

# The Relationship between Vocabulary Learning Strategies for Phrasal Verbs and Learning Outcomes: The Case of Chinese EFL Learners

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## Abstract

On account of the high frequency of use, phrasal verbs have been the focus for Chinese EFL learners. However, due to the syntactic features and figurative meanings of English phrasal verbs, many Chinese EFL learners misuse or even avoid using phrasal verbs, rendering it a major problem in English teaching and learning. Aiming to investigate the relationship between Chinese EFL learners' vocabulary learning strategies for phrasal verbs and the learning outcomes, this research was conducted via a mixed quantitative and qualitative research method. One hundred and fourteen Year-3 undergraduates in Guangdong Province participated in this research. After analyzing the data from the questionnaires, tests for phrasal verbs, and interviews, this research found that Chinese EFL learners' awareness of utilizing vocabulary learning strategies to acquire phrasal verbs was generally at a moderate level. The performance of Chinese EFL learners in phrasal verbs was significantly correlated with the frequency of employing guessing strategies, dictionary strategies, note-taking strategies, encoding strategies, meta-cognitive strategies, and activation strategies in a positive manner, with the latter three strategies most strongly correlated with the achievement in phrasal verbs. Significant differences were found between the high- and low-competence groups in the adoption of the vocabulary learning strategies. Underpinned by the results, the teaching methods and learning strategies of phrasal verbs were proposed to advance the teaching and learning of phrasal verbs.

**Keywords:** Phrasal verb, Multi-word verb, Vocabulary learning strategies, Chinese EFL learners

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## 1. Research Rationale

Phrasal verbs, also called multi-word verbs, are defined as combinations of verbs with adverbial or prepositional particles (Quirk *et al.*, 1972), which play a vital role in both daily communication and formal discourse for EFL learners. An overwhelming number of EFL learners in China, nevertheless, struggle to acquire and avoid using phrasal verbs (Liu, 2006). Therefore, studies in this field have been conducted to motivate the development of the pedagogy in teaching phrasal verbs.

For the most part, researchers (*e.g.*, Liao & Fukuya, 2002; Feng & Shi, 2015) unveiled the misconception of the EFL learners and suggested that Chinese EFL learners would eschew phrasal verbs and resort to their single-word equivalents. These problems in learning and using phrasal verbs are mainly due to the inherent nature of phrasal verbs: A substantial percentage of collocations involve figurative meanings (Macis & Schmitt, 2017). This indicates that the meanings of a phrasal verb often cannot be seen as merely the aggregation of the components. Given that such a particular nature renders it extremely challenging for EFL learners to employ phrasal verbs, many scholars have begun to explore the pedagogy of teaching English phrasal verbs from various teaching approaches (Kévecses & Szabo, 1996; Boers, 2006).

Whilst these studies provide insight into phrasal verbs in L2 teaching, the instruction of phrasal verbs is inclined to be teacher-oriented in China, often disregarding learners' initiative. Despite the dedication of Chinese EFL teachers to the instruction of phrasal verbs, many students still fail to improve their competence in phrasal verbs. Nevertheless, effective learning strategies are conducive to developing students' learning capabilities and boosting their learning efficiency. Considering the subjectivity of EFL learners in vocabulary learning, therefore, it is pressing to explore vocabulary learning strategies for phrasal verbs that are suitable for Chinese EFL learners.

## 2. Literature Review

### 2.1 Phrasal Verb

#### 2.1.1 Definition and Characteristics of Phrasal Verbs

Different scholars have put forward varied definitions of phrasal verbs, of which the most prevailing was the one proposed by Quirk *et al.* (1972). Phrasal verbs, also called multi-word verbs, are defined as combinations of verbs with adverbial or prepositional particles, which can be single, such as *run AWAY*; or double, like *make OFF WITH*. In phrasal verbs, the sense loaded in the particles is comparatively weaker, and thus particles are selected and constrained by verbs. In this way, the internal structure of phrasal verbs is stable.

Primarily, the components in phrasal verbs cannot be substituted at will. For instance, *bring* in the phrasal verb, *bring out*, cannot be replaced by its synonym like *carry*, *take*, or other. Additionally, the components in phrasal verbs cannot be arbitrarily inserted or omitted. For example, *with* cannot be added after *come across* or cannot be deleted in *get away with*. Otherwise, the resultant phrase will either not be a phrasal verb or will be irrelevant to the previous phrasal verb. Ultimately, each component of a phrasal verb carries its literal meaning in some way, but the sense of a phrasal verb cannot simply be attributed to a combination of the literal meanings of its components. In other words, the majority of the phrasal verbs are figurative, so the meaning of a phrasal verb cannot be inferred in accordance with the meaning of a verb, preposition, or adverb. For example, the phrasal verb, *look out*, whose figurative meaning is to warn somebody to be careful, especially when there is danger. However, literally, *look* means turning one's eyes in a particular direction; *out* refers to being away from the inside of a place or thing.

#### 2.1.2 Empirical Research on Phrasal Verbs

Kêvecses & Szabo (1996) selected 30 intermediate-level EFL learners as subjects, and they employed traditional and cognitive teaching methods for the control and experimental groups during the instructional process. At the end of the instruction, the participants were tested and it was found that the experimental group scored about 25% higher than the control group. Thus, the notion was proved that instruction is more efficient when cognitive linguistic theories are applied.

With 74 native French-speaking English learners as subjects, Boers (2006) conducted a study on the acquisition of phrasal verbs by using conceptual metaphors. As the experimental group learned the phrasal verbs, the instructor classified the phrasal verbs according to the conceptual metaphors and presented words that shared the same meaning as the phrasal verbs. Subsequently, the subjects were asked to take a cloze test to examine their performance in using phrasal verbs. The results demonstrated that increasing learners' awareness of metaphors facilitated their recall of phrasal verbs.

El-Dakhs *et al.* (2021) divided 77 EFL learners into two experimental groups (incidental learning vs. enhanced exposure) and a control group. The incidental learning group read restaurant reviews that included the target phrasal verbs, the enhanced exposure group read the same reviews with the target phrasal verbs bolded and underlined, and the control group did not receive any treatment. The learners' performance on the post-test manifested a clear advantage for enhanced exposure over incidental learning.

Roohani & Vinchek (2021) assigned 150 Isfahan learners of English to game-based, social media, and classroom-based groups. The game-based group received instruction on phrasal verbs through a mobile gaming application, the social media group via a Telegram channel, and the classroom-based group through the traditional teacher-fronted method. The effects of the three methods were statistically significant, but the game-based method was the most effective one to acquire English phrasal verbs.

In summary, scholars have been studying the pedagogy of English phrasal verbs for many years. The focus of their research varies, but they have all attained fruitful advances and provided theoretical basis as well as methodological guidance for subsequent research. These studies, nonetheless, have principally highlighted teachers' pedagogy in phrasal verbs. Nowadays, it is widely acknowledged that students are the primary subjects of learning, that effective learning strategies are an essential driving force for second language acquisition, and that it is preferable to instruct learners how to learn rather than what to learn. However, little research has been conducted to investigate the learning strategies of phrasal verbs, and no conclusive findings have been drawn as to which strategies are effective for the acquisition of phrasal verbs.

### 2.2 Vocabulary Learning Strategy

#### 2.2.1 Definition and Classification of Vocabulary Learning Strategy

Vocabulary learning strategies are often referred to as "the process of accessing, storing, retrieving, and

employing information” (Schmitt, 1997), namely specific methods, procedures, or behaviors that learners usually apply consciously with the aim of improving their progress in acquiring the vocabulary of the target language.

O’Malley and Chamot (1990), primarily adopting an empirical research approach to classify vocabulary learning strategies, suggested that vocabulary learning strategies include metacognitive, cognitive, and social strategies. From the perspective of the relationship between vocabulary learning strategies and language materials, Oxford (1990) argued that vocabulary learning strategies should include strategies that are directly linked to language acquisition as well as strategies that are not directly linked to language acquisition. Based on the purpose of vocabulary learning strategies, Cohen (1990) considered vocabulary learning strategies should be divided into strategies for learning and strategies for performance.

As opposed to the researchers above, Gu & Johnson (1996) embodied the classification of vocabulary learning strategies through a questionnaire that included beliefs about vocabulary learning, metacognitive strategies, cognitive strategies (guessing strategies, dictionary strategies, note-taking strategies, rehearsal strategies, and encoding strategies), as well as activation strategies.

As can be seen above, Gu & Johnson’s (1996) classification is more exhaustive, which lays the foundation for the design of the research instrument for the current study.

### 2.2.2 Empirical Research on Vocabulary Learning Strategy

Empirical research on vocabulary learning strategies of Chinese EFL learners can be categorized into the following three major categories: survey-oriented research on vocabulary learning strategies, research on the correlation with other variables, and comparative research on vocabulary learning strategies.

In terms of survey-oriented research, Liu’s (2017) surveyed the graduates majoring in English and found that the strategies of making review plans, reviewing on time, and paying attention to high-frequency collocations were widely popular among graduates. In addition, the strategy of translating into the native language was also more widely adopted. Zhang & Wu (2017) investigated undergraduate English majors and concluded that in the use of cognitive strategies, the higher the grade level and the higher the English competence, the less frequent the use of rehearsal strategies and that the use of association strategies was more widely adopted among the high-proficiency learners in all grades.

Research on the correlation with other variables has focused on the relationship between the use of vocabulary learning strategies, language performance, and vocabulary depth. With English majors as participants, Ma (2010) found that the strategies of planning, self-assessment, and self-learning were highly correlated with vocabulary depth. Tan & Zhang (2015) explored what relationships existed with the use of vocabulary learning strategies, using the scores of TEM-4 as a gauge, and found that memory and affective strategies were all significantly correlated with the achievement of TEM-4, and that students’ meta-cognitive strategies were also positive predictors of the performance in TEM-4.

Comparative research has mainly concentrated on the use of vocabulary learning strategies among high- and low-proficiency learners, English and non-English majors, and learners of different nationalities. Basing her research on non-English undergraduates, Wang (2008) discovered that high-competence groups adopted meta-cognitive strategies more often than low-frequency groups. Xu (2011) discovered that learners from ethnic minorities employed self-monitoring strategies more frequently than the learners of the Han nationality. Cui (2018) revealed that English majors and non-English majors were more likely to choose cognitive strategies.

The research above has contributed to assisting teachers in improving the pedagogical approaches to vocabulary and instructing the EFL learners to select and develop the strategies that are the most suitable for themselves. All of these studies have focused on the strategies for general vocabulary without further segmentation. Unlike general vocabulary, phrasal verbs often encompass figurative meanings and entail complicated syntactic composition. Correspondingly, further research is warranted on which learning strategies are effective for Chinese EFL learners to acquire phrasal verbs.

## 3. Methodology

### 3.1 Research Questions

The present study employed a mixed research method integrating quantitative and qualitative research to tackle the following three questions:

- (1) What are the general features of Chinese EFL learners’ employment of vocabulary strategies for phrasal verbs?

(2) Is there any significant correlation between the use of vocabulary learning strategies for phrasal verbs and the scores of the phrasal verb test?

(3) Is there a significant difference in the use of vocabulary learning strategies for phrasal verbs among different competence groups?

### 3.2 Participants

One hundred and fourteen Year-3 English majors (13 males and 101 females) from five classes in a university located in Guangdong Province participated in the formal study. All of them have passed TEM-4 and they have learned English for at least 10 years.

The underlying reasons for choosing them as the participants are as follows. Above all, compared with the Year-1 and Year-2 undergraduates, the lexical knowledge of the Year-3 is more comprehensive in that the number of vocabularies needed to pass TEM-4 is approximately 6000-8000. Additionally, phrasal verbs are relatively challenging for Chinese EFL learners, so the accuracy of Year-1 and Year-2 undergraduates to use phrasal verbs may be far much lower than their Year-3 counterparts, which might undermine the generalizability of the research. Meanwhile, Year-3 undergraduates possess more experience in developing their own individualistic vocabulary learning strategies. Hence, the diversity of the strategies adopted by Year-3 undergraduates also paves the way for the present study.

### 3.3 Instruments

#### 3.3.1 Questionnaires

The questionnaire was composed of two parts. The first part involved the personal information of the respondents. The second part was based on Gu and Johnson's (1996) taxonomy of vocabulary learning strategies, from which 45 items were excerpted.

The KMO test and Bartlett's test produced a measure of .79 ( $p < .05$ ), which exceeded the cutoff value of .60 (Tabachnick & Fidell, 2007). The study adopted the principal component method to extract the factors and the maximum variance method to rotate the factors. By extracting the components with eigenvalues greater than 1, a seven-factor solution was achieved, retaining 45 items with primary loadings greater than .50 (no cross-loadings of .50 or above) and explaining approximately 72.6% of the total variance. Cronbach's alpha of the questionnaire is 0.948. The data collectively suggested that the adapted questionnaire was a reliable and valid instrument that can be used in the formal study. The adapted version consisted of seven dimensions, namely metacognitive strategies, guessing strategies, dictionary strategies, note-taking strategies, rehearsal strategies, encoding strategies, and activation strategies.

#### 3.3.2 Test Papers

The authoritative examples from Oxford Dictionary and Collins Dictionary as well as the sentences containing phrasal verbs in TEM-4 were selected and adapted as the items to be examined. The test paper was divided into three parts: multiple-choice questions, cloze, and gap-filling questions. After devising the test papers, the validity, reliability, difficulty, and discrimination were examined underpinned by classical test theory. Pearson correlation coefficient between the scores of the test papers and those of TEM-4 is 0.88 ( $p < .01$ ), with Cronbach's alpha 0.948. The difficulty values of each part are respectively 0.67, 0.72, and 0.44. The discrimination values are 0.49, 0.52, and 0.55. All of the data collectively ensured that the test paper used for the study was a reliable and valid instrument with moderate difficulty that could differentiate the learners at different levels.

#### 3.3.3 Interview Guideline

The purpose of the interview guideline was to assist the researcher in better understanding the learners' attitudes and beliefs in learning phrasal verbs and the specific learning strategies used in learning multi-word verbs.

### 3.4 Data Collection

Data were collected in two phases. In the first phase, participants were required to take a test for phrasal verbs and fill in a questionnaire concerning strategies for phrasal verbs. The test was limited to 25 minutes under invigilation, whilst the questionnaire filling was not. Any questions could be raised at any time and the researcher would answer them on the spot. All the test papers and questionnaires were collected on the scene as well. Six subjects (three from each of the high- and low-competence groups) participated in an interview after class, which was recorded during the whole process.

### 3.5 Data Analysis

After the data were collected, the test papers for phrasal verbs were marked first. Subsequently, the test scores

and responses to the questionnaires were entered into the software. Descriptive statistics, correlation analysis, and independent samples t-test were conducted by using SPSS 22.0. Interview recordings were transcribed manually, and textual information from the interviewees was compiled to explore the reasons for the discrepancies in strategy use.

#### 4. Results and Discussion

##### 4.1 General Features of the Employment of Vocabulary Learning Strategies for Phrasal Verbs

According to Oxford (1990), the criteria of the frequency of strategy use on a five-point scale are as follows: mean scores between 3.5 and 5.0 are regarded as high frequency of use; mean scores between 2.5 and 3.4 are thought to be medium frequency; mean scores between 1.0 and 2.4 are referred to as low frequency.

Table 1. The frequency of strategy employed in learning phrasal verbs

Category	Mean	Std. Deviation
Guessing strategy	3.72	1.000
Dictionary strategy	3.24	0.953
Note-taking strategy	2.79	0.803
Meta-cognitive strategy	2.60	1.142
Encoding strategy	2.55	1.494
Rehearsal strategy	2.51	0.895
Activation strategy	2.30	1.197

As is shown in Table 1, generally speaking, the frequency of employing these strategies went above 2.4 except for activation strategies, among which the frequency of adopting guessing strategies exceeded 3.5. In other words, while acquiring phrasal verbs, Chinese EFL learners will consciously adopt vocabulary learning strategies to help them master and apply phrasal verbs. Nevertheless, the frequency of each strategy was disparate. Data revealed that Chinese EFL learners adopted guessing strategies (M=3.72) most frequently while acquiring phrasal verbs, which presented a high frequency, followed by dictionary strategies (M=3.24), note-taking strategies (M=2.79), meta-cognitive strategies (M=2.60), encoding strategies (M=2.55), rehearsal strategies (M=2.51), staying at a medium frequency. The frequency of employing activation strategies (M=2.30) was the lowest, appearing a low frequency.

To sum up, of these seven strategies, guessing strategies were most frequently adopted, whereas activation strategies were least frequently employed which acquiring phrasal verbs. Even though encoding strategies are favored by cognitive linguists (*e.g.*, Kêvecses & Szabo, 1996; Boers, 2006) and widely applied in L2 classrooms, the frequency of adopting these strategies was solely ranked fifth.

Through the interview, the reasons why the distribution was presented in such a way were informed.

##### 4.1.1 Guessing Strategies

The primary reason why guessing strategies rank first is that they can maintain the coherence of readers in the reading process. If a reader keeps looking up the unknown phrasal verbs in the dictionary whenever they come across one, it will solely convert holistic reading comprehension into the accumulation of fragmented phrasal verbs. Although a thick notebook for phrasal verbs is finally accomplished, the reader may still have great difficulty understanding the text.

Moreover, it provides a more convenient and faster way for reading comprehension and serves as a contributor to the mastery and memorization of a phrasal verb. One of the characteristics of phrasal verbs is the diversity of meanings. Although a phrasal verb appears merely a fusion of verbs and particles, the combination may account for dozens of meanings. Therefore, in this case, if learners keep looking up a dictionary to match the meaning of the phrasal words found in the text, it will not only waste a great deal of time, but it is likely that learners still fail to know which meaning is consistent with the one appearing in the text. Alternatively, if learners utilize contextual sentences in the reading materials and the clues provided by the context, they can not only quickly guess the corresponding meaning of the phrasal words, but also deepen the understanding of new phrasal words through the context.

Furthermore, some respondents suggested that there were a large number of phrasal verbs, some of which were

rare and not commonly used. Guessing can mitigate the burden of memorization as well.

#### 4.1.2 Activation Strategies

Among these seven strategies, activation strategies were least frequently employed by Chinese EFL learners. In other words, Chinese EFL learners are prone to avoid using phrasal verbs, no matter whether they are newly learned or they have been taught for a long time, when they make sentences in speeches and writing. It is consistent with the experimental results of Feng & Shi's study (2015). On account of the polysemy and figurative meanings of phrasal verbs, it is extremely challenging for Chinese EFL learners to have a mastery of them. Most of the learned phrasal verbs will be converted into their passive words, which can merely be used to understand others' speech or read the articles written by others. In their writing or speech, they are apt to use single-word verbs instead of multi-word verbs in case they make dozens of mistakes.

#### 4.1.3 Encoding Strategies

By using encoding strategies, learners will relate the new phrasal verbs to similar known ones, use schemas, establish wordnet in their mind (including synonymy, antonymy, and semantic field), and analyze the word part of the new phrasal verbs. Even though the efficacy of encoding strategies is thought highly of by most cognitive linguists, surprisingly, encoding strategies are merely ranked last but two among seven strategies. The reasons may lie in the following aspects.

In the first place, the respondents' accumulation of phrasal verbs was not large enough. In L2 classrooms, because instructors possess a great number of phrasal verbs, they can guide Chinese EFL learners into cognitive strategies by assisting them in learning synonyms, antonyms, or other features of a phrasal verb. However, when a new phrasal verb is encountered during their self-learning, because the accumulation of phrasal verbs remains inadequate, most learners are unable to build systematic semantic wordnet in their mind. Hence, it appears to be struggling for Chinese EFL learners to acquire phrasal verbs by using encoding strategies when no instructor stands by their side.

Additionally, it is widely acknowledged that encoding strategies are effective because these strategies can help EFL learners to distinguish the subtle differences among phrasal verbs. For Chinese EFL learners, nevertheless, when they set up wordnet in their minds, they often neglect these differences, because most of them hold firm that it appears useless and overwhelming if they are required to memorize and distinguish these subtle differences between synonyms. In other words, most Chinese EFL learners prefer to spend more time expanding the width of phrasal verbs rather than learning in depth.

Eventually, most respondents suggested that there was inadequate guidance for them to know, or they were not aware of the significance to sum up the most commonly-used particles that constitute phrasal verbs. In practice, the number of these particles is only twenty or so, and each particle has its own specific meanings. Making sense of the deep meaning of particles is the premise of adopting encoding strategies. If not, it seems impossible to employ encoding strategies to help learn phrasal verbs.

#### 4.2 The Correlation between the Achievement in Phrasal Verbs and Vocabulary Learning Strategies

Table 2. The correlation between the achievement in phrasal verbs and different learning strategies

Category	Pearson Correlation	Sig. (2-tailed)
Guessing strategy	.206*	.028
Dictionary strategy	.335**	.000
Note-taking strategy	.528**	.000
Meta-cognitive strategy	.613**	.000
Encoding strategy	.777**	.000
Rehearsal strategy	-.569**	.000
Activation strategy	.717**	.000

From Table 2, it was found that a significant correlation existed among all the seven types of strategies. Specifically, guessing strategies ( $r=.206$ ,  $p<.05$ ) and dictionaries strategies ( $r=.335$ ,  $p<.01$ ) were significantly and positively correlated with the achievement in phrasal verbs, though the correlation was relatively weak. Note-taking strategies ( $r=.528$ ,  $p<.01$ ), meta-cognitive strategies ( $r=.613$ ,  $p<.01$ ), encoding strategies ( $r=.777$ ,  $p<.01$ ), and activation strategies ( $r=.717$ ,  $p<.01$ ) were significantly correlated with the achievement in phrasal



verbs in a positive and strong manner. By contrast, rehearsal strategies ( $r=.569$ ,  $p<.01$ ) were significantly correlated with the achievement in phrasal verbs in a negative fashion.

From these data, it can be concluded that the achievement in phrasal verbs can be attained by adopting the strategies listed above except rehearsal strategies. The higher frequency of employing these strategies, the more satisfactory outcome of acquiring phrasal verbs.

Although the frequency of adopting meta-cognitive strategies, encoding strategies, and activation strategies are ranked at the bottom, these strategies turn out to be the most effective strategies to acquire phrasal verbs in that they are the top three strategies that significantly correlated with the performance of phrasal verbs in a strong and positive way.

#### 4.3 The Differences in Vocabulary Learning Strategies Adopted by Learners with Different Competences

In this study, participants were sorted by scores in the test for phrasal verbs into three competence groups: high (N=32, 28.0%), medium (N=50, 44.0%), and low (N=32, 28.0%). The competence of high- and low-competence groups was significantly different ( $p=.000$ ) and the strategies adopted by these two groups would be compared.

Table 3. The differences in strategies adopted by high- and low-competence Chinese EFL learners

Category	Grouping	Mean	Std. Deviation	Sig. (2-tailed)
Metacognitive strategies	LCG	2.19	0.821	.000
	HCG	3.94	0.716	
Guessing strategies	LCG	3.53	1.077	.032
	HCG	4.03	0.695	
Dictionary strategies	LCG	2.97	0.822	.000
	HCG	3.81	1.091	
Note-taking strategies	LCG	2.47	0.507	.000
	HCG	3.56	0.914	
Rehearsal strategies	LCG	3.34	0.483	.000
	HCG	1.97	0.822	
Encoding strategies	LCG	1.47	0.507	.000
	HCG	4.66	0.602	
Activation strategies	LCG	1.53	0.507	.000
	HCG	3.75	0.880	

Notes. LCG is the low-competence group while HCG is the high-competence group

As is shown in Table 3, significant differences existed in all the strategies among high- and low-competence groups. High-competence learners' frequency of using rehearsal strategies while acquiring phrasal verbs was lower than that of low-competence learners. The other strategies, nonetheless, were adopted more frequently by high-competence learners than by their low-competence counterparts.

## 5. Conclusions and Implications

To sum up, Chinese EFL learners' awareness of utilizing vocabulary learning strategies to acquire phrasal verbs was not strong, generally at a moderate level. The performance of Chinese EFL learners in phrasal verbs was significantly correlated with guessing strategies, dictionary strategies, note-taking strategies, encoding strategies, meta-cognitive strategies, and activation strategies in a positive manner, with the latter two strategies most strongly correlated with the achievement in phrasal verbs. Significant differences in the adoption of all strategies were found between the high- and low-competence groups.

Given the above findings, teachers should monitor the learning situation of low-competence learners and help them develop appropriate learning strategies as soon as possible, and apply them flexibly to improve their performance in using phrasal verbs. The specific suggestions concerning the strategies significantly and most strongly correlated with the performance of phrasal verbs in a positive manner are as follows.

### 5.1 Encoding Strategies

By encoding strategies, primarily, learners can grasp the prototypical meaning of a phrasal verb, integrate it into the context, and infer other peripheral meanings from the prototypical meaning. In this process, image schemata of a phrasal verb count. For instance, when learners try to understand the phrasal verb, *pick up*, they can draw a sketch in which a circle represents an item, plus an arrow to indicate that the item is lifted, so as to indicate the prototypical meaning of *pick up*, that is, “to lift up an object”. Then, learners can refine the circle by adding keywords like “a person” or “knowledge”, so as to indicate the metaphorical or peripheral meaning of *pick up*, that is, “to use a car to carry someone” and “to acquire some knowledge accidentally”. This schema is projected into the target domain by metaphor, so as to realize the leap from the prototypical meaning to the peripheral meanings of *pick up*.

Additionally, instructors can help learners apply conceptual metaphor and conceptual metonymy to deduce the extended meaning of phrasal verbs. To take *dawn on* as an example, *dawn* means the time of day when light first appears in the sky, just before the sun rises. By taking this meaning into consideration and putting it into one concrete matter, learners can extrapolate that the matter is becoming lucid as if the sky turns luminous. In this way, it can be deduced that *dawn on* means beginning to realize it for the first time.

Furthermore, learners can utilize the semantic field to classify phrasal verbs pertaining to a certain verb or particle. It is advisable for learners to understand the usage of phrasal verbs in a context-dependent rather than context-independent manner, which is conducive to the mastery of the syntactic features and in-depth acquisition of phrasal verbs. After accumulating a certain number of phrasal verbs, learners might as well try to summarize the underlying meanings of some common particles. In this way, when learners encounter some unfamiliar phrasal verbs, they can take advantage of the rule to speculate and figure out the figurative meanings connoted in the phrasal verbs. For example, as long as learners have mastered the underlying meanings of *up*, which connote “to be thorough and complete”, it may be stress-free for them to analyze the meanings of the following phrasal verbs containing *up*: *drink up*, *burn up*, etc. Thus, in the presence of similar phrasal verbs in the future, learners can make the best of the usage of particles they have summarized to help themselves remember the phrasal verbs (Liu, 2006).

Many of the Chinese EFL learners, nevertheless, suggest that if their mastered phrasal verbs are insufficient, especially when they teach themselves, they may fail to classify the phrasal verbs in the way argued above and thus naturally cannot deduce the usage of the particles. At this moment, learners can resort to some reference books to assist themselves in accumulating phrasal verbs. Some dictionaries, such as *Collins COBUILD Dictionary of Phrasal Verbs (CCPDV)*, arrange the meanings of polysemous phrasal verbs according to the vocabulary frequency (Liu, 2006). This arrangement is helpful for EFL learners to strengthen the command of some key phrasal verbs. The dictionary also helps distinguish the synonymous phrasal verbs and the homomorphous ones, because CCPDV utilizes the synonyms which are familiar to most of the beginners to explain the meanings of phrasal verbs. For example, *give up* = *quit*, and *give in* = *submit*. In addition, CCPDV also lists synonyms of correlated phrasal verbs to help learners remember and deepen their impression by analogy. For example, *call up* = *ring up*, and *go about* = *move about*.

### 5.2 Meta-cognitive Strategies

By meta-cognitive strategies, learners can formulate workable learning plans, strengthen self-monitoring, and conduct periodic self-assessments. When formulating their study plans, learners should consider their own lexical fundamentals, learning capabilities, and time. The plans should not exceed their capabilities. Otherwise, the plans will be formidable and discourage them from implementing, nor should the plans be too simplified, or else the plans may fail to help them improve their achievement in phrasal verbs. The instructors can also assist and provide advice while the learners are drawing the plans. Self-monitoring means that learners should pay attention to the progress of their learning plans for phrasal verbs in time. Periodic self-assessment implies that learners ought to evaluate their achievement in learning phrasal verbs in a phased manner and adjust their learning plans according to the outcomes of self-assessment. The instructors play an equally vital role in the process. On the one hand, instructors can keep abreast of learners’ acquisition of phrasal verbs and offer targeted assistance promptly. On the other hand, they can provide relevant materials to help learners conduct a staged self-assessment and propose suggestions on how to revise the plans in response to the outcomes of the self-assessment.

### 5.3 Activation Strategies

By activation strategies, learners can make their own sentences using the newly-learned phrasal verbs or try to use these phrasal verbs in their speeches and writing. Meanwhile, learners can try to visualize scenarios in their



minds where they might use the newly-learned phrasal verbs. Instructors can try to teach phrasal verbs in a situational approach by creating concrete scenarios to help learners understand and apply phrasal verbs in authentic situations and convert more passive vocabulary into active vocabulary. As is argued above, however, most of the Chinese EFL learners will avert phrasal verbs and use their corresponding single-word verbs instead in that they are fearful of making mistakes. Therefore, instructors should be aware that learners may experience anxiety when using phrasal verbs for communication. When evaluating learners' verbal or written errors in using phrasal verbs, positive feedback is indispensable to encourage their engagement in phrasal verbs and improve their self-confidence in using phrasal verbs.

In a nutshell, strategy training should become an integral part of foreign language teaching. Instructors can strengthen the strategic awareness of EFL learners in the process of teaching phrasal verbs, guide them to employ a variety of learning strategies, and assist the learners in developing their own strategic competence. Instructors should also supervise low-competence learners' acquisition of phrasal verbs and offer guidance to help them tailor the learning strategies for phrasal verbs to their personal characteristics and needs in order to advance the mastery of phrasal verbs. At the same time, EFL learners are supposed to take the initiative and reflect on their own phrasal verb learning instead of relying merely on instructors. Considering that phrasal verbs are relatively challenging for Chinese EFL learners, this research selected Year-3 English majors as the subjects and the results were extrapolatable in a sense. Future studies can be conducted to investigate Chinese EFL learners at different phases to render the subjects more holistic.

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