CHAPTER 4

ANALYSIS OF DATA

4.0 Introduction

This chapter presents the findings from the analysis of communication strategies (CSs) used in e-mail messages for recreational purposes. It aims to identify and categorise the occurrences of CSs employed by teenagers in the e-mail messages sent to their friends on www.friendster.com. The findings of the analysis of CSs were based on the 123 e-mail messages collected from the 12 participants. The frequency of the various CSs employed is discussed, the reasons for using the strategies as determined by the participants are explained and a comparison on the frequency of usage of CSs between gender is made.

The discussion is divided into three parts based on the research questions of this study. The first part presents the analysis of the frequency of distribution of the various types of CSs used by all the participants. The number of occurrences of each strategy was counted and tabulated based on the classifications in Table 4.1. The modified taxonomy adopted for this study was drawn based on various sources and studies done by researchers such as Murray (1985), Segerstad (2002) and Su Ning (2004) (refer to Table 2.4 Taxonomy of Communicative Strategies for Present Study in Chapter 2).

The second part provides an explanation on the reasons for employing the various CSs with the support of examples. It should be noted that the extracts presented in this chapter have not been taken from all the e-mail messages but are randomly selected based on their relevance.

The final part focuses on the analysis of the frequency of usage of each strategy type between genders so as to identify strategy preference of each gender.

4.1 Analysis Of Communicative Strategies Used By E-mail Users

RQ 1: What are the communicative strategies used by e-mailers when writing their e-mail messages in the Friendster website?

The data revealed that all the participants employed a wide range of CSs when writing email messages to their respective recipients in www.friendster.com. The main reason for this phenomenon is to overcome the distance and silent nature of this mode of communication. The wide range of CSs employed is evident in Table 4.1 below.

A total of 3,144 communicative strategies has been identified in the corpus of 123 e-mail messages, with female participants using slightly more CSs (1,611 total occurrences) than male participants (1,533 total occurrences) (see Table 4.2 below). In terms of the types of CSs employed, the male participants used all the 14 types listed in the taxonomy while the female participants used 13 types. Only the use of capitalization for shouting was absent in the female e-mail messages.

The CSs found in the corpus include both lexical and syntactic strategies and they are generally categorized under 4 different strategy types. Interestingly, the data revealed that

all the CSs are not distinct from each other. The data illuminates many permutations of CSs usage and thus many overlaps were found. The sub-strategy, *absence of capitalization*, for instance, overlapped with the use of *initialisms* and *abbreviations*. Some instances of such *overlaps* are shown below.

F4:9 - i was wonderin hus tis guy...tengok group(ns), dah taula..azrin..

[**ns** - National Service]

[I was wondering who's this guy...look at the NS group, I knew already... Azrin..]

F6:5 - hoping 2 c them n many others on **cbn** carnival cum family day...

[cbn - Convent Bukit Nanas]

M3:4 - last yr ur passing marks make ur batch for **spm** look like a fluke....

[spm - Sijil Pelajaran Malaysia (Form 5 public examination)]

M4:8 - i want borrow d warcraft cd...plz

[cd - Compact Disc]

The occurrences of these CSs were recorded under the categories of both initialisms and absence of capitalization because they are initialisms which have not been punctuated correctly with the uppercase.

As a matter of fact, it was found that all the word level strategy types (except for the *use of punctuation-mark emoticons or smileys*) overlapped with the syntactic level strategies (that is, "telegraphic" language, syntactic simplification, and use of interactional features). Additionally, there was also double-counting of the occurrences at the syntactic level strategies. The examples below quoted from the corpus show overlaps that were found between *syntactic simplification* and *interactional features*.

Syntactic Simplification:

M2:9 - wat u do this few days? U support which football caountry?

Interactional Features:

M2:9 - wat u do this few days? U support which football caountry?

Although the percentage of overlap in the CSs employed is high, this issue (overlap) is not the focus of this study and hence will not be further discussed.

The overall analysis of CSs application revealed that the participants employed *orthographic strategies* the most frequently: these recorded 1,683 (53.5%) of the total strategies employed (refer to Table 4.1 below). This is followed by *paralinguistics* and *graphics* which accounted for 552 (17.6%) occurrences and vocabulary strategy, 481 (15.3%) occurrences and the least of all is *discoursal features*, 428 (13.6%) occurrences.

Table 4:1 Frequency of Communicative Strategies Used in E-mail Messages by Male and Female E-mail Users

No.	Types of Communicative Strategies		Number of Occurrence (%)	Total for Each Category
1		1.Phonetic / Informal Spelling	782 (46.5)	
	Orthography	2. Speed Writing	88 (5.2)	1,683 (53.5%)
		3. Absence of Capitalization	813 (48.3)	
2	Paralinguistics and Graphics	1. Multiple Letters	10 (1.8)	
		2. Capitalization (shouting)	5 (0.9)	552
		3. Excessive use of Punctuation	526 (95.3)	(17.6%)
		4. Punctuation-mark Emoticons or Smileys	11 (2.0)	
	Vocabulary	1. Informal Words	58 (12.1)	
3		2. Interjections	315 (65.4)	481 (15.3%)
	v ocusulary	3. Initialisms	58 (12.1)	
		4. Abbreviations	50 (10.4)	
4	Discoursal Features	1. "Telegraphic" Language	76 (17.8)	
		2. Syntactic Simplification	208 (48.6)	428 (13.6%)
		3. Interactional Features	144 (33.6)	
	3,144			

The *orthographic strategy* was obviously the most preferred strategy when compared to the other 3 main strategies (see Table 4.1 above). Among the orthographic sub-strategies employed, *absence of capitalization* was the most widely used and it accounted for 813 occurrences or 48.3% out of 1,683 occurrences, followed by *phonetic/informal spelling*, 782 occurrences (46.5%) and *speed writing* with 88 (5.2%) occurrences.

The second preferred CSs revealed in the corpus is the use of *paralinguistics* and *graphics*; it accounted for 552 (17.6%) of the total occurrences of CSs used. The excessive use of *punctuation* was employed 526 times (95.3%). Meanwhile the other three strategies which had very low frequency of use comprise the use of *punctuation-mark emoticons or smileys* (11 occurrences or 2.0%), *multiple letters* (10 occurrences or 1.8%), and *capitalization* or *shouting*, (5 occurrences or 0.9%). The data revealed that this last sub-strategy was employed by only one participant, M1, with the intention of shouting to get the attention of the email recipients. Phrases in the upper case were found in the e-mail messages of two other participants, M4 and F2, but they were merely accidental and correction was not necessary as the e-mail messages were not formal documents, based on the explanation given by the participants during Interview 2 (refer to Question 6 in Appendix 2).

Vocabulary strategies ranked third, with a total of 481 (15.3%) occurrences. The use of interjections accounted for the majority of the vocabulary strategies used by the participants, that is, 315 occurrences (65.4%). The other two sub-strategies under this category which had a lower frequency of application were the use of informal words and initialisms which accounted for 58 occurrences or 12.1% respectively, while the lowest occurrences was abbreviations, 50 times or 10.4%.

Unlike the three earlier mentioned strategies, there was a lower percentage of use of discourse strategies by the participants. The data revealed that *syntactic simplification* accounted for 208 occurrences or 48.6% of the total strategies used in this category (see Table 4.1) whereas the recorded frequency for the use of *interactional features* such as questions was 144 times or 33.6%. *Telegraphic language* was the least used and it accounted for only 76 occurrences or 17.8 %.

The following section provides a detailed discussion of each strategy type and the reasons for employing each one, with examples elicited from the data, in order to answer Research Question 2.

4.2 Reasons For Using Each Type Of Communicative Strategy

RQ 2: Why do they (teenage e-mailers) adopt these strategies?

4.2.1 Orthographic Strategy

Figure 4.1 Orthographic Strategy and Percentage of Usage

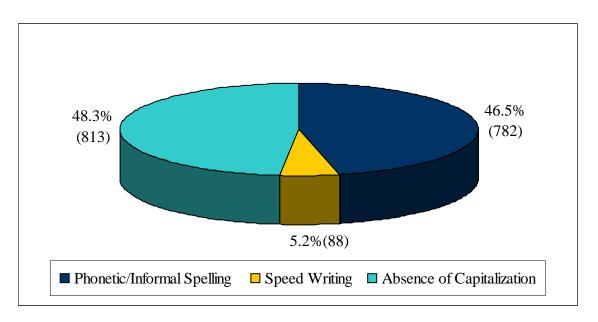


Figure 4.1 above shows the occurrences of each CS under the *orthographic* strategy that is the *absence of capitalization, phonetic or informal spelling* and *speed writing*.

4.2.1.1 Phonetic / Informal spelling

Nonstandard spelling which is penalized in formal writing, was used freely in the e-mail messages in this study. All 12 participants were found to use 'simplified, erroneous' spellings which are commonly found CMC (probably due to the influence of Short Messaging System, Instant Messaging or chatroom language) or to create their own spellings based on the phonemic equivalents or representations of words. The data yielded 46.5% of the total strategies identified in this category of CS (Refer to Figure 4.1). This is not surprising because the participants under study are experienced e-mailers who have been communicating with their friends and relatives in this website for a least a year, as revealed in their response to Question 6 (see questionnaire, Appendix 3).

This strategy was found to be effective in reducing the number of keystrokes and thus is in favour of the principle of economy of effort. The 'erroneous' spellings in e-mails do not indicate a lack of education in the participants as they were school goers and had managed to obtain grades A1 to B3 in the SPM English paper. Instead, such spellings are deemed acceptable by the participants who belong to the same speech community (of e-mailers) and are well understood by them for they were not newbies. There were also inconsistencies in the use of this 'new' writing convention among the participants. However, there should be no question on the inconsistent usage of the strategy by the participants because its usage is not mandatory for all e-mail users.

The displacement of words by their phonemic equivalents can be further divided into the following categories:

- i) replace a word with one/two letter(s),
- ii) replace a word with a number,

- iii) replace a word with a letter and a number,
- iv) combine letter(s) and numeric,
- v) spell words according to the pronunciation, and
- vi) truncate initial, middle and end letters which are not stressed.

Some instances of phonetic or informal spelling employed by both male and female participants found in the corpus are quoted below.

i) Replacing a word with one/two letter(s)

F6:5 - Oh i **c**, yeah i noe tat esther has left 2...

F4: 3 - oh, nw **u** uni student redy la..if i join ur uni nex year..ten i'll **b** ur junoir..hahaha...

[
$$u - you$$
; $b - be$; $ur - your$]

M5:8 - Yea **d** ball thingy i suppose...

ii) Replacing a word with a number

F3:6 - hey.. i wanted 2 invite u 2 join our TGS-ians group..

M2:9 - i spent 2 much money ad, about Rm300++,

$$[2-too]$$

M2:3 - i dun reli prepare things 4 cny.. juz hopin 2 get more angpaus..

$$[4 - for; 2 - to]$$

M3:8 - Well am so happy la that I am going to meet Peter Yii after the

$$[1 - one]$$

iii) Replacing a word with a letter and a number

M2:10 - Haha, do u go 2 kulim **b4**?

[b4 - before]

iv) Combining letter(s) and numeric

This is a combination of rebus which Crystal (2001) defines as "the sound value of letter or numeral that acts as a syllable of a word", as in '2day' (today) and '2moro' (tomorrow). An example extracted from the data is shown below.

M2:9 - Yesterday i go 2 watch the KL motorshow n **2day** i go 2 Sunway lagoon again wif TJ,his gf n my friend. **2day** i spent 2 much money ad,about Rm300++,

[Yesterday, I went to watch the KL Motorshow and today I went to Sunway Lagoon again with TJ, his girlfriend and my friend. Today I spent too much money already, about RM300++.]

v) Spell words according to the pronunciation

F3:14 - wat do u mean by dis?

[What do you mean by this?]

- M6:5 oh, ben leon, got 2 **noe** him last **yer** @ kem jatidiri **tat** we f6 joined

 [Oh, Ben Leon, got to know him last year at Kem Jatidiri that we Form 6 joined]
- M5:9 .i **oso dunno** d percentage la... hahaha.. Pls **dun** tel ne1..**cos** my family **oso dun** lyk to mention it.. k?

 [I also don't know the percentage la... hahaha.. Please don't tell anyone.. cause my family also don't like to mention it.. ok?]

vi) Truncating initial, middle and end letters

Words are 'shortened' or truncated by ellipting the vowel 'o' as in 'frm' (from) and by joining key consonants in 'bz' (busy) in which the combined 'plosives' /b/ and /z/ is a classic example. Additionally, there is an example of the tendency to play with 'plosive' sounds as in /s/ or /z/. The participants break this truncation practice with a non-standard spelling that is from 'just' to 'juz' to affect a playful mood. The replacement of /s/ by /z/ in this data should not be seen as poor spelling but instead reflects the spoken pronunciation of the word. Some examples of initial letter truncation:

F4:11 - if ur chosen, jus **njoy** it..

[If you're chosen, just enjoy it..]

M2:2 - i hav added ur msn .. dun worrie... n tel me more **bout** u.. coz u r completely a stranger 2 me..

[about]

Some examples of middle letters truncation:

F3:5 - long time **nvr** hear from u edy...

[Long time never hear from you already]

F3:4 - haha.. **thx thx**...

[haha.. thanks, thanks]

Examples of truncating end letters:

M4:1 - sei piang..now im **takin** sptm la not spm!

[sei piang (a rude Cantonese expression).. now I'm taking STPM, not SPM]

M5:9 - .. Pls dun **tel** ne1..cos my family oso dun lyk to mention it.. k?

[.. Please don't tell anyone because my family also don't like to mention it.. okay?]

In the following example, the participant created her own truncations. In these extracts, all the 3 types of truncations were found.

F4:5 - so, i **mus** online **vryday** la **cz** i **gt** another 51 days...hahaha

[So, I must (go) online everyday la cos I got another 51 days...hahaha]

F4:11 - hey u **stil mba** me ah??

[Hey, (do) you still remember me?]

Such phonetic or informal spellings were also found in the construction of phrases and questions. Some examples of this strategy are listed below.

Examples of phrases:

F2:8 - **oic** [Oh, I see]

F3:4 - owh.. **icic.**.. [I see, I see]

F4:2 - hahaha..cya in skul.. [see you]

Examples of questions:

F4:8 - hi **h r u**?? [Hi, how are you?]

4.2.1.2 Speed Writing

The occurrence of *speed writing* was found to be less frequent than both *phonetic/informal spelling* and *absence of capitalization*, with a total of 88 instances of occurrences or 5.2% of the total occurrences for the orthography category of CSs. The two main reasons for the employment of this strategy is a matter of expediency and less keystrokes. A common way of *speed writing* is to omit punctuation marks such as apostrophe (') contractions as listed below.

F1:2 - ...sleep **doesnt** come easy too..

[.. Sleep doesn't come easy too..]

F3:12 - ppl **cant** understand marsians.. hehe!

[People can't understand Marsians..hehe!]

M4:1 - sei piang..now **im** takin sptm la not spm!

[sei piang.. now I'm taking STPM la, not SPM]

F3:4 - nah.. **its** ok...

[Nah (No).. it's ok..]

M5:6 - **Its** easy being the centre of attention.

[It's easy being the centre of attention.]

F5:1 - u **wont** k de hor

[You won't care de hor (right)]

M5:3 - Hahaha.. I noe u wont.

[Hahaha.. I know you won't.]

M1:6 - i said **ill** try 2 ccome next time...

[I said I'll try to come next time...]

The last 3 words ('its', 'wont' and 'ill') were liberally employed as contractions although they are listed as headwords in the dictionary and have their own distinct meanings. They however did not cause any misunderstanding in the recipients of the e-mail messages.

It is discovered also that 11 out of the 12 participants employed *speed writing* except Sample M6. He reasoned that he might not be able to understand the 'newly created words' used in the e-mail messages sent to him and thus he did not create his own 'new' spellings of words or phrases.

4.2.1.3 Absence of Capitalization

The most frequently used sub-strategy was *absence of capitalization*, accounting for 813 occurrences (48.3%) out of the total occurrences of CSs (1,683) for this category. *Capitalisation* was found to be absent in proper nouns such as names of places, people and events and even in the case of the pronoun 'I'.

F2: 4 - me from **tawau.** [I'm from Tawau (name of a town)]

M1:4 - erm..i am 19..in upper six this year in **st.john institution**..

[Erm, I am 19 and in Upper Six this year in St. John's Institution]

F4:1 - emm..i feel lkie killin tis david..

[Emm.. I feel like killing this David.]

Besides, capitalized letters were not used at the beginning of most sentences. Some of the examples are quoted from the corpus.

M4:5 - **nxt** time my car rosak...u must repair free 4 me!

[Next time when my car breaks down, you must repair it free of charge for me]

F4:2 - wad about u?

[What about you?]

The absence of capital letters in these instances was mainly to reduce keystrokes and thus was a way of saving time. The majority of the participants interviewed agreed that pressing the 'Shift' or 'Cap Lock' button on the keyboard was time consuming and a hassle. Additionally, *capitalization* had been greatly ignored by the participants based on the responses given during Interview 2. There was never any misunderstanding in the process of communication through emails. Therefore, it is obvious that getting the message across was more important than accurate punctuation when communicating through emails.

4.2.2 Vocabulary

This category of communicative strategies refers to the use of non-standard or informal lexical items. Figure 4.2 below shows the frequency of occurrence of each sub-strategy under the *vocabulary* strategy that is the use of *interjections*, *abbreviations*, *initialisms* and *informal words*.

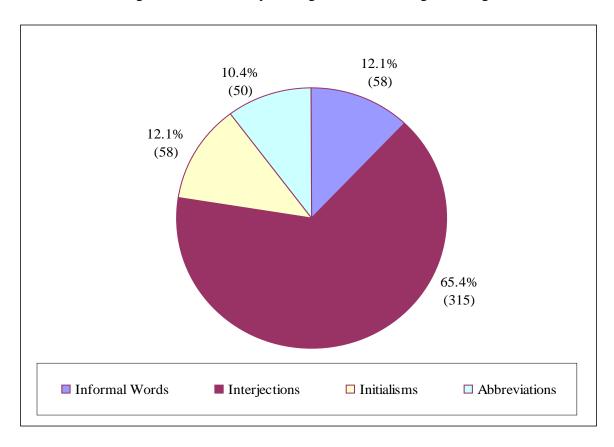


Figure 4.2 Vocabulary Strategies and Percentage of Usage

4.2.2.1 Informal Words

Comparatively, *informal words* were not widely used by the participants and it accounted for 58 occurrences (12.1%) out of 481 occurrences of CSs in this category. It was found that Sample F2 did not use a single *informal word* in all her 10 e-mail messages. Some of the *informal words* used include "kinda", "wanna", "cool", "fella/fela", "stuff", "gimme"

and "super duper". The participants need to be familiar with the use of these words as well as be creative in creating one. Since e-mail writing is basically transferring of ideas from the participant to the screen of the computer and it is similar to FTF communication, therefore the use of informal words in speech is expected to be found in e-mail messages. In addition, the participants acknowledged that the e-mail messages written were for recreational purposes so they tried to keep the language as informal as possible. Some examples of informal words used are listed below.

F3:1 - haha..wat **kinda cool** stuff?

[Haha..what kind of "cool" stuff?]

F1:6 - i know wat u mean.. but i'm not **gonna** do that..

[I know what you mean.. but I'm not going to do that..]

M3:2 - u look **super duper** ugly!!

[You look extremely ugly!!]

M4:6 - apa awak buat ni! **dotaing** ah?

[What are you doing? Dotaing (playing Dota, an online game) ah?]

4.2.2.2 Interjections

A wide variety of interjections (58 altogether) were used by 10 of the participants in this study. The total occurrence of *interjections* was 315 which were 65.4% of all the *vocabulary* strategies used (see Figure 4.2 above). This sub-strategy accounted for the highest percentage of usage in the *vocabulary* category.

The data revealed that three types of *interjections* were employed by the participants that is, English, Malaysian and other informal interjections. They were used to convey the participants' state of emotion and vocal inflection when composing their e-mail messages.

English interjections include those that are commonly used by English Language speakers in their speech and those that are found in the English Oxford Reference Dictionary, such as 'hi', 'yeah', 'well', 'Oh, my god', 'Oh, dear', 'yucks', etc. There were 81 occurrences of English interjections in total and 19 different types were found.

The extracts below demonstrate the English interjections that were found in the data.

M 1:8- **yeah** my gf...

M2:8 -> Hi,how r u?

M3:7 - well well neway have a nice day...

F3:10 - **huh**? > wats so cure so?

F4:1 - **oh no**..nt 4 d whole day..

F1:2 – .. i'm never gonna be one of those chicks that u talk about worshipping this kinda ppl.. **yucks**.. they're so ugly..

The interjection 'yucks' used by participant F1 was to express her thoughts on the disgusting practice of youngsters worshipping certain kinds of people or their idols.

Comparatively, more Malaysian interjections were employed by the 12 participants in this study. There were 138 occurrences altogether. 39 different types of Malaysian interjections such as 'la', 'le', 'wo', 'ma', 'meh', 'ya', 'lo', 'haih', 'ah', 'liao', 'ar' and others were used. These interjections reflect the influence of the Malay, and Mandarin as well as Cantonese and Hokkien dialects. Apart from that, since the distinction between speech and writing is becoming blurred as a result of modern technology (Halliday, 1985), writing email messages like how they were spoken helps create an atmosphere where the e-mail sender and recipient are seen to be having informal FTF conversation.

The particle 'lah' and its variants (la, le, leh, lo, lor) were extensively used in e-mail interaction by the participants. The function of 'lah' (and its variants) may be likened to that of "please" in English, "sila" in standard Malay and "tolong" in colloquial Malay (Morais, 1994, Jamaliah, 2000). It was also used as an emphasis marker.

M4:6 - woi...reply me la... apa awak buat ni! dotaing ah?

F5:4 - i'm fine, juz a lil bit bz **lo**, **haih**, f6 reli hard to go thru....

The 2 extracts below show that 'la' and 'leh' were used to affirm a statement which is similar to "of course". It is derived from and has the same meaning as the Chinese expression "啦"/la/.

M4:3 - i still hav exam **leh**

F5:2 - yalo, the world soooo small..... [Yes, of course. The world is so small.]Next, the particle 'meh' is used when asking questions, especially when a person is skeptical of something. It is derived from the Chinese expression "咩"/mie/ or "喝"/ma/.

M6:6 - you think you very yeng **meh**? [Do you think you are very smart?]

F5:9 - i look like that kind of girl **meh**? [Do I look like that kind of girl?]

The other particle 'ah', 'ar' or 'ahh' is derived from the Chinese expression "啊"/a/. It is used at the end of sentences but unlike **meh** the question is rhetorical. This is shown in the extracts below.

F4:5 - **hoi** u nex week pmr aso still online **ah**?

F5:5 - me **ar**??doing the same thing everyday...

F6:6 - wah, bio ahh!!! i'm oso dying la wei!!!

Other interjections like 'hoi', 'wah', 'wei' and others are commonly used by Malaysian speakers.

The third group of interjections which is not typically used in English or Malaysian English includes 'ish', 'emm', 'haha', 'hehe', and 'erm' was also found in the corpus. They functioned differently; for instance, participant M1 used 'erm..' to show that he was going to change the topic of interaction (as shown below) while "haha" and "hehe" were used to express the participant's happy feeling and action (that is, laughing away). All these are also found in FTF communication.

M1:4 - **haha** good..not my dog..**hehe..**my friend send me the pic 1..**erm**..i am 19..in upper six this year in st.john institution..

Another example of an interjection used to show annoyance is found in the extract below.

F3:13 - haha.. wat la.. ireally dun understand la babes... **ish**... [annoyed]

Meanwhile, the interjection 'emm' in the extract below was used to show agreement.

F4:1 - **emm**..i feel lkie killin tis david..wear tie again??

The participants explained that a variety of interjections were used because e-mail messages are written like verbal FTF conversations minus the tone of voice and emotion.

4.2.2.3 Initialisms

Initialisms was one of the least used sub-strategies although 9 out of the 12 participants admitted (refer to the questionnaire in Appendix 3) that they used *initialisms* when composing e-mail messages. The total occurrence was 58 or 12.1% out of the total occurrences for the *vocabulary strategy*. This low percentage was due to its low frequency of application by the participants and they were used only when necessary. It is found that only one participant, that is, M4 did not employ this strategy at all. Some of the initialisms employed by the teenage e-mail users are shown below.

M5:3 - Lolz.. Agree.. Yes to all. Hahaha..

[Laugh out loud.. Agree.. Yes to all. Hahaha..]

F6:4 - **btw**, do u still remember me?

[By the way, do you still remember me?]

M3:8 - hmm hehe i am messaging u from my kampung in pahang...so mite not b in kl for **ob** nite...

[Hmm, hehe I am messaging you from my village in Pahang.. so might not be in KL for the Orientation Ball night...]

Some initialisms which were commonly used in FTF conversation such as PMR, SPM, STPM, NS (National Service) and SMS were also found in the data.

4.2.2.4 Abbreviations

The use of *abbreviations* is neither prevalent nor consistent. This sub-strategy yielded a total of 50 occurrences or 10.4%. Participant M6 was found not to employ this strategy. There was also no particular pattern found in the abbreviations used. Although majority of the participants agreed that abbreviating words helps save time and reduces keystrokes (based on responses from Question 9 of the questionnaire, Appendix 3), they do not apply it when composing their e-mails. This is because the influence of the traditional conventions of writing has been more dominant than those advocated and mediated by new media technology such as the e-mail. Some of the examples of abbreviations used by the participants are shown below.

F1:3 - kinda miss ur **lil bro** there.. hehe..

[Kind of miss your little brother there.. hehe..]

F3:12 - **swt**...

[Sweat.. (an expression)]

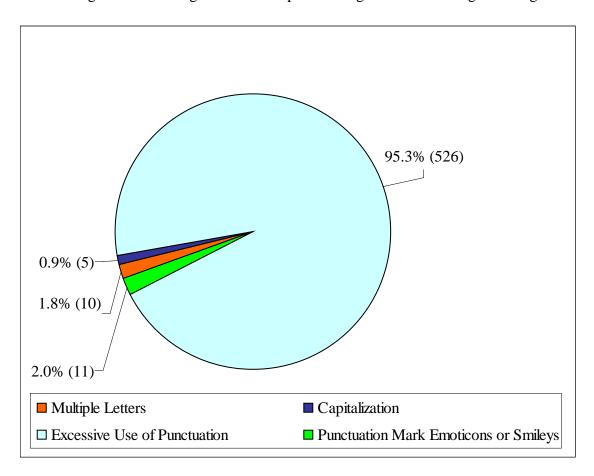
M5:7 - Nvm it's ok.. I stay in kl.. nth much to do in kl la, as u n I know

[Never mind, it's ok.. I stay in KL.. Nothing much to do in KL la, as you and I know]

4.2.3 Paralinguistics and Graphics

Paralinguistic and graphic strategies ranked second in terms of its total usage, with a frequency of 552 or 17.6%. Figure 4.3 below shows that the excessive use of punctuation marks such the question mark (????) and periods (.....) accounted for the highest frequency, i.e. 526 times (95.3%). As for punctuation-mark emoticons or smileys, the total occurrence was 11 times (2.0%) and this is followed closely by the use of multiple letters which occurred 10 times only (1.8%). Capitalization which represents shouting was the least used, that is, 5 times or 0.9% only.

Figure 4.3 Paralinguistic and Graphic Strategies and Percentage of Usage



4.2.3.1 Multiple Letters

Multiple letters means reduplicated letters used to represent drawn-out or expressive intonation, or "eccentric spelling" (Reid, 1996) in the text like 'nothinggggggggg'.

M1:1 - haha thanks 4 being my **friendzzz** then...hehe

F5:7 -juz wanna c whether u free during the **loonnngggg** holidays or not....

This sub-strategy was the least used among all the *paralinguistic* and *graphic* strategies and it appeared 10 times (1.8%) only. It was employed by 4 male and 1 female participants. This result was not surprising, as the majority of the participants, that is 10 of the 12, were unable to interpret the function of this strategy correctly and therefore a low frequency of use was expected (refer to Question 14 of the questionnaire, Appendix 3).

4.2.3.2 Capitalization

Capitalization is used to signal conversational tone and nonverbal communication information. It is read as "SHOUTING", with the purpose of attracting the attention of the reader or showing emphasis. Capitalization accounted for 5 times (0.9%) of the total occurrences. Only two participants (M1 and M4) used this strategy.

M1:2 - but if not then.....nice meeting u :-p

~SMILEZ~

M1:5 - wid u...gotta go now..till then take care..tell me bout ur self k..

~SMILEZ~

When closing his messages, participant M1 admitted that the reasons for using this strategy was to attract the readers' attention till the very last word of his email messages and it was a way to end his messages pleasantly - "SMILEZ" or SMILE.

However, participant M4 used the *capitalization* strategy twice (as shown below) with the intention of shouting at his friend because of frustration as he was desperately waiting for a reply.

M4:8 - plz reply me **ASAP!!!!**

M4:10 – reply me **AHHHHHH!!!!!**

Capitalization appeared twice in F2's e-mail messages and once in M5's. They highlighted that shouting at their friends or recipients was never their intention but reasoned that it was accidental and like wrong spelling, correction was not necessary because their key objective was to get their messages across.

4.2.3.3 Excessive Use of Punctuation Marks

This strategy was the most frequently used sub-strategy under the *paralinguistic* and *graphic* category of CSs, that is, a total occurrence of 526 or 95.3%. The three commonly used *punctuation marks* are trailing dots (.....), multiple exclamation marks (!!!!) and multiple question marks (?????). All the 12 participants employed this sub-strategy for various reasons.

First, it was used to produce real paralinguistic effects which are found in real life conversation. Instead of typing the interjection "erm..." to communicate the idea that he/she was thinking of what to write next, the participants used trailing dots. This is similar to speakers in FTF communication who want to hold the floor.

Second, the participants reasoned that the use of trailing dots (.....) in particular served as a signal for sudden topic shift since there is nobody to control what to write or say next. It

was the easiest way to demonstrate a switch from one topic to another as not many keystrokes were involved.

F5:1 - when i got 'feel' n inspiration to write sumthing....maybe after exam??c

first la, a gd article is not dat easy to 'produce', wakkaka!!!!

In the example above, multiple periods were used to communicate to the recipient that she (participant F5) was thinking and had something to add. Then, multiple question marks were used to express her uncertainty regarding writing e-mails after her exam. Finally, the multiple exclamation marks present after her laughter "wakkaka" were meaningless (based on F5's response during Interview 2) and could be omitted yet her action of laughing was maintained.

Third, the excessive use of question marks was meant to express the participants' state of emotion such as amazement, astonishment or shock.

M1:5 - hie thanks 4 adding me...do i know u??how did u get my contact???

In this extract, participant M1 expressed his surprise and amazement at how he was added as a friend by the sender who did not know him. The question marks could also project a furrowed brow as he read and responded to the e-mail message sent to him. They also served as emphasis to the questions, thus the recipient concerned responded to the questions.

However, in many cases the excessive use of punctuation marks was meaningless and redundant.

4.2.3.4 Punctuation-mark Emoticons or Smileys

Punctuation-mark emoticons or smileys were employed on 11 occasions (2.0%) in all the 123 e-mail messages. It was found that 7 out of the 12 participants used this sub-strategy. The main reason for such low frequency of employment was these emoticons and smileys could not be used to express the feelings of the participants clearly and accurately. Neither were they able to provide pitch, rhythm, loudness and other voice cues. Basically, they were used for fun. Besides, the participants need to be able to apply the emoticons and smileys at the right place in the e-mail messages instantaneously. The extracts below show the use of punctuation emoticons and smileys.

M1:2 - nice meeting u :-p (smile, happy – ASCII)

M5:9 - But i'm a malaysian..Lolx.. >.< (angry – a Japanese smiley)

F1:10 - dun wanna talk about it.. sadly = ((sad - ASCII)

F5:5 - take k ya, although u r bz....^ (male smiley – a Japanese smiley)

4.2.4 Discoursal Features

The discoursal features employed by the participants include telegraphic language, syntactic simplification and use of interactional features. The data revealed that the participants used more syntactic simplification that is 208 occurrences or 48.6%, followed by the use of interactional features, 144 occurrences or 33.6%, and the least was telegraphic language 76 occurrences (17.8%), as shown in Figure 4.4 below.

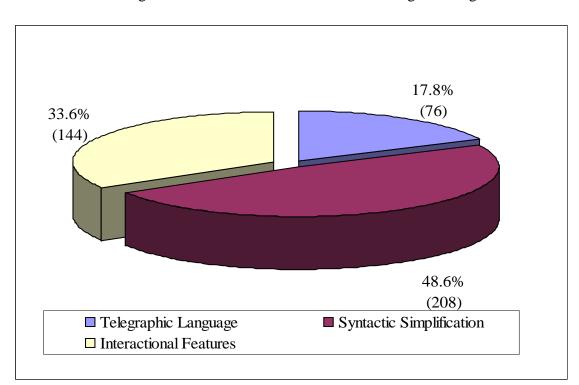


Figure 4.4 Discoursal Features and Percentage of Usage

4.2.4.1 Telegraphic Language

Telegraphic language or speech refers to a form of reduction of speech like that used by children who imitate the sentences of adults at the early stages of first language acquisition. Thus, only the lexical or contentive words are retained while the grammatical ones are almost completely left out. It is similar to the use of a stretch of incomplete structures (mainly phrases) which is unconventional in written language. This feature is frequently found in spoken discourse, particularly in an informal setting.

In the data, 76 instances (17.8% of the total occurrences of discoursal features) of *telegraphic language* were employed by the 12 participants. They regarded their e-mail messages as informal documents and the primary purpose of sending the messages was for socialising. As such, having incomplete and ungrammatical structures were not considered

grave mistakes as getting their messages or ideas across was more crucial than stringing accurate grammatical structures. The participants are competent in their English language since they fulfilled criterion (d) under 3.3 Selection of Participants, that is, they obtained grade A1-B3 in their SPM English. Thus, their language competency is good enough for them to not make serious grammatical mistakes.

F2:1 - nearby endah ria condo double storey.

(meaning It's nearby Endah Ria Condo. It's a double storey house.)

F2:2 - well same like me my econ very weak ...econ very hard ..

(meaning Well, I'm just the same. I'm very weak in Economics. Economics is very difficult.)

M3:8 - sure fail 1 me

(meaning I'm sure to fail.)

M5:9 - Me hanging in KL.. Mata mata? Heard of it..

(meaning I'm hanging around in KL. Where is Mata mata? I've heard of it.)

F5:7 - wah, reli very short wor....nola

(meaning"Wah, it's really very short. No.)

M4:9 - when u free call me mamak!

(meaning When you are free, call me to go to Mamak stall.)

The extracts above display the employment of mostly contentive words with few or no grammatical words.

4.2.4.2 Syntactic Simplification

The data revealed 208 occurrences (48.6%) of various syntactic simplifications. *Syntactic simplifications* include the deletion of subjects, auxiliaries, and determiners in statements. There were many opportunities for the participants to omit the subject since the server has

inserted the senders' userids (user's identification), pictures and names, which were known to the receivers. Examples of deletion of subject are shown below.

F4:11 - u gt ns ah?

(meaning Did you get selected for National Service?)

F5:1 – reli very very sorry ar, coz always away....

[meaning **I'm** really very very sorry cos **I'm** always away]

F4:5 - woi...fatty! how r ...still workin in desa petaling?

(meaning Woi, Fatty! How are you? Are you still working in Desa Petaling?)

'Woi' is a colloquial Chinese version of 'Hey' or "Hi" and "fatty" is a nickname of F4's friend.

- F6:6 duno how to *sumbat* the 2 volumes into my head...scared will collapse soon!!!

 (*meaning* I don't know how to absorb the 2 volumes into my head. I'm afraid I will collapse soon!!!)
- M6:3 yea loh.. that time all excited and happy about ob nite.. but now, exam next week la..

(*meaning* Yes, at that time **we were** all excited and happy about Orientation Ball night.But now we are **busy with** exam **which is** next week.)

In order to reduce the number of keystrokes, the participants resorted to using simplified structures. This means less time is used to compose the messages. Another obvious influence is the use of Manglish or Malaysian English in an informal setting. Since it is being used by Malaysian speakers in everyday conversation and e-mail is similar to spoken language but in written form, therefore, simplified structures were found in the data. Codemixing, common among Malaysian teenagers who are either bilingual or multi-lingual, was also employed by the participants.

4.2.4.3 Interactional Features

Interactional features such as questions were commonly found in the e-mail messages although e-mail is a form of asynchronous communication. The participants knew that their questions do not require instantaneous response as e-mails for recreational purposes do not involve urgent matters. There were 144 instances (33.6%) of usage of such features in the corpus. Some examples of this sub-strategy taken from corpus are shown below.

M5:4 – Wat's so special bout them anyway?

M6:5 – U..go challenge BUNTA if u dare..or u want to race with me?

(meaning You challenge Bunta if you dare to. Or do you want to race with me?)

M3:4 – ooh...as in the same college as chowdi and shimyi rite?

(meaning Ooh.. Is A.S. in the same college as Chowdi and Shimyi?)

M2:10 – there got 1hutan simpanan call sungai sedim,u know?

(meaning Do you know there is a forest reserve in Kulim called Sungai Sedim?)

F1:7 – haha.. we'll meet up one day and talk?

(meaning haha.. Should we meet up one day and talk?)

F3:2 – mind 2 intro?

(*meaning* Do you mind to introduce yourself?)

The structure of sentences in the e-mail messages in the corpus could then be summarized as short and less complex where non-edited or non standard grammatical fragments were common. Sometimes it was seen as unplanned and disorganized. Initial pronouns and articles in sentences were also commonly omitted to reduce keystrokes and to save time.

In short, the data revealed that all the 14 CSs listed in the taxonomy were used by the 12 participants for various reasons when composing their e-mail messages. The key reasons were to save time and reduce keystrokes. The frequency of application however varied

from as high as 782 occurrences (*phonetic/informal spelling*) to as low as 5 occurrences (*capitalisation* for shouting) only.

The following discussion will turn to the analysis of differences in the use of CSs between male and female gender and the reasons for the differences will also be highlighted.

4.3 Analysis Of Differences In The Use Of Communicative Strategies Between Gender

RQ 3: How does gender influence the use of these communicative strategies?

Generally, the data revealed that there is no significant difference in the use of CSs between male and female teenage e-mail users. It was discovered that female e-mail users employed slightly more CSs than the male e-mailers, that is, 1,611 occurrences (51.2%) and 1,533 occurrences (48.8%) respectively (see Table 4.2 below). The male e-mailers were found to employ comparatively fewer of the *orthographic* CSs and *discoursal features* than female e-mailers.

Table 4.2 Communicative Strategies Used By Male and Female Teenage E-mail Users

No	Types of Communicative Strategies		Occurrence of CSs	
			M	F
1	Orthography	1. Phonetic / Informal Spelling	394	388
		2. Speed Writing	20	68
		3. Absence of Capitalization	480	333
Sub-total			789	894
			(46.8)	(53.2)
	Vocabulary	1. Informal Words	36	22
2		2. Interjections	171	144
		3. Initialisms	42	16
		4. Abbreviations	20	30
	Sub-total			212
			(55.9)	(44.1)
	Paralinguistics and Graphics	1. Multiple Letters	4	6
3		2. Capitalization (shouting)	5	0
		3. Excessive use of punctuation	247	279
		4. Punctuation-mark Emoticons or Smileys	7	4
	Sub-total			263
			(52.4)	(47.6)
	Discoursal Features	1. "Telegraphic" Language	30	46
4		2. Syntactic Simplification	95	113
		3. Interaction Features	61	83
	Sub-total	186	242	
		(43.5)	(56.5)	
		1,533 (48.8%)	1,611 (51.2%)	



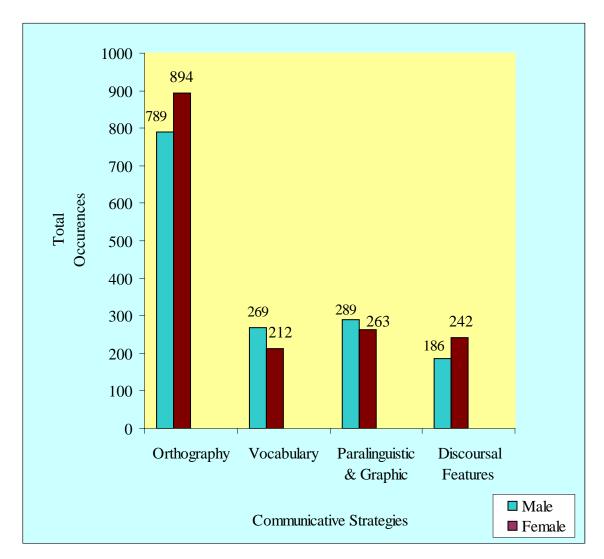


Figure 4.5 illustrates the use of the 4 categories of communicative strategies by the male and female teenage e-mail users. It clearly shows that female e-mail users employed more *orthographic* and *discoursal features* than their male counterparts when composing their e-mail messages. However, they used less *vocabulary* and *paralinguistic and graphic* CSs compared to the male users.

4.3.1 Orthography

Under the *orthographic* CSs, both male and female users employed almost the same number of *phonetic/informal spellings*, that is 394 (50.4%) and 388 (49.6%) respectively. This small difference implies that both genders were equally good in using this substrategy. All the 12 participants (6 males and 6 females) agreed that using *phonetic/informal spelling* was time-saving and it was faster for them to compose their message as it involved fewer key strokes (based on Question 7 in the questionnaire, Appendix 3). Besides that, 7 out of the 12 participants rationalised that phonetic or informal spellings were part of e-mail language which every user should know and understand, thus, this sub-strategy was one of the most frequently used CSs. Besides, the rich phonetic spellings of e-mail language which is understood by every e-mail user not only encouraged extensive usage among the participants but also prompted the creation of new ones to enrich the existing list.

Similarly, the *absence of capitalization* sub-strategy also had a high frequency of use by the male participants (480 occurrences or 59%) while the female participants employed slightly less, that is 333 occurrences or 41%. Accuracy and precisions in terms of punctuation were not regarded as important to both genders because e-mail messages for recreational purpose were not formal documents where accuracy is a pre-requisite.

However, the female participants employed more *speed writing* (68 occurrences or 77.8%) than their male counterparts (20 occurrences or 22.7% only) (refer to Table 4.2 above). In this study, *speed writing* refers to the omission of punctuation marks such as apostrophes (') in contractions.

4.3.2 Vocabulary

Both male and female participants did not employ the *vocabulary* CSs as frequently as compared to the *orthographic* CSs. Overall, a total of 269 (55.9%) occurrences of this strategy were found in the 6 male participants' e-mail messages and 212 (44.1%) occurrences in the female participants' e-mail messages.

The male participants were found to use more *informal words* (36 occurrences or 62.1%) than the female ones (22 occurrences or 37.9%). The data also revealed that the females used mostly informal or colloquial expressions found in the Oxford English Reference Dictionary (1995) such as 'gonna', 'cool', 'wanna', 'gimme' and 'kinda'. Unlike the female participants, the male users did not only use informal words found in the Oxford English Reference Dictionary but created their own informal words such 'dotaing' (for playing Dota), 'harloo' (for hello), 'testimols' (for testimonies), 'hols' (holidays), etc. Furthermore, the female participants were found to be more careful with their informal word usage for fear of 'polluting' the English Language. One such participant, that is, F2 did not even use a single *informal word* in all her 10 e-mail messages.

A higher frequency of occurrence was found in the use of *interjections* by the male participants (171 occurrences or 54.3%) than their female counterparts (144 occurrences or 45.7%). Both male and female participants were found to use all the 3 different types of interjections – English, Malaysian and other non-linguistic interjections. Out of the 19 types of English interjections used, the males used 14 different types while the females used 11 types. The total occurrence of English interjections employed was 81 with the males using them 41 times and females 40 times. The data shows that the male participants used slightly more "fillers" such as 'well', 'oh well', 'oh really' (5 instances) and

"affirmative" responses such as 'oh yeah', 'yea', 'yeah' (11 instances) than the female participants who used these interjections 2 times and 5 times respectively. Thus, this result does not support Hierschmann's finding (1973) on greater female use of "fillers" (e.g. 'uhm', 'well', 'you know'), and "affirmative" responses (eg. 'yeah') as markers of supportiveness in FTF conversation. According to her, these features are also used by men but they appear less frequent in their conversation. On the contrary, these features appeared more frequently in the male participants' e-mail messages than in the females in this study.

The data obtained also revealed that both male and female participants employed 39 different types of Malaysian interjections which was more than the other 2 types of interjections (English and others informal interjections). The male participants employed 27 out of the 39 types of Malaysian interjections while the female participants employed only 17 types. In terms of frequency of occurrences, the male participants also employed more Malaysian interjections that is, 82 instances compared to 56 instances found in the female participants. The higher number of occurrences and the different types of Malaysian interjections used by male participants implies that they were more casual and informal when composing their e-mail messages as compared to their female counterparts. Also, they boldly brought particles from other languages such as from Malay language, Mandarin and other local Chinese dialects (mainly Cantonese and Hokkien) into their e-mail messages, like casual FTF conversation where code-switching is common. The extracts below illustrate the use of various Malaysian interjections:

- M1:7 **hayo**..study also havent finnish..job also dun >> have >> > yet marry wat **la.**who will marry a guy without > job >> > **wo..**
- M4:4 u kasi saya duit petrol **la!** no **ah**...dun hav > money 2 go **leh**...i got > conact ah piang...the fella stil same **la...**

Female participants were found to be more particular and careful in their employment of *interjections* for they reasoned that they did not want to 'pollute' the English Language even in informal settings. This was demonstrated in participant F1's e-mail messages, where only 1 Malaysian interjection was found while in participant F2's e-mail messages only 2 Malaysian interjections were used.

Other informal interjections used to express hesitation or laughter such as *erm*, *err*, *hehe*, *haha*, and *wakakaka* were employed by both male and female participants. Under this category of *interjections*, 17 different types were used; the male participants used 15 types while the female participants used 8 types only. In terms of frequency of occurrences, a total of 96 were found in all the 123 e-mail messages. Male participants also used more of these interjections which totaled to 57 occurrences while female participants employed them 39 times.

Although e-mail messages are similar to spoken language, the use of *interjections* by male and female participants in this study does not support the work of Brown (1980) on politeness phenomena in a Mayan community where she found that Tenejapan women used more speech particles to strengthen or weaken an utterance (cited in Kendall and Tannen, 2003). Instead, male participants were found to employ more interjections (including particles) than female participants when writing their speech-like e-mail messages.

The use of both *initialisms* and *abbreviations* were not frequent among male and female participants. The male participants employed initialisms 42 times while the female participants employed this strategy 16 times only. Since most part of the e-mail message

cannot be written using initialisms at any juncture of writing, a low frequency of use for both genders was expected.

Unlike the use of *initialisms*, the female participants employed *abbreviations* 30 times, which was more than its frequency of use by the male participants, that is, 20 times. All the male participants were found to employ this strategy, except M6. Interestingly, it was found that both male and female participants created their own version of abbreviations such as 'coll' (college), 'ryt' (right), 'nvm' (never mind) and 'lil' (little). Like initialisms, these teenage e-mail users (both the senders and recipients) need to be very familiar with the abbreviations. Otherwise, the messages may not be understood.

4.3.3 Paralinguistics and Graphics

Like *vocabulary* CSs, *paralinguistic* and *graphic* CSs were not popularly used by both male and female participants. The majority of occurrences was found in the male participants' e-mail messages, that is, 289 occurrences (52.4%) while 263 (47.6%) occurrences were found in the female participants' e-mail messages. 3 out of the 4 substrategies under this category of CSs had a very low frequency of employment and they were the use of *multiple letters*, *capitalization* for shouting and *punctuation-mark emoticons or smileys*.

The occurrence of *multiple letters* was equally low for both genders – 4 times (40%) in the male participants' e-mail messages and 6 times (60%) in the female participants'. Each one of the 4 male participants used this sub-strategy once while only 1 female participant used it 6 times. *Multiple letters* is used to represent drawn-out or expressive intonation and the low frequency of usage could be due to the participants' intention and interpretation of the

use of *multiple letters* such as 'plzzzz' and 'soooooo'. Since only 2 male participants were able to interpret this strategy correctly (based on question 14 in the questionnaire in Appendix 3), it is obvious that the majority of the participants did not have the intention of showing expressive intonation.

Capitalization of words with the intention of shouting at the recipient(s) was the least popular sub-strategy among all the 14 sub-strategies in the taxonomy (see Table 4.2 above), The data showed that none of the female participants employed this sub-strategy unlike the male participants who employed it 5 times (100%). Although this figure may be small, it may imply that the female participants were gentler in their speech as well as in e-mail communication which is speech-like; and in order to do so, they seem to avoid direct, rough and threatening language like shouting.

On the other hand, the excessive use of *punctuation* was more frequently used by female participants than male participants. The data displayed 279 (53%) occurrences in the female participants' e-mail messages and a relatively lower occurrence of 247 (47%) in the male participants' e-mail messages. All the 6 female participants revealed that they used multiple punctuation marks when writing their e-mail messages while only 4 male participants admitted they used this CS (based on Question 7 of the questionnaire, Appendix 3). This pattern was prevalent because all the female participants agreed that graphics such as multiple punctuation marks helped them to express their feelings clearly and convey nonverbal information (e.g. vocal intonation) which is used in FTF conversation (based on Question 9 of the questionnaire in Appendix 3). Only 2 participants sometimes used this sub-strategy without any meaning attached and they reasoned that they did not have any other strategy to use. One male participant, M1, disclosed that the excessive use of

punctuation marks (......) had become a habitual action when composing e-mail messages (based on Question 6 in Interview 2, see Appendix 2).

The use of punctuation emoticons and smileys was generally rare. 5 male participants (M1, M2, M3, M5 & M6) employed this sub-strategy when writing their e-mail messages but the frequency of usage was very low (7 times or 63.6% only). Only 4 occurrences or 36.4% of these were found used in 2 female participants' (F1 & F5) e-mail messages. The male participants claimed that using punctuation emoticons and smileys were fun and enjoyable and some of the emoticons were cute too. 3 out of the 6 male participants agreed that emoticons helped them to express their feelings while all the female participants agreed to this (based on Question 9 of the questionnaire in Appendix 3). A total of 10 participants (5 males and 5 females) agreed that emoticons helped to convey nonverbal information such as those used in FTF conversation. In addition, 11 participants (5 male and 6 female) felt that it was difficult to describe their emotions by using words at length which contradict the principle of economy in e-mail writing. Although the frequency count for the use of punctuation emoticons or smileys was low in this study, the reasons given by both male and female participants implied that they were helpful and important in e-mail writing in conveying nonverbal language and emotions.

4.3.4 Discoursal Features

Generally, the female participants employed more of the *discoursal features* than the male participants in all the 3 sub-strategies, namely, the use of *telegraphic language*, *syntactic simplification* and *interactional features*. A total of 242 occurrences (56.5%) of this strategy were found in the female participants' e-mail messages compared to a total of 186 occurrences (43.5%) in the male participants'.

Among the 3 sub-strategies, the one with the highest frequency of use is *syntactic simplification* with female participants (113 instances or 54.3%) dominating by 8 times more than the male (95 instances or 45.7%). This high frequency count shows that both genders did not mind the use of wrong grammar and incomplete structures, which were secondary factors in e-mail communication for recreational purpose. Instead, getting the e-mail message composed in the shortest possible time with the fewest keystrokes at the same time, establishing a seemingly FTF conversation atmosphere were more important when communicating through e-mails.

A total of 76 occurrences of *telegraphic language* were found in the 123 email messages. Out of this total, female participants used this strategy 46 times (60.5%) while male participants used it 30 times (39.5%). A higher occurrence of this sub-strategy was found in the female participants' messages because 5 out of the 6 of them agreed that the use of wrong grammar and incomplete structures is a normalcy in e-mail writing for socializing purpose. Hence, this result revealed that female participants have a higher tendency to use only contentive words, leaving out grammatical words, to form incomplete structures compared to the male participants.

The use of *interactional features* such as questions was prominent among female participants as well. The data revealed that the 6 female participants employed this strategy 83 times (57.6%) which was 22 times more than the male participants, 61 times (42.4%). These figures show that the female participants asked more questions than the male participants in e-mail communication. This seems to support Herring's claim that "women and men have different characteristic online styles" in which the female style is

characterized by "supportiveness and attenuation with expressions of ... expressing doubts, asking questions, and contributing ideas in the form of suggestions" (Herring, 1994:3-4).

In sum, an insignificant higher frequency of employment of CSs was found in the female email messages. Both male and female participants in this study employed a wide range of CSs when composing their e-mail messages for various reasons. However, only *capitalization* for shouting was not used by any of the female participants. This shows that female participants appear to be generally gentler in e-mail communication compared to male participants. However, this should be taken with a pinch of salt since only 2 male participants used this strategy. Although e-mail communication is said to be similar to FTT interaction, the analysis does not support Hierschmann's finding (1973) on greater female use of "fillers" and "affirmative" responses as markers of supportiveness in FTF conversation as the male participants used more of these features than the female participants. The use of *telegraphic language*, *syntactic simplification* and *interactional features* also confirms the linguistic features of e-mail that is non-edited, non-standard, 'spoken' style of writing.

4.4 Summary

This chapter has presented the findings on the use of CSs in 123 e-mail messages composed by 12 teenage e-mailers in the website www.friendster.com. The results reveal that among the 4 categories of CSs, orthographic strategies were employed the most, with phonetic/informal spelling as the most frequently used sub-strategy. However, the frequency of use of the other 3 CSs (vocabulary, paralinguistics and graphics, discoursal features) was quite similar. Apart from that, the female participants were found to use more

of *orthography* and *vocabulary* CSs while male participants employed more of the other two CSs namely, *paralinguistics* and *graphics*, and *discoursal features*. These findings suggest that since all the participants were experienced e-mailers, they were able to employ many permutations and combinations of CSs. They did not only adopt those commonly used CSs but also created new ones which have enriched e-mail language. There were many reasons for the use of a wide range of CSs but ultimately it was the silent mode of computer communication that forced them to use them.

The final chapter will summarize the findings of the study on CSs and discuss some implications and provide suggestions for further research.