Security	scurity (01)	01	01	0.01%
Oh my god	OMG (01)	01	01	0.01%
Course	cours (01)	01	01	0.01%
Everything	evrthing (01)	01	01	0.01%
Later	ltr (01)	01	01	0.01%
Disgust	ugh (01)	01	01	0.01%
Normally	nrml (01)	01	01	0.01%
Up	uuuup (01)	01	01	0.01%
Checking	cheking (01)	01	01	0.01%
Believe	beliv (01)	01	01	0.01%
Alone	alon (01)	01	01	0.01%
????	pnd (01)	01	01	0.01%
Celebrating	celebratin (01)	01	01	0.01%
Darling	darliiiiing (01)	01	01	0.01%
Surprise	surpriiiiise (01)	01	01	0.01%
Suffer	sufer (01)	01	01	0.01%
I have got to go	gotta (01)	01	01	0.01%
Best boyfriend	bbf (01)	01	01	0.01%
Minute	minit (01), mn (01)	02	01	0.01%
Writing	writin (01)	01	01	0.01%
Money	mony (01)	01	01	0.01%
Everytime	evrytime (01)	01	01	0.01%
Welcome	wlcm (01)	01	01	0.01%
Unpredictable	inpredictible (01)	01	01	0.01%
Text (verb)	txt (01)	01	01	0.01%

Text (noun)	txt (01)	01	01	0.01%
Succeeded	sceded (01)	01	01	0.01%
Honey	honie (01)	01	01	0.01%
Birthday	birthy (01)	01	01	0.01%
Disturbing	distrbing (01)	01	01	0.01%
Damn	daaaaamn (01)	01	01	0.01%
Such	suc (01)	01	01	0.01%
Wonderful	wenderful (01)	01	01	0.01%
Module	modul (01)	01	01	0.01%
Problem	prblm (01)	01	01	0.01%
Pleasure	pleasur (01)	01	01	0.01%
Back	bck (01)	01	01	0.01%
There (subject)	ther (01)	01	01	0.01%
Much	mch (01)	01	01	0.01%
New	nw (01)	01	01	0.01%
Wanted	wantd (01)	01	01	0.01%
Kisses	ksz (01)	01	01	0.01%
Block	B (01)	01	01	0.01%
Weekend	wknd (01)	01	01	0.01%
Coming	comining (01)	01	01	0.01%
Dear	dr (01)	01	01	0.01%
What's	wats (01)	01	01	0.01%
But	bt (01)	01	01	0.01%
Doesn't	doesnt (01)	01	01	0.01%
Freedom	fredm (01)	01	01	0.01%
Filled	fild (01)	01	01	0.01%
Talking	talkin (01)	01	01	0.01%
See you	sya (01)	01	01	0.01%
Say	sy (01)	01	01	0.01%
I have	I'v (01)	01	01	0.01%
Forget	forge (01),	01	01	0.01%
Take care	tc (01)	01	01	0.01%
Things	thinkz (01)	01	01	0.01%
Should	shud (01)	01	01	0.01%
Food	fd (01)	01	01	0.01%
English	eng (01)	01	01	0.01%
Tonight	t8 (01)	01	01	0.01%
As soon as possible	asap (01)	01	01	0.01%
Answer	answ (01)	01	01	0.01%
Sir	sr (01)	01	01	0.01%
Catch up	cutshap (01)	01	01	0.01%
Tell	tel (01)	01	01	0.01%
Hein	hein (01)	01	01	0.01%
Questions	qsts (01)	01	01	0.01%
Knowledge	knowldg (01)	01	01	0.01%
Never	nevr (01)	01	01	0.01%
Again	agn (01)	01	01	0.01%

Tired	tird (01)	01	01	0.01%
Sure	sur (01)	01	01	0.01%
Flower	flowr (01)	01	01	0.01%
Kisses	xx (01)	01	01	0.01%
Could	cld (01)	01	01	0.01%
Possible	posibl (01)	01	01	0.01%
Busy	beasy (01)	01	01	0.01%
Ask	axe (01)	01	01	0.01%
Wish	whish (01)	01	01	0.01%
Sincerely	sinserly (01)	01	01	0.01%
They	dy (01)	01	01	0.01%
Laugh (verb)	laught (01)	01	01	0.01%
There	the (01)	01	01	0.01%
A bit	a beet (01)	01	01	0.01%
Any	ini (01)	01	01	0.01%
Weren't	wrn't (01)	01	01	0.01%
With	withe (01)	01	01	0.01%
Pieces	peaces (01)	01	01	0.01%
Had	hat (01)	01	01	0.01%
Why	y (01)	01	01	0.01%
Happy birthday	h b (01)	01	01	0.01%
See you	c u (01)	01	01	0.01%
Cute	cut (01)	01	01	0.01%
Pretty	preaty (01)	01	01	0.01%
Alive	alife (01)	01	01	0.01%
Come back	come-back (01)	01	01	0.01%
I will	ill (01)	01	01	0.01%
Mother's day	mothers day (01)	01	01	0.01%
We	w (01)	01	01	0.01%
Viber (verb)	vibre (01)	01	01	0.01%
Best	bestest (01)	01	01	0.01%
Semiotics	semiotic (01)	01	01	0.01%
I have got to go	gotta	01	01	0.01%
?????	ol	01	01	0.01%
Freestyling	feestyling (01)	01	01	0.01%
Going to	gonna (01)	01	01	0.01%
Lose	loose (01)	01	01	0.01%
Let's	lets (01)	01	01	0.01%
It's	I'ts (01)	01	01	0.01%
?????	o (01)	01	01	0.01%
<b>Total</b>		<b>399</b>	<b>1323</b>	<b>100%</b>

**APPENDIX C: GENERAL CORPUS LEXISMS ACCORDING TO LYDDY ET AL  
(2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	i (43), hi (03), hello (02), if (02), gm (01), we (02), gby (01), helo (01), plz (01), do (01), miss (Mrs, 01), by (04), fatima (01), have (01), ghani (01) , they (01), sara (03), g morning (01), thanks (02), sorry (03), gnight (01), please (06), thnx (02) , jaz (01), see u (02), warm (01), sima (01), thanx (01), where (06), u (05) , cnt (01), amira (01), sousou (01), don't (01), good night (04), how (02), you (03), bring (01), bye (02), happy (02), semio (01), am (01), mr (01), foudil (01), oh (01), hey (05), wish (01), have (01), i'm (01), im (01), such (01), love (01), there (01), good luck (01), call (01), don't (01), didactics (01), are (06), bcs (01), try (01), good nit (01), thank you (02), can (05), see you (03), ok (02), send (01), hurry (01), thank u (01), miss (04), hop (01), waitin (01), love u (01), take care (01), hope (05), missed u (01), maybe (01) ,wanted (01) , waky (01) , r (01) , c u (01), it's (03), lol (01), show (01), what (01), life (01), you (03), big (01), good morning (01),good (03), wr (01), c (01), see (01), hate (01), call (01), need (01), r (01), haven't (01) , thank (01), sisi (01), yes (01), can (01), bring (01), english (01), believe (01), kind (01), happy birthday (01), what (01), do (03), good bye (01), mom (01), no (01), april (01), take care (01), lili (01), god (01), mimi (01), just (01), but (01), always (01), a part (01), never (01), its (01), wake (01), the (01)
<b>2. Accent stylisation</b>	yah (yes , 01), ya (you, 05), cuz (05), dat (05), cauz (02), da (that, 01), dis (this, 04), babay (01), byby (01), wanna (02), wana (01), wanna (01),wid (with, 03), ma (my, 02), gotta (01), diz (these, 01), sya (see you, 01), di (the, 01), dy (they, 01), hat (had, 01), gonna (01), gotta (01)
<b>3. Letter/ number homophones</b>	u (379), 2morrow (01), c ( see 11), n (and 05), g8 (good night 04), n8 (night, 03), 2day ( 05), t8 (tonight, 01), r (are, 74), y (why, 01), 2 (too, 07), 4 ( for, 07), 2 (to, 06) , b (be, 03) , c u (see you, 01)
<b>4. Missed punctuation</b>	dont (04), wont (01), didnt (01) , doesnt (01), im (02), cant (02), Im (02), lets (01), its (it's, 01), ill (01), mothers day (01)

<p><b>5. Phonetic/nonconventional spelling</b></p>	<p>pleaz (01), pliz (01), gud ( 01), luv (10), thnkx (10), thanx (02), ur (you are, 12), nit (01), kom (01), welkomed (01), friendz (01), frienz (01), haw (01), liv (leave, 01), thinkz (things, 01), shud (01), plis (02), ur (your, 26), ure (your, 01), urself (03), wen (02), wat (03), wats (what is, 01), ini (any, 01), axe (ask, 01), bay (bye, 01), gbay (01), u've (01), lyk (01) , may (my 01) , cutshap (01)</p>
<p><b>6. G clippings</b></p>	<p>doin (04), goin (02), givin (01), askin (01), celebrati (01), writin (01), talkin (01), waitin (04),</p>
<p><b>7. Onomatopoeic/exclamatory</b></p>	<p>hahaha (02), hhhh(02), hahahaha (01), khkhkh (01), yo (01), yoo (01), ugh (01), hein (01), youuuu (02), pleaaaase (01), thaaaaank (01), loooove (01), helloooo (01), hii (03), hiiiiii (02), misssss (01), miiiiis (01), uuuup (01), darliiiiing (01), surpriiiiise (01), daaaamn (01), soooo (02), ssoo (01), :xx (kisses, 01), xoxo (kisses and hugs, 01) , uuuuu (01)</p>
<p><b>8. Shortenings</b></p>	<p>tomor ( 01), tom (04), bro (18), sist (07), sis (06), wh (when, 01), num (01), univ (01), bec (01), univers (01), eng (01), answ (01), ple (01), the ( there, 01)</p>
<p><b>9. Other clippings</b></p>	<p>yo (02), ar (05), brothe (01), thank (thanks, 04), lov (04), se (04), hav (05), wil (08), th ( the, 01), bab (01), hop (01), car (01), com (03), boumerde (02), lik (02), giv (01), som (01), lif (01), beautifu ( 01), cours (01), alon (01), minit (01), famil (01), suc (such, 01), modul (01), pleasur (01), ther (01), tel (01), knowledg (01), sur (01), wher (01), I'v (I've, 01) , forge (01), mis (miss, 01), hell (hello, 01), tak (01), you (your, 01), by ( bye 02), cut (cute, 01), semiotic (01), didn (01)</p>
<p><b>10. Misspellings</b></p>	<p>classrome (01), vibre (viber 01), bestest (01), helle (01), comining (01), loose (lose 01), duing (01), tommorrow (02), deppartmnt (01), bey (bye 01), harry up (01), unpredictable (01), cridites (01), honie (01), taugh (tough, 02), wenderful (01), sinserly (01), peaces (pieces, 01), withe (01), laught (01), wish (01), beasy (01), a beet (a bit, 01), loocked (01), whene (02), familly (01), to day (today, 02), preaty (pretty, 01), alife (alive, 01), every time (everytime, 02), all right (alright, 02), sweet heart (sweetheart,02), I'have (02), how'are (01), how're (02), thank's (01), cann't (can't, 01) , iam (02), I'am (05) How's ( how is , 02) , fxxxxx (fuck, 01), w'ont (01), hy (02), I'ts (it's 01), tommorow (01)</p>
<p><b>11. Initialisms</b></p>	<p>hru (how are you?, 02), g (good, 11), t (take, 01), c (care, 01), omg (01), bbf (best boyfriend, 01), tc (take</p>

	care, 01), b (block, 01), m (morning, 01), p (please, 01), b (birth, 01), h (happy, 01), m (am, 10), m (me, 03), g ( group, 02), t (to, 04), asap (01), lol (05), gm (good morning, 03), H B (happy birthday, 01), idk (I would like to know, 02), w (we 01)
<b>12. Contractions</b>	madm (01), fild (filled, 01), beliv (01), re (16), fr (for 02), dn (doing 01), lck (03), feestyling (freestyling 01), wether (weather, 01), wether (whether, 01), yu (13), plz (33),pls (02), pease (01), yr (06), yur (05), tmrw (09), tomrw (04), tomorw (02), tmr (04), tomrow (01), tomoro (01), tomorrow (01), tmw (02), gd (11), god (good, 01), brothr (01), bcz (10), bcs (01), tks (thanks, 01), thak (thank, 01), lv (04), sistr (01), hv (05), ve (02), hve (01), wl (01), ll (will, 04), bb (babe, 07), hpe (01), hp (03), dnt (05), tk (07), helo (06), sth (05), smtng (01), smthg (01), dng (01), youself (01), yslf (01), mrng (01), morng (01), cr (care, 03), gd (good 01), ngt (night, 01), mdm (04), msg (04), mg (01), cm (01), wn (when, 02), hw (how, 03), jst (just, 03), nt (not, 04), vry (04), whr (02), wr (01), rly (02), realy (01), ms (miss verb, 01), bmrds (01), knw (02), lge (02), thm (02), ws (02), wht (02), fn (fine, 02), dpt (01), gv (01), wlcmd (01), havnt (01), hvnt (01), sm (some, 01), hpy (01), numbr (01), hurry (01), nd (need, 01), d.dline (01), bn (been, 01), mybe (01), scurity (01), evrthing (01), ltr (01), cheking (01), frm (01), nxt (01), mny (01), fuking (01), srly (01), hlp (01),.l.k (luck 01), lck (luck, 01), wrry (01), fnd (find, 01), wnt (want, 01), sufer (01), mn (minute, 01), mony (01), evrytime (01), wlcmm (01), txt (01), birthy (birthday, 01), distubing (01), prblm (01), bck (01), mch (much, 01), nw (new, 01), wantd (01), wknd (01), classrom (01), dr (01), bt (but, 01), fredm (01), sy (say, 01), fd (food, 01), sr (sir , 01), qsts (01), gby (01), nevr (01), agn (01), tird (01), flowr (01), ys (01), cld (01), posibl (01), abt (02), cnt (can't, 02), ksz (01) , w'll (we will, 01), wrn't (weren't, 01), sceded (succeeded, 01), h (how, 01), do't (don't , 01), nrml (normal, 01), gby (01), cause (01), tk (02), wr (where 02), cr (care 02) , bout (about, 01) , g'd (good, 01), mach (match 01), cn't (01)
<b>13. Semantically unrecoverable</b>	Pnd (01), ol (01), o (you or oh ? 01), BCNU (02)

**APPENDIX D: FEMALES' LEXISMS OCCURRENCES ACCORDING TO LYDDY  
ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	heddouche (01), ibersienne (02) , i (43), boumrde (01), helle (01), helo (01) , hi (30), g8 (01), mrs (02), bay (01), g night (01), semiotic (01), thnx (01), thank you (01), wats (01), hey (01), g morning (01), mrs (02), hey (02)
<b>2. Accent stylisation</b>	wid (with, 02), dat (that 03), yo (hello 01), cuz (01), dy (they 01), ma (01), dis (01), diz (these 01)
<b>3. Letter/ number homophones</b>	u (60), c ( see 05), n (and 02), g8 (good night 01), 2day (01), r (are, 06), b (be 01), m (I am 01), m (me 03) , n ( and 02)
<b>4. Missed punctuation</b>	didnt (01), Im (01)
<b>5. Phonetic/nonconventional spelling</b>	ur ( you are 02), welkomed (01), ur ( your 06), bay (01), wats (01) , nd (01),
<b>6. G clippings</b>	waitin (01), givin (01)
<b>7. Onomatopoeic/exclamatory</b>	khkhkh (01), ugh (01), xx (01???)
<b>8. Shortenings</b>	bro (03), sist (02), sis (01), num (01)
<b>9. Other clippings</b>	wil (03), giv (01), alon (01), lif (01), hop (01), modul (01), w (we 01), semiotic (01), I'v (01)
<b>10. Misspellings</b>	tommorrow (02), tommorow (03), withe (01), helle (01), bestest (01), honie (01), a beet (01), beneficts (01), famill (01), alife (01), evrytime (01), comining (01), vibre (viber 01), gredit (01), deppertmnt (01), Iam (02), I'ts (01)
<b>11. Initialisms</b>	lol (04), m (morning 02), v (have, 01), BBF (01), Idk (01)
<b>12. Contractions</b>	tomrow (01), tmw (01), tomrw (01), tomorrow (01), yr (02), cause (01), bcs (01), wl (01), bb (04), hv (02), msg (02), bmrde (01), boumrde (01), helo (01), gv (01), hvnt (02), wn (01), beliv (01), ws (01), mny (01), cheking (01), gd (01), tk (01), sceded (01), birthy (01), wat (01), prblm (01), abt (01), thak (01), wnt (01), fredm (01), fild (01), sy (01), smthg (01), wether (01), dnt (01), txt (01), srry (01), mn (minute 01), plz (06) , bcz (02),
<b>13. Semantically unrecoverable</b>	Pnd (01)

**APPENDIX E: MALES' LEXISMS OCCURRENCES ACCORDING TO LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	i (01), good (02), can (02), english (02), thank (01), its (01), its (01), by (01), yes (01), are (01), take (01), hurry (01), dnt (01), you (01), bring (01), there (01), hey (01), thnx (01), see (01), what (01)
<b>2. Accent stylisation</b>	wid (with, 01), dat (that 03), cuz (03), cauz (02), gotta (01), byby (02) , gonna (01), wanna (01),
<b>3. Letter/ number homophones</b>	u (88), 2day (01), c (see 01), n (and 01), r (are, 18), 4 ( for, 03), m (me 01), B (block 01), 4 (for 03)
<b>4. Missed punctuation</b>	dont (01), lets (01), cant (01), im (01)
<b>5. Phonetic/nonconventional spelling</b>	frienz (01), bay (01), wat (01), thanx (01)
<b>6. G clippings</b>	doin (02), goin (02), writin (01)
<b>7. Onomatopoeic/exclamatory</b>	Uuuuup (01), thaaaaank (01), xoxo (kisses and hugs 01), hahaha (03), hhhhh (01) xx (01), soooo (01), ssoo (01), hiii (01),
<b>8. Shortenings</b>	bro (13), tom (04), y (you 05)
<b>9. Other clippings</b>	wher (01), hav (01), com (01), beautifu (01), boumerde (01) , ar (03)
<b>10. Misspellings</b>	tommorrow (04), tommorow (01), loocked (01), preaty (01), peaces (01), loose (01),whene (02), laught (01), taugh (tough 01), fxxxxx (01), how're (01), cann't (01), I'am (03)
<b>11. Initialisms</b>	Idk (01), g (good 01), hru (02)
<b>12. Contractions</b>	tmrw (04), msg (02), fr (02), mony (01), bck (01), knw (01), hlp (01), dpt (01), mach (01), nt (01), youself (01), ltr (01), jst (01), wrry (01), hw (01), vry (01), nrml (01), scrurity (01), feestyling (01), sufer (01), lge (02), lck (luck 03), dng (01), gd (good 03), plz (05), dn (01), dnt (04), bcz (02), thnx (02), tks (thanks 01), cn't (01)
<b>13. Semantically unrecoverable</b>	pnd (01)

**APPENDIX F: 1<sup>ST</sup> YEAR LEVEL LEXISMS OCCURRENCES ACCORDING TO  
LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	is (01), it (02), let's (01), no (01), man (01), did (01), are (03), never (01), there (01), you (02), please (02), really (01), why (02), can (01), sweet (02), love (04), miss (01), come (01), that (01), we (01), u (03), but (01), see (06), do (03), pliz (01), have (05), the (01), wake (01), get (01), it's (04), when (01), she's (01), luv (01), tc (01), call (02), don't (02), need (01), where (03), what (01), bring (01), english (01), gud (01), i (06), ok (01), good (05), how (02), babay (01), sorry (02), every (01), wr (01), c (02), take (03), may (05), wish (01), enjoy (01), just (01), r (01)
<b>2. Accent stylisation</b>	ya (yes 04) , dis (this 02), cuz (01), byby (01)
<b>3. Letter/ number homophones</b>	u (44), 2day (01), c (see 05), t (to 01), r (are, 08), n8 (night 02), n (and 02), m (I'm 01), m (me 03)
<b>4. Missed punctuation</b>	didnt (01), im (01)
<b>5. Phonetic/nonconventional spelling</b>	pliz (01), friendz (01), luv (02), gud (01), nd (and 01), ), ur (your 02)
<b>6. G clippings</b>	givin (01)
<b>7. Onomatopoeic/exclamatory</b>	uuuuup (01), daaaamn (01), hhhhh (01) soooo (01), khkhkh (01)
<b>8. Shortenings</b>	bro (03), ar (03), y (you 01), sis (02), wh (when 01),
<b>9. Other clippings</b>	beautifu (01), boumerde (01), tak (01), yo (you 01), bab (01),
<b>10. Misspellings</b>	tommorrow (01), tommorow (01), loocked (01), preaty (01), family (01), wenderful (01), deppertmnt (01), alife (01), whene (01), laught (01), fxxxxx (01), how're (01), duing (01), c'nt (01), Iam (02)
<b>11. Initialisms</b>	g (good 03), tc (take care 01), m (morning 01)
<b>12. Contractions</b>	tmrw (01), tomorow (01), mornng (01), sth (01), bn (been 01), lv (love 01), wr (where 01), knw (01), fuking (01), scurity (01), wat (01), srry (01), msg (01), nrml (01, wether (weather 01), lk (luck 01), feestyling (01), yu (you 01), mg (01), bb (01),
<b>13. Semantically unrecoverable</b>	o (yo or oh)

**APPENDIX G: 2<sup>ST</sup> YEAR LEVEL LEXISMS OCCURRENCES ACCORDING TO  
LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	see (05), happy (02), please (04), sara (01), be (02) don't (01), hv (01), ok (02), g'd (01), c (02), what's (01), hury (01), sleep (01), are (02), can (06), where (01), bring (02), am (02), it's (01), do (01), thank (02), good (03), we (02), ple (01), take (02), by (03), come (01), how (01), if (01), hope (02), plz (01), wish (01), yes (01), god (01), my (01), u've (01), we've (01), you're (01), love (01), gd (01), too (01), ur (01), life (01), you (01)
<b>2. Accent stylisation</b>	gotta (01), bay (01), cuz (01)
<b>3. Letter/ number homophones</b>	u (50), c (see 02), r (are, 14), n8 (night 04), b (block 01)
<b>4. Missed punctuation</b>	//////////
<b>5. Phonetic/nonconventional spelling</b>	luv (01), nd (and 01), nit (01), ur (02), welkomed (01), urself (01)
<b>6. G clippings</b>	writin (01), waitin (01)
<b>7. Onomatopoeic/exclamatory</b>	Hiiii (01), youuuu (01), missss (01),
<b>8. Shortenings</b>	bro (03), y (you 06), sis (01), tom (04), uni (01), ple (01)
<b>9. Other clippings</b>	hav (01), tak (01), forge (01), ar (03), yo (02), hell (hello 01)
<b>10. Misspellings</b>	tommorrow (01), tommorow (01), beasy (01), classrome (01), famill (01), honie (01), whene (01), withe (01)
<b>11. Initialisms</b>	lol (01), bbf (01), idk (01)
<b>12. Contractions</b>	wlcm (01), rly (01), birthy (01), evrytime (01), msg (01), txt (01), hury (01), thak (thank 01), mony (money 01), sufer (01), hv (02), re (01), bcz (01), bb (babe 03), sth (03), tmrw (04), yu (02), gd (02), sceded (01), havnt (01), plz (02), g'd (01)
<b>13. Semantically unrecoverable</b>	////////////////////////////////////

**APPENDIX H: 3<sup>rd</sup> YEAR LEVEL LEXISMS OCCURRENCES ACCORDING TO  
LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	b (01), tell (01), don't (02), we (01), meet (03), already (01), where (06) thanks (02), plz (02) by (04), ur (01), congratulations (01), you (01), love (02) call (01), how (03) what (02), it's (01), are (01), please (03), can (01), i (02) thank (03) if (02), mrs (01), try (01), as (01), say (01), it (03), so (01), what's (02), my (01), call (01), good (01), take (03), goodbye (01), english (02), have (01), hurry (01), wait (01), hru (01), send (01), join (01), me (01), dnt (01), why (01), waitin (01), wat's (01), hop (01), tk (01), wats (01), miss (01)
<b>2. Accent stylisation</b>	////////////////
<b>3. Letter/ number homophones</b>	u (45), c (see 01), n (and 01), 2day (02), r (are, 06), b (block 01)
<b>4. Missed punctuation</b>	////////////////
<b>5. Phonetic/nonconventional spelling</b>	nd (and 05), oblgde (01) , wats (01), wat (01)
<b>6. G clippings</b>	doin (01), goin (01), waitin (01)
<b>7. Onomatopoeic/exclamatory</b>	////////////////
<b>8. Shortenings</b>	bro (05), y (you 06), num (01), sist (02), bec (01)
<b>9. Other clippings</b>	Hop (01), som (01), tak (01), othe (other 01), modul (01), brothe (01), ar (01)
<b>10. Misspellings</b>	tommorrow (01), familly (01), comming (01)
<b>11. Initialisms</b>	lol (01), idk (01)
<b>12. Contractions</b>	lv (01), fn (01), gd (01), lge (02), bb (babe 01), dnt (01), wn (01),bmrdr (01), ther (their 01), yr (your 02), prblm (01), bck (01), thm (02), tmrw (01), tomrw (01), tomorw (01), tomrow (01), vry (01), tody (01), bcz (02), bcs (01), plz (07)
<b>13. Semantically unrecoverable</b>	ol

**APPENDIX I: MASTER 1 LEVEL LEXISMS OCCURRENCES ACCORDING TO  
LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
1. <b>Missed capitalisation</b>	warm (01), happy (01), how (04), plz (01), mr (02), at (02), bye (04), what (01), thanx (02), take (06), see (04) wish (03), love (02) thanks (01), we (02), be (01), happy (01), smile (01), u (04) what's (01), sara (01), wishing (01), dis (01), its (01), cnt (01), tmrw (01), u're (01), you (01), please (04), plz (03) bring (03), thnx (02), c (02), lv (01), happy (01), am (02), miss (02), hope (01), foudil (01), where (01), oh (01), i (03), ur (01), at (01), if (01), it (01), send (01), good (03) don't (01), have (01), you (01), will (01), peace (01), tks (01), there (01), get (01), ok (01), hey (02), hw (01), tmrw (01), dnt (01), thank (01), long (01), just (01), no (01)
2. <b>Accent stylisation</b>	cuz (01), cauz (01), frienz (01), dat (01), wid (01), d (the 01), ya (01)
3. <b>Letter/ number homophones</b>	u (74), r (are 16), 2morrow (01), c (see 05), t8 (01) b (be 02)
4. <b>Missed punctuation</b>	Im (01), I m (01), lets (01), wont (01)
5. <b>Phonetic/nonconventional spelling</b>	urself (01), haw (01), thinkz (01) , nd (01), kom (01), ur (03), thanx (03)
6. <b>G clippings</b>	goin (01)
7. <b>Onomatopoeic/exclamatory</b>	hhhhh (02) , hahaha (01), hein (01), xoxo (kisses and hugs 01)
8. <b>Shortenings</b>	answ (01), univer (01), se (see 01), y (yes 01), w (will 01), bro (03), y (you 05), tom (03), sist (01), sis (01), h (how 01), eng (01)
9. <b>Other clippings</b>	ar (03), lov (01), hav (01), th (the 01), liv (01), t (to 01), wher (01), cours (01)
10. <b>Misspellings</b>	cutshap (01), thoughts (01)
11. <b>Initialisms</b>	tc (01), asap (01)
12. <b>Contractions</b>	mrng (01), dng (01), hw (01), nxt (01), wht (01), yourself (01), lv (01), hp (02), gd (02), sth (02), jst (02), msg (01), knw (01), hlp (01), lck (01), wrry (01), everthing (01), dpt (01), nt (01), mach (01), fd (01), ltr (01), tks (thanks 01), n (in 01), cnt (02), cn't (01), bcz (02), tomrw (01), tmrw (04), re (03), cr (care 01)
13. <b>Semantically unrecoverable</b>	//////////

**APPENDIX J: MASTER 2 LEVEL LEXISMS OCCURRENCES ACCORDING TO  
LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	hi (02), i (28), ibersienne (02), cld (01), if (03), bay (01), hello (03), by (05), see (05), y (02), tk (02), g (03), have (01) , it (06), ghani (01), wen (02), thnx (02), bay (01), gd (03), we (05), please (02), thank (06), gm (01), gby (01), plis (01), be (01), are (01), tomorrow (01), plz (02), hope (02), do (01), hey (01), where (01), byby (01), ok (01), fatima (01), have (02), its (01), they (01), hop (01), just (02), wanna (01), anyway (01), luv (01), call (01), sara (01), pls (01), tmr (01), hw (01), where're (01), quick (01), are (01), any (01), bye (02), nice (01), helo (01), millions (01), god (good 01), thanks (02), sorry (01), could (01), good (01), mr (01), mftah (01), need (01), there (01), how (01), hru (01), take (01), send (01), what (01), wish may (01), all (01), tell (01)
<b>2. Accent stylisation</b>	babay (01), wid (01), dy (they 01), dat (that 01),
<b>3. Letter/ number homophones</b>	b (be 01), r (are 21), u (50), n (01)
<b>4. Missed punctuation</b>	doesn't (01), dont (02)
<b>5. Phonetic/nonconventional spelling</b>	misses (Mrs 01), luv (01), wen (02), nd (02), thanx (04), pliz (01), ur (05)
<b>6. G clippings</b>	talkin (01), goin (01), doing (02)
<b>7. Onomatopoeic/exclamatory</b>	thaaaank (01), soooo (01), hiiiiii (03), uuuu (01)
<b>8. Shortenings</b>	h (happy 01), sist (01), sis (01), w (will 01), h (how 02), tom (02), tomor (01), y (you 20)
<b>9. Other clippings</b>	sur (01), lik (01), th ( the 01), tel (tell 01), giv (01), car (01), t (to 02), lov (01), hop (01), com (03), se (see 03), wil (08), ar (03)
<b>10. Misspellings</b>	sinserly (01)
<b>11. Initialisms</b>	hru (01), gm (good morning 02) , g (good 04)
<b>12. Contractions</b>	wlcmd (01), vry (01), d.dline (01), wn (when 01), madm (01), posibl (01), flowr (01), tird (01), agn (01), yslf (01), bt (01), ys (01), cld (01), fnd (01), dnt (01), nevr (01), smthg (01), sm (01), qst (01), fredm (01), fild (01), sy (01), knowldg (01), v (I've 01), hvnt (01), wnt (01), bday (01), gby (01), gbay (01), gv (01), forgt (01), wl (01), abt (01), tk (01), nt (01), hv (02), hve (01), fr (for 02), hp (01), hpe (01), hw (01), thnk (03), mdm (04), helo (06), pls (02), plz (05), gd (01), god (good 01), re (05), tmr (02), tmw (02), tomrw (01), tomorw (01), tmrw (01), yur (04), re (05), yu (08)
<b>13. Semantically unrecoverable</b>	////////////////

**APPENDIX K: FEMALES' LEXISMS OCCURRENCES ACCORDING TO LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION AND RANKING**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	please (15), ibersienne (02), can (03), so (04), me (01), good (06), wish (02), see (04), i (14), no (02), miss (02), every (01), always (01), a (01), u (02), lol (03), if (04), call (03), waitin (01), tk (01), tell (02), misses (01), don't (01), wats (01), wat's (01), have (02), what's (01), mrs (01), show (01), hold (01), bye (01), it (05), why (02), do (04), love (05), you (05), what (04), how (07), let's (01), sorry (03), where (06), is (01), did (01), ur (02), life (01), thank (03), big (01), my (03), happy (02), u've (01), we've (01), c (01), hope (03), you're (01), gd (01), are (01), try (01), hop (01), the (01), by (01), could (01), after (01), truly (01), take (02), such (01), miiiis (01), wat (01), just (02), tomorrow (01), plz (01), hey (01), miss (01), we (01), there (01), they (01), thy (01), hi (01), god (01), byby (01), ok (01)
<b>2. Letter/ number homophones</b>	u (60), c ( see 05), n (and 02), g8 (good night 01), 2day (01), r (are, 06)
<b>3. Contractions</b>	tomrow (01), tmw (01), tomrw (01), tomorow (01), yr (02), cause (01)
<b>4. Misspellings</b>	tommorrow (02), tommorow (03), withe (01), helle (01), bestest (01), honie (01)
<b>5. Initialisms</b>	lol (04), m (morning 02), v (have, 01), nd (01), n (02), BBF (01), Idk (01)
<b>6. Accent stylisation</b>	wid (with, 02), dat (that 03), yo (hello 01), cuz (01), dy (they 01), ma (01)
<b>7. Other clippings</b>	wil (03), giv (01), alon (01), lif (01), hop (01), modul (01), w (we 01)
<b>8. Shortenings</b>	bro (03), sist (02), sis (01), num (01)
<b>9. Phonetic/nonconventional spelling</b>	ur ( you are 02), welkomed (01), bay (01), wats (01)
<b>10. Onomatopoeic/exclamatory</b>	khkhkh (01), ugh (01), xx (01)
<b>11. G clippings</b>	waitin (01), givin (01)
<b>12. Missed punctuation</b>	didnt (01), Im (01)
<b>13. Semantically unrecoverable</b>	Pnd (01)

**APPENDIX L: MALES' LEXISMS OCCURRENCES ACCORDING TO LYDDY ET AL (2013) TAXONOMIC DISTRIBUTION AND RANKING**

<b>LEXISM TYPE</b>	<b>EXAMPLES</b>
<b>1. Missed capitalisation</b>	i (08), good (07), can (02), english (01), thank (07), its (01), have (05), where (03), love (01), we (03), last (01), enjoy (01), sweet (01), it's (01), see (05), take (06), r (01), man (01), send (02), me (01), you (01), what (01), just (01), never (01), there (02), get (02), come (01), that (01), u (03), are (02), wake (01), is (01), it (05), really (01), this (01), the (01), so (01), if (02), happiness (02), dat (02), c (01), how (02), wish (02), plz (02), by (01), bring (03), am (01), yes (01), god (01), be (01), hurry (01), hru (02), don't (01), talk (01), thanx (02), may (01), peace (01), tks (01), please (03), hey (01), tmrw (01), long (01), sorry (01), could (02), mr (01), mftah (01), thnx (01), thanks (01), need (01), no (01), live (01), all (01)
<b>2. Letter/ number homophones</b>	u (88), 2day (01), gonna (01), wanna (01), c (see 01)
<b>3. Contractions</b>	tmrw (04), msg (02), fr (02), mony (01), bck (01), knw (01)
<b>4. Shortenings</b>	bro (13), tom (04), ar (03), y (you 05)
<b>5. Misspellings</b>	tommorrow (04), tommorow (01), loocked (01), preaty (01)
<b>6. Accent stylisation</b>	wid (with, 01), dat (that 03), cuz (03), cauz (02), gotta (01)
<b>7. Onomatopoeic/exclamatory</b>	Uuuuup (01), thaaaaank (01), xoxo (kisses and hugs 01)
<b>8. G clippings</b>	doin (02), goin (02), writin (01)
<b>9. Other clippings</b>	wher (01), hav (01), com (01), beautifu (01), boumerde (01)
<b>10. Missed punctuation</b>	dont (01), lets (01), cant (01), im (01)
<b>11. Phonetic/nonconventional spelling</b>	frienz (01), bay (01), wat (01), thanx (01)
<b>12. Initialisms</b>	Idk (01), g (good 01), hru (02)
<b>13. Semantically unrecoverable</b>	pnd (01)

**APPENDIX M: LEXISMS GROUP OCCURRENCES GENERAL RESULTS  
ACCORDING TO STUDENTS' ACADEMIC LEVEL**

	Year 1	Year 2	Year 3	Master 1	Master 2	Total
1. Missed capitalisation	105	71	81	105	144	506
2. Letter/ number omophones	67	71	56	99	94	387
3. Contractions	20	33	32	42	73	200
4. Misspellings	16	16	15	20	29	96
5. Phonetic/nonconven spelling	8	9	8	12	27	64
6. Accent stylisation	8	8	7	11	16	50
7. Other clippings	7	7	3	10	7	34
8. Initialisms	6	3	3	5	6	23
9. Shortenings	5	3	2	4	4	18
10. Onomatopoeic/ exclamatory	5	3	1	2	4	15
11. G clippings	2	2	0	2	3	9
12. Missed punctuation	1	0	0	1	1	3
13 Semantically unrecoverable	1	0	0	0	0	1
Total	251	226	208	313	408	1406

**APPENDIX N: THE QUESTIONNAIRE SAMPLE**

Dear participant,

This questionnaire is part of a research project I am conducting on SMS texting amongst young college students. I appreciate you taking time to fill this questionnaire as honestly and frankly as possible. The information enclosed in this questionnaire will remain confidential and will only be used for research purposes. Thank you in advance. .

**Part I. Identification questions**

**1. Sex:**

Male

Female

**2 Age:** .....

**3. Class/ Year :**.....

**Part II. SMS 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 specify .....

**2. How many messages do you send a day?**

- About five
- About ten
- More than ten
- Other, please specify .....

**3. Why send SMS?**

.....  
.....  
.....

**4. When do you feel the need to use SMS more than any other means of communication?.**

.....  
.....  
.....

**5. How is your messages language designed in general ?**

- Formal
- Informal
- A mixture of both

*Part III. SMS texting and Language modifications*

**1. Do you think that making grammatical and spelling modifications in messages is done on purpose?**

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

**2. How about you? Do you modify the language of messages?**

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

**3. What do you like about modifying language?**

.....  
.....  
.....

**4. When do you modify language?**

.....  
.....  
.....

**5. Who do you use abbreviations more with?**

.....  
.....  
.....

*Part IV. SMS texting and English language use*

**1. How many SMS messages written completely in the English language do you send a day?**

- About five
- About ten
- More than ten
- Other, please specify .....

**2. How often do you use English in your messages?**

- Very often
- Sometimes
- Rarely
- Other, please specify.....

**3. When do you use the English language in your messages?**

.....  
.....  
.....

**4. Why do you use English language in your messages?**

.....  
.....  
.....

*Part V. SMS texting and the English language modifications*

**1. How often do you use formal English in your messages?**

- Most times
- Sometimes
- Rarely
- Never

**2. Do you care about the kind of English language you use in your messages?**

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

**3. What are the language components ( , , , prepositions....) that you abbreviate most?**

- Nouns       Verbs       Adverbs       Adjectives       Sentences
- Other, please specify.....

**4. Do you think that abbreviating and modifying words has to do with students' poor English command?**

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

**5. Do you use “predictive text” device when texting?**

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

*Part VI. SMS Corpus*

**Please write the last ten (10) messages you sent in ENGLISH ONLY LANGUAGE. Thank you in advance.**

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

***ABSTRACT IN ARABIC***

## المخلص

أصبحت الرسائل النصية القصيرة واحدة من أكثر وسائل الاتصال السائدة في أجزاء كثيرة من العالم بما في ذلك الجزائر. بالنسبة للميزات اللغوية ، أصبحت الرسائل النصية القصيرة مجموعة متنوعة من اللغات في حد ذاتها ، مما يدل على انتظامات محددة في جوانب مختلفة من استخدام اللغة. تهدف الدراسة الحالية إلى استكشاف الانزياحات المورفولوجية في سياق أكاديمي في اللغة الإنجليزية كلغة أجنبية. تم تنفيذ طريقة مختلطة دمجت كل من المنهجية القائمة على مدونة واستبيان لتحقيق رؤية كاملة حول الخصائص اللغوية والاجتماعية للرسائل النصية القصيرة. غطت البيانات مجموعة من 808 رسالة نصية باللغة الإنجليزية ، تم جمعها من طلاب اللغة الإنجليزية الجزائريين الشباب الذين يدرسون اللغة الإنجليزية كلغة أجنبية الذين يحضرون المستويات التعليمية الخمسة في قسم اللغة الإنجليزية بجامعة بومرداس. ركز فحص المجموعة على الأشكال المغيرة ويطرح أسئلة الأشكال الأكثر تغييراً ، وأكثر أنواع الانزياحات انتشاراً وفقاً للجنس و المستوى الأكاديمي للطلاب. استكملت هذه الخطوة باستبيان للنظر في تصورات استعمال الرسائل النصية ودوافعها. أظهر فحص المجموعة أن 14.96٪ من محتوى الكلمات استخدم التهجئة غير الرسمية ، وهي الفئة الأكثر شيوعاً التي تتضمن حذف الأحرف الكبيرة. وأعقب هذا الأخير الأحرف الهوموفون حرف / رقم ، والتقلصات ، والأخطاء الإملائية ، والتهجئات الصوتية / غير التقليدية. الأنواع الأقل حدوثاً هي أسلوب التوكيد ، القصاصات الأخرى (أو القصاصات الطرفية) ، علامات الترقيم الفائتة ، وأخيراً ، G والتكوينات التي أعقبتها تقصير ، أشكال المحاكاة / التعجب ، قصاصات أنواع الانزياحات غير القابلة للاسترداد. كما أبرزت النتائج الدور غير الهام للجنس في استخدام الانزياحات حيث أن كلا الجنسين يتشابهان في استعمالهم . فيما يتعلق بالتأثير الأكاديمي للطلاب على استخدام النماذج المغيرة ، أظهرت البيانات زيادة استخدام الانزياحات مع إتقان اللغة لدى الطلاب حيث تم الكشف عن طلاب الماستير كأكثر المستخدمين إنتاجاً الانزياحات. على الرغم من الاختلافات الملحوظة في النتائج عبر المستويات ، إلا أن الحساب الإحصائي يُظهر علاقة غير مهمة بين المستوى التعليمي للطلاب واستخدام الانزياحات. بلاضافة الى تحليل المدونة ، سلط الاستبيان الضوء على ميل الطلاب إلى استخدام أنواع الانزياحات في الاقتصاد اللغوي والإيجاز والتقريب الصوتي من ناحية ، ووعيهم السياقي والتكيف مع الظروف التواصلية ، من ناحية أخرى. على مستوى الجنسين ، تم رصد كل من أوجه التشابه والاختلاف. في حين أفادت أوجه التشابه عن الاستخدام المتماثل المتعمد للغة النص لأسباب الإيجاز واقتصاد اللغة ، إلا أن الاختلافات أبرزت ميل الإناث للاستخدام الرسمي مقابل الاستخدام غير الرسمي للغة ، كشفت البيانات أن الإناث كانوا أكثر ميلاً إلى توظيف اللغة غير الرسمية عند إرسال الرسائل النصية بلغات مختلفة عن اللغة الإنجليزية ، في حين أن الرسائل النصية المكتوبة باللغة الإنجليزية أكدت استعداد الإناث العالي لاستخدام اللغة الإنجليزية الرسمية عند مقارنتها بالمراسلين الذكور.