

**GENDER DIFFERENCES IN THE TEXT MESSAGING OF YOUNG
JORDANIAN UNIVERSITY STUDENTS: AN ANALYSIS OF
LINGUISTIC FEATURES**

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Abstrak

Walaupun kajian menyeluruh telah dijalankan ke atas komunikasi bersemuka, perbezaan jantina masih belum dipelopori dengan meluas dalam pesanan teks. Objektif kajian ini adalah meneroka perbezaan jantina dalam ciri linguistik yang terdapat dalam pesanan teks dalam kalangan pelajar lelaki dan perempuan di universiti-universiti di Jordan yang berkaitan dengan (1) ciri leksikal (singkatan, akronim, pemendekan, pinjaman, terbitan, teradun, majmuk, dan pertukaran), (2) ciri sintaktik (menggugurkan kata nama subjek, menggugurkan kata nama subjek dan kata bantu, menggugurkan kopular/katakerja modal, dan menggugurkan kata sandang) dan ciri tipografi (tanda bacaan, huruf dan homofon nombor, ejaan fonetik, perkataan onomatopia dan emotikon). Dari segi teori, kajian ini berpandukan model Bodo dan Lee, iaitu *Technology-conditioned Language Change and Use* dan pendekatan Herring, iaitu *Computer-Mediated Discourse Analysis*. Tiga teknik pengumpulan data secara kualitatif digunakan, iaitu soal selidik terbuka, diari pengguna dan temu bual separa berstruktur untuk memperoleh maklumat berkaitan ciri yang terdapat dalam pesanan teks pelajar tersebut. Seramai seratus orang pelajar menjawab soal selidik manakala dua puluh orang pelajar ditemu bual secara separa berstruktur. Enam puluh orang pelajar yang terlibat dalam diari pengguna memberikan korpus sebanyak 1,612 pesanan teks yang telah dianalisis berdasarkan jantina penghantar teks. Pesanan teks juga dianalisis untuk melihat kehadiran ciri leksikal, sintaktik dan tipografi dan dibandingkan untuk mencari perbezaan antara jantina. Ciri leksikal dikategori berdasarkan kategori *word-formation processes* oleh Yule (2009) manakala ciri sintaktik dan tipografi dikategori mengikut Hård af Segrestad (2002) dan tipologi ciri linguistik pesanan teks mengikut Thurlow (2003). Dapatan kajian ini menunjukkan bahawa terdapat perbezaan jantina dalam pesanan teks pelajar Jordan dalam ketiga-tiga ciri linguistik. Pelajar perempuan didapati cenderung menggunakan lebih banyak ciri leksikal berbanding dengan pelajar lelaki manakala pelajar lelaki pula cenderung menggugurkan ciri sintaktik berbanding dengan pelajar perempuan. Dari segi ciri tipografi, didapati pelajar lelaki cenderung menggunakan lebih banyak huruf, homofon huruf dan ejaan fonetik berbanding dengan pelajar perempuan yang lebih banyak menggunakan tanda bacaan, perkataan onomatopia dan emotikon. Dapatan kajian ini juga menyokong dapatan kajian lampau mengenai terdapatnya perbezaan jantina dalam pesanan teks, dalam komunikasi bersemuka dan komunikasi berperantara komputer. Kajian ini memberi sumbangan terhadap literatur kajian bahasa dari sudut penggunaan beberapa ciri linguistik dan variasinya dalam pesanan teks antara lelaki dengan perempuan. Beberapa implikasi dan cadangan turut dikemukakan dalam kajian ini.

Kata kunci: Perbezaan gender, Pesanan teks, Ciri linguistik, Pelajar universiti di Jordan

Abstract

In spite of being extensively studied in face-to-face communication, gender differences remain widely unexplored within text messaging. The objectives of this study are to explore gender differences in the use of linguistic features in the text messaging of young Jordanian male and female university students with regard to (1) lexical features (abbreviations, acronyms, shortenings, borrowing, derivation, blending, compounding, and conversion), (2) syntactic features (deletion of subject pronoun, deletion of subject pronoun and auxiliary, deletion of copular/ modal verb, and deletion of article), and (3) typographical features (punctuation, letter and number homophones, phonetic spellings, onomatopoeic words, and emoticons). Theoretically, the study is guided by Bodomo and Lee's model of Technology-conditioned Language Change and Use and Herring's approach of Computer-Mediated Discourse Analysis. Three techniques of qualitative data collection were used: open-ended questionnaires, user diaries and semi-structured interviews to elicit information on the features reflected in the text messages of the students. One hundred students responded to a questionnaire while twenty students participated in semi-structured interviews. The sixty students who participated in the user diaries provided a corpus of 1,612 text messages which were analyzed according to the gender of the senders. The messages were also analyzed for occurrences of lexical, syntactic, and typographical features, and compared for differences across gender. Lexical features were categorized based on Yule's (2009) categorization of word-formation processes while syntactic and typographical features were categorized according to Hård af Segrestad's (2002) and Thurlow's (2003) typology of linguistic features of text messaging. The findings of this study reveal the existence of gender differences in the text messages of the Jordanian students in all the three linguistic features. The females tend to use more lexical features than males, whereas the males tend to favor the deletion of syntactic features more than females. In terms of typographical features, the males tend to use more letter and number homophones and phonetic spelling than females while the females tend to use more punctuation, onomatopoeic words and emoticons than males. The findings corroborate with previous findings on differences across gender in text messaging as well as in face-to-face and computer-mediated communication. This study contributes to the literature related to the study of language in terms of the use of some of the linguistic features and their variations in text messaging between males and females. Some implications and recommendations are provided in this study.

Keywords: Gender differences, Text messaging, Linguistic features, Jordanian university students

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List of Abbreviations

ARPANET	... Advanced Research Project Agency Network
CMC	... Computer-Mediated Communication
CMD	... Computer-Mediated Discourse
CSCA	... Central States Communication Association
DLSU	... De La Salle University
E-mail	... Electronic Mail
F-T-F	... Face-To-Face
GSM	... Global System for Mobile
HTTP	... Hyper Text Transfer Protocol
ICQ	... I Seek You
IM	... Instant Messaging
IP	... Internet Protocol
JP	... Jordanian Piaster
MBU	... Megabyte University
MDA	... Mobile Data Association
MIT	... Massachusetts Institute of Technology
MOE	... Ministry of Education
MOHE	... Ministry of Higher Education
MOO	... Multi User Domain-Object Oriented
MUD	... Multi User Dimension
PDA	... Personal Digital Assistance
SMS	... Short Messages Service
TCP	... Transmission Control Protocol
TESL	... Teaching English as a Second Language
TRC	... Telecommunication Regulatory Commission

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Text messaging, popularly known as Short Messages Service (SMS), is an asynchronous mode of computer-mediated communication (henceforth CMC) which does not require communicators to be present online simultaneously. Hård af Segerstad (2002, p. 68) defines SMS as “a service that enables its users to send short text messages to one mobile phone from another, or to a mobile phone via the internet.”

Text messaging abounds in the lives of people in the world nowadays and is one of the most successful mobile services in recent years. Even though text messaging is used for multi-user communication, 90% of text messages are person-to-person communication (Pederson & Macafee, 2007). In the first stage of text messaging, the length of each text message would be up to 160 characters for Latin alphabets and up to 70 characters for non-Latin alphabets like Chinese and Arabic. Presently, there is no limit to the length of a message. Messages exceeding the number of characters can still be sent; they are automatically split into chunks during the process of sending (Hård af Segerstad, 2002). SMS or text messaging is also referred to as “texting, text” (Harper & Hamill, 2005; Herring, 1994) or "SMSing" (Rouibah, 2006).

Moreover, text messaging is a very popular technology, particularly used by young generations, especially university students (Grinter & Eldridge, 2001; Lancaster, Dodd & Williamson, 2004), who use it for a variety of purposes such as trading messages with friends and keeping in touch with them, staying in constant contact with family, and exchanging ideas with others (Grinter & Eldridge, 2001; Ling, 2005; Thurlow, 2003).

Undoubtedly, the mobile phone has now become an essential element in the everyday life of youth and their emancipation process (Klimsa, Colona, Ispandriano, Sasinska-Klas, Döring & Hellwig, 2006; Ling, 2008). It has become part of their culture and has changed the way they communicate and organize their lives. Therefore, communication, verbal and written, has been made much easier by the mobile phone (Smith & Williams, 2004).

This means that text messaging is used for everyday purposes. Kasesniemi and Rautanen (2002) explain that text messaging has rapidly become a means used in our everyday life. The new mobile phone users, teenagers and young adults, favor text messaging over other means of communication, making it one of the fastest-growing segments of the mobile communications industry (Reid & Reid, 2004). Today's young people are referred to as the "Mobile Phone Generation (Reid & Reid, 2004), "Generation Txt" (Thurlow, 2003), "Generation SMS" (Bosco, 2007; Klimsa et al., 2006), "Generation Y" (Koutras, 2006) , and other names like"@ Generation", "Windows Generation" and "New Media Generation". They are considered the first

generation to grow up with mobile technology, which, in addition to talking on the phone, primarily makes use of text messaging (Klimsa et al., 2006).

In their text messages, young people use a specific language which has a set of features that makes it different from the language of standard writing. It comprises features from both the written and spoken forms, which are regarded as universal characteristics of a novel language called “netspeak” (Crystal, 2001). It also has a distinct pattern in terms of lexical and syntactic, and typographical forms (Doring, 2002) that fulfill the young people’s needs as well as the new technology. The language of SMS has its own style. It saves time, space and effort. Texters use their own language conventions, so SMS communication is viewed as a special code for youth (Doring, 2002). Texters make sure that their messages are as economical as possible by using SMS acronyms, abbreviations or a combination of letters and numbers. For example, they use *LOL* instead of lots of laugh/love; *clas*, instead of class; *every1* instead of everyone; *gud* instead of good; *2moro* instead of tomorrow; *plz* instead of please; *luv* instead of love; *u* instead of you; *r* instead of are; *wk* instead of week; *tel* instead of tell. Another important aspect is that young texters (males and females) use emoticons such as the happy face and sad face which have similar functions to body language. These emoticons are used to express their feelings quickly and effectively through written texts. To express another type of verbal effect, young texters utilize phonetic representation of sounds such as "hahaha" or “hehehe” to express laughter.

The popularity of text messaging has evoked a lot of public discussions about the social, psychological and linguistic impacts this medium of communication may have. Research has been published on the linguistic aspects of text messaging by Agoncillo-quirante, 2006; Deumart and Masinyana, 2008; Doring, 2002; Faulkner and Culwin, 2005; Grinter and Eldridge, 2001; Hård af Segerstad, 2002; Kasesniemi and Rautianen 2002; Ling, 2005; and Thurlow, 2003. These studies have investigated SMS communicative functions as well as the language used in this medium of CMC.

Since the earliest stages of their childhood, males and females are taught to use different linguistic forms in their communication (Tannen, 1990). Males are taught to use a rough and aggressive language, whereas women are taught to use a soft and gentle language. Lakoff (1975) and Tannen (1990) suggest that the characteristics of males' speech are different from those of females' speech. Similarly, previous research on computer-mediated communication has shown that males and females use different linguistic features and communication styles in their daily interaction (Baron, 2004; Graddy, 2004; Herring, 1992, 1993, 1994, 2003, 2004; Ling, 2008; Ling & Baron, 2007; Soukup, 1999). However, gender differences in the linguistic forms used in text messaging has not been sufficiently studied yet. It is a field that is still widely open for research.

1.2 Jordanian Setting

In order to understand the Jordanian setting, a discussion of the following topics is needed: demographic information, education in Jordan, Jordanian culture, Jordanian Arabic, and Jordan mobile phone service.

1.2.1 Demographic Information

Jordan, transliterated “Urdunn”, is a small Arab Kingdom (area 89, 342 square km) located on the East Bank on the River Jordan. It is located in the heart of the Middle East and bordered on the north by Syria, on the south by Saudi Arabia, on the east by Iraq, and on the west by Israel and the West Bank. Dry hills and desert make up 89% of the country (Jordan, 2010).

The population of Jordan is estimated at 6,053,193 people, with a growth rate of 2.2% (Jordan Department of Statistics, 2010). About 55% of the people are Jordanians. Most others are Palestinians (Jordan, 2010). There are three different ethnic groups in Jordan: Arabs 98% and the rest are Circaccians and Armenians. 94% of the Jordanian people are Muslims, and 6% are Christians. Religion is not a divisive factor in the Jordanian society, and all groups are "tolerant of each other" (Nydell, 2006, p. 168).



Figure 1.1: Map of Jordan

Major Jordanian cities include the capital Amman located in the Northwest, with a population of over 3,000,000, Irbid and Zarqa both located in the north and east respectively, and Aqaba in the south. The climate in Jordan is dry and hot, since the country is mainly a desert. Table 1.1 shows the age structure in Jordan according to Jordan (2010).

Table 1.1: Age Structure in Jordan

Age Range	Males	Females
0-14 (32%)	1,017,233	976,284
15-64 (63.7%)	2,110,293	1,840,531
65 and Over (4.1%)	122,975	131,361

1.2.2 Education in Jordan

Jordan has an excellent education system with a literacy rate of 91% (Ministry of Education [MOE], 2009). Jordan's educational system, which is under the supervision of the Ministry of Education and the Ministry of Higher Education and Scientific Research (MOHE), consists of two stages: school education and university education. School education, which started in the 1920s, is divided into three stages. The first one is the pre-school stage. It is non-compulsory and run by the private sectors. Children from the age of three and up to six can be admitted to the pre-school based on parents' decision. The second stage is the basic education stage, which is a compulsory ten-year stage ranging from first grade to tenth grade. The final stage is the two-year secondary education stage, which ends with the sitting for the General Certificate Examination (Tawjihi) (MOHE, 2008). According to the grade a student achieves on the Tawjihi, he/she may qualify for different universities and colleges. Jordan has 1, 493 private schools and 2, 787 public schools, and the

number of students in the basic education stage is 125, 6400, whereas the number of students enrolled for the secondary education stage is 183, 400 (MOHE, 2010).

University education provides all levels of higher education. Jordan has 26 universities, ten of which are state universities and the others are private. It also has fifty community colleges (MOHE, 2010). Over 200,000 students (males and females) are enrolled at the undergraduate level; 17,000 in Master's programs and 3, 000 pursuing their PhDs. University education is highly valued in the Jordanian society despite high unemployment rates among university graduates.

1.2.2.1 Education among Males and Females in Jordan

Although education was deemed unnecessary and inappropriate for females in Jordan during the early twentieth century (Al-Saleem, Al-Ahmad, Al-Ali & Al-Dibs, 2009), Jordan has one of the highest female literacy rates in the region (84%) (MOHE, 2009). Eyang (2003) and Willy (2006) agree that females in Jordan have profited more than males from the expansion of higher education because of the re-islamization of society and commercialization of education. Furthermore, the Jordanian constitution guarantees gender equality in education. Thus, there is an equal involvement of females and males at all levels of education. Nevertheless, some females tend to drop out of school for economic reasons, frustration with school curriculum, early marriage, among other factors (MOHE, 2009).

Females comprise a large percentage of Jordan's higher education attendees. They account for 66.6% of community college students and 50% of the university students

(Ministry of Higher Education, 2010). Moreover, the number of female students accepted in colleges and universities is on the rise and female enrollment ratio in education has exceeded that of male students (Al-Saleem et al., 2009). For example, females constituted 80% of the total number of students admitted at the University of Jordan in 2010 (MOHE, 2010).

1.2.3 Jordanian Culture

The culture of Jordan is based on Arab and Islamic elements. Arab culture is a highly social and family-oriented influenced by Islam (Rouibah, 2006), which governs the traditions and daily life of Arabs. Arab culture is masculine-oriented, where men dominate in most settings. However, this dominance may differ from one Arab country to another. For example, gender segregation in Saudi Arabia is enforced by the social norms where all kinds of communication between males and females are prohibited (Rouibah, 2006). In contrast, males and females in Jordan work together and go to school together.

Most Jordanian women are well educated (Nydell, 2006). However, gender inequality in women's participation in the highest levels of decision-making continues to exist in Jordan. Almost all Jordanian heads of states, judges, parliamentarians and owners of major businesses are males. There are only 6% of women representatives in parliament. Jordanian women have a high rate of employment compared to women in other Arab countries. Women in Jordan mainly work in teaching, nursing and clerical jobs.

1.2.4 Jordanian Arabic

Arabic, originally spoken by the Arabs of the Hejaz and Nejd areas, is now the prevailing speech of a wide region in southwestern Asia and Northern Africa (Abdul-Jawad, 1981). Arabic may be described as a world language; it is ranked fifth among the world languages (Palfreyman & Al- Khalil, 2003). Jordanian Arabic is a vernacular variety of Arabic spoken by native Jordanians. It is worth noting that language use in Jordan is an example of diglossia, a situation in which one dialect or language is used in formal or written context and a second dialect or language is used in informal or spoken contexts (Ferguson, 1959). Ferguson (1959, p. 429) characterized Arabic as being diglossic and defines diglossia as “the existence of two varieties side by side through the community, with each having a definite role to play.”

There are two linguistic contrasts, standard Jordanian (H) and local varieties (L). The symbol (H) stands for High (super-ordinate variety), whereas (L) refers to the colloquial variety (Migdady, 2003). The former is the variety used for religious sermons, news broadcast, poetry, etc., while the latter is the variety used in conversations with family, friends, and for singing.

Jordanian Arabic consists of a number of local dialects. Although these dialects are mutually intelligible, they include some linguistic features that make them distinguishable (Migdady, 2003). They include Urban, Rural and Bedouin Jordanian Arabic. Jordanian Arabic shares some linguistic features with other Arabic dialects similar to those spoken in neighboring Arab countries. For example, Irsheid (as cited

in Migdady, 2003) explained that the local varieties spoken in the southern part of the country share some features with the varieties spoken in some parts of Saudi Arabia. Similarly, the dialects spoken in the northern part of the country are similar to those dialects spoken in the southern part of Syria (Abdul-Jawad, 1981).

The official language of Jordan is Arabic, with English widely spoken as a second language, particularly among Jordan's business and wealthy people and university students (Nydell, 2006). English is the only mandatory language taught in schools starting from first grade. Hotel workers, taxi drivers and street vendors use English to communicate with foreigners, especially in major cities and tourist locations. A number of universities and private schools in Jordan use English as their medium of instruction. Medicine, dentistry, engineering, veterinary studies, economics, management etc., are taught in English (Ministry of Higher Education, 2009).

1.2.5 Jordan's Mobile Phone Services

Jordan, which represents a good example of the mobile phone explosion in the Middle East, has a very active and competitive mobile phone market. Mobile phones are widely used in Jordan. The total number of mobile phone subscribers in the kingdom had reached, by the first quarter of 2011, six million and eight thousand subscribers with a penetration rate of 112 % (No Taxes on Smart Phones, 2011). Mobile phones evolved initially as a status indicator for the rich and business people, and they were perceived as a luxury at the time of their appearance because they were very expensive.

Mobile phones have become highly domesticated in the Jordanian culture. They are used by almost all individuals in almost all social and demographic groups. We can say that the majority of the Jordanian population is covered nowadays. It is worth stressing that the percentage of young people owning a mobile phone surpasses the average although it was initially aimed at adults. A few years back, it was rare for a young person to own a mobile. Young Jordanian males and females, who are considered heavy users of mobile telephony and its sister technology, text messaging, have significantly contributed to the rapid increase of cellular phones in Jordan, as it is the case worldwide (Telecommunications Regulatory Commission (TRC), 2010). Analyzing young people's use of mobile telephony will reveal considerable differences if compared with the use of the same service by adults.

The growing mobile usage in both urban and rural areas in the world is reducing the use of fixed-line phone services (Jordan, 2010). In Jordan there is a trend that homeowners are abandoning their fixed-lines and acquiring only mobile phones for use both at home and for business. The main reasons behind this trend are the strong competition among mobile phone companies in the country and the many advantages offered by the medium (T R C, 2008). Far more than the internet, the mobile phone service is probably the information and communication technology which has rapidly entered the everyday life of the Jordanian public.

Telecommunications in Jordan is largely privatized. Therefore, public phones, mobile phones and data transmission are privately owned. There are currently four mobile phone companies in Jordan: Zain, Orange, Uminiah and Express. The

average amount of money spent on mobile phones by a Jordanian family is \$40 a month, which is a considerable amount of the monthly income of an average Jordanian family (Mubaideen, 2011). Mobile phones are used by Jordanians to make social connections and build relationships, especially when face-to-face meetings and interactions are not possible. Hence, the mobile phone has become a part of Jordanian people's lives, especially that of teenagers.

The cost of text messaging in Jordan is very inexpensive, ranging between 1 Jordanian Piaster and 3 Jordanian Piasters a message, which is one of the reasons that makes text messaging in Jordan very popular. Jordanian people send around six million text messages every day, and they sent around eighteen million text messages on the day of Eid el-Fitr in 2011 (Mubaideen, 2011), which is a huge number.

1.3 Statement of the Problem

Text messaging is a new form of CMC that has spread rapidly around the world. It has become a very significant part of our daily life. The phenomenal growth of text messaging offers an unprecedented opportunity to study its language, its production, and its use by people. This topic is increasingly significant because today's society depends heavily on text messaging. Both men and women use this technology in daily interactions, and it is important to explore the linguistic features they use either deliberately or subconsciously.

The emergence of text messaging as a very popular means of communication gives researchers a chance to investigate its language, communicative functions, and social effects. Zelenkauskaitė and Herring (2008, p. 4) suggest that:

The ready availability of new modes provides a rich opportunity to study the emergence of language practices, norms, and social behaviors as expressed through discourse, and to theorize about emergent language phenomena.

Since text messaging has become more embedded in our daily lives as a typical and very important mode of communication, an understanding of its unique properties becomes salient. Some researchers have expressed that text messaging language has not been satisfactorily examined. For example, Thurlow and Poff (2009) point out that scholarly interest has been very slow concerning language and communication, and that text messaging, in particular, has been an under-examined field of research. The same notion was emphasized by Tagg (2009, p.3) who states that “texting remains largely unexplored within corpus linguistics, discourse analysis or language variation studies”. Tagg (2009) also stresses that “there has as yet been little attempt by linguists to describe in any depth or breadth the language used” (p. 2).

Researchers investigating text messaging have primarily focused on English speaking settings. Haggan (2007) and Thurlow and Poff (2009) claim that text messaging in languages other than English has not been sufficiently examined, stating that research on text messaging has focused largely on native English-speaking users. Haggan (2007) stresses the need to study text messaging in settings

different from those related to the west because there are some culture-specific features related to different cultures in the world. Haggan (2007) states that:

By and large, however, research has ignored text messaging in languages other than English and by non-native speakers of English. The lack of research is particularly the case as regards the use of mobile phones in the Middle East which presents a culture that is very different from what pertains in Europe and the west in general. (p. 428)

Schlobinski and Watanabe (2003), who studied text messaging in Germany and Japan, also emphasize that text messaging is culture-specific. They claim that, despite globalization, certain characteristics of the messages are culture-specific. Therefore, the present study attempts to explore text messaging in a Jordanian culture.

Research has consistently revealed gender differences in language use in face-to-face communication (Coates, 1993; Eckert & McConnell-Ginet, 2003; Holmes, 1995, 2008; Lakoff, 1975, 1990; Romaine, 1999; Tannen 1990, 1994). Similarly, it has been revealed that there are gender differences in the speech of males and females in many different cultures around the globe (Holmes, 2008; Labov, 1991; Trudgill, 1983; Yule, 2009). Yule (2009), for example, points out that females are likely to use more prestigious forms, which are reflected in the use of the standard language in their speech, than males with similar social background. Hence, forms such as *I done it, it growed* and *he ain't* can be found more often in males' speech, and forms such as *I did it, it grew* and *he isn't* can be found more often in females' speech. One can

conclude that males resort to colloquial expressions, while females tend to produce the standard version of a language.

Some research has also shown that SMS messages indicate that both males and females opt for non-standard or a mixture of languages, which have given birth to a new and creative variety. This seems to be challenging the idea that females tend to opt for standard varieties; whereas males resort to non-standard choices of these varieties in a speech community (Rafi, 2010). This study attempts to explore language use among males and females in CMC, in general, and SMS, in particular.

In spite of being widely discussed in face-to-face interaction and other modes of CMC, the language of youth has not been given enough focus in their SMS communication, especially in an Arab setting. Rouibah (2006, p.3) urges the study of youth language in the Arab world by saying that "nowadays, young speakers represent the majority in the Arab urban countries. Yet, almost nothing is known about their language use." Thus, this study intends to provide knowledge about young college students' linguistic behavior in text messaging, in the Arab countries, in general, and in Jordan, in particular.

In addition, a substantial body of research has investigated the social functions of mobile phones and text messaging (Agoncillo-Quirante, 2006; Grinter & Eldridge, 2001; Harper & Hamill, 2005; Ito & Okabe, 2005; Kasesniemi & Rautiainen, 2002; Klimsa et al., 2006; Ling, 2002, 2005; Reid & Reid, 2005; Smith & Williams, 2004) and the linguistic aspects of text messaging (Deumart & Masinyana, 2008; Doring,

2002; Haggan, 2007; Hård af Segerstad, 2002; Igarashi, Tajai & Yoshida, 2005; Laursen, 2005; Ling, 2005; Thurlow, 2003). However, very little attention has been directed towards the issue of gender differences in text messaging. In support of this, Herring and Zelenkauskite (2008, p.75) state that “SMS research that focuses on gender is as yet relatively rare.” More specifically, they mention that very little research has examined gender with respect to non-standard spelling and typographical manipulation in text messaging. In addition, research exploring gender differences with respect to grammatical and lexical features is also scarce. Thus, the study of gender and text messaging remains neglected and is open to study in the mainstream of SMS research. The present study is one of the very few studies that examine gender differences with respect to lexical, syntactic and typographical features in text messaging in the Arab world, in general, and in Jordan, in particular.

Finally, the observation about the paucity of research on gender variation and text messaging has inspired the researcher to work on this promisingly interesting topic. Therefore, this study attempts to fill in this gap, which is the lack of studies investigating gender and text messaging, in the related literature, which constitutes the core of this research.

1.4 Objectives of the Study

The present research aims at exploring gender differences in the linguistic features used in the text messaging of young Jordanian male and female university students. Specifically, the main objective of this study is to explore gender differences in the use of linguistic features in the text messaging of the students with regard to lexical

features (abbreviations, acronyms, shortenings, borrowing, derivation, blending, compounding, acronyms, and conversion), syntactic features (deletion of subject pronoun, deletion of subject pronoun and auxiliary, deletion of copular/ modal verb, and deletion of article), and typographical features (punctuation, letter and number homophones, phonetic spellings, onomatopoeic words, and emoticons).

1.5 Research Questions

The present study addresses the following research questions:

1. What are the differences in the lexical features used in the text messaging of the young Jordanian male and female university students?
2. What are the differences in the syntactic features used in the text messaging of the young Jordanian male and female university students?
3. What are the differences in the typographical features used in the text messaging of the young Jordanian male and female university students?

1.6 Significance of the Study

This study derives its significance from the fact that it is one of the very few studies to be conducted in a Jordanian context, in particular, and in an Arab context, in general. Most of the literature written on online interaction has come from the western context and has focused on English speaking countries. It is worth mentioning that less than 1% of the articles published in the period 1990-2006 in

prestigious international journals focused on users of CMC in Arab countries in the Middle East (Rouibah, 2006). Therefore, this study can contribute to the existing research that has been published on this particular issue in the Arab context. This study would also boost the knowledge of Arabic speakers as well as that of the speakers of other languages on this significant area because, according to Nydell (2006, p. 68), "Foreigners find very little materials available to help them to understand Arab society."

Exploring gender variations in the language used by Jordanian male and female students will enhance our understanding of the communication between them in this Arab country. It is also hoped that the findings of the present study can enrich our understanding of the linguistic aspects of text messaging as a form of computer-mediated communication. This study represents a step towards better understanding of how technology can redefine the nature of human linguistic interaction. In addition, the present research will contribute to the available literature and growing research on language and gender in text messaging since there has been little work done on gender variation in the use of text messaging. Consequently, such a study will help improve the linguistic mapping of new communication technologies.

Such a study can also lend valuable insight into how young male and young female students differ in their use of text messaging. This examination of gender differences will advance our understanding of the nature of male-female communication in SMS, in comparison to that of face-to-face communication. It is also hoped that this

particular study will contribute to the growing knowledge investigating human communication using text messaging.

Furthermore, the study of text messaging can provide a variety of insights into the ways males and females present themselves and interact with others in SMS. The exploration of gender-related differences may provide more insights into the understanding that CMC use is a masculine-dominated technology. In other words, not only will the present research help us understand in a structured way how the technology of text messaging is used these days, but it will also increase our knowledge about the living conditions and behaviors of male and female youth through its use. This present research also attempts to delineate the gendered interaction patterns of text messages in order to better assess the issues related to gender and communication in CMC.

1.7 Definitions of Key Terms

Asynchronous CMC is one type of CMC that allows individuals to communicate electronically at anytime; the recipient need not to be online at that moment (Hård af Segerstad, 2002). The message will stay in storage until the recipient chooses to read it.

Chain messages are messages composed of longer epigrams, jokes, word-play, or short poems, which are passed from one message sender to another. Chain messages do not require a response. They are similar to the conventional chain words and letters which promise happiness and love (Laursen, 2005).

Computer-mediated communication refers to a variety of written messaging systems that allow two or more participants to communicate using computer-based technology (Baron, 2005a). CMC comprises a variety of interactive socio-technical modes including e-mail, discussion lists, newsgroups, chat, MUDs, MOOs, ICQ, IM, and SMS. All of these modes are textual, involving typed words that are read on a computer screen (Herring, 2001a).

Emoticons are signs or icons representing the face of a writer's mood or facial expression (Walther & D'ardario, 2002). Emoticons, also referred to as smileys, are derived from the two words: "emotions" and "icons" (Huffaker & Calvert, 2005). They are often used in text communications to convey an emotion with a message. To create an emoticon or smiley you use your standard keyboard characters and punctuation marks.

Genderlect is a term that was coined by Tannen (1990) to describe the difference between men's and women's speech. Specifically, genderlect refers to the variety of language that is specific to one gender, male or female. It is a blend of gender and dialect (Fromkin et al., 2011).

Mobile phone is defined as any wireless device that permits interpersonal communication at any time in virtually any urban location. These include basic handsets, smart phones, Blackberries, and I-phones (Wei, 2007, p.18).

Online Communication means communicating via a computer connected through a modem, telephone line or network to another computer.

Onomatopoeic words are words whose sounds suggest their meaning, e.g., *cough*, *cuckoo*, *hiccup*, *ring*, *buzz*, and *knock* (Fromkin et al., 2011).

Semiotics is “the study of sign action.” (Borpy, 2002, p. 6) It studies sign forms and their meaning.

SMS is a mode of asynchronous text communication via mobile phones in which users have a limited number of symbols-160 including spaces to construct their message (Zelenkauskaitė & Herring, 2008, p.2). (See also text messaging).

Sociolinguistics is the study of language in relation to society. It is "concerned with investigating the relationships between language and society with the goal being a better understanding of the structure of language and how languages function in communication" (Wardhaugh, 2006, p.13).

Synchronous CMC is one form of CMC in which a two-way communication or interaction takes place simultaneously.

Text is a term used to refer to the texts used in SMS text messaging, instant messaging, internet chat, informal e-mails, and social software (Shortis, 2001).

Texters is a term that refers to people who send text messages. This term was used by Rafi (2008, 2010).

Text messaging is the common term for the sending of “short” (160 characters or fewer, including spaces) text messages from mobile phones using the Short Message

Service (SMS). The individual messages which are sent are called text messages or more colloquially, texts.

Typographical Features are a set of features that are used in the composition of a text in order to make it intelligible, readable and coherent, such as punctuation, capitalization, visual signs, color, and font.

1.8 Summary

This chapter served as an introduction to this study, whose main objective is to explore gender differences in the text messaging of young Jordanian university students. It offered a brief review of the Jordanian setting, including demographic information, education, culture, language, and mobile phone services in order to set the scene for the study. Following that, the chapter gave a detailed description of the statement of the problem, the objectives, the research questions, and the significance, of the study. Significant terms that are used throughout the remainder of the study were defined next. Finally, this chapter outlines the study by giving brief accounts of its chapters.

1.9 Organization of the Thesis

Chapter One is an introduction of this study, the purpose of which is to explore gender differences in the text messaging of young Jordanian university students. This chapter constitutes the background of the present study. The chapter also serves to give details about the statement of the problem, objectives, research questions, and

significance of the study. It also presents the definitions of significant terms that will be used throughout the remainder of the dissertation.

The second chapter includes a literature review pertaining to the relationship between language and gender in face-to-face communication and in computer-mediated communication, discussing some of the most important studies conducted on these two issues. The chapter begins by offering a brief review of computer-mediated communication touching upon its definition, history, forms, characteristics, and text messaging as a form of CMC. The second chapter also discusses previous literature relevant to text messaging, focusing on the linguistic and the socio-cultural aspects of text messaging. Literature about the theories dealing with gender differences in face-to-face communication as well as theories of gender differences in computer-mediated communication are presented in this chapter. Finally, the theoretical framework upon which this study is based is also discussed.

A detailed description of the methodology behind this study is presented in Chapter Three. This includes research design, sampling and procedures of selecting participants, data collection techniques, pilot study, data analysis, issues of validity and reliability, ethical and legal considerations, and any related perceived limitations. The data for the study were collected by means of an open-ended questionnaire, user diaries, and semi-structured interviews.

Chapter Four reports on the results and the main findings of gender differences in the text messaging of young Jordanian university students and discusses the central

issues of the dissertation. It focuses on the linguistic features in the text messaging of the students. It also discusses and interprets the findings of this study.

Finally, Chapter Five is a summary and evaluation of the results, including a discussion of their implications from a number of perspectives including linguistic and educational aspects. Further suggestions and recommendations for future research on CMC, in general, and text messaging, in particular, are suggested. Finally, the limitations of the study are explained in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses some of the important studies in the areas of gender and face-to-face-communication, and gender and CMC. It also discusses studies related to text messaging communication, focusing on its socio-cultural aspects, linguistic aspects and gender differences. The first section discusses CMC with regard to its definition, history, forms, characteristics, importance as well as text messaging as a form of CMC. Then this chapter highlights the literature relating to gender and face-to-face communication, followed by relevant literature on gender and CMC. A review of various studies pertaining to text messaging on two different levels: the socio-cultural level and the linguistic level are discussed after that. The final section of this chapter presents the theoretical framework of this study.

2.2 Computer-Mediated Communication (CMC)

2.2.1 Definitions of CMC

The term Computer-mediated Communication (CMC) was first coined in 1978 by Hiltz and Turoff (Bosco, 2007). It refers to a variety of written messaging systems that allow two or more participants to communicate using computer-based technology (Baron, 2005a). Broadly speaking, CMC may be defined as the use of computer and computer networks in a way that allows participants to interact with one another (Sierpe, 2002). Herring (2001a) proposed the idea of CMD as one

specialization of CMC. She defined CMD as “the communication produced when human beings interact with one another by transmitting messages via network computers.” (p. 612)

However, she pointed out that a distinction between computer-mediated discourse (CMD) and CMC should be made clear. Herring (2001a) argued that CMD is to be regarded as a specialization within the broader study of CMC because of its focus on language and language use in computer-mediated communication, and its methods of discourse analysis to address that focus. This study is one type of CMD studies which follows Herring’s approach to “Computer Mediated Discourse Analysis” (CMDA). This kind of human interaction via the computer is also described as electronic communication, online communication, and cyber communication. Another definition was introduced by December (1996) who defined CMC as the asynchronous and synchronous creation and transmission of messages using digital techniques.

Two points vital to this definition of CMC are interaction and message. The interaction is the "give and take" which occurs between the participants due to the reciprocal nature of the interaction (Seirpe, 2002, p. 7). Regarding the messages exchanged, there is a common understanding that when a person talks about CMC, he/she is talking about textual communication unless another form is specified (Herring, 1996).

2.2.2 History of CMC

To better understand CMC, it is helpful to take a look at how it all began with a short history of the World Wide Web (WWW).

The transmission of textual messages using computer networks dates back to the heights of the cold war with the development of The Advanced Research Projects Agency Network (ARPANET). Griffiths (2001) explained how the World Wide Web emerged. The formation of the World Wide Web, as it is known today, began in the 1960s when the Advanced Research Project Agency (ARPA), a division of the United States Ministry of Defense, planned to transfer information between different field locations. Therefore, ARPA collaborated with Massachusetts Institute of Technology (MIT) and other universities to develop a computer network capable of sending information between locations.

In 1969, ARPANET, a network of four host computers in different locations, was successfully set up by the researchers who worked into integrating more computers into the network (Porter, 2004). By December 1971, the United States Eastern and Western coasts were connected by 23 host computers involved in ARPANET. At this period of time, the ARPANET research was restricted to governmental service. This restriction changed at the First International Conference on Computers and Communication 1972, when scientists demonstrated the system in operation by linking computers together from 40 different locations (Griffiths, 2001). This was the first public demonstration of the new network technology (Leiner, 2000). Further research in computer networks was stimulated by this demonstration, shifting the

research to private groups. Thus, various protocols were designed for specific networks, meaning that networks used different languages and protocols to function (Griffiths, 2001). It was then that the initial "hot" application, the electronic mail, was introduced (Leiner, 2000).

In 1982, ARPANET adopted a standard known as a transmission control protocol/internet protocol (TCP/IP). TCP/IP became the standard language for all the networks being developed at that time which allowed them to communicate with one another. This merging of TCP/IP was the beginning of the "Internet", a connected set of computer networks using the TCP/IP standard (Griffiths, 2001). At this stage, the internet was mainly used by the researchers who developed it, and it became a kind of an international network (Porter, 2004). In the mid 1980s, the world governments began to use the internet in higher education, and by the year 1990, the number of host computers using the internet surpassed 300,000 (Porter, 2004). The United States government increased funding for internet development in the early 1990s, establishing the Information Superhighway Project which was intended to improve the United States internet infrastructure, and it succeeded (Griffiths, 2001). In 1991, the World Wide Web (WWW) was released to the public. It is a network of sites that can be searched and retrieved using Hyper Text Transfer Protocol (HTTP). With the web using easy-to-use graphical interfaces that could be understood by everyone, businesses, as well as regular people and even children began to use it.

The development of the internet is significant to the communication field. Different communication modes like e-mail, bulletin boards, chat rooms, instant messages,

text messages, weblogs, and listserves, were created when people started using the internet for personal use (Leiner, 2000). Furthermore, complex communities online where people could communicate with each other anywhere and anytime were also developed. The internet opened the door to CMC that was previously impossible.

2.2.3 Forms of CMC

CMC includes a number of different interactive socio-technical modes such as e-mail, discussion lists and newsgroups, chat, Multi-User Dimensions (MUD), I Seek You (ICQ), instant messaging, and text messaging.

Baron (2005a) described CMC messaging with respect to two variables: (1) synchronicity and (2) the number of participants in the interaction. In the first one, CMC is either synchronous or asynchronous. In synchronous CMC, the participants are logged on to the computer-based technology simultaneously, i.e., they communicate in real time. Synchronous communication, especially chat and instant messaging, is similar to face-to-face conversation in which message transmission is immediate (Hård af Segerstad, 2002). Synchronous messages are usually short and unedited because of time constraints, and communicators' interruption and immediate response (Baron, 2003).

In asynchronous CMC, the participants are not communicating in real time; that is, a sender can construct and send a message without the recipient needing to be available to respond when the message is transmitted. There are no time constraints, and participants cannot be interrupted. Asynchronicity allows the message senders

time to compose and edit messages before sending them, and the communication does not require an immediate response like synchronous and spoken interactions (Hård af Segerstad, 2005).

However, the distinction between synchronous and asynchronous CMC is not clear-cut. In formal characterization, for example, e-mail is asynchronous and one-to-one but, in practice, the distinction is not always very clear (Herring, 2004). E-mail in the form of spam is a one-to-many communication, and texting can also be the same. Users of text messaging can also engage in interactions made of a number of exchanges within a very limited period of time. Evidently, there is no clear dichotomy between synchronous and asynchronous modes of CMC. Hence, it is important to take into consideration how CMC is used in practice.

As to the second variable, CMC is either one-to-one, in which a single user communicates with a single interlocutor, or many-to-many in which multiple users join together in conversations. Baron (2005a, p. 2) suggested a four-way matrix resulting from these variables:

	<u>Synchronous</u>	<u>Asynchronous</u>
One-to-one	instant messaging	e-mail, SMS
Many-to-many	chat, MUDs, MOOs	listservs, newsgroups, blogs, computer conferencing

2.2.4 Characteristics of CMC

CMC provides people from around the globe with a unique forum for human communication. Harasim (1993, p. 15) mentioned that: "human communication has become the major use of computer networks and has transferred them into a social space where people connect with one another." He also pointed out four important features of CMC: anyplace communication, anytime communication, group interactivity and computer mediation.

Firstly, network is place-independent. In other words, people all around the world can connect with one another by using telecommunication technology. Secondly, network is available 24 hours/7 days a week. Therefore, communication is always possible. Furthermore, participants can send and receive messages independently at times convenient to them. They can also take their time composing and editing their messages. CMC has the ability to reduce delays by eliminating "telephone lags" or waiting for a suitable time for face-to-face interactions. Besides, interactions may be more egalitarian since airtime is not limited and cannot be controlled by a few verbose participants as in face-to-face meetings.

Thirdly, interactive conversations and discussions are offered on network among people from different parts of the world comprising different ages, different genders and the like. In these virtual places, questions are asked and answered, advice is offered, and opinions are argued.

Finally, computer-mediated communication is restricted to written texts appearing on a computer screen and can be printed as hard copies. This form of communication lacks necessary information vital to communication like the tone of voice, gestures, or physical appearance of the communicators. Researchers argue that this medium provides a uniquely "democratic" forum for interacting since users can operate without physical evidence related to sex, race and class, which may result in increasing "voice" for those participants marked by sex, age, race, or other characteristics in face-to-face interactions (Herring, 2002).

2.2.5 Importance of CMC

The use of CMC at the beginning of its development was restricted to government agencies, high-technology organizations, academic research institutions or high prestige professions (Griffiths, 2001). Nowadays, the rapid growth of personal computers coupled with the decreasing cost of the internet connection has caused CMC to shift from being a relatively elitist and high-profile technology into one that is found even in public schools.

Presently, CMC is so popular that it is regarded as part of our culture and daily lives (Sierpe, 2002). It is common nowadays to see internet establishments such as internet cafes and shops along the streets of big and small cities around the world. It is also very common to find computer terminals at airports, educational centers, and large shopping malls offering free access to popular web-based electronic systems. Due to the rapid development of CMC, electronic communication, electronic shopping and electronic entertainment are readily made available.

Another importance of CMC is the presence of electronic communication in mass media. Electronic mail "addresses" are posted along with fax numbers to elicit inquiries or responses from consumers and television audiences (Seirpe, 2002). By the same token, CMC is important in helping institutions, organizations and occupational fields such as libraries and information centers conduct their operations.

On the interaction level, textual conversation over CMC appears to overcome many of the problems and difficulties associated with cross-cultural and intra-cultural interactions (Reid & Reid, 2005). People seem to communicate with one another as if in a normal face-to-face context, adapting their conversations to fit this new environment (Bennet, 1998). The establishment of this new form of social interaction allows people of different ages, sex, race, nationality or culture to interact, overcoming many of the social obstacles that exist in our complex social world. Bennet (1998, p. 2) defined CMC as a social form of interaction as follows:

People who use this form of interaction seem able to express a depth of feeling and emotion that would "ordinarily" be socially unacceptable within the context of a "traditional" conversation.

Discussing the social and interpersonal consequences of the internet, McKenna and Bargh (1998) pointed out that the lives of some internet users have been improved by the medium. They specifically investigated people who experience difficulties in face-to-face interactions; for example, those who are socially conscious, lonely or who have marginal identities. As a matter of fact, lonely and socially anxious people

were found to be able to express themselves and develop close-knit friendships on the internet better than in real-life situations. Not only does CMC connect people from around the world in virtual communication, but it can also support more intimate and personal relationships among friends (Wei, 2007). According to McKenna et al. (as cited in Reid & Reid, 2005), people with already strong and frequent intimate social contacts use the internet for social purposes, and many regard it as a relatively safe environment in which to form extensive and meaningful close relationships.

In addition, CMC has brought some benefits to some students and learners. For example, Graddy (2004) found that students with access to online communications, such as bulletin boards, chat rooms and e-mails do better in examinations than students who do not have such access. Fullick (2006) revealed that school students found online collaboration outside school highly motivating to their studies and that web-based communication provides a practical means of encouraging and developing collaboration in school work. The internet is also used as a means of communication and feedback for students to exchange their ideas and thoughts about what they have read. Such an exchange reinforces the reading and writing skills of the students (Bensoussan, Avinor, Ben-Israel, & Bogdanov, 2006).

CMC also provides people with an open gate to the world. It is like a living encyclopaedia, where you usually get answers in a very short time. It is a medium of collaboration, interaction and information dissemination (Leiner, 2000).

2.2.6 Text Messaging as a Form of CMC

Although the term CMC has traditionally been referred to those communications that occur via computer-mediated formats (e.g., instant messages, e-mails, chat rooms), it also refers to other forms of text-based interactions such as short message service (SMS). It is a technology using a text-based format just like e-mail and instant messaging (IM), which brought it under the remit of CMC. According to Grinter and Eldridge (2001, p. 219), SMS is in effect a "mini-terminal" for text-based communication.

2.2.6.1 Definition of Text Messaging (SMS)

The abbreviation SMS formally stands for "short text messaging" (Baron, 2003). SMS, as defined within the GSM digital mobile phone standard, is a "service that allows users to communicate non-vocally, expressing themselves via combinations of alphanumerical characters with a maximum of 160 characters per single SMS message" (Balakrishnan, 2007, p. 52). In much of the western literature on texting, the term SMS is also used to describe both the medium and the message (Kasesniemi & Rautianen, 2002). SMS can be used as a two-way means of communication, allowing people to send and receive short text messages from a mobile phone in near real time (Doyle, 2000).

The SMS service is a network of SMS centers owned by telecommunication companies offering SMS service to their customers. These centers are written software packages that can send messages to mobile phones, receive messages from mobile phones, receive messages from the internet, send messages to the internet,

send messages to other SMS centers, and receive messages from other SMS centers (Doyle, 2000).

Technically, SMS is not computer-mediated communication, since it was designed to be sent and received via satellite technology, not through computer networks. In recent years, many digital technologies have become interchangeable platforms for sending and receiving linguistic messages. For instance, e-mail messages can be transmitted and received on mobile phones. Likewise, SMS can be sent and received through computers (Baron, 2003).

Any text message comprises a header and a body of message (Bosco, 2007). The header usually includes the time and the date of sending the message. It also includes the sender's mobile phone number or name if that name is included in the contact list. The body of the message, which is the main content of the message, may be a new message or a forwarded message or a combination of both.

2.2.6.2 Emergence of Text Messaging (SMS)

SMS was developed in Europe (Baron, 2003; Deumart & Masinyana, 2008; Goggin, 2005). The first SMS in the world was sent by Neil Papworth via the Vodafone line in the United Kingdom on the 3rd of December 1992 (Deumart & Masinyana, 2008). It was a "Merry Christmas" message. Text messaging, according to Goggin (2005) and Hård af Segerstad (2002), was established by phone companies as an afterthought; another gimmick to beat the competition. Goggin (2005) added that SMS was built into the European Global System for Mobile (GSM) standard as an

insignificant additional capability. The GSM community expected that the new service will be more like an "add-on" that might increase the attraction of the GSM system without any commercial significance. However, the huge success of the service proved it to be the other way round.

The uptake of SMS was slow until the late 1990s. Initially, it took the mobile phone industry twelve years to reach the one billion connection, and only two and a half years for the number to reach another billion (Agoncillo-Quirante, 2006). This big change occurred because it became possible to send and receive messages among various networks. Consequently, mobile phone companies began to promote the service by marketing pre-paid cards which attracted low-income users, including teenagers and students. Since then, not only did high-income countries start to use the service, but also low and middle-income countries like China and India (Deumart & Masinyana, 2008). In their study of mobile phone practices, Rautiainen and Kasesniemi (as cited in Grinter & Eldridge, 2001, p. 220) described the explosion in the use of SMS as follows:

A significant change took place in the spring of 1998. Suddenly, instead of talking about calling and changing the color covers on their mobiles, all the teenagers wanted to give their views on text messaging. In a few months, the number (of) text messages sent attained the number of calls made and surpassed it.

The growth in the volume of text messages sent world-wide is astonishing. According to a report by the UK-based Information Telecoms & Media, SMS traffic

topped five trillion messages by the end of 2010, and the number is expected to reach 8 trillion a year by 2012 (Global Mobile Statistics, 2011).

At the early stages, the adoption of SMS was very slow in the US for a variety of reasons. First, Americans were very attached to their computers, so they used one-to-one messaging systems like e-mail and instant messaging (IM). Second, the US did not have a single phone protocol like Europe. Consequently, American mobile phone users did not have access to a shared mobile phone texting service (Baron, 2005b). However, things have changed since the launch of the Central States Communication Association (CSCA) (Interesting Mobile Statistics, 2008). SMS traffic volumes have been growing by 250% a year in the U.S. It has quickly changed the way people communicate and access information. By the end of 2011, 8 trillion text messages will be sent (Global Mobile Statistics, 2011). Despite the amazing growth of SMS messages in the world, in general, and in Jordan, in particular, very little attention has been given to its language, use, and impact on Jordanian society.

2.3 Language and Gender

Language plays a significant role in every society. It is used by people to express their feelings, thoughts, ideas, and convey their messages. However, there are no two people who talk alike, and people are often judged by the way they talk. Language and gender are inseparable as language is an important part of people's social identity (Coates, 1993). As Graddol and Swann (1994, p. 5) put it: "Linguistic habits reflect our individual biographies and experiences". On the other hand, our society shapes the way we speak and communicate with each other, teaching us how to

speak differently and how to have preconceptions about how different genders communicate and use language differently. It is important to study gender differences since language plays a significant role in our socialization process.

In the next section, previous studies on gender and face-to-face communication are discussed.

2.3.1 Gender and Face-to-Face Communication

Even though this research project aims to identify gender differences in males' and females' text messaging, it is significant to comprehend the linguistic aspects of males' and females' interactional styles and the language used in their face-to-face communication.

Finding gender differences in human language has evoked interest among linguists, in general, and sociolinguists, in particular, since the 1970s (Coates, 1993; Eckert & McConnell-Ginet, 2003; Fishman, 1983; Lakoff, 1975; Poynton, 1989; Tannen 1990, 1994, 1995; West & Zimmerman, 1983). Their constant investigation of language and gender has highlighted dichotomous differences between males and females. The researcher begins with a description of two of the most prominent researchers in this field, Robin Lakoff and Deborah Tannen.

2.3.1.1 The Research of Lakoff on Face-to-Face Communication

Robin Lakoff, whose book *Language and Woman's Place* (1975) had set the scene for so many studies on gender and communication, is a pioneering feminist linguist

and one of the most leading researchers in this particular field. Lakoff's theory (1975) on gender differences of males' and females' language claims that there are significant gender variations in males' and females' use of linguistic forms. Women, according to Lakoff, tend to show lack of commitment by employing a language style reflecting their diffidence, shyness, and lower self-confidence (cited in Eckert & McConnell-Ginet, 2003). Lakoff (1975) also asserts that women's lack of power in society leads to their lack of confidence, and, therefore, is reflected in their less-assertive speech. She argues that women are urged to use statements of uncertainty and triviality because they have been denied the use of strong self-expression. According to Lakoff (1975), an obvious discrepancy does exist in the language used by males and the language used by females, and this social difference of men and women leads to linguistic disparity. Lakoff (1975) points out that women, since they were little girls, were encouraged by parents to choose a speech that was gender-specific which showed their femininity linguistically just like their playing with dolls and avoiding aggressive play show their femininity physically. This femininity is a "symbolic enactment of powerlessness" (Wodak, 1997, p. 26). Therefore, women's language is distinguished by the employment of mitigating devices and by the avoidance of aggressive or strong language. This claim is reflected in Lakoff's own words (as cited in Cameron, 1990, p. 23):

Women are forced to learn a weak, trivial, and differential style as part of their socialization, which is essentially training in how to be subordinate. In other words, she regards women's style as a reflex of their powerlessness and men's power over them.

The language of females, according to Lakoff (1975), is more expressive, more non-assertive, and more polite than that of male language. She argues that American women are forced to soften their speech through certain devices such as tag questions, hedges, boosters and amplifiers, rising intonation on declarative sentences, diminutives, euphemism, and conventional politeness (cited in Eckert & McConnell-Ginet, 2003). For example, women often use indirect language to gain the benefit of rapport (Lakoff, 1975; Poynton, 1989; Tannen, 1990). Like Lakoff, Coates (1993) claims that women's general speech style, termed as "women's language", results from their position in society which is relatively weak, trivial and powerless. The differences in their speech for Coates (1993, p. 13) can be "interpreted as reflecting and maintaining gender-specific subcultures." Coates (1993) suggests that:

Men typically adopt a competitive style in conversation, treating their turn as a chance to overturn earlier speakers' contributions and to make their own point as forcibly as possible. Women, on the other hand, in conversation with women, typically adopt a cooperative mode: they add to rather demolish other speakers' contributions, they are supportive of others, they tend not to interrupt each other.
(p. 10)

In addition, Lakoff (1975) suggests that the language spoken by males and females is different in various aspects, and she recognizes "vocabulary" as one of these aspects. According to Lakoff, women have larger vocabulary to describe colors, whereas men use more words to describe sports. Men, according to Lakoff, view color as an unimportant and irrelevant world topic. Another difference in the speech of males and females, as mentioned by Lakoff, is the use of "empty adjectives" such as

charming, adorable, lovely, and divine. These adjectives are used more by females to show their approbation for something besides their literal meaning.

Additionally, Lakoff points out that the speech of males and females is different with regard to the use of “hedges”. Hedges are words or sentence fragments that indicate the speaker’s uncertainty about a specific statement. They include words such as *sort of, kind of, ya, you know, well.* Women often use more hedges than men, believing that using such devices will make them more “ladylike”, and that affirming themselves in a strong manner is not polite.

The use of “intensifiers” is also one feature of women’s speech in Lakoff’s theory. Women usually use them to hide their strong emotions or assertions. Therefore, when women have a strong feeling about something, but do not dare to show how strong their feeling is, they use intensifiers such as *so, rather, quite,* etc. For instance, instead of saying: “I like him very much” where the speaker is stating how much he/she likes someone, a woman will say, “I like him so much”, concealing the intensity of their love. Additionally, Lakoff (1975) argues that females employ more “meaningless particles” such as *oh,* and *dear* than males do. These particles, which have no referents, indicate the relationship between women and their addressees, and between them and what they are talking about.

Besides the aforementioned characteristics of female speech, Lakoff adds that female speech is “syntactically peculiar”. One aspect of this syntactic peculiarity is indicated in the use of “tag questions” which are typical of women’s speech. A tag question is

a reduced question (e.g., isn't it? and don't you?) that is joined to the end of a positive or negative statement; for instance, "You like coffee, don't you?". According to Lakoff, tag questions are used when the speaker lacks commitment or confidence in the proposition made. Therefore, a tag question enables the speaker to avoid any embarrassment or conflict with the addressee, or to show the speaker's lack of opinion (Lakoff, 1975).

Men and women vary in their use of "hypercorrect grammar". Women tend to adhere more to the norms of language by using more standard forms than men (Lakoff, 1975). They also avoid the use of "coarse language", "apologize" more, and use more "super polite" forms than men do because they know that women's talk is supposed to be polite.

Furthermore, Lakoff (1975) claims that women do not tell jokes. She points out that there is an American axiom that women cannot tell jokes, always ruin the punch line, and confuse the order. They are also unable to understand jokes because they lack a sense of humor.

The last feature of female's speech that was outlined by Lakoff (1975) is that females often speak in "italics". They employ intonation which is similar to underlining words. According to Lakoff (1975, p. 56), "The more ladylike and feminine you are, the more in italics you are supposed to speak." Speaking in italics is another example of expressing uncertainty about statements.

The linguistic features characterizing women's speech as proposed by Lakoff (1975) are summarized as follows:

1. Lexical hedges or fillers, e.g. *you know, sort of, well, you see.*
2. Tag questions, e.g. *she's very nice, isn't she?*
3. Rising intonation on declaratives, e.g. *it's really good?*
4. "Empty" adjectives, e.g. *divine, charming, cute.*
5. Precise color terms, e.g. *magenta, aquamarine.*
6. Intensifiers such as *just* and *so*, e.g. *I like him so much.*
7. "Hypercorrect" grammar, e.g. *consistent use of standard verb forms.*
8. "Superpolite" forms, e.g. *indirect requests, euphemisms.*
9. Avoidance of strong swear words, e.g. *fudge, my goodness.*
10. Emphatic stress, e.g. *it was a BRILLIANT performance.*

(Cited in Holmes, 2008, p. 298)

Lakoff (1975) believes that women, generally, make use of the above-mentioned speech styles in their conversations even though they differ in the degree of their usage. Her claim constitutes two basic elements. The first one is that males and females talk in different ways. The second one is that the variation in the speech of males and females results from male dominance (Eckert & McConnell-Ginnet, 2003, p. 2). It is worth pointing out that her observations have found much support by researchers today even though they have been criticized by some others.

2.3.1.2 The Research of Tannen on Face-to-Face Communication

Unlike other researchers of the dominance approach (Coates, 1993; Lakoff, 1975; Fishman, 1983), Tannen's (1990) approach is a more balanced approach of unbiased "difference". While she admits to the existence of male power and control in society, her analysis of gender differences downplays the role of power in producing linguistic differences. Tannen (1990) believes that gender differences in communication styles can be explained through culture. She claims that the speech of males and females is different, just like the speech of people from different nationalities and cultures. There is no superior-inferior relationship. She also suggests that the difference in gender is due to individuals simply employing differently learnt norms of communication (Nowson, 2006). Tannen (1990, p. 18) says that "boys and girls grow up in what are essentially different cultures, so talk between women and men is cross-cultural communication."

In her research, Tannen (1990, 1994) focuses on gender differences in face-to-face communication. In her very popular book *You Just Don't Understand*, Tannen suggests that males and females have two different styles of linguistic interaction, which stems from the fact that boys and girls are nurtured in relatively distinct settings.

As such, Tannen refers to women's speech as "rapport talk" (Tannen, 1990, p. 74) because women connect with others and establish relationships by means of conversation. Tannen (1990) describes women's conversation as more cooperative than competitive. In contrast, males make use of conversation to establish power and

status. Tannen refers to the speech of men as “report talk” (Tannen, 1990, p. 74).

This talk is used as a means to achieve a higher status in interactions. Tannen (1990)

states that:

The act of giving information by definition frames one in a position of higher status, while the art of listening frames one as lower but when women listen to men, they are not thinking in terms of status. Unfortunately, their attempts to reinforce connections and establish rapport can be misinterpreted as casting them in a subordinate position-and are likely to be taken that way by many men. (p. 139)

In other words, men negotiate status through conflict, whereas solidarity and close relationships are created by women by using a relationship-oriented conversation.

Tannen (1990) finds similarities between males’ and females’ conversations and young girls’ and boys’ conversations. Comparing the conversations of sixth grade girls and boys, Tannen found that:

the boys do say a bit about their friendships and about other people, but most of their talk is about things and activities and opinions about social issues...all the girls’ talk is about friends, friendship, and feelings; they orchestrate this talk at a level of subtlety and complexity that is not seen in the sixth-grade boys’ talk. (1990, p. 265)

Tannen (1990, 1995) highlights some of the most common areas of difference in the speech of men and women. First, she confirms that speech, for women, is a way to reciprocate confirmation and support, whereas men use it to achieve power and dominance. Second, women are more concerned with closeness and support, while men are more concerned with status and independence. Third, some women make

their requests like proposals not orders, but for some men this method has some disadvantages because it may backfire. Men often feel resentful if someone tries to make them do something indirectly. In fact, they prefer straightforward requests. Fourth, talk for men is information, so they enjoy telling jokes and stories in social settings. Women, on the other hand, get offended when their husbands talk to strangers about issues they have not told their wives about. Finally, unlike men, women do not resist the will of other people openly. Holmes (1995) reports similar findings. She mentions that women's use of language may be described as facilitative, affiliative and cooperative, whereas men's use of language may be described as competitive and control-oriented.

Finally, Tannen (1990) stresses that males and females need to understand their own way of communication in order to avoid conflict and misunderstanding between them. For instance, men need to remember that women are looking for a sense of community through their communication. Women, on the other hand, should keep in mind that men are looking for status and control.

2.3.1.3 Further Research on Gender and Face-to-Face Communication

Previous research on gender and face-to-face communication has also shown that there are clear gender variations in the speech of men and women. For example, Poynton (1989) has given a list of language strategies that are usually used by English males and females to reflect their different styles in communication. These strategies include: interruption, mood choices (tag questions), back channel noises (yeah), intonation, and various phonological variants. Poynton (1989) discovered

that females include more modals (must, might), modal adverbs (probably, possibly, certainly), interpersonal metaphors (I think, I suppose), more polite expressions (I was wondering if I could possibly), and less direct commands. Poynton (1989) also believed that females make longer statements to avoid interruption by others, more evaluative adjectives (e.g., wonderful), more adjectives of approximation (e.g., about, around), more intensifiers (e.g., so, very), and more direct quotations instead of paraphrasing.

Investigating males' and females' conversations in their homes, Fishman (1983) illustrated how verbal communication help men and women construct and maintain their hierarchical relations. Fishman (1983) highlighted a number of linguistic forms used by males and females. He explained that women ask more questions than men, use the question "D'ya know" twice as much as men, use attention beginnings five times more than men, use minimal responses like "umm" and "uhuh" to support ongoing interactions, and make fewer statements than men.

In their study of gender differences in the verbal interaction of males and females, Turner, Dindia, and Pearson (1995) investigated the effect of gender on 11 verbal communication behaviors, including: number of words spoken, vocalized pauses, verbal fillers, interruptions, overlaps, intensifiers, justifiers, qualifiers, questions, question tags, and agreement. The results of their analysis indicated that women's use of some features is consistent with Lakoff's (1975) theory of gender variation in interaction. For instance, women used more intensifiers, justifiers, and agreement than men who used more vocalized pauses than women. Males utilized more

vocalized pauses and were more uncomfortable in task-oriented discussions than females. Females used more agreement and were more cooperative and positive in communication than males. This finding may be explained in light of theories of gender differences such as the dominance approach which suggests women's lack of power in society. Therefore, they try to make up for their weakness by showing a sense of cooperation, attenuation, and agreement in their communication.

Previous studies have also shown that men and women are different with respect to politeness. Women tend to be more polite, are ready to soften their speech more than men, and are not as critical of others as men are (Graddy, 2004; Holmes, 1995; Lakoff, 1975; Poynton, 1989; Tannen, 1990; West & Zimmerman, 1983). For example, Holmes (1995, p. 2) believed that men are not as polite as women. She stated that:

Most women enjoy to talk and regard talking as an important means of keeping in touch, especially with friends and intimates. They use language to establish nurture and develop personal relationships. Men tend to see language more as a tool for obtaining and conveying information.

Similarly, Sheldon (as cited in Herring, 1995) mentioned that unlike men who tend to enjoy discussions that are agonistic and argumentative in nature, women tend to be polite, self-effacing, and pay attention to other people's needs. The findings go hand-in-hand with the findings of Coates (1993), who confirmed that men have the tendency to control linguistic communication. In her study, she realized that men dominate in the amount and manner of communication. In order to do so, they use

aggressive and self-promotional language, whereas women tend to be polite, supportive, attenuated, and self-deprecating. These patterns emphasize the gender power hierarchy with men being dominant and women being subordinate. Similarly, Graddy (2004) found that males tend to be more adversarial, contentious, self-promoting, and assertive. Their conversational style includes threats to individual expressions, concern with rules, and posting of long messages. In contrast, women tend to be more “qualifying, apologetic, supportive, and polite” (Graddy, 2004, p. 3).

Research has also shown that there are gender differences in the amount of talk (Coates, 1993; Fishman, 1983; Herring, Johnson, & DiBenedetto, 1995; Tannen, 1990). Herring et al., (1995) explained that women talk less than men in public interactions. Coates (1993) and Tannen (1990) maintained that men are more “verbose” than women, though it is women who “chatter” in stereotypical mythology. Fishman (1983) also pointed out that men make more statements than women, who favor minimal responses.

There are also gender differences that exist in the speech acts of complimenting and apologizing (Bataineh & Bataineh, 2006; Holmes, 1995; Migdady, 2003). Bataineh and Bataineh (2006) showed that Jordanian male and female students differ in the apology strategies they use for complimenting. Females use strategies that help them avoid the discussion of offense, while male students use those which help them blame the victim. Migdady (2003) found that there are gender differences in the use of compliments among Jordanian males and females with respect to the following categories: frequency, topics, strategies, syntax, format, and compliment responses.

To exemplify, females in Migdady's (2003) study gave and received more compliments than males. Females also used explicit compliments, whereas males used implicit ones. Moreover, while females gave more compliments on appearance, males gave more compliments on personality.

Sociolinguistic literature has shown that females are habitually more concerned with prestige than males (Angle & Sharlene, 1981; Eckert & McConnell-Ginet, 2003; Holmes, 2008; Romaine, 1999; Stockwell, 2002; Trudgill, 1983). For example, analyzing the phone conversation of a brother and sister, Stockwell (2002) mentioned that the sister used a more prestigious variant / r /, whereas the brother used the stigmatized variant, the glottalized / ʔ /. Furthermore, in their attempt to gain prestige, women are generally more ready to copy and use the speech of rich people than men (Angle & Sharlene, 1981). In his study of prestige preference among men and women in Norway, Trudgill (1983) pointed out that the preference is much greater among women. According to Holmes (2008) and Trudgill (1983), women employ higher class forms because they are more status-conscious, and therefore, feel more pressure than men to look and act correctly.

Furthermore, women are more likely to use more standard forms in speech than men (Coates, 1993; Holmes, 2008; Trudgill, 1983). Trudgill (1983) demonstrated that the association between women and standard language is the most important finding that emerged from social dialects over the past twenty years. The association between femininity and standard language dates back to the Victorian era where "speaking properly" became linked to being a lady (Romaine, 1999). In Europe, studies have

shown that women tend to shift to standard language in preference to regional dialects (Trudgill, 1983). British women, according to Coates (1993), have the tendency to shift to codes closer to the standard language, while men have the tendency to use shift to non-standard forms. Holmes (2008) also revealed that in many speech communities women employ more standard forms than men do, whereas men use more vernacular forms than women do. For example, men use more *double negation* (e.g. I don't know nothing about it), more *h dropping* (e.g. *ous* instead of house), and more *in* at the end of words (such as writing and speaking) than women. Holmes (2008) presented four explanations as to why more standard forms are used by women than men. The first is related to social class and its status. The second one appeals to women's role in the society. The third explanation is women's status as a subordinate one. The final explanation is related to the speech function in representing gender identity.

In diglossic situations, situations in which two varieties of the same language exist in a speech community, the high variety (H) refers to the standard language which is used in formal situations such as education, religion, media, etc., whereas the low variety (L) refers to the colloquial language which is used in informal situation such as family and friends talk. Women differ in their attitudes and use of the high variety, which is considered more prestigious. An example of a diglossic situation is found in Paraguay where Spanish is the language used in formal interactions, whereas, Guarani, a surviving Amerindian language, is the language of informal and intimate situations (Angle & Sharlene, 1981). Holmes (2008) showed that Guarani is the language used by men when they speak with other men, but Spanish is used

when they talk with women, who preferred to use the Spanish language. Similar findings are reported by Trudgill (1983), who concluded that school girls in Jamaica are more ready than boys to give up their Creole language to a more standard form, therefore accepting correction of their language by their teacher.

With regard to finding the topic of speech, women, unlike men, find their topics of discussions easily. In her own words, Tannen said that:

Women exhibit minimal or no difficulty finding something to talk about, and they talk about a small number of topics... men exhibit great difficulty finding something to talk about... so they produce small amounts of talk about each of a great number of topics. (1994, p. 99)

The analysis of written texts has also been a focal point for gender identification because writing is intended for a different audience, and lacks the conversational cues such as pitch, tone, stress, intonation, gestures and so on. However, there is evidence indicating gender variations in the written discourse of males and females. For instance, gender differences in writing were observed by Mulac and Lundell (1994) who studied impromptu essays of college students. One hundred and forty eight students from an introductory communication class at the University of California were asked to write short essays about two different photographs. Mulac and Lundell (1994) found that that the writing styles of the males and females were different. They reported that the females showed more interests in emotional status and were more elaborate in their writing than their male counterparts. This finding is consistent with previous findings such as Tannen's (1990) and Coates' (1993).

Males, on the other hand, used more linguistic features indicating instrumental styles (referring to quantity and locatives) than females. They also mentioned that “women generally rated as higher on socio-intellectual status and Aesthetic Quality, and men higher on Dynamism” (Mulac & Lundell, 1994, p. 308).

Additionally, Shlomo, Moshe, Jonathan, and Anat (2003) studied 604 documents (articles and books) of the British National Corpus of different genre. The purpose of their study was to investigate gender differences in the occurrence of several classes of lexical and syntactic features in the writings of males and females. They indicated that female writers used more pronouns that encode the relationship between the writer and the reader such as first and second person pronouns. They also mentioned that female writers used more personal pronouns that indicate the gender of the object being mentioned, while males used more generic pronouns. They pointed out that females were more concerned with talk about relationships than males, whereas the males were more concerned with talk about objects than the females, supporting Tannen’s (1990) findings. Mehl and Pennebaker (2003) also revealed that their male and females participants differ in the use of first person pronouns, articles, and conjunctions. Females used them more than males. They found that the females used more first person pronouns, articles, conjunctions, intensive verbs, and modal auxiliaries than the males.

In summary, the previously discussed research investigates gender differences in the spoken or written discourse of males and females. It has shown that the speech and communication style of males and females are different. Males according to the

previous studies use a language that reflects their superior status, whereas females use a language that reflects their weak and inferior status in society. Unlike males who use language to achieve power, females use language to achieve support and closeness. In addition, the speech of males was found to be competitive, aggressive and less polite, while the speech of females was found to be facilitative, polite, less aggressive and supportive. The previous literature has also shown differences in the way males and females use vocabulary, syntax, and pronunciation. The question is: Do these differences invariably exist between males and females in CMC? The next section overviews what previous literature has revealed about gender variation in CMC.

2.3.2 Gender and Computer-Mediated Communication

Besides the large body of previous literature discussing gender differences in face-to-face-communication, there are more studies that have examined gender differences in CMC (Guiller & Durndell, 2006, 2007; Herring, 1992, 1993, 1994, 1996, 1999, 2000, 2001b, 2003; Huffaker & Calvert, 2005; Savicki, Lingenfeller, & Kelley, 1996; Selfe & Meyer, 1991; Sierpe, 2002).

Even though earlier studies claim that CMC is gender neutral because of the presence of sensory cues that indicate gender was eradicated by the text-only medium and that CMC presents a more equalitarian form of communication (Trias, 1997), a growing number of researchers have found that gender differences still exist in CMC (Guiller & Durndell, 2007; Herring, 1992, 1993, 2000, 2001b, 2003;

Herring & Paolillo, 2006; Huffaker & Calvert, 2005; Savicki et al., 1996; Selfe & Meyer, 1991 ; Sierpe, 2002).

It is important to note that language choices of males and females found in CMC are almost similar to those found in face-to-face communication (Herring, 2000, 2001b). Herring (1993) and Herring and Paolillo (2006) argue that gender socialization in face-to-face communication is clearly reproduced in CMC.

In the following section, the research of Susan Herring is discussed. Herring's research deserves some attention because she is one of the first scholars to make the issue of gender differences in CMC the focus of her research. She has published a considerable number of articles on gender and CMC.

2.3.2.1 The Research of Susan Herring on Gender and CMC

During her many years of research in the field of gender and CMC, Susan Herring, one of the leading linguists and known researchers in the field, based her theories on on gender differences revealed in her research (Herring, 1992, 1993, 1994, 1995, 1996, 1999, 2000, 2001b, 2002, 2003). Herring has used theories of gender differences in face-to-face communication by Lakoff (1975), Tannen (1990), and Coates (1993) as the basis for her research.

Herring (2000) believes that both men and women transfer the already-present gender differences of face-to-face communication onto computer-mediated communication. Herring (1999, p. 137) claims that gender differences in CMC still

persist despite technological mediation, and that the assumption made by previous research that gender differences in CMC are equalized (Danet, 1998; Kiesler, Siegel & McGuire, 1984; Suler, 2004; Trias, 1997) needs more support. Herring (1999, p. 261) states that:

Contrary to the assumption that CMC neutralizes indications of gender, there are gender differences in public discourse on the internet. Moreover, these differences are not randomly distributed across individuals, but rather display a systematic pattern of distribution with male users as a group tending toward more adversarial behavior and female users as a group tending toward more attenuated and supportive behaviors.

Herring's findings on gender and CMC are similar to those reported by Lakoff (1975), Tannen (1990), and Coates (1993) on gender and face-to-face communication. Herring (2000, p.2) argues that "the linguistic features that signal gender in computer-mediated interaction are similar to the findings that have been previously described for face-to-face interaction". Herring (2000, p.2) adds that these linguistic features include "verbosity, assertiveness, use of profanity, politeness (and rudeness), typed representations of smiling and laughter, and degree of interactive engagement."

The linguistic features mentioned above are used by males and females with different degrees. Herring (2001b, p.2) suggests that:

There is an overall tendency for some of these behaviors to correlate more with female CMC users, and for others to correlate more with males. This does not mean that each and every female and male manifests the behaviors; exceptions to the tendencies can readily be found.

The findings of her research have shown that men tend to use an adversarial and self-promoting style in the CMC environment, which is featured by making assertions. In contrast, women tend to use an attenuated style in their communication by hedging their assertions, asking questions, and providing personal orientation, which is consistent with face-to-face communication (Herring, 1992, 1993, 1994).

In her first research on gender differences in CMC, Herring (1992) made a comparison between the representation of women in Linguistics and their representation in LINGUIST, an electronic discussion list. Despite the fact that women made up 46% of the regular members of the Linguistic Society of America, they represented only 36% of the subscribers in LINGUIST. She found that men participate more than women in the discussion of theoretical issues. She also found that men write more messages than women do; their messages are also longer than those posted by their female counterparts. Herring, based upon these findings, formulated four hypotheses in her attempt to explain the underlying causes of these gender differences:

1. Men are not as busy as women to participate in LINGUIST.
2. Women are intimidated by the tone of the discussion.
3. Women are inhibited from participating because of their fear of technology.
4. Men are more interested than women in the topic or topics raised.

Studying the language employed by men and women on the list, Herring (1992) listed two different sets of features distinguishing men's communication style from

women's communication style: *the adversarial style* versus *the attenuated /personal style*. The adversarial style of men is characterized by strong assertions (using adverbials like certainly, absolutely, definitely, never, obviously), self promotion, sarcasm, rhetorical questions, exclusive first person plural pronouns, imperative form of verbs, impersonal and presupposed truth (e.g., it's obvious, it's clear) and ridiculing an opponent's point of view. The women's attenuated/personal style, on the other hand, is characterized as attenuated assertions using hedges and qualifiers (e.g., may, perhaps, sort of, seems, might, somewhat), exhortations phrased as suggestions (e.g., let's go), questions as a means to get a response, apologies (e.g., I am sorry), and inclusive first person plural pronouns (e.g., I feel that, I am intrigued by) (Herring, 1992). Her findings are consistent with the findings of coates (1993), Lakoff (1975), Poynton (1989), Tannen (1990), and Turner et al. (1995) of gender and face-to-face communication.

Herring (1992, 1993) identified some of the characteristics of men's and women's language on the LINGUIST list. They are summarized in Table 2.1.

Table 2.1: Characteristics of Men's and Women's Language

Men's Language	Women's Language
Strong assertion	Attenuated assertions
Presupposition	Explicit justifications
Challenging others	Supporting others
Self-promotion	Apologies
Rhetorical questions	Questions
Authoritative orientation	Personal orientation
Humor/sarcasm	

Herring (1992) extended her critical investigation of gender differences in electronic discourse to Megabyte University (MBU), an electronic discussion list in the subject of composition and rhetoric. In this discussion group, women enjoyed considerable influence. Herring expected that women would participate equally in the discussion since MBU is considered friendly and supportive. Her findings revealed that men's style on LINGUIST is not as adversarial as it was on MBU. Men also contributed more to the list than women. For a brief period of time, women's contributions exceeded those of men's. Subsequently, they were accused of trying to silence the men, forcing three males to announce publicly that they would unsubscribe. In

addition, Herring (1992) pointed out that males received more responses to their contributions than women. As much as 89% of postings made by men received responses, whereas only 70% of postings made by women received responses. Similarly, men's contributions received more attention than women's contributions even by women themselves.

In her investigation of gender and democracy, Herring (1993) analyzed two academic discussion groups over a one-year period through observing 261 messages which were posted on a cognitive linguistics discussion. Her findings are in line with her earlier theory and other findings of gender differences in face-to-face interaction such as Tannen's (1990). She reported similar gendered language style such as *task-oriented* versus *socioemotional features*. Herring (1993) maintained that males and females in the discussion groups participate differently by pointing out significant gender differences in terms of amount of participation, manner of participation and discussion topics. She reported that men participated more than women and that their contributions were one and a half times longer than, and sometimes twice as long as those of women. Men successfully posted and received more messages than women did in the Literature list. However, women participated more in topics related to real-world consequences. A small group of males in the list, however, dominated the interaction with regard to amount of talk and rhetoric by means of self-promotional, sarcastic and adversarial language. Herring (1993) claims that academic CMC is power-based and hierarchical and that:

This state of affairs cannot, however, be attributed to the influence of computer communication technology; rather, it

continues preexisting patterns of hierarchy and male dominance in academia more generally, and in society as a whole. (p. 486)

Males' communication style mostly includes self-promotion, fostering competition, assumptions, concrete statements and challenges to others. Females, on other hand, adopt a more personal orientation, draw upon previous experience with family and friends, show more support and understanding of others, use humor, and ask more questions.

Trying to reveal the communicative values leading both males and females to display different politeness behaviors on the internet, Herring (1994) applied Brown and Levinson's (1987) framework on positive and negative politeness. Her data were collected from nine different electronic discussion groups which had different levels of women's participation. Herring's findings conclusively showed that females' behavior on the internet was more overtly polite than males' with regard to observance of positive face, expressions of agreement, appreciation and support. Males violated politeness norms more often than females. For example, they produced more unmitigated face-threatening acts such as disagreeing with others and complaining or protesting against their behavior (Herring, 1994, 2003). Herring (1994), moreover, explained that men flame, at least in part, to regulate the social order. Flaming is defined as "the expression of strong negative emotion", use of "derogatory, obscene, or inappropriate language", and "personal insults" (Herring, 1994, p.11). She also argues that:

Such behavior is rationalized within a male system of values that assigns greater importance to freedom of expression and firmness of verbal action than to possible consequences to the addressee's face needs (p. 292).

Herring's (1995) findings are congruent with her earlier findings (Herring, 1992, 1993, 1994). She discovered that men on the internet maintained an aggressive style that involved self-promotion, disrespecting others, long conversational turns, and insulting the competence of others.

Herring (1996) focused on the stereotype proposed by Tannen (1990) suggesting that males are concerned mainly with exchanging information, while females are concerned with maintaining social relationships. She based her analysis on 71 messages sent to LINGUIST on a discussion of "cognitive linguistics" and on 65 messages sent to the Women's Studies List (WMST) on the difference between men's and women's brains. Herring (1996) recognized gender variants in the organizational structure of electronic messages: the aligned variant and the opposed variant. The former one is aligned with the views of the addressee while the second one is opposed to the views of the addressee. Herring's findings do not support the stereotype of the informative male and socially-oriented female. In fact, she mentioned that both men and women participate in the discussions to exchange opinions, beliefs, understanding, and judgments in social interactions.

Turning her attention to the issue of gender and ethics, Herring (1999) probed the moral and political dimensions of norms governing on-line behavior and the mechanisms used to establish them. She also focused on how men and women differ

in their CMC. She pointed out that CMC includes heavily gendered discourse. For example, females tended to provide politeness-related responses more than men did. Females also tended to make the addressee positively valued, whereas men did not. Additionally, similar to Lakoff's findings (1975), Herring (1999) discovered that the females' messages involve various attenuation features such as hedges (e.g. not terribly, I suspect, likely), and politeness markers (e.g. please). More importantly, Herring's (1999) findings do not support the assumption that CMC neutralizes gender differences as suggested by some researchers (Danet, 1998; Kiesler et al., 1984; Suler, 2004; Trias, 1997). In fact, she found that gender differences in CMC still exist despite the nature of CMC, which reinforces gender equality.

To report on the findings of previous literature on gender and CMC, Herring (2000; 2001b) arrived at two important themes. First, there is a tendency among the internet users to manifest gender styles in their messages. Second, gender dynamics are not the same in synchronous and asynchronous CMC. Synchronous CMC revealed greater objectification of women in sexual terms, whereas asynchronous CMC revealed greater inequity in the amount of participation. She also came across very little evidence to support the claim that the CMC, in general, and the internet, in particular, lend support to gender equality (Herring, 2000, 2001b). She remarked that although the internet provides a very fertile environment for both male and female users, it doesn't appear to minimize gender differences in their communication.

In their analysis of gender differences regarding turn allocation in a Thai chat room, Panyametheekul and Herring (2003) analyzed turn-taking, response patterns and

flirtation in face-to-face conversations. Unlike other findings by Herring (1992, 1993, 1994), Panyametheekul and Herring's (2003) results showed that turn allocation in a Thai chat room was not very different from that of face-to-face communication. The results also showed that females participated more than males in chat rooms. In order to take the floor in the Chat rooms, males had to work harder, even in their attempted flirtatious interactions. Females in Thai chat rooms appeared to be relatively empowered, a finding that does not go in line with other findings of gender variation claiming that females have subordinate status. This finding may suggest that Thai culture provides women with more freedom to communicate freely.

Herring and Martinson (2004) concentrated on deceptive gender performances in the Turning Game using content analysis. The Turning game is one type of identity games publicly available via the internet. They mentioned that the contestants adopted some of their real-life gender features regardless of the gender they were acting on the game. For example, they chose nicknames and topical content that suited the gender being performed. Regarding stylistic features, Herring and Martinson (2004) explained that females' stylistic features are employed more than those of males'. Therefore, females used more examples of emoticons, laughter, thanks, and apologies. On the other hand, males produced more messages than women. Kapidzic and Herring (2011) reported similar findings which are consistent with previous research. They found that males used more articles and more 1st person pronouns; females expressed more emotion. They also mentioned that males and females differed from each other for most word categories in the chat. In addition, Kapidzic and Herring (2011, p. 57) suggested that, in CMC, young females have the

tendency to present themselves as emotional, friendly, good listeners (reactive), sexually available, and eager to please males, whereas young males have the tendency to be more assertive, manipulative, initiating, visually dominant, and at the same time more distant.

Describing the language used in CMC, Herring (2001a) stressed that most computer-mediated language is text-based, i.e., messages are typed using a computer keyboard and read as a text on a computer screen. She (2001a, p. 612) added that computer-mediated language is commonly perceived as “less correct, complex and coherent than written language.” She pointed out that computer-mediated language often contains non-standard characteristics, which are deliberately used by participants to economize the time and effort of typing, mimic features of spoken language, or to express texters’ creativity. These non-standard forms are not the results of lack of knowledge or inattention.

Herring (2001a) argued that the use of textual representation of auditory information such as prosody, laughter, and other non-language sounds reflects the users’ ability to adapt the medium of communication to their expressive needs. Non-standard forms of language are used in a text because of the informal purpose of a message. Herring and Zelenkauskite (2008, p.88) suggested that “resources of written language are employed variably by users to communicate social meaning in CMC.” They also proposed that the use of non-standard typography in CMC may communicate feminine or masculine qualities. For example, the users may communicate feminine characteristics of “expressiveness, friendliness, and

playfulness”. Females’ longer messages may indicate “talkativeness.” According to Herring and Zelenkauskite (2008), females favor standard language conventions more than their male counterparts. In addition, females are more economical, expressive, and supportive.

However, studying the CM language used in other modes may reveal different patterns of language depending on the mode of the medium and the medium itself. For example, Herring (1998) found that the language used in participants’ posts in the professional discussion list tend to be linguistically sophisticated. The participants used complex grammar and made few errors. Her findings were limited to the language used in this medium.

Herring’s research has focused on the language and the communication style used in CMC. She has not primarily focused on the linguistic features used by the participants in their communication. Herring also has not paid sufficient attention to the language used in text messaging. However, her research is considered a corner stone in the study of language, gender and CMC. Herring’s research forms the basis for the present study.

2.3.2.2 Further Research on Gender and CMC

In addition to previous research published by Herring, many other researchers have revealed that common males’ and females’ communication patterns exist in CMC (Baron, 2004, 2005a; Dennis & Kinney, 1999; Graddy, 2004; Grinter & Palen, 2002; Guiller & Durdell, 2006, 2007; Lee, 2003; Pedersen & Macafee, 2007; Punyanunt-

Carter & Hemby, 2006; Rossetti, 1997; Selfe & Meyer, 1991; Soukup, 1999; Stewart, Shields, Monolescu & Charles, 1999).

One of the earliest studies to investigate how humans communicate using CMC was conducted by Selfe and Meyer (1991). They studied electronic discourse sites in order to establish whether they are more equalitarian and less affected by differences in power than in face-to-face interactions. Selfe and Meyer (1991) focused on the relationship between the amount of discourse, politeness, verbal assertiveness, and gender. Their results coincided with previous research in face-to-face communication, revealing that men have the tendency to dominate the amount of discourse and that they are more verbally assertive than women are. Nevertheless, unlike previous findings, Selfe and Meyer's (1991) findings revealed no significant gender differences with respect to politeness. Men, in contrast to expectations, used more expressions of approximation. They used the words "about", "may be", and "perhaps" more times than women did. Moreover, men used the word "very" as an intensifier, while women used the word "so". Although both men and women brought about almost the same number of exclamations, men employed more questions and more direct quotes than women.

Investigating gender differences in the language used in electronic discussion groups, Rossetti (1997) analyzed the e-mail messages of 46 men and the e-mail messages of 36 women. The findings of his study showed many significant gender differences. For instance, females used more modals than men, except for the modal "can". Males, on the other hand, used the modals "could", "might", and "would"

significantly more times than women. Females, however, used “can” more than men. “Should, may, and must” were all used more by men. In addition, men and women tended to use adverbs differently. For example, women used the words “certainly” and “probably” more than men while men used the word “possibly” more than females. In line with other research on politeness, Rossetti (1997) discovered that men’s language was less polite than that of women’s. Women significantly used the words “please, sorry, thanks, and appreciate” more frequently than men. Men tended to use a more assertive language than women using the word “sure” more times, whereas females used “not sure” more times. Regarding the length of messages, Rossetti (1997) explained that men’s and women’s messages had the same number of words, contrary to previous research stating that men write more. Rossetti’s (1997) findings support those made by Herring (1992, 1993) in terms of *aggressive vs. supportive* language. Males were more prone to using an aggressive style in contrast to women who had the tendency to adopt a more supportive style. Rossetti argued that the male-female dichotomy is transported into CMC regardless of the lack of physical contact.

Supporting Rossetti’s (1997) findings and Herring’s (1992, 1993, 1994) findings, Soukup (1999), who investigated males’ and females’ interaction in a chat room, found that male-male interaction was full of flaming, profanity, sexual reference, and attacks on masculinity. In contrast, female-female interaction was characterized by cooperation, relation building, and emotionality.

Just like their face-to-face interactions, women on the internet are more likely to maintain a more expressive language, interpret non-verbal behavior such as the use of typographical features like emoticons or phonetic spellings in a better way, and socially orient themselves more than men do (Dennis & Kinney, 1999, Savicki et al.; Soukup, 1999). On the other hand, men often tend to be much more task-oriented. Huffaker and Calvert (2005) observed that females used more expressions denoting cooperation and passivity than men, but, in general, they found very few differences between them.

Savicki et al. (1996), who analyzed 30 discussion groups to investigate group-gender composition on the internet, provided some clear and supporting evidence for the gender-related interaction styles introduced by Herring (1993, 1994). They came across similarities and differences in language use in relation to gender and CMC. However, they suggested that gender differences found in one mode of CMC do not necessarily generalize to other modes of CMC since each has its own characteristics. For example, groups having a higher number of men make use of a more personal, fact-oriented language, while groups having higher numbers of women used a more social-oriented and supportive language.

Stewart et al. (1999) investigated a sample of 17 undergraduates in a large urban university in the US. Their objective was to examine gender differences with regard to online participation and language styles in Internet Relay Chat (IRC). Similar to interactions in other modes of CMC as reported by many studies (Graddy, 2004; Herring, 1992, 1993, 1994; Rossetti, 1997), the men in their study controlled the

interaction. They always began and ended the conversation; they posted longer messages; they sent and received more messages. Women, on the other hand, were quieter, sometimes not replying to an exchange. Other differences in the language use were also shown. For example, males were more likely to take charge, criticize and make personal attacks. This is called “flaming”; behavior women are not very comfortable with (Stewart et al., 1999). Similarly, Subrahmanyam, Smahel and Greenfield (2006) indicated that women are more polite in CMC. They stated that men engaged more explicit sexual remarks, while women engaged implicit ones. This finding agrees with past research findings in face-to-face communication (Bataineh & Bataineh, 2006; Graddy, 2004; Holmes, 2008; Lakoff, 1975; Poynton, 1989; Tannen, 1990; and West & Zimmerman, 1983) and in CMC (Herring, 1993, 1994, 1999, Herring & Martinson, 2004; Huffaker & Calvert, 2005; and Soukup, 1999). Subrahmanyam et al. (2006) findings may be explained in relation to gender theories which claim that women are subordinate groups in society and subordinates are supposed to be more polite and respectful.

College students are usually the focus of gender differences research in CMC (Baron, 2004, 2005a; Graddy, 2004; Lawlor, 2006; Lee, 2003; Punyanunt-Carter & Hemby, 2006; Stewart et al., 1999). For example, Baron (2004, 2005a) conducted an empirical study in which she analyzed the linguistic profile, lexical issues, and gender differences in the instant messaging of American college students. The data in Baron’s study, which consisted of 23 instant messaging conversations and contained 2,185 conversational turns, were collected from 23 college students in April 2003. Data were analyzed based on the following linguistic variables:

conversational scaffolding (length of turns, sequences, and conversation lengths), lexical issues (abbreviations, acronyms, contractions, punctuation, and capitalization), and emoticons. Contrary to the findings of other research by Herring (2003), Baron (2004) concluded that female-female conversational turns were longer than male-male conversational turns, and that the average of female-female conversations was longer than that of male-male conversations. Therefore, it seems that females were more expressive and more concerned with establishing connections with other people through instant messaging. Females employed more complex punctuation, more capitalization, and more unabbreviated lexical forms than males. These findings concur with the findings on gender and face-to-face communication where women usually use a more standard form than men (Holmes, 2008). Significantly, males were also more likely than females to divide their messages into multiple instant messaging (IM) turns. Moreover, Baron (2004, 2005a) noticed that females used far more emoticons than men did (35 to 15 emoticons respectively), a finding that goes hand-in-hand with the findings of Herring (2003), Herring and Martinson (2004), Ling (2005), and Rafi (2010).

Baron (2005b) investigated linguistic structures in the instant messaging of American college students with regard to utterance breaks or chunks while communicating with friends. She also aimed to compare the utterance breaks found in the students' messages with the same kind of utterance breaks found in face-to-face interactions. Utterance breaks mean dividing the message to be sent into a sequence of short messages or transmissions. Analyzing the data collected from 22 male and female American college students, Baron's (2005b) findings revealed some

significant gender differences in the way male and female American college students construct their IM conversations. For example, males tended to use more utterance breaks than females did. Males also began their second transmission with a conjunction and were more likely to use multi-turn IM transmission than females. On the other hand, females began the second transmission with an independent clause, and tended to chain together related sentences. Baron (2004) claimed that the IM conversations of the American college students resembled more spoken discourse than writing. The writings of the students contained contractions, deletion of syntactic elements such as pronouns and auxiliaries, and use of one-word utterances. Moreover, the writings of the students' were mostly unedited, and the formality level was low. The same finding was mentioned by Crystal (2001) and Hård af Segerstad (2002).

In his attempt to examine gender differences in the e-mail messages of males and females, Graddy (2004) studied the postings of some American undergraduates in e-mails and chatrooms. Graddy (2004) proposed significant differences between males and females in terms of postings. For example, females showed higher rates in terms of activity and lesser in terms of optimism. Females and males also differed in their use of adjectives; females employed more adjectives to praise and fewer verbs to express present concerns. In contrast, males used fewer adjectives to praise and more verbs to express present concern. In addition, great praise, satisfaction and inspiration were found to be higher among males. Finally, males were more prone to be more optimistic than females who were less enthusiastic and more concerned about present issues more than men.

Lee (2003), examining the logs of instant messaging exchanges of 50 pairs of college students at Stanford University, classified the data into the following groups: male-female, female-female, and male-male. Lee (2003) discovered that gender differences found in college students' instant messaging were similar to those found in face-to-face conversation even though instant messaging, as part of CMC, reduces gender differences in mixed-gender interactions. Specifically, Lee (2003) pointed out that gender differences in male-male and female-female interactions exist. Nevertheless, gender differences in male-female interactions were found to be equalized. Furthermore, she mentioned that male students talked about technology-related issues while female students talked more about personal and emotional topics. Females were found to greet each other more than their male counterparts did, and the tones of their messages were not as aggressive as the tones of males' messages. Females also had the tendency to use more emoticons than males did.

Fox, Bukatku, Hallahan and Crawford (2007) explored gender differences in the instant messaging of 35 undergraduate students (16 males and 19 females) at a private American college. They concentrated on some linguistic and textual variables such as expressiveness, and strength of speech. In their examination they included the following features: emoticons, textual representations of emphasis, laughter, expression of love, compliments, reference to emotion, adjectives, self-derogatory comments, expletives, insults, opinions, and request for information. They also looked into the number and length of turns as well as the total number of words. Fox et al. (2007) described females' communication as more expressive than males' communication; they employed more emphasis, adjectives, and emoticons.

Furthermore, messages sent to males included more words and turns than those sent to females. In contrast, females received messages that contained more reference to emotions than those sent to males. Females also sent more messages with longer turns and higher number of word count than males. Like the females in Baron's (2004, 2005a), Hård af Segresrad's (2002), Herring's (2003), Lee's (2003), and Ling's (2005) studies, the females in the present study had the tendency to use more emoticons than the males.

Punyanunt-Carter and Hemby (2006) studied the e mails of one hundred and forty-five undergraduate students at a southwestern university. They pointed out that college students have specific communication conventions when they use the internet. They also noted that males' and females' perceptions and usages concerning their CMC behavior were different. Their data revealed that females checked their e-mails and used more abbreviations and clippings when writing their e-mails to a superior than males did. Males, at the same time, were more likely than females to use emoticons. Males also preferred using the e-mail when it is difficult for them to meet someone in person.

According to Lawlor (2006, p. 26), male graduate students' statements were "epistolary" (disseminating information), whereas female graduate students' statements were "expository" (alignment and support). Lawler, further, revealed that females participated less than males in computer conferencing. Unlike men, women tended to go to virtual communities to offer and receive compassion and support.

The study of gender differences was also carried out in countries other than the USA (Pedersen & Macafee, 2007; Robertson, 2000). To study gender differences in blogging in England, which started later than the USA, Pedersen and Macafee (2007) investigated whether gender differences in this form of CMC in England are similar to those found in the US studies. Analyzing the blogs of 24 male and 24 female British bloggers, Pedersen and Macafee (2007) revealed that their findings were very much similar to the findings of US research. Like American bloggers, male and female British bloggers were equally satisfied about blogging, especially when it comes to revealing talents and thinking. Both males and females used blogging as a means to let out their feelings and frustration. However, according to Pedersen and Macafee (2007), British women bloggers showed more interest in the social aspects of blogging unlike men who were more interested in sending information and expressing opinions. As a result, personal issues and creative work were the main topics of women's blogs, whereas favored blogs that offer political topics and opinions were the favorites for males. Males also showed more technical complexity than women do.

Robertson (2000) studied a group of Canadian graduate college students whose ages range between 25 and 50 years to see whether gender differences in face-to-face communication are present in online communication. She found that gender differences in face-to-face communication still exist in online communication. Her results showed that the number of postings by women, as well as the number of words written, is significantly lower than that of men.

Some researchers have tackled the attitudes and behaviors of both males and females in CMC. In his investigation of males' and females' attitudes and behaviors in CMC, Li (2006) tried to quantitatively synthesize the findings of 50 empirical researches from different contexts on how gender affects people's communicative, interactive, and effective patterns using CMC. The study involved 63,889 participants. Li's (2006) findings showed that females were more collaborative, provided more feedback, were more likely to master their gender, used more engagement approaches, and made more suggestions than males. On the other hand, males enjoyed CMC more, had more experience and skills of using CMC, were more confident in using CMC, thought CMC to be important, and used more authoritative language than females.

In summary, the findings of the research discussed above concur in many aspects with the findings of previous research conducted in face-to-face communication with respect to language and gender. To exemplify, males frequently dominated the communication in the amount and manner, using aggressive and self-promotional talk, while females frequently attenuated their speech, were polite and supportive of others. These patterns support the familiar gender power hierarchy, with males being dominant and females being subordinate. The following section discusses past studies conducted on text messaging.

2.4 Previous Studies of Text Messaging

The literature related to the study of text messaging can be classified under two broad, related, and overlapping sets of studies. The first set deals with text messaging

as an emerging mobile culture in many parts of the world (Ling, 2008; Kasesniemi & Rautianen, 2002; Taylor & Harper, 2003; Thurlow, 2003; Vykoukalova, 2007). The second one represents a sociolinguistic analysis of the communicative functions, and linguistic features of text message communication (Bosco, 2007; Deumart & Masinyana, Doring, 2002; Hård af Segerstad, 2002, Mostari, 2009; Rafi, 2008, 2010). The socio-cultural aspect of text messages is discussed first.

2.4.1 The Socio-Cultural Aspect of Text Messaging

2.4.1.1 The Culture of Text Messaging among Young People

Although the mobile phone was invented in the 1970s, it was not until the beginning of this century that the power of the mobile phone became very clear (Vykoukalova, 2007). It has become an indispensable part of peoples' lives all over the world, and its amazing penetration is still growing. Texting is the preferred form of mediated interaction among young people, specifically youth, surpassing all other kinds of computer-mediated communication such as instant messaging, e-mail, voice mobile telephony and even land-line phones (Ling, 2005). The adoption of mobile phones usually takes place as a gift from parents (Lorente, 2002). Their cheap cost, their smaller size, their personal and private nature and the introduction of the pre-paid phone cards contributed significantly to the rapid adoption rate by young people (Ling, 2005, 2008).

The mobile phone is a significant social and cultural phenomenon which is highly symbolic for boys and girls alike since it represents reachability and popularity

(Klimsa et al., 2006). SMS is particularly popular among young adults and teenagers who often have a very strong emotional attachment with their mobile phones considering it to be an extension of oneself, stating: "It's part of me" (Oksman & Rautiainen, 2004); "I have my life on the top of my hand" (Lorente, 2002, p. 4); or "your mobile is like your shoes" (Wei, 2007, p. 11). Many young people reported feeling depressed, left out or upset when they do not hear from their friends. This emotional attachment, which is one of the reasons behind the huge popularity of the medium, results from the fact that this technology offers something extraordinary for them which other modes of communication do not. Taylor and Harper (2003) gave their account regarding the adoption of mobile phones and text messaging by teenagers and young adults. They stated that:

Although texting and mobile phone sharing may be new phenomena, they are a manifestation and a reflection of deeply rooted needs in these social relationships, needs that have to do with the system of reciprocity and social solidarity. (p. 268)

They also suggested that the need for reciprocity and solidarity have been persistent in teenage culture for a long time, and will continue as such for a long time. Therefore, the youths' motivation for text messaging seems complex and deeply rooted in their perceptions of social relations because most of what young people use their phones for is the exchange of socially oriented information. Mobile phones and text messaging allow them to strengthen their alliance and cement their friendship through sharing their emotions and exchanging content that is personally important to them.

Youth's interest in the mobile phone often originates from peer pressure (Boneva, Quinn, Kraut, Kiesler & Shklovski, 2006; Geser, 2004; Klimsa et al., 2006; Thurlow, 2003). Peer-based connectedness is very significant for adolescents (Boneva et al., 2006). As one adolescent reported: "If you don't use the technology, you are not part of the group", and he also said that: "If you are not a name or a number in my phone book, then you're not on my radar screen" (Grinter & Eldridge, 2001). Teenagers usually have a higher number of friends than adults do and interact with friends more often than adults (Boneva et al., 2006). Reid and Reid (2004, p. 7) also highlighted the importance of peer relationships by noting that one of the most important findings of their studies is the notion of "text circles". Young texters seem to establish closely-knit groups of "textmates" with whom they engage in regular, and may be perpetual contact. Additionally, there is a pressing need for adolescents to have close friends to talk to, to hang out and have fun with. They take advantage of SMS since face-to-face interactions are sometimes very limited to them (Grinter & Eldridge, 2001). Ling (2005, p 336) said, "the culture of SMS is centered among teenagers and, in particular, among female users." He also concluded that they use it to extend their social activities, gain prestige, and facilitate the process of courting and flirting.

Adolescents' strong need for numerous friendships and peer-group associations explains their higher adoption of mobile phones and use of SMS. Their developmental period is characterized by the need for person-to-person communication with friends (Klimsa et al., 2006). Emphasizing the same notion, Kyratzi (2004) illustrated the adolescents' need for peer communication for

establishing and maintaining peer-culture. Peer talk, according to Kyratzi (2004), is very essential for adolescents to show their identities and ideologies. This explains why they maintain a higher number of friends than adults.

A different psychological account explaining youths' motivation for mobile phone adoption is presented by Geser (2004):

Given their capacity to retain primary social relationships over distance, the use of cell phones can well go along with regressive psychological tendencies, e.g., with the need to cushion the traumatic experiences in foreign environments by remaining tightly connected to the loved ones at home. Thus the mobile can function as a pacifier for adults which reduces feelings of loneliness and unproductiveness at any place at any time. (p. 12)

Geser (2004), further, mentioned that texting provides a means through which youth can overcome the "adult-controlled power structures" that control their everyday lives. Mobile phones offer young adults and teenagers a special kind of freedom. For example, it is no longer necessary to wait at home for a phone call. Mobile phones allow a certain kind of liberty, independence and privacy (Ito & Okabe, 2005). The use of mobile phones by the young generation allows them to escape the control and monitoring of their parents.

Hortsmanshof and Power (2005) added that text messaging suits the 18-24 year age group that has taken to communicating by text messaging. They are adapting and inventing a language that fits the 160 character limit resulting in abbreviations, acronyms, and/or combinations of letters and numbers such as L8 for "late". As a

result the language is informal and the messages are exchanged among close friends (Hård af Segerstad, 2002; Ling, 2005).

2.4.1.2 Characteristics of Text Messaging

When SMS was originally designed, the system was created as a means to alert users to voice mail messages and as a system to broadcast weather or stock information; it was not intended as a form of personal interaction (Ling, 2005). However, the medium has proven to be more convenient for people, particularly the young, than other mediums of communication, especially in interpersonal relationships (Hård af Segresatad, 2002, 2004; Ling, 2005; Thurlow & Poff, 2009).

In fact, there are many reasons why young people, including teenagers use text messaging over other media. It is quick, cheap, and convenient (Eldridge & Grinter, 2001; Igarashi et al., 2005). Text messaging can save them time and money by avoiding long unnecessary phone conversations. Besides, sending a text message is more economical than making a phone call. The cost of SMS is most often cheaper than that of a phone call. Most of the phone carriers in the world provide free SMS messages with every subscription, and offer free ones as promotions from time to time. For instance, Zain, one of the major carriers in Jordan, offers 60 free messages with every new subscription.

Moreover, text messaging is more convenient for young people than other modes of communication because it is discrete and quiet (Eldridge & Grinter, 2001). Young people can send and receive messages silently anytime and at anyplace without

annoying others. In fact, some researchers (Ling, 2005) found that youths send and receive SMS messages during class and after midnight. Schaller (2007) showed that young people use "quiet" technologies such as "text messaging" to avoid disturbing others since they do not ring or require voice interactions. He explained that the quietness of SMS allows users to communicate without other members of the household being aware of or disturbed by the conversation. "More convenient" also means that people can send a text message when it is, for example, too early or too late to make a phone call, or when the sender is in a public place. This particular feature was also emphasized by Ling (2005) who mentioned that if a person turns off the ringing tone in his/her mobile phone, no one will know that he/she is sending or receiving messages.

In addition, research has shown that young people prefer text messaging to email and talking on a mobile phone for the following reasons (Byrne & Findlay, 2004; Hortsmanshof & Power, 2005; Igarashi et al., 2005). The first one is the message content. Whereas the e-mail is used for business and other formal communication, text messaging is used for personal and informal purposes. The second one is mobility. Unlike e-mailing, texting offers more mobility while communicating, that is, people can send and receive messages wherever they want (e.g., restaurants, shops, buses, trains, classrooms, etc.), while walking in the street or jogging in the park (Ito & Okabe, 2005). Eldridge and Grinter (2001) mentioned an example of the ability of text messaging to connect people from places from which they previously could not. For example, shortly after mobile phones became very popular, cinemas started to enforce rules about the use of mobiles during the show. Text messaging

made it possible in such places. Therefore, sending and receiving messages became ubiquitous (Doring, 2002; Eldridge & Grinter, 2001; Igarashi et al., 2005; Ling, 2005; Taylor & Harper, 2003).

The third reason is that users of SMS know that if one sends an SMS to a specific mobile phone number, it will reach that particular individual and not any other person (Ling, 2005). Next, the asynchronicity of text messaging eliminates the need for immediate response. One does not have to respond at once when receiving a text message and can respond whenever he/she wishes although texters tend to reply instantly to close friends. The asynchronous nature of SMS enables its users to plan, contemplate and edit messages before sending them out (Byrne & Findlay, 2004; Doyle, 2000). Further, texting is efficient and time-saving for both the sender and the receiver. Messages can be stored and dealt with in one session, and unlike talking on the phone, can be received with minimal disruption.

Control is also one of the most important characteristics of text messaging (Agoncillo-Quirante, 2006). That is, the communication is one-way and at the convenience of the sender, and takes less time than having to exchange pleasantries.

A young person reported that:

It's hard to end a conversation over the phone. It can go on and on and you can't just end abruptly. With texting, you put a smiley or something at the end of your text, and the other party will understand *tapos na usapan*. (Agoncillo-Quirante, 2006, p. 7)

One more important characteristic of text messaging is that it saves young people the embarrassment of saying something good or bad and allows them to express things that they would not dare to say in face-to-face conversations or on phones (Byrne & Findlay, 2004; Clonen, 2002; Ito & Okabe, 2005; Vykoulakova, 2007). As one young lady put it:

I come from a laid -back family. We do not say "I love you", "I miss you" or things like that. But with texting, I am able to tell my mom or dad, "I love you", "I miss you, or just plain "take care". (Agoncillo-Quirante, 2006, p. 12)

According to Small (2003), texting allows the users to change or cancel plans without the awkwardness of having to speak to the other person. Similarly, Vykoukalova (2007) saw that communication through SMS is easier because you do not have to look the other party in the eye while talking. "The absence of aural and visual information means that the vocal and visual signs of nervousness, shyness, or anger are not apparent" (Byrne & Findlay, 2004, p. 3). Besides, it is a way to discreetly ask others if communication is possible or desirable. Thus recipients can decide when and in what manner to answer (Klimsa et al., 2006).

Finally, researchers have also reported some positive impact of text messaging on students and schools. For example, Agoncillo-Quirante (2006), argued that texting has made communication with classmates easier and more frequent. Students are able to get in touch with former classmates and friends from high school since texting can be done almost anywhere, anytime, having the numbers stored in the mobile phone.

However, the same technology that has all of the above-mentioned advantages suffers from some drawbacks. Educators have expressed concerns over the use of SMS language by students in their exams and assignments (Lee, 2002; Mphahlele & Mashamaite, 2005; O'Connor, 2005). Some students find it easier to use shorthand in exams. Some researchers purported that the SMS language deteriorates writing skills; however, others claim that this kind of language has positively affected students' writing performance (Baron, 2004). In their study of the text messages of teenagers, Eldridge and Grinter (2001) discovered that teenagers face some problems using text messaging. The first is the evolving problem of SMS language. Although abbreviations and shorthand are adopted to ease and speed up the process of typing, they are sometimes misunderstood. Secondly, some teenagers report that humor and sarcasm were often misunderstood. It is sometimes difficult to determine the sender's intent from the content of the message due to the excessive use of abbreviations. Others complain about sending the message to the wrong person. Phone numbers are easily confusable which may lead to some kind of embarrassment.

Another disadvantage worthy of addressing is that being available all the time increases the potential of being exposed to harassment, conflict, ostracism, and "text message bullying" (Campbell, 2005; Doring, 2002; Smith & Williams, 2004). To cite an example, in Scotland and New Zealand, text message bullying was a problem, forcing some schools to ban mobile phones in schools (Smith & Williams, 2004). Disruption to lessons and incidences of cheating are some of the negative impacts of text messaging on the school (Campbell, 2005).

In conclusion, the fact that some people prefer sending text messages to making phone calls means that the service offers something that talking on the phone or sending an email do not. Text messaging is quick, cheap, convenient, discrete, quiet, and time-saving. The asynchronous nature of text messaging saves young people from some embarrassing situations, and gives them time to think and edit before sending their text messages. Not only does the medium add something extra to young peoples' already existing relationships with family and friends, but it also takes them a step further, by helping them to develop new relationships (Reid & Reid, 2004).

2.4.1.3 Use of Text Messaging among Young People

SMS is a breakthrough in communication, giving mobile users the ability to send and receive short messages to and from mobile telephones. Generally speaking, texting is used as one of the most common means of communication nowadays. The fact that interaction takes place via SMS may be regarded as communicating information. Just like face-to-face interaction, texting seems to serve multiple functions (Hård af Segerstad, 2004).

First, young people use text messaging to chat and gossip. They discuss topics like what happened on the previous evening, and what the plans are for next weekend. Topics discussed by young users of SMS include: family, boyfriends, girlfriends, teachers, classmates, homework, movies, and fashion (Campbell, 2005; Eldridge & Grinter, 2001; Lorente, 2002). It is through mobile gossip that these young people

relieve the pressures of life and restore the sense of connection and community (Agoncillo-Quirante, 2006).

Young people also use text messages to reaffirm and adjust plans. Eldridge & Grinter, (2001), Ling and Yttri (2002), and Thurlow (2003) referred to this as 'hyper-coordination'. Hyper-coordination, a term introduced by Ling and Yttri, (2002, p. 139), is the practice of frequently revisiting and revising arrangements with others using a mobile phone. They suggested that teenagers use text messaging to do that.

SMS is a vibrant medium allowing youth to coordinate everyday events, to maintain social relationships with peers and family, and mainly to stay in touch with them (Koutras, 2006). This means that text messaging is mainly used for private purposes. Doring (2002) reported that text messaging is seldom used in formal contexts, such as within business organizations.

In the same vein, text messaging provides youth with an opportunity to reinforce social ties, friendships and intimate relationships. Yoshida and Takai (2008) recognized that the intimacy of friends who communicate via SMS and face-to-face was rated higher than those who communicate only via face-to-face. Using the "goodnight message", receivers of the message feels that they are important, loved, and unforgotten (Eldridge & Grinter, 2001; Reid & Reid, 2004; Taylor & Harper, 2003). Taylor and Harper (2003) viewed texting as an exchange of a gift since there is something that is sent and received, given and taken. This gift strengthens the already existing relations. The more you text a person, the more intimate your

relationship becomes, a point reported by Reid and Reid (2005) who found that texters develop deeper relationships with the person they text the most.

Additionally, SMS messages are often used by youth to entertain themselves, and as a time-passing activity. In the words of one 17 year-old boy: "often when you are sitting on the bus and subway it is boring and so you can write messages that entertain you in those boring moments" (Ling, 2005, p. 336). Geser (2004, p. 4) supported this statement by finding out that mobile phone use gives a new meaning to dead time allowing people to escape boredom. He also stressed that text messaging may be regarded as one of the most important activities London passengers do while waiting for a ride. Furthermore, Vykoukalova (2007) mentioned that some young people used stored messages for comforting and feeling good. The repeated reading of saved SMS messages can invoke positive emotions within the reader, so if the receiver wants to feel good or be encouraged, he/she simply refers to the saved messages. Besides, the use of SMS can always make one feel connected and provide him/her with a sense of closeness.

Ling (2002, p. 41) classified the use of text messaging by young adults into three categories: informing and gathering information, engaging in social interactions, and sending and receiving gag messages. In a nutshell, it seems that texting offers users a special kind of function for which other mediums is no substitute. According to Geser (2004), many studies showed that texting is subject to functional expansion because users change habits constantly and learn to apply the new technology for a growing variety of purposes in different situations.

2.4.2 The Linguistic Aspect of Text Messaging

2.4.2.1 Linguistic Features

Undoubtedly, the linguistic features of text messaging have been the interest of many researchers (Bosco, 2007; Doring, 2002; Hård af Segerstad, 2004; Thurlow, 2003; Thurlow & Poff, 2009). Most of the researchers have reported similar findings regarding the most common linguistic features of text messaging such as abbreviations, letter-number homophones, acronyms, and phonological approximations.

For example, Thurlow (2003), who studied the linguistic features used in the text messaging of young British university students, reported that their text messaging included the following linguistic features: shortenings, contractions, acronyms and initials, letter/number homophones, misspellings and typo errors, non-conventional spellings, accent stylizations; omission of punctuation and word spacing, exclamation and question marks, emoticons; capitalization only (whole message), reduction of inflectional endings, and substituting longer native words with shorter foreign ones. Thurlow (2003, p.17) believed that the language of SMS, unlike other forms of CMC, appears to be supported by three sociolinguistic maxims, “all serving the principle of sociality which drives the messaging”. These maxims are: (1) brevity and speed; (2) paralinguistic restitutions; and (3) phonological approximations. According to Thurlow (2003), the first maxim is represented by the use of abbreviations (shortenings, acronyms, and contractions), the deletion of capitalization and punctuation, and the minimal use of standard language. The

second and third maxims, which are often used to compensate for the lack of verbal cues, stress, and intonation, are manifested in the playful use of punctuation, letter and number homophones, phonetic spellings, and emoticons. However, it is noteworthy that the last two maxims may override the brevity and speed maxim even though all maxims are served simultaneously and equally. For example, lexical items such as *ello*, *goin*, and *bin* serve both the need for abbreviation and phonological approximation.

Similar linguistic features were also revealed by Hård af Segerstad (2002) in a Swedish context. Hård af Segerstad, who approached Swedish SMS as an expert in SMS communication, analyzed 1,152 text messages collected from Swedish people. She revealed findings similar to those of Thurlow's (2003) with respect to the following features: phonetic spelling, omission of vowels, abbreviations and clippings, deletion of punctuation and blank space, omission of subject pronouns and auxiliaries, and substitution of longer words with shorter ones. Hård af Segerstad (2002) also found that Swedish users of SMS split compounds, and omitted prepositions and possessive pronouns. In doing this, Swedish texters tried to adapt their messages to the restrictions of the device, showing how creative the users are.

Unlike the situation in Sweden, teenagers in Norway did not use as many abbreviations, acronyms, capitalization, or emoticons (Ling, 2005). Despite the popularity of text messaging among Norwegians, only around 6% of the overall SMS messages (867) analyzed consisted of acronyms, abbreviations, or emoticons. Moreover, 95% of the SMS messages did not use any capitalization. Female

teenagers were more likely to be accustomed to using abbreviations and new spellings. As among the most frequently used words, Ling (2005) listed the following: the pronoun *du* (you) and the word *pa* (on, in, at, to), *i* (in, at), and *er* (are). No adverbs or adjectives were identified among the most frequently used words.

In his study of text messaging in Hong Kong, Bosco (2007) found that texters used a number of lexical adaptations, such as the use of shortenings and abbreviations, in their text messaging practices. He argued that Hong Kong texters employed several strategies of representing the Chinese/Cantonese language, including using roman numerals, phonetic approximations, and morpheme-for-morpheme translations. He explained that some culture-specific characteristics of text messaging do exist in Hong Kong. Acronyms of sentences such as TMTOWTDI for “*There's More Than One Way To Do It*” is one of them. Another finding is the mismatch of consonants, for example, TOMOLOW for “*tomorrow*”, where the initial consonant in the final syllable is changed from R to L. Omission of subject pronouns, modal verbs, copula verbs, and articles is also characteristic of text messages among the Hong Kong texters. Bosco also observed the use of typographical features such as capitalization, punctuation, phonetic spelling, and emoticons in the text messages in Hong Kong.

Similar to the young Swedish, Norwegians, and Chinese, Germans also used contractions in their text messages (Doring, 2002). Studying the lexical and syntactic features of text messaging in Germany, Doring (2002) revealed that German texters used a large number of syntactic and lexical reductions, including deletion of subject,

determiner, article, preposition, auxiliary, copula, and modal verb. These findings corroborate with the findings of Hård af Segerstad (2002) and Bosco (2007). Unexpectedly, only 30 out of 1,000 words collected for the study were found to be acronyms and abbreviations. This conclusion is in line with Thurlow's (2003). Doring's study (2002) contained the following syntactic features: omission of subject pronoun; omission of verb and subject pronoun; omission of copula, auxiliary or modal verb; and omission of preposition, article and possessive pronoun.

An interesting case is shown by Deumart and Masinyana (2008) who reported that South Africans employed the abbreviation and phonetic spelling of English words when texting in English. However, they used none of these when they text in isiXhosa. Therefore, the messages written in isiXhosa did not adhere to Thurlow's (2003) sociolinguistic maxims of texting. They also found that South Africans' English text messaging have many similar linguistic features with that of the English SMS international conventions (e.g., abbreviations, paralinguistic restitutions, and non-standard spellings). This may emphasize the effect of English as a lingua franca in the world, and that text messaging has common features across the globe.

Kuwaitis, like South Africans, used abbreviations, phonetic spelling, and alphanumeric symbols when texting in English but not in Arabic (Haggan, 2007). Haggan pointed out that Kuwaities use English numbers to replace Arabic letters in their text messaging. A list of the English numbers used by the participants in Haggan's (2007) study to represent the Arabic phonemes is shown in Table 2.2.

Table 2.2: Numbers Representing Arabic Letters in Text Messaging

Number	Arabic Letter	Phonetic Transcription	Phonetic Description
2	ا	ʾ	Glottal stop
3	ع	ʾ or ʕ	Voiced Pharyngeal fricative
'3	غ	ɣ	Voiced velar fricative
5	خ	x	Voiceless velar fricative
6	ط	ɬ	Voiceless emphatic interdental fricative
'6	ظ	ʒ	Voiced emphatic interdental fricative
7	ح	ħ	Voiceless pharyngeal fricative
'7	خ	x	Voiceless velar fricative
8	ق	q	Voiceless uvular stop
9	ص	ʃ	Voiceless emphatic alveolar fricative
'9	ض	ɖ	Voiced emphatic alveolar stop
\$	ش	ʃ	Voiceless alveopalatal fricative

Haggan (2007) also found that Kuwaitis use the English alphabet when writing Arabic messages. The same finding was reported by Mostari (2009) who pointed out that Algerians preferred the Latin alphabet (English and French) in their text messages. Moreover, Mostari (2009) mentioned that Algerians use pure Algerian Arabic, pure modern standard Arabic, and pure French in their text messages (29.30%, 8%, and 21% respectively). Messages containing a mixture of Algerian Arabic, and French represented 41.5% of the overall text messages; messages

containing modern standard Arabic and French represented 31.5% of the overall messages. English was only used in forms like “hi”, “bye”, and “thank you”. Additionally, examples of shortenings (deletion of final letters), abbreviations (deletion of middle letters), typographical symbols (Xxx,!!!), as well as emoticons were common in their text messages.

Mostari (2009) revealed that the participants in her study employed English letters to substitute Arabic ones. She presented a list of the English letters used to replace the Arabic ones in her study. Table 2.3 presents the Latin letters that are used by the participants in Mostari’s (2009) study to substitute the Arabic ones.

Table 2.3: Latin Letter Substitution for Arabic Letters in Text Messaging

Arabic Letter	Latin Letter Substitution	Phonetic Transcription
ا	a	‘ or ?
ث	th	θ
ج	j	dʒ
ح	h	ħ
خ	kh	x
ز	z	z
ش	sh	ʃ
ص	s or S	ʂ
ض	dh	ɖ
ط	T	ɬ
ع	3	ʕ

غ	gh	ɣ
ق	q, g, k	q
ه	h	h
و	o, u, oo, w,	w

The findings that texters employ non-standard features of language in their text messages are congruent with previous findings in the language used in computer-mediated communication (Baron, 1984; Murray, 1990; Herring, 2001a). For instance, Baron (1984) discovered that the participants in computer conferencing tended to use fewer subordinate clauses and a narrower range of vocabulary. Similarly, Murray (1990) observed that users of computer-mediated communication had the tendency to delete subject pronouns, determiners and auxiliaries, used abbreviations, and did not correct typo errors.

The text messaging of Kenyans presents a good example on the use of syntactic features in text messaging, in particular, and in CMC, in general. Ong'onda, Matu and Oloo (2011), who analyzed the syntactic aspects of the text messaging of Kenyan university students, reported that sociolinguistic factors affected the choice of words used by the texters in a given interaction. They collected a total of 160 text messages from 40 university students. Ong'onda et al. (2011) investigated syntactic variation with respect to the following features: omission of subject pronoun, omission of pronouns and auxiliary verbs, omission of objects, omission of articles, omission of to-infinitive, grammatical agreement, contractions, and different word orders. Their findings revealed that the syntactic nature of Kenyans' text messaging

relied heavily on sentence and word modifications, and that Kenyan texters employed playful modifications which affected the syntax of language, leading to language change. They also found that the text messaging of Kenyans was compressed through omissions, abbreviations, and contractions.

The evolving language of text messaging sometimes causes problems for teenagers. Grinter and Eldridge (2001) claimed that despite being a quick, cheap, and easy means of communication, text messaging makes teenagers confused of the meaning and content of many messages because different people have different levels of understanding the language used in text messaging. Besides omitting sentences and final punctuation and apostrophes, the Americans also utilized vowel deletion techniques and lexical shortening (Ling & Baron, 2007). The messages of the American students contained 47 examples of abbreviations, such as *k* for “okay,” “*R*” for “are,” and “*U*” for “you”. Acronyms such as *LOL* for “lots of love” were rarely used.

Emoticons are one type of linguistic features that are common in text messaging. They are formed by a mixture of typographical symbols and used to compensate for the lack of facial expressions and voice changes found in oral communication. Hård af Segerstad (2002) and Bosco (2007) reported that their participants used them in their text messaging. Hård af Segerstad (2002, 2004) found that texters usually take their time so that they can use emoticons which are not originally formatted in their devices. Bosco (2007) detected 27 emoticons in the corpus of 635 text messages. 63% of the emoticons in Bosco’s study represented the “happy face”. However, in

Ling and Baron's (2007) study, a 1,473-word sampling data, only two emoticons were observed.

In terms of message complexity (whether the message contains one clause or more) and length, Ling and Baron (2007) revealed that most text messages sent by American students were composed of one message idea, which is sent as a single transmission. The American students' SMS messages average 7.7 words, and the number of character length averaged 35 characters per message. Therefore, the US text messages were closer in length to the Norwegian text messages at an average of 6.95 words per message (Ling, 2005). Hård af Segerstad (2002) showed that Swedish text messages averaged 14.77 words per message and are typically longer than the American messages (Ling & Baron, 2007), whereas German text messages were at 13 words per message (Doring, 2002). Word count in isiXhosa, as compared to that in English, was low because of the agglutinating structure of isiXhosa. Words in this language were formed from a basic root using affixes to indicate tense, aspect, pronouns, and syntactic objects (Deumart & Masinyana, 2008).

Another important aspect of the language used in text messaging that has been discussed by some researchers is code-switching (Al-Khateeb & Sabbah, 2008; Deumart & Masinyana, 2008; Haggan, 2007; Thurlow, 2003). Code-switching is a linguistic term referring to the switching between at least two different languages in a single conversation. It occurs when bilingual speakers use both languages in their communication with another bilingual person. Code-switching happens consciously

as well as sub-consciously. This process is widely used in the text messaging of bilingual people.

Al-Khateeb and Sabbah (2008), Haggan (2007), Mostari (2009) reported the use of code-switching in the text messaging of their participants. In Kuwait, Haggan (2007) explained that Kuwaiti people used Arabic, English, a mixture of Arabic and English and English characters to transcribe Arabic. A total of 40.6% of the respondents made use of a mixture of Arabic and English; 13.2% English; 27.4% Arabic words and characters; and 18.8% Arabic words written in English characters. In Jordan, Al-Khateeb and Sabbah (2008) analyzed the text messages of 54 undergraduate and graduate students to study the sociolinguistic context of Arabic-English code-switching in the text messaging of the students. Their findings showed that the students employed code-switching in their text messaging. The analysis of their data also demonstrated that the students in their study tended to use Arabic/English texts more than totally English and totally Arabic texts. According to Al-Khateeb and Sabbah (2008, p. 37), technical elements such as the “ease and swiftness of writing in English and limited space in Arabic messages” were responsible for the use of more English in the text messages of the students.

Similarly, Mostari (2009) mentioned that Algerians used pure Algerian Arabic, pure modern standard Arabic and pure French in their text messages. South Africans frequently engage in code-switching, using English as their preferred choice when writing romantic messages and sending chain messages and using isiXhosa when sending messages of a serious commitment or love. Their code-switching was

intersentential. That is, they used one specific language in a certain message fulfilling a certain function, and another language in another message fulfilling a different function. For the South Africans, English is part of their identity, and it is a mark of prestige and education. isiXhosa was also used to express traditional values and beliefs, which may sound funny in English (Deumart & Masinyana, 2008).

The above mentioned cases of code-switching may indicate that bilingual texters use more than one code in their text messaging for the following reasons. Firstly, code-switching can help texters to express themselves in a better way. Secondly, using more than one language makes it easier for texters to compose their messages. Finally, using a code like English may signal sophistication and prestige.

2.4.2.2 Gender and Text Messaging

Gender and language in text messaging has received very little scholarly attention. Researchers, who investigated gender and language in text messaging, have found that males and females are different in their text messaging (Baron, 2005a; Deumart & Masinyana, 2008; Herring & Zelenkauskite, 2008; Igarashi et al., 2005; Kasesniemi & Rautiainen, 2002; Klimsa et al., 2006; Ling, 2005; Rafi, 2008, 2010). These studies have not mainly focussed on gender in text messaging; however, they show that male and female texters differ with respect to certain features.

Researchers have found that text messaging appeal more to females than males (Ling, 2005; Klimsa et al., 2006; Igarashi et al., 2005). Ling (2005) pointed out that the purpose for which Norwegian teen males and females use text messaging was

different. Males used more text messages for mid-future planning activities, whereas females used them for immediate future planning activities. He added that females tended to send more “grooming” messages, especially emotionally-based “grooming” such as “greetings”, “ good night” and “love you” messages compared with the males.

In a study whose findings agree with those of Ling (2005), Klimsa et al. (2006) emphasized that text messaging is a medium that appeals more strongly to girls than to boys. In their study, which was carried out in Germany, Peru, Poland, and Indonesia, they found that girls cared to be more communicative than their male counterparts. Rafi’s (2008) results also showed that Pakistani females preferred text messaging to communicate with their friends more than their male counterparts (62% and 38% respectively). Klimsa et al. (2006) demonstrated that males were less attached to their mobile phones than females (14% and 25% respectively). Igarashi et al. (2005) revealed that first-year undergraduate Japanese females used text messaging more actively than males in social networks and, therefore, usually expand their text messaging social networks. Although not elaborated, they mentioned that the content of the females' text messaging was different from that of the males'. Similar to face-to-face interaction, Japanese females were more interested in forming and sustaining strong and intimate relationships over text messaging than Japanese males.

Research carried out by Deumart and Masinyana (2008); Herring and Zelenkauskite (2008), Kasesniemi and Rautiainen (2002); Klimsa et al. (2006); Ling (2005); and

Ling (2008) revealed that females sent more messages, wrote longer messages, formed more complex messages, and got involved in more text messaging discussions than males did. Herring and Zelenkauskite (2008) reported that Italian females often used all the characters available in their mobile phones in writing their text messages. In South Africa, female participants wrote longer messages (23 words) than male participants (19 words) (Deumart & Masinyana, 2008). The same results were found in Finland where girls sent longer than male teenagers (Kasesniemi & Rautiainen, 2002).

Furthermore, previous research showed significant gender differences with regard to the lexical, syntactic, and typographical features used in the text messaging of males and females. Norwegian teenage girls sent far more complex and longer messages (having more than one clause) than their male counterparts. A total of 52% of the complex sentences were sent by females compared with 15% sent by males (Ling, 2005). This finding agrees with that of Ling and Baron's (2007), who reported that 60% of the text messages sent by American female students were complex ones. Similarly, Rafi's (2008) findings agree with the above-mentioned findings in that females were more sophisticated users of text messaging than males. He revealed that females' text messages were more complex, longer and more lexically dense than males' messages. As much as 56.6% of the messages sent by female students were complex messages containing more than one clause, whereas 74% of the male students' messages were simple one-clause (sentence) messages. Rafi's (2010) data analysis also showed that when text messaging with other females, female students used more standard forms than when texting with males. This finding was consistent

with Labov's (1991) findings that females' writing is closer to standards than males'. However, Herring and Zelenkauskite (2008) found that females used more non-standard forms in their text messaging than males did. They believed that females expressed features of expressiveness, friendliness, and support through non-standard typography. On the other hand, Igarashi et al. (2005) reported no significant gender differences among Japanese first year law school undergraduate males and female students when it comes to the amount of SMS messages sent.

Females, according to Baron (2004), Ling (2005); and Rafi (2008, 2010), employ more sophisticated syntax than males. Unlike males who tend to delete syntactic features from their text messages, females like to preserve these syntactic features. They have reported some significant gender differences concerning contracted forms among young people. For example, Baron mentioned that male texters used more contracted forms than their female counterparts (77% and 57%, respectively). Females, furthermore, used less abbreviation and more punctuation than males (Baron, 2004; Ling, 2005; Rafi, 2008). Herring and Zelenkauskite's (2008) findings seem to contradict these findings. Their study has shown that the females used more abbreviations and contractions than the males.

Previous research has also shown that females tend to use more emoticons than males (Baron, 2004; Ling, 2005). Rafi (2008) found that females used fewer emoticons while texting with other females. However, they used more emoticons while texting with males. Likewise, males used fewer emoticons when texting with females, and more emoticons when texting with male friends. This may indicate that

males and females tend to be more emotional and expressive when communicating with males than when communicating with females. It may also indicate that males and females feel more at ease when communicating with the same sex.

Gender differences related to code-switching were evident in the text messages of Jordanian students. According to Al-Khateeb and Sabbah (2008), males code-switch between English and Arabic less frequently (30%) than females (44%). They also found that messages written in Arabic scripts were more frequently used by males (33%) than females (22%). However, when messages were written in English, the researchers noticed that both males and females showed no significant difference in the frequency of using English (34% and 37%, respectively).

Yates, Mills, Lockley and Doherty (2004) reported that British text messaging displayed gender differences in politeness. Their findings agree with the findings reported in other modes of CMC by Herring (1994, 2003). Females tend to adhere to politeness norms more than males, whereas males tend to violate politeness norms more than females.

This section discussed some of the previous literature related to the linguistic features used in text messaging in different settings. It discussed the most common linguistic features of text messaging (lexical, grammatical, and typographical) such as those on abbreviations, acronyms, deletion of subject/verb, deletion of an auxiliary/copular verb, letter-number homophones, phonological approximations, code-switching, among others. It also tackled gender differences found in text

messaging. For example, females were reported to write longer and more complex text messages, to use more emoticons, to employ more punctuation, and use more code-switching than their male counterparts. Females' messages were found to be politer, more friendly and expressive. On the other hand, males used more abbreviations and contracted forms, less punctuation, and less standard forms in their text messaging than their female counterparts.

2.5 Theoretical Framework of the Study

This study is guided by Bodomo and Lee's (2002) model of "Technology-conditioned Approach to Language Change and Use" (TeLCU) and Susan Herring's (2004) approach of "Computer-Mediated Discourse Analysis" (CMDA).

2.5.1 Bodomo and Lee's Model of TeLCU

Bodomo and Lee (2002) proposed a model called "Technology-conditioned Language Change and Use" (TeLCU). This model suggests that there is a causal relationship between the emergence of new information communication technologies (ICTs) in our societies and the creation of new forms of language and literacy. The TeLCU model was adopted by Bodomo and Lee by analyzing the interrelationship between language, literacy and ICTs. According to Bodomo and Lee (2002, p. 29),

New technologies often require new forms of language and literacy to express new concepts that emerge along these with these new media and tools. New media of communication, then, can lead to changes in the way people use their language.

Researchers who oppose this view may argue that the introduction of new ICTs does not have prevalent effect on the way people use language. For example, Labov (2000) mentioned television and radio, which do not have significant influence on language used by people. The TeLCU model does not relate to the old modes of communication such as television and radio; it discusses new ICTs such as the internet and the mobile phone. Text messaging, which is the focus of this study, is one type of the new ICTs to which this model may apply.

Bodomo and Lee (2002) have highlighted a number of characteristics distinguishing between the old passive modes of information technology and new ICTs. Specifically, they have introduced five characteristics: flexibility, connectivity, affordability, interactivity, and popularity. Furthermore, TeLCU suggests that “the more of the above features a new technology carries, the more likely new forms of language and literacy will be introduced and the more widespread these new forms will be.” (Bodomo and Lee, 2002, p. 29)

Text messaging enjoys all of the aforementioned features. Firstly, text messaging is a flexible means of communication, which allows people to send and receive text messages at anytime and at anyplace without disturbing others. One can also receive a text messages even if his/her mobile phone is turned off. Text messaging offers people the advantage to avoid any immediate response. It enables them to plan and edit their text messages before sending them. Secondly, text messaging enables people from different places and cultures to stay connected all the time. It can be used for different purposes (Ling, 2005; Thurlow, 2003). Thirdly, text messaging is

interactive. It helps people express their feelings in a better way, and. it also helps them strengthen their relationships with one another. People can interact with one another through text messaging as if they were communicating in face-to-face. Affordability is another characteristic of text messaging. Text messaging is cheap and convenient (Eldridge and Grinter, 2001; Igarashi et al., 2005). The cost of text messaging is often cheap, and most phone companies provide free text messaging service to their customers. It also saves time and effort. Finally, SMS messaging is used by billions of people worldwide. It is also considered the most successful means of communication in recent days (Grinter and Eldridge, 2001; Lancaster et al., 2004). According to Ling (2005), text messaging is the most favored form of CMC surpassing instant messaging, blogs, computer conferencing, emails, etc.

In addition, TeLCU fits into the model of New Literacy Studies (NLS), which is a theory of defining new literacy in relation to social contexts. It is a social approach to literacy explaining the significance of social context in understanding literacy. Bodomo and Lee (2002, p. 30) suggest that the TeLCU model “allows new forms of language and literacy in which the use of these new forms can be explained by the dynamic nature of the social contexts and practices.”

Figure 2.1 illustrates the causal relationship between the introduction of new ICTs and new forms of language and literacy. The figure presents the products of TeLCU. One of the most significant products of TeLCU is “technobabble”, which is a new form of language which includes e-terminology, abbreviations, acronyms, punctuation, ellipsis, and emoticonomy.

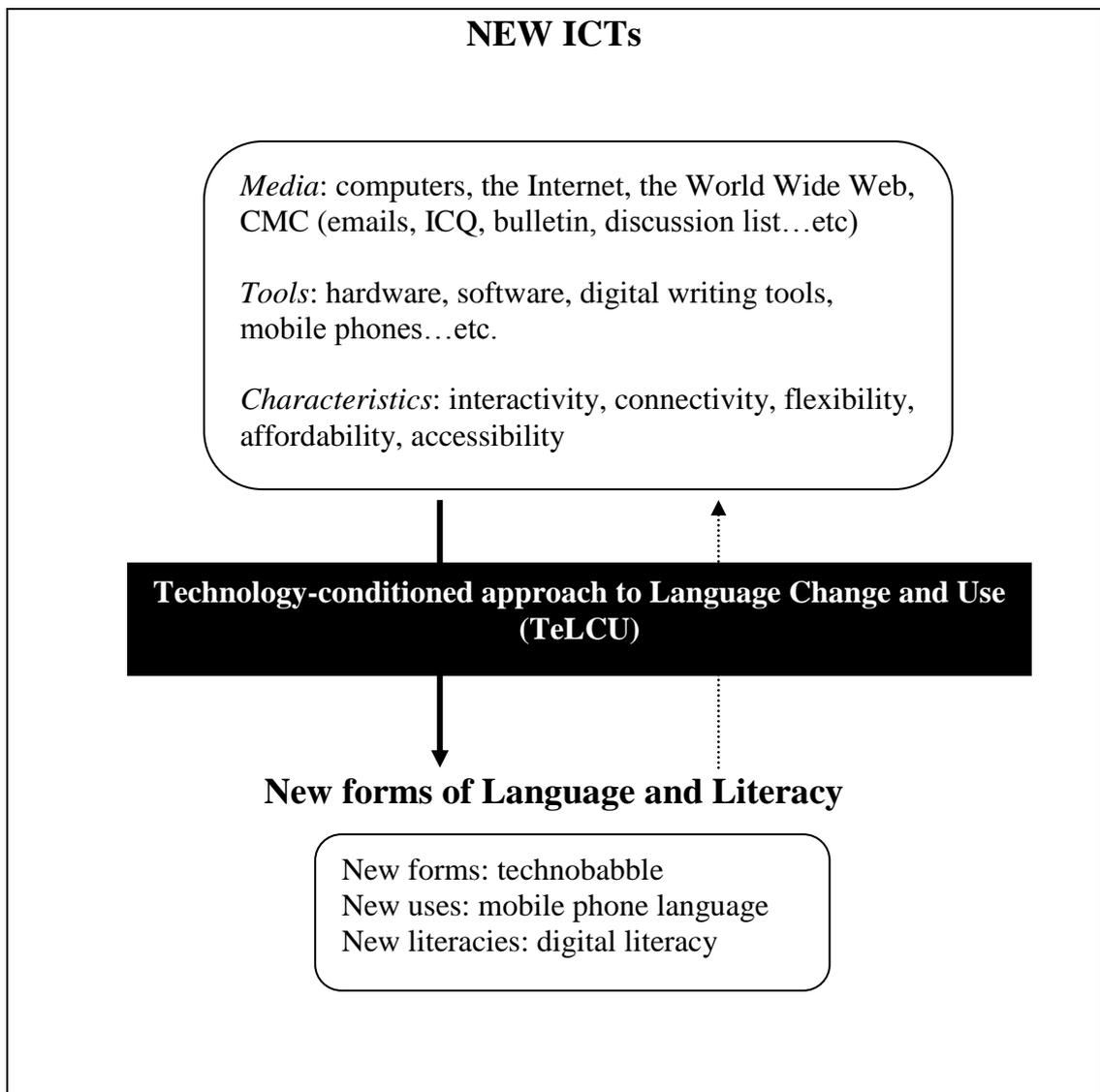


Figure 2.1: *Technology-conditioned Approach to Language Change and Use (TeLCU)* (adapted from Bodomo and Lee (2002))

2.5.2 Herring's Approach of CMDA

Herring (2004) has devised a framework for the analysis of text in online contexts. It is an approach to researching computer-mediated communication, which she called Computer-Mediated Discourse Analysis (CMDA). This approach employs methods that are language focused, and may involve qualitative as well as quantitative analysis which could be supplemented by surveys, logs, interviews, ethnographic

observation, or other methods. The core of CMDA is the linguistic analysis of logs of verbal interaction (e.g., characters, words, utterances, messages) (Herring, 2004). It enables the analysis of language in a specific medium of communication. Androutsopolous and Beißwenger (2008, p.2) call it “the most explicit and fully-articulated framework in the field.”

According to Herring (2004, p. 2), CMDA can be used in the investigation of “micro-level linguistic phenomena” such as online word-formation processes, sentence structure, lexical choice, and code-switching. It can also be used to investigate “macro-level phenomena” including coherence, community, gender equity, and identity in discourse.

CMDA may be applied to four levels of language (Herring, 2004, p. 3):

1. Structural domain (the use of special typography or orthography, novel word-formations, and sentence structure).
2. Meaning levels (meanings of words and utterances).
3. Interactional levels (turn taking, topic development, and other means of negotiating interactive exchanges).
4. Social levels (linguistic expressions of play, conflict and power, and group membership).

Herring (2004, p. 4) considers CMDA “an approach”, rather than a “theory” or a single “method”. It is not considered a theory because it does not make any predictions about the nature of computer-mediated discourse. In fact, CMDA permits various theories of computer-mediated discourse to be assessed. It is not a single method because it provides the researchers with a set of different methods from which they choose what fits their research questions and data. Herring (2004, p.4) proposes that “CMDA as an approach to researching online behavior provides a

methodological toolkit and a set of theoretical lenses through which to make observations and interpret the results of empirical analysis.”

Text messaging is one type of computer-mediated discourse (CMD). CMD occurs between people who interact with one another by using network computers (Herring, 2001a, 2004). According to Herring (2001a) CMD may be viewed as a specialization within the broader field of computer-mediated communication because it focuses on language and language use in computer-networked environments.

Herring explains that CMDA can help researchers to approach their investigations in CMC. It can also help CMDA researchers to conceptualize, design, and interpret a CMDA research project. Specifically, CMDA shows researchers:

- a) how to articulate good research questions;
- b) how to select suitable and sufficient data;
- c) how to choose sampling techniques;
- d) how to operationalize key concepts; and
- e) how to analyze and interpret the data

Table 2.4 is a summary of the CMDA research process, as it appeared in Herring (2004, p. 24).

Table 2.4.: Summary of Herring's CMDA Approach

CMDA Research Process	Application to Virtual Community
Articulate research question(s)	E.g., "To what extent do two online professional development environments, listserv X and website Y, constitute "community"?"
Select computer-mediated data sample	E.g., intermittent time-based sampling (several weeks at a time at intervals throughout a year) of public messages from each group
Operationalize key concept(s) in terms of discourse features	Community + core participants + in-group language + support + conflict + group self-awareness + roles, etc.
Select and apply method(s) of analysis	<p>Frequency counts of, e.g., messages and message length, rate of response ('core participants')</p> <p>Structural analysis of, e.g., abbreviations, word choice, language routines ('ingroup language')</p> <p>Pragmatic analysis of, e.g., speech acts of positive politeness ('support'), etc.</p>

<p>Interpret results</p> <ol style="list-style-type: none"> 1. summarize/synthesize results of data analysis 2. answer research question(s); explain unexpected results 3. consider broader implications 	<ol style="list-style-type: none"> 1. Listserv X has community features a, b, c, ...; website Y has community features c, f, ... 2. Both have some community features; X is more community-like than Y. This is due to ... 3. Results have implications for: CMC theory (e.g., media richness); system design (e.g., push vs. pull access); research methodology (e.g., coding categories for community features)
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2.6 Summary

This chapter reviewed the literature related to the current research. The first section of the literature review discussed computer-mediated communication focusing on its definition, history, forms, characteristics and importance. It also presented some of the important research that has investigated males' and females' communication strategies and language use in face-to-face communication over the past three decades. Evidently, the literature review showed that the majority of well-known researchers seem to agree that there are clear gender differences in the language and communication styles of males and females. The second part dealt with gender differences in CMC, describing some of the research that has been conducted with regard to gender differences in different types of CMC. A special focus was given to the research of Susan Herring, who is a leading scholar in this field.

Previous literature dealing with the social aspect as well as the linguistic aspect of text messaging was also introduced in this chapter, in which the lack of research pertaining to gender differences in this particular medium is evident. The scarcity of research into gender differences in SMS, as shown in the literature review, calls for further research in this particular area. The present study attempts to fill a gap in the literature by exploring gender differences in the linguistic features used in text messaging.

The chapter ended with a discussion of the study's theoretical framework. The final section reported on Bodomo and Lee's TeLCU model as well as Herring's CMDA approach, on which the study is guided by. The theoretical framework as well as the previous literature discussed in this chapter provides the study with a strong background.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

As discussed in Chapter One and Chapter Two, SMS based communication is proliferating into the lives of young people all over the world and into the lives of Jordanian University male and female students in particular. Previous research has revealed variations in males' and females' communication habits based on various parameters such as phonological variations, stylistic range, syntactic differences; etc. The present study becomes significant in the literature by identifying gender differences in the linguistic features used in the text messaging of young Jordanian university students.

The limited number of research investigating gender differences in the use of text messaging is both challenging and inspiring to the present researcher. It is challenging because there is little to direct this study, and inspiring because it allows for a truly original research. The current study is an investigation attempting to explore gender differences in the SMS messages of young male and female university students in a Jordanian setting through qualitative analysis.

This chapter presents the research design of the current dissertation and describes the general methodology that has been used for collecting and analyzing data necessary for the study. It begins by describing the research design. Data collection techniques as well as procedures used for selecting the participants in this study are explained.

A brief detail of the pilot study that was conducted before the main study is provided. In addition; procedures of data analysis are discussed. Finally, issues of validity and reliability and ethical and legal considerations are presented in this chapter.

3.2 Research Design

Conducting a research generally requires preparation of all the necessary steps needed methodologically in a research, such as methods, approaches, data collection techniques, selection of participants, and data analysis techniques. This is called research design and is usually done before one begins a research adventure. Research design, therefore, is a plan for conducting the whole research study. Gay and Airasian (2003) explain that research design is a method that helps integrate a number of different elements of a research consistently for the purpose of addressing the research questions. It “involves theoretical, methodological, and ethical considerations that shape both the design and what the research is aiming to achieve” (Cheek, 2008, p.763). A good research design, according to Lewis (2003, p.74), is “clearly defined, with coherence between research questions and methods, which will generate valid and reliable data and which can be achieved within the available resources.”

The present study is a qualitative case study that employs qualitative design to answer its questions. Qualitative research is “a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (Creswell, 2009, p. 4). The importance of this approach lies in the belief

that it “helps us to understand the world in which we live and why things are the way they are” (Hancock, 2002, p. 2). In addition, the qualitative approach is vital to the study of how groups’ cultural and behavioral patterns develop over time (Creswell, 2009). Some of the most significant questions that the qualitative approach tries to address are: “How and why cultures have developed the way they are, why humans behave the way they do, and the differences between social groups” (Hancock, 2002, p. 2). It is also important because it focuses its investigations on contemporary issues for purposes of illumination and understanding (Hays, 2004). Moreover, it is very helpful in studying new topics that have never been investigated with a specific community (Morse, 1995).

A case study research, on the other hand, is defined as “a qualitative research approach in which researchers focus on a unity of study known as a bounded system (e.g., individual teachers, a classroom, or a school)” (Gay, Mills & Airasian, 2009, p. 426). Case studies and qualitative research are strongly associated with each other that they are sometimes used interchangeably (Lewis, 2003, p. 51). According to Creswell (2009, p. 13), “Case studies are a strategy of inquiry in which the researcher explores in depth a program, event, activity, process”. They seek to understand a phenomenon that is bounded, identifiable, appropriately studied, and that occurs within a specific context. Creswell (2007, p. 73) states that “a case study is a good approach when the inquirer has clearly identifiable cases with boundaries and seeks to provide an in-depth understanding of the cases or comparison of several cases.”

Three techniques of data collection were used in this research. Firstly, an open-ended questionnaire, which was used to collect demographic information about the participants and their use of text messaging, to collect text messaging from them, and mainly to select participants for the user diaries. Secondly, user diaries were also used in order to collect text messages pertaining to the research questions of the study. Finally, semi-structured interviews were conducted in order to complement the other two techniques of data collection by eliciting information directly from the participants related to text messaging practice. These data collection techniques and procedures are discussed in detail in Section 3.4.

Figure 3.1 shows the research framework that was followed in this dissertation. It explains the three data collection techniques that were used in the pilot study: an open-ended questionnaire, a user diary, and a semi-structured interview. Having conducted the pilot study, some modifications were applied to the questions in the open-ended questionnaires and the interviews. Then, the main study was carried out using the same data collection techniques. The participants consisted of Jordanian male and female undergraduate students (18-20 years old) from three different Jordanian universities. Data collected from the participants were categorized according to the gender of the sender of a message. Then, the data were analyzed for the occurrence of lexical, syntactic, and typographical features. Gender differences were then explored.

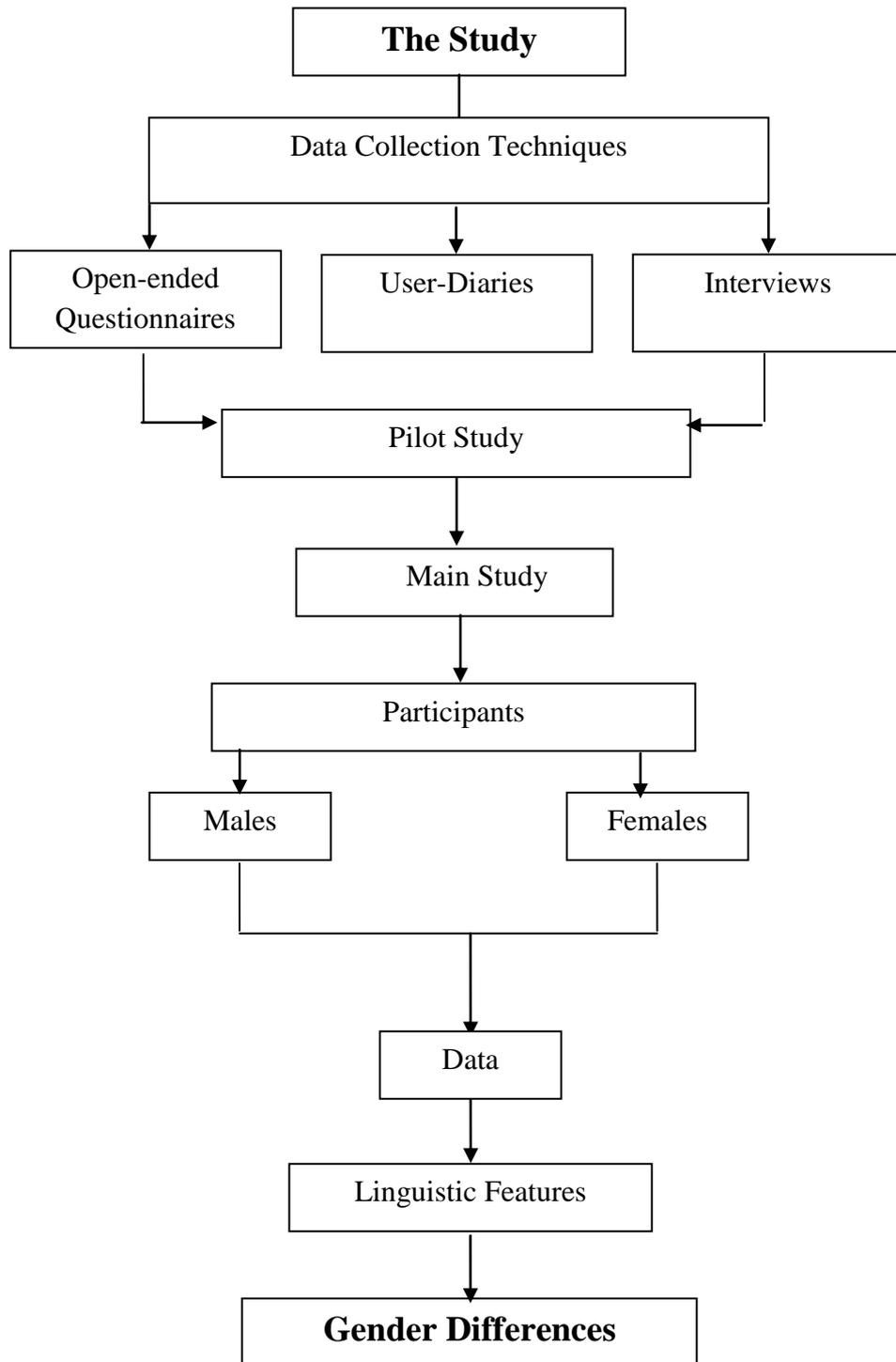


Figure 3.1: Research Framework

3.3 Sampling

Qualitative research, according to Wilmot (2005), employs a non-probability sampling approach because producing a statistically representative sample is not its main objective. Creswell (2009, p. 193) adds that “particularity rather than generalizability is the hallmark of qualitative research.”

In this study, non-probability sampling, particularly purposive sampling, was used to select the participants. Palys (2008, p. 698) demonstrates that “purposive sampling is virtually synonymous with qualitative research.” It is the most common sampling strategy used for qualitative investigations (Marshall, 1996; Palys, 2008; Patton, 2002). Purposive sampling “refers to a process where participants are selected because they meet criteria that have been predetermined by the researcher as relevant to addressing the research questions (e.g., people of a particular age or other demographic category)” (Saumure & Given, 2008, p. 562). Purposive sampling is recommended in qualitative research because it reflects the diversity and breadth of the sample population (Wilmot, 2005), and provides researchers with a broad spectrum of ideas and a variety of opinions and views (Creswell, 2007). This particular type of sampling is suitable for researchers who wish to study in-depth a specific group of individuals and as a result selects individuals representing common features from a particular group (Saumure & Given, 2008; Mason, 2002; Patton, 2002).

The sample in the present study was confined to first-year undergraduate male and female students aged eighteen and twenty from three different universities in Jordan.

The researcher wanted to have a wider range of students for analysis. The first is Al al-Bayt University, located in Mafraq city, where the researcher worked as lecturer at the Department of English Language and Literature. The second one is Yarmouk University, which is the second largest state university in Jordan, located in Irbid City. The third one is Philadelphia University, one of the private universities in Jordan, located in Amman city.

For the purpose of the current study, “young students” were defined as male and female students between the ages of eighteen and twenty, studying as first year undergraduates at a Jordanian university. This particular group of young students has several years (at least 2 years) of text messaging experience from high school. According to Grinter and Eldridge (2001), these young people bring with them to college a well-developed practice of text messaging. Baron (2005a, p. 3) reported that young students “often anecdotally report having 'out grown' the stylized language patterns characteristic of many younger users.” These undergraduates are generally identified as dominant users of the technology. In their study of mobile text messaging, Igarashi et al. (2005) chose first-year undergraduate students because this particular group of students communicates with friends through text messaging very often, and because they have more opportunities than other groups of students to establish new relationships once they arrive at the university.

In addition, this group of students maintains more friendships than any other group, interacts with friends very often and has higher rates of SMS use (Deumart & Masinyana, 2008; Ling, 2002; Thurlow, 2003). Young males and females tend to

send twice as many text messages than adults and children and are more responsive to messages they receive (Ito & Okabe, 2005; Rafi, 2008). The participants were relatively homogeneous with respect to their cultural background (Jordanians), academic background (first-year undergraduates), and age background (18-20 year olds). Further, the researcher ensured that they were all familiar with mobile phones and SMS messaging. The owning of a mobile phone for at least two years was one of the criteria used in the selection of the students. This information was obtained via the questionnaire, and sometimes orally.

Patton (2002) points out that the sample size in qualitative research does not have any rules. He also mentions that “ sample size depends on what you want to know, the purpose of the inquiry, what’s at stake, what will be useful, what will have credibility, and what can be done with available time and resources” (Patton, 2002, p. 244). The sample size in qualitative research is often small because its purpose is in-depth investigation, and because statistical significance is not an aim (Wilmot, 2005). According to Sandelowski (1995), since qualitative research seeks saturation, the size of the sample is not really an issue. He also explains that the sample size should not be large or small in qualitative research because a large sample would make it difficult to conduct a deep, case-oriented investigation, whereas a small size would make it difficult to achieve data saturation. According to Marshall,

An appropriate sample size for a qualitative study is one that adequately answers the research question. For simple questions or very detailed studies, this might be in single figures; for complex questions, large samples and a variety of sampling techniques might be necessary. In practice, the number of required subjects usually becomes obvious as the

study progresses, as new categories, themes or explanations stop emerging from the data (data saturation). (1996, p.523)

Creswell (2009, p. 178) points out that “The idea behind qualitative research is to **purposefully select** participants or sites (or documents or visual material) that will best help the researcher understand the problem and the research questions.” Creswell adds that this does not necessarily require a big number of participants or sites like the ones required in quantitative research. Prior to Creswell, Patton (2002) confirms the same idea by pointing out that qualitative studies aim to study a relatively small number of participants who are selected purposefully.

3.3.1 Participants of the Study

The participants in the present research consisted of one hundred students. They were evenly balanced for gender (50 males and 50 females). These participants came from three different Jordanian universities. They all major in different fields such as Education, Chemistry, Physics, English, Arabic, Biology, Business, etc. Most of the participants have some knowledge of English because it is the medium of instruction in all three universities.

The students were all between the ages of eighteen and twenty. Out of the fifty male students, fifteen students were eighteen years old, twenty one students were nineteen years old, and fourteen students were twenty years old. Out of the fifty female students, thirteen students were eighteen years old, eighteen students were thirteen years old, and nineteen students were twenty years old.

One hundred male and female students participated in the questionnaire. Sixty students (30 males and 30 females) out of the one hundred students took part in the user diaries. Twenty students (10 males and 10 females) were interviewed.

3. 4 Data Collection Techniques and Procedures

First-year undergraduate students were targeted for data collection for this study. It was carried out during a one-month period in 2010, and involved one hundred participants. Three techniques of data collection were used, namely: an open-ended questionnaire, a user diary and a semi-structured interview. According to Stake (2000), some of the best instruments for data collection for qualitative case studies are interviews, gathering logs and surveys.

3. 4.1 Open-Ended Questionnaires

The first data collection technique which was used for collecting data for the current study was an open-ended questionnaire in which open-ended questions were asked. Open-ended questionnaires do not provide participants with a choice of answers. Participants in this kind of data collection technique have the freedom to answer the questions in any manner they choose. Creswell (2009) points out that in qualitative research, open-ended questionnaire are used because they allow participants to express their detailed views.

Questionnaires attract researchers because they are efficient in terms of the researcher's time, effort and financial resources (Foddy, 2001), and they can yield different types of information including: factual, behavioral, and attitudinal

(Dornyei, 2003). In qualitative research, questionnaires can be used to generate understanding of a group of related questions, to construct interview questions for the purpose of in-depth qualitative analysis, and to choose possible interview participants (Foddy, 2001).

In the present study, one hundred participants (50 males and 50 females) were needed to fill out the questionnaires. Some items from previous survey instruments (Grinter and Eldridge, 2001; Wei, 2007; Bosco, 2007) were adopted and customized to fit the purpose of the research (e.g., questions 1, 2, 5, 6, 11, 12, and Part C). The open-ended questionnaire in the present study was written in Arabic and English and the participants chose the language they felt more comfortable with. In order to avoid response errors or non-response by the participants, the wording of the questions was kept simple. The researcher believes that the words used in the questions matched the vocabulary level of the participants because the participants did not make any complaints or comments about the questions, which would, in turn, help the researcher fulfill the objectives of the study.

In the beginning, the researcher faced some difficulties in obtaining participants who would be willing to take part in the user diaries and the interviews. The questionnaire helped in making the participants acquainted with the process by setting the scene and making them feel more comfortable and willing to participate in the user diaries, the principal data collection technique in this study. In sum, the questionnaire assisted the researcher in choosing questions for the interviews, and getting participants for the study.

The open-ended questionnaire was divided into three different parts. The first part (Part A) focused on getting demographic information about the participants including age, sex, nationality, and major. To protect their privacy and personal information, the participants were not required to provide their names. It was important to gather demographic information in order to select participants who fulfill the selection criteria for this study, i.e., the participants should be young Jordanian undergraduates between the ages of eighteen and twenty, and have at least two-year experience in text messaging.

The second part (Part B) included questions where the main objective was to get a general background about the participants, for example, their habits of using text messaging, which may be difficult to observe directly from the corpus such as habits of editing, if any, and the typical language used in their text messaging, and the other party that they communicate with (see Appendix A). The questions in this part did not contribute to the main research questions. They were not intended to provide any linguistic data for the study, but to help the researcher in understanding the students' text messaging practices. Moreover, some of the questions, for example, questions 7, 8, and 9, were intended to complement and correlate the data collected from the questionnaire with data obtained from the other two techniques of data collection.

In the third part (Part C) of the questionnaire, the participants were requested to voluntarily include some actual SMS data, more specifically, the last 5 text messages they sent to their colleagues, friends or family members in a period of not more than a week. The researcher presumed that young Jordanian university students normally

hold a record of at least one week's text messages sent and received from their fellow students. In order to ensure the gathering of natural data, the participants were asked to retrieve the messages from their mobile phones and forward them to the researcher's mobile phone. However some students (specifically, 37 males and 29 females) preferred to copy the text messages character-by character, exactly as they have them in their mobile phones, from their phones into the questionnaire directly. This is because they claimed that they did not have sufficient credit in their mobile accounts. In order to avoid copying mistakes, the researcher, then, asked them to take extra caution when copying text messages from their mobiles onto the questionnaire and to double-check them. The researcher offered to top up their mobile phones as he was carrying some prepaid phone cards to facilitate the process of forwarding the messages. All but 8 (6 males and 2 females) of the students, who agreed to forward their messages directly from their phones to the researcher's phone, refused the offer as they regarded it humiliating.

A total of 442 messages (213 from males and 229 from females) were collected from the participants taking part in the questionnaire. Even though students were asked to provide 5 messages they had sent from their mobile phones, a number of them (10 males and 7 females) provided fewer than 5 messages. Several students pointed out that they do not usually save so many messages in the memory of their phones.

It is noteworthy that a number of students were hesitant to participate in the open-ended questionnaire, and others refused to take part in it, especially when they realized that they were asked to provide some of the text messages they had in their

mobile phones. Thus, in his attempt distribute the questionnaires to the male and female students, the researcher approached 163 students from the target universities; only one hundred students (50 males and 50 females) agreed to participate in the questionnaire. The researcher believes that the sensitive nature of text messages as being very private was the reason behind their hesitation and refusal.

Creswell (2009, p.175) argues that in qualitative research, “researchers collect data themselves through examining documents, observing behavior, or interviewing participants.” The same idea was confirmed by Merriam (2009, p. 5) who makes it clear that the researcher is the “primary source of data collection and data analysis” in qualitative research. In this research study, students at the target universities were approached in person by the researcher in different locations on campus including lecture rooms, libraries, hallways, and cafeterias. The following technique of in-person delivery for the survey was adapted from Koutras (2006). The adapted technique consists of the following steps:

- 1) Approach a student at the target university and introduce yourself and the purpose of approaching him/her.
- 2) Ask whether he/she is a student at the target university, whether he/she is a first-year undergraduate and is 18-20 years of age, and whether he/she owns a mobile phone (screening questions).
- 3) If the answer is yes, then the student will be asked whether he/she would be willing to participate in the survey.

- 4) If the student agrees, he/she will be assured that his/her identity and responses will be kept anonymous and highly confidential. The student will also be informed that he/she may ask questions, if in doubt, at any time. This ensures that the participant fully understands the questions and answers them correctly.
- 5) The student, after that, will be given a questionnaire, and the researcher waits for him/her to complete it.
- 6) After completing the questionnaire, the student will be asked whether he/she would be willing to take part in the user diaries and the interview process.
- 7) If the student is willing, he/she will be asked to provide the researcher with his/her phone number in case the researcher needs to contact him/her.
- 8) Lastly, the participant will be thanked for his/her participation and will be allowed to leave.

3. 4.2 User Diaries

A diary is a document made by someone who has kept a recent, regular, personal log. Diaries are used as a research instrument to gather comprehensive data about behavior, events and other aspects of a person's daily life (Corti, 1993). User diaries enjoy many advantages compared to other data collection instruments. First and foremost, they offer an intense and real representation of an individual's everyday intimate, sensitive, and personal experiences (Blatter, 2008). Ito and Okabe (2005, p. 3) claim that this method has "the advantage of providing much more detail on usage than can be recalled in a stand-alone interview." Secondly, they can provide a dependable choice to the interview technique, especially for events that can be easily

forgotten and are hard to remember (Blatter, 2008). Thirdly, diaries are very flexible because they can be used within a variety of research designs, and they can be used side by side with other methods of data collection (Alaszewski, 2006). Further, diaries can assist in accessing people who are difficult to reach, and help in obtaining the actual language used by the participants (Blatter, 2008; Creswell, 2009).

According to Merriam (2009), “the strength of documents as data source lies with the fact that they already exist in the situation; they do not intrude upon or alter the setting in ways that the presence of the investigator might” (p.13). Finally, user diaries can support interview information by providing a reliable source of information on participants' daily behavior and practices (Blatter, 2008). The aforementioned advantages of user diaries motivated the researcher to use them as a source of data collection. The text messages collected using the user diaries were analyzed and used to answer the research questions of the study.

The user diary technique of data collection was used by Grinter and Eldridge (2001) where they asked 10 teenagers to record the time, content, length, location and recipient or sender of all their SMS messages for a period of one week. The same technique was also used by Bosco, (2007), Deumart and Masinyana (2008), Hård af Segrestad (2002), and Ito and Okabe (2005).

In this study, the user diary is the main data collection technique on which the analysis of the text messages was based. Sixty participants' diaries (30 males and 30 females) were used for the analysis. The participants were invited to keep a log of

the text messages they sent from their mobile phones over a period of one week. The participants were selected from the group of the students who participated in the questionnaire. Of the 100 students who took part in the questionnaire, seventy one (37 males and 34 females) students agreed to participate in the user diaries. Before the data collection, general information about the seventy one participants was collected including name, age, sex, phone number. Information related to the students' experience in text messaging and mobile phone usage was also obtained to ascertain that they met the criteria of the study. Only sixty two (30 males and 32 females) students out of seventy one students actually participated in the logs because the other nine (7 males and 2 females) students didn't forward any messages to the researcher. When the researcher contacted them, a few of them apologized and the others didn't reply to the calls. To make the sample equal for gender analysis, the researcher excluded the last two diaries received from the female students.

A total of 1,612 messages (780 messages from males and 832 messages from females) were forwarded to the researcher's mobile phone by the participants. Sixteen text messages (7 text messages forwarded by the males and 9 text messages forwarded by the females) were excluded from the study because they were very difficult to decipher when received by the researcher, and therefore, became incomprehensible.

The researcher tried to develop a good relationship with the students. It is essential to make the participants as comfortable as possible since the researcher would be allowed to enter a very personal and private part of their lives. Moreover, because

there was a common element of connection and familiarity that developed between the researcher and the students participating in the study, it proved to be easier for them to develop trust. The researcher believes that this encouraged the students to participate despite the sensitive nature of the text messages.

It is significant to mention that females were more cooperative than males even though the researcher believed otherwise. The number of females who volunteered to participate in the user diaries was bigger than that of the males. However the researcher used an equal number of males and females. Females also provided the researcher with more messages than males in the user diaries. The researcher believes that cultural differences among males and females in Jordan are decreasing because of the effect of media such as TV, satellites, the internet, and mobile phones, which allow females more freedom to communicate with males in a country where this kind of communication was not permitted years ago. Moreover, co-education in Jordan may have provided females with more equality as they are open to interacting with males and females alike.

Before beginning the data collection process, the participants were given verbal instructions by the researcher and were requested to keep a record of the text messages which they sent to their colleagues or family members over a period of one week. In order to control the possibility of copying errors due to retyping or rewriting by the participants as well as the researcher, the participants were asked to forward their messages to the researcher's mobile phone, at the researcher's own expenses. The participants were compensated by the researcher by charging their

pre-paid phone cards with an amount covering the cost of sending the messages. They were given the choice to do the forwarding either at the end of each day or after sending, whichever was more convenient to them.

After the completion of the diaries, the researcher sent the students “thank you” messages, expressing his gratitude to them for taking part in the study and reassuring them that their information would be kept strictly confidential. The researcher also informed them that he was willing to share the results of the study with them if they wished. They were also asked if they would allow the researcher to contact them for clarification, if needed, regarding the text messages they had provided. All of them had no objection to the researcher’s request.

3. 4.3. Semi-Structured Face-to-Face Interviews

The third technique of data collection used in this study besides the paper-based open-ended questionnaires and the user diaries is the semi-structured face-to face interviews.

According to (deMarrais, 2004; Merriam, 2009), interviews may be regarded as the most common data collection technique in qualitative studies in which a researcher and the participants in his/her study engage in a conversation which focuses on the research study questions. They “present the understandings of the people being interviewed. Those understandings constitute important, indeed critical, information” (Patton, 2002, p. 264). Interviews are also “one of the richest sources of data in a case study” because they provide the researcher with information from a variety of

perspectives” (Hays, 2004, p. 229). They are usually used in qualitative research when a researcher, studying a particular phenomenon, seeks to obtain in-depth information from participants regarding the given phenomenon (deMarrais, 2004). Moreover, “interviews yield direct quotations from people about their experiences, opinions, feelings, and knowledge” (Patton, 2002, p. 4), and help the researcher measure the participant’s view and attitude about a certain experience or topic (Creswell, 2009; deMarrais, 2004). Mishler (1986, p. 35) commented on the importance of qualitative interviews by saying that “interviews are not simply exchanges of questions and answers by researchers and participants, but a form of discourse where the researcher and participant engage in constructing meaning within a particular type of social relationship.”

The present research employed semi-structured interviews as a technique for data collection. Semi-structured interviews, which are typically a combination of structured and open methods, “is a qualitative data collection strategy in which the researcher asks informants a series of predetermined but open-ended questions” (Ayres, 2008, p. 810). They are “conducted on the basis of a loose structure consisting of open-ended questions that define what are to be explored” (Britten, 1995, p. 251). A list of questions to be asked and a list of issues to be understood often guide a major part of semi-structured interviews (Merriam, 2009). The interviews questions and wordings are not usually predetermined

The participants were selected from the group of the students who participated in the user diaries. Specifically, twenty students (10 males and 10 females), who took part

in the user diaries were asked to participate in these in-depth interviews to draw details relating to texting habits and usage. After the students forwarded their text messages from their user diaries, they were contacted by the researcher and invited to partake in the interviews. Even though twenty six students (12 males and 14 females) agreed to the researcher's request, only twenty participants (10 males and 10 females) were needed for the interviews. They were chosen randomly. The other 6 students were thanked for their cooperation, and a note of gratitude was sent to each of them via a text message. Having agreed to participate, appointments were set based on their free time in order to conduct the interviews. They were also asked if they would allow the researcher to contact them for clarification, if needed, regarding the text messages they had provided. All of them had no objection to the researcher's request.

Before the interviews, a number of open-ended questions, which allow some flexibility in answers, were prepared in order to direct the entire interview process. The interviews, which were carried out in Arabic, contained questions related to mobile texting practices such as frequency of text messages, use of borrowed lexical items and inputting methods, among others. The researcher was also interested in getting to know what kind of relationship the participant had with the person he or she sent the messages to, which is one of the factors that influence how they write, when and about what, of course. Aside from their text messaging habits, the participants were asked questions concerning their language attitudes and general feelings towards the language used in their text messaging. These questions were not primarily intended to answer any of the research questions, but rather to complement

the data the researcher obtained from the other two techniques of data collection, the questionnaire and the user diaries.

The whole interview process was tape-recorded with the participants' consent. The participants were informed that it would be possible to stop the audio-recording if they felt uncomfortable at any time during the interview. Tape recording, according to Seidman (1991), is a very useful and powerful method that can be used in the interviews because the researcher, at any time, can have immediate access to the original words of the interviewees, free from paraphrase or arbitrary interpretations by the researcher. Furthermore, tape recording helps ensure accuracy, especially in vague cases. Meanwhile, certain notes can be taken during the interview. As the participants answered the questions, the researcher also took down some quick and important notes in his notebook. At the end of each interview, the researcher thanked the participants for their co-operation and gave them time to ask questions.

3.5 Pilot Study

The term *pilot study* refers to mini versions of a full-scale study. It is “the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule” (Teijlingen & Hundley, 2001, p. 289). Pilot studies help researchers to get familiar with all the procedures used in their studies, and let them focus on the important aspects of their research. According to Teijlingen and Hundley (2001, p. 289),

One of the advantages of conducting a pilot study is that it might give advance warning about where the main research

project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated.

Additionally, piloting a study provides the researchers with the opportunity to test the viability, validity, and reliability of their study and to obtain some preliminary data that can assist the researchers to enhance their investigation plan in an effective way (Jolly & Mitchell, 2007). A pilot study is also called a feasibility study, which is usually carried out to determine if the main study is accomplishable (Schreiber, 2008). According to Creswell (2009), a pilot study may be used as a rehearsal of the protocol to be followed before the full study.

The pilot study for the present study was conducted for the following purposes:

1. To foresee any problems that may occur during the process of data collection such as simplicity, clarity, relevance, significance and ambiguity of the questionnaire and interview questions;
2. To check the suitability and adequacy of the data collection techniques that are chosen to carry out the main study;
3. To avoid inaccuracy, inconveniences, and errors during data collection and data analysis; and
4. To assess the feasibility of the study.

The participants in the pilot study consisted of eighteen students distributed as follows: ten students (5 males and 5 females) for the questionnaire, four students (2 males and 2 females) for the user diaries, and four students (2 males and 2 females)

for the interviews. The pilot study was carried out over a period of ten days. The feedback of participants in the pilot study was taken into consideration, and some changes were made accordingly. For example, seven students (5 males and 2 females) expressed that some of the questions in the English and Arabic versions of the questionnaire were vague and difficult to understand. Therefore, these questions (Arabic and English versions) were reworded, reordered, and clarified in order to suit the objectives of the present study. Below are examples of some of the questionnaire questions that were modified (The original questions are given first, followed by the modified ones):

1. The original forms of the questions:

- a. Do you use any lexical features?
- b. Do you use any syntactic features?
- c. Do you use any typographical features?
- d. Is grammar important to you when you send your text message?

2. The modified forms of the questions:

- a. Do you use any lexical features (e.g. abbreviations, acronyms, clippings, etc.)? If yes, why?
- b. Do you use any syntactic features (e.g. deletion of subject, deletion of auxiliary, deletion of article, etc.)? If yes, why?

- c. Do you use typographical features (e.g. punctuation, phonetic spelling, emoticons, etc.)? If yes, why?
- d. Do you pay attention to the grammar of your text messages? If yes, why?

In addition, some irrelevant questions were deleted from the questionnaires such as the questions about the course major of the students, the type of phones they own, the best time in which they like to send their messages, and the purpose of their text messaging. The pilot study also showed that some of the students were not comfortable when the researcher asked them to provide him with more text messages in the interviews. A number of the students complained that they had already provided enough text messages in the questionnaires and the user diaries. Therefore, the researcher ignored asking the participants for more text messages in the interviews.

Having conducted the pilot study, the researcher realized that some linguistic features should be removed from the list of linguistic features. For example, the lexical category “backformation” was removed because it did not exist in the text messaging of the students.

The pilot study also helped the researcher to choose the language of the interviews. Initially, the researcher thought that interviews could be carried out in English, but the pilot study revealed that interviews in Arabic would be more appropriate for the participants. The majority of the students selected for the interviews (3 students) preferred to express themselves in Arabic.

Moreover, the pilot study helped the researcher to estimate the sample size and the amount of data needed for the study because the researcher was uncertain about them. The pilot study also showed that the main study would be feasible and could be carried out in time. It also showed that the task of getting participants and collecting natural data for the main study would not be as difficult as the researcher expected although some difficulties were faced in the beginning. In sum, the researcher discovered that the pilot study contributed to improving the validity of the research methods and techniques at a satisfactory level.

A total of 166 text messages were obtained from the participants by means of the user diaries. The participants used three systems of writing in their text messaging: English, Arabic, and Romanized Arabic. Table 3.1 shows the distribution of the participants' messages.

Table 3.1: Distribution of SMS Messages of the Pilot Study

Language of Messages	Males		Females	
	Frequency	Percentage	Frequency	Percentage
English	32	41%	42	48%
Romanized Arabic	27	35%	29	33%
Arabic	19	24%	17	19%
Total	78	100%	88	100%

The data were organized according to the gender of the sender of the text messages. They were then classified according to the occurrence of lexical, syntactic, and typographical features in the text messages.

Table 3.2 shows gender differences in the lexical, syntactic, and typographical features used in the text messaging of the students based on the pilot study.

Table 3.2: Findings of the Pilot Study

	Males		Females	
	Frequency	Percentage	Frequency	Percentage
I. Lexical Features				
1. Abbreviation	60	76.9%	45	51.1%
2. Borrowing	32	41%	41	46.6%
3. Derivation	9	11.5%	10	11.3%
4. Acronyms	18	23%	13	14.8%
5. Compounding	6	7.7%	8	9.1%
6. Blending	7	9%	9	10.2%
7. Conversion	1	1.2%	1	1.1%
8. Coinage	0	0%	1	1.1%
II. Syntactic Features				
1. Deletion of subject pronoun	23	29.8%	21	23.9%
2. Deletion of subject pronoun and auxiliary	16	20.5%	11	12.5%
3. Deletion of auxiliary/ copular /modal verb	14	17.9%	12	13.6%
4. Deletion of article	14	17.9%	10	11.3%
III. Typographical Features				
1. Phonetic spelling	31	39.7%	27	30.7%
2. Punctuation	36	46%	43	48.8%

3. Onomatopoeic words	18	23%	24	27.2%
4. Emoticons	19	24.3%	32	36.3%
5. Letter and number homophone	21	27%	15	17%

Having completed the pilot study and taken all the changes and improvements into consideration, the main study was then carried out.

3.6 Data Analysis

This section presents the analysis of data collected via the data collection techniques. It starts with the analysis of the text messages as collected by means of the user diaries, which is the main data collection technique in this study. Next, the analysis of the open-ended questionnaire is discussed. Analysis of the interviews is described finally.

3.6.1 Analysis of the User Diaries

The analysis in this study was based on the text messages obtained by means of the user dairies, which is the main technique of data collection in this study. In order to answer the three research questions, the text messages collected through the user diaries were classified according to gender, that is, they were classified into two categories: text messages written by male students and text messages written by female students. Next, each text message was analyzed individually and manually to identify the presence of the linguistic features: lexical, syntactic, and typographical. The text messages were then further analyzed to detect gender differences in the use of the linguistic features.

Tabulations of all the linguistic variables for the entire corpus were performed, which made it easier for the researcher to identify the linguistic features. Frequency counts and percentages were used to help determine gender differences in the students' text messaging. They were also tabulated from the data for further comparison and discussion.

The final set of data contained 1,612 messages (780 messages from males and 832 messages from females). To analyze the text messages, a coding scheme was adopted and modified based on lexical, syntactic, and typographical categories used in previous literature. The following are the categorizations and sub-categorizations of these linguistic features:

3.6.1.1 Lexical Features:

To analyze the lexical features that occurred, eight lexical features from George Yule's book, "The Study of Language" (2009) were adopted. Yule's (2009) classification of word-formation processes is considered one of the most common classifications used in the study of language. The use of these word-formation processes may demonstrate the speakers' ability and competence in a language. Lexical categories such as abbreviations, acronyms, shortenings, and borrowing were discussed in previous literature (Bosco, 2007; Deumart & Masinyana 2008; Doring, 2002; Hård af Segerstad, 2002; Thurlow, 2003). One of the very few studies that investigated compounding, blending and derivation in CMC is that of Hassan and Hashim (2009). The researcher believes that the use of lexical features such as derivation, compounding, blending, conversion, and coinage may be used as an

indication of the more complex use of language. Therefore, they could be used in the study of gender and language to answer questions such as “Whose text messaging is more complex, males’ or females’?” “Who use more lexical features in their communication, males or females?” Even though this does not answer any of the main research questions, it gives an insight into the language of males and females. The following are the lexical features used in the analysis of the present study:

- a. Abbreviation (e.g., *wk*= week; *msg*= message)
- b. Borrowing (e.g., *yogurt* from Turkish; *pizza* from Italian)
- c. Compounding (e.g., *girlfriend*=girl+friend, *headmaster*=head+master)
- d. Blending (e.g., *motel*= motor+hotel; *smaze*= smoke+haze)
- e. Derivation (e.g., *unimportant*= un+important; *successful*= success+full)
- f. Acronyms (e.g., *ATM*= automatic teller machine; *LOL*= lots of love/laugh)
- g. Conversion (*vacation*, *butter* are nouns used as verbs)
- h. Coinage (Kleenex, Brillo)

3.6.1.2 Syntactic Features:

The syntactic features were categorized based on Hård af Segrestad’s (2002) and Thurlow’s (2003) typology of the linguistic features of text messaging. Each text message was analyzed for the presence of any of the following categories:

- a. Deletion of subject pronoun: ([I] wanted 2 see if u can lend me some money?)
- b. Deletion of subject pronoun and auxiliary: ([I am] trying to see if you have my book)
- c. Deletion of copular/auxiliary/modal verb: ([Are] you home from work?)
- d. Deletion of article: (Do you want to go to [the] bank?)

3.6.1.3 Typographical Features:

The typographical features used for the analysis of this study were also adapted from Hård af Segrestad's (2002) and Thurlow's (2003) typology of the linguistic features of text messaging. Five categories of typographical features were used in the study. All text messages were checked against the occurrence of any of these categories.

- a. Punctuation: (whether a sentence contains punctuation marks or not)
- b. Letter and Number Homophones: (*sum1*= someone; *RU?*=Are you?; *2g4u*= too good for you)
- c. Phonetic Spelling: (non-conventional spelling): (*luv*=love; *thanx*=thanks; *fone*=phone)
- d. Onomatopoeic Words : (hahaha, hmmm, hee hee, ahaa)
- e. Emoticons: (the smiley [:]), the frown emoticon [;]), and the kiss emoticon [:-*])

It is important to note that each individual text message was checked against the occurrence of all the linguistic features (lexical, syntactic, and typographical). For example, analyzing the following English text message:

Example 1: plz bring ktaaby with you, have quiz aftr 2morro :)

The following linguistic features were found:

- a) abbreviation (**plz** instead of **please**, **aftr** instead of **after**, and **2morro** instead of **tomorrow**),
- b) borrowing (**ktaaby**): it is an Arabic word meaning **my book**,
- c) deletion of subject pronoun (I): the first person singular subject pronoun was deleted from the clause **I have quiz aftr 2morro**
- d) deletion of article (**a**): this article was deleted from the phrase **a quiz**
- e) punctuation (comma): a comma was used in this message
- f) phonetic spelling (plz): The final consonant in the word **please** was written phonemically as **z**
- g) letter and number homophones (2morro): The number 2 which is considered a homophone to the letter **t** in this word was used
- h) emoticon (:)): a smiling face was used in this text message

Therefore, this message was listed under these eight linguistic categories. A table, which was designed to record the occurrence of all the linguistic categories, was used by the researcher. Whenever a certain linguistic feature was detected in any of the text messages, a tick was placed in the box designed for that specific category.

An example of an analysis of the following Arabic text message yielded the linguistic features below the example:

Example 2: طنش تعش تنتعش. ما في حد بستاااهل، لو كنت مكنك بعمل ذا سيم هاهاها

(Don't worry. You will be happy. Nobody is worth it. If I were you, I would do the same.)

- a) abbreviation (مكنك) instead of مكانك
- b) borrowing (ذا سيم) : it is an English word that is written in Arabic meaning **the same**
- c) deletion of subject pronoun (انا): This first person singular pronoun which is equivalent to first person singular pronoun **I** in English was deleted from the clause لو كنت مكنك بعمل ذا سيم
- d) phonetic spelling (بستاااهل); this word was phonetically spelt for emphasis or play. The original word is يستاهل
- e) punctuation (period and comma); these two punctuation marks were used in this text message
- f) onomatopoeic word (هاهاها) . This onomatopoeic word indicating laughter was used in the message.

Another example is provided from the list of the Romanized Arabic text messages:

Example 3: ya zam fe3lan 2nk ga7of y3ni b3dk ma bataltha hay el habit wlk 3abd el karem bil3b shadah h3h3h

(Hey, man. You are such a stingy person. You have not stopped this bad habit yet. Abdulkareem plays cards, haha.)

Five linguistic features were detected in this particular text message:

- a) abbreviation (ya zam instead of yazalameh meaning man, 2nk instead of inak meaning you, b3dk instead of ba3dak meaning you still, wlk instead of walak, which is used as a vocative),

- b) borrowing (**habit**): It is a borrowed English word.
- c) compounding (3abd el karem): It is a compound name.
- d) onomatopoeic word (**h3h3h**): It is an onomatopoeic word indicating **laughter**, sometimes used to mock people.

A sample of the table showing how the text messages were analyzed is provided in the appendices (see appendix K)

3.6.2 Analysis of the Open-ended Questionnaire

The open-ended questionnaire consisted of three parts, the first of which was concerned with collecting demographic information about the participants. This information helped the researcher to select the participants of the study. Table 3.3 below shows the information about the participants which was collected through the first part of the open-ended questionnaire.

Table 3.3: Demographics of the Participants in the Questionnaire

		Males	Females
Sex		50	50
Age	18 years	15	13
Nationality	Jordanian	50	50
University	Al al-Bayt University	18	17
	Yarmouk University	16	17
	Philadelphia University	16	16

As mentioned previously, the second part of the open-ended questionnaire was not primarily designed to answer any of the main research questions. The data collected by means of the second part of the questionnaire were analyzed and discussed in section 4.5. Data collected through the second part of the questionnaire were analyzed and coded according to the themes introduced in the questions. Their frequency counts and percentages were calculated. Gender differences were also shown. This part of the questionnaire provided the researcher with more details about the process of text messaging and supplemented the findings and discussion of the study.

The main objective of the final part of the open-ended questionnaire was to select students for the user diaries, which is the main data collection technique in this study. Text messages collected through the final part of the open-ended questionnaires were not included in the analysis of this study. The researcher believes that the text messages collected by means of the questionnaire were not highly reliable because the researcher noticed that the students were sometimes selective, and may have made errors while copying their text messaging from their mobile phones into the questionnaire because some of them were in a hurry . Therefore, to answer the main research questions of this study, the analysis were based mainly on the text messages of the students collected through the user diaries.

3.6.3 Analysis of the Semi-Structured Interview

The present study aims at exploring gender differences in the linguistic features used in the text messaging of the young students. Therefore, the primary data on which

the analysis of the present study was based were the text messages of the students collected through the user-diaries.

The main purpose of the semi-structured interviews in the current study was to gain greater understanding about the use of SMS messages by listening to the actual users talking about the practice of SMS messaging. The interviews were not primarily intended to gain data for linguistic features per se, but rather for complementing the linguistic material and the researcher's understanding of how people use SMS. Furthermore, face-to-face interviews helped the researcher to get in-depth explanations about the practice of SMS messaging and to overcome the weaknesses that may result from depending exclusively on the other two techniques of data collection.

The data collected through the semi-structured interviews were transcribed and used in the study to lend support to the researcher's discussion. They were not used in answering the main questions. However, they helped strengthen the discussion by providing the researcher with various points of view on Jordanian students' text messaging practice. Some of the participants' quotations were used literally in the discussion.

Each interview was transcribed from the tape-recorder into the researcher note-book, (see appendix G). Not all utterances were equally important. For example, crutch words, and false starts such as uhh, umm, well, you see were excluded. Confusing and irrelevant utterances were also avoided. The data collected from the interviews

were classified into categories based on the questions asked and on the participants' responses.

3.7 Validity and Reliability

Validity and reliability are two aspects which are integral to qualitative researchers, who should pay extra caution while designing their studies, analysing results and judging the quality of their studies (Patton, 2001). Bailey (2007) defines validity as the measurement of research accuracy. On the other hand, reliability is largely concerned with the extent to which the findings of any research could be repeated to produce the same results (Merriam, 2001; Mason, 2002). Even though the issue of validity and reliability in qualitative research is subject to debate, it can contribute to the credibility and trustworthiness of research. To ensure the validity and reliability of the present study, certain procedures were taken into consideration.

First, triangulation was utilized to allow for a more reliable way to verify the findings of the study. According to Bailey (2007) and Merriam (2001), triangulation is the utilization of various data sources, data collection techniques, and data analysis. In the present research, triangulation of methods was applied in order to make sure that the findings of the study are credible by utilizing various techniques of data collection. Triangulation of the methods helps researchers to confirm the findings of the study by overcoming the limitations that may arise from depending on one method of data collection. Furthermore, data collected from one particular technique of data collection may be enhanced by another.

For example, the researcher of this study faced some difficulties in getting sufficient and detailed answers from the students participating in the questionnaire because some of them complained that they did not have enough time to fill out the questionnaire properly and to answer all the questions in detail. A number of them also claimed that they had a class or they were late for an appointment. Others may have felt uncomfortable with the kind of inquiry, especially about the final part of the questionnaire, although they agreed to fill out the questionnaire. Even though the researcher asked the participants to take extra care when copying their text messaging from their phones into the questionnaire, the researcher believes that some of the students, who preferred copying messages to forwarding them, may have made some mistakes while copying their text messages or may have corrected some errors. Additionally, the participants may also have been selective. They may have selected text messages that were easier to copy since some of them provided less than five text messages.

The user diaries, which were primarily used for collecting real text messages, have helped in overcoming the limitation of copying. The researcher believes that when the students became more acquainted with the researcher, the text messages they provided might have been more accurate than those provided in the questionnaire. Assuring the participants of the confidentiality of their responses and making them sign the consent form could have reinforced the participants' trust of the researcher and made them more willing to participate amply. In other words, the trust that was built during the implementation of the user diaries was lacking through the administration of the questionnaire.

Similarly, the semi-structured interviews provided more detailed answers to the researcher's inquiry than the questionnaire. Unlike the questionnaires and the user diaries, the interviews allowed the participants more freedom and time to answer the questions and to ask for clarifications on certain issues. Therefore, the participants' responses to the interview have been more thorough and detailed. The interviews also gave the researcher the opportunity to modify the questions by adding or deleting some of them to be suitable for the objectives of the study based on the participant's reactions, responses and questions. The friendly environment, which was missing during the administration of the questionnaire, also assisted in getting better responses from the participants. Some of the students were actually very glad to be part of such the study.

Second, the questionnaires and the interviews yielded almost the same findings for many of the questions. For example, there were similar outcomes such as the amount of text messages which were sent and received, the motivation for using lexical, syntactic, and typographical features, and the language used in text messaging. The same findings regarding the issue of editing text messages and paying attention to grammar were also confirmed.

Third, peer review was also utilized in this study. Peer review refers to the process of reviewing data by people who have sufficient knowledge and experience in research (Merriam, 2001). Throughout the present study, the researcher obtained help from a colleague who was working with him in the same department of Applied Linguistics. He is a PhD holder and has six years of experience in research. The colleague helped

the researcher in the analysis and interpretation of the findings. He also used to review the researcher's work from time to time and to give his comments.

Fourth, the researcher also had constant formal discussions with his supervisor throughout the study, keeping the researcher focused and on track. These discussions were often conducted on monthly basis and on times that are convenient for the supervisor. The researcher used to contact the supervisor through scheduled meetings, e mails, and SMS messages.

Fifth, the researcher tried his best to avoid bias throughout the data collection, data analysis, and interpretation of the findings. The researcher did not interfere with the participants' viewpoints concerning the research. The researcher also strived to give an accurate and detailed interpretation, using some of the participants' direct quotations in the discussion of the results.

Sixth, during the data analysis process the researcher kept constant contact with some of the participants who gave the researcher the permission to be reached. Keeping in touch with them helped in clarifying some fuzzy and unclear points regarding the text messages they had provided. For example, the researcher faced problems understanding some of the text messages, especially those written using Romanized Arabic as the researcher was not very familiar with this language. The difficulty of understanding these messages stemmed from the fact that the students used some numbers and English letters to replace Arabic letters. Some of the acronyms used by the students in their text messaging were also confusing to the

researcher and not easy to comprehend because the students used these acronyms differently. Therefore, the researcher had to call the participants and to get clarifications on some certain points.

Finally, inter-rater reliability, which is a term “used to determine the agreement between different judges or raters when they are observing or evaluating the performance of others” (Marczyk, DeMatteo & Festinger, 2005, p.100), was carried out. Inter-rater reliability refers to the analysis of written material and involves at least two trained individuals independently conducting the coding process (Hoonard, 2003). It helps ensure that the findings are correct and reliable. To enhance the effectiveness of the inter-rater reliability, two coders besides the researcher coded 70% (1130) of the text messages independently to determine the type of linguistic features present in each message (the researcher and two other Jordanian colleagues who hold Master’s degrees in linguistics and work with the researcher in the same department of Applied Linguistics). They were given clear idea about the research and instructions about how the analysis should be carried out. The results of the three coders were compared for consistency. However, whenever the coders did not agree on the classification of any of the linguistic features in a text message, they would discuss the matter with each other and resolve the ambiguity of that specific category. Table 3.4 below shows the results of the inter-rater reliability process.

Table 3.4: Results of Inter-rater Reliability Agreement

Agreement	Number of Messages	Percentage
All three agreement	1139	92%
Two agreement	69	6%
No agreement	22	2%

3.8 Ethical and Legal Considerations: confidentiality and informed consent.

Confidentiality is a crucial issue in research. The researcher has taken some measures to ensure confidentiality in this study. For example, the interviews were carried out in private rooms within the universities. They were conducted in the form of an informal friend-to-friend chat, which created a friendly atmosphere, motivating participants to share their information very happily and willingly. Such a relaxing environment made the participants feel comfortable and willing to provide more data for the study.

In addition, gaining informed consent from participants before beginning the process of collecting data is necessary when conducting research in face-to-face situations. Therefore, at the beginning of each interview in this study, the researcher, who conducted the interviews in person, would get the participants to read a letter from the researcher containing details on the research background, the aims of the study, as well as some ethical issues. In the letter, the participants were assured that their participation would be strictly confidential and voluntary, giving them the right to

withdraw from the study at any time without prior notice (see Appendix E). The participants also had the prerogative to skip any question, take breaks, or interrupt at any time. Each interview lasted around 15-20 minutes and was arranged at times convenient to the participants. The interviews were conducted on a one-to-one basis, allowing the participants to talk to the researcher freely and trustfully.

Moreover, the participants in the user diaries were highly assured that all of the information they provided in the study would be kept strictly confidential, and that no one would be able to have access to their messages but the researcher himself. Informed consents were gained from the participants who agreed to take part in the user diaries in order to use their forwarded messages for analysis (see Appendix C).

To better ensure the confidentiality and anonymity, the participants were given pseudonyms to conceal their identities. A pseudonym may be defined as a fictional name that replaces the original name of a person, a group, or a place to give anonymity (Ogden, 2008). A pseudonym can help protect confidentiality and anonymity.

3.9 Summary

This chapter discussed the methodology employed to answer the research questions for the present study. The aim of this chapter was to give an account of how the research was conducted and the way the data were collected and then analyzed. Therefore, research design, data collection techniques and procedures, pilot study, and data analysis procedures were explained. Issues of validity and reliability as well

as ethical and legal considerations were discussed. The next chapter presents the analysis and the discussion of this study.

CHAPTER FOUR

FINDINGS AND DISCUSSION OF THE STUDY

4.1 Introduction

This chapter presents the findings and discussion of the data collected from the young Jordanian participants by using (a) open-ended questionnaires; (b) user diaries; and (c) interviews. The data were analyzed to explore gender differences in the linguistic choices of the young Jordanian male and female texters in their text messaging communication. The linguistic features of the text messaging of the young participants as well as gender differences among them are presented in this chapter. The present study is guided by the following research questions:

1. What are the differences in the lexical features used in the text messaging of the young Jordanian male and female university students?
2. What are the differences in the syntactic features used in the text messaging of the young Jordanian male and female university students?
3. What are the differences in the typographical features used in the text messaging of the young Jordanian male and female university students?

This research is guided by Bodomo and Lee's (2002) model of TeLCU and Herring's (2004) approach of CMDA. The following sections discuss the linguistic features that are present in the text messaging of the students, gender differences in

these linguistic features, discussion of the findings, and other findings in the students' text messaging.

4.2 Linguistic Features of Text Messaging

The data analysis shows that various linguistic features including the linguistic features under investigation are present in the text messaging of the young Jordanian university students. It is also shown that these linguistic features can be treated as new forms of language or what is called by Bodo and Lee (2002) as "technobabble". Not only do these linguistic features show the linguistic context of the text messaging of the Jordanian students, but they also show a strong causal relationship between the introduction of text messaging, which is a form of ICTs and new language forms used by the students, supporting Bodo and Lee's (2002) claim.

The data reveal that the linguistic features under investigation for the purpose of this study are all present in the text messages of the students. They are lexical features (abbreviations, borrowing, derivation, acronyms, compounding, blending, coinage, and conversion), syntactic features (deletion of subject/ subject pronoun, deletion of subject pronoun and auxiliary/ modal, deletion of auxiliary, copular, and modal, and deletion of article), and typographical features (phonetic spellings, punctuation, onomatopoeic words, emoticons, and letter and number homophones). Details on the findings and discussion of these linguistic features will be presented in the next section.

4.3 Gender Differences in the Linguistic Features of Text Messaging

This section presents answers to the three research questions in this study in relation to the linguistic features found among the young Jordanian male and female texters. For this purpose, numeric data consisting of the lexical features obtained from the user diaries are presented in Figure 4.1, showing gender differences in the use of word-formation processes. Next, numeric data consisting of the syntactic and typographical features are displayed in Figures 4.2 and 4.3 respectively to indicate gender variations.

4.3.1 Gender Differences in Lexical Features

This section deals with gender differences among the young Jordanian male and female students with respect to the lexical features used in their text messages. The findings in this study show that the most frequently used lexical feature is abbreviation, which was used in 74.1% (578) of the text messages of the males and in 63.8% (531) of the text messages of females. The next most frequently used lexical feature is borrowing. It was used in 43.6% (340) of the text messages of the males and in 56.9% (473) of the text messages of females. Further, derivation occurred in 27.6% (215) of the text messages of the males and in 44.7% (372) of the text messages of females. Acronyms, which were used in 27.9% (218) and 21.4% (178) of the text messages of the males and females respectively, comes in fourth place. Compounding appeared in 11% (86) and 13.9% (116) of the males' and females' text messages respectively, followed by blending which appeared in 9.1% (71) and 12.4% (103) of the text messages of the males and females respectively.

The least common lexical features are coinage and conversion. Conversion is the second last of the lexical features that was found in 1.9% (15) and 2.5% (21) in the text messages of the males and females respectively. Finally, coinage is the least frequently used lexical feature. It was used in 1.5% (12) of the text messages of the males and 3% (25) in the text messages of the females.

Figure 4.1 displays word-formation processes among the students and shows variations among them with respect to each lexical category.

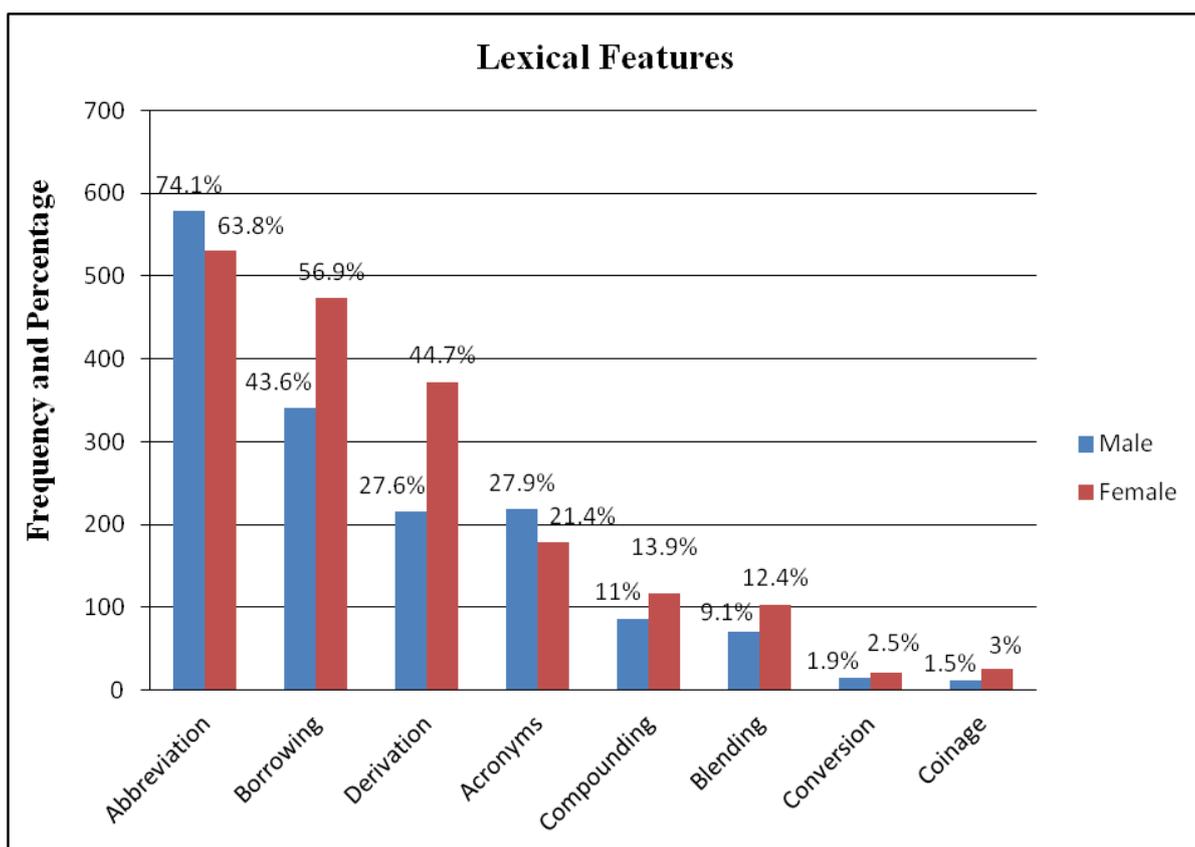


Figure 4.1: Lexical Features in the Text Messaging of Young Jordanian University Students

4.3.1.1 Abbreviation

This word-formation process is one of the “most noticeable features of present-day English” (Crystal, 2005, p. 504). It refers to the process whereby longer words are reduced into shorter ones by omitting certain vowels from a word (e.g., *wk* for *week*; *tnght* for *tonight*). Yule (2009) used the term clipping in his categorization of word-formation processes. This term was replaced by the term abbreviation because it is a more common and a wider term that includes more abbreviated forms of words than clipping (Crystal, 2005).

The data analysis shows that abbreviation is the most common lexical feature among the young Jordanian students participating in this study. Most abbreviated forms occurred in the English and Romanized Arabic messages. Abbreviation in the students’ text messages is recorded high on the scale and the ratio of using abbreviation in the text messages differs between the male and female students. The percentage of abbreviation among the males is 74.1% (578) compared to 63.8% (531) among the females.

The vast majority of the abbreviations in this study are based on English and Romanized Arabic text messages. This may be due to the nature of orthography in Arabic. Texters usually achieve abbreviation through clipping such as *sis* for “sister” and *bro* for “brother”, or by omitting vowel sounds from the middle of the word such as *wk* for “week” and *hw* for “how”. Below are some examples of the students’ abbreviations. English, Arabic, and Romanized Arabic messages are provided below

(Abbreviated words are given in square brackets and the originals in round brackets.

M represents male and F represents female).

Example 1 (M): [hw] come you don't want to give me my [mny] back?
((How) come you don't want to give me my (money) back?)

Example 2 (F): [plz] [bby] [dnt] [b] upset am just [jokin].
((Please) (baby)! (Don't) (be) upset! I am just (joking))

Example 3 (M): [س م] (سلام). كيفك؟ راح تروح بكير اليوم و لا متاخره مثل كل مره
((Hi), how are you? Are you going early today or late as usual?)

Example 4 (F): [kf] (keef) eltalj bijanin, ru7na 3ala 3jloun [inbstna]
(inbasatna) [ktrrrrrr]. (kteer)
([How] was the snow? It was fabulous. We all went to Ajloun. We [had a lot
of fun].)

Example 5 (M): [shkran] (Shokran) 3la [als2al] (als02al) 2na soret mne7a
bb8a [2shfk] (ashoufak)
([Thank] you for [asking], I am fine now, I will [see you].)

4.3.1.2 Borrowing

Borrowing is a linguistic term which refers to a linguistic form that is transferred from one language into another usually by bilingual speakers (Crystal, 2008). For example, the word *restaurant* came into English from French. The borrowed lexical items are also called “loan words” (Fromkin et al., 2011, p. 505). Borrowing simply means taking a word or a phrase from one language and using it in another.

The given data mark borrowing as the second most common linguistic feature in the students' text messages. The percentage of borrowing among the young Jordanian male and female students emphasizes the aforesaid finding. While comparing the percentage of borrowed words or phrases among the texters, it is shown that borrowing is used in 56.9% (473) of the females' text messages. In contrast, it is used in 43.6% (340) of the males' text messages. This finding is consistent with Al Khateeb and Sabbah's (2008) study which revealed that female students code-switch between English and Arabic in their text messaging more than their male counterparts. The data also show that the students borrowed items from English when they type their messages in Arabic and vice versa. However, females tend to borrow more words and phrases from English than males do. It is noticed from the data that when English and Arabic are used in text messages, students tend to use more English words than Arabic words in a given message. This seems to indicate that English is a popular mode of communication among the young Jordanian females. Below are two examples of students' borrowings from Arabic:

Example 1 (F): Hi, don't forget to bring the CD [bukrah] plz (tomorrow)

Example 2 (M): She is [jamal] [wallah] (camel) (I swear to Allah).

The word "camel" is used figuratively in this example to mean "gorgeous".

The students also borrowed words and phrases from English when writing messages in Arabic and in Romanized Arabic. For example:

Example 3 (F): سموحه لاتنسي دفتر الاسلاميه [بليز]

([Please] Samouhah. Do not forget the Islamic Science notebook.)

Example 4 (M): مش عارف تكتب اسمي يا [ستيوييد]

(You don't know how to write my name, you [stupid].)

Example 5 (M): Roo7i 3al [faysbuk now now] o shoofi el[masij] elli ba3tlik yaha

(Go to [facebook] right now and check the message I have sent you.)

Example 6 (F): 5la9 brenilak el [next wed] o bashofak

(OK. I will buzz you [next Wednesday] and we will meet.)

These analogies show borrowing of different grammatical categories such as noun phrases, verb phrases, adverbials, prepositional phrases, connectors, and discourse markers. Sociolinguists may deem this phenomenon as code-switching, which may occur at two levels: inter-sentential and intra-sentential. The former occurs outside the boundaries of one sentence and the latter within the sentence itself (Auer, 1998; Holmes, 2008). The texters often tend to do a direct translation of borrowed words or phrases into English text messages.

4.3.1.3 Derivation

English derivation is a process which is considered the most common word-formation process to be found in the production of new forms (Fromkin et al., 2011; Yule, 2009). Derivation is accomplished by means of a large number of affixes in English messages. An affix is added to an already existing word. For example,

boyish is derived by adding the suffix *-ish* to the word *boy*; the word *unhappy* is derived by adding the prefix *un-* to the word *happy*.

Figure 4.1 shows that the frequency of derivation among females is higher than the frequency of derivation among males in the text messages; females used derivation in 44.7% (372) of their text messages while males used it in 27.6% (215) of their text messages.

English is a derivational language while Arabic is an inflectional language (Khalil, 1996). In English, derivation is achieved by adding affixes (suffixes, infixes, prefixes) to an existing word such as *helpless* which is derived by adding the suffix *less* to the end of the word *help*. In Arabic, some words are derived from root words. For example:

Example 1 (F): معك (مفتاح) الغرفة الثاني. شكله انا ضيعت تاعي ؟

(Do you the have the extra [key] to the room. It seems that I lost mine.)

Example 2 (M): على [قولت] احمد اخوي ع شوارب والله

(As my brother Ahmad [says], very nice (literally: on my mustache)

In example (1), the word **مفتاح** is derived from the root "فتح", and in example (2), the word [قولت] is derived from the root "قول".

Example 3 (M): ahahahaaa... heyye hay...[da3awatek] 2'7ouy

(ahahahaaa...heyye hay...your [prayers] brother.)

Example 4 (F): dear 7bebey...kool saneh wn7na m3 b3d wya rab nkamel
ba2i 3omrna swa

(My [love]...I pray to God that we stay together forever.)

In example 3, the word **da3awatek** is derived from the word **da3a** (دعا) meaning (pray), and in example 4, the word **7bebey** (my love) is derived from the Arabic word **27aba** (احب) meaning (to love).

4.3.1.4 Acronyms

Acronyms are words that are derived from the initials of several words and they are pronounced as single words (Fromkin et al., 2011, p. 504) such as *USA* from *United States of America*, *UN* from *United Nations*, and *NASA* from *National Aeronautics and Space Administration*.

Even though brevity in text messaging does not allow the use of complex and formal style of language, it becomes a common feature of text messages owing to its ease of use and mutual intelligibility across the board among the texters. Most of the acronyms found in the data are English-based. The given data show considerable variation among the males and females in this study with regard to the use of acronyms. While acronyms are used in 27.9% (218) of the male students' messages, they are used in 21.4% (178) of the female students' messages. The texters form acronyms from the initial letters of a set of other words that sound like one word. Below are examples from English, Arabic and Romanized Arabic as they appear in the students' messages (The acronyms appear in square brackets followed immediately by the original words in round brackets):

Example 1 (M): U hear the breaking news. Amal left her [bf] (boyfriend)

Example 2 (F): [G] (good luck) with ur exam baby. I heard it won't be difficult

Example 3 (M): أحمد تتذكر [ع م] (عيد ميلادك) السنه الماضيه؟ من الآخر صح!!! يا الله الأيام كيف بتمر
(Ahmad, do you remember your [birthday] last year? It was the best, wasn't it? God, how quick the days go by!)

Example 4 (F): [ز م ش] (زي مانت شايف) مارح اقدر اعمل شي غير اني اعيد ماده
([As you see], I can't do anything. I have to take the course again.)

Example 5 (M): ween halghaibeh? Lessa za3laaneh. 2na 3an jad 2asef [lol](lots of love)

(Where have you been? Are you still angry with me? I am really sorry. [lots of love])

Example 6 (F): [brb](be right back) habibty. Mother is calling me
(I will [be right back] darling. My mother is calling me.)

The most common acronyms found in the students' English text messages are *lol* for laughing out loud or lots of love, *cul* for call you later, *brb* for be right back, and *ttyl* for talk to you later respectively. However, in their Arabic text messages, the students frequently use *س م* (*salam*) for Hello and *ص خ* (*sabah elkhair*) for good morning.

4.3.1.5 Compounding and Blending

Compounding is a linguistic term widely used to refer to a linguistic unit which is made up simply by joining together two different linguistic words that function independently in other circumstances such as *bedroom*, *rainfall*, and *washing*

machine (Crystal, 2008). Blending is a similar process that refers to combining two individual words to form a completely new word, usually by joining two shortened forms of two other existing words (Crystal, 2005; Yule, 2009). For example, the word *smog* is formed from *smoke* and *fog*; *heliport* is formed from *helicopter* and *port*. Blends are usually formed by combining the first part of the first word with the second part of the second word.

As shown in Figure 4.1, the females use compounding and blending 13.9% (116) and 12.4% (103) respectively in their text messages, whereas males use them 11% (86) and 9.1% (71) respectively, in their text messages. Both of these features involve combinations of morphemes to form a new word, but compounding requires combining two independent lexemes. The following are examples of blending and compounding:

Example 1 (M): I ate [breakfast] with mother before I come to university

Example 2 (F): Salam, how r u. come to my house and see my new [laptop] or I bring u a picture and u see it on sundy

Text messages in Arabic overwhelmingly indicate proper nouns compounding. Here are some examples on compounding from the students' messages which were written in Arabic.

Example 3 (F): [لام كلتوم] حد ما يحب يسمع

(Is there anyone who doesn't like to listen to [Umm Kaltoum]?)

Example 4 (M): كتبنا شكوى [لرئيس القسم] وبدنا اياك توقعي عليها

(We wrote a complaint to the [Head of Department] and we want you to sign it.)

Compounding also appears in the students' Romanized Arabic messages. For example:

Example 5 (F): 2otlak abouy [mudeer bank] fi amman bs mu mdawim elyoum

(I told you my father is a [bank manager] in Amman, but he isn't working today.)

Example 6 (F): urduniah bas a9lna min [toul karem] bifalsteen

(I am Jordanian, but we are originally from [Toul Karem], Palestine.)

The English use of compounding is extensive, whereas the Arabic use of compounding is limited (Khalil, 1996). Unlike English compounds, Arabic compound words found in the text messages are typically separated by a space within the nouns. Compounds in Arabic can also be formed from three words such as **ابو عبد السلام** [Father of Abd Alssalam] although they are pronounced as a single form.

On the other hand, blending is typically accomplished by taking only the beginning of one word and joining it to the end of another word. For example:

Example 7 (F): The girls invited me for a [brunch] today. U missed it stupid. Amer was there and asked about u

(Blended from [breakfast] and [lunch])

Example 8 (M): Jamal got 90 in physics I told you he will. He is [workaholic]

(Blended from [work] and [alcoholic])

Some Arabic examples are also found as stated below:

Example 9 (F): [هسا] برن عليها وبشوف شو صار

(I will ring her right now and see what happened)

(هذه + الساعة blended from هسا)

Example 10 (M): [هلقيت] بروح على رئيس القسم بشوف شو صار بالماده

(I will go to the Head of Department [right now] and see what happened with the course)

(هذا + الوقت blended from هلقيت)

The data show that blending also occurs in Romanized Arabic, although with low frequency. Two examples are provided below:

Example 11 (M): [eesh] akhbaarak taminni 3anak. Mata jay 3ala elgiryih

(How are you doing, when are you coming to the village?)

([eesh] blended from the Arabic words [اي+شيء])

Example 12 (F): [Mafish] ma3i wala girsh. iza feeh ma3ak 23teeni

(I don't have any money. Can you give me some if you have it?).

([mafish] blended from the Arabic words [ما+في+شيء])

4.3.1.6 Conversion

Conversion refers to the derivation of a new item by changing its function without adding any affixes (Crystal, 2008; Yule, 2009). For example, the verb *smell* comes to be used as a noun; the noun *bottle* comes to be used as a verb. It is among the least common word-formation processes, which is texted in a minimum number of the

messages. The females used conversion in 2.5% (21) of their text messages compared to males who used it in 1.9% (15) of their messages. The researcher assumes that the low percentage of conversion may be attributed to the uncommon use of this feature of word-formation in our everyday communication. In conversion, a noun comes to be used as a verb (Fromkin et al., 2011; Yule, 2009), a skill that may require command on word-formation processes. The data collected from the young Jordanian texters provide us with insight into interesting instances of conversion in the text messages. The following are some examples of conversion:

Example 1 (M): **Dunt tell her nthing. She will [wikileak] u**

Example 2 (M): **[google] it and am sure u find somthin**

This feature is not a characteristic of Arabic; thus, very few examples of Arabic conversion appeared in the data. However, there are students who used some technical lexical elements found in English in their daily conversations such as *e-mail*, *wikileak*, *message*, *save*, and *format*.

Example 3: لا تنسى [تسيفها] وابعثها بسرعه

(Do not forget to [save it] and send it very quickly.)

Example 4: امبارح [مسجتها] سمر وقراتها بتضحك كتبيبيير

(Yesterday Samar sent this message to me. It is very funny)

The data reveal that most of the terms used by the males and females in this category are words that have recently appeared in their text messaging communication. These terms are very common in everyday interactions nowadays. Even though the

frequency of conversion is not high in the text messages and the difference is not significant, the females seem relatively to be more expert in word-formation through conversion than their male counterparts, signaling more complexity in their use of language.

4.3.1.7 Coinage

Coinage is a term which refers to the invention of totally new words (Yule, 2009). These new words are created outright for a specific purpose. For example, new words that have been added to English by the advertising industry are such *Kleenex*, *Brillo*, *Jello*, *Xerox*, *Band-Aid* (Fromkin et al., 2011). Some words are actually coined from the existing words (e.g., *Kleenex* from the word *clean*).

Among the word-formation processes, coinage is one of the least common and least creative processes of word-formation. In this study, out of the 1,612 text messages collected from male and female texters, coinage is observed only in 37 text messages. However, the percentage of coinage in the text messages among the females is 3% (25) compared to 1.5% (12) among males, which is relatively higher. The most typical sources of coinage are found to be related to trade names for commercial products or objects mentioned in the messages of the texters. The following are some examples from the students' messages on this particular feature:

Example 1 (M): Mother calld wants u 2 get bread an [kleenex] frm store

Example 2 (F): U saw Samer [jeep]? Very nice color

Example 3 (F): ولك ميتة جوووع جببيلي زعتر بس ون [سانويشة]

(I am starving. Bring me only one thyme [sandwich].)

Example 4 (F): بلييز بدي اياك تعملي 20 كوبيز. في (زيروكس) ماشيين عند ابو جواد عزاوية الجنوبي

(Please, I need you to make 20 copies. There is a [zerox] machine in Abu Jawad store on the corner of the south gate.)

Example 5 (F): salam 3omri. Ma3ek [Vaseline]? Hassa jeet min el jim

(Hello my love. Do you have some [Vaseline]? I've just come out of the gym.)

Example 6 (M): khals bkon 3indik b3d 10 mints wbajib ma3y [sanwiishaat]

(Ok. I will be there after 10 minutes, and I will bring some [sandwiches].)

4.3.2 Gender Differences in Syntactic Features

This section describes gender variation among Jordanian male and female students with respect to the syntactic features that occurred in their text messaging. A significant point to mention here is that the result of the syntactic features will be restricted to the students' English messages. The only syntactic feature that applies to the Arabic or Romanized Arabic messages is the deletion of subject/subject pronoun. The other three syntactic features do not apply because the syntactic system of Arabic is different from that of English with respect to these features.

Figure 4.2 shows deletion of syntactic features in the text messages collected from the young male and female students and the variation among them.

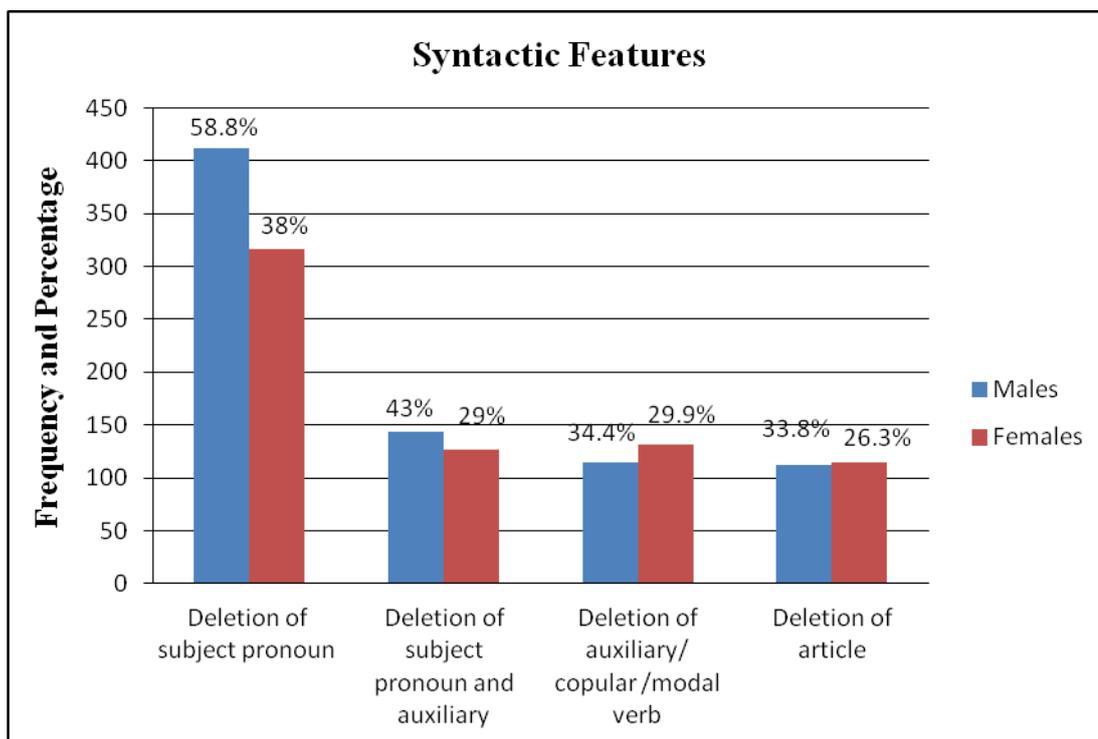


Figure 4.2: Syntactic Features in the Text Messaging of Young Jordanian University Students

4.3.2.1 Deletion of Subject Pronoun

A complete sentence in English should have a subject, except in the case of an imperative sentence in which a subject is deleted (e.g. Open the window!), and a sentence having a deleted subject may be deemed ungrammatical. However, subject pronouns are often deleted in text messaging. The most common syntactic feature found in the text messaging of the Jordanian students is the omission of subject pronoun. The data analysis also shows that there is a difference between the text messages of the male and female students with regard to this particular feature. Owing to mutual intelligibility that develops among the texters, the males deleted

52.8% (412) of the subject pronouns, whereas the females deleted 38% (316) of the subject pronouns from their messages. The following are two examples of subject pronoun deletions found in the data (Deleted subject pronouns are written in square brackets):

Example 1 (M): [I] need to talk to u very bad! Coming to college tday?

Example 2 (F): She is having a meeting with dr. nw. [She] wont b able 2 talk

The following are four examples (2 Arabic and 2 Romanized Arabic) from the data (Deleted subjects are provided in square brackets):

Example 3 (M): [انا] زهقان و طالعه روجي

([I] am bored to death.)

Example 4 (F): [اهلي] راحوا عمره والان في مكه المكرمه

([They] went to perform umrah and now they are in Mecca Almukarammah.)

Example 5 (M): [anta] jay m3na wila bidak tit2a5ar?

(Are [you] coming with us or you will be late?)

Example 6 (F): [anta] dafa3et russoum elfasl o kam dafa3et?

(Have [you] paid tuition and fees for this term, and how much you paid?)

Most frequently, the first person singular pronoun (I) and the first person plural pronoun (we) are omitted from the text messages. Based on the data, it is shown that

males tend to delete these two pronouns more than females do. Deletion of the third person pronoun is not very common in the students' text messages.

4.3.2.2 Deletion of Subject Pronoun and Auxiliary/Modal

The findings show that this linguistic feature is frequently omitted in the students text messaging. It is also indicated that the young female and male students in this study tend to differ in the frequency in which they delete their subject pronouns together with the auxiliaries and/or modals from their text messages. While the males deleted them from 43 % (143) of their text messages, the females deleted them from 29% (127) of their text messages. Below are three examples demonstrating the deletion of subject pronoun and auxiliary (Deleted subjects and auxiliaries are written in square brackets):

Example 1 (F): [I am] at airport with Hani to pick up mother

Example 2 (M): [Are you] happy now friend? [I will] See u 2moro

Example 3 (F): class just started. [Are you] coming?

4.3.2.3 Deletion of Auxiliary, Copular, and Modal Verb

The third common grammatical category frequently deleted in the text messaging of young Jordanian students are the auxiliary, copular, and modal verbs. Clearly, the corpus shows that there is a difference in the deletion of this syntactic feature among male and female students. The males tend to delete more auxiliary, copular, and modal verbs from their messages than the females do (34.4 % (131) and 29.9% (131)

respectively). This is a feature of everyday conversation and is hardly found in Standard English where grammatical words such as auxiliaries, modal and copular verbs are often deleted while content words such as nouns and verbs are retained. Three examples are given below (Deleted auxiliary, copular, and modal verbs are given in square brackets):

Example 1 (M): We [are] watching game me and thamer [are] u coming?

Example 2 (F): Dr dalal [is] ugly an cant stand her. Mistake I took the cours with her

Example 3 (F): [Will] u b on time or late like always?

These messages are similar to those found in telegram communication. Texters often exclude such grammatical information assuming that the recipient has the ability to decipher the message and understand its content.

4.3.2.4 Deletion of Article

The deletion of an article is common among the participants of the present study. An article is a determiner used to emphasize, highlight the message or give extra information. It can add more clarity to the utterance. The collated data reveal that there is a tendency among male students to delete articles from their messages more than their female counterparts. Article omission appeared in 33.8% (112) of the text messages of the males, whereas it appeared in 26.3% (115) of the text messages of the females. The definite article “the” is found to be the most frequently omitted article by both males and females, followed by the indefinite article “a” and then

“an”. Below are three examples on article deletion as found in the text messages of students (Deleted articles are given in square brackets):

Example 1 (M): We r at [the] cafeteria eatin breakfast, hurry if u want 2 eat

Example 2 (F): prof mahmoud is [a] nice man I reeeally like em

Example 3 (F): got here b4 [an] hour an nobdy was there only teacher

4.3.3 Gender Differences in Typographical Features

This section presents the findings of the gender differences in the typographical features used in the text messaging of the young Jordanian university students. The typographical features between the young Jordanian male and female students are presented in Figure 4.3.

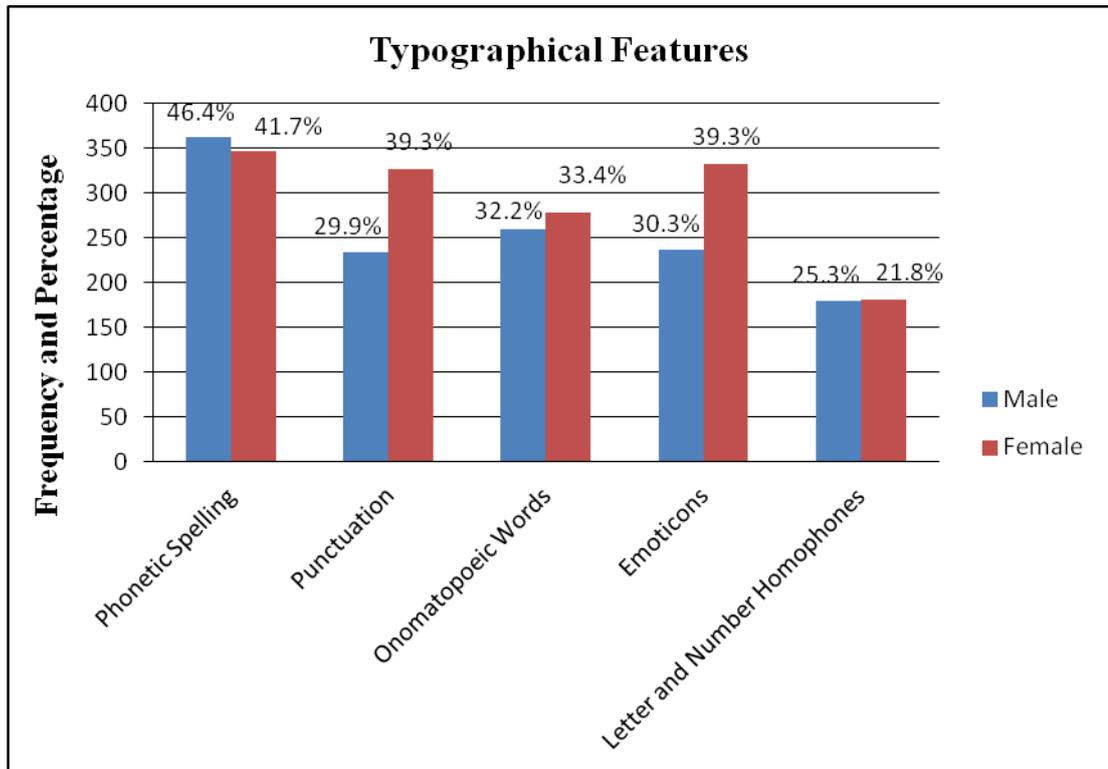


Figure 4.3: Typographical Features in the Text Messaging of Young Jordanian University Students

4.3.3.1 Phonetic Spelling

One of the interesting and common features of text messaging communication, which has attracted many researchers, is phonetic spelling. Texters often use this kind of phonetic assimilation to simplify their communication as much as possible by using contractions such as *dunno* for don't know, *luv* for love and, *coz* for because. Out of the 780 messages of the males, 46.4% (362) phonetic spellings are used in comparison to 41.7% (347) used by the females in their text messages. The data also show that the texters often emphasize their messages and convey their

emotions by reduplication of speech sounds. According to Hård af Segerstad (2002), people use such features to make up for the lack of vocal and visual cues in CMC.

Following are some examples:

Example 1 (F): Wat cn I tell u? all I can say is that am [soooo] frustrated.

Example 2 (M): I will try to ask him for u just give me some time it will be [tuffffffff]

Example 3 (M): صباحووووو [صباحووووو] كلك [زوووء] يامان
([Good morning]. You are a [gentleman].)

Example 4 (F): احكيبيبييله [احكيبيبييله] عن شعورك. لاتترددي
([Tell] him how you feel about him. Do not hesitate!)

Example 5 (F): [lat7aaaaawili] ma3i mish ra7 sam7ak abdan 3ali 3miltuh
([Don't even try it [! I will never forgive you for what you did.)

Example 6 (F): alf [mabroooooook]. Wallah btista7i2i kul khair ya 3omri
(A [thousand congratulations]. I swear you deserve the best sweetheart.)

The texter in the first example, for instance, reduplicated the sound *o* in the word *soooo*, to express the level of his/her anger. In example 6, the texter also reduplicated the sound *o* in the word *mabroooooook* to express happiness and joy. More reduplication of a certain sound may signal higher level of happiness, sadness, or anger.

4.3.3.2 Punctuation

Punctuation is often used to serve a function. It is used to separate sentences, clauses, phrases, and words from each other in written language. For example, a period is used to indicate the end of a sentence in Standard English and Arabic, and an exclamation mark is used to express emphasis or emotions in a sentence. Other punctuation marks have other functions in written language. The data generally indicate the lack of punctuation used by both males and females. It is not uncommon for the students to delete all these punctuation marks. Texters tend to omit full stops, commas, and question marks, among others. Non standard use of punctuation is also detected in the data such as the use of repeated periods, repeated question marks, and repeated exclamation marks.

It is shown from the data that there is a clear gender difference among the students with respect to the use of punctuation in the three systems of writing. While punctuation is found in 39.3% (327) of the text messages of the females, it is found in 29.9% (233) of the text messages of the males. Different punctuation marks are found in the students' text messages, however, with different frequencies. The most frequently used punctuation mark is the question mark, appearing in 30% (70) of total punctuation marks in the text messages of the males and in 29% (94) of the total punctuation marks in the text messages of the females. The next most frequently used punctuation mark is the period, appearing in 26 % (61) of the text messages of the males and in 24% (78) of the text messages of females. The comma is used at 19% (44) and 21% (68) by the males and females respectively. The least common is the single exclamation mark which appeared in 12% (28) of the text messages of

males and in 15% (50) of the text messages of females. The following are some examples of punctuation, representing the three writing systems, taken from the data (punctuation marks are shown in square brackets):

Example 1 (F): I am sorry to disturb your meeting Dr. [,] but I need the keys to the lab [,] u have them[?]

Example 2 (M): I am very busy nw [.] Call me later plz[!]

Example 3 (F): [.] جهاد بعثلي رساله بحكيكي قديش بحبني وانه مستعد يموت عشاني الخ
(Jihad sent me a message telling how much he loves me and that he is willing to die for me, bla bla bla.)

Example 4 (M): سلام [.] بتحكيك ماما شو صار مع محمد [؟] وسلمي ع الاولاد
(My mother wants to know what has happened with Muhammad. And say hello to the kids.)

Example 5 (F): oslte bl salama[?] tmnene 3nak lma tosle[!!!]
(Have you got home safely? Let us know when you get there!!!)

Example 6 (M): kef lemti7aan[?] sho ma bdak teje 3lena [?] elko o7sheh.
(How was your exam? Don't you want to come over? We miss you.)

Exclamation marks are used in text messaging because they serve similar functions as in written language. They are usually used to convey emotions and add emphasis to the message. It is important to point out is the exaggerated use of the excessive exclamation mark by females who used it more than their male counterparts. Two examples are given below:

Example 6 (F): I really love to c u soon!!!! Can we meet tomoro plz!!!!

Example 7 (M): Happy birthday baby!!!!!!!!!!!! Hope u live 1000 years!

4.3.3.3 Onomatopoeic Words

Onomatopoeic words are words that imitate or suggest the source of the sound that they describe. Common occurrences of onomatopoeias include animal noises, such as *meow*, *roar*, *knock*, and *hiss*. The data show that there is no obvious difference in the text messaging of the males and females in terms of onomatopoeic words 32.2% (259) and 33.4% (278) respectively. Arabic onomatopoeias are not usually similar to those found in other languages; they conform to some extent to the broader linguistic system they are part of; hence, the sound of a *knock* which is *knock knock* in English is طق طق “tok tok” in Arabic. However, the texting culture has invented fresh and unfamiliar onomatopoeic sounds used by males and females alike but with different frequencies such as: (a) *hahaha* for laughing, (b) *xxxxx* for love you, (c) *zzzzzz* for sleeping, (d) *hehehe* for giggling, (e) *ufff* for displeasure, etc. This kind of onomatopoeia is often used by the students and can be observed in the three types of messages: English, Arabic and Romanized Arabic messages. Some examples on this particular linguistic feature are given below:

Example 1(M): [Hahaha]. Made me lugh. Still lughing [hahaha]

Example 2 (F): am in bed [zzzzzzzzzz]

Example 3 (M): [اممممم] معناته ز علانه مني عن جد. بس ممكن افهم السبب
([ummmmm]). This means that you are angry with me, but can I know why?)

Example 4 (F): [هههههههههه] انا اللي قتلته يجيب السياره لانني حابه اطلع معه. مين صاحله

(I was the one who told him to bring the car because I wanted to go out with him. [hahahaha].

Example 5 (F): [ufffff] shu hada mish 3arfeh arakez. Khaifeh kteer mn halmaadeh.

([ufffff]. What is this? I cannot focus. I am really scared of this course.)

Example 6 (M): [akhkhkh] bas law ashouf hal7aywan bsi makan lawa7duh

([Akhkhkh] I wish I could run into this animal somewhere alone!)

The most common onomatopoeic words that occur in the SMS messages of the students are: xxxxx , *hehehe* , هاهاهاهاها , اففففف .

4.3.3.4 Emoticons

Emoticons are composed of “clusters of typographic symbols, and popularly known as ‘smiley’ icons or ‘smileys’” (Danet, 1998). They are used in text messaging in the same way voice changes and facial expressions are used in face-to-face or telephone conversations. For example, if you were joking with someone and sent a text message of "idiot!" the person receiving your message may think you are making a rude comment to him/her. If you send the same message with a "happy smiley" :) at the end of it, the person would understand you were "smiling", or joking when you said that, and would not misinterpret your intent. Emoticons are often used to express emotions and attitudes and add semantic value to the message. According to Randall (2002, p. 27), emoticons are “abbreviations of expressions of mood, tone of voice, or instruction of the reader.” The data show that emoticons are a preferred choice among the females who used them in 39.9% (332) of their messages in

contrast to the males who used them in 30.3% (236) of their messages, almost 10% less than their female counterparts. This finding is consistent with Herring's (2003) finding. Herring noticed that females use three times more representations of smiling and laughter than men.

The most frequently used emoticon in the text messages of the students is the *happy face*, occurring in 27.5% of the total emoticons in the text messages of the males and in 33.5% of the total emoticons in the text messages of the females. On the other hand, the next most frequently used emoticon is the *sad face* which appeared in 22.6% and 26.1% of the males' and females' messages respectively. Flirty or flirtatious emoticons are detected more in the text messages of the males than in the text messages of the females. They are a type of emoticons with a humorous effect used to convey a feeling such as coyness or a blush. The following are some examples of the use of emoticons taken from the data:

Example 1 (M): Dr marked u absent. U can't cheat him ☺

Example 2 (F): فكرت انك ز علانه مني لاني تاخرت تارديت عليك ☹

(I thought you are upset because I replied late to your messages ☹)

Example 3 (M): latgooly heek,2na ba3rf inu inti mabtigdari titkhali 3anni [;-)]

(Do not say that! I know you cannot live without me [;-)].)

The emoticons in these three examples are functional. They have a meaning to convey. They compensate for the lack of verbal cues, facial expressions, and body language that are used in face-to-face communication. The first emoticon, the happy

face emoticon, expresses happiness and pleasure. It shows that the texter is happy that something funny has just happened to his/her friend. The emoticon in the second example is the sad face emoticon. It usually expresses unhappiness and sadness about a certain matter. The emoticon used in example three is a flirtatious or flirty emoticon. Specifically, it is a winking sign that is usually used to express pleasure or tease somebody.

4.3.3.5 Letter and Number Homophones

Letter and number homophones can be renamed as written numbers and letters which sound identical to some words, for example, *some1* for someone; 2 for “to” or “two”, *4u* for “for you”, and *ru* for “are you”. They are clearly observed in the Jordanian students’ messages. However, the data show that there is a trend by which the males used more letter and number homophones than the females. Letter and number homophones appeared in 25.3% (197) of the text messages of the males and in 21.8 % (181) of the text messages of the females, which is not a big difference. This feature of shortening appears only in the English messages of the students but none in the Arabic messages. This might be due to Arabic orthography which does not allow this kind of writing. Very few examples of letter and number homophones are found in Arabic but not in the data of this study. For example, the number 100% in Arabic phonetically sounds as a homophone of the Arabic word *مئة* *mi?ah* meaning “one hundred”. The most common letter and number homophones that appeared in the data are *ru* for “are you”, *4u* for “for you”, 2 for “to”, and 4 for “for”. Economizing time and space, the texters embed this novel feature in their text

communication. Therefore, letters and numbers are often combined for compression and convenience.

Three examples from the students' messages, reflecting their use of letter and number homophones are provided below (letter and /or number homophones are given in square brackets immediately, followed by the word or phrase they represent in round brackets):

Example 1 (M): [u r] (You are) stupid. Dont believe them. I swear they [r] (are) lying

Example 2 (F): [every1](everyone) is mad with [u](you) coz[u](you) did that [2] (to) Jihan.

Example 3 (M): sry[4](for) [l8t] (late) reply just woke up send you the stuff [l8er](later) with tamer

4.4 Discussion

The analysis of the text messages of the young Jordanian male and female students shows that various linguistic features are present in the text messaging of the Jordanian students. It also shows that gender differences exist at all levels of the linguistic features, but with varying degrees. The findings of the present study are discussed in light of the research questions.

4.4.1 Discussion on Gender Differences in Lexical Features

The findings reveal that there are gender differences in the lexical features used in the text messaging of the young Jordanian male and female university students.

One of the obvious gender differences is in the students' borrowing, where females tend to be more regular borrowers than males. They tend to borrow more English words and phrases when texting in Arabic or Romanized Arabic. The relatively higher percentage of borrowing from English supports the finding that English has presently become a popular medium of interaction among the young Jordanian female students. It also shows a strong female interest in English. The females mentioned prestige and elegance as some of the reasons that entice them to borrow more English words and phrases in their text messages. Ease of use was also mentioned as a reason for borrowing. According to the students, they usually include words that they often use in their daily communication. This raises a profound question on the influence and future of English in Jordan. Borrowing may be considered as one type of code switching in which communicators concurrently use more than one language in their communication. One participant pointed out that she unintentionally uses more than one language in her text messages. Code switching is used by communicators to serve different social functions such as showing off, and excluding one person from a conversation, etc.

Abbreviations are regarded as the most typical linguistic feature in CMC language (Crystal, 2001). Abbreviations, including clippings and short forms, are shown to be the most common features that occur in the students' text messages. The males in

this study used more of this feature in their text messages than their female counterparts. This finding agrees with the findings of previous research revealing that males use more abbreviated forms than females (Baron, 2004; Hård af Segerstad, 2002; Ling, 2005; Ong'onda et al., 2011; Rafi, 2008). However, this finding contradicts Herring's and Zelenkauskite's (2008). This finding also shows that students prefer using the abbreviated spelling rather than the standard spelling which indicates the importance of brevity in text messages. Moreover, economy and speed, which are usually manifested in the abbreviation of words, are said to be the motive for using abbreviations. The interviews reveal that young Jordanian male and female university students commonly use abbreviations to save time and effort; a finding that is in accordance with the findings of Baron (2004), Doring (2002), Herring (2001b), Hård af Segerstad (2002), Rafi (2010), and Thurlow (2003). However, the participants did not mention "saving money" as a motivation for using abbreviation. One explanation for this is that text messaging in Jordan is very cheap. Subscribers are often given a large amount of free text messaging each month.

According to Doring (2002), all kinds of short forms and abbreviations that occur in text messaging are the result of the economy function and products of a collective identity function. She also claims that abbreviations satisfy collective identity functions thus requiring a common shared knowledge in order to enable people understand the language and use it. Text messaging communication, according to Grinter and Eldridge (2001) and Hård af Segerstad (2002), is interpersonal, that is, it is communication between people who share a considerable amount of shared background knowledge; therefore, they can rely on their shared background

knowledge by using a particular kind of language in their texting. Brevity results from different factors. First, one has to be brief in order not to go over the limited number of characters permitted per message. Second, inputting texts on a mobile phone is cumbersome (Doring, 2002). Hård af Segerstad (2004 p. 317) appropriately notes, since most SMS communication is private and interpersonal, between people who know each other, then “shared background knowledge makes brevity pragmatically plausible.”

Reid and Reid (2004) pointed out that there is an existence of text circles, well-defined and close-knit groups of contacts with whom texters regularly and continuously, exchange messages. For the young Jordanian students, the skillful use of abbreviations and short forms signals solidarity and group affiliation. Therefore, most text messages have informal purposes, which motivate the use of abbreviations and other shortened forms of words.

Despite the fact that abbreviations speed up the process of typing, save time and effort, and do not change the semantic value of communication, females still do not like to use them as much as males do. Females abbreviate less than males in their text messaging because they may consider it rude to be very short-spoken. Another explanation is that they may be less experienced in sending text messages than their male counterparts. The interviews show that females sometimes use abbreviation unintentionally, but they stop using them when they realize that they are overdoing it. Six of the female students interviewed explained that they always tried to make their text messages as clear as possible. One of the female students stated that:

" لما بستخدم كثير اختصارات بالمسح تاعتي, بحس انه مش كثير شي حلو. عشان هيك انا دائما بعيد. عليها. "
[When I use so many abbreviations, I feel that my message is disrespectful, so I always recheck my messages.]

Eighteen of the females who participated in the questionnaire claimed that they often edit their text messages before sending them compared to six of the male participants. This suggests that females tend to be more careful when they construct their messages than males. This may also indicate that females' language is more polite than males', a suggestion that concurs with previous literature on language and gender such as the studies of Lakoff (1975), Tannen (1990), and Herring (1993, 1994).

Acronyms are also a strong marker of gender differences in the students' text messaging. These acronyms are used more by males compared to females. It is important to note that one of the males and two of the females reported having difficulty understanding some of the acronyms used by their fellow students (males and females) because of the use of new acronyms which can sometimes be confusing. This indicates that the language of SMS is still evolving to fit the needs and the features of the medium. Most of the acronyms in the data appeared in the English messages. The acronyms which appeared in the students' text messaging were somewhat different from those appearing in previous literature. This lends support to Bodomo and Lee's (2002) finding that there is no fixed set of acronyms used by all texters in the world because acronyms are associated with the linguistic background of texters. Variation in acronyms, according to Bodomo and Lee (2002), emphasizes the role of setting or context in language use.

The data also show that compounding and blending are not very common in the text messages of the students. The lack of blending may result from the uncommon nature or the small number of blended words in a language. The data show that most of the examples on blending appeared in the text messages written in Arabic. However, they appeared more in the text messages of the females. This may indicate that females are more complicated users of a language and that males like to keep their communication simple. It also shows that females choose a language that is more complex and closer to the standard norm.

Despite the fact that males and females differ in their use of coinage and conversion, these two word-formation processes are found to be very low in the data. The weak utilization of coinage and conversion may also be due to small number of these two linguistic features in language. However, the finding that females employ coinage and conversion more than males in their text messages may suggest that females are more creative than males in the use of this medium.

4.4.2 Discussion on Gender Differences in Syntactic Features

The data analysis reveals that young Jordanian male and female university students use almost the same basic kinds of syntactic deletions in their text messages as the ones reported by Doring (2002), Hård af Segerstad (2002), Ong'onda et al. (2001) and Thurlow (2003).

Deletion of certain syntactic categories is associated more with spoken communication. The presence of such deletions may indicate that text messaging is

considered speech more than writing (Hård af Segerstad, 2002). Deletions of these features reflect activation of pragmatic cues among the texters. Therefore, while deleting subjects, subjects and auxiliaries, auxiliary, copular and modal verbs, and articles, the texters expect that the recipients of their text messages would comprehend the content of these messages. Danet (2001) argues that the relationship between both parties, the sender and the receiver, influences the way people compose their text messages. Grinter and Eldridge (2001) point out that texters demonstrate clearly that the grammatical skills they use in their text messaging is intact, and that they skillfully mix it with other types of language.

Syntactically, text messages are often kept simple. The syntactic structures of text messaging, according to Crystal (2001) and Hård af Segerstad (2002), are similar to “telegrams” in so many ways. Telegraphic style contains short messages with simplified grammar and deletion of function words. Therefore, the mutual understanding and the shared background knowledge of the texters are necessary for the comprehension of such messages.

The data reveal that males overwhelmingly prefer deletion of subject pronoun in their text messages to all of the other syntactic features, whereas this tendency is relatively less among females. Four of the male students and four of the female students who participated in the interviews mentioned that they delete their subject pronouns because the receivers usually have the name of the sender stored in his/her phone, so it would be redundant to mention the sender’s name since he/she is already known. Since SMS communication is a one-to-one communication which usually

takes place between people familiar with each other, i.e., the identities of both parties are known, omitting a personal pronoun from the text message would not distort the message. This also explains why more first-person singular and plural pronouns are omitted than second and third-person pronouns. This finding is in line with the findings of Mehl and Pennebaker (2003), Mulac and Lundell (1994), and Shlomo et al. (2003).

The data also reveal that males delete fewer personal pronouns than females. This particular finding mirrors Herring's (1994) finding that females use more personal pronouns in their messages than males do in CMC. It is also consistent with Tannen's (1990, 1994) and Mehl and Pennebaker (2003) that females' speech signals cooperation and solidarity and group identity.

The need for speed and saving of keypad strokes motivate the students to delete their subjects and auxiliaries/modals. It is a feature common in daily discourse in which the omitted grammatical categories do not affect the meaning of the message since they are easily retrievable. According to Hård af Segerstad (2002) and Baron (2004), the deletion of a subject pronoun and an auxiliary is a feature of spoken language and is hardly present in standard language.

Deletion of linguistic features in text messages is becoming very common and popular in SMS language, with males marking this trend relatively higher than females. From this, one may infer that females hold on to conversational maxims more than males. The philosopher Paul Grice (1975) proposed four conversational

maxims that arise from the pragmatics of natural language. They are called the “Gricean maxims”: the quantity maxim, the quality maxim, the relation maxim, and the manner maxim. The researcher of this study intends to cite these maxims to explain the link between text messages and what is understood from them. It can be concluded that females adhere to conversational conventions more than males in texting, particularly the maxim of manner.

There is also gender variation in terms of grammatical awareness among the male and female students. The data reveal that females are the ones who tend to be more aware of the structure of their text messages. Fifty eight percent (29 students) of the female students who participated in the questionnaire and 60% (6 students) of the females interviewed mentioned that they often paid attention to the grammar of their text messages, whereas only 20% (2 students) of the male students who participated in the questionnaire and 20% (2 students) of the males interviewed paid attention to the grammar of their text messaging. (Pseudonyms are used to conceal the identity of the students). For example, Jumana said:

”لما بكتب رساله بحب اكتب على مهلي عشان ما بحب يكون فيها اخطاء املائييه او قواعديه“

[I usually take my time when I write a text message, because I like my grammar and spelling to be correct.]

Unlike Jumana, Khalid said:

”المهم انه اللي بوديله المسج يفهمها • ما بهتم لاباملاء ولا قواعد“

[The important thing is that the receiver understands my message. I do not care about spelling or grammar.]

Sixty percent (6 students) of the female students mentioned that they like to write grammatical messages because they want the receiver to easily understand their message. Unlike the 7 males who noted that they do not really care about the grammar of their sentences, some females (5 females) mentioned that they do not like their language to be poor. This suggests that females are more expressive and tend to use what Lakoff (1975) calls “hypercorrect” grammar.

Finally, the difference between male and female students in the use of syntactic features may be ascribed to the notion that females tend to adhere more to standard norms in their syntactic construction than males do.

4.4.3 Discussion on Gender Differences in Typographical Features

Figure 4.3 shows that typographical features are found to be common in the text messages of the participants in this study. It also reveals that young students (males and females) use these typographical features differently. For instance, the females were found to use certain typographical features more than males namely punctuation, emoticons and onomatopoeic words. On the other hand, the males were found to use certain typographical features more than the females such as letter and number homophones, and phonetic spelling.

It is noticed that the students lean towards a lack of punctuation in their text messaging. Nevertheless, the lack of punctuation in the students’ messages does not necessarily show lack of proficiency in the language they are using. For Crystal (2001), ignoring punctuations in a text message does not mean a lack of grammatical

knowledge of a language. It may mean saving time and effort. Crystal (2001) also adds that texters often deviate in their writing from traditional norms based on the party receiving the message. Furthermore, writing a punctuation mark in a text message using a mobile phone could be tedious for some texters because one will have to press a particular key several times to type that symbol, or press a key to open a window then choose the desired symbol, depending on the type of phone he/she owns.

The females in this study have shown a tendency towards employing more punctuation marks in their text messaging than the males. This finding is consistent with Herring and Zelenkauskite's (2008) and Ling's (2005) findings that young Italian and Norwegian females employ more punctuation in their text messaging than males do. This shows that females tend to be more accurate and clear in their communication than males. In other words, they adhere more to standards and norms of the language in their text messages than their male counterparts. Six of the female students and two of the male students interviewed mentioned that they use punctuation marks because they like their sentences to be correct and understood. As Rawan, a female participant said:

” بحب الرساله تاعتي تكون واضحه و قواعديه“

[I like my own message to be clear and grammatical.]

Moreover, the females mentioned that the use of unconventional punctuation like the excessive use of exclamation marks helps them to convey their emotions and feelings, an explanation that goes hand in hand with Hård af Segerstad's (2002)

study. This finding is also in line with Herring and Zelenkauskite's (2008) claim that females are more expressive and emotional than males. The use of graphic features such as capitalization, italicization, and excessive use of punctuation is a new convention that has been brought about by electronic discourse (Brown & Yule, 1983). The use of graphic features may indicate a sense of solidarity, closeness and intimacy. This concurs with previous literature that females are more concerned with relationships than their male counterparts (Herring, 1993; Tannen, 1990).

The use of emoticons as a meta-communicative means emphasizes the informal characteristic of SMS communication (Hård af Segerstad, 2002). Emoticons are an important part of the message in that they can change the meaning of an SMS message, just like body language can change the meaning of an utterance in face-to-face interaction (Mostari, 2009). They are used to fill a gap in the SMS interaction caused by the absence of verbal and non-verbal features usually found in face-to-face interaction which are important in expressing feelings and attitudes (Crystal, 2001). For Huffaker (2004), emoticons can be employed by the texters to emphasize or clarify their feelings, to soften their negative tone, and to regulate the communication, just like smiles and frowns do in everyday conversations, for example, [:)] means happy, and [:(] means sad. Although smileys generally serve to emphasize a message, they can provide an answer or be used in an independent communication. In addition, Davis & Brewer (1997) pointed out that texters use emoticons to signal humor, irony, or intimacy. Their finding seems to agree with Herring (2001a), Herring and Zelenkauskite (2008), and Ong'onda et al. (2011) that

texters use typographical as well as orthographical features to express playfulness, and humor through which closeness and intimacy are signalled.

Emoticons are more common in other modes of CMC such as instant messaging, chatting, and blogs because they are built into their applications, and are thus more convenient to employ. Although emoticons seem to slow down the texters typing of their messages, texters take their time to include an emoticon within their text messages, revealing the need for such a feature in text messaging.

The use of more emoticons in the text messages of the females than in those of the males may indicate that females are more emotional than males. This supports the finding of Klimsa et al. (2006) that females are more emotional than males in their text messaging. This finding also supports previously reported findings that females often use more emoticons in computer-mediated communication in order to express emotions and attitudes (Baron, 2004; Herring, 2003; Herring & Martinson, 2004; Ling, 2005; Rafi, 2010). This finding agrees with the findings of Herring (1993), Herring and Zelenkauskite (2008), and Tannen (1990) that females are more supportive and expressive in their communication.

Why do females tend to use more emoticons in their text messaging than males do? Females are more emotionally expressive, and they usually have more positive feelings than males (Herring, 1993; Tannen, 1990). Social research has revealed that unlike males, females like to share their feelings and emotions with a wider range of people, which may be because females often occupy social roles which require them

to be more emotionally expressive, and thus more concerned with other people's feelings than males are (Eagly & Wood, 1991). Tannen (1990) claims that the communicational style of men is typically informative, whereas the communicational style of females is typically more supportive. Joud, a participant, explained her stance on emoticons by stating that:

”الايوتكونز بساعدوني اعبر ع شعوري وامرار بستخدمهم عشان اتول لشخص انه بهمني امره او انه انا حزينه او مبسوطه“

[Emoticons help me express my feelings, and I sometimes use them to show how much I care about the person I am sending the message to, how happy or sad I am]

However, Amer, a male participant, stated that:

” انا ما بحب استخدمهم لانهم اشي بناتي. بس مرات قليله بستخدمهم لانه يوفروا وقت“

[I do not use them because they are more feminine, but I use them very little because they save me time]

The interviews show that emoticons are part of the SMS culture. Thus, the use of emoticons is a means by which males and females express their feelings, emotions, and support towards others.

Like other studies discussing the use of typographical features in CMC in general, and in SMS in particular, this study reveals the same findings. It reveals that phonetic spelling is an integral part of the language used by the students in their text messaging. According to Werry (1996), this feature is a mere reflection of the medium limitation as well as people's attempt to use a language that is similar to speech. The same idea was also confirmed by Thurlow (2003) who revealed that

young people write their messages as if they are speaking them for the purpose of establishing a more informal register, helping them to strengthen their solidarity, bonding and to do their small talk. The language they use is therefore not only intelligible but also appropriate to the overall communicative function. According to Thurlow and Poff (2009), the use of lexical items such as *ello* “hello”, and *gonna* “going to” serve the need for abbreviation, speed, and phonological approximation. Jaff (as cited in Thurlow, 2003), demonstrates that non-standard orthography in text messaging is very powerful and expressive, and it adds beauty, flavor, and originality to the text. Herring and Zelenkauskite (2008, p.88) suggest that “non-standard typography was manipulated to reflect gendered identities and gender roles” in iTV SMS. Doring (2002), furthermore, suggests that some features of spoken language (e.g. dialectal words, interjections, prosody, facial expressions) are usually verbalized in text messaging.

Even though there is a variation in the use of phonetic spelling between male and female students, with males utilizing it more in their messages, almost all the males who participated in the interviews reported that they were doing it naturally and unconsciously. In other words, they are not aware of the use of this feature because they are writing everyday speech in their text messages. Females, however, reported that they avoid using this kind of spelling, especially with students whom they are not very intimate with because they worry that their message will be confusing. Suhad, a female participant, said that she does not like to utilize phonetic spelling in her text messages because:

“بحب رسائلي تكون واضحه دائما لانه مرات اصحابي بتصلوا يسئلوني شو معنى الكلمه الفلانيه”

[I like my message to be understood all the time because some friends call me back to ask me what I mean by a certain word].

Moreover, the confusion may be triggered because of silent sounds (e.g., knife) or two letters which are pronounced as one sound in English, for instance, in the word “philosophy”, the initial syllable gives the /f/ sound instead of the bilabial voiceless stop /p/ along with the glottal glide /h/. This may motivate texters to use a simplified technique of writing, which they have acquired through mutual interaction while texting.

The findings show that there is no clear difference between males and females in relation to the use of onomatopoeic words. Onomatopoeic words are an important vehicle for them in their attempt to express themselves as well as to save them time and physical effort. This finding is consonant with Herring’s (2001a) and Herring and Zelenkauskite’s (2008) findings. Some females commented in the interviews by saying that the use of onomatopoeic words helps them to express themselves, just like emoticons do, and saves them time and effort. Manal, for instance, explained why she likes to use onomatopoeic words in her text messaging:

“مرات اريح من انه ابعت رساله انه انا نايمه بس ببعث زززززز”

[Sometimes, instead of sending a message saying that *I am sleeping* I just type zzzzzzzzz].

Hani also stated that:

”افضل طريقه تقول فيها للي بتوديله المسج انه انتة قاعد بتضحك انه تبعثله هيهيهيهي او هاهahahahaha”

[The best way to tell the recipient of your message that you are laughing is by sending him something like hehehehe or hahahaha].

The above statement supports Herring’s (2001a) and Herring and Zelenkauskite’s (2008) findings that textual representations reflect users’ playfulness and expressiveness. However, a closer look at the use of onomatopoeia in the text messages of the students will give an insight on how students express their emotions through them, and which onomatopoeic words are used more by males and which ones are used more by females.

In sum, the use of typographic features in text messaging serves a social function. Texters use them to indicate expressiveness, support, and gender roles. This explanation supports Herring and Zelenkauskite (2008, p.88) who maintained that “typographic manipulation is one of the most available means through which participants can perform identities for others to see and evaluate in the public market place of iTV SMS.”

4.5 Other Findings on Gender Differences in the Students’ Text Messaging

Even though the following findings do not answer any of the research questions, they are vital to the study because they provide much more details about gender differences in students’ text messaging practices by comparing it with previous literature. Their importance and relevance to the previous findings urged the researcher to discuss them.

4.1.1 Gender Differences in the Students' Usage of Text Messaging

Data analysis of the second part of the questionnaire and the semi structured interviews show that there are gender differences in the way young students use their text messaging. Table 4.1 below presents these differences.

Table 4.1: Analysis of the Open-ended Questionnaire

Theme	Response	Males		Females	
		Frequency	Percentage	Frequency	Percentage
Owning a mobile phone	1-2 years	0	0%	0	0%
	3-4 years	30	60%	34	68%
	5 or more	20	40%	16	32%
Text messages sent per day	0-3 messages	2	4%	2	4%
	4-6 messages	36	62%	19	38%
	7 or more	17	34%	29	58%
Text messages received per day	0-3 messages	2	4%	2	4%
	4-6 messages	31	62%	19	38%
	7 or more	17	34%	29	58%
Sending text messages	Only Family	1	2%	2	4%
	Only Friends	5	10%	2	4%
	Family & friends	43	86%	45	90%
	others	1	2%	1	2%
Receiving text messages	Only Family	0	0%	0	0%
	Only Friends	1	2%	0	4%
	Family & friends	45	90%	2	92%
	others	4	8%	46	4%

Language used in text messages	Only Arabic	2	4%	2	4%
	Only English	3	6%	5	10%
	Only Rom-Arabic	41	82%	41	82%
Motivation for using Arabic	Prevalence	35	70%	39	78%
	Prestige	3	6%	2	4%
	Ease of use	2	4%	1	2%
	Other	2	4%	4	8%
	Unspecified	8	16%	7	14%
Motivation for using English	Prevalence	40	80%	27	54%
	Prestige	4	8%	16	32%
	Ease of use	4	8%	0	14%
	Other	2	4%	0	0%
	Unspecified	2	4%	-	0%
Motivation for using Romanized Arabic	Prevalence	30	60%	24	48%
	Prestige	1	2%	0	0%
	Ease of use	10	20%	12	24%
	Other	2	4%	4	8%
	Unspecified	7	14%	10	20%
Use of lexical features	Yes	49	98%	48	96%
	No	1	2%	2	4%
Motivation for using lexical features	Speed	34		31	62%
	Ease of use	8	68%	11	22%
	Trend	4	16%	3	6%
Deletion of syntactic features	Yes	44	88%	40	80%
	No	6	12%	10	20%

Motivation for using syntactic features	Speed	32	66%	35	70%
	Ease of use	10	20%	8	16%
	Trend	4	8%	2	4%
	Other	0	0%	2	4%
	Unspecified	4	8%	3	6%
Use of typographical features	Yes	49	98%	48	96%
	No	1	2%	2	4%
Motivation for using typographical features	Speed	27	54%	24	48%
	Ease of use	7	14%	6	12%
	Trend	6	12%	4	8%
	Other	8	16%	15	30
	Unspecified	2	4%	1	2%
Paying attention to grammar of text messages	Yes	2	4%	29	58%
	No	27	54%	13	26%
	sometimes	21	42%	8	16%
Motivation for paying attention to grammar of text messages	Clarity	9	18%	26	52%
	Accuracy	11	22%	18	36%
	Other	1	2%	2	4%
	Unspecified	29	58%	4	8%
Editing of text messages	Yes	6	12%	18	36%
	No	30	60%	9	16%
	sometimes	14	28%	13	24%
Motivation for editing text messages	Clarity	14		22	44%
	Accuracy	18	28%	22	44%
	Other	3	36%	2	4%
	Unspecified	15	6%	4	8%

The data show that text messaging is an important vehicle for male and female students for establishing a sense of social connection with other people, especially family and friends. Data collected from the open-ended questionnaires confirm previous findings that female students lead in SMS usage. It is discovered that female students send and receive an average of 6 messages a day, whereas the males send and receive an average of 4 messages a day. It is also found that heavy texters, specifically those who prefer texting to talking on their mobiles, are predominantly young females. The data also show that 90% of text messaging occurs between family and intimate friends discussing their study, friendship, and intimate issues. The following are examples of text messaging obtained from the participants:

Example 1 (F): Teacher is sleeping 2day. May be wife made him babysit all night

Example 2 (F): He is soooooo cute, can u introduce me?

Example 3 (M): Were u been long time really miss talking to you, xxxxx

An important finding to discuss here is the significant difference between males and females in the usage of text messaging. In spite of being common among male and female students, text messaging appears to be used more by females than males. The females reported sending and receiving more messages than their male counterparts. In addition, the total number of messages forwarded by the females to the researcher's mobile phone was larger than that forwarded by the males. This finding goes hand in hand with the findings by Grinter and Eldridge (2001), Reid and Reid (2004) and Pew Trust's Project (2001) who conclude that young females are more

likely to benefit from the mobile phone and text messaging than males. Similarly, Grinter and Eldridge (2001) and Kasesniemi and Rautiainen (2002) find that young females often send and receive more text messages than young males. Ling (2005) points out that females have taken the lead in text messaging even though male adopted the technology earlier than them. Females are more sociable in nature, value relationships and like to be connected more than males (Tannen, 1990). Igarshi et al. (2005), Klimsa et al. (2006), and Rafi (2010) support Tannen's statement that their female participants are more communicative and more interested in forming and sustaining a relationship than males.

What makes texting so popular among the youth? The first indication is that texting is predominantly concerned with friendship. The texters especially females establish social networks of text mates, with whom they exchange messages more or less continuously, engaging in extended text conversations consisting of multiple friends and multiple turns, even preferring this kind of contact over voice calls with their close friends. Perhaps, it is because texting creates "a steady flow of banter, and used to maintain an atmosphere of intimacy and perpetual social contact" (Thurlow, 2003, p. 12). In this sense, text messaging is "small talk par excellence-none of which is to say that it is either peripheral or unimportant" (Thurlow, 2003, p. 12). SMS is therefore an important vehicle for establishing a sense of social connection to others, creating awareness moments in which people feel connected to each other, with or without the need to convey specific items of information.

4.5.2 Gender Differences in the Students' Choice of Language

The main purpose of the present study is explore gender differences in the text messaging of young Jordanian male and female students with regard to the use of lexical, syntactic, and typographical features. However, the data interestingly reveal the use of three systems of writing in the text messaging of the students: English, Arabic, and Romanized Arabic. Therefore, the students' text messages are classified into three categories: English messages, Arabic messages, and Romanized Arabic messages. Examples of the students' messages are written in bold, followed by the English translations for the Arabic and Romanized Arabic messages.

English messages:

Example 1 (M): am in smrt rm getting ready for exam

Example 2 (F): I slept late yesterday. I was watching a movie. It was vry scary but I enjoyed it

Example 3(M): Dunt lie send it again man nothing in my em”

Arabic messages:

Example 1 (F): صباح الخير. بس تيجي الدوره مري لعندي

(Good morning. When you come to the training, stop by me.)

Example 2 (F): صرت بالمحاضره بس اطلع ببعثلك مسج

(I am already in class. When I finish, I will send you a message.)

Example 3 (M): امبارح درست انا و محي الدين على امتحان الكالكولاس للصبح والله ينجحنا

(Yesterday Muhya Aldein and I studied for the Calculus Exam until the morning. May Allah help us pass!)

Romanized Arabic Messages (Arabic messages written in Latin alphabet):

Example 1 (F): kefak ya 27la sde8a bl danea kef drastak enshala

(How are you, most beautiful friend in this world? How is your study? I hope it is all right.)

Example 2 (F): shokran 3la also2al 2na sorat mne7a bb8a 2shofak

(Thanks for asking. I am feeling better now. I would like to see you.)

Example 3(M): kefak bokra 2y sa3a jaea 3la almostashfa r2yak bokra al doctor r7 eaje

(How are you? What time are coming to the hospital? Do think the doctor will show up tomorrow?)

Figure 4.4 below shows the distribution of the text messages collected from the male and female students.

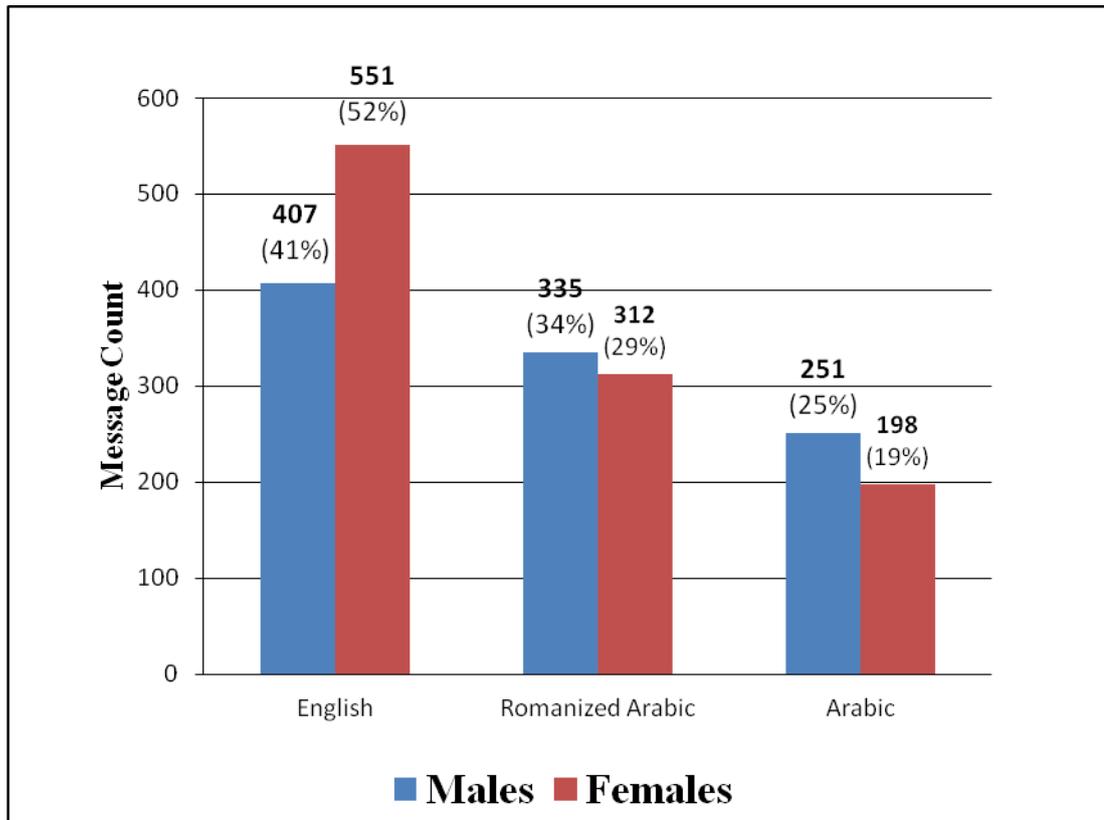


Figure 4.4: Distribution of the Text Messages of Young Jordanian University Students

The data show a very interesting and unexpected finding, which is the dominant use of English in the text messaging of the students compared to the use of Arabic, which is the students' mother tongue. In terms of frequency, both the male and female Jordanian students show a clear preference for English. English is used in 42.4% (331) of the text messages of the males, whereas it is used in 52.6% (438) of the text messages of the females. This finding reveals that both male and female students prefer using English as the medium of communication in their text messages, suggesting the popularity of English among the students. However, the females prefer texting in English more than their male counterparts.

Another unexpected finding revealed by the data is the prevalent use of the Romanized Arabic in the text messaging of the students. Romanized Arabic is a term that was introduced by Warschauer, El Said, and Zohry, (2002). Palfreyman and Al-Khalil (2003) called the same writing system as ASCII-ized Arabic. It is also known as Arabenglish, Arabic English, or Arabish. The percentage of texting using this writing system is even higher than that of using Arabic, with males using it more than females 35.8% (280) and 29.2% (243) respectively. Only 40% of the female students and 20% of their male counterparts knew what this writing system was called when they were asked about it. The following is an example of an SMS message written in Romanized Arabic, followed by its English translation:

Example 1 (M): Kefk. Shu a[kh]barak? Bde as2alak 3an awraq elemt7an tb3 el chem elsanh elmadyeh [u] hai elsanh

(How are you? I need to ask you about the exam papers for last year and this year Chemistry course.)

The texter, in this example, replaces the Arabic letter **ك** with the **kh**, and the Arabic letter **و** with **u** because English has no equivalent for it in its alphabet. The use of the Latin alphabet in writing text messages calls for the search for new conventions because the English alphabet contains fewer letters than the Arabic one. Therefore, letters with no equivalent in English are often replaced by new phonetic symbols. This study shows that the participants use the same Latin letters used by the participants in Mostari's (2009) study, indicating that Arab texters use the same conventions.

Furthermore, the young male and female students apply English numbers in their Romanized Arabic messages to represent certain Arabic letters because there are no Latin letters that are equivalent to these Arabic phonemes. An example to illustrate this is given below:

Example 1 (F): mjood *3anjad* btrjaaki la *t7kee* heeek
(Mjood, seriously, I big you. Don't say this!).

In this example, in the word *3anjad* in italics, which means “seriously”, the number **3** replaces the Arabic letter ع, and in the word, *t7kee*, which means “say”, the number **7** replaces the alphabet ح, for which there is no correspondence in the Latin alphabet. The present study shows that the participants used the same English numbers which were used by Haggan’s (2007) and Mostari’s (2009) participants to replace Arabic letters in their text messaging.

The findings reveal that young Jordanian male and female students employ three writing systems in their text messaging: English, Arabic, and Romanized Arabic. The findings also reveal that students prefer texting in English to texting in their first language, which shows that communicating through the English register, has become very popular among them. The data reveal that females use English more than males.

It is important to point out the low percentage of the use of Arabic in the students’ messages. Even though all the participants are native speakers of Arabic, Arabic is the least frequent language appearing in the students’ messages. The male students used Arabic in 21.7% (169) of their messages while female students used it in 18.1%

(151) of their messages. The fact that English is used as the medium of instruction in the three Jordanian universities may have helped in making English a very common language among the students. Some students claimed in the interviews that English is easier to use in the text messages because abbreviations and short forms, for example, are more common and convenient in English than in Arabic. Jordanian students may be used to the abbreviated forms, the special acronyms, the deletion of syntactic categories, and the typographical features of English. Thus, English has become very popular among them. Additionally, the impractical use of the Arabic keypad may also have contributed to the common use of the English language in the text messages of the students', a comment that was provided by some of the students in the interviews. Amal, a female student, said:

“الطباعه بالعربي اسهل من الانجليزي بكثير”

(Typing in English for me is much easier than typing in Arabic)

Another female student whose name is Suhad said:

“بالنسبه لي انا متعوده على الطباعه بالانجليزي اكثر من العربي”

[As for me, I am more used to the English keypad]

Saif, a male student, said:

“لانه احنا دراستنا واجباتنا كلها بالانجليزي بشوف الطباعه بالكيباد الانجليزي اسهل عشان هيك بتشوف كثير من الناس بكتبوا رسائلهم العربيه باحرف انجليزي”

(Because we usually use English in our studies and assignments, I find the English keypad easier to use, and that is why you find a lot of students typing their Arabic messages using English alphabets)

The majority of the females stated that they preferred using English to Arabic because English was more prestigious and that it was the language of high social status around the world. They also claimed that almost all the students were familiar with it. This emphasizes the symbolic meaning of English, as a marker of education and upward mobility (Deumart & Masinyana, 2008). In addition, some students considered English to be the language of the world, the lingua franca, used by almost everyone nowadays, especially young students in their everyday communication. For instance, Manal said:

”الانجليزي هو الموضه هالاياام والواحد لازم يمشي مع الموضه.“

[English is the trend nowadays, and you should follow the trend].

Like Manal, Joud said:

”الانجليزي بدل عالفاخامه والراقي و بشعرني كمان بانني متميزه عن الناس“.

[I see that English signals prestige. It also makes me feel distinguished].

This is supported by Deumart and Masinyana (2008) who asserted that the dominance of English on the internet has supported the popular belief that the language of CMC in general is English. They also added that English can replace a user’s mother tongue in text messaging in certain instances, such as in the Finnish case reported by Kasesniemi and Rautiainen (2002).

Local varieties of language such as Jordanian Arabic are used in text messaging and have been modified in tandem with English to satisfy the limitations of the medium.

It is possible to predict the influence and the future of English in Jordan. The findings, further, show that Romanized Arabic, which is relatively new to the linguistic repertoire of the students, has become very common among them. They even use it more than Arabic; males are using it more than females. Interestingly, students are found to use numbers to make up for the lack of English letters in forming their texts. During the interview the students pointed out that they resorted to English numbers because they did not find equivalent Latin letters for some Arabic phonemes. Waleed stated that:

”بستخدمهم لانه مافي الهم مقابل بالانجليزي.“

[I use them because there is nothing equivalent to it in English]

Haggan (2007, p. 441) emphasized the same finding by stating that the reason behind using English numbers is “that the English alphabet does not provide an exact match for the Arabic alphabet so that there are letters in Arabic for which there is no equivalent English letter.” The orthography of Arabic which does not allow for much abbreviation and other short forms seems to be one of the reasons why students use Romanized Arabic in their messages.

It seems that writing messages using the Latin alphabet is a common practice which seems to be understood by the texters in the Arab world. This confirms Haggan’s (2007) doubts about the use of Romanized Arabic in Arab countries other than Kuwait and Egypt.

Eighty percent of the overall students (90% (9 males) and 70% (7 females)) who participated in the interviews reported that they preferred using this system over Arabic because it was easier to use and was more interesting. For instance, Joud said:

”بحب استخدم هي الطريقة لانها اسهل وامتع من العربي“

[I like to use this system because it is easy and more fun to use than Arabic].

The same finding was reported by Warschauer et al. (2002) who found that their Egyptian participants often use this typing system in their emails because it was easy to use. Some students mentioned that they were accustomed to using this kind of writing because they constantly use it in their chats with other friends over the net, or on facebook.

Mamon, a male, explained:

”انا متعود عالكتابة هاي لاني بستخدمها عالفيس بوك كل يوم“

[I am used to this type of writing because I use every day on facebook.]

In contrast, 30% (6 students) of the students complained that this writing system was “ugly” and difficult to understand because of all the numbers and alphabets used in it. 10% (1 student) of the male students claimed that they had never used it in their text messaging. Salem expressed his view on using this system of writing by saying that:

”ماعمرني استخدمته لاني مابحيه“

[I have never used it before because I do not like it]

The low percentage of using Arabic in the students' text messaging contradicts Mostari's (2009) claim that people in the Middle East generally use Arabic in their text messaging. Some students mentioned that they were not used to the Arabic keypad, so they avoided using Arabic. In their interviews, 50% (5 students) of the male students and 20% (2 students) of the female students stated that they used Arabic only in formal and very personal messages. On the other hand, some students mentioned that they used it when it was very difficult for them to express themselves in English. For example, Nuha made it clear that she used Arabic in her text messaging in the following situation:

”بحس انه يعبر عن حالي افضل بالعربي وخاصة لما بيعت مسج لواحد اكبر مني او مش عزيز علي“

[I feel that I express myself better in Arabic, especially when I write to someone older than me or not so close to me]

It can be concluded that Jordanian Arabic is used by both male and female students in informal as well as formal functions. The interviews show that Arabic is mostly used in sarcastic messages, greetings, and religious expressions.

4.5.3 Students' Adherence to the Norms and Standards of Language in Text Messaging

The data have shown that there is a tendency among the females to adhere to more accuracy, clarity, and standard forms in their communication than males. The text messages of the females are found to be more complex than the text messages of the males, containing more than one clause. This finding is in line with previous research findings which revealed that females usually write longer and more

complex text messages (Baron, 2004; Deumart & Masinyana, 2008; Ling, 2005; Ling & Baron, 2007; Rafi, 2008). In addition, females' language was found by previous research to be more relational and expressive when they communicate compared to males'. According to Lakoff (1990), females tend to use more expressive forms of language than males do. For example, Lakoff (1990, p. 204) remarks that females tend to use "adjectives not nouns or verbs and, in that category, those expressing emotional rather than intellectual." Therefore it seems possible that females have the tendency to use a clearer and more accurate language because they want to express themselves more vividly and, thus, be more intelligible since most of their communication is emotional and relational.

Furthermore, previous researchers (Holmes, 2008; Labov, 1991; Romaine, 1999, Trudgill, 1983) have shown that females have the tendency to use more standard forms of language than males do, whereas males have the tendency to use more nonstandard forms of language than females do. Specifically, Labov (1991) suggested that females' speech often reflects more standard lexical, phonological, and grammatical forms than males'. Females choose the standard forms because these forms are believed to carry "overt prestige," while males choose nonstandard forms because they are believed to carry "covert prestige" (Holmes, 2008, p. 407). The reason why females tend to use a more prestigious form, according to Trudgill (1983, p. 94), is that "females, 'because of their greater status consciousness', will feel more pressured than males to 'appear correct' by employing higher class forms." This is also supported by sociolinguistic literature which shows that females are more concerned with prestige than males (Eckert & McConnell-Ginet, 2003;

Holmes, 2008; Romaine, 1999; Stockwell, 2002). Holmes (2008, p. 163) stated that “in speech communities, when women use a more linguistic form than men, it is generally the standard form- the overtly prestigious form- that women favor.” This variation in the use of standard forms has also been ascribed to females’ awareness of their lesser social status in society (Holmes, 2008). Therefore, females appeal to forms for which they will be positively assessed (Romaine, 1999; Yule, 2009). Another explanation is that females are more concerned with being careful while males are usually concerned with being more casual (Tannen, 1990). Therefore, using abbreviations and short forms, deleting syntactic categories, employing typographical features, and using nonstandard forms of language are practical and convenient for males to use.

4.6 Summary

This chapter presents the findings on the linguistic features used in the text messaging of the young Jordanian male and female students and their gender differences. This study has provided evidence to support the claim by Bodomo and Lee (2002) that there is a relationship between the emergence of new ICTs and language change and use.

Overall, similar to many other studies conducted on gender differences in SMS and CMC, gender differences in the text messaging of young Jordanian students were present. The data for this study were collected by means of three data collection techniques: open-ended questionnaires, user diaries, and interviews. The data were

then analyzed based on categories adapted from Yule (2009), and previous research on SMS language by Hård af Segerstad (2002), and Thurlow (2003).

The findings in this chapter revealed significant gender differences in the young Jordanian male and female students' text messages. The students were found to differ in the linguistic features used in their text messaging.

Concerning the lexical features used by the students, except for acronyms and abbreviations which appeared to be used more by the males than females, all of the other lexical features occurred more in the females' text messages. The findings have shown that borrowing, compounding, blending, derivation, conversion and coinage are used more by the females than their male counterparts, suggesting that females seem to be more complex users of language than males. Males appeared to be common users of abbreviations including acronyms, short forms and clipping, while females appeared to be common borrowers from other languages in their text messaging. Females borrowed from English when writing their messages in Arabic and vice-versa.

The male and female students also vary in the use of syntactic features in their text messaging. The male students were more prone to deletion of syntactic categories than females. They also tended to delete more subject pronouns, more subject pronouns and auxiliaries, more auxiliary, copular and modal verbs, and more articles than the female students. In contrast, the females' messages were more complex than the males' messages in that they contain more than one clause. The females tended

to delete less syntactic features from their text messages, which may suggest that they are more aware of the grammar of their language. It may also suggest that they prefer to write clearly and use more complex structures representing the standard forms of their language.

As far as typographical features are concerned, gender differences were also obvious in this particular category. The male students used more letter and number homophones and phonetic spelling than the female students, whereas the female students used more punctuation and emoticons than the male students. This shows that the females were more expressive and emotional than the males. However, the usage of onomatopoeic words was almost the same for both genders although with a very slight difference leaning towards the females.

Besides, a very interesting finding was the use of three different writing systems in the students' text messaging: English, Arabic and Romanized Arabic. A much unexpected finding was the use of English and Romanized Arabic over Arabic, the students' native language. Both the males and the females preferred English to the other two writing systems. Nevertheless, the females used English more than the males, whereas the males used more Arabic and Romanized Arabic than their female counterparts. This indicates that the females may have more positive attitudes about English as they consider it more prestigious. Finally, the findings of this study have shown that the females had the tendency to follow the rules and norms of language more than the males did. They also tend to send clearer and more accurate text messages than their male counterparts.

CHAPTER FIVE

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a brief description of the objectives, research questions, research design, participants, data collection processes and techniques, data analysis, and findings of the present study. It also draws conclusions from the research findings. Finally, the chapter concludes with some implications of the current study, limitations of the study, and recommendations for future research.

5.2 Summary

The current study aims at exploring gender differences in the text messaging of young Jordanian male and female students. Specifically, the main objective of the study is to find out gender differences in the linguistic features in the text messaging of the students in relation to lexical, syntactic, and typographical features. The following questions guided the study:

1. What are the differences in the lexical features used in the text messaging of the young Jordanian male and female university students?
2. What are the differences in the syntactic features used in the text messaging of the young Jordanian male and female university students?
3. What are the differences in the typographical features used in the text messaging of the young Jordanian male and female university students?

One hundred students (50 males and 50 females) from three different Jordanian universities participated in the study. They were between the ages of eighteen and twenty years old in the first-year of their undergraduate studies. Purposive sampling was used to identify the participants who had willingly taken part in the current study.

This study is a qualitative case study that employed qualitative designs to answer its questions. The data for the study were collected using three techniques of data collection. The first data collection technique was the open-ended questionnaire, which was used to collect demographic information about the participants, to find out the habits of using text messaging and to select participants for the user diary. The second one was the user diary, which was the main data collection technique to collect data to answer the research questions of this study. The final one was the semi-structured face-to-face interview carried out to complement the other two techniques of data collection by eliciting information directly from the participants.

Fifty male and fifty female students participated voluntarily in the questionnaire which consisted of open-ended questions which were used to elicit data pertaining to the present research. The questionnaire consisted of three parts, the last of which asked students to forward text messages from their mobile phones to the researcher's mobile phone and to get students to participate in the study.

In the second data collection technique, the user diary, which is the primary data collection technique in this study, sixty students (thirty males and thirty females)

agreed to provide the researcher with text messages they sent from their phones to their peers and friends after keeping them in a personal log for over a period of one week. The participants were selected from the group of the students who participated in the questionnaire. Informed consent forms were read and signed by all the students who were assured that all their personal information as well as the information they provided would be kept confidential. The researcher was provided with a total of 1,612 messages (780 messages from the males and 832 messages from the females) which were sent by the participants to the researcher's mobile phone.

Ten male students and ten female students who took part in the user diaries agreed to be interviewed by the researcher to obtain more information about their text messaging practices. They were all interviewed by the researcher himself in a very informal setting. Each interview lasted for about 15-20 minutes. All of the students signed consent forms stating that they agreed to participate in the research and allowed the researcher to use their information for analytical purposes only. On the other hand, the researcher promised them that the information they provided as well as their identities would be kept private.

Data collected for the purpose of the current study were analyzed to explore gender differences in the text messaging of the students. The participants' text messages were classified according to the gender of the senders: males' messages and females' messages, which were then analyzed for occurrences of linguistic features.

Lexical features were categorized according to word-formation processes adapted from Yule's (2009) book. These categories are borrowing, compounding, blending, derivation, acronyms, abbreviation, conversion, and coinage. On the other hand, syntactic and typographical features were categorized according to Hård af Segrestad's (2002) and Thurlow's (2003) typology of linguistic features of text messaging. Syntactic features analyzed are deletion of subject pronoun, deletion of subject pronoun and auxiliary, deletion of copular/auxiliary/ modal verb, and deletion of article. Finally, typographical features consist of the following categories: punctuation, letter and number homophone, phonetic spelling (non-conventional spelling), onomatopoeic words, and emoticons.

The findings in this study reveal that there are gender differences in the lexical, syntactic, and typographical features used in the young students' text messages. Particularly, the females used more lexical features such as borrowing, derivation, compounding, blending, conversion, and coinage than the males. In contrast, the males used more abbreviations and acronyms. On the other hand, the males had the tendency to use the syntactic features more than the females. In terms of typographical features, the males used more letter and number homophones and phonetic spelling than the females whereas the females used more punctuation, onomatopoeic words, and emoticons than the males.

5.3 Conclusion

Jordan is a region in which gender roles are traditionally segregated. However, the high proliferation of SMS provides greater freedom for the young people to

communicate with the opposite sex. A young female wearing the traditional Muslim *hijab* (head covering) who is to adhere to traditional Islamic barriers such as mixed-sex interaction can communicate with her male fellows through text messaging. Thus, SMS communication has become an important vehicle for establishing a social network that helps people communicate their beliefs, feelings, ideas, and needs.

Gender variation is an important aspect of culture that is often reflected in language use. This study concludes that young Jordanian male and female students use different linguistic features in word-formation, syntax and typography at the informal end of the spectrum. Word-formation processes such as abbreviations, borrowing, compounding, acronymy, blending, and derivation are essential stylistic features of texting. Specifically, abbreviations and short forms such as clipping, and acronyms are the most prevalent of all features. Owing to the instant communication of SMS, which is fundamentally achieved through a pidgin-type variety, texting is manifested in various communicative functions such as informing, sharing of ideas, coordinating beliefs, conventional communication (greetings, invitations, congratulations, jokes, love letters or emergency calls for help).

The findings presented in Chapter Four show that the relationship between new ICTs and new language forms and use as proposed by Bodo and Lee (2002) is also present in the study. The findings also reveal that there are gender differences in the young Jordanian students' messages with regard to lexical, syntactic and typographical features. It has also been shown that the text messaging of the Jordanian students is affected by the characteristics of the medium such as the design

of the keypad and the number of characters available for each text message and by the syntax and orthography of the Arabic language.

Brevity is the most popular feature among the texters. The data show that the informal and abbreviated languages (Arabic and English) are used by the young students. While texting, the students tend to shorten their sentences as much as possible. However, the text messaging of the male and female students differs in lexical reduction and shortening. The males employ more abbreviations and acronyms in their messages more than the females. On the other hand, the females have the tendency to use other word-formation processes such as borrowing, derivation, blending and compounding more than the males. This may indicate that the females are more sophisticated users of text messaging than the males. It may also indicate that the males are more experienced in writing text messaging, which requires speed and economy.

English was found to be a very popular mode of communication among the young Jordanian females because they borrow English words and expressions, on average, more than their male counterparts. Using the English language as the medium of instruction in the majority of the Jordanian universities and the high attitudes of the students toward English are reported to be the reasons behind its common use in the students' text messaging. The data elicited from the questionnaires and interviews triangulate with the findings in the user diaries.

The findings in this study have also shown that females tend towards accuracy and clarity in their communication. This indicates that females relatively adhere to the cooperative principles of communication, specifically to Grice's maxim of manner. Unlike the Jordanian female students, a considerable majority of the young Jordanian male students overuse syntactic features such as deletion of subject, auxiliary, modal and article. Deletion of these constituents reflects activation of pragmatic cues among the texters that makes SMS texting more like verbal communication than written discourse. Among the pragmatic cues is that the young Jordanian males tend to predict more forms of the language used than the females while communicating through text messages.

Semiotics is the new way through which the texters express their feelings, that is, in signs rather than words. The males embed relatively less emoticons than the females. For example, the basic emoticons used are “:)”, a sign which indicates happiness and “:(”, a sign which indicates sadness. There is a considerable list of signs which have been invented by the texters depending on the context. It is observed that the frequency of using punctuations, emoticons, and onomatopoeia is higher among the females than the males. However, the frequency of letter and number homophones and phonetic spelling conventions is higher on average among the male students than their female counterparts. Based on these findings, we can conclude that the young Jordanian females use different typographical features than the males.

The findings also reveal that the females tend to adhere more to norms and standards in their communication than the males do. Text messaging is a new medium of

communication, which has altered the ways youths express themselves because it allows users the time to select, craft, and use the language of their choice. The data has revealed that the language of text messaging is a non-standard form of language (Crystal, 2001). However, the young Jordanian female students tend to adhere more to norms and standards in their text messaging than the males.

5.4 Implications of the Study

5.4.1 Linguistic Implications of the Study

It has recently been claimed that the widespread use of communication technologies and text messaging language have negatively affected the standard language, causing it to lose some of its characteristics (Lee, 2002; Mphahlele & Mashamaite, 2005; Rosen, Chang, Erwin, Carrier & Cheever, 2010). For instance, Lee (2002) describes the language used in text messaging as a threat to formal English. The present study has found that the students are innovatively and creatively employing a new form of language that fits their needs and limitations of the medium. One has to bear in mind that human language is constantly changing and developing, and that new forms of abbreviations and short forms may become an integral part of the language in the future, not only within text messaging but also within the spoken and written language.

Furthermore, some researchers have claimed that CMC is gender blind or gender neutral (Danet, 1998; Suler, 2004; Trias, 1997), providing females with more chances to participate anonymously and, with more privacy, allowing them to

equally use similar linguistic forms of language and a similar style of communication as those used by males. However, the present study has shown that gender differences are still present in the use of SMS with respect to the linguistic forms used by males and females. It has also shown that females still adhere more to the standard norms in language than males. This suggests that gender differences in CMC still exist as a social phenomenon in spite of the mediation of technology.

The present study advances the research on SMS, in particular, and the research on CMC, in general. It adds to the limited number of research on lexical, syntactic, and typographical differences related to gender in SMS, by extending the research on gender and computer-mediated language to micro-level. This is significant because the present study one of the very few studies on text messaging and in CMC in an Arab culture, which is different from the western culture in which most of the studies on gender and CMC have been carried out. The findings on gender differences in this study are congruent with the some of the findings of previous work on gender and computer-mediated communication. This may imply that gender differences are similar despite cultural differences.

5.4.2 Pedagogical Implications of the Study

Genetically, humans are born with a language faculty (Chomsky, 1968), but owing to social and cultural factors they nurture diverse language habits (Tannen, 1990, 1995; Uchida, 1992). This variation in our language use can be observed in lexical, syntactic, and typographical features among male and female students.

This study has discovered that SMS or text-based communication has altered the ways youths express themselves. The students use different languages other than their native language. For example, the English Language has come into contact with different languages, dialects and varieties used by online communities across the world. As a result, English has become a very common language among the users of CMC. The diffusion of Standard English into asynchronous communication may have contributed to the widespread of World Englishes. Eventually, this would trigger pedagogical concerns: (a) How do we present our cultures and languages in the process of teaching English? and, (b) In the wake of the existing range of Englishes, which form of English should be emphasized?

Moreover, Arabic-English code-switching is commonly observed in texting. Al-Khateeb and Sabbah (2008) claimed that when code-switching and borrowing become widely used by youths, entirely new linguistic codes may come into existence. This results in novel communication or texting conventions among the youth.

The high proliferation of SMS communication language has been a serious concern for some educators who have expressed their concerns about the use of non-standard forms of language in schools, where students use a new form of language that does not adhere to the rules of language (Mphahlele & Mashamaite, 2005; O'Connor, 2005). Many teachers reported the prevailing and constant use of SMS linguistic forms in the assignments and examinations of their students. This issue is still debatable among researchers who believe that SMS language has a negative impact

on students' language proficiency (Lee, 2002; Mphahlele & Mashamaite, 2005; O'Connor, 2005), and those who refute this idea (Baron, 2003; Crystal, 2001). This may require educators to carefully observe and monitor their students during the teaching process and look into the extent to which students are using the SMS language in their schools, its effect on their educational performance. Educators may then propose initiatives to prevent the spread of this negative phenomenon if it exists among students.

Additionally, the significant finding that young Jordanian students tend to use more "Romanized Arabic" instead of Arabic stresses the importance of English in the students' life in particular, and in the society in general. It may also indicate the students' detachment from the written form of the Arabic Language. Educators and language planners should encourage the use of only the Arabic alphabet in the construction of SMS messages. The use of Arabic could be encouraged by using mobile phones having only Arabic keypads.

5.5 Limitations of the Study

There are several limitations to the present study which are very important to point out. The present study focuses on gender differences in the text messaging of young Jordanian male and female university students with respect to lexical, syntactic, and typographical features.

One limitation is that this study is limited to the text messages sent by the participants themselves, not the messages they receive. According to Ling (2005),

the researcher can only ask participants to provide him/her with the messages they send, but not the ones they receive due to ethical and methodological reasons. Ethically, to ask the participants to provide messages they receive requires the consent of the senders of these text messages. Therefore, the researcher of the present study cannot include the senders' messages since their consents were not obtained. Methodologically, on the other hand, the researcher of the present study will not be able to know the age, gender and background of the senders, which were important information for the selection of the participants.

Another limitation is that this study focussed on young first year undergraduates between the ages of 18-20. It excludes older students such as sophomores, juniors, seniors, or graduate students. The participants in this study may not represent the wider community of university students, which may reveal different practices and variations.

Additionally, non-speakers of Jordanian Arabic were excluded from the sample as the focus of the study is on this particular form of Arabic. Arabic has a number of different varieties spoken by different Arab people in different Arab countries. For example, there is Syrian Arabic, Moroccan Arabic, Egyptian Arabic, and Saudi Arabic. These varieties of Arabic have different linguistic features (lexical, phonological, and syntactic) that make them different dialects of the same language which is Arabic. This study has focussed on Jordanian Arabic which is different to some extent from other varieties of Arabic. Therefore, the findings are limited to the linguistic features found in Jordanian Arabic.

Moreover, this study is limited to text messages that are typed using keypads. It does not include those messages typed using “predictive text”. Predictive text uses the technique of entering text by a single press on the number key instead of using the “multi-tap” technique. The mobile phone built-in dictionary then identifies the words which are being entered based on what is already stored in the memory of the mobile phone (Hård af Segerstad, 2002). Predictive text, according to some young users, is difficult to use, annoying, slower, does not usually choose the right word and does not facilitate the need for abbreviation (Thurlow, 2003). Text messaging typed using “predictive text” would not yield suitable data for the study because, unlike the keypad, “predictive text” does not allow texters to use abbreviations, acronyms, letter and number homophones, etc.

One more limitation is that the researcher had some difficulties interpreting some of the text messages forwarded by the participants. The content of some of the text messages was sometimes difficult to understand. In addition, some of the text messages were incomplete. Therefore, these text messages were ignored. Some text messages were also difficult to understand because they contained new linguistic features such as new abbreviated forms, acronyms, and emoticons.

Finally, the researcher faced some difficulties in getting participants for the present study. A good number of students were hesitant to participate in such a study. Some of the participants withdrew from the study without specifying any reasons for doing so. The main reason behind their reluctance may be due to the extremely private nature of SMS data since it is a very personal mode of communication. Hård af

Segerstad (2002, p. 207) suggested that "SMS is experienced as being even more private than e-mail." Most SMS messages are transmitted between family members, close friends and lovers who may wish to keep their messages a secret.

5.6 Recommendations for Future Studies

The findings of this study constitute a step toward understanding gender in text messaging communication. Nevertheless, in order to be more certain about the linguistic aspects of text messaging, further studies of text messaging need to be conducted.

Firstly, the current study focused on only first-year undergraduate students between the ages of eighteen and twenty years. The participants would not be representative of the overall Jordanian student population. Therefore, a broader sample of college students, including older students such as seniors and graduate students, should be studied. Moreover, this study could be extended to investigate older generations with different socio-economic backgrounds to represent the overall Jordanian population or current SMS users. Past Literature review has revealed that age, profession, and educational background are determining factors in the choice of language used by people (Holmes, 2008). Therefore, a study of this kind may reveal more variation in the linguistic features used by these different groups of people in their text messaging.

Secondly, an examination of more linguistic features in text messaging may reveal wider and stronger patterns of differences and similarities between males and

females. For instance, based on earlier research related to gender and language use in face-to-face communication and in computer-mediated communication, it has been revealed that the communication styles of males and females differ with respect to the use of qualifiers, hedges, and intensifiers (Fahy, 2002; Guiller & Durndell, 2006; Lakoff, 1975). Research in face-to-face interaction and in CMC has further shown gender differences in relation to politeness, flaming, aggressive language, and supportive language (Baron, 2004; Herring, 1993, 1994; Soukup, 1999). Therefore, text messaging needs to be investigated for additional variables such as those mentioned earlier. This will help us to determine the degree to which gender differences in text messaging correspond to those found in face-to-face conversations and in CMC.

Future studies are also recommended for examining gender differences in other types of CMC such as Instant Messaging, Emails, Chat, Facebook, and Twitter in the Arab world, in general, and in Jordan, in particular. The findings of the current study are based on research conducted in the Jordanian setting, and therefore may not apply to other neighboring Arab countries. Thus, future work could be conducted to study gender differences in other Arab countries for the purpose of comparing similarities and differences among them. It is an issue which still needs further investigation due to cross-regional differences and similarities.

It is also significant to thoroughly investigate the widespread use of Romanized Arabic in text messaging, in particular, and in other kinds of CMC, in general. The findings of this study show that students use this new system of writing even more

than their native language. Further research is needed to study the reasons why students prefer using it and the effects of using it on the students' mother tongue, which is Arabic. It is also worthwhile to investigate whether the use of Romanized Arabic by this sample of students may reflect broader linguistic shifts. This may, further, call for the need for a separate study to investigate the functions for which Arabic is used in text messaging by young people.

Finally, it is recommended that a single study be devoted to the communicative functions used in students' text messaging which will shed some light on how and why Jordanian students use text messaging. The same study could further analyze gender differences in the communicative functions of the students' text messaging and could be compared to studies conducted on the same issue in different cultures and settings.

Last but not least, it is not likely that the flourishing field of human language communication technology will come to an end. Therefore, it will be a challenging and interesting endeavor to keep on inquiring into the human communication process in the future.

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Appendix A
Research Questionnaire (English Version)

Dear Participant,

I am a PhD candidate at the Department of Language Studies, Universiti Utara Malaysia. I am currently doing a research on **Gender Differences in the Text Messaging of Young Jordanian University Students: An Analysis of Linguistic Features**. Please note that all the information you provide will be kept confidential and will not be disclosed. The data will only be used for analytical purposes. If you wish to participate, please answer all questions to the best of your ability. Thank you very much for your participation.

Part A: Demographics

Sex: Age:
Nationality: University:

Part B: General Information

- Do you own a mobile phone?
.....
- How long have you had a mobile phone?
.....
- What language do you use to type your messages?
.....
- Why do you choose this language? Briefly.
.....
- Who do you usually send your text messages to and receive text messages from?
.....
- How many SMS messages do you send a day?

-
- How many SMS messages do you receive a day?
.....
 - Do you use any lexical features (e.g. abbreviations, acronyms, clippings)? If yes, why?
.....
 - Do you use any syntactic features (e.g. deletion of subject, deletion of auxiliary, deletion of article, etc.)? If yes, why?
.....
 - Do you use typographical features (e.g. punctuation, phonetic spelling, emoticons, etc.)? If yes, why?
.....
 - Do you pay attention to the grammar of your text messages? If yes, why?
.....
 - Do you proofread your text messages? If yes, why?
.....

PART C: Mobile Phone Text Messages

Would you like to provide samples of your text messages for this research? YES/
NO

Thank you for agreeing to provide data for this study. Please note that all the text messages provided will be kept strictly confidential and will be used for analytical purposes ONLY. (Your identity will NOT be disclosed)

Please forward the last 5 text messages you sent from your mobile phone.

END OF QUESTIONNAIRE

THANK YOU FOR YOUR TIME AND CO-OPERATION

Would you like to participate in the user diaries? YES/ NO. If yes, please provide the following information:

Your name: -----

Your Phone number: -----

Your E-mail: -----

Your information will NOT be disclosed and will be kept strictly confidential.

Appendix B

Research Questionnaire (Arabic Version)

عزيزي المشارك،

أنا طالب دكتوراه في قسم اللغويات التطبيقية ، جامعة أوتارا ماليزيا. أقوم الآن بعمل بحث بعنوان " تحديد الفروق بين الجنسين في الرسائل النصية القصيره للطلاب الأردنيين الشباب: تحليل لخصائص لغويه ". يرجى ملاحظة أن كل المعلومات التي تقدمها ستكون سرية للغاية ولن يتم الكشف عنها. البيانات المقدمة سوف تستخدم فقط للأغراض التحليلية. الرجاء الإجابة على جميع الأسئلة. شكرا جزيلاً لكم على مشاركتكم.

الجزء الأول: معلومات شخصيه

الجنس:
السن:
الجنسية:
الجامعة:

الجزء الثاني : معلومات عامة

- هل تملك هاتفاً محمولاً؟
.....
- منذ متى تملك هاتفاً محمولاً ؟
.....
- ما هي اللغة التي تستخدمها لكتابة الرسائل النصية القصيرة الخاصة بك؟
.....
- ما هو سبب اختيارك لهذه اللغة؟ باختصار.
.....
- من الذين ترسل إليهم عادة الرسائل النصية القصيرة؟
.....
- من الذين تتلقى منهم عادة الرسائل النصية القصيرة؟
.....
- كم عدد الرسائل النصية القصيرة التي ترسلها في اليوم؟
.....
- كم عدد الرسائل النصية القصيرة التي تستقبلها في اليوم؟
.....

- هل تستخدم أية ميزات معجمية (الاختصارات)؟ إذا كانت الإجابة بنعم، لماذا؟
- هل تستخدم أية ميزات نحوية (حذف الفاعل، حذف الفعل المساعد، حذف أدوات التعريف)؟ إذا كانت الإجابة بنعم، لماذا؟
- هل تستخدم ميزات طباعيه (الترقيم ، الإملاء الصوتي، الرموز) إذا كانت الإجابة بنعم، لماذا؟
- هل تعير انتباهها لقواعد اللغة التي تكتب فيها رسائلك النصيه القصيرة؟ إذا كانت الإجابة بنعم، لماذا؟
- هل تقوم بتدقيق الرسائل النصيه القصيرة الخاصة بك قبل إرسالها؟ إذا كانت الإجابة بنعم، لماذا؟

الجزء الثالث : الرسائل النصيه القصيرة

- هل ترغب في تقديم عينات من الرسائل النصيه القصيرة الخاصة بك لأغراض هذا البحث ؟ نعم / لا
- شكرا لموافقتك على تقديم بيانات لهذه الدراسة. يرجى ملاحظة أنه سيتم الحفاظ على جميع الرسائل النصيه القصيرة المقدمة في سرية تامة وسوف تستخدم لأغراض التحليل فقط ولن يتم الكشف عن هويتك.
- الرجاء تزويدي بخمسة رسائل نصية قصيرة من هاتفك المحمول.

نهاية الاستبيان
شكرا جزيلاً لك على وقتك وتعاونك

- هل ترغب في المشاركة في مذكرات المستخدم؟ نعم / لا. إذا كانت الإجابة بنعم، يرجى تزويدي بالمعلومات التالية :

الاسم:-----

رقم الهاتف:-----

البريد الإلكتروني : -----

- سوف يتم التعامل مع المعلومات التي تقدمها بسريه تامة.

Appendix C
Consent Form-User Diaries (English Version)

I hereby agree to participate in this dissertation entitled “**Gender Differences in the Text Messaging of Young Jordanian University Students: An Analysis of Linguistic Features**” at the Department of Language Studies, School of Arts and Sciences at Universiti Utara Malaysia.

The purpose of the study is to explore gender differences in the text messaging of young Jordanian male and female students with regards to the lexical, syntactic, and typographical features used in their text messaging.

I fully understand that my participation in the present study involves providing the researcher with diaries of my text messages over a period of one week. The messages will be forwarded directly to the researcher’s mobile phone at the end of each day. I understand that the text messages I provide the researcher with will only be used for analytical purposes.

I understand that the diaries will be kept private in a locked place, and that only the researcher himself will have access to the records.

I also understand that my participation is voluntary and that there is no monetary compensation for participating in this study. I reserve the right to withdraw from the study at any point and request that any data from the diaries not be included in the study.

Name:

Signature:

Date:

Appendix D

Consent Form-User Diaries (Arabic Version)

مذكرات المستخدم - نموذج الموافقة على المشاركة

أوافق على المشاركة في أطروحة الدكتوراه بعنوان " تحديد الفروق بين الجنسين في الرسائل النصية القصيرة" للطلاب الأردنيين الشباب: تحليل لخصائص لغويته " في قسم اللغويات التطبيقية، كلية الآداب والعلوم في جامعة أوتارا، ماليزيا.

و أفهم أن الغرض من هذه الدراسة هو دراسة الفروق بين الجنسين في الرسائل النصية القصيرة من الطلبة الأردنيين الشباب من الذكور والإناث فيما يتعلق بالخصائص النحوية و الطباعية المستخدمة في الرسائل النصية الخاصة بهم.

إنني أدرك أن مشاركتي في هذه الدراسة تتضمن تزويد الباحث بمذكرات للرسائل النصية خاصتي خلال فترة أسبوع واحد. وسوف ترسل الرسائل مباشرة إلى هاتف الباحث المحمول في نهاية كل يوم. وأدرك أن الرسائل النصية التي سوف يتم تزويد الباحث بها سوف تستخدم فقط للأغراض التحليلية. وكما أنني أدرك أنه سوف يتم الحفاظ على مذكراتي الخاصة في مكان آمن، وأن للباحث فقط الحق في الإطلاع على هذه التسجيلات.

إن مشاركتي في هذه الدراسة طوعية وإنه ليس هناك أي تعويض نقدي عن المشاركة في هذه الدراسة. كما أنني أحتفظ بحقي في الانسحاب من الدراسة في أي لحظة والطلب بأن لاتستخدم أي من بياناتي المقدمة في الدراسة.

الاسم:

التوقيع:

التاريخ:

Appendix E

Consent Form-Interviews (English Version)

I hereby give permission to Mr. Rafat Al Rousan to interview me for his doctoral dissertation entitled “**Gender Differences in the Text Messaging of Young Jordanian University Students: An Analysis of Linguistic Features**” at the Department of Language Studies, School of Arts and Sciences at Universiti Utara Malaysia.

I understand that the purpose of the study is to explore gender differences in the text messaging of young Jordanian male and female students with regards to the lexical, syntactic, and typographical features used in their text messaging.

I understand that in order to participate in the study I will meet with the researcher for an interview which will last for approximately 20 minutes, at a mutually convenient time and location.

I hereby grant permission to Mr. Rafat Al Rousan to audiotape the interview for the purpose of the study, which will be subsequently transcribed and analyzed. If I so desire, I can review any part of the completed audiotape of my interview and I can request that my audiotape be destroyed. I understand that all audiotapes will be erased at the completion of this study. Until then, all audiotapes will be secured in a safe place.

I understand that the researcher will guarantee my anonymity and will protect my privacy.

Name:

Signature:

Date:

Appendix F

Consent Form-Interview (Arabic Version)

نموذج الموافقة على المشاركة - المقابلة الشخصية

انا،أمنح الإذن للسيد رأفت الروسان لاجراء مقابلة شخصية معي لأطروحة الدكتوراه بعنوان " تحديد الفروق بين الجنسين في الرسائل النصية القصيره للطلاب الأردنيين الشباب: تحليل لخصائص لغويه " في قسم اللغويات التطبيقية في كلية الآداب والعلوم في جامعة أوتارا ماليزيا.

إنني أفهم أن الغرض من هذه الدراسة هو التحقيق في الفروق بين الجنسين في الرسائل النصية للطلبة الأردنيين الشباب من الذكور والإناث فيما يتعلق بالخصائص النحوية والمعجمية والطباعية المستخدمة في الرسائل النصية الخاصة بهم.

وأنا أفهم أنه من أجل إجراء الدراسة سألتقي مع الباحث في مقابلة تستمر حوالي 20 دقيقة في زمن و مكان مناسبين للطرفين

إنني هنا أمنح إذنا للسيد رأفت الروسان بالتسجيل الصوتي للمقابلة لغرض الدراسة، والتي سيتم استخدامها في وقت لاحق في التحليل. وبناء على رغبتني، فإنه يمكنني مراجعة أي جزء من التسجيل الصوتي بعد الانتهاء من المقابلة التي أجريتها وإنه يحق لي الطلب بإتلاف الشريط. كما أنني أفهم أنه سيتم مسح جميع الأشرطة الصوتية عند الانتهاء من هذه الدراسة. حتى ذلك الحين، سيتم تأمين جميع الأشرطة الصوتية في مكان آمن

وأفهم أن الباحث سيبدل قصارى جهده لضمان عدم الكشف عن هويتي ، وحماية خصوصياتي.و سيتم الاحتفاظ التعامل مع جميع المعلومات بسرية تامة.

شكرا جزيلاً لموافقتك على المشاركة في هذه الدراسة.

الاسم :

التوقيع :

التاريخ :

Appendix G

Samples of Interviews

Interview I

Male 1

-
- الباحث: صباح الخير.
- R: Good morning.
- M1: صباح النور.
- M1: Good morning.
- الباحث: كيف الحال.
- R: How are you?
- M1: الحمد لله بخير.
- M1: Fine. Praise to God.
- الباحث: كيف دراستك؟ انشأته تمام؟
- R: How is your study? I hope it is well.
- M1: ماشي حالها و الحمد لله.
- M1: It is good. Thanks God.
- الباحث: معلىش نبدا بالاسئله؟
- R: Very well. Shall we start our interview?
- M1: ماشي.
- M1: OK.
- الباحث: كم عمرك يا M1؟
- R: How old are you?
- M1: 20 سنه.
- M1: I'm 20 years old.
- الباحث: العمر كله ان شاء الله.
- R: I hope you will live very long.
- M1: شكرا.

M1: Thanks.

الباحث: عندك تلفون خلوي؟

R: Do you have a cell phone?

M1: نعم.

M1: Yes

الباحث: كم صار له عندك التلفون الخلوي؟

R: How long have you had your mobile phone?

M1: حوالي ست سنين.

M1: About six years.

الباحث: بتكتب رسائل نصية يعني SMS messages ؟

R: Do you write SMS messages?

M1: طبعا بستخدم الرسائل النصية.

M1: Yes, of course. I use text messages

الباحث: كم رسالة نصية تكتب يوميا ؟

R: How many SMS messages do you send every day?

M1: ما يقارب 10 رسالة.

M1: Approximately 10 messages.

الباحث: بتقدر تقولي بالزبط كم رساله؟

R: Can you tell me exactly how many?

M1: مابعرف بالزبط بس بين ال 7 و ال 10 رساله.

M1: I don't know exactly, but may be between 7 to 10 SMS messages.

الباحث: كم رسالة نصية بتستلم يوميا ؟

R: How many SMS messages do you receive every day?

M1: تقريبا نفس الرقم.

M1: About the same number.

الباحث: لمين بترسل الرسائل النصية عادة؟

R: To whom do you often you send your SMS messages?

M1: الى الاصدقاء و الاهل.

M1: To my family and friends.

الباحث: لمين اكثر الاهل ولا الاصدقاء؟

R: Who do you send more SMS messages to family or friends?

M1: الاصحاب اكثر اكيد.

M1: My friends, of course.

الباحث: من يرسلك الرسائل النصية غالبًا؟

R: From whom do you often receive your SMS messages?

M1: الاصحاب و الاهل.

M1: My family and my friends.

الباحث: شو هي اللغة التي بتستخدمها عادة في كتابة رسائلك النصية؟

R: What language do you usually use in your SMS messages?

M1: والله بستخدم اكثر من لغة. بستخدم عربي و انجليزي بس عربي اكثر.

M1: I use more than one language, but I often use Arabic more.

الباحث: بتستخدم ال Romanized Arabic او الارابيش؟

R: Do use Romanized Arabic or you use Arabish?

M1: مش فاهم شو يعني؟

M1: I'm not sure; I do not understand what you mean

الباحث: يعني العربي اللي مكتوب بالاحرف الانجليزيه او اللي بسموه بعض الناس العربيزي.

R: I mean using English letters to write Arabic messages, which some people call it Arabish.

M1: لا مبستخدمه بالمره.

M1: No, I don't use it at all.

الباحث: ليش؟ في سبب معين؟

R: Why? Is there any particular reason?

M1: جربتها مره او مرتين وما حبيتها. حسيتها ثقيله علي.

M1: I have tried it once or twice, but it felt awkward.

الباحث: كيف يعني ثقيله؟

R: Awkward! What do you mean by awkward?

M1: كنت بطيء فيها ممكن لاني مش متعود عليها.

M1: I was slow using Romanized Arabic, may be because I'm not used to it.

الباحث: طيب مابتجيك رسائل مكتوبه بهاي اللغة؟

R: But still you get some messages written in the Romanized Arabic, don't you?

M1: بتيجي بس مش كثير والحمدلله انه مش كثير.

M1: Yes, but not too many, thank God.

الباحث: طيب اي لغة بستخدم اكثر العربي ولا الانجليزي؟

R: Ok, what language do you use more Arabic or English?

M1: لا العربي اكثر

M1: I use Arabic more.

الباحث: ليش؟

R: Why?

M1: لانه اكثر اصحابي يعرفوا عربي احسن من الانجليزي وبيعثولي بالعربي. واهلي كمان مابعرفوا انجليزي.

M1: Because most of my friends are better in Arabic than English. Also, my family is not so good with English.

الباحث: لما رسالتك بتكون مكتوبه بالعربي بتكون كلها عربي خالص؟ ولا بتستخدم كلمات انجليزيه او غريبه؟ يعني هل تستخدم أكثر من لغة في الرسالة الواحدة؟

R: When you write your message, do you write it in Arabic only or do you use some English words? In other words, do you use more than one language in your message?

M1: لا, احيانا بتستخدم بعض كلمات انجليزيه وخاصه مع اصحابي.

M1: No, but sometimes I use some English words especially with my friends.

الباحث: كلمات مثل شو؟

R: Words like what?

M1: مثل (please, sorry, tomorrow, see you)

M1: For example, (please, sorry, tomorrow, see you)

الباحث: ليش بتستخدمها؟

R: Why do you use them?

M1: هاي كلمات معروفه تقريبا عند الكل و سهله تفهم. ومرات بتستخدمها للتسلية.

M1: Because these words are very common words and everyone knows them.

Sometimes I use them for fun.

الباحث: هل تستخدم الاختصارات في رسالتك؟

R: Do you use abbreviations in your SMS messages?

M1: احيانا ولكن مش كثير.

M1: Yes, but not a lot.

الباحث: شو المانع؟ ليش مابتستخدمهم؟ الشباب بتستخدموهم بكتره.

R: Why not? Why don't you use them? A lot of young people use them.

M1: صحيح. بس انا مابحب استخدمهم لانه اولانا بكتب اكثر رسائي بالعربي والعربي مافيه اختصارات كثير و كمان خوفا من عدم قدرة الشخص الثاني على فهم هاي الاختصارات.

M1: That's right, but I don't like to use them for two reasons. Firstly, I usually use Arabic in my messages and Arabic does not have a lot of abbreviations. Secondly, I usually worry about the receiver's inability to understand these abbreviations.

الباحث: قبل شوي انت قلت احيانا بتستخدمهم, طيب ليش بتستخدمهم؟

R: You've just said that you sometime use abbreviations, why do you use them in the first place?

M1: لانهم بسهلوا علي طباعة الرسالة.

M1: Because they make the typing process much easier.

الباحث: هل تستخدم ميزات قواعدية ؛ مثل حذف الفاعل ، الفعل, ادوات التعريف؟

R: Do you use grammatical features, such as omitting the subject, the object or the determiner?

M1: معلش مافهمت عليك.

M1: sorry, but I didn't understand.

الباحث: يعني احيانا لما بنكتب رساله بنحذف الفاعل مثل بدل مانكتب I am coming بنكتب coming or am coming

R: What I mean is that sometimes we omit the subject like *in I am coming* or we write *am coming* or *coming*

M1: نعم وخاصة لما برسل رساله باللغه الانجليزية.

M1: Yes, especially when I'm writing in English.

الباحث: مابتخاف الشخص اللي بترسله مايفهم عليك؟

R: Aren't you worried about being misunderstood?

M1: لا. لانه الناس كلها الان بتعرف هاي الاختصارات و خاصة الشباب اكثر شي

M1: No, because these things are very common especially among the young people.

الباحث: هل تستخدم علامات الترقيم؟

R: Do you use punctuation marks?

M1: مش دائما. مش ضروريه كثير.

M1: Not all the time, it is not that important.

الباحث: شو اكثر علامة ترقيم بتستخدمها؟

R: What is your most used punctuation mark?

M1: يعني ممكن علامة السؤال.

M1: I think the question mark.

الباحث: ليش؟

M1: نعم أستخدامها للتعبير بشكل افضل عن معنى الرسالة.

M1: Yes, I use them to enhance the meaning of the message.

الباحث: فيه اسباب ثانيه؟

R: Are there any other things?

M1: مرات اريح ويتوفر كلام كمان وحلوه هيك بتعبر.

M1: Sometimes it saves time by being more expressive than a whole sentence. They are also enjoyable.

الباحث: كيف حلوه؟

R: Enjoyable! how?

M1: انا بحبها لانها في شغلات مابتقدر تعبر عنها بالرساله الا اذا استخدمته؟

M1: I enjoy them because there are statements that can't be written unless you use the emoticons.

الباحث: ممكن توضح اكثر؟

R: Can you illustrate more?

M1: مثلا بدك تقول لصاحبك انك مقهور كثير بترسله مثلا اخخخخخخ بسسس.

M1: For example, if want to say to your friend you are so much upset about something; it is hard to convey how upset you are by just words.

الباحث: لو سالتك عن التمثيل الصوتي او ال phonetic spelling , بتعرف عنه؟

R: What if I asked you about phonetic spelling, do you know anything about it?

M1: لا والله. كيف يعني؟

M1: It is not clear for me what are you talking about.

الباحث: مثل *luv, tanx, u* , بدل ماتكتب *love, thanks, you* ؟

R: For example, instead of writing *love, thanks, you*, some people write *luv, tanx, u*.

M1: قليلا جدا. لأنني ما بستخدم اللغة الانجليزية كثير في رسائلي.

M1: I don't use it very often, because I don't use English a lot in my messages.

الباحث: هل تنتبه للقواعد اللغوية عندما تكتب رسائلك النصية؟ يعني بتراعي قواعد اللغة؟

R: Do you pay much attention to the grammar rules in your messages?

M1: نعم ولكن مش بشكل كبير. احيانا وحسب الشخص اللي يرسله.

M1: Yes, but I don't pay much attention to it. It depends on the receiver in the first place.

الباحث: وكيف يعني حسب الشخص اللي يرسله؟

R: What do you mean by it depends on the receiver?

M1: اذا كانت الرساله رايحه لصاحبي مابدقق. بس اذا بيعث رساله لابي او لواحد علاقتي فيه مش قويه, لا بدقق

M1: If I'm sending to my friends I don't check my grammar. However, if I'm sending to my parents or someone I'm not strongly related to , then of course I do proofread.
الباحث: طيب ليش؟

R: Well, why?

M1: لانه بخاف ابوي يبهدلني ويقوللي اني مابعرف اكتب. ومرات بخاف تصل المعلومة بشكل خاطئ.

M1: Because I fear that my father will scold me and tell me that I can't write.
Sometimes I fear to convey the messages in a wrong way.

الباحث: قبل ارسال الرساله, هل تعيد قراءتها قبل إرسالها؟ بمعنى هل تدققها قبل ارسالها؟

R: Before you send the message, do you re-read it? In other words, do you check it?

M1: مش كل المرات. و حسب الشخص اللي بيعثله الرساله.

M1: Not every time, and according to the receiver.

الباحث: طب ليش؟

R: Ok why?

M1: لأتأكد من عدم وجود اي اخطاء املائية او بالقواعد. وكمات بدقق الرساله اذا كان المحتوى تبعها مهم.
رسائل اصحابي مابدققها عادة.

M1: To make sure there is no spelling mistake or grammatical ones. Also it depends on the content of the message, if it is important or not. I usually don't check the SMS messages I send to my friends.

الباحث: قبل مانتهي في شي بتحب تضيفه؟

R: Before we finish, would you like to add anything?

M1: لا شكرا.

M1: No, thanks.

الباحث: شكرا جزيلا على وقتك وبارك الله فيك.

R: Thanks a lot for your time, God bless you.

M1: لاشكر على واجب

M1: Do not mention it.

Interview II

Male 2

-
- الباحث: صباح الخير عمر ,كيف حالك
- R: Peace be upon you. Good morning Omar. How are you?
- M2: السلام عليكم.
- M2: Peace be upon you.
- الباحث: عمر انا رايح اسالك كم سؤال عن الرسائل النصية.
- R: Omar, I am going to ask you some questions about text messaging.
- M2: اتفضل.
- M2: Go ahead.
- الباحث: كم صار لك تمتلك تليفون؟
- R: How long have you had your phone?
- M2: اول سمارت فون ولا تليفون عادي؟
- M2: You mean smart phone or regular mobile phone?
- الباحث: اي جوال.
- R: Anyone of them?
- M2: يعني حوالي عشرة سنوات.
- M2: May be 5 years.
- الباحث: يعني تستخدموا من 5 سنوات؟
- R: You mean you have been using it for 5 years?
- M2: بالضبط.
- M2: Exactly.
- الباحث: طيب ترسل رسائل نصية؟
- R: Do you send text messages?
- M2: بديت فيها حوالي قبل اربع سنوات.
- M2: I started 4 years ago
- الباحث: حوالي كم رسالة ترسل في اليوم؟
- R: How many messages do you send per day?
- M2: اول ما بديت كانت قليل بس دحين بدات تكثر شوي.
- M2: When I first started it was very little, but it is now increasing.

الباحث: الان حوالي كم يعني؟

R: About how many?

M2: يعني في اليوم الواحد حدود تقريبا من 10 الى 15.

M2: Between 10 and 15 a day

الباحث: طيب وكم رسالة بتيجيك بتستلم؟

R: Ok, and how many messages do you receive per day?

M2: برضوا بحدود 10 الى 15.

M2: Also between 10 and 15.

الباحث: متساوية طب عادة الى مين بترسل رسائل؟

R: The same? Who do you usually send your SMS messages to?

M2: والله تختلف احيانا لاصحابك و احيانا لناس تتعرف عليهم جداد.

M2: It is different. Sometimes to my friends and sometimes to people I've met recently

الباحث: العائلة عادة ما ترسل رسائل للعائلة.

R: What about your family? Do not you send them text messages?

M2: الرسائل العائلية عادتنا تكون رسمية يعني تعرف كيف زي رسائل الاعياد ومثل كذا.

M2: The text messages I send to my family are usually formal ones such as text messages I send them in Feasts or holy holidays.

الباحث: رسائل لايوك لايوك لايوك لاخوك لاخوك؟

R: Don't you send regular text messages to your father, mother, brother, sister?

M2: بالنادر. انا دائما اتصل بيهم.

M2: Seldom. I always call them.

الباحث: بس اصحاب اغلبهم اصحاب؟

R: So, you only send your messages to your close friends?

M2: بالضبط.

M2: Exactly

الباحث: مين برسلك الرسائل النصية غالباً؟

R: Who do you receive your SMS messages from?

F1: كمان اصحابي.

M2: Also from my friends.

الباحث: طيب لما تكتب الرسالة النصية ايش اللغة اللي تكتب فيها؟

R: When you send an SMS message, what language you usually use?

M2: انا حقيقة افضل اقع على لغة وحدة يعني يا اتكلم عربي يا اتكلم انجليزي.

M2: Actually, I like to use one language. I mean either I use English or Arabic.

الباحث: طيب ايش اللغة اللي انتا تكتب فيها يعني غالبا؟

R: Well, which language do you usually use?

M2: عربية.

M2: Arabic.

الباحث: العربية, انجليزي ما تستخدمها؟

R: What about English?

M2: احيانا.

M2: Sometimes.

الباحث: احيانا طيب ليش بتفضل العربية؟

R: Why do you prefer Arabic?

M2: يعني لغتي هادي واسهلي في الكتابة.

M2: Because it is my native language, and I find easier to use.

الباحث: اسهلك العربي في الكتابة؟

R: Is Arabic easier to write with?

M2: اسهلي في الكتابة

M2: Yes, it is much easier to write with.

الباحث: طيب اذا العربي اسهل ليش بتستخدم الانجليزي؟

R: Well, if Arabic is easier, why do you use English?

M2: احيانا تستخدم الانجليزي لانو في مصطلحات في الانجليزي ما تقدر تقولها بالعربي مثل استخدام

مصطلح LOL معناها laughing out loud ما تقدر تقولها بالعربي الضحك بصوت عالي.

M2: I use English because there are sometimes some English terms that you can't say in Arabic such as *LOL* which means *laughing out loud*. It is difficult to say this in Arabic as I am laughing very loudly.

الباحث: ايوا صح صح صعب تلاقياها.

R: Yes, you are right. It is sometimes difficult to find.

بس كدة طيب في ناس بيستخدموا يعني مثل البنات بيحبوا يستخدموا اللغة الانجليزية اكثر من العربي ليش يعني؟

R: That's all. I feel that girls for example like to use English more than Arabic. Why do you think they do that?

M2: هادا سؤال جيد جدا والله صح. صحيح هادا الكلام.

M2: This is a good question, and you are completely right.

الباحث: طيب ليش؟

R: Well, tell me why?

M2: ممكن لانوا علشان توريك انو هيا بنت راقية.

M2: May be to show that she is classy.

الباحث: طيب انتا عمرك وديت رسالة علشان توري للناس انو انتا راقية؟

R: Well, have you ever send a message to show people that you are classy?

M2: طبعا سويت.

M2: Of course, I did.

الباحث: بتعمل يعني؟

R: You did that?

M2: ايوا. العربي ما بتحس انو ببينك راقية. بنوري للناس انو انتا شخص متعلم بتفهم في الاشياء بترسلوا احيانا رسايل بالانجليزي.

M2: Yes. Arabic does not show that you have class like English. You also show people that you are educated

الباحث: طيب كونك طالب لغة انجليزية ما بيساعدك هادا انو بتستخدم اللغة الانجليزية في رسايلك اكثر من العربي؟

R: Since you study in English, does not this help you to use English more than Arabic?

M2: انا بتستخدم الانجليزي كثير صح اني بتستخدم العربي كثير بس برظوا بتستخدم الانجليزي كثير يعني في ناس بكلمهم انجليزي فقط وفي ناس بكلمهم عربي وانجليزي وفي ناس بكلمهم عربي فقط وزي كذا

M2: It does. It is true that I use a lot of English text messages, but I use Arabic more. I communicate with some people using only English; others I use only Arabic with them; and some others I use both languages, and so on.

الباحث: طيب هل تكتب بالعربي ولا بالانجليزي ولا العربيزي؟

R: Do you write English in Arabic letters? Do you use Romanized Arabic?

M2: اها اعرفها اعرف استخدمها بس مو كثير.

M2: I know it but I don't use it very often.

الباحث: ليش ما تستخدمها؟

R: Why don't you use?

M2: احس انها صعبة احس انها تصعب الكتابة النصية اكثر ما انو تسهلها.

M2: I feel it is difficult. I feel it complicates the writing of a text message rather than making it easier.

الباحث: طيب الرسائل اللي تصلك تكون غالبا باي لغة؟

R: Well, the message you usually receive, what language they are usually written in?

M2: عربية غالبا وبرضوا في انجليزي.

M2: Mostly Arabic, and sometimes English.

الباحث: بس عربي انجليزي ما تستخدمها؟

R: But again you do not use Romanized Arabic?

M2: انا ما بحبها بس اني اعرفها وبشوف الناس يستخدموها كثير والله بس ما بتحبها انتا ما بحبها.

M2: I do not use it because I do not like it. I see a lot of people using it, but I do not like it.

الباحث: طيب لما تكتب رسايك في العربي او في الانجليزي بتستخدم اختصارات؟

R: When you write your messages in Arabic or in English, do you use abbreviations?

M2: اختصارات؟

M2: Abbreviations?

الباحث: مثل بدلا من week تكتب wk بدلا من lol اللي هيا laughing out loud.

R: Such as wk fire week, LOL laughing out loud.

M2: ايوا ايوا طبعا طبعا.

M2: Yes, yes, of course, of course

الباحث: بتستخدمها دايما؟

R: You always use it?

M2: طبعا.

M2: Of course.

الباحث: طيب ليش بتستخدمها؟

R: Well, why do you use it?

M2: يعني اسرع في الكتابة وكمان اغلب الوقت بتكون مستعجل ويكون عندك واجب عندك شي بدك تخلص بسرعة علشان تقضي امورك عرفت كيف لما كل مرة بتكتبها بدون اختصارات حتاخذ وقت كثير طويل المحادثة.

M2: It makes me write faster, and also most of the times you have are in a hurry because you have a class or an assignment, something you need to finish quickly. If you write without abbreviations, it will take a long time.

الباحث: طيب تحب تستخدم لغة صعبة لغة معقدة ولا اللغة الدارجة العادية؟

R: Well, do you like to use a difficult language, or a language that you use daily?

M2: اللهجة العادية اللهجة العامية.

M2: I use the daily colloquial dialect.

الباحث: طيب لمن تكتب باللغة الانجليزية مثلا تحذف فاعل مثلا بدل ما تقول am coming تقول ؟coming

R: When you write in English, do you delete the subject pronoun or subject pronoun and auxiliary? For example instead of writing *I am coming*, we write *am coming* or *coming*.

M2: ايوا بالضبط.

M2: Of course, I do.

الباحث: وتحذف كمان اكزلري يعني تحذف ال I و am؟

R: You also delete an auxiliary such as *am* or *is*?

M2: ايوا .

M2: yes

الباحث: تحذفهم هدول؟

R: Do you delete them?

M2: بالضبط.

M2: exactly.

الباحث: طيب ليش بتحذفهم؟

R: Well, why do you delete them?

M2: يعني بتحذف طبعا علشان بتسرع الكتابة وكمان بتسهل ال texting .

M2: You delete them to speed up the writing of a text message.

الباحث: بتستخدم ترقيم punctuation

R: Do you use punctuation?

M2: لا بتاخذ وقت.

M2: No, no. I do not. It takes time

الباحث: من مرة ما تستخدمها؟

R: You do not use it at all?

M2: لا لا بتاخذ وقت.

M2: No, it takes time.

الباحث: ولا حتى question marks او commas ولا شي؟

R: Not even a question mark, or a comma?

M2: لا طبعا احيانا اذا كنت فاضي كثير.

M2: Most often, I do not unless I am not busy at all.

الباحث: ما بتخرب هادي الجملة؟

R: Does not this spoil the sentence?

M2: لا الشخص الثاني بي فهمها لانو بيكون نفس حالتك بي فهمها.

M2: No, because the other person understands it because he/she is just like you. He/she will understand it.

الباحث: اوكي طيب بتستخدم ال emoticons ال smileys .

R: Ok. Do you use emoticons?

M2: ايوا طبعا.

M2: Of course, yes.

الباحث: ليش؟

R: Why?

M2: لانو بتبين شعورك.

M2: Because they show your feelings.

الباحث: شو اكثر شي بتستخدموا؟

R: What is the most emoticon you use?

M2: Blushing.

الباحث: ليش انتا انسان خجول؟

R: Why? Are you a shy person?

M2: تقريبا تقدر تقول كدا.

M2: Almost. You can say that.

الباحث: طيب بتستخدم ال letter number homophones يعني بدل ما تكتب someone تكتب some1
تكتب 4u ؟

R: Ok, do you use some words with letters, or what is called letter and number homophones, such as some1, 4 instead of four, do you use such words?

M2: ايوا .

M2: Yes, I do.

الباحث: ليش بتستخدم هذول؟

R: Why do you use them?

M2: Because it is much easier to write 4 and u and not the whole thing.

M2: لانوا برظوا اسهل تكتب 4u يعني 4 واللتر u not the whole you اسهل كثير

الباحث: بس علشان السهولة يعني؟

R: Only because it is easier?

M2: بالضبط السهولة وسرعة الكتابة انتا بتخلص الكتابة بسرعة.

M2: Of course. Ease and speed in writing. It makes finish writing your message very quickly.

الباحث: طيب والناس الثانية بي فهموا عليك؟

R: Well, do other people understand your messages?

M2: طبعا طبعا يعني اذا كانوا بنفس المستوى السني.

M2: Of course, of course. I mean if they were in my age.

الباحث: طيب عمرها صارت انوا وديت واحد رسالة وقلك انا مش فاهم؟

R: Have you ever had a situation where you sent a message to someone, and replied that he does not understand your message?

M2: انا بعرف افرق هادي الرسالة بتروح لمين بتروح لواحد كبير ولا تروح لواحد في سني اذا بتوح لواحد في سني رايح يفهمها مية بالمية اذا راحت لواحد كبير حيقلي ايش الخرابيط هادي.

M2: I usually know to whom my message is going, whether it goes to someone in my age or someone who is older than me. If it goes to someone in my age he will understand it 100%, but it goes to someone old, he might tell me what nonsense you are sending me.

الباحث: phonetic spelling بدل ما تكتب love تكتب luv؟

R: What do you think about phonetic spelling, such as *luv* instead of *love*?

M2: ايوا صح مالهم؟

M2: Yes, what about them?

الباحث: بتستخدمهم هدول كمان؟

R: Do you use them?

M2: ايوا.

M2: Yes.

الباحث: ليش؟

R: Why?

M2: يعني هادي حركات جديدة بدل love تكتب luv

M2: I mean they are new trends to write *luv* instead of *love*

الباحث: يعني حركات جديدة بس هادا السبب؟

R: They are a new trend, that's why you use them?

M2: بس هادا في راياي انا انه تقول انهم كول كثير.

M2: In my opinion, you also tell others that you are cool enough.

الباحث: لما تكتب رسالتك بتنتبه للقواعد؟

R: Do you pay attention to the grammar of your SMS messages?

M2: لا لا اهم شي توصل المعنى.

M2: No, no. The most important thing is to convey the meaning.

الباحث: اهم شي المعنى اما القواعد مابتهم طيب ليش ايش السبب؟

R: The meaning is the most important thing and you do not care about grammar, what is the reason?

M2: لانوا لو حرصت على القواعد مثل السبجكت والفيرب بياخد وقت كثير.

M2: Because if I need to pay attention to grammar like the subject and the verb, then it will take too much time.

الباحث: لما تكتب رسالتك بتعملها editing يعني لما تطبعها بتشوف فيها اخطاء ولا لا؟

R: Before you send your SMS message do you usually proofread it or edit it? I mean do you check your message for mistakes?

M2: لا ما بدقق. لا بعد ما توصل الرسالة والتاني ببقلك ايش قصدك بتصير تدقق.

M2: No, but if the other person tells what you mean, you start proofreading.

الباحث: طيب لو رسلت رسالة لوالدك او مدرسك بتدقق؟

R: Well, if you send a message to your father or teacher, do you proofread?

M2: وقتها علشان شخص مهم بتدقق طبعا. اما صديق بيكون صديق عرفت كيف غير الاب او الدكتور.

M2: Yes, if the person is important, I do. My friend is different than my father or teacher.

الباحث: في شي بتحبي تضيفيه؟

R: Do you like to add anything?

M2: لا شكرا.

M2: No, thanks.

الباحث: شكرا جزيلا.

R: Thank you very much.

M2: عفوا.

M2: Welcome!

Interview I

Female 1

-
- الباحث: السلام عليكم.
- R: Peace be upon you.
- F1: وعليكم السلام.
- F1: Peace be upon you too.
- الباحث: كيف حالك اليوم؟
- R: How are you today?
- F1: الحمد لله بخير. تمام
- F1: I am fine. Thanks God
- الباحث: كيف امور دراستك؟ انشالله ماشيه تمام؟
- R: How is your study? Hope it is going great.
- F1: يعني ماشي حالها و الحمد لله.
- F1: It is ok. Thanks God
- الباحث: كم عمرك انسه؟
- R: How old are you Ms?
- F1: 19 سنه.
- F1: 19 years
- الباحث: ما شاء الله.
- R: All praise to God
- الباحث: شو بتدرسي؟
- R: What is you major?
- Education:F1
- F1: Education
- الباحث: ما شاء الله.
- R: All praise to God
- الباحث: هذي السنه الاولى؟
- R: Is this your first year?
- F1: لا. الثانيه. فصل اول.
- F1: No. Second year, first term
- الباحث: مغلش نبدا بالاسئله؟

R: No. Second year, first term

ok :F1

F1: Ok

الباحث: عندك تلفون خلوي؟

R: Do you have a mobile phone?

F1: نعم.

F1: Yes

الباحث: كم صار له عندك التلفون الخلوي؟

R: How long have you had your mobile phone?

F1: اربع سنين.

F1: Four years

الباحث: وكيف علاقتك مع الخلوي؟

R: Do you like it?

F1: بحبه كثير.

F1: I love it.

الباحث: بتكتبي رسائل نصية يعني SMS messages ؟

R: Do you send SMS messages?

F1: اكيذ بكتب رسائل النصية.

F1: Yes. Of course

الباحث: كم رسالة نصية يعني بتكتبي كل يوم ؟

R: How many messages do you send per day?

F1: من 5-7 رسائل.

F1: From 5 to 7 text messages

F1الباحث: كم رسالة نصية بتستلمي يوميا ؟

R: How many messages do you receive per day?

F1: كمان من 5-7 رسائل.

F1: Also from 5 to 7 text messages

الباحث: لمين بترسلي الرسائل النصية ؟

R: Who do you usually send your SMS messages to?

F1: صاحباتي و ماما وبابا.

F1: My mother, father, and female friends

الباحث: لمين اكثر الاهل ولا الاصحاب؟

R: Who do you send more messages to, family or friends?

F1: الاصحاب اكثر.

F1: More to friends.

الباحث: مين برسلك الرسائل النصية غالباً؟

R: Who do you receive your SMS messages from?

F1: كمان اصحابي و اهلي.

F1: Also from my family and friends.

الباحث: لما بتبعثي رساله, شو هي اللغة التي بتستخدميها عادة في كتابة رسائلك النصية؟

R: When you send an SMS message, what language do you usually use?

F1: بستخدم عربي و انجليزي وبعض الامرات عربيزي.

F1: I use Arabic, English, and sometimes Arabish.

الباحث: اياها اكثر لغه بتستخدميها؟

R: Which language do you use the most?

F1: انجليزي وبعدين عربي

F1: English then Arabic.

الباحث: والعربيزي؟

R: What about Arabish?

F1: بيجي بالترتيب الثالث.

F1: It comes in the third place.

الباحث: طيب ليش بتسعملي الانجليزي اكثر من العربي؟

R: Ok, but why do you use English more than Arabic?

F1: انا وصاحباتي متعودين نبعت لبعض رسائل بالانجليزي من زمان.

F1: My female friends and I have been used to using English in our SMS messages for a long time.

الباحث: ليش؟ في سبب معين؟

R: Why? Is there a particular reason for that?

F1: لا. بس لانه دراستنا بالانجليزي. وانا بحس اللغة الانجليزيه لما بكتب فيها بتكون اسهل. ولما بتيجيني رساله بالانجليزي برد عليها بالانجليزي.

F1: No, but because we study in English in the university. I also feel that English is easier to write. And when I receive a message in English, I respond in English.

الباحث: بتكتبي لاهلك بالعربي ولا انجليزي؟

R: Do you use Arabic or English when you write to your family?

F1: لا طبعا بالعربي.

F1: No, I use Arabic of course.

الباحث: ليش؟

R: Why?

F1: ما يعرفوا انجليزي.

F1: They do not know English.

الباحث: ومع مين كمان بتستخدمي العربي؟

R: Who else do you use Arabic with?

F1: مع صبايا بتعرف عليهم جديد.

F1: With new female friends.

الباحث: طيب العربيزي لمين بتكتبيه؟

R: OK, who do you use Arabish or Romanized Arabic with?

F1: للاصحاب.

F1: Friends

الباحث: اصحابك كلهم يفهموا العربيزي؟

R: Do all your friends understand Arabish?

F1: تقريبا كلهم. كل الشباب هالاياهم يفهموها وبستخدموها.

F1: Almost all of them. All young people know it these days.

الباحث: بس انا بحس انها صعبه حتى تفهم؟

R: But I feel it is difficult to understand.

F1: انا كنت افكرها صعبه في البدايه بس لما تتعود عليها بتشوفها حتى اسهل من العربي.

F1: In the beginning, I also thought it was difficult, but when I got used to it, I found it easier than Arabic.

الباحث: هل تستخدمي أكثر من لغة في الرسالة الواحدة؟ ولا بتستخدمي كلمات انجليزيه او غريبه مثلا؟

R: Do you use more than one language in your SMS message? Or you use English or French words for example?

F1: اه باستخدام كلمات انجليزي لما بكتب بالعربي.

F1: Yes, I sometimes use English words when I write in Arabic.

الباحث: ليش؟

R: Why?

F1: اسهل واحلى كمان. واحيانا الكلمات الانجليزي نتدخل لحالها عالرساله بدون تخطيط

F1: It is easier and more beautiful. And sometimes the English words go inside the message without planning

الباحث: كيف احلى؟

R: What do you mean by more beautiful?

F1: ارقى يعني واجمل. وكمان اللغه الانجليزيه بتعطي الرساله نكهه خاصه. واحيانا بتستخدمها عشان تحسس الطرف الثاني انك بتحكي انجليزي خاصه ازا بتتعرف عليه لأول مره.

F1: More decent and more beautiful. English give the message a special taste. And sometimes you make the receiver feel that you know English, especially if you know the person for the first time.

F1: الباحث: كلمات مثل شو؟

R: Words like what?

F1: كلمات كثيره مثل (love, fabulous, great, tomorrow)

F1: Many words like (love, fabulous, great, tomorrow)

الباحث: هل تستخدم الاختصارات في رسائلك؟

R: Do you use abbreviation in your SMS messages?

F1: اكيد بتستخدمها.

F1: Of course!

الباحث: ليش بتستخدميهم؟

R: Why do you use it?

F1: اسرع واسهل كثير.

F1: Faster and much easier.

الباحث: كيف يعني؟

R: How?

F1: بسهلوا علي طباعة ال message.

F1: They make the typing process easier and faster.

الباحث: هل تستخدم ميزات قواعدية؛ مثل حذف الفاعل، الفعل، ادوات التعريف؟

R: Do you use syntactic features such as deletion of subject pronoun, articles, verbs?

F1: كيف يعني.

F1: How, what do you mean?

الباحث: يعني احيانا لما بنكتب رساله بنحذف الفاعل مثل بدل مانكتب I am coming or coming am coming

R: We sometimes delete the subject pronoun or subject pronoun and auxiliary. For example instead of writing *I am coming*, we write *am coming* or *coming*.

F1: نعم اكيد وخاصة لما برسل رساله باللغه الانجليزيه.

F1: Yes, sure. Especially when I send a message in English

الباحث: مابتخاف انه الشخص اللي بترسله يكون مايفهم عليك؟

R: Don't you worry that the receiver will misunderstand your message?

F1: الاصحاب كلهم بعرفوا هاي الاختصارات.

F1: All my friends know these abbreviations.

الباحث: حد عمره شكا انه مافهم على رسالتك؟

R: Has anyone ever complained that he/she didn't understand your SMS message?

F1: نادرا جدا. I don't remember.

F1: Very rarely. I do not remember.

الباحث: هل تستخدم علامات الترقيم؟

R: Do you use punctuation marks in your text messages?

F1: نعم. بحسها ضروريه كثير. وبتسهل فهم الرساله.

F1: Yes. I feel it is very important and makes the message easy to understand.

الباحث: فيه علامة ترقيم معينه بتستخدمها بكتره؟

R: Is there a specific punctuation mark that you use so often?

F1: النقطه و علامة السؤال و الفاصله.

F1: The period, the question mark, and the comma.

الباحث: ممكن تقوليلي ليش؟

R: Could you please tell me why?

F1: عشان أميز السؤال من الجمله في المحادثة. وكمان بتخلي الرساله اوضح.

F1: I use them in order to distinguish the question from the statement in the message, and to make my message clearer.

الباحث: هل تستخدم الوجوه يعني السمايليز او اللي بسموها الايميتيكونز.

R: Do you use faces or smileys or what they call emoticons in your SMS messages?

F1: نعم. دائما. وبحبها كثير كثير.

F1: Yes, Always. And I like it so so much.

الباحث: شو السبب؟

R: Why?

F1: نعم كثيرا ممتعة ومضحكة

F1: Yes, because it is funny and interesting.

الباحث: كيف يعني؟

R: How?

F1: يعني انا بستمع لما برسلها وكمان بحب بييجني رسائل فيها سمايليز.

F1: I enjoy it when I send a message with an emoticon, and I also like to receive messages with emoticons.

الباحث: بس عشان هيك؟

R: Is that the only reason?

F1: ولا كمان هي معبره.

F1: No, it is also expressive.

الباحث: كيف معبره.

R: What do you mean by expressive?

F1: بتعبر عن شعورك اذا كنت فرحان, زعلان, تعبان. وفي شغلات كثيره كمان.

F1: They express your feeling whether you are happy, upset, tired, and many other things.

الباحث: طيب فيه بعض الاحيان بنستخدم كلمات معها ارقام بسموها Letter and number homophones, مثل 1 some, او 4 بدل four هل تستخدمها؟

R: Ok, sometimes we use some words with letters, or what is called letter and number homophones, such as some 1, 4 instead of four, do you use such words?

F1: نعم بستخدمها عشان الاختصار والسرعه.

F1: Yes I use them for speed and abbreviation.

الباحث: هل تستخدم الاونوماتوبويا مثل : zzzz, آه ه ه ه, ههههههه؟

R: Do you use onomatopoeic words like zzzzzz, hahahaha?

F1: نعم أستخدمها. نتساعدني اعبر عن موضوع الرساله.

F1: Yes, it helps me express the content of my message.

الباحث: فيه اسباب ثانيه؟

R: Are there any other reasons?

F1: وبتوفر وقت كمان واستخدمها ممتع و معبره.

F1: It also saves time. It is interesting and expressive also.

الباحث: كيف ممتعه ومعبره؟

R: What do you mean by that?

F1: في اشياء ما بتقدر تقولها بالرساله الا عن طريقها وهي دارجه كثير عند الشباب.

F1: There are things that you cannot say in your message unless you use these words, and all young people use them.

الباحث: طيب شو رايك بالتمثيل الصوتي او ال phonetic spelling, بتعرف عنه؟

R: What do you think about phonetic spelling, do you know anything about it?

F1: كيف يعني؟

F1: What do you mean?

الباحث: مثل u, tanx,luv, بدل ماتكتب love, thanks, you ؟

R: Like when you use words like *luv* instead of *love*, *tanx* instead of *thanks*, *u* instead of *you*.

F1: نعم بستخدمها دائما كثير في رسائلي.

F1: Yes, I use them very often in my messages.

الباحث: هل تنتبه للقواعد اللغوية عندما تكتب رسائلك النصية؟

R: Do you pay attention to the grammar of your SMS messages?

F1: اكيد. احيانا وحسب الشخص اللي ببعثله الرساله. يعني مع اصحابي ماينتبه كثير لانه مش مهم. بس احيانا

ازا كانت الرساله مهمه. اه نعم بحاول اتقيد باللغه والقواعد عشان اتأكد من صحتها

F1: Yes, of course. It depends on whom I am writing to. For example, I do not pay so much attention when I write to my close friends because it is not important.

الباحث: قبل ارسل الرساله, هل تعيد قراءتها قبل إرسالها؟ بمعنى هل تدققها قبل ارسالها؟

R: Before you send your SMS message do you usually proofread it or edit it?

F1: بعض المرات. و كمان حسب الشخص اللي ببعثله الرساله.

F1: Sometimes. And also depending on whom I am writing to.

الباحث: ليش؟

R: Why?

F1: عشان ماتكون فيها اي اخطاء مثل باللغه مثلا.

F1: In order to avoid grammatical mistakes

الباحث: فيه اسباب اخرى؟

R: Are there any other reasons?

F1: لا. بس عشان هيك.

F1: No. That's it.

الباحث: متى بتدققي الرسائل؟

R: When do you proof read your SMS message?

F1: لما تكون الرساله مهمه, بحب رسالتي تكون واضحه وقواعديه.

F1: I do when the message is important because I like to be clear and grammatical.

الباحث: في شي بتحبي تضيفيه؟

R: Do you like to add anything?

F1: لا شكرا.

F1: No, thanks.

الباحث: شكرا جزيلاً على وقتك وعلى معلوماتك.

R: Thank you very much for your time and for your information.

F1: عفوا.

F1: Welcome!

Interview II

Female 2

-
- الباحث: السلام عليكم.
- R: Peace be upon you.
- F2: وعليكم السلام ورحمة الله.
- F2: Peace be upon you too
- الباحث: كيف حالك.
- R: How are you?
- F2: الحمد لله منيحه.
- F2: Good. Thank God
- الباحث: تهلون دراستك؟
- R: How is your study?
- F2: الحمد لله ممتازه.
- F2: Great. Thank God
- الباحث: كم عمرك انسه F2؟
- R: How old are you?
- F2: 20 سنه.
- F2: I am 20 years old.
- الباحث: في اي سنه انتي الان؟
- R: what year you are right now?
- F2: ثانيه
- F2: Second year
- الباحث: شو بتدرسي؟
- R: What do you study?
- F2: اقتصاد
- F2: Economics
- الباحث: ما شاء الله.
- R: Praise to God
- الباحث: جاهزه نبيلش؟

R: Are you ready to start?

F2: نعم اتفضل

F2: Yes, please

الباحث: في عندك تلفون خلوي؟

R: Do you have a mobile phone?

F2: نعم.

F2: Yes

الباحث: كم صار له عندك؟

R: How long have you had it?

F2: 6 سنين.

F2: 6 years

الباحث: وتستخدميه كثير؟

R: Do you use it a lot?

F2: طبعا اكيد.

F2: Yes, of course

الباحث: بتستخدميه للمكالمات بس؟ ولا بتستخدميه لكتابة ال رسائل نصية كمان يعني SMS messages؟

R: Do you use it to make phone calls or you use it also to write SMS messages?

F2: للتنتين. اكيد بكتب رسائل النصية.

F2: Both. Sure, I use it for SMS messages too.

الباحث: كم رسالة نصية بتكتبي كل يوم؟

R: How many SMS messages do you send per day?

F2: مابعرف بالزبط نديش.

F2: I do not know exactly how many messages I send per day

الباحث: يعني اقل من 5 , ولا اكثر من 5, او اكثر من 10؟

R: I mean less than 5, more than 5, or more than 10 messages.

F2: اكثر من 5 وائل من 10. وامرات اكثر من 10

F2: More than 5 and less than 10, and sometimes more than 10

الباحث: وكم رسالة نصية بتستلمي يوميا؟

R: How many SMS messages do you receive per day?

F2: كمان نفس الرقم.

F2: Also about the same number of messages

الباحث: لمين بترسلي اكثر الرسائل النصية تبعتك؟

R: To whom do you send your SMS messages the most?

F2: خطيبي واصحابي وصاحباتي.

F2: My fiancé, and my friends.

الباحث: واهلك؟

R: What about your family?

F2: واهلي كمان. عائلتي اخوي واختي.

F2: Also my family. My brother and sister.

الباحث: بترسلي لناس ثانيين؟

R: Do you send SMS messages to any other people?

F2: نليل كثير.

F2: Rarely

الباحث: مين برسلك الرسائل النصية غالباً؟

R: From whom do you receive your messages the most?

F2: خطيبي واصحابي اكثر شي.

F2: My fiancé, family, and friends the most

الباحث: شو هي اللغة التي بتستخدميها عادة في كتابة رسائلك النصية؟ لما بتبعثي رساله باي لغة بتكتبيها؟

R: What language do you use when you write your SMS messages?

F2: بستخدم انجليزي وعربي وبستخدم الارابش كمان.

F2: I use English, Arabic, and also Romanized Arabic.

الباحث: اياها اكثر لغة بتستخدميها؟

R: Which language do you use the most?

F2: انجليزي

F2: English.

الباحث: واللغه الثانيه؟

R: What about the second most language you use?

F2: الارابش

F2: Romanized Arabic

الباحث: وثالثا العربي؟

R: And Arabic comes third?

F2: نعم.

F2: Yes.

الباحث: العربي اقل لغة بتستخدميها مع انها لغتك الام؟ ماهو السبب؟

R: What is the reason for using Arabic the least although it is your native language?

F2: ما يعرف بس بحب اكتب بالانجليزي والارابش اكثر.

F2: I do not know, but I like to use English and Romanized Arabic more.

الباحث: مافي سبب معين؟

R: Is there a particular reason?

F2: بجوز لانه انا واصحابي متعودين من زمان نبعت لبعضنا رسائل بالانجليزي

F2: May be because my friends and I are used to sending messages to one another in English.

الباحث: طيب ليش؟

R: But why?

F2: ممكن لانه الانجليزي والارابش اسهل واسرع للطباعه.

F2: May be because English and Romanized Arabic are easy to use and type.

الباحث: في سبب اخر؟

R: Is there any other reason?

F2: ممكن لانه دراستنا بالانجليزي بتخلي العمليه اسهل. وكمان لاتنسى انه الانجليزي لغة العالم

F2: Also may be because we study English in the university, which makes the process of using English much easier. Also do not forget that English is the language of the world.

الباحث: طيب والارابش ليش اكثر من العربي؟

R: Ok, but why do you use Romanized Arabic more than English?

F2: اكيد لانه اسهل بالطباعه واكثر العالم هلا يستخدموها

F2: I am sure because it is easy to type, and most of the people are using it nowadays.

الباحث: بتكتبي لاهلك بالعربي ولا انجليزي؟

R: Do you use Arabic or English with your family?

F2: بالعربي. بس ماما احيانا بيعتلها بالانجليزي.

F2: I use Arabic, but sometimes I use English with my mother.

الباحث: شو السبب؟

R: What is the reason?

F2: بابا مدرس لغه عربيه وجربت بعته بالانجليزي مره او مرتين وما حياها. وماما لما بيعتلها بالارابش مرات مابتفهم علي.

F2: My father is an Arabic teacher. I tried to send him messages in English once or twice, but he did not like it. Also my mother has some difficulty understanding my message when I use Romanized Arabic.

الباحث: مع مين بتستخدمي العربي اكثر اشي؟

R: Who do use Arabic with the most?

F2: مع بابا و لما ببعث رساله جديه كثير.

F2: With my father and when I send serious SMS messages.

الباحث: طيب العربيزي لمين بتكتبيه؟

R: Ok, what about Romanized Arabic, who do you use it with?

F2: للاصحاب.

F2: My friends.

الباحث: هل تستخدمي أكثر من لغة في الرسالة الواحدة؟ ولا بتستخدمي كلمات انجليزيه او غريبه مثلا؟ يعني بتخطي كلمات من لغات مختلفه؟

R: Do you use more than one language when you write your SMS message? Or do you use English or foreign words, for example? In other words, do use words from different languages in one text message?

F2: نعم. دائما. خاصه لما بكتب رساله بالعربي بستعمل معها كلمت انجليزيه

F2: Always, especially when I write an Arabic message, I use English words.

الباحث: ليش؟

R: Why?

F2: بتوصل المعنى بسهولة وهاي الكلمات بتستخدمها احنا الاصحاب مع بعض كثير. في اغلب الرسائل وخاصة التي للأصدقاء. لانها شائعة وفيها تميز. علي سبيل المثال , okay , deal , see you .

F2: Because they convey the message easier, and these words are usually used among the friends because they are very common and special.

الباحث: هل تستخدمي الاختصارات في رسائلك؟

R: Do you use abbreviation in your text messages?

F2: اكيد بتستخدمها.

F2: Of course, I do.

الباحث: ليش بتستخدميهم؟

R: Why do you use them?

F2: اسرع واسهل كثير.

F2: Because they are fast and easy to use.

الباحث: كيف يعني؟

R: What do you mean?

F2: بسهلوا علي طباعة ال message.

F2: They facilitate the process of typing a message.

الباحث: هل تستخدم ميزات قواعديّة؛ مثل حذف الفاعل، الفعل، ادوات التعريف؟

R: Do you use syntactic features such as deletion of subject, verb, or articles?

F2: كيف يعني؟

F2: How, what do you mean?

الباحث: يعني احيانا لما بنكتب رساله بنحذف الفاعل مثل بدل مانكتب I am coming or am coming.

R: We sometimes delete the subject pronoun or subject pronoun and auxiliary. For example instead of writing *I am coming*, we write *am coming* or *coming*.

F2: نعم اكيد وخاصه لما برسل رساله باللغه الانجليزيه.

F2: Of course, especially when I send a message in English.

الباحث: مابتخاف انه الشخص اللي بترسله يكون مايفهم عليك؟

R: Don't you worry that the person will misunderstand your message?

F2: الاصحاب كلهم بعرفوا هاي الاختصارات.

F2: All my friends know these abbreviations and deletions.

الباحث: حد عمره شكاه انه مايفهم على رسالتك؟

R: Anyone has ever complained that he/she does not understand your message?

F2: لا.

F2: No.

الباحث: هل تستخدم علامات الترقيم؟

R: Do you use punctuation marks in your text messages?

: نعم. بحسها ضروريه كتير. وبتسهل فهم الرساله.

F2: Yes, because I feel they are so important in the message.

الباحث: فيه علامة ترقيم معينه بتستخدمها بكثره؟

R: Is there a specific punctuation mark that you use so often?

F2: ممكن النقطه و علامة السؤال.

F2: May be the period and the question mark.

الباحث: ليش؟

R: Why?

R: How are they interesting and expressive?

F2: في اشياء مابتقدر تقولها بالرساله الا عن طريقها وهي دارجه كثير عند الشباب.

F2: There are things you can't express in your message, so you use these words to help you send an expressive message.

الباحث:طيب شو رايك بالتمثيل الصوتي او ال phonetic spelling, بتعرف عنه؟

R: What do you think about phonetic spelling, do you know anything about it?

F2: كيف يعني؟

F2: How?

الباحث:مثل u, tanx,luv, بدل ماتكتبك you, thanks, love ؟

R: Like when you use words like *luv* instead of *love*, *tanx* instead of *thanks*, *u* instead of *you*.

F2: نعم بستخدمها دائما كثير في رسائلي.

F2: Yes, I always use them in my messages.

الباحث: هل تنتبه للقواعد اللغوية عندما تكتب رسائلك النصية؟

R: Do you pay attention to the grammar of your SMS messages?

F2: اكيد. احيانا وحسب الشخص اللي ببعثله الرساله. يعني مع اصحابي مابتنبه كثير لانه مش مهم. بس احيانا اذا كانت الرساله مهمه. اه نعم بحاول اتقيد باللغه والقواعد عشان اتأكد من صحتها

F2: Yes, of course. Sometimes and it depends on the receiver of the message. For example, if I send a message to my friends, I don't pay attention to the grammar. However, if the content of the message is important, then, yes, I try to adhere to the grammar of the language to make sure the message is correct.

الباحث: قبل ما ارسل الرساله, هل تعيد قراءتها قبل إرسالها؟ بمعنى هل تدققها قبل إرسالها؟

R: Do you proofread your message before you send it?

F2: بعض المرات. و كمان حسب الشخص اللي ببعثله الرساله.

F2: Sometimes, and also it depends on the person I am sending the message to.

الباحث: ليش؟

R: Why?

F2: عشان ماتكون فيها اي اخطاء مثل باللغه مثلا.

F2: To avoid any language mistakes.

الباحث: فيه اسباب اخرى؟

R: Are there any other reasons?

F2: لا. بس عشان هيك.

F2: No, I don't think so.

الباحث: متى بتدققي الرسائل؟

R: When do you proofread your SMS message?

F2: لما تكون الرساله مهمه, بحب رسالتني تكون واضحه وقواعديه.

F2: When the content of the message is important, I like it to be clear and grammatical.

الباحث: في شي بتحبي تضيفيه؟

R: Is there anything that you like to add?

F2: لا شكرا.

F2: No, thanks.

الباحث: شكرا جزيلا على وقتك.

R: Thank you so much for your time

F2: عفوا.

F2: You are welcome.

Appendix H

Samples of Lexical Features

Abbreviation			
English Text Messages			
No.	Males	No.	Females
1.	U hve massari? need 2 buy fone card :(	1.	How was dnce in alzwaj ams? Was joyful ha? :)
2.	hahaha getting washm this wkend!!! U wanna do one. C u l	2.	want ur car becoz my mother sick an need to take her to hspital
3.	Gd moorning keefek? U study good? Think its gonna be tough exam g l	3.	Cn you tell Dr that am going to be late for 5 mnts latinsi plssss
4.	Thank Allah u paaassed tst hppy 4 y :)	4.	Cn you pick me up after class coz my car kharbaaneh. Uhuhuh
5.	I hve 2 talk 2 bakir b he acting stupid dayman	5.	If u in balad i wnt u to look 4 usb pl
6.	Oops frgot to cal you Latistana nt comin to class c u s	6.	thas rght we shuld all be hnd wa7deh :)
7.	Cmn plz i am alwyz nice to you :)	7.	Am almost finishd , will bring with me to clss bukrah
8.	Cn u find a place for me and my bro ? Be ther in 2 dys T A	8.	Mmmm good what you studying? Latguuly math
9.	u home bro ? gonna stop by	9.	Marhaba this is my nw mob Numb
10.	Sry bs if u c him in office tell him t call me plz	10.	He jst behaving lke dis all time shi mish ghareeb

10.	Leaving class after 15 mints . Wfm	10.	Thank Allah u should be v hppy and relaxd :)
12.	She wth you? lyng :)	12.	should see my friends they are worse thn yours kasal min el2akhir :)
13.	Call you lter xxxxx :-*	13.	Have only two. Wnt one?
14.	Hw he doing 2night? better? Inshallah g d	14.	Im sure I wnt 2 meet nas 7ilween like u :)
15.	Khkhkh really feel bad. Whole thing soooo frstrating :(	15.	Wats wrong with her laptop Esh almoshkla?

Abbreviation			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	sho malak ma btrde fe she? :(	1.	sho hek bnkoon a5er mn ya3lam wlama ne3raf ma btr'9a te7kelna meen lah lah
2.	btawfeeee2 ya a7la Dr yes3dek ma a7sanek	2.	3andy 3'lat be Multiple Choice
3.	a9ln daymn b7ki 3nk karemeh o betd7i 3ashan 3'eerk 7ata eni bshbhek b 7atem	3.	kaman 1 mnth barja3 la maga9 raasi : (
4.	Ufufuf malkoo 3alii ente bt7ke heek w 3'eerek bgoule 6l3t mtlk mtel 3'eerak :(	4.	nazalna dfater el t5roj tb3oona in M3 level 0.. lele be7eb yoktoble :)
5.	ya yazn wlah msh 3aref shu bede a8olk ay rooo888 3ad bla habal :-p	5.	sho hek bnkoon a5er mn ya3lam wlama ne3raf ma btr'9a te7kelna
6.	ya zam fe3lan 2nk ga7of y3ni b3dk ma bataltha hay el habit wlk 3abd el karem	6.	Btw wallah ana l2rfjrjeek bt7ki 3ni ana ele bnam mn don ma enta 27kki ahh okiii

7.	shoooo bl nsbeeh Ili shofto elyooOOOOoom :(	7.	7bebee m7mood wllh b6l3lkk sede wa7sn mnha kmaan I wish you the best
8.	f3lan 2nkoom nawar shu had nas 2a5er zman Tfooooo 3lekoom ya klaaaaab :(	8.	hahahaha malk lola twfe2 rbha kan enta ma 9art star 97
9.	Hi mnwre sure mn 2bel tab3n w2t nazlna el pics	9.	meeeeen 9art m3oooo y36ene 7aal 8bul ma a5boo6 al mob bel 7eee6
10.	la t5afe ma fe she bs eshe ra7 tffja2e feeh	10.	mo ana ele ba7ki this way enta fashret la7alk :P
10.	keef elmt7aaaaan 2e sa3a ?	10.	Ufff plssss lesh hal7ke ele malu da3i you know me
12.	bkrah dfa3 alrosom lamta ra7 edal ? :(	12.	sho bdna nelbaaaas y3ni daroore sa7batna yo5tobo effff
13.	Salaam ya maaaaan 7awalt 2tasel m3ak bs maradeet :(	13.	nooo ajlnaha lsh3ar a5er e3ne may be osbo3 jay enshallah srroy
14.	Yazam shu halwartah ele wirtnahaaa ma3 dr samer :(	14.	grgorty wallah mshta2etlek komeat komeat ....w 3ende exam wlsa ma ft7to bs
15.	sho oslte bl salama tmnene 3nk lma tosle	15.	hhhhh 7bii tarre8 bs lssank mllan 3dmm 3ashan tl7s booozza. Btw miss you ya

Abbreviation			
Arabic Text Messages			
Males		Females	
مشاء الله و يبسر لك اموووورك	1.	طب يا الكلبة ايش اسوي انا بالاكل ☺	1.
هههه اليوم عليك اللنش الله لا يهينك .. عايزك شششد حييييييك ;)	2.	صراحه المس ما بتشرح كويس بس بتقرأ قراءه سريعه وما نفهم و تجلس تتقتنا ع الحبه فيري بيكي	2.

Borrowing

English Text Messages

No.	Males	No.	Females
1.	Ok bs coming o not	1.	How was dnce in alzawaj ams? Was joyful ha? :)
2.	Don't hve engh mony. El kundarah v expensive . hav extra :(	2.	waited for u more than 45 m. I had to leave ma3 elsalamah :)
3.	Are you hme? 2keed ? OK b am conming now	3.	Y know good restaurnt in Zarqa? Taba3 mashawi
4.	she comin ova soon inshallah , so try to b here asap ;)	4.	who caaares? I3mal shu mabidak , will be waitng when u chnge ur mind :)
5.	Home hal7een ? need 2 come see y :)	5.	Did you see hw she acting wallah didn't say anything to her
6.	Cal u? Latkhaf am sure she will :(	6.	Its ok bt it fill smething in kteer ra2i3 in my life hahahaaa :d
7.	Ok rula can I 7akeeky 2morrow cuz I go sleep nw c u t	7.	B nw b4 i get upset. Bti2ahrni bkalamak
8.	Hmmm like America kytheer . wishin to go study there l8r	8.	Mmmm good what you studying? Latguuly math
9.	Come on enjoy ur life u makin things sooo complicated . Tannish :(	9.	went to office and complained to him abt grade. Think he do somthing inshallah
10.	Send me ur nmbr jic ba3taazuh need it	10.	should print it out. Its m easier to study jarby wo shofy
11.	I hve 2 talk 2 bakir b he acting stupid dayman	11.	Im srroy, i really feel slpy now, gn ya batah :)
12.	b home wen u finish rineely will come an tke y :)	12.	I wnt with my fathr to jerash to see my grndmothr she kteer sick ya 7araaam

13.	U cn cme any yuum , be hpy to see y :-*	13.	Uuuffff tired 2 be nice with u and still wnt 2 mke me feel bad ir7amni shway plz
14.	U hve massari ? need 2 buy fone card :(	14.	ok tday? Tld yasmeen abt bday party? Khabry fadia too
15.	I did ktheeeeer good in exam, wish u do same	15.	S surprised. Amer tld us shu el7mar awadh did? I cant imgne hw he did that

Borrowing			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	9ba7 el5eer ya Man , kef el7al w \$o el25bar??	1.	t2akadet meno ba3ed 2l exam
2.	Hello Dr pls lama tsale7 el wara2 plz khabrni	2.	Hyih ma7akatli ana mit2akdeh i swear to God
3.	7abebte bakeer 5aleeki la next year :(	3.	ay ya 7lw 2l 3omor klo n\$alla sory 3\$an 2jat mt25ra
4.	Salaam sho ishtretalk laptop min elaaaa'7ir	4.	embare7 prblm ma kafatne bs ma bkoon 3noood ezama 5aleathom ye9ero ye7lefo b 3omri
5.	Hi mnwre sure mn 2bel tab3n w2t nazlna el pics	5.	I mashi filshware3 bedoon ma a3raf wean ana wala wean ray7a sho3oor baaad
6.	3 fekra msh ra7 28dar 2mor 3leke al eom sorry 7bebte.	6.	3andy 3'lat be Multiple Choice
7.	2na left 7bebte bkra bshofak xxxxx mua	7.	yazan 7abebe msh kol da8e8ah el status update ya3ne 237mne shoe :P

8.	Mmm mo mshkala 5las bshofak al 5mees al jae bye bye	8.	thaanks kteeeeeer kteer la kol el friends 3l birthday wishes 7abeebeene entoo
9.	ma 3andyee mo7a6rat 2moro Lol :)	9.	Ed3oly plz a6eeb walah motet mn 8a7a 7asa 2lbe bdo ew2f :((
10.	Mta mraw7a 3al home	10.	hhhhh 7bii tarre8 bs lssank mllan 3dmm 3ashan tll7s booozza. Btw miss you ya
11.	Hi rano\$ kefk bedk teje elyom 3ala el school	11.	dear 7bebey...kool saneh wn7na m3 b3d wya rab nkamel ba2i 3omrna swa
12.	kefk 5alaste draseh 3 el quiz	12.	hi bs bde 2tlab mnak talab tjebele la man3 mn doctor al jldea eza fadea ?
13.	AL klaciko la real inshaa Allaaaah :)	13.	r7 n3mal elha paaarty enshala etf2na ?
14.	hi mta r7 nta3 3ala shan nsoar soa ?	14.	yes , bs 2e sa3a el E. dorori 3rif la2inuh mabidy 2t2ahkaaar .
15.	efta7 3la email al jam3a fe 5dmat al tulab mktob hnak	15.	salm sis 2na hl2 w9lt 3la elum. 3nde 3 Mo7ad`rat wbreak el sa3a 12 bde a\$ofk

Borrowing			
Arabic Text Messages			
No.	Males	No.	Females
1.	اووووبس غلتي سامحيني..والله انسيبت انه فيه تريننج	1.	والاو اميزننج رح تجوزي و تقعدي بالبيت ياهنيااالك
2.	صبخير لك اليوم؟ بدي ايك بليز تعلمي زيروكس للنووت بوك تاع الثقافة	2.	قوود موورننج بنصحك نصيحه لوجه الله . ببيعلم هيك فور شووور لانه انتي مطره لهادا الشغل

Derivation			
English Text Messages			
No.	Males	No.	Females
1.	Am with my btful gf :)	1.	That is nice and v interstng kteer
2.	Come on enjoy ur life u makin things sooo complicated . Tannish :(	2.	Thank Allah u should be v hppy and relaxd :)
3.	sooo borng bitkhaliik sleeping zzzzzz :(	3.	So y good and thats wonderful
4.	discussing elwajib wth Iman ? she v cooperative an nice lol	4.	Its gd to see you smiling akheeran :)
5.	Won't stop begging you to do it for me just this time :(	5.	Am comin to wedding tmoro n :)
6.	Asking y 2 frgive me plz. Promise i make it up 2 u WA3D :-*	6.	Not suuuure. Cmptor engineering is what i like, shu ra2yik
7.	Having diffict tims understanding questins. Need you to explain T A :(	7.	V generous an what els Kaman
8.	Checkin to see tomoro have training or nooo	8.	Do have friends but they all booooring akhhhhh
9.	dr was yawning whle class made me sleepy too	9.	Becoz we don't care abt facilities only care abt teachng
10.	Ahhh Lke jeans on u walllllaaaah u sooo sexy :d	10.	Ok will try my bst. Jst keep praying :(
11.	Game fantastic 4 to 0 messi 3 glz. Am gonna bug rami	11.	hmmm. Wen we supsed 2 do that fascinating job? U mt2kdih innuh can do
12.	Khkhkh Really feel bad. Whole thing sooooo frstrating :(	12.	Its nice to knw dat u r careful man :)

13.	Aftr 10 m exactly :)	13.	Omg i feel soooo exhsted , many classes yestrday and 2day
14.	Loving u gives me strength . L y 4 eve	14.	ThnQuuuu s much 4 ur kind invitation 7ilwah minnak
15.	Ur bsy life gonna start after gradution brb	15.	ok I guess will do job happily : d

Derivation			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	n7na be7ajh 2la mohndseen b3rfo autocad	1.	Alf mabroook ma3mltu
2.	hhhh 7ibitiiii allah y3enk sho bdk t3maliii :))	2.	I7na nej7ana waallah wafgna .. Fadia Y. Hamam Bodoor Mazen
3.	Gosh. law makank bashtaki 3aleeh 3ind ra2ees elgism	3.	I mashi fishware3 bedoon ma a3raf wean ana wala wean ray7a sho3oor baaad
4.	Hhh ok shed 7ailk same3na el a5bar el 6aybe :)	4.	sho bdna nelbaaaas y3ni daroore sa7batna yo5tobo effff
5.	y13n o5t hassaghliah ele msh 3arf t5la9 mnha. btw belt awfeg bro	5.	Rousaneye pure sho bdo Ytla3 menk !! :DD
6.	MESH TAYE2 7ALLIIII MEN HL A5'BAAAAAAAR	6.	tlefone ma3e yahabla ween 3a8lik?
7.	aaah in shalah ana msade2 bs b3rfesh 3n el shabab shu think	7.	hi kfk kef al3atla m3ak enshala 7aloea ea rab tkone b5er ea 27la sdae2a

Acronyms			
English Text Messages			
No.	Males	No.	Females
1.	hahaha getting washm this wkend!!! U wanna do one. C u l	1.	wats big deal nw? Lol
2.	2l7amdulilah fabulous. Can you brng me the exam sheet asap :(	2.	G nite bby <i>zzzzzzzzzz</i>
3.	Hw r u habibty, what u doin? Lov you lol	3.	S W . Also same here, isnt big diffnce
4.	U cn cme any yuum, be hpy to see y :-*	4.	Thank Allah u should be v hppy and relaxd :)
5.	Lutb :-*	5.	Am comin to wedding tmoro n :)
6.	hey, were you been? Don't call no sms no nothing	6.	wher going now? Wfm . i am gonna talk to mama and c
7.	Aoooh has been fun. Really enjoyed talkin to u Tamara lol :)	7.	Gr8 , el7amdellah. They didn't tell me anything
8.	Hehe send it again man Brb	8.	Am going 2moro to Amm. y want anything frm there
9.	Leaving class after 15 mints Wfm	9.	Thank y , you so nice. I will alwyz rmembr what you did this for me. G b
10.	U sleep gud las night? Couldn't. Noom elhana ya H	10.	Sry went to bookstore. B b soon :d
11.	Pssed T . Hppy for you frm bottm of my foot	11.	S sry, hv class nw. cul
12.	Sry habibty 2moro m I bring them. No one home las night :)	12.	Coming v soon an will tell everythin latist3jili

13.	luv uuuuu so mch habiiby :d s y	13.	In my hous. Mashghouleh kteer must send homwrk 2 his em . 2moro I will rite 2
14.	Hehehe. D asking for u. already started :d	14.	CUOL 2NIGHT
15.	N class tmoro, best nws i heard. G N hahaha	15.	taking mama to airport. See u L

Acronyms			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	Uhaha lazam ykoon fy 7orreya sha59eya :P lol	1.	ya allah shu bjneen wshu b7eboo !! btw la allah 7elwaaaa al song
2.	Allah 2kbar 3 '9alem tfuuu	2.	sho r2ek 3asa3a 12:30 cys
3.	Bs men zamaaaan kan 3meltha walak wallah btifham G L	3.	Marhaba K , mur 3indi Kaman sa3ah 3ayzak bmodoo3
4.	Esma3 la tesa7enee alyoom 2na 23teet alwara8a le yousef roo7 enta wfayez	4.	BB inset el shay 3alnaar wbiddy anazluh ta7t 3ind elshabaab illy 3ind thabet wait
5.	Brb 3ndy 7sah	5.	Bidak teeji ma3na 3ala bday taba3 samer willa ba3dak musir 3ala r2yak?
6.	3 kol 7aaal keefak osho alakhbaraaar	6.	A A isma3 ana msh ray7 2aji 3al 7aflih, abouy 3azem nas
7.	ma3aki 20 d bs layoum sundy plsss :(	7.	mama bidha yaaaani mabatawil istinna brb

8.	ma 3andyee mo7a6rat 2moro Lol :)	8.	9 kh , la msh r7 2nsa bokra enshala bjeblak eahom
9.	Deeeri balk 3 7alek nighty ;)	9.	btw byoum 2l 7afleh bnlbs 2l fsateen wbnroo7 3l saloon b3deen bnroo7 3l
10.	kefak oala elak o7sha zman 3nak enshala 2shofak 3n 8reb ontla3 soa e7na TC	10.	Yalla betawfeeee8 wentabeh 3 roo7ek
11.	sho mdaoma al eom , keef al jo wa keef akhbar el bf ?	11.	Ehem faisal do8 3alay a8rab wa8et feeh good news fr yyyyy
12.	shoooo bn8al llbnat ele da5leen byothom sa3a 8 pm	12.	allh eslmak yaaa 2lbi v sweet of you
13.	Ya 3omriii mabrook..wallah enshallah 3o2bal al 100 bkra btseeri ted7aki 3la ha	13.	ana raye7 bokra 3 elsoo2 bde a\$tree new things
14.	Ay yallah maleeee7 illy 7al2atlak 3hh3h3h loool	14.	Hppy b day al3omr kello enshallah
15.	3 fekra msh ra7 28dar 2mor 3leke al eom sorry 7bebe.	15.	5ala9 7el 3anyee msh 8ader a7ki, talk to y later

Acronyms			
Arabic Text Messages			
<i>No.</i>	Males	<i>No.</i>	Females
1.	ص خ اش رأيك تشترك معايه في النادي الي هنا في الحاره على شان نحمس بعض بليبييز . جيت أفلام	1.	زمش ماراالح اقدر اعمل شي غير اني اعيد الماده
2.	صبخير ك اليوم؟ بدي ايك بليز عملي زيروكس للنووت بوك تاع الثقافه	2.	ص خ .خالي جيبيلي معاك صدفات كثيرة وكبيره من خليج العقبه

Compounding

English Text Messages

No.	Males	No.	Females
1.	U hve massari? need 2 buy fone card :(	1.	Uffff phonology elam ne1t wk. studied anything yet :(
2.	2l7amdulilah fabulous. Can you brng me the exam sheet asap :(	2.	Am done with ur play station . Coming 2 pck it up
3.	Hmmmm am good thnks anywy ;))	3.	My mother not feeling well yesterday . could't come
4.	R u dun ur homework ? didnt do mine :)	4.	Its ok bt it fill smething in kteeer ra2i3 in my life hahahaaa :d
5.	I swear u not a man and hve no manners whatsoever . dunt wnt u 2 apologize yaaa	5.	ok tday? Tld yasmeen abt bday party ? Khabry fadia tooo
6.	My house next to traffc light . wen u get there give me miss call.	6.	ok insa nvrmind . Can you do it by myself
7.	hi friend, wasup? Wer mitkhaby? i have somthing to giv u hehe	7.	Your friendship makes me hppy. Wish everyone like you
8.	love u umri ..u keep me wrm..can't live without u lovvvvve y muamua	8.	dont tell anyone waleh baz3al minnik hah :)
9.	Ooook. Guess we hve no choice. we have to bring wateva u ask us 2	9.	You always say smthing and do smthing else Laaaaa zawaditha
10.	Hahah heard what hapned with samar? She left boyfriend :(	10.	I wnt with my fathr to jerash to see my grndmothr she kteeer sick ya 7araaam
11.	Ghadeer wont say somting like this 2na ba3rifha kuwis ;)	11.	In my hous. Mashghouleh kteeer must send homwrk 2 his em. 2moro I will rite
12.	Mrhaba. Am Adel this my new mob phon N	12.	What you mean when you say no problem don't understand bilmarrah be specific

13.	But it's not about cinema or drivin or anything	13.	Salam, i lst my mobile phne . May boro your old 1 4 2 days
14.	whooo wnt to buy secnd hand car like urz? yakhkh :(	14.	Am going 2moro to Amm. y want anything frm there
15.	U see Ibrahim grlfriend ? Cute muzah ha	15.	Sry went to bookstore . B b soon :d

Compounding			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	men 3ioni yaaa sweet heart wallllo ... ma3k 3la elmoooot o mata bedk ana jahez	1.	Hahaha istinini mitil mastaneetik 2na last week . Inti mish a7san minni
2.	ya zam fe3lan 2nk ga7of y3ni b3dk ma bataltha hay el habit wlk 3abd el karem	2.	2otlak abouy mudeer bank fi amman bs mu mdawim elyoum
3.	Eeey tro7e nftar soa 3ind kfterea abu ma7moud 3aaazmek	3.	Ummm kefak zman ma shabkna ana ba6lt ashbook 3ala emaili el yahoo hada email
4.	Jibt el notbook ma3ak ya 7maar? :d	4.	Hilla shluunk? 2na mne7a wmissk walla, 2na 6a\$a bkra 2na w2hle 3la 3ra8 al2mer
5.	Gosh law makank bashtaki 3aleel 3ind ra2ees elgism	5.	Jebili m3ek ktab gaw3id el3arabi
6.	Eza 2na 2ily ma lhosh be alfa6ball taba3et almarat o faq3at mararty	6.	hi bokra jebe al laptop 3shan nsht'al 3lah ?
7.	Slm ya khoy 9a7elak bidak something	7.	btw m3 meen bdi 2koon 27key e3neey m3 el girlfriend Tan3an :P

Blending			
English Text Messages			
No.	Males	No.	Females
1.	taking intel training crse inuniversity cntr biljam3ah. U wanna join? Ttyl	1.	Yah with father bt don't like it noisy, smogy dirty
2.	My brther wrks in a motel in America. I give u his fone number call and ask him	2.	Hamdeh is chocoholic . she alwys crying 4 baskout and chocolate
3.	Hw he doing 2night? better? Hassa3 Inshallah g d	3.	I think Syrian melodrama is mch bettr than Egyptian ba7bha aktar
4.	T y i full ate brunch hme b4 I come :-*	4.	Sent u nice emoticon , u like it? send 1 bck :)
5.	I askd u to brng bck modem bt neve did	5.	Bby I hate u when u use that slang with me
6.	You smelld the smog coming out of the fuckng hundai bus. Allah la yiteeh el3afyih	6.	I slept late yesterday. I was watching a fantblus movie. It was vry scary but I
7.	Fanatabulous . won't know the meaning of the word. Heard it in radio ystrdy :)	7.	The girls invited me for a brunch today. U missed it stupid. Amer was there and
8.	i bring you sme wen i bck. Going wth ahmad to d hani hassa :-*	8.	
9.	was in sagloub last night	9.	
10.	Jamal got 90 in physics I told you he will. He is workaholic	10.	
11.	T y i full ate brunch hme b4 I come :-*	11.	

Blending			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	7abebte enshalah betawfeeeee2 ya rab ente 2adha shedi 7ailk ;)	1.	l mashi fishware3 bedoon ma a3raf wean ana wala wean ray7a sho3oor baaad
2.	3assa3ah 12 bs latit2akhar 3alay	2.	ya3ni 5ala9 ma yenzel esheta wet5ale9na men hal7abseh welbhdaleh,,
3.	Mr7ba, kefek w \$o A5barek, En\$allah Tmam? wallah Mista8lk kteer ya bro	3.	embare7 prblm ma kafatne bs ma bkoon 3noood ezama 5aleathom ye9ero ve7lefo h 3omri
4.	la7awla wala 9wata ila bilah 7awgil ma3i	4.	Ahlawsahla braghad walla nawwarat tfadhali 3enna eshrabe chai :)
5.	Shuuu shayef 7aaluh hashab	5.	2na 2ked mdaoma l2ne tl3at al jo hassa wra7 murr 3aleeky bas a'7la9
6.	btawfeeee2 ya a7la Dr yes3dek ma a7sanek	6.	nooo ajlnaha lsh3ar a5er e3ne may be osbo3 jay enshallah srroy
7.	hehe 3njad mnsta5demhom o ma elhom m3na hehehe	7.	grgorty wallah mshta2etlek komeat komeat ...w 3ende exam wlsa ma ft7to bs
8.	yl3n o5t hassaghlih ele msh 3arf t5la9 mnha. btw beltawfeg bro	8.	hhhhh 7bii tarre8 bs lssank mllan 3dmm 3ashan tll7s boozza. Btw miss you ya
9.	esh hal7ke al kaabeer bs ma bokel ma3ha ;)	9.	3maw3dna eom al etnen al jae enshale ?
10.	2hlaan ya massaa alwared hasa kna b6aareeky :)	10.	al7mdalala 3sa3a 12 bshofak 8bal al emt7an .
11.	ya3ney hasa3yat 6bat alnakhwa feek ta troo7 tbale'3 3noh	11.	hi kfk kef al3atla m3ak enshala 7aloe ea rab tkone b5er ea 27la sdae2a
12.	Hey wlak wadeeeely ra8m omar hasa3	12.	enshala mneje 3n 8reb oe7na mnsht2tlko

3.	met khalid in escalator tday was sooo embarrsd :)	3.	Tell yur brother to bring me chips 3usso musso from store wen y come
4.	Go ahead and google it. U will find an answer	4.	Going to zerox something? Can u mke 2 copies 4 me plz. will pay u
5.	Hungry, Can u get me a sandwich ?	5.	Guess its my period. U hve Aspirin or any pain reliever
6.		6.	Maram was crying couz failed the test and everyone was giving her fine 2 clean her
7.		7.	Mother calld wants u 2 get bread an Kleenex frm the store
8.		8.	Zrox machine not workin in library
9.		9.	Hungry? U want sanyoorah sandwch ?
10.		10.	U eat? U need falafel sandwich ?
11.		11.	Too much pain? U got sme aspirin or any pain killr
12.		12.	U saw Samer jeep ? Very nice color
13.		13.	Hi baby, do u have some Vaseline ? Just got out of the gym
14.		14.	Srry i had to go to laundry and pick up my father shirt srry kteer
15.		15.	Fine. had some cornflex this morning

Coinage			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	Itha feeh 3induhum jeeb sandweesh wa7deh bs	1.	iza madakhlti 3jamgah b3dk jeebeely banadol mn el pharmacy plzzzz
2.	Woow Shu hassyiarah elsa7i7 jeeb mn elaaakhir :)	2.	ok etf2na bshofak after 1 hour plz bdy sandwich l2nuh mar7 agdar atla3 mn elab
3.	Eza bedk tet3asha mr 3aly nw la2nuh feeh sanwiishat zakyyaaaat	3.	

Coinage			
Arabic Text Messages			
No.	Males	No.	Females
1.	صبحير ك اليوم؟ بدي ايك بليز تعلمي زيروكس للنوت بوك تاع الثقافة بليبيز	1.	ولك ميته جوووع جيبيلي سانويشة زعتر بس ون
2.	جبت سنويشه من عند صقلووب (:)	2.	بليز بدي بااك تعلمي 20 كوبيز. في زيروكس ماشيين عند ابو جواد عزاويه الجنوبي
3.	احسن لك من الشاورما ساندوش	3.	اتمى الترجمة ساعدت و لو في أي حركة ما عرفتني تسويها اكتبني في جوجل كيف أسوي وحتجكي على
4.	جبلي معك فطور من نفس كافتيرية الكلية ساندوش او من عند تل الرمان سنيوره (:)	4.	اعلمي داوونلود للفايل واطبعيه و بعدين اعلميله زيروكس

5.		5.	ماما بتحكيك جيب معك توسفين لايهم لانه بفتح كثير
6.		6.	ماشاء الله ماحلا الجيب تاعتها براند نيووووو امممم
7.		7.	خلصت بكوون عندك الافتر 10 منتس ورح جيب ساندوتششز
8.		8.	حاولي تستخدمي ديتول رح يزبط

Conversion			
English Text Messages			
No.	Males	No.	Females
1.	Teacher said it is a must	1.	think you sleeping so skype me the numbr when you wake up
2.	She made me mad she spied on me	2.	She is stupid, she gonna wikileak what happened between us. Told you never
3.	Message me his number to hana	3.	Cheer up baby. Life is full of ups and downs . U be fine. Dont think too much
4.	There will be three presentation and d waleed asked me to chair the class	4.	Beutifl start habiby ;)
5.	Be careful Saleem is a coward. He will wikileak u	5.	My sis got new baby girl. I think will name her rawan
6.	Sameh filmed what happened yesterday	6.	Salam drling. trying to fool me? Uuu cant :(

7.	The lab was a mess today. Dr told us to bottle all liquid by 12 noon	7.	Will email u the results asap
8.	Slping khkhkhkh i will phone u in morning	8.	She googled it bas didn't find anyting
9.	Google it maaaaan. Am sure u ll find it	9.	Tke a guess . If u knw will give kiss
10.		10.	Im gonna color my hair. I luv you sm. Muak muaaaaak
11.		11.	We all tried to calm her down but didn't stop
12.		12.	Dr asked us to empty the room is an to come back afr 5 mints
13.		13.	My mother has no say in the house
14.		14.	plz bby dnt b upset am just jokin here is always hope
15.		15.	hate my brother bcz he always boss me around

Conversion			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	Isma3 ballh tmassigha 3sareeee3	1.	Walla b3tt 25wy egebhn n9dmt lamma \$fthm ma 3rft 7ale 2d ma hma mftren

2.	Walak farmatuh bas mish raadhi yuzbutt	2.	Kunt 2na wahmad akhadna long walk around eljam3ah
3.		3.	Fakastha lalmustashfa and galouly 2inha wi9lathum

Conversion			
Arabic Text Messages			
No.	Males	No.	Females
1.	شووووو؟؟؟اكشنها وخليبيك كوووول	1.	اعملي داونلوود للفايل واطبعيه و بعدين اعمليله زيروكس
2.	ثانكيو هاشم ع المساعدة. شو رايك نروح نقلقلها عند السلطان	2.	لو كنت مكانك ببلتتها. ماحدا رح يعرف سدنييني
3.		3.	فلمت عليه واعطيته رقم خطا خله يحل عني ياشيخه
4.	دنكنها وريح حالك لانك راح تغير رايك	4.	

Appendix I

Samples of Syntactic Features

- Deleted subject is placed within parantheses.

Deletion of Subject/ Pronoun			
English Text Messages			
No.	Males	No.	Females
1.	U hve massari? (I) need 2 buy fone card :(	1.	(I) will be tking e1am at 10 plz, pray for me. am sooo scared
2.	Broke!!U get ur ratib from bnk. (I) wanna bor sme mny hahaha :)	2.	(I) am not going to tell anything nw. It is surprise
3.	Gd moorning keefek? U study good? (I) Think its gonna be tough exam g l	3.	(I) didn't pass psychology. I hate teacher and school. My father will be v mad
4.	I did ktheeeeer good in exam, (I) wish u do same	4.	(I) Hate waking up soooo early
5.	Hw r u habibty, what u doin? (I) Lov you lol	5.	(I) relly miss schl and all the grls mishtaagah kteer :)
6.	(I) miss u ya habla, wher are y? :-*	6.	(I) was sure u not going to answr the fone :)
7.	Woow (I) wanna hear more Brb	7.	Bn. (I) Have clss
8.	(I) Am with my btful gf :)	8.	(I) need 4 d pleeez iza bala2i ma3ik
9.	C u sat 3ind elmujama3. (I) Wish u nice w :)	9.	(I) Am hving heavy eyes this moning i need sme coffee :)

- Deleted items are placed within parantheses.

Deletion of Subject Pronoun and Auxiliary			
English Text Messages			
No.	Males	No.	Females
1.	Uhhh. (It is)Tough. dun think I pss test i hate MIS :(	1.	(I am) at airport with Hani to pick up mother
2.	Hehehe. u suuure abt it. I email the doc. (I will) Be waiting 4 reply Lol :d	2.	(I am) leaving late. don't think I will see u tody lol
3.	(It/ He is) funnny hehehaha :d	3.	(I will) be tking exam at 10 plz, pray for me. am sooo scared
4.	(I am) Slping khkhkhkh	4.	(I am) doing nothing these days just waitin for school am s excited
5.	(It is) Greeaaat nws really happy for you :-*	5.	(Are you) ready? If u r miss call me am in car outside.
6.	(It is) done on time my dear bro C Y	6.	Of couurse (I am) going wth y daaaah
7.	(I am) free today need 2 shw y my nw black berry woow beutfl	7.	(I will) See you satrdy when I come back. kssssss
8.	Hv 2 go chck m bank accont, (will you) go with me? :-*	8.	Hiii were hv u been ya habibty (I am) missing y sooo much
9.	Assalmualikum car nw with my frind thnk (he is) gonna buy it.	9.	Gd morning. (Do you) have autocad book?
10.	(I have) got it? thnk y :)	10.	Not (I am) going. he got on my nerves last time shuftuh feeha uffff
11.	Uhah (I am) still waitin 4 him 2 call	11.	(I am) starting my training at baladyah after tomoro :)

12.	(It is) sooo funny!! u r mad cuz of those stff	12.	(I am) looking at the results now and guess how much I got
13.	(I will) c u 2moro :-*	13.	(She is) not answering her fone? Dont know why
14.	Hahah (I have) heard what hapned with samar? She left boyfriend :(	14.	(We are) all sitting behnd cafeteria. we are discussing the material y gave
15.	Dnt wry ya rajul (I have) alrdy done that. I will mange evry thng :d	15.	Thnk u v much.(You are) so niice to me all the time

- Deleted items are placed within parantheses.

Deletion of Copular/ Aux/ Modal Verb			
English Text Messages			
No.	Males	No.	Females
1.	going to the movie in albalad, if (you) wanna cme cme quickly	1.	(Will) u b on time or late like always?
2.	Waitin fr eve. Wher the hell (is) my f hard drive yakhara i am so annoyd	2.	Srry habibty, will be late. I (will) be there in the afternoon or may be after that :(
3.	Salam bro, in Ajloun rite nw. v butful here. I recivd your msg see u wen i (am) bck	3.	(Are) U sure? am free in the weeknd!
4.	Everybody (is) comin to the party this wk. Coming? Pls try your bst	4.	We (are) all in cafeteria me salama jihan
5.	Hi d. I (was) so sick other day, can you remake the quiz next wk	5.	Am still waiting. wher (is) the number?
6.	see y 10:30 in car park PM plz don't (be) late hv to be hme early	6.	You (are) sooo impatient. Gve me time pl

7.	Salaam am in supermarket (Do) u wnt bouzah 1	7.	Abdulnaser (is) very nice man and very helpful kteeer kuwais
8.	T y i (am) full ate brunch hme b4 I come :-*	8.	Wat d rami give u yesterday? I (am) leaving to Amman an need to know what
9.	thnk he (is) cowboy sab3uh tfuuu :)	9.	Hw (are) u. send me ikhlas number. I wnt my red colored pen
10.	Remember him. He (is) my schl teacher :d	10.	sabahu. Where r u? (are) u evn alive? :d
11.	watch fireworks? Wht (do) u think tagi3333?	11.	Hpe notebook (was) helpful
12.	Nice haircut. U (were) ugly before, shuld party 2night 4 that :)	12.	I (am) lcky I took course wth him
13.	in meetng wth ra2ees elgism, I (will) be back in library after 30 m	13.	Wow weather (is) beatful. Put something light
14.	What (are) u doing. bring halak an cme my computer needs 4mating :)	14.	(are) u happy now. What we goin to do :)
15.	arrivin 2 air port at 12 am who (is) pickin me up :d	15.	Thank y, you (are) so nice. I will alwyz rmembr what you did this for me. G b

- Deleted article is placed within parantheses.

Deletion of Article			
English Text Messages			
No.	Males	No.	Females
1.	C u sat 3ind elmujama3. Wish u (a) nice w :)	1.	Cn u draw 4 me (a) nice skull, if you not busy? Need for bio

2.	Hhh so guess evryne 3induh (a) prblm of his own :(	2.	G moning, is there (a) tennis match 2dy?
3.	doing one assignmnt and y doing (the) other mish heek itafagna?	3.	Exam 2moro at 9 room 11, should bring (a) dictnary
4.	Sry bs if u c him in (the) office tell him t call me plz	4.	grandfather vry sick in (the) hospital 4 1 wk , am worried abt him allah yustur
5.	Pssed (the)T. Hppy for you frm (the) bottm of my foot	5.	need to rent (a) car 4 2 days coz my car damagd :(
6.	Having difficlt tims understanding (the) questins. Need you to explain T A :(	6.	What happend las night in eedoon? Big houshah? They closed (the) road 4 almost
7.	Uhuhuh yazeed an malik taken (the) highst gradz in (the) class mabroook	7.	Wat u think (the) reaction of d salem will be
8.	Hehehe J Kdin. dun know anythng abt (the) phon	8.	(The) room is empty. Nobdy here.
9.	Ahhh Lke (the) jeans on u walllllaaaah u sooo sely :d	9.	My sis got (a) new baby girl. I think will name her rawan
10.	home? Wat you doing? Jeeb (the) labtop wuta3al	10.	will take (a) pic with my mobile fone and post it 3almawge3
11.	My sis comin frm oman, at (the) airport nw. My fathr and mothr wnt to bring her.	11.	left it in (the) bedroom I am sure it is ther jst look good
12.	in (the) bus nw ur bro hmoodeh with me hmmm	12.	Awke. Cl me on (the) landline its in my room and parnts slping
13.	in class an d giving (the) exam papers hurry	13.	Got (a) niiiiice swatch 4 my b day :)
14.	My house next to (the) traffc light. wen u get there give me miss call.	14.	U want (a) hamburger or fahita?
15.	we watching (the) game me and thamer u coming?	15.	There will be (a) trip 2omoro all clamates, its gonna be interesting pleez come pl :)

Appendix J

Samples of Typographical Features

Phonetic Spellings			
English Text Messages			
No.	Males	No.	Females
1.	Gd moorning keefek? U study good? Think its gonna be tough exam g l	1.	Cn you tell Dr that am going to be late for 5 mnts latinsi plssss
2.	Omg. Lcky u. hate u maan :(	2.	Cn you pick me up after class coz my car kharbaaneh . Uhuhuh
3.	Hehehe. u suuure abt it. I email the doc. Be waiting 4 reply Lol :d	3.	who caaares? I3mal shu mabidak, will be waitng when u chnge ur mind :)
4.	ready for dr muhmoud test? Hope it gonna easy G luuuk	4.	I am lost in math. Need hecellp
5.	Come on enjoy ur life u makin things sooo complicated . Tannish :(	5.	Okiiiiii fhimit now :)
6.	need 2 tell u somthin abt your friend noor. Vrrrrry interestn Cm	6.	Why don't call? everything alright? Tamniini
7.	dun wait 4 me. not going 2day i will be home sleeping zzzzz	7.	Cn talk 2 him if u want me to basiitah :)
8.	Oook .Next w I go there with family. will keep in touch ba7bik	8.	want to sell my fone if you interested, ba3du jadeeed
9.	Khkhkh Really feel bad. Whole thing soooo frstrating :(	9.	u all times emotional an 4get wat u said the pas words, knw my situation soooo
10.	hey, were you been? Don't call no sms no nofin	10.	He is alwyz supportive. Helps us to do good in crse. I like him soooo much

11.	were an wen wana meet me hehehe	11.	Just got it.Thnk uuuu v much ya a3az sa7bih muaaa
12.	hw many tims i have to tell u that dnt wana call u. Ifhamha 3ad ya3333	12.	What you mean when you say no problem don't understand bilmarrah be specific
13.	Call you lter xxxxx :-*	13.	Mabroook its my pleasure to accept ur invitation
14.	Angry wth me coz I lost it? didnt do it on purpse :(	14.	ThnQuuuu s much 4 ur kind invitation 7ilwah minnak
15.	evry1 luvz sum1, right? Luvvvv who :)	15.	Omg i feel soooo exhsted, many classes yestrday and 2day

Phonetic Spellings

Romanized Arabic Text Messages

No.	Males	No.	Females
1.	btawfeeee2 ya a7la Dr yes3dek ma a7sanek	1.	knt 3arftoo bs wala nsetoooo o shabaktoo ma3 2she tanee
2.	Ay yallah maleeee7 illy 7al2atlak 3hh3h3h loool	2.	thxxx ya a7la Dr alla ybarek feek
3.	gal 7lweeeen gal , wlk bejanino 5orafyeen la alla :D	3.	Alf mabroook ma3mltu
4.	Aaah ana aktar walek msh 7ayah bedoonek :(esht2telk 2ad el 3aalam	4.	b5aaf a7lm 7lm mesh 7elooo wynz3le mzajeee hhhhh
5.	Woow ya rab tekoony enbasaty yaaa rab :)) Wish u best	5.	meeeee 9art m3oooo y36ene 7aal 8bul ma a5boo6 al mob bel 7eeee6
6.	shoooo bn8al llbnat ele da5leen byothom sa3a 8 pm	6.	Ufff plssss lesh hal7ke ele malu da3i you know me

Punctuation

English Text Messages

No.	Males	No.	Females
1.	Broke!!U get ur ratib from bnk, wanna bor sme mny hahaha :)	1.	who caaares? I3mal shu mabidak, will be waitng when u chnge ur mind :)
2.	Hw r u habibty, what u doin? Lov you lol	2.	Wats wrong with her laptop Esh almoshkla?
3.	Wnna act this way? kiss surmy ya stuuupid	3.	What is prblm with uuuuuu? ok, Dalak za3lan
4.	Free now? Wen have free time plz send my tings 3albeet, T c	4.	Salam how waz it??? Attrctive? Lol
5.	There be no class tomoro, tagi333 tell the b and g	5.	Am going hme, I don't feel good, I have a bad headache TTUL
6.	evryl luvz sum1, right? Luvvvv who :)	6.	? r uu? Gorgous muaaaak
7.	Happy birthday baby!!!!!!!!!!!!!! Hope u live 1000 years!	7.	I stuffd my face with food! woooooo!!!! :)
8.	you coming? Wat time? Don't late plz becoz don't feel well ... mish gader	8.	I am sorry to disturb your meeting Dr., but I need the keys to the lab, u have them?
9.	love u umri, u keep me wrm, can't live without u lovvvvve y muamua	9.	Wow...Dont think sooo im gonna take it nxt semestr :)
10.	Hehehe J Kdin, dun know anythng abt phon	10.	U wnt go there? Ruddy khabar? Be wating!!!
11.	G nite my fren.....zzZZzzZZ	11.	fine al7mdullilah, How r u? And how every thing there? T A for yr msg :-*
12.	sooo funny!! u r mad cuz of those stff	12.	someone want ur nंबर, y want me to give it to him, mufaj2ah

13.	s boring yazalameh!!!	13.	Oook. I will call you 3anjad 3anjad. I am not going to swear :)
14.	Hello fren how r u? havnt seen u for long time. cm	14.	Good E. Akhabarku. We at the borders now. Miss u all muamua
15.	G M. wht kind of personality is that. ha ??	15.	Handsome. handsome. handsome bijannin

Punctuation			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	ahahahaaa... heyye hay...da3awatek 2'7ouy	1.	nazalna dfater el t5roj tb3oona in M3 level 0.. lele be7eb yoktoble :)
2.	5zeeet el 3een 3naaak!! allah ysam7ek 3la hal page baas !! :P	2.	Ya siidy. Bs m7l 2wa3ii fd7tooona:)
3.	Hhhhh ... yah hay el o3'nyeh sho 2dmnet 3alaihha fatra :p	3.	Rousaneye pure sho bdo Ytla3 menk !! :DD
4.	men 3ioni yaaa sweet heart wallllo ... ma3k 3la elmoooot o mata bedk ana jahez	4.	Uhaah ya 3enni sho hll 7ki zmaan ana ma sm33t hl2 wo b3ll8 3lle !!
5.	hi mta r7 ntl3 3ala shan nsoar soa ?	5.	grgorty wallah mshta2etlek komeat komeat ...w 3ende exam wlsa ma ft7to bs
6.	mbrk ya kbr. antm l sabqoon wn7n l la7qoon . enshala	6.	dear 7bebey...kool saneh wn7na m3 b3d wya rab nkamel ba2i 3omrna swa
7.	eesh akhbaarak taminni 3anak. Mata jay 3ala elgiryih	7.	Rano\$ eesh bidk tishtary mn elsoug a2deeh bdna nu3ud hinak?

8.	Enta msh 3arf tktb esmee ya hbeelh...hehehe	8.	kefk sho sar ma3ak fe alemt7an enshala ok ?
9.	Weeeen kl hal 3iba??	9.	r7 n3mal elha paaarty enshala etf2na ?
10.	Weenak ya rajul? Taminni 3annak	10.	bdna ntl3 3la al so8 ttl3e m3na?
11.	Alhmdlililah tmam enta kefek seede?	11.	Hlla shluunk? 2na mne7a wmissk walla, 2na 6a\$a bkra 2na w2hle 3la 3ra8 al2mer
12.	Meen al2wl? Hehehe	12.	oala ma b3raf mta ay S bizabt.
13.	6ayeb lsh ween 2booha womha w lsh tarkeenha?	13.	Hi kefek? 6l3o 9wre 2lt5rg 25te 9wark? 2na bde 25le 9a7bte tgeble yahm mn
14.	Yaaaao Wba3deeeen? 7da yjawebnee :)	14.	l8ete mobaylik willa lissa ?
15.	msh mstw3ebeh sheeeeee? :(	15.	keef r7 23raf ana r8am jhaze 3shan al emt7an ?

Punctuation			
Arabic Text Messages			
No.	Males	No.	Females
1.	وين حينعرض الفلم؟! بروح معك :	1.	هاااي يسعد مساك وين ما بتكون... بتمنى تكون بألف خير
2.	صبخير ك اليوم؟ بدي ايك بليز تعلمي زيروكس للنوت بوك تاع الثقافة	2.	صباحك شوووقر و هوني.. يسلمو كتير حبيبي على الكلام الحلو الله يخليك ولا يحرمني منك يااa
3.	الحمد لله ع السلامة لا جديد بعدني بستنى ;)	3.	شو دخل خطيبك السابق بالايامي... لز تاعتها؟؟؟

Onomatopoeic Words

English Text Messages

No.	Males	No.	Females
1.	hahaha getting washm this wkend!!! U wanna do one. C u l	1.	Cn you tell me what i should do? V confused :(ufffff
2.	This one of bst days in m life got bouseh tody muaaa :)	2.	Wow weather beatful. Put something light
3.	Wow I saw ur girl pics 7ilween kteer lol	3.	I stuffd my face with food! wooooo!!!! :)
4.	Oops forgot to cal you Latistana nt comin to class c u s	4.	What's latst nws?hahaha
5.	Hehehe . u suuure abt it. I email the doc. Be waiting 4 reply Lol :d	5.	Ooops Cn meet u on msng.thnx
6.	Hve PE class 2day? Bigarriff ha ?	6.	Uffffff stop bothering with same thng me pleeez shi bigarif
7.	Ufff forget apptmnt? U Ghabi minuh feeh	7.	It is worst univ in Jordan. I hate it la2nha mitl el3ama stdnts wu techrs wo majors
8.	sooo borng bitkhaliik sleeping zzzzzz :(	8.	Hahaha you are payng for brekfast so jahiz halaaaak :d
9.	Hmmmm am good thnks anywy:)	9.	Oooooof minik dnt hve it! dont go ya7maarah am on my wy to room
10.	Hehe send it again man Brb	10.	I am in hospital now and they giving me mughathi aakhkh :(
11.	Hhh so guess evryne 3induh prblm of his own :(	11.	Hi keefek? U finshed study? I did 2 hours ago bas eighth section complicatd uff
12.	Hmmm like America kytheer. wishin to go study there l8r	12.	U will never be civilzed grow up walek life totally different nowadays hehaheha

13.	Ffff my little b sick an mabagdar leave him alne :(	13.	Mmmm thnk i need someone good wth autocad daroori pleeez :)
14.	Woow wanna hear more Brb	14.	Ufff am telling him to go awy but he insisting to stick lazgaaah shu haaad?
15.	Left habibty? Lov you s much :-* mua	15.	I can't belieeeev it lolololeesh am sooo hppy fooor youuuu, when?

Onomatopoeic Words			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	ahahaha... heyye hay...da3awatek 2'7ouy	1.	ay ya 7lw 2l 3omor klo n\$alla sory 3\$an 2jat mt25ra
2.	Aaah ana aktar walek msh 7ayah bedoonek :(esht2telk 2ad el 3aalam	2.	sho hek bnkoon a5er mn ya3lam wlama ne3raf ma btr'9a te7kelna meen lah lah ma 7abetha menek
3.	Woow ya rab tekoony enbasaty yaaa rab :)) Wish u best	3.	b5aaf a7lm 7lm mesh 7elooo wynz3le mzajeee hhhhh
4.	Ufufuf malkoo 3alii ente bt7ke heek w3'eerek bgoole 6l3t mtlk mtel 3'erak :(	4.	hahahaha malk lola twfe2 rbha kan enta ma 9art star 97
5.	8om 8om la2nak 9oret t5abes khkhkh	5.	Ufff plssss lesh hal7ke ele malu da3i you know me
6.	fedetk ente w hlsora :D hehheheh	6.	sho bdna nelbaaaas y3ni daroore sa7batna yo5tobo effff
7.	Mra 8rd w83 3n \$jara T3l8 been al7ia welmoz hhhhh	7.	Ummm 6ab yalla come on bebe khleena ntghda wb3deeen binshouf
8.	Wlk 9'leet mrkeez bel d8e8a 10 , yeeeeeeee wllah zmaaaaaan 3noo	8.	Uhaah ya 3enni sho hll 7ki zmaaan ana ma sm33t hl2 wo b3l18 3lle !!

Emoticons			
English Text Messages			
No.	Males	No.	Females
1.	Talking to ziad. Will cal u after 10 m :)	1.	Cn take me to mall after isha prayer ;)
2.	Left habibty? Lov you s much :-* mua	2.	Rlly appreciate it hobby TA :)
3.	U hve massari? need 2 buy fone card :(	3.	Where (are) you now. Need some mony v bad 7aalan ballah latit2akhar ☹
4.	Broke!!U get ur ratib from bnk. wanna bor sme mny hahaha :)	4.	sabahu. Where r u? u evn alive? :d
5.	U shld believe me. Wallah wallah in luv with yyy :-*	5.	I happy with u. nw I know u care abt me shukran 4 evrything :-*
6.	Hehehe but not u ya 7maaar go bring sandwiches for the guys :d	6.	relly miss schl and all the grls mishtaagah kteer :)
7.	whooo wnt to buy secnd hand car like urz? yakhkh :(	7.	ok but I'm gonna stare at you the entire time :-*
8.	sooo borng bitkhaliik sleeping zzzzzz :(	8.	Salam appointment is 2dy, if you not coming call me :)
9.	lamma go 2 btiful contries i hate mine:d LOL	9.	just wantd 2 check on you and shouf if you need something c m if u need me :-*
10.	Aoooh has been fun. Really enjoyed talkin to u Tamara lol :)	10.	need to rent car 4 2 days coz my car damagd :(
11.	evry1 luvz sum1, right? Luvvvv who :)	11.	S sorry but have to leave nw to Amman please sam7iini =((
12.	Asking y 2 frgive me plz. Promise i make it up 2 u WA3D :-*	12.	want to till y something v importnt call me lama btifdi ;)

13.	she comin ova soon inshallah, so try to b here asap ;)	13.	My apology 4 not showing up at ur walima. had somthin important 2 do :(
14.	oops U ok? hven't heard from u :)	14.	Oook. I will call you 3anjad 3anjad. I am not going to swear ;)
15.	She there yet? When there call me plz ;)	15.	Salam, hw u. come to my house and c the new dishwasher :) .

Emoticons			
Romanized Arabic Text Messages			
No.	Males	No.	Females
1.	7abebte enshalah betawfeeeeeee2 ya rab ente 2adha shedi 7ailk ;)	1.	yazan 7abebe msh kol da8e8ah el status update ya3ne 237mne shoe :P
2.	Aaah ana aktar walek msh 7ayah bedooonek :(esht2telk 2ad el 3aalam	2.	I7na nej7ana waallah wafgna .. Fadia Y. Hamam Bodoor Mazen 3o2balkommmmm
3.	7abebte bakeer 5aleeki la next year :(	3.	kaman 1 mnth barja3 la maga9 raasi :(
4.	ya wailiiiiii ooof, el mohem ma9la7tek a5ertk t9ofi janbe :D	4.	sho rayk innuh a7kelk wa7deh mnhom blke nmt ya bu2bu2 3eeni :P
5.	Woow ya rab tekoony enbasaty yaaa rab :)) Wish u best	5.	Ya siidy, Bs m7l 2wa3ii fd7tooona :)
6.	7aketlek la tet7adeeni wala tjakreeni ☺	6.	Rousaneye pure sho bdo Ytla3 menk !! :DD
7.	Salaam ya maaaaan 7awalt 2tasel m3ak bs maradeet :(	7.	salm sis 2na hl2 w9lt 3la elum. 3nde 3 Mo7ad'rat wbreak el sa3a 12 bde a\$ofk
8.	gal 7lweeeen gal , wlk bejanino 5orafyeen la alla :D	8.	Ed3oly plz a6eeb walah motet mn 8a7a 7asa 2lbe bdo ew2f :((

9.	shoooo bl nsbeeh lli shofto elyooOOOOoom :(	9.	alla y5lelk yahom ya rb wy5le t5oot wm5dat jmee3 ilmslmeen walmslmat :D
10.	wlkoom w7eatallah 2l 7et bfham 2ktar mnkoom :(	10.	Ahlawsahla braghad walla nawwarat tfadhali 3enna eshrabe chai :)
11.	bkrah dfa3 alrosom lamta ra7 edal ? :(	11.	zkrni 22olk she 3nn hay 2l song LOL -_-
12.	Yazam shu halwartah ele wirtnahaaa ma3 dr samer :(	12.	hehehe ana more ya bbyyyy bs we really nbtstna :*
13.	sho malak ma btrode fe she ? :(	13.	Btw wallah ana l2rfrjeek bt7ki 3ni ana ele bnam mn don ma enta 27kki ahh okiii
14.	oen sorte bidna nro7 soa :)	14.	mta 3ed melad fofo ? forsa 2nkkk jmbey :PPP
15.	Sbaaaa7 el3asal muaaa :-*	15.	Hi, ana gabl mnam b2lik what happened :)

Emoticons			
Arabic Text Messages			
No.	Males	No.	Females
1.	الحمد لله ع السلامة. لا جديد بعدني بستنى:)	1.	اهواك واتمنى لو انساالك وانسى روحي وياك <i>love</i> ;) <i>you</i>
2.	جبت سنويشه من عند صقلووبوب :)	2.	سوري بس مندرت مر عدكتور الماده على شان القريد تاعك ☹
3.	والاو هلا رح نوخذ ريق حلو ☺	3.	هاي براي انه كل انااا بما فيه ينضح :)
4.	تسبح ع خير هنييي ههههههههه >":	4.	طب يا الكلبة ايش اسوي انا بالاكل ☹

Letter and Number Homophones

English Text Messages

No.	Males	No.	Females
1.	U shld believe me. Wallah wallah in luv with yyyy :-*	1.	want ur car becoz my mother sick an need to take her to hspital
2.	she comin ova soon inshallah, so try to b here asap ;)	2.	Am going 2 moro to Amm. y want anything frm there
3.	Sry habibty 2 moro m I bring them. No one home las night :)	3.	C u 2 moro saba7an. G B :)
4.	N p evrythng jahiz 4u jus cum and pick it up. Will leave wth samar	4.	Gr 8 , el7amdellah. They didn't tell me anything
5.	4 sure u comng? Then will be ther soon inshallah	5.	Taib, my tme 2 ask u what u like to do
6.	U hve massari? need 2 buy fone card :(	6.	Im sure I wnt 2 meet nas 7ilween like u :)
7.	Aaaah Watup man if dont c u don't be worried Shu ya3ni	7.	Salam drling. trying to fool me? Uuu cant :(
8.	miss u ya habla, wher are y? :-*	8.	Salam, i lst my mobile phne. May boro your old 1 4 2 days
9.	Wow hw many pics u want me to zerox 4 u	9.	This ur nw acct "lonely-47". 7ilu? :d
10.	Barca playin 2 day with osasona at 6 hope they will win	10.	Saba7o reealy sriry cause I lost it lata7zani dont wrry am bying u new 1 2 dy
11.	every 1 is mad with u coz u did that 2 to Jihan.	11.	Emad wnts me 2 help him wth his assignment. I need 1 hr
12.	been waitin 4 u . U goin 2 day or n	12.	In my hous. Mashghouleh kteer must send homwrk 2 his em . 2moro I will rite

13.	c u 2 moro :-*	13.	Treat every 1 with LOVE, even those who rude to u not coz they are nice bt coz u r
14.	Uffuffuff wat u want to buy? Wanna buy some fr me :(	14.	he still perfect 2 me btw seen his friend , tall 1 ? Kteer gentl
15.	wat r u going to study 2 day? Studying Engl 202	15.	My apology 4 not showing up at ur walima. had somthin important 2 do :(

Appendix K

Samples of Data Analysis

Following are the symbols and their corresponding linguistic features as they appear in the tables below.

Linguistic Features		
Lexical Features	Syntactic Features	Typographical Features
L1 Abbreviation	S1 Deletion of subject/ subject pronoun	T1 Phonetic spelling
L2 Borrowing	S2 Deletion of subject pronoun and auxiliary	T2 Punctuation
L3 Derivation	S3 Deletion of auxiliary/copular/ modal verb	T3 Onomatopoeic words
L4 Acronyms	S4 Deletion of article	T4 Emoticons
L5 Compounding		T5 Letter and number homophones
L6 Blending		
L7 Conversion		
L8 Coinage		

English Text Messages of Males																		
No.	Text Messages	Lexical Features								Syntactic Features				Typographical Features				
		L 1	L 2	L 3	L 4	L 5	L 6	L 7	L 8	S 1	S 2	S 3	S 4	T 1	T 2	T 3	T 4	T 5
1.	Ok bs coming o not	x	x								x						x	
2.	U hve massari? need 2 buy fone card :(	x	x			x				x		x	x	x	x		x	x
3.	hahaha getting washm this wkend!!! U wanna do one. C u l	x			x	x					x	x		x	x	x		x
4.	Broke!!U get ur ratib from bnk. wanna boro sme mny hahaha :)	x	x							x	x	x	x		x	x	x	x
5.	Gd mooorning keefek? U study good? Think its gonna be tough exam g l	x	x		x					x	x	x	x	x	x			x
6.	U shld believe me. Wallah wallah in luv with yyyy :-*	x	x		x						x			x	x		x	x
7.	I did ktheeeeer good in exam, wish u do same	x	x							x		x	x		x			x
8.	Thank Allah i paaassed tst hppy 4 y :)	x	x		x					x	x		x	x			x	x
9.	Hw r u habibty, what u doin? Lov you lol	x	x		x					x		x			x			x
10.	U cn cme any yuum, be hpy to see y :-*	x	x		x						x				x		x	x
11.	This one of bst days in m life got bouseh tody muaaa :)	x	x		x					x		x	x			x	x	
12.	So lying. Dont trust her, she KHADHABEH 3alamyah lol	x	x		x						x	x			x			

English Text Messages of Females																		
No.	Text Messages	Lexical Features								Syntactic Features				Typographical Features				
		L 1	L 2	L 3	L 4	L 5	L 6	L 7	L 8	S 1	S 2	S 3	S 4	T 1	T 2	T 3	T 4	T 5
1.	Fine walhamdulillah. How are you and hw kids inshallah you all ok. U	x	x				x			x	x	x	x		x			X
2.	I can't belieeeev it lolololeesh am sooo hppy fooor youuuu, when?	x	x											x	x	x		
3.	Need to borrow 10 d frm u. Mother gave mony to buy nido for moody bt i	x			x					x				x	x		x	X
4.	Hi dr keefak? I went ther and i asked abt application but they told me	x	x	x						x			x		x			
5.	Hahaha he vrrrry funny. sense of humor is gift frm god :d	x										x	x	x	x	x	x	
6.	Of cours sandwich, you think i am gonna eat bagarah early this moning	x	x						x				x	x	x			
7.	You should brng all he askd 4 towels, kleenex, gloves :)	x		x					x						x		x	x
8.	Wher cn we go? they should build more motels in country :)	x					x			x			x		x		x	
9.	S sorry but have to leave nw to Amman please sam7iini =((	x	x		x					x								x
10.	It is worst univ in Jordan. I hate it la2nha mitl el3ama stdnts wu techrs wu	x	x	x									x		x	x		
11.	There is no way am gonna belive stry. It is unbeleeeevable ya allaaah wooow	x	x	x					x	x			x	x	x	x		
12.	We all tried to calm her but didn't stp	x								x					x			

13.	S W. Also same here, nt big diffrnce	x			x							x		x		x			
14.	That is nice and v interstng kteer :)	x	x	x	x													x	
15.	Am in college now, bhakiki ba3d 1 h			x								x					x		
16.	Not suuuure. Cmptcr engineering is what i like, shu ra2yik	x	x	x								x				x	x		
17.	Why that? Hve been telling me same thng :(	x										x		x	x		x	x
18.	V generous an what els Kaman	x	x	x	x							x				x			
19.	Do have friends but they all booooring akhhhhh				x							x		x		x		x	
20.	Im sure I wnt 2 meet nas 7ilween like u :)	x	x															x x	
21.	How was dnce in alzwaj ams? Was joyful ha? :)	x	x	x								x			x		x x x		
22.	waited for u more than 45 m. I had to leave ma3 elsalamah :)			x	x	x						x	x				x	x x	
23.	Uffff phonology exam be next wk. studied anything yet :(	x											x	x			x x x	
24.	want ur car becoz my mother sick an need to take her to hspital	x										x		x	x	x			x
25.					x								x						x

Romanized Arabic Text Messages of Males

No.	Text Messages	Lexical Features								Syntactic Features				Typographical Features					
		L1	L2	L3	L4	L5	L6	L7	L8	S1	S2	S3	S4	T1	T2	T3	T4	T5	
1.	9ba7 el5eer ya Man, kef el7al w\$o el25bar??	x	x															x	
2.	Hello Dr pls lama tsale7 el wara2 plz khabrni	x	x							x								x	
3.	7abebte enshalah betawfeeeee2 ya rab ente 2adha shedi 7ailk ;)	x						x										x	
4.	ahahahaaa... hey ye hay...da3awatek 2'7ouy																		x
5.	btawfeeee2 ya a7la Dr yes3dek ma a7sanek	x	x					x											x
6.	Aaah ana aktar walek msh 7ayah bedoonek :(esht2telk 2ad el 3aalam	x						x											x
7.	7abebte bakeer 5aleeki la next year :(		x					x											x
8.	ya wailiiii ooof, el mohem ma9la7tek a5ertk t9ofi janbe :D	x																	x
9.	5zeeet el 3eeen 3naaak!! allah ysam7ek 3la hal page baas !! :P	x	x																x
10.	Keefk? 2llah yi3een elsadig yasaadig :d	x			x														x
11.	Hhhhh ,, yah hay el o3'nyeh sho 2dmnet 3alaiha fatra :p	x																	x
12.	Woow ya rab tekoony enbasaty yaaa rab :) Wish u best		x																x

Romanized Arabic Text Messages of Females

		Lexical Features								Syntactic Features				Typographical Features				
No.	Text Messages	L 1	L 2	L 3	L 4	L 5	L 6	L 7	L 8	S 1	S 2	S 3	S 4	T 1	T 2	T 3	T 4	T 5
1.	3andy 3'lat be Multiple Choice	x	x							x								
2.	coz ana 3an jad adamet mnee7!!! bas ymkn fe 3nde 2l so2al 2l rabe3 ta3 2l	x	x			x								x	x			
3.	Hehe fadi called bidu yana nroo7 ma3ah 3ssouuu2		x				x							x		x		
4.	Sho hal7alwh yaah woow u look greeeeat hehe	x	x											x		x		x
5.	Hyih ma7akatli ana mit2akdeh... i swear to God		x												x			
6.	thxxx ya a7la Dr alla ybarek feek	x	x											x				
7.	hi bs bde 2tlab mnak talab tjebele la man3 mn doctor al jldea eza fadea ?	x	x												x			
8.	kaman nx mnth barja3 la masga9 raasi : (	x	x			x				x								x
9.	Alf mabroook ma3mltu			x						x				x				
10.	ay ya 7lw 2l 3omor klo n\$alla sory 3\$an 2jat mt25ra ☺	x	x													x		x
11.	nazalna dfater el t5roj tb3oona in M3 level 0.. lele be7eb yoktole :)	x	x		x					x					x			x
12.	I7na nej7ana waallah wafgna.. Fadia Y. Hamam Bodoor Mazen			x										x	x			x

Arabic Text Messages of Females																		
No.	Text Messages	Lexical Features								Syntactic Features				Typographical Features				
		L1	L2	L3	L4	L5	L6	L7	L8	S1	S2	S3	S4	T1	T2	T3	T4	T5
1.	اهواك واتمنى لو انساالك وانسى روجي وياك love ;) you	x								x				x			x	
2.	طب شو اسمه بليبيز تل ميببي؟	x	x											x	x			
3.	هااي. يسعللي هالمسا يالحلى روووز	x					x		x					x				
4.	مستنياك..يا روجي تعبت تعبت من الاشوااق. مس يوو سو متش	x							x					x	x			
5.	افف بلا زنااخه ابعتلي الكوبيز كلهم ناااو	x												x		x		
6.	وااو اميزنج رح تجوزي و تقعدي بالبيت ياهنياالك	x	x						x					x		x		
7.	المهم راحتك سووويتي will do that don worry	x	x						x					x				
8.	اوووكي اعلمي حاللك هيلة عباسم وكنك مو عارفه شي بالمررره	x	x				x			x				x				
9.	قود موورننج بنصحك نصيحه لوجه الله . بيعمل هيك فور شووور لانه انتي مطره لهادا الشغل	x	x	x					x						x			
10.	اهالاه والله انتي فريبي شو اعملك بس ع راي المثل ظل راااa	x		x										x		x		
11.	يب اعملنا امتحان بليسمنت تحديد مستوى لبعض مواد الجامعه	x	x						x									
12.	ع اساس اتو في عرسان !!لو مكانك اي ول سيي بس يس يسسس	x		x					x					x	x			

