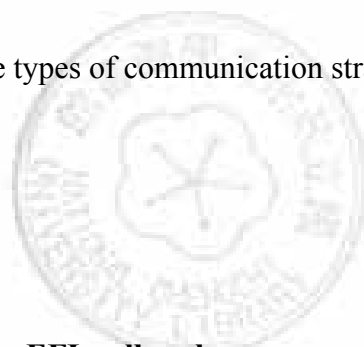


Chapter Four

Data Analysis

The chapter presents the results and data analysis of the study. In section 4.1, communication strategies used by Taiwan EFL college learners and the differences of communication strategies used between Taiwan EFL learners and Persian ESL students in Paribakht's (1985) study are presented. The comparison of communication strategies in spoken language and written language is provided in section 4.2. In section 4.3, how proficiency affects subject's use of communication strategies in terms of the number and the types of communication strategies is consecutively demonstrated.



4.1 C.S. adopted by Taiwan EFL college learners

It is found that subjects generally adopt four main approaches to solve lexical problems. Each approach includes several different communication strategies as listed in the following.

First, learners try to narrow down semantic scopes of target concepts by using a word that is semantically close to the target word. In concrete concepts, learners can use a *hypernym* or *analogy* to narrow down the range of possible words while in abstract concepts, *synonym* and *antonym* are used to denote the target words. For

example, in conveying the concept of ‘peacock,’ most learners mentioned that ‘it is like a bird.’ (the strategy of *analogy*) while in expressing the concept of ‘fate,’ ‘it is similar to the concept of destiny’ (the strategy of *synonym*) is often referred for the purpose of narrowing down the semantic scope of the target concept.

Second, when the semantically close words are hard to derive, learners turn to exemplify the target word by mentioning a highly relevant concept. For example, the concept of ‘fortunetelling’ is often mentioned in expressing the word ‘fate.’ The two concepts—‘fortunetelling’ and ‘fate’ usually occur together in humans’ cognition and therefore are regarded as two highly relevant concepts. Mentioning one of the concepts can activate the other. Alternatively, a prototypical member of the target concept can be used to refer to the target word, which is called *metonym strategy*. For example, learners may mention how ‘dog’ treat their master in order to trigger the concept of ‘faithfulness.’

Third, a context that contains the target concept is provided to help the audience get what has been conveyed. It includes the mention of a *proverb*, a *story* and a *situation* to offer such a context. *Proverb strategy* provides a linguistic context for the target concept and leaves the target concept blank, like ‘Bla bla is the best policy (honesty).’ *Story strategy* and *situation strategy* describe the context in which the target concept often occurs. For example, the story of *Three Little Pigs* is often

mentioned by the subject to convey the concept of ‘chimney’ and the situation of ‘when you see a poor person,’ is usually referred to for the purpose of activating the concept of ‘sympathy.’

Fourth, learners choose to directly describe the meaning of the target concepts. In concrete concepts, physical features or functions of such concepts are described, which is identified as *circumlocution strategy*. For example, in conveying the concept of ‘abacus,’ subjects may say that ‘it is rectangular and has many balls on it.’ In abstract concepts, learners either mention the definition of the words, i.e. *defining strategy* or talk about the concept from its opposite perspective, which is classified as *opposition strategy*. The mention of ‘having the same feeling for others’ to convey the concept of ‘sympathy’ belongs to the former while ‘people won’t have affair with other people except for their husband or wife’ to express the concept of ‘faithfulness’ is the latter.

To sum up, in dealing with lexical problems, learners may choose the following four approaches to help the audience get the target word, i.e. by (a) narrowing down the semantic scope of the target word, (b) referring to a highly relevant concept, (c) offering a linguistic context containing the target word and (d) directly defining the target word. Each approach is comprised of several communication strategies. In total, we found twelve types of communication strategies used by the subjects. The

definition and examples of each communication strategy are listed in the following:

1. *Synonym strategy*: a synonym is used to denote the target concept. For example:
 - a. 'It's something like loyalty.' (faithfulness)
 - b. 'It is close to arrogance.' (pride)
 - c. 'It is similar to brevity.' (courage)

2. *Antonym strategy*: an antonym is used to denote the target concept. For example:
 - a. 'It is the opposite word of failure.' (success)
 - b. 'It is opposite to humility.' (pride)
 - c. 'Its opposite word is timidity.' (courage)

3. *Analogy strategy*: another concept that is physically similar to the target word is used to represent the target word.
 - a. 'It looks like a human being.' (scarecrow)
 - b. 'This is like a flashlight.' (lantern)
 - c. 'It looks like a libra.' (seesaw)

4. *Hypernym strategy*: a word that is semantically broader than the target concept and contains the target concept is used to narrow down the scope of possible words.
 - a. 'This is a kind of bird.' (peacock)
 - b. 'It is a kind of big toy for children to play.' (seesaw)
 - c. 'It is a kind of tool for cleaning.' (dust pan)

5. *Highly relevant concept strategy*: a highly related concept that usually appears with the target concept is used to activate the target concept.
 - a. 'It is always accompanied by a broom.' (dust-pan)
 - b. 'Judge should have it to maintain social order.' (justice)
 - c. 'It is a very important quality especially in an examination.' (honesty)

6. *Metonym strategy*: a prototype member of the target concept is used to represent the target concept.
 - a. 'Dog has this concept for its master.' (faithfulness)
 - b. 'It is regarded as a sign of *pride*.' (peacock)
 - c. 'A *peacock* is usually seen as a sign of that.' (pride)

7. *Proverb strategy*: a proverb of L1 or L2 is used to activate the target word.
- 'Failure often comes before it.' (pride)
 - 'It is the best policy.' (honesty)
 - 'People who succeed in something should not have this kind of feeling.' (pride)
8. *Story strategy*: a story that mentions the target concept is used to activate the target concept.
- Santa Claus (chimney)
 - The wizard of OZ (scarecrow)
 - Pinocchio (honesty)
9. *Situation strategy*: a situation in which the target concept often occurs is used to activate the target concept.
- 'When you see a poor guy, you will have this feeling for him.' (sympathy)
 - 'When you need to do something dangerous, you need it to make yourself stronger.' (courage)
 - 'When you want to get a promotion, you will do this behavior to your boss.' (flattery)
10. *Defining strategy*: a direct definition is provided to express the target concept.
- 'It means you can feel for someone's feeling.' (sympathy)
 - 'You say something not true to make your boss happy.' (flattery)
 - 'The definition of it is to achieve one's goal.' (success)
11. *Opposition strategy*: a definition is provided from an opposite perspective to activate the target concept.
- 'If a husband doesn't have this, he will have love affair with another woman' (faithfulness)
 - 'It is the quality that someone doesn't tell lies.' (honesty)
 - 'Without this, you can't take adventures.' (courage)
12. *Circumlocution strategy*: physical features or functions of a concrete concept are provided to express the target concept.
- 'The shape of it is rectangle and there are many beans on it.' (abacus)
 - 'Farmers use this kind of thing to prevent birds from eating their crops.' (scarecrow)
 - 'You use to dip medicine and let medicine cover your wound.' (cotton bud)

The majority of the categories mentioned above can be found in Paribatht's

(1985) taxonomic system, which was listed in Chapter Three. *Hypernym strategy* is exactly the *superordinate strategy* in that taxonomic system. We, however, list three more strategies: (1) *S5 highly relevant concept strategy*, (2) *S8 story strategy* and (3) *S10 defining strategy*. The reasons of the addition of these three strategies in our taxonomic system are demonstrated in the following.

S5 highly relevant concept strategy is actually the strategy of *exemplification* in Paribakht's taxonomic system. In this study, we find that subjects usually use another highly relevant concept to exemplify the target one. We therefore call this strategy *highly relevant concept strategy*. Highly relevant concepts used to exemplify the target word can be a concept that usually appears with the target concept or a concept that is full of the quality of the target concept. The mention of 'broom' to express 'dust-pan' belongs to the former while the description of 'teacher' to convey the concept of 'patience' is the latter. Both are helping in activating the target concept in listeners.

As for *S8 story strategy*, it is found that in addition to offering the context of idioms and proverbs, Taiwan EFL college learners like to describe the plot of stories--*story strategy*, to help the audience activate the target concepts. One of the possible reasons is that Taiwan EFL college learners do not have many English target idioms or proverbs in their command; they, therefore, resort to stories. When the

learners were little, they have read a lot of stories written in Chinese. In expressing the target words, they can choose to translate a small part of the stories into English and describe it to the audience, which is easier than using target idioms and proverbs. Using stories is therefore counted as another communication strategy in the present study.

S10 *defining strategy* is actually separated from S12 *circumlocution strategy* in Paribakht's study (1985). The difference between the two strategies is that *defining strategy* is exclusive for abstract concepts whereas *circumlocution strategy* is exclusive for concrete concepts. This issue is concerned with the influence of word types on the selection of communication strategies and the data will be presented in the next section. Our reason for the separation of the two strategies is the difference of difficulty level of these two strategies. In the experiment, we observed that in expressing concrete words, subjects tend to use *circumlocution strategy* to solve the lexical problem, but in conveying abstract words, *defining strategy* is not the first choice. Rather, the description of a common situation is preferred. The possible reason may be the difficulty of describing invisible concepts. That is, to directly describe visible concrete words is easier than to directly describe invisible abstract concepts. The difference of the difficulty level of the two strategies may make the difference of their pedagogical implication as well. We, therefore, classify them as two categories

for the reason of pedagogical suggestion.

From the definition and examples mentioned above, it is found that the twelve types of communication strategies take advantage of the target language to express a concept and seldom rely on the native language system. The twelve types of communication strategies are therefore regarded as L2-based strategies¹. Few of obvious L1-based communication strategies such as foreignizing (the use of an L1 word in accordance with the L2 sound), code-switching (the use of L1 word, phrase or sentence in L2 discourse) and literal translation (the word for word translation from L2 to L1) are found in our study². The possible reason for the absence of L1-based strategies in our data is learners' expectation of the failure of L1-based strategies to achieve communicative goals. It is suggested that the difference of vocabulary system between Mandarin and English is rather large. One is ideographic system and the other is alphabetic system. Using Mandarin-based strategies is not considered as an effective way to get the meaning across. Learners, as a result, would rather choose English-based strategies.

In a word, the use of L1-based strategies in target language communication has

¹ L2-based strategies refer to the strategies that make use of the structure of the target language system, such as the sound, words and phrases, to convey a concept.

² The L1-based strategy here indicates the transferring of the structure of the native language system to convey the target language concepts. Although the subjects seldom use L1-based strategies in our study, the contents they refer to with an aim to activating a target concept, nevertheless, are rather L1 based. For example, when subjects choose to use an idiom to convey the concept of 'pride,' they tend to say '*If you are with this word, you will fail easily*' (驕兵必敗) instead of using the target idiom '*The word comes before a fall*' (Prides comes before a fall). In a word, EFL college learners in Taiwan seldom transfer the structure of Mandarin in communicating with English, but they will rely on translating the contents or linguistic context of Mandarin.

connection to the distance between L1 and the target language. This is consistent with previous studies (Kellerman; 1977, 1978 & Paribakht, 1985) that transfer will be biased by learners' awareness of typological relatedness between L1 and L2 (Paribakht, 1985).

Since no occurrence of L1-based strategies is found, our hypothesis that speakers, who are under time pressure, resort to greater proportion of L1-based strategies than writers is not plausible. One possible conclusion is that although L1 is one of the resources in communicating with foreigners, the effectiveness of using such resources is still rated as the highest consideration of learners. That is to say, when language learners perceive that the use of native language may not help in expressing the meaning of the target word, they may choose to give up relying on the resources of their native language.

To sum up, four approaches to solving lexical problems are in the present study and each approach is comprised of several communication strategies. In total, there are twelve types of communication strategies used by Taiwan EFL college learners. All the twelve types of communication strategies selected belong to L2-based strategies for the reason that the vocabulary system between English (L2) and Mandarin (L1) is too different for structural transfer to occur. Our hypothesis that the speakers would use greater number of L1-based strategies than the writers is not

plausible. Instead, Taiwan EFL college learners, no matter in spoken language or in written language, tend to choose L2-based communication strategies to get the meaning across.

4.1.1 The influence of word types on the selection of C.S.

In the experiment, two types of words are used as prompted words to elicit subjects' use of communication strategies. One is concrete word type and the other is abstract word type. People have randomly the same chances of using these two types of words. We, therefore, used both of the types of words in our experiment. However, the two types of words have different level of difficulty---concrete words are easier than abstract words. How does the word type influence the selection of communication strategies? Do the concrete concepts and abstract concepts have their own preference for some communication strategies? In order to answer these questions, a chi-square test is conducted to examine if there is difference in the selection of communication strategies between concrete words and abstract words. The result is displayed in Table 4.1.

Table 4.1: Word types v.s. the selection of C.S.

Word type	Concrete	Abstract	Total	Adjusted Absolute Value
Strategy	Words	Words		

1. Synonym	0(0%)	61(100%)	61(100%)	9.5*
2. Antonym	0(0%)	32(100%)	32(100%)	6.8*
3. Opposition	0(0%)	87(100%)	87(100%)	11.2*
4. Proverb	0(0%)	12(100%)	12(100%)	4.2*
5. Story	33(64.7%)	18(35.3%)	51(100%)	0.8
6. Metonym	4(25.3%)	13(76.5%)	17(100%)	3*
7. Relevant concept	13(8.4%)	141(91.6%)	154(100%)	16.4*
8. Analogy	104(100%)	0(0%)	104(100%)	8.7*
9. Hypernym	95(83.3%)	19(16.7%)	114(100%)	5.4*
10. Situation	154(35.6%)	278(64.4%)	432(100%)	10.9*
11. Defining	0(0%)	267(100%)	267(100%)	20.8*
12. Circumlocution	947(100%)	0(0%)	947(100%)	32.9*
Total	1343(59%)	935(41%)	2278(100%)	
The result of chi-square test	$\chi^2(11)=1671.060, p=.000$			

From Table 4.1, we observe that there are several zero percentages. This indicates that some strategies are exclusively used to express concrete words and some are exclusively adopted for conveying abstract words. For example, *defining strategy* is exclusive for expressing abstract words while *circumlocution strategy* is exclusive for conveying concrete words. According to Paribakht (1985), *defining*

strategy belongs to *circumlocution strategy* in that they both focus on directly describing target words. However, we have shown that the subjects use the two strategies differently, which may reflect the different difficulty levels of concrete words and abstract words for learners. We, therefore, separate these two strategies as mentioned in the last section and consider that this may help the researcher better understand the difference of expressing these two types of words in order to make a practical suggestion for how to solve lexical problems more effectively.

The result of chi-square test in Table 4.1 shows that there is a significant difference ($\chi^2=1671.060$, $p<.005$) in the selection of communication strategies between concrete words and abstract words. This indicates that the use of communication strategies is under the influence of word types. In order to check out what strategies are under the influence and what strategies are not, we have to examine the adjusted absolute value in Table 4.1. When the adjusted absolute value of the strategy is larger than 1.96, such strategy shows a significant difference between conveying concrete concepts and abstract concepts. Among the twelve strategies in Table 4.1, there are eleven strategies that display differences in expressing the two different types of words. The only one strategy that does not display difference in expressing the two types of words is S5 *story strategy*.

In our experiment, we found that Taiwan EFL college learners tend to make use

of the context of a story to express a target word regardless of the word type. Different kinds of stories which subjects are familiar with are chosen to express the target concept no matter whether the target concept is concrete or abstract. That is, in using *story strategy*, subjects first consider searching their brains for a familiar story containing or related to the target word without taking account of the word types. For example, subjects are observed to use *The Wizard of OZ* to express the concrete concept ‘scarecrow’ and talk about *Pinocchio* to convey the abstract concept ‘honesty’. Both types of prompted words can be expressed through the context of a story. *Story strategy*, therefore, displays statistically similar occurrences in the two types of words.

As for the rest of the strategies that are under the influence of word type, we divide them into two categories. One is preferred to be used in expressing concrete words and the other is preferred to be chosen for conveying abstract words as are demonstrated in Table 4.2.

Table 4.2.: The preference of the C.S. in concrete concepts and abstract concepts

Concrete concepts	Abstract concepts
1. Circumlocution (947 ³) 2. Analogy (104) 3. Hypernym (95)	1. Situation (278) 2. Defining (267) 3. Relevant concept (141) 4. Opposition (87) 5. Synonym (61) 6. Antonym (32) 7. Metonym (13)

³ The numbers in this table represent the occurrences of the C.S.

According to Table 4.2, we observe that in expressing concrete concepts, subjects prefer to use *circumlocution strategy* to describe the physical characteristics of the concrete target concepts. Sometimes, the mere description of the properties, i.e. *circumlocution strategy*, may still make listeners confused about what is mentioned. Therefore, ‘It is like a...,’ the *analogy strategy* as well as ‘It is a kind of...,’ the *hypernym strategy* are then chosen to narrow the possible range of the target words. However, *analogy strategy* (104) and *hypernym strategy* (95) display far less occurrences than *circumlocution strategy* (947). English teachers are therefore suggested to encourage learners to use the other two strategies more often in conveying concrete words for the purpose of making the meaning of the target word explicit.

On the other hand, without specific images, to express abstract concepts is more difficult to learners. They, therefore, have to think about other ways to convey the target words. The types of communication strategies used for expressing abstract concepts consequently display greater variety than those that are used to convey concrete concepts. We observe that in expressing abstract words, subjects tend give listeners a context such as *situation strategy* and *proverb strategy*, or take advantage of another concept to trigger the target one like *highly relevant concept strategy*, *metonym strategy*, *synonym strategy* and *antonym strategy*. When subjects found it

difficult to apply these unlearned strategies, they alternatively choose to deal with the lexical problems by directly defining them from the straight perspectives as well as from the negative perspectives, i.e. *defining strategy* and *opposition strategy*.

To sum up, the word type has a great influence on the analysis of the subjects' use of communication strategies. Learners have different preferences for the use of communication strategies in expressing different types of words. In the daily life, the possibility of encountering concrete words and abstract words is equal. These twelve strategies may have the same chances to be randomly chosen in dealing with lexical problems. We, therefore, use these twelve strategies as a basis for examining the mode-related as well as proficiency-related use of communication strategies.

4.2 The comparison of C.S. used in the two modes

The comparison of communication strategies in these two modes are discussed in this section. Section 4.2.1 probes into the differences of the use of communication strategies in these two modes. The order of the preference of communication strategies in the two modes are reported in 4.2.2 followed with the comparison of the communication strategies in these two modes from the perspectives of the types and the number in 4.2.3 and 4.2.4 respectively. Finally, the summary of the differences in two modes is given in 4.2.5.

4.2.1 The differences of C.S in the two modes

The frequencies and percentages of communication strategies used in spoken language and written language are presented in Table 4.3.

Table 4.3: The occurrences of C.S. in the two modes

Mode Strategy	Spoken Language	Written Language	Total	Adjusted Absolute Value
1. Synonym	21 (34.4%) ⁴	40 (65.6%)	61 (100%)	2.7*
2. Antonym	12 (37.5%)	20 (62.5%)	32 (100%)	1.6
3. Analogy	57 (53.8%)	49 (46.2%)	106 (100%)	.0
4. Hypernym	51 (44.7%)	63 (55.3%)	114 (100%)	.7
5. Related concept	75 (48.7%)	79 (51.3%)	154 (100%)	.5
6. Metonym	10 (58.8%)	7 (41.2%)	17 (100%)	.6
7. Proverb	5 (41.7%)	7 (58.3%)	12 (100%)	.4
8. Story	28 (54.9%)	23 (45.1%)	51 (100%)	1.5
9. Situation	267 (61.8%)	165 (38.2%)	432 (100%)	4.7*
10. Defining	131 (49.1%)	136 (50.9%)	267 (100%)	.9
11. Opposition	45 (51.7%)	42 (48.3%)	87 (100%)	.4
12. Circumlocution	477 (50.4%)	470 (49.6%)	947 (100%)	1.1
The result of chi-square test	$\chi^2(11)=33.285, p=.001$			

A chi-square test is conducted to examine if there is difference in the selection of communication strategies between these two modes. The result shows that the difference is significant ($\chi^2=33.285, p<0.05$). This indicates that the mode of

⁴ ‘%’ in the table stands for the percentage of a communication strategy that occurs in spoken language and in written language. The summation of the percentage of communication strategies in spoken language and written language is 100%.

expression has a significant effect on the selection of communication strategies. However, among the twelve types of the strategies, only the adjusted absolute value⁵ of S1 *synonym strategy* and S9 *situation strategy* is larger than 1.96. It means that only the two strategies display significant differences in the occurrences between spoken language and written language. Other strategies including *circumlocution strategy* are similarly adopted in the two modes. Asao's (2002) hypothesis that face-to-face characteristics of spoken language, i.e. context-bound discourse may result in greater use of *circumlocution strategy* is not supported in the present study. In other words, the use of *circumlocution strategy* is not under the influence of context. Even in written language that is decontextualized, the occurrence of *circumlocution strategy* is frequent and does not show significant difference from that in spoken language.

Since we have the same set of subjects express the same set of prompted words in the two modes, the similarities of the majority of the strategies can be expected. The discussion of this section is therefore put on the differences of the communication strategies used in spoken language and written language.

Among the significant differences, what draws our attention is the more occurrences of S1 *synonym strategy* in written language and the more occurrences of

⁵ When absolute value of statistical results is larger than 1.96, it means that there is a significant difference between the two things that under chi-square test.

S9 *situation strategy* in spoken language as shown in Table 4.3.

Using a synonym is actually the most direct way to express a concept when the target word in second language is missing. However, it is also the most knowledge-demanded strategy in the taxonomic system. That is, a learner needs to have enough lexical knowledge and to know which word is the most semantically close to the target one. In spoken language, the requirement of immediate response in a short time makes speakers fail to apply this strategy. Written language, by contrast, allows writers more time to search for their word banks and to consider how to express a concept accurately. *Synonym strategy* is, therefore, more frequently adopted in written language.

As for the *situation strategy*, why does it show more occurrences in spoken language? The possible is as follow. Spoken language is a context-dependent discourse. With the shared context between speakers and writers, speakers can describe situations based on such context, which can help listeners associate with target concepts. For example, when a learner is asked to convey the concept of 'patience' in spoken language, he/she may say to the native interlocutor that *you are very tired but you still stay here listening to me without getting angry; then you are said to have this quality*. The situation is shared between the subjects and the native interlocutor. The lack of such shared context in written language, by contrast, may

decrease the possibility of writers to use *situation strategy*. Besides, in spoken language, speakers can judge from listener's face to know that whether the description of such situation has reached its communicative goal. When listeners still show sign of confusion in their faces, speakers can keep on mentioning other situations. The occurrence of *situation strategy* is consequently higher in spoken language than in written language.

In addition, S2 *antonym strategy* is expected to display significant differences in the two modes, with more occurrences in written language, just like the pattern of S1 *synonym strategy*. The reason is that S2 *antonym strategy* and S1 *synonym strategy* are similar in that they both take advantage of referring to another semantically confined word to denote the target concept. However, from Table 4.3, it is found that *antonym strategy* indeed occurs more in written language (20: 62.5 %) than in spoken language (12 : 37.5%). Nevertheless, the absolute value of antonym strategy is not larger than 1.96, which indicates that the difference of the use of antonym in spoken language and written language does not reach a significant level. It is possible the occurrence of *antonym strategy* is too few for the statistical result to be significant. In addition, we also consider that the use of *antonym strategy* may have relationship to the prompted words. The prompted words in the experiment do not have simple antonym for subjects to refer to and may therefore result in fewer occurrences. When

other words that have simple and obvious antonyms are chosen as prompted words to elicit learners' performance of communication strategies in spoken language and written language, the difference of the use of *antonym strategy* in the two modes may display significant differences.

In short, among the twelve types of communication strategies, only S1 *synonym strategy* and S9 *situation strategy* display significant differences between spoken language and written language, with the former showing more occurrences in written language and the latter having more occurrences in spoken language. We consider that the characteristics of 'plannedness' in written language may allow writers more time to pick up the most semantically close words and therefore result in more occurrences of *synonym strategy*. The context-dependence of spoken language, on the other hand, makes speakers take advantage of the shared context between themselves and the listeners to express a concept and may accordingly lead to more occurrences of *situation strategies* in spoken language.

4.2.2 The preferences of C.S. in the two modes

In this section, we compare the preference of the communication strategies in spoken language and in written language. The percentages of each communication strategy in the two modes are listed in Table 4.4.

Table 4.4: The preference of C.S. in the two modes

Spoken language	Written language
1. Circumlocution 477 (40.5%)	1. Circumlocution 470 (42.7%)
2. Situation 267 (22.6%)	2. Situation 165 (15%)
3. Defining 131 (11.1%)	3. Defining 136 (12.4%)
4. Representative 75 (6.4%)	4. Representative 79 (7.2%)
5. Analogy 57 (4.8%)	5. Hypernym 63 (5.7%)
6. Hypernym 51 (4.3%)	6. Analogy 49 (4.5%)
7. Opposition 45 (3.8%)	7. Opposition 42 (3.8%)
8. Story 28 (2.4%)	8. Synonym 40 (3.6%)
9. Synonym 21 (1.8%)	9. Story 23 (2.1%)
10. Antonym 12 (1%)	10. Antonym 20 (1.8%)
11. Metonym 10 (0.8%)	11. Metonym 7(0.6%)
12. Proverb 5(0.4%)	12. Proverb 7(0.6%)
Total: 1179 (100 %)	Total: 1101 (100%)

As shown in Table 4.4, spoken language and written language show similarities regarding the use of the most frequently-adopted communication strategies as well as the least frequently-adopted communication strategies. As for the rest of other communication strategies, we find that the range of difference is only one grade or two grades. We, therefore, regard them as personal choices and not under the

influence of the mode. The focus of this section, consequently, is mainly put on the similarity of the preference of the communication strategies in the two modes.

The three most frequently used communication strategies in spoken language are *circumlocution strategy*, *defining strategy* and *situation strategy*. The written language shows the same pattern as spoken language with the same three communication strategies being the three most frequently adopted communication strategies. It indicates that no matter whether in spoken language or written language, when encountering an unlearned word, learners tend to solve the lexical problems by (a) explaining the meaning of the target words--*circumlocution strategy* (for the concrete concepts) and *defining strategy* (for the abstract concepts)⁶ or by (b) offering a situation in which the target word often occurs--*situation strategy*. The frequent use of direct explanation of the meaning of the target concepts is understandable for it is the straightest way to get across the target concept. *Situation strategy*, describing a context where the target concept usually occurs, is less complicated and easier for learners. It can be applied in the lack of the knowledge of *synonym*, *antonym*, *proverb* and *story* etc. Learners, therefore, tend to resort to situation strategy when they find it difficult to elaborate the meaning of the target word.

These three communication strategies occupy more than seventy percent of all

⁶ Both *circumlocution strategy* and *defining strategy* focus on describe the parts of the target concepts and therefore are regards as way of directly explaining the meaning of the target word.

communication strategies used by the subjects in the present study. It is suggested that the choices of the ways available to solve lexical problems are restricted. This might have connection to the fact that without much training in using communication strategies, the first way that bumps out in learners' minds to deal with vocabulary is to directly explain the meaning of the target concepts or to describe a situation. However, during the process of experiment, we observed that the direct explanation of the target concepts sometimes often fails to achieve the communicative goals, because the range of the possible target words is still too broad for the listener to get the meaning especially in the case of abstract concept. To overcome this problem, the subjects are forced to turn to other approaches to solve lexical difficulties, such as to narrow down the semantic scope of the possible words by offering a synonym, antonym or a hypernym etc, which make up the other communication strategies in the Table 4.4. However, each of the rest of the communication strategies, i.e. except for the three most frequently adopted communication strategies, nevertheless, only occupies a small percentage, with the most only seven percent. It can be suggested that without much training in communication strategies, the adoption of other more communicative efficient strategies is limited. Only a small part of subjects know to develop other communication strategies to make the communication ongoing and successful. This lends support to the viewpoint that communication strategies need to

be taught in order to guarantee a rich system of communication strategies in language learners.

The least frequently-adopted communication strategies in spoken language and written language are *metonym strategy* and *proverb strategy*. Metonym refers to using one concept to represent another one. These two concepts are in two different domains. One is in abstract domain and the other is in concrete domain. To apply the *metonym strategy*, learners need to come up with one concept in the other domain that is regarded as conventionally⁷ parallel to the target concept. For example, to convey the concept of ‘faithfulness,’ learners have to switch from abstract domain to concrete domain and find the conventional counterpart of ‘faithfulness’ in the concrete domain—‘dog’ to represent the target word ‘faithfulness.’ Concentrated in directly explaining the meaning of the target words, learners may fail to think beyond the domains. The occurrence of *metonym strategy* is consequently low in our study.

As for the *proverb strategy*, it includes two parts: (a) the transfer of the native proverb and (b) the use of target language proverb. In our study, we do not separate them into different strategies and regard them as a category. As shown in Table 4.4, there are only five occurrences of *proverb strategy* (0.4%) in spoken language and seven occurrences of *proverb strategy* (0.6%) in written language. The percentages

⁷ The two concepts that are considered as metonym for each other are a conventional set. Therefore, to mention one of the nouns can help activate the noun in the other domain.

are small. It indicates that not only the ability of using target language proverbs but also the ability of referring to native proverbs in conveying a target concept is limited.

Paribakht's (1985) argument that 'for communicating in the target language, idiomatic aspects of L1 are among the last to be abandoned, while similar aspects of the target language are among the last to be acquired (Paribakht, 1985: 140)' are only partially supported in our study. Although the target language proverbs are among the last to be acquired, the native language proverbs are not among the last to be abandoned.

Instead, subjects lack the sense of taking advantage of their native language proverbs to help in communicating with a target language. This gap is expected to be made up through the teaching of communication strategies.

In summary, the two modes show similar pattern regarding the most-frequently-adopted communication strategies and the least-frequently-adopted communication strategies. The rest of other communication strategies display some mode-related differences. We, however, do not regard such differences as the influence of mode as a result of small percentage of these communication strategies as well as the little range of the difference. The focus is, therefore, put on the similarities. The three most frequently adopted communication strategies in the two modes are *circumlocution strategy*, *situation strategy* and *defining strategy*, which occupy more than seventy percent of all communication strategies. It indicates that in dealing with

lexical problems, both speakers and writers tend to directly explain the meaning of the target concepts or to describe a context in which the target concept often takes place.

The two approaches may be of less difficulty to learners. However, it also indicates that their ability to apply other kinds of communication strategies such as using an antonym, a related concept and a synonym is restricted. *Metonym strategy* and *proverb strategy* rate the least frequently adopted communication strategies for the reason of involving more than one domain and the reason of the unfamiliarity of using proverbs to convey a concept respectively. These two strategies are worth teacher's attention when they are teaching communication strategies in the classroom.

4.2.3 The types of C.S. in the two modes

The section aims to compare the types of communication strategies in the two modes. The types of communication strategies⁸ indicate the number of the different types used to express a target concept. For example, when a learner uses three different types of communication strategies, such as *synonym strategy*, *defining strategy* and *highly relevant concept strategy*, to convey a concept, the types of communication strategies are counted as three. The calculation of the types of communication strategies used to express a concept is displayed in appendix .

As mentioned in the previous chapter, spoken language belonging to unplanned

⁸ In total, subjects in our study adopt twelve types of communication strategies to solve the lexical problems as shown in Table 4.1.

discourse imposes greater anxiety on speakers than written language on writers.

Influenced by the emotion of anxiety, speakers may stick to using a certain type of communication strategy and fail to refer to other types of communication strategies.

Namely, the range of communication strategies available for speakers to choose from may be reduced because of higher anxiety.

Writers in written language, by contrast, experience lower anxiety than speaker because of the absence of native interlocutor. It is suggested that the taxonomic system available for writers to solve lexical problems may be flexible. Besides, writers can have more time to search for their linguistic and cognitive system in considering how to convey a concept. Writers are therefore expected to choose more types of communication strategies in expressing a concept than speakers do.

In total, we have nineteen subjects and twenty prompted words in the experiment. The number of types of communication strategies a learner use to express each word (the first column from the right in the Appendix) is summed up. There are three hundred and eighty items of data (nineteen subjects⁹ multiply twenty words) in spoken language and in written language respectively. The two sets of data are subtracted from each other for the purpose of comparing the types of communication strategies used in the two modes.

⁹ Originally, twenty NCCU college students are invited to participate in the experiment. However, one of the students refused to continue the second stage of the experiment. He, accordingly, is excluded from the results of the statistics.

A sign test is conducted to examine if there is difference in the types of communication strategies selected between spoken language and written language.

The result of the sign test is displayed in Table 4.5.

Table 4.5: The comparison of the types of C.S. in the two modes

S-W ¹⁰	S>W	S<W	S=W	Total
Occurrence	80	84	216	380
The result of sign test	Z= -0.234, P(two-tailed)= 0.815			

‘S>W’ in the table indicates spoken language uses more types of communication strategies than written language. ‘S<W,’ by contrast, represents more types of communication strategies in written language. ‘S=W’ means the same types of communication strategies in spoken language and in written language. We have nineteen subjects participate in the experiment and each subject is asked to express the twenty prompted words. Therefore, the total number of the data is three hundred and eighty.

The result of sign test does not reach the level of significance ($z=-0.234$, $p>0.05$).

This indicates that the types of communication strategies used in the two modes do not have significant differences. The possible reason is that some other factors may

¹⁰ S-W means the number of types of communication strategies used to express a concept in spoken language subtract that in written language. As mentioned in the previous section, the rationale of the sign test is to have the two items subtracted each other and then to divide them into three groups: the more group, the less group and the equal group. Because we attempt to compare the types of communication strategies in the two modes, we have the number of types of communication strategies adopted for expressing a concept in spoken language subtract that used for conveying the same concept in written language.

have gotten involved and are discussed in the following.

Since we compare the types of communication strategies selected for expressing a concept in the two modes, the type of concepts itself may be a factor that influences the result. As mentioned in Chapter Three, there are twenty prompted words used to elicit learners' use of communication strategies. Ten of them are concrete concepts and ten of them are abstract concepts. We, therefore, decide to examine the types of communication strategies selected for expressing concrete concepts and abstract concepts respectively. The results are quite different as displayed in Table 4.6 and are discussed separately in the following.

Table 4.6: Word types V.S. the comparison of C.S. in the two modes

Word types	The types of C.S. in two modes	The result of sign test
Concrete concepts	S>W=52, S<W=26, S=W=112	Z=-2.831, P=.003
Abstract concepts	S>W=32, S<W=54, S=W=104	Z=-2.264, P=.012

In concrete concepts, the result of sign test ($Z=-2.831$, $P<0.05$) shows that the types of communication strategies used in spoken language and in written language are significantly different. The occurrence of more types of communication strategies in spoken language is fifty-two ($S>W=52$) and the occurrence of more types of communication strategies in written language is twenty-six ($S<W=26$). In other words, it is spoken language that uses more types of communication strategies in conveying a concrete concept than written language, which is contrary to our hypothesis. We

originally hypothesized that greater time pressure and greater anxiety in spoken language may make speakers adopt fewer types of communication strategies. The possible explanation for the opposite result we observed in the experiment is stated as follows.

Concrete concepts are visible objects and have specific characteristics.

Compared with intangible abstract concepts, ways of expressing these concrete concepts are easier, i.e. to describe the physical features or the functions of them. As a result, despite under greater anxiety, speakers may still choose other types of communication strategies aimed at describing the features and the functions of these concrete concepts, especially when they find that the listeners are still confused about what is conveyed. We suggest that it may be the involvement of spoken language that increases speaker's choices of types of communication strategies in expressing concrete concepts. To be brief, less complexity of describing the concrete concepts as well as the involvement of spoken language may help speakers overcome the problem of anxiety and therefore may result in more types of communication strategies in spoken language to express concrete concepts.

Written language, on the other hand, imposes less anxiety on writers and is hypothesized to show more types of communication strategies. The argument, however, is not supported by the result. It is possible that without the kind of

involvement between speakers and listeners, writers may consider their description of the concrete objects sufficient for readers to figure out the target concept and thus stop choosing other types of communication strategies. That is, without direct interaction between the writers and the readers, i.e. the detachment of written language, writers may use fewer types of communication strategies in expressing concrete concepts than speaker.

In a word, our hypothesis that anxiety may influence the types of communication strategies in the two modes is not plausible in the case of concrete words. Instead, it may be the direct interaction between learners and their audience, i.e. the ‘involvement versus detachment’ that determines the types of communication strategies in expressing concrete concepts in the two modes. That is to say, the involvement of spoken language may result in more types of communication strategies whereas the detachment of written language may lead to fewer types of communication strategies in expressing concrete words.

As for the abstract concepts, the result of sign test ($z=-2.264$, $p<0.05$) shown in Table 4.6 indicates that the types of communication strategies in the two modes is significantly different with the written language ($S<W$: 54) using more types of communication strategies than the spoken language ($S>W$: 32). Our hypothesis that written language may display more types of communication strategies than spoken

language is supported in the case of abstract concepts. To deal with these abstract concepts that do not have explicit characteristics to describe, learners need more time to consider how to express them. Written language belonging to planned discourse not only offers the time writers need to solve these difficult lexical problems but also imposes lower anxiety on writers, which makes their taxonomic system of communication strategies wider. Accordingly, more types of communication strategies are found in written language to express abstract concepts.

Spoken language, on the other hand, can not offer the time that speakers need to express abstracts concepts like written language and thus imposes higher anxiety on speakers, which may make the taxonomic system for dealing with lexical problems reduced. Speakers therefore tend to stick to certain types of communication strategies and fail to apply other types of communication strategies. As a result, the types of communication strategies used to express abstract concepts in spoken language are fewer than those in written language.

From the results and the analysis mentioned above, we can see that the types of prompted words--abstract concepts and concrete concepts, have a great influence upon the use of types of communication strategies in the two modes. Concrete concepts are easier to describe. Therefore, the state of anxiety--higher anxiety in spoken language and lower anxiety in written language, has less influence on the

types of communication strategies used for expressing a concrete concept¹¹. Rather, it is the factor of the ‘involvement versus detachment’ that determines the types of communication strategies in the two modes. The ‘involvement’ of spoken language results in more types of communication strategies whereas the ‘detachment’ of written language leads to fewer types of communication strategies in terms of concrete words.

Abstract concepts, by contrast, are intangible and may cause greater difficulties for the subjects in conveying these concepts. The state of anxiety may therefore become decisive in learners’ use of types of communication strategies. Higher anxiety of spoken language may reduce the types of communication strategies whereas lower anxiety of written language may allow writers to adopt more types of communication strategies. More types of communication strategies, as a result, are found in written language than in spoken language in terms of abstract concepts. The patterns concerning the types of communication strategies in the two modes can be displayed in Figure 4.1.

	Spoken language	Written language								
Concrete concepts	<table border="1"> <tr> <td>H.A.</td> <td>Involvement</td> </tr> <tr> <td>(Type↓)</td> <td>(Type↑)</td> </tr> </table>	H.A.	Involvement	(Type↓)	(Type↑)	<table border="1"> <tr> <td>L. A.</td> <td>Detachment</td> </tr> <tr> <td>(Type↑)</td> <td>(Type↓)</td> </tr> </table>	L. A.	Detachment	(Type↑)	(Type↓)
H.A.	Involvement									
(Type↓)	(Type↑)									
L. A.	Detachment									
(Type↑)	(Type↓)									

¹¹ When the prompted words are easy to convey, whether the learners are under great anxiety or not does not influence the communication strategies used. However, when the prompted words are difficult to convey, the state of high anxiety will make the expression of words more difficult reduced the types of communication strategies.

Abstract concepts	H. A.	Involvement	L. A.	Detachment
	(Type↓)	(Type↑)	(Type)	(type↓)

Figure 4.1: The factors that determine the types of communication strategies in two modes in terms of concrete words and abstract words

H.A. means high anxiety and L.A. refers to low anxiety. Type↑ represents more types of communication strategies may be selected whereas type ↓ indicates that the types of communication strategies may be reduced. As shown in the table, there are two competing factors that determine the types of communication strategies in the two modes: (a) the state of anxiety and (b) ‘involvement versus detachment.’ The greater space of ‘involvement,’ ‘detachment,’ ‘H.A’ and ‘L.A’ in the figure represents the more powerful the strength of that factor. As shown in Figure 4.1, when concrete concepts are encountered, the factor of ‘involvement versus detachment’ overpowers the factor of the state of anxiety¹². Therefore, the involvement of spoken language results in more types of communication strategies whereas the detachment of written language leads to restricted types of communication strategies in terms of concrete

¹² Because to convey concrete concepts is less difficult, the state of anxiety does not influence subject’s performance. Instead, it is the factor of involvement and detachment that takes part in determining the types of communication strategies in the two modes.

concepts. The pattern is quite different when abstract concepts are experienced. The state of anxiety overpowers the factor of ‘involvement versus detachment’ in expressing abstract concepts¹³. As a consequence, higher anxiety of spoken language makes speakers use only restricted types of communication strategies whereas lower anxiety of written language makes writers adopt more types of communication strategies.

To sum up, more types of communication strategies can be seen in spoken language in terms of concrete concepts whereas more types of communication strategies are found in written language in terms of abstract concepts. The result is suggested to be under the influence of three factors: (a) the types of prompted concepts, (b) the state of anxiety, and (c) involvement versus detachment. All of them need to be taken into consideration so that a plausible explanation regarding the types of communication strategies in the two modes can be achieved.

4.2.4 The number of C.S. in the two modes

The number of communication strategies is the summation of all communication strategies in the strategy-counting form displayed in appendix . As mentioned in Chapter Two, speakers are hypothesized to adopt greater number of communication

¹³ To convey abstract concepts is more difficult, and therefore subject’s state of anxiety becomes a decisive factor that influences the types of communication strategies they use to deal with lexical problems.

strategies in conveying a concept than writers for the following reasons. First, speakers, who are in face-to-face interaction with listeners, bear the responsibilities of making communication successful and will try all the ways possible to make themselves understood. Writers, by contrast, who do not have a direct interaction with readers, may use fewer communication strategies in conveying a meaning. That is to say, the factor of 'involvement versus detachment' is suggested to influence the number of communication strategies used for conveying a concept in the two modes. Second, compared with writing, speaking is a less physically laborious task than writing. To speak, subjects need only to open their mouth and say what is inside their minds, but to write, they have to hold a pen and write down what they want to express word by word. As a result, spoken language is therefore suggested to display greater number of communication strategies than written language.

In order to compare the number of communication strategies in the two modes, the factors of words, strategies and subjects are taken into consideration in this section. Namely, the numbers of the same communication strategy that the same subject adopts to express the same word in the two modes are compared. The reason is as follows. If we compare the total number of communication strategies that learners use for expressing the twenty concepts in the two modes, we may count in the number of communication strategies as well as the types of them. For example, a learner may use

metonym strategy for one time to express the concept of ‘pride’ in the spoken language but does not choose such strategy in the written language. The one more count of *metonym strategy* in spoken language can be regarded as greater number as well as more types. The focus in this section is put on the number of communication strategies. Therefore, only the communication strategies that are adopted by the same subject to deal with the same words in both modes are included for statistical analysis. To put it differently, the communication strategies that are applied only in spoken language or in written language are given up for analysis. In this way, whether the number of communication strategies is under the influence of the mode can be more accurately examined.

A sign test is then conducted to investigate whether there is difference in the number of communication strategies that learners use in the two modes. The result is displayed in Table 4.7:

Table 4.7: The comparison of the number of C.S. in the two modes

S-W ¹⁴	S>W	S<W	S=W	Total
Occurrence	109	68	435	612
The result of Sign test	Z=-3.007, P(two-tailed)=0.003			

The result of sign test (Z=-3.007, P<0.05) shows that the difference is significant

¹⁴ S-W represents the frequency of a communication strategy adopted by a learner to express a concept in spoken language subtracts the frequency of the same communication strategy used by the same learner to convey the same concept in written language.

with spoken language ($S>W=109$) having greater number of communication strategies than written language ($S<W=68$). Our hypothesis that involvement of spoken language leads to greater number of communication strategies whereas detachment of written language results in fewer number of communication strategies is therefore supported. It can be suggested that in addition to (a) paralinguistic cues, (b) appeal for assistance and (c) repetition, greater number of communication strategies are also a sign of involvement in spoken language as well.

In addition, since we compare the number of communication strategies used for conveying the same concept in the two modes, the type of concepts needs to be taken into consideration as well. In the study, we used two types of concepts to elicit the use of communication strategies. One is concrete concept and the other is abstract concept. We, therefore, decide to examine the number of communication strategies used for expressing concrete concepts and abstract concepts separately. The result of sign test is shown in Table 4.8.

Table 4.8: Word types V.S. the comparison of the number of C.S. in the two modes

Statistical results The types of the concept	The number of C.S. in two modes	The result of sign test
Concrete concepts	$S>W=62$, $S<W=51$, $S=W=204$	$Z=-.941$, $P=.174$
Abstract concepts	$S>W=47$, $S<W=17$, $S=W=231$	$Z=-3.625$, $P=.000^*$

In terms of concrete concepts, greater number of communication strategies is

found in spoken language ($S>W=62$, $S<W=51$) but it does not reach the level of significance ($Z=-0.941$, $P>0.05$). This indicates that the number of communication strategies that learners use to express concrete concepts displays no significance difference in the two modes. It may be possible that the concrete concepts have specific shapes, physical properties and functions for learners to describe. No matter whether in spoken language or in written language, learners may choose similar parts of the concrete objects to represent them. The description of the parts will be classified as communication strategies such as *circumlocution strategy*, *analogy strategy*, or *hypernym strategy*, etc.¹⁵ Therefore, the difference of using communication strategies to express concrete concepts in the two modes is insignificant.

With regards to abstract concepts, the result of sign test ($Z=-3.625$, $P<0.05$) indicates that the difference concerning the number of communication strategies in the two modes is significant, with spoken language outnumbering written language ($S>W=47$, $S<W=17$). One possible explanation is as follows. In section 4.2.3, which discusses the issue of types, we have mentioned that the state of anxiety may play a decisive role in determining the types of communication strategies when the abstract concepts are encountered. Therefore, higher anxiety of spoken language may result in

¹⁵ There are seven types of C.S. that the subjects in the study choose to express concrete concepts as shown in Table 4.1.

fewer types of communication strategies while low anxiety of written language may lead to more types of communication strategies as can be referred back to Figure 4.1. That is to say, speakers may adopt fewer types of communication strategies than writers in expressing abstract concepts. Nevertheless, both speakers and writers have to provide enough information for listeners and readers to identify what is referred to. How do speakers compensate for the restricted choices of types of communication strategies in expressing abstract concepts? We suggest that speakers may use greater number of communication strategies to make up for the limited types of communication strategies as shown in Figure 4.2.

	Spoken language	Written language								
Types of communication strategies	<table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">H. A.</td> <td style="text-align: center;">Involvement</td> </tr> <tr> <td style="text-align: center;">(Type↓)</td> <td style="text-align: center;">(Type↑)</td> </tr> </table>	H. A.	Involvement	(Type↓)	(Type↑)	<table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">L. A.</td> <td style="text-align: center;">Detachment</td> </tr> <tr> <td style="text-align: center;">(Type)</td> <td style="text-align: center;">(type↓)</td> </tr> </table>	L. A.	Detachment	(Type)	(type↓)
H. A.	Involvement									
(Type↓)	(Type↑)									
L. A.	Detachment									
(Type)	(type↓)									
Number of communication strategies	Number	Number								

Figure 4.2: The comparison of the types and the number of communication strategies in the two modes to express abstract concepts

When speakers realize that a certain communication strategy can help them get across the meaning, they may use it several times by mentioning two or more different propositions that belong to the same communication strategy to denote the target

concept. The repetitive application of the same type of communication strategy in spoken language to convey abstract concepts therefore results in greater number of communication strategies. Writers, on the other hand, may have rich types of communication strategies available for them to express abstract concepts and may resort less to the repetitive application of the same communication strategies. The number of communication strategies in written language to express abstract concepts may be therefore smaller than that in spoken language.

To sum up, greater number of communication strategies is found in spoken language than in written language in general. One possible conclusion can be made that the involvement of spoken language may make speakers implement greater number of communication strategies whereas the detachment of written language may reduce the number of communication strategies. When we examine the number of communication strategies used for expressing concrete concepts and abstract concepts separately, different result is derived. In concrete concepts, the number of communication strategies used in spoken language and in written language displays no significant difference. It is suggested that concrete concepts with specific shapes, properties and functions for both speakers and writers to describe may not lead to significant difference in the two modes. In abstract concepts, the difference of the number of communication strategies in the two modes is significant with spoken

language outnumbering written language. In addition to the factor of ‘involvement and detachment,’ we consider that the restricted types of communication strategies in spoken language resulting from higher anxiety may make speakers employ the same type of communication strategies¹⁶ several times as compensation. The number of communication strategies used for expressing abstract concepts in spoken language may be therefore increased. Writers, by contrast, having rich types of communication strategies for them to choose from in expressing abstract words, do not have to stick to a certain type of communication strategy. Writers therefore adopt smaller number of communication strategies than speakers do in terms of abstract concepts.

4.2.5 Summary of the comparison of C.S. in the two modes

Taiwan EFL college learners prefer to take advantage of the structure of the target language (L2) to express a concept, but seldom rely on the native language system (L1). The possible reason is learners’ expectation of the failure of L1-based strategies in achieving the communicative goals. Our hypothesis that speakers would use more L1-based strategies while writers would choose more L2-based strategies is not plausible.

Among the twelve communication strategies, only *synonym strategy* and *situation strategy* display significant difference in the two modes. The former shows

¹⁶ The application of the same type of communication strategy several times with different propositions may make the number of communication strategies increasing.

more occurrences in written language whereas the latter is more frequent in spoken language. It is suggested that longer pondering time in written language may result in greater use of *synonym strategy* whereas the context-dependent characteristics of spoken language leads to more *situation strategy*.

With regards to types of communication strategies, three competing factors: (a) the type of concepts (b) the state of anxiety and (c) involvement versus detachment, are suggested to determine the results. When the concrete concepts are encountered, the factor of ‘involvement versus detachment’ overpowers learners’ state of anxiety. Involvement of spoken language leads to more types of communication strategies while detachment of written language results in fewer types of communication strategies in terms of concrete concepts. By contrast, in expressing abstract concepts that are of greater difficulties, learners’ state of anxiety overpowers ‘involvement versus detachment.’ Higher anxiety of spoken language may decrease the types of communication strategies while lower anxiety of written language may increase the types of communication strategies. That is the reason why more types of communication strategies are found in the spoken language to express concrete concepts but more types of communication strategies are seen in the written language to convey abstract concepts.

As for the number of communication strategies, concrete concepts that have

explicit characteristics for learners to describe display no significant difference in the two modes. Abstract concepts, on the other hand, demonstrate greater number of communication strategies in spoken language than in written language. In addition to the involvement of spoken language that makes speakers implement greater number of communication strategies, we suggest that speakers may repetitively apply the same communication strategy several times in order to compensate for the restricted types of communication strategies in expressing abstract concepts in spoken language.

In a word, the differences of the communication strategies in the two modes are discussed from two points: (a) the types of communication strategies and (b) the number of communication strategies. The former represents the range of taxonomic system available for solving lexical problems and the latter is an indicator of learners' the ability of solving lexical problems in lack of rich taxonomic system. Both are important in communicating with target language. English teachers in Taiwan are therefore suggested first to increase learners' types of communication strategies and then to encourage them to apply the strategy of in grater number for keeping the communication ongoing.

4.3 The relation between L2 proficiency and the use of C.S.

The mode-related differences of communication strategies are compared in the previous section. We then further investigate how proficiency level influences the

selection of communication strategies in the two modes. In order to make up for the gap between measuring proficiency through pencil-and-paper grammatical test and eliciting the use of communication strategies in oral task, the proficiency level in the current study is derived from the subject's performance in speaking section and writing section of GEPT. Namely, speaking proficiency and writing proficiency of the same subject are measured and the subjects are divided into three groups accordingly: the elementary group, the intermediate group and the advanced group. Speaking proficiency indicates both linguistic knowledge and speaking ability while writing proficiency represents linguistic knowledge and writing ability. Without linguistic knowledge, neither speaking ability nor writing ability can be achieved.

In section 4.3.1, the total occurrences as well as the percentage of the each communication strategy among the three groups according to their speaking proficiency and writing proficiency are demonstrated. The purpose is to explore the proficiency-related effect on the selection of communication strategies. In addition, the relation between proficiency and the use of communication strategies in terms of the number and the types are then examined in two aspects: (a) speaking proficiency versus the use of communication strategies in spoken language and (b) writing proficiency versus the use of communication strategies in written language. The former is presented in section 4.3.2 and the latter is discussed in section 4.3.3. The

summary of the relation between proficiency and the use of communication strategies is summarized in section 4.3.4.

4.3.1 The influence of proficiency on the occurrences of C.S in the two modes

In this section, we examine how proficiency affects the occurrences of communication strategies. The occurrences here are actually what we have called the number of communication strategies. The discussion in this section includes two parts: (a) how speaking proficiency influences the occurrences of communication strategies in spoken language and (b) how writing proficiency influences the occurrences of communication strategies in written language. The former is presented first, followed by the latter.

The occurrences and the percentages of the twelve communication strategies in the spoken language among the three groups according to subject's speaking proficiency are presented in Table 4.9.

Table 4.9: The number of C.S. in the three groups according to speaking proficiency

Group \ Strategy	Elementary	Intermediate	Advanced	Total
1. Circumlocution	138(28.9%)	153(32%)	186(40.1%)	477(100%)
2. Situation	75(28.1%)	84(31.5%)	108(40.4%)	267(100%)
3. Defining	32(24.4%)	49(37.4%)	50(38.2%)	131(100%)

4. Related concept	16(21.3%)	26(34.6%)	33(44%)	75(100%)
5. Analogy	19(33.3%)	22(38.6%)	16(28.1%)	57(100%)
6. Hypernym	14(27.5%)	16(31.3%)	21(41.2%)	51(100%)
7. Opposition	12(26.7%)	14(31.1%)	19(42.2%)	45(100%)
8. Story	7(25%)	9(32.1%)	12(42.9%)	28(100%)
9. Synonym	3(14.3%)	8(38.1%)	10(47.6%)	21(100%)
10. Antonym	2(16.7%)	4(33.3%)	6(50%)	12(100%)
11. Metonym	4(40%)	4(40%)	2(20%)	10(100%)
12. Proverb	0(0%)	2(40%)	3(60%)	5(100%)
Total	322	391	466	1179(100%)

There are six subjects in the elementary group, six subjects in the intermediate group and seven subjects in the advanced group. Therefore, the reference percentage of the communication strategies in the three groups is 31.6%, 31.6% and 36.6%.¹⁷

Great deviation from these percentages indicates that the use of the communication strategies is under the influence of speaking proficiency. In other words, these communication strategies may be of great difficulties to learners of a specific proficiency level and worth more pedagogical attentions.

¹⁷ In total, there are nineteen subjects. The six subjects in the elementary group occupy 31.6% of the whole subjects and so do the subjects in the intermediate group. The seven subjects in the advanced group occupy 36.6% of the whole subjects. We, therefore, use these three percentages as reference; great deviation from the percentage indicates the influence of proficiency.

The order of communication strategies is listed from the highest occurrences to the lowest occurrences in total. The communication strategy of the highest occurrence is *circumlocution strategy* and that of the lowest occurrence is *proverb strategy*. When the occurrence of a communication strategy is so low with less than ten times in the whole experiment like the *proverb strategy*, to separate such communication strategy in the three groups and therefore to examine the group-related effect on the choices of such strategy will become less convincing. Therefore, the higher the occurrence of the strategy in the table is; the more convincing the discussion of the proficiency-related effect is.

According to Table 4.9, it can be found that the uses of the three most frequently adopted communication strategies in the three groups increase according to the subject's proficiency level. Nevertheless, the percentage in each group does not deviate from the reference percentage greatly. The result indicates that the three communication strategies--*circumlocution strategy*, *situation strategy* and *defining strategy*, are not too difficult in nature for learners to apply. Even learners of low proficiency know to apply them. The teachers can therefore put less emphasis on them and focus on teaching other difficult communication strategies such as the least adopted communication strategies discussed in the following.

The two least adopted communication strategies--*proverb strategy* and *metonym*

strategy, have small occurrences in spoken language with the former only five times and the latter only ten times in the whole experiment. The result indicates that the learners irrespective of proficiency level find it difficult to apply these communication strategies. We suggest that the possible reason may be the lack of the awareness of these two strategies in Taiwan EFL college learners. More training is suggested to enhance the awareness of these two strategies. Thus, more occurrences can be at least expected to show in the learners of higher proficiency. In addition, when we examine the occurrences of *proverb strategy* closely in the three groups, we found that that *proverb strategy* even fails to be adopted by the learners of low proficiency, with the percentage of zero in the elementary group. It is possible that the least proficient speakers do not have the target language proverbs stored in their repertoire and therefore fail to apply them in the oral communication. Alternatively, it may be that the subjects know the target proverbs, but poorer speaking ability makes them stressful and thus unable to effectively search for the cognitive resources in dealing with lexical problems. The bare application of *proverb strategy* in Taiwan EFL college confirms Paribakht's(1985) claim that target language proverbs are among the last to be acquired and to be resorted to for solving lexical problems.

For the rest of other communication strategies, it can be found that there are two strategies that show apparently low occurrences in the elementary group: (a) *synonym*

strategy (c) antonym strategy. The percentages of these two strategies in the elementary group are much lower than the reference percentage. This indicates that the learners of low speaking proficiency have difficulties in applying these two communication strategies. In addition to the lack of the awareness of these strategies, the complexity of the two strategies themselves as well as learners' deficiency of linguistic knowledge may also account for the low occurrences in the elementary group. The possible explanation is demonstrated in the following.

Synonym strategy and *antonym strategy*, they are the most concise way to express a concept when the target word is missing. However, it needs sufficient lexical knowledge to apply these two communication strategies. With only limited vocabulary as well as the greater time pressure in speaking, the least proficient speakers therefore find it difficult to refer to a synonym or an antonym of the target word to represent it. The percentages of these two strategies are thus deviant from the reference percentage.

In order to increase the adoption of these two strategies, English teachers can focus on enhancing the awareness of these two strategies in the learners of low proficiency. In addition to the awareness of the strategies, less proficient learners also need the support of the linguistic knowledge to overcome the complexity of the strategies and then have the ability to correctly apply them. When their proficiency

level reaches a specific level, the use of these strategies may ‘bloom.’¹⁸

In addition to the situation in spoken language, the occurrences and the percentages of the twelve communication strategies in written language among the three groups according to their writing proficiency are demonstrated in Table 4.10.

There are five subjects in the elementary group, six subjects in the intermediate group and eight subjects in the advanced group. The reference percentage of the communication strategies in the three groups is 26.3%, 31.4% and 42.1%. Like the situation in the spoken language, great deviation from these percentages indicates the influence of subject’s writing proficiency.

Table 4.10: The number of C.S. in the three groups according to writing proficiency

Group \ Strategy	Elementary	Intermediate	Advanced	
1. Circumlocution	107(22.8%)	143(30.4%)	220(46.8%)	470(100%)
2. Situation	42(25.5%)	55(33.3%)	68(42.1%)	165(100%)
3. Defining	35(25.7%)	39(28.7%)	62(45.6%)	136(100%)
4. Related concept	14(17.7%)	23(29.1%)	42(53.1%)	79(100%)
5. Hypernym	13(20.6%)	25(39.7%)	25(39.7%)	63(100%)
6. Analogy	17(34.7%)	13(26.5%)	19(38.8%)	49(100%)

¹⁸ The reason why the subjects in the advanced group do not ‘bloom’ in the use of the two strategies may be the lack of the awareness of these two strategies. When learners have sufficient linguistic knowledge as well as the awareness of the C.S., they may know to apply them well.

7. Opposition	8(19%)	14(33.3%)	20(47.6%)	42(100%)
8. Synonym	5(12.5%)	7(17.5%)	28(70%)	40(100%)
9. Story	5(21.7%)	6(26.1%)	12(52.2%)	23(100%)
10. Antonym	4(20%)	10(50%)	6(30%)	20(100%)
11. Metonym	2(28.6%)	3(42.9%)	2(28.6%)	7(100%)
12. Proverb	2(28.6%)	2(28.6%)	3(42.9%)	7(100%)
Total	254	340	507	1101

Similar to the situation in spoken language, the percentages of the three most frequently adopted communication strategies in the three groups do not deviate greatly from the reference percentage. This indicates that the strategies of *circumlocution*, *situation* and *defining* are not difficult in nature. Without the training of communication strategies, even the least proficient learners know to use them in solving lexical problems. Though, the percentage used in the elementary group is lower than the intermediate group and the advanced group.

Proverb strategy and *metonym strategy* are also the least adopted communication strategies in written language. The low occurrences of these two strategies in the present experiment suggest that learners irrespective of the proficiency level are not familiar with applying these two strategies. The possible explanation has been stated in the previous section. More training is therefore needed to enhance the awareness of

these two strategies in the learners of all proficiency level. What needs to be paid attention to is the *proverb strategy*. As we have shown in the spoken language, learners in the elementary group fail to take advantage of the *proverbs* in communicating with target language. However, in written language, even the least proficient writers know to use proverbs in dealing with lexical problems, though the occurrence is not high. It is suggested that the longer pondering time of written language enables writers to search for their cognitive system and therefore can resort to choosing a more effective way in solving lexical problems.

In addition, we found that *synonym strategy*¹⁹ shows apparently low percentage in the elementary group as we have found in the spoken language. The low percentage of the strategy in the elementary group in both spoken language and written language suggest that the communication strategy is of greater difficulties to learners of low proficiency. The possible reason can be (a) the lack of the awareness of these strategies, (b) the complexity of the strategies or (c) the deficiency of linguistic knowledge. The job of an English teacher is to enhance learners' awareness of these strategies. When the learners' proficiency has reached a certain level, they can have the abilities of overcoming the complexity of the strategies. The occurrences of these strategies can be expected to rise.

¹⁹ Antonym strategy does not show an apparently low occurrence in the elementary group in the written language. The pattern may result from the overall low occurrence of this strategy in the written language.

In summary, the three most frequently adopted communication strategies in spoken language and written language, i.e. *circumlocution strategy*, *situation strategy*, and *defining strategy*, do not exhibit proficiency-related effects. Learners of all proficiency level know to apply them. The two least adopted communication strategies in spoken language and written language--*proverb strategy* and *metonym strategy*, have low occurrences in the present experiment. It suggests that Taiwan EFL learners irrespective of proficiency level are not familiar with applying these two strategies. More training is therefore needed to enhance the awareness of these two strategies in the learners of all proficiency level. In addition, *synonym stratege* is found to have proficiency-related effects in spoken language as well as in written language, with apparently low occurrences in the elementary group. It provides evidence that such communication strategies may be of great difficulties to the learners of lower proficiency. In addition to the enhancing of the awareness of these strategies in the learners of low proficiency, it is suggested that more linguistic knowledge is also essential for the learners to successfully apply the strategy.

4.3.2 Speaking proficiency V.S. C.S. in spoken language

In this section, the number as well as the types of communication strategies in spoken language is examined through subjects' speaking proficiency by SPSS. In the

experiment, twenty prompted words are used to elicit learners' use of communication strategies. In terms of communication strategies used to express these twenty words, more proficient speakers are hypothesized to use greater number and more types of communication strategies for the reasons respectively demonstrated in the following.

First, more proficient speakers have more sufficient linguistic knowledge and better speaking ability necessary for correctly performing communication strategies in spoken language. Only correctly produced communication strategies can help the audience figure out what is conveyed and therefore can be counted as occurrence of communication strategies. Thus, more correctly produced communication strategies that serve the communicative functions, i.e. greater number of communication strategies, can be expected in more proficient speakers. Second, with sufficient knowledge and better speaking ability, more proficient speakers may encounter fewer difficulties and experience lower anxiety in communicating with native English speakers. The cognitive system of more proficient speakers may be more flexible, with which they can easily activate necessary resources for correctly performing communication strategies. The types of communication strategies adopted by more proficient speakers accordingly may be greater.

Less proficient speakers, by contrast, have more limited linguistic knowledge and poorer speaking ability. In the process of using communication strategies, they

may find it difficult to carry out the communication strategies in their minds. They may be forced to give up the half produced communication strategies because the linguistic knowledge necessary for correct expression is missing. The number of communication strategies therefore may decrease. Besides, their incomplete interlanguage system may make them encounter more difficulties and experience higher anxiety, which would make the types of the available communication strategies more restricted. In a word, the less proficient learners may adopt smaller number and fewer types of communication strategies than the more proficient speakers do. In the following, the result and discussion of the issue of number will be first presented followed by the issue of types.

To gain the number of communication strategies, the total occurrences of communication strategies used for expressing the twenty prompted words by a learner are first added up. Each learner's use of communication strategies in one group is then summed up and divided by the number of the subjects of that group. The means of the number of communication strategies in the three groups are derived. A K-W test is carried out to examine whether more proficient speakers are capable of using greater number of communication strategies. The means and the result of the test are displayed in Table 4.11²⁰.

²⁰ Please refer to Table 4.9 on page 112.

Table 4.11: Speaking proficiency V.S. the number of C.S.

Group	Elementary	Intermediate	Advanced
Mean of the number of C. S.	53.67	65.17	66.57
The result of K-W test	$\chi^2(2)=5.995, p=0.049^*$		

The result of K-W test ($\chi^2=5.995, p<0.05$) shows that there is significant difference in the number of communication strategies among the three groups. According to Table 4.11, it is found that the numbers of communication strategies used by the intermediate group and the advanced group are significantly higher than that of elementary group. The result lends support for the hypothesis that more proficient speakers may have the ability of using greater number of communication strategies when encountering lexical problems. The least proficient speakers, by contrast, may produce the fewest communication strategies because of the limitation of linguistic knowledge as well as poorer speaking ability.

What needs to be paid attention to is that there appears to be no significant difference in the number of communication strategies between the intermediate group and the advanced group. One of the possible explanations is that the potential of using increasing number of communication strategies may stop when learners reach a certain proficiency level. To put it differently, when learners' speaking proficiency develops at a specific level, their ability to use communication strategies may display insignificant differences from the even more advanced speaker. The specific level of

speaking proficiency may be regarded as a threshold beyond which learners are expected to have enough ability of solving lexical problems during communication. To train students how to reach at this specific level, to be sure, is the aim of English education in Taiwan. We, however, acknowledge that the finding needs to be supported by a long term study and the criterion for defining this specific speaking proficiency level is hard to derive in the current study. Larger study is therefore suggested to confirm the finding, to explore the criterion and to investigate how to train most of college students in Taiwan to achieve this level.

In addition to greater number of communication strategies, we also assume that more proficient speakers would make use of more types of communication strategies. As mentioned in the previous section, there are twelve types of communication strategies. A speaker may adopt several types of communication strategies to express one single word. In total, there are twenty words in the experiment. The numbers of the types of communication strategies used for conveying these twenty words by a subject are first summed up. Then, the types of communication strategies used to express the twenty prompted words in one group are summed up and divided by the number of the subjects of that group. The mean of the types of communication strategies of each group is derived. A K-W test is consecutively conducted to examine whether more proficient speakers have the ability to employ more types of

communication strategies. The result and the means of the types of communication strategies among the three groups are shown in Table 4.12.

Table 4.12: Speaking proficiency V.S. the types of C.S.

Group	Elementary	Intermediate	Advanced
Mean of the number of types of C. S.	36.67	42.25	42.29
The result of K-W test	$\chi^2(2)=4.031, p=0.133$		

The result ($\chi^2=4.031, p>0.05$) does not reach the level of significance. It indicates that speaking proficiency does not have a significant influence upon the choices of types of communication strategies. That is to say, even without the training of communication strategies, speakers do not display significant differences in the choices of types of communication strategies. This is consistent with what was in Paribatht (1985) asserting that learners of different proficiency level use the same approaches to solve lexical problems.

Two statements can be inferred from the result that the types of communication strategies are not under the influence of speaking proficiency level. First, each type of communication strategy can be used by speakers with different proficiency level as shown in Figure 4.3:

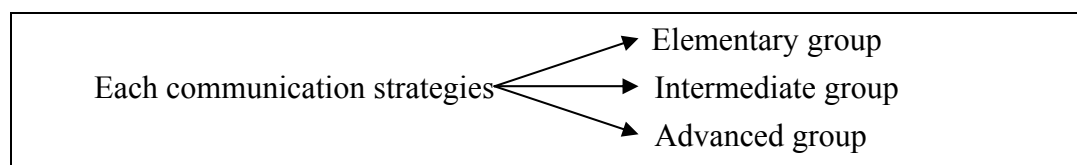


Figure 4.3: Each communication strategy can be used by one of the three groups

Even the most knowledge-demanded strategy such as *synonym strategy* and *antonym strategy*, are observed to be used by the least proficient learners. In other words, there is no preference for a certain type of communication strategy to be adopted by one of the three groups. It is likely that ways to solving lexical problems may have connection to cognitive system. The subjects in the current study are all college students whose cognitive system is well-developed; they consequently display similar choices in the types of communication strategies.

Second, among the twelve types of communication strategies, a learner may not know how to apply all the types in expressing the twenty words. Some types of communication strategies fail to be adopted by the learners. What types of communication strategies tend to lack in learners? It is found that each type of communication strategy fails to be adopted by learners from one of the three groups as shown in the Figure 4.4:

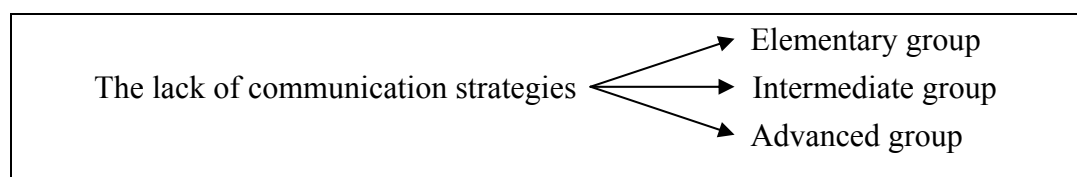


Figure 4.4: Each communication strategy may fail to be adopted by one of the three groups

This means that even speakers of the advanced group are found to lack *synonym strategy* or *antonym strategy*, which according to Paribakht (1985) is preferred to be used by advanced learners. It may be possible that without the training of

communication strategies, although learners know how to make use of communication strategies to solve lexical problems, the system of communication strategies of the learners is incomplete. Each learner, accordingly, may fail to adopt some types of communication strategies.

In a word, the occurrences of certain types of communication strategies can be seen in the three groups and the lack of certain types of communication strategies can be found in the three groups as well. The finding indicates that the awareness of the types of communication strategies is unrelated to speaking proficiency. Namely, the awareness of the types of communication strategies may not grow as learners make progress in the target language. Since the advance in speaking proficiency can not guarantee the awareness of communication strategies, the teaching of them is considered to be necessary. The aim of the teaching is to enhance the awareness of communication strategies and to ensure that learners, despite their proficient level, are equipped with rich types of communication strategies to solve lexical problems. When encountering lexical problems in communication, they will have enough communication strategies available to get across the meaning. The goal of enhancing communicative competence of learners is therefore expected to achieve.

To sum up, speaking proficiency is a factor that determines the number of communication strategies adopted but fails to influence the types of communication

strategies selected. In other words, as speakers progress in their speaking proficiency, they can produce greater number of communication strategies but the types of communication remain the same. Nevertheless, we also found that both the most proficient learners and the least proficient learners fail to apply some useful communication strategies. The result lends support for the need of teaching communication strategies with an aim to ensuring the awareness of rich types of communication strategies in language learners.

4.3.3 Writing proficiency V.S. C.S. in written language

Similar to speaking proficiency, writing proficiency is regarded as an indicator of linguistic knowledge as well as writing ability. It is assumed to be a factor that may influence the number and the types of communication strategies in written language, which will be discussed respectively in the following. The total occurrences of communication strategies used to express the twenty prompted words by a learner are summed up. Each subject's use of communication strategies in one group is added up and divided by the number of subjects in that group. The mean of the number used for expressing the twenty words of the each group is derived. A K-W test is then performed to examine whether more proficient writers are able to use greater number of communication strategies. The result and the means of communication strategies in

the three groups are displayed in Table 4.13.²¹

Table 4.13: Writing proficiency V.S. the number of C.S.

Group	Elementary	Intermediate	Advanced
Mean of the number of C. S.	50.8	56.67	63.38
The result of K-W test	$\chi^2(2)=4.254, p=0.119$		

Table 4.13 shows that more proficient writers use greater number of communication strategies than less proficient writers. However, the result of K-W test ($\chi^2=4.254, p=.119$) shows that there is no significant difference among the three groups in terms of the number of communication strategies. Namely, our hypothesis that the number of communication strategies accord with writing proficiency is not plausible. Writing proficiency is found not a factor that influences the number of communication strategies in written language.

It is likely that other factors in addition to linguistic knowledge and writing ability might get involved in determining the number of communication strategies in written language. One possible explanation of the result might be as follows. The written task used in the current study to measure writing ability is composition, which requires cooperative attitudes and efforts of learners to finish a good composition. Learners who write good compositions that are well-organized and cohesive will be rated as advanced writer. However, the test in the current study is not a formal test that

²¹ Please refer to Table 4.10 on 117.

has an influence upon test-taker's future; we can not guarantee that all subjects finish the written task cooperatively. As observed in the experiment, some of the learners with sufficient linguistic knowledge and good writing ability are rated as intermediate writers or even elementary writers, because they do not do their best in performing the written task. Although rated as intermediate writers or even elementary writers, they may have enough linguistic knowledge and writing ability to deal with lexical problems. The number of communication strategies used in the intermediate group and the elementary group may increase. As a result, the differences among these three groups in terms of the number of communication strategies in written language diminish and fail to reach the level of significance in the statistical analysis.

The result is different from how speaking proficiency influences the number of communication strategies. In the previous section, we have shown that learners with more sufficient linguistic knowledge and better speaking ability are rated as more proficient speakers and are reported to use greater number of communication strategies in spoken language. By contrast, writers with sufficient linguistic knowledge and good writing ability are not necessarily rated as proficient writers because they do not do their best in completing the composition task. To put it differently, in addition to linguistic knowledge and writing ability, it also requires cooperative attitude for a subject to be rated as an advanced writer. However, the third

factor can not be guaranteed in the current study. More studies are suggested to take into consideration the aforementioned three factors--linguistic knowledge, writing ability and cooperative attitude, to examine whether the number of communication strategies used in written language accords with writing proficiency or not.

In addition to the issue of the number, we turn to the issue of the types of communication strategies in the following. Subjects use several types of communication strategies to express one target concept. The types of communication strategies used to express the twenty prompted words by a subject are added up. Then, each subject's use of types of communication strategies in one group is summed up and divided by the number of the subjects of that group. The mean of the types of communication strategies of each group is derived. A K-W test is then carried to investigate whether more proficient writers are capable of using more types of communication strategies. The means as well as the result of the test are shown in Table 4.14.

Table 4.14: Writing proficiency V.S. the types of C.S.

Group	Elementary	Intermediate	Advanced
Mean of the number of types of C.S.	37.2	40.67	42.38
The result of K-W test	$\chi^2(2)=2.748, p=0.253$		

The result of K-W test ($\chi^2=2.748, p=.253$) does not reach the level of significance. It indicates that writing proficiency is not a factor that influences the

choices of the types in adopting communication strategies in written language. The result is consistent with what was found between speaking proficiency and the types of communication strategies in spoken language. The view that the awareness of types of communication strategies is unaffected by proficiency level is further supported. It states that the types of communication strategies may not increase according to learners' proficiency level and the absence of certain types of communication strategies may still lack in learners as they progress in proficiency. Therefore, we consider it as necessary for English teachers in Taiwan to remind students of different types of communication strategies with an aim to ensuring rich taxonomic system of communication strategies in all learners. With sufficient resources for learners to solve lexical problems, learners' communicative competence is enhanced, which is the goal of language teaching. In a word, the findings of the relation between proficiency and types of communication strategies chosen lend support for the need of teaching communication strategies and offer a possible way of enhancing learners' communicative competence.

4.3.4. Summary of the relation between proficiency and the use of C.S.

The relation between proficiency and use of communication strategies are discussed in two perspectives: (a) how speaking proficiency influences the use of communication strategies in spoken language and (b) how writing proficiency

influences the use of communication strategies in written language. Speaking proficiency is found to be a factor that may affect the number of communication strategies but is unrelated to the types of communication strategies chosen. To put it differently, the total occurrences of communication strategies seem to increase according to learners' speaking proficiency but the types of communication strategies remain the same even as they progress in speaking proficiency. One possible conclusion is that although the awareness of types of communication strategies is unrelated to speaking proficiency, correct production, i.e. the number of communication strategies needs to be backed up by sufficient linguistic knowledge and good speaking ability.

With respect to writing proficiency, neither the number nor the types of communication strategies are influenced by it. One possible explanation concerning the issue of number is that the absence of cooperative attitudes of learners in finishing the written task may make writing proficiency fail to account for the number of communication strategies used. As for the insignificant relation between writing proficiency and types of communication strategies in written language, it is like the pattern found in spoken language, i.e. the types of communication strategies are not under the influence of writing proficiency. The similar findings of the relation between language proficiency and the types of communication strategies in spoken

language and written language provide evidences to the fact that learners of different proficiency levels are endowed with the same cognitive resources to solve lexical problems. However, only some of the resources or some types of communication strategies can be activated through the process of trying to solve lexical problems and therefore only incomplete system of communication strategies can be found in learners. This is the reason that we consider it as necessary for English teachers to remind students of the different types of communication strategies.