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교육학석사학위논문

The Effects of Cognitive Linguistics-Based
Instruction on Learning, Transferability, and
Perception of English Phrasal Verbs for
Korean High School Learners

인지 언어학 접근의 교수법이 한국 고등학교
학습자들의 영어 구동사 학습, 전이, 관점에 미치는
영향

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The Effects of Cognitive Linguistics-Based
Instruction on Learning, Transferability, and
Perception of English Phrasal Verbs for
Korean High School Learners

by
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The Effects of Cognitive Linguistics-Based Instruction on Learning, Transferability, and Perception of English Phrasal Verbs for Korean High School Learners

인지 언어학 접근의 교수법이 한국 고등학교 학습자들의 영어 구동사 학습, 전이, 관점에 미치는 영향

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ABSTRACT

The present study attempted to examine the effects of cognitive linguistics (CL)-based instruction on Korean high school students' learning of English phrasal verbs, transferability to novel phrasal verbs along with the retention for both. The study administered several tests regarding student's knowledge of English phrasal verbs, and students' perceptions of English phrasal verb learning were also investigated through an in-depth interview.

To date, there has been a growing body of literature on the cognitive linguistics-based teaching for vocabulary, but adopting this approach for phrasal verb instruction has yielded inconsistent results in most of the seminal studies (Kovecses & Szabo, 1996; Boers, 2000; Condon, 2008; Yasuda, 2010). The current study intended to fill this research gap, and since Korean students' L1 is distinctly different from English, it may provide useful insights for applying CL approach to teaching phrasal verbs to EFL students whose native language falls in different typology from English.

In this study, twenty-eight second-year students at a public high school in Korea participated, and the students were divided into the experimental and control groups. Each group had two lesson sessions: the first session consisted of the pre-test, instruction, and the immediate post-test, while the second session was approximately twelve days later involving delayed post-test and the interview for eight selected students. The experimental group received a cognitive linguistics-based explanation on the taught phrasal verbs with cognitive concepts and image

schema based on the particles, whereas the control group received a list of phrasal verbs in alphabetical order, which was explained with example sentences, Korean translation, and equivalent English words.

With respect to the learning of taught phrasal verbs, an ANCOVA revealed that there was no significant difference between the two groups, suggesting that the effect of CL-based instruction is not significantly more effective than that of the control group. Regarding the transferability to novel phrasal verbs, there was a statistically significant difference between the experimental and control groups, suggesting the beneficial effect of CL-based teaching on knowledge transfer. As for the lasting effect of instructional treatments on learning and transferring, there was no significant difference between the two groups. Nonetheless, different patterns shown from the within-group comparison demonstrated that the learning of the taught phrasal verbs in the experimental group continued with statistical significance while it did not in the control group. Moreover, the increased mean score of the delayed post-test in the experimental group and the decreased score in the control group manifested different influence of the instructions. Students' interview responses from the experimental group revealed enhanced awareness for the phrasal verbs and positive attitude towards the instruction.

These findings have some pedagogical implication of the potential benefits of implementing cognitive linguistics approach to teaching phrasal verbs in the Korean EFL context. However, when applied in class, several elements should be considered, such as the long duration of the lessons, image schema

suitable for students' better understanding, and the learners' proficiency level.

Keywords: cognitive linguistics approach, phrasal verb instruction, Korean
EFL/L1 learners, phrasal verb learning perception

Student Number: 2016-25101

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CHAPTER 1.

INTRODUCTION

In this chapter, the motivation and the background of the present study are introduced. The purpose of the study is covered in Section 1.1, followed by the research questions in Section 1.2. The overall organization of the thesis is outlined in Section 1.3.

1.1 The Purpose of the Study

Vocabulary learning is an essential part of acquiring a second language since vocabulary knowledge greatly contributes to overall language success and it is strongly related to general language skills (Schmitt, 2010). Obtaining a considerable amount of vocabulary is a daunting task for L2 learners, especially for English learners in foreign language contexts as they are limited to the language exposure. It is impossible for the learners to just ‘pick up’ the vocabulary through the limited input and this is why vocabulary teaching is required in foreign language classes (Schmitt, 2010).

Considering the fact that the learners need to be able to use vocabulary knowledge in both the language process and production (Ellis, Simpson-Vlach & Maynard, 2008), formulaic language should be included in vocabulary teaching since it is a key component of a language enabling a fluent production of a

language not to mention the understanding of the language. This is because it reduces the processing effort and enhances language fluency and accuracy (Arnon & Snider, 2010; Boers & Lindstromberg, 2012; Conklin & Schmitt, 2012; Ellis, 2012; Schmitt & Carter, 2004; Wood, 2002).

Though formulaic language takes an essential part in language, vocabulary instruction has been focused mainly on individual words, and formulaic language has been neglected, as it is easier for teachers to instruct and make class materials on single words (Alali & Schmitt, 2012; Hatami, 2015; Schmitt, 2010). At present, there has been an increasing interest in formulaic sequences in L2 research (Boers & Lindstromberg, 2012; Granger & Meunier, 2008; Hatami, 2015; Schmitt & Carter, 2004). However, the research seldom includes the instruction and very little is known about how to teach formulaic language (Alali & Schmitt, 2012) and phrasal verbs in particular, among the other types of formulaic language.

Frequency becomes one of the most important factors to take into account when choosing which formulaic sequences to teach (Arnon & Snider, 2010; Siyanova-Chanturia, Conklin & Van Heuven 2011), and phrasal verbs (e.g., go on, pick up) are one type of formulaic language that is used very frequently (Schmitt, 2010). According to Gardner and Davies (2007), “learners will encounter, on average, one [phrasal verb] in every 150 words of English they are exposed to” (p.347). On top of its frequency, the phrasal verb is needed to have a good command of a language, taking a considerable part in language proficiency (Boers, 2000; Kurtyka, 2001).

Despite its ubiquity and importance, learners tend to avoid phrasal verbs as they seem remarkably difficult to learn (Dagut & Laufer, 1985; Liao & Fukuya, 2004; White, 2012; Yasuda, 2010). Therefore, learners need help on learning phrasal verbs in class, especially in English as a foreign language (EFL) contexts where learners have limited exposure to the English language (Kweon, 2006).

Phrasal verbs have been considered to be unsystematic and difficult to teach and learn, traditionally taken to be something that needs to be just memorized as a whole (Kovecses & Szabo, 1996). However, there has been some light shed on Cognitive Linguistics (CL) as a different approach from the traditional way of teaching phrasal verbs. This approach uses cognitive mechanisms such as conceptual metaphors, which are known to promote the learning of some abstract concepts. In CL view, language is something that is closely related to our minds. Therefore, language learning, particularly learning vocabulary with figurative meanings and polysemies, could be facilitated through cognitive insights (Berendi et al., 2008; Csabi, 2004; Kovecses & Szabo, 1996; Lee, 2012). Moreover, there are studies that have shown that the CL approach could help students' learning of phrasal verbs, but more empirical research is needed, as the results of some of the major studies were inconsistent in terms of the participants' learning of the taught phrasal verbs and the strategy or the knowledge transfer to the novel phrasal verbs (Boers, 2000; Condon, 2008; Kovecses & Szabo, 1996; Yasuda, 2010). Besides, there are very few studies done on this issue in the Korean EFL context. Because different language typology and L1-L2 difference are known to have some effects on phrasal verb learning, there need to

be more empirical studies with different L1 backgrounds (Boers, 2000; Yasuda, 2010). In addition, most of the previous studies took experiments with adult learners (Boers, 2000; Condon, 2008; Kovecses & Szabo, 1996; Yasuda, 2010). Since it is important to know how CL-based phrasal verb teaching could affect students and how phrasal verb teaching could be brought into the classes, there need to be more studies involving younger learners, whose cognitive level is perceived to be lower than that of the adult learners. Most of the seminal studies also did not use the qualitative data nor include the delayed post-test for the sign of any possible retention for the phrasal verb learning and knowledge transferring, but employing the additional data analysis and the delayed post-test in the experiment will allow more accurate interpretation of the results.

This study intends to fill the research gap by exploring the effectiveness of CL-based instruction for Korean high school students' learning of the phrasal verbs compared to the traditional approach, which includes the explanation of the alphabetically listed target items with Korean translation and equivalent words. With the delayed post-test results, whether there is any retention for the participants' learning and transferring will be examined. Furthermore, unlike most previous research with only the statistical analysis, the current study additionally provides students' interview analysis for understanding their perceptions in terms of the participants' phrasal verb learning and teaching along with their motivation for future learning of phrasal verbs.

Since the knowledge of phrasal verbs is crucial in language learning, phrasal verbs should be taught in class. Suggesting a more effective approach and

method of teaching phrasal verbs will lead to students' better learning of phrasal verbs in Korean EFL contexts. Cognitive linguistics-based instruction could be suggested as the better approach when its effectiveness is further proved through the empirical study.

1.2 Research Questions

Based on the purpose of the study mentioned above, the present study investigates the effect of two different approaches to phrasal verbs instruction. More specifically, this study examines the effects of CL instruction on the learning of taught phrasal verbs, strategy or knowledge transfer to novel phrasal verbs as well as the retention for both learning and transferring compared to the effects of the traditional approach. In addition, students' perceptions are discussed based on the interview. Thus, the research questions of the current study are as follows:

1. Is CL-based instruction more effective for the learning of taught phrasal verbs by Korean high school students compared to the traditional approach?
2. Is CL-based instruction more effective for the transferability to novel phrasal verbs by Korean high school students compared to the traditional approach?

3. Is CL-based instruction more effective for the retention of phrasal verb learning and transferring by Korean high school students compared to the traditional approach?
4. How does CL-based instruction affect Korean high school students' perceptions of phrasal verb learning compared to the traditional approach?

1.3 Organization of the Thesis

This thesis consists of five chapters. Chapter 1 introduces the motivation of the study and presents the research questions. Chapter 2 covers the theoretical and empirical background of the current study. In Chapter 3, the methodology is described in terms of the participants, instruments, procedure and data analysis. Chapter 4 provides the results and discusses the research findings. Finally, Chapter 5 concludes with the summary of the major findings, pedagogical implications and limitations of the study, and suggestions for future research.

CHAPTER 2.

LITERATURE REVIEW

This chapter reviews the theoretical and empirical background of the literature related to the current study. English phrasal verbs, CL approach, and its application to vocabulary teaching and learning are covered respectively in each section. Section 2.1 addresses previous research on phrasal verbs, specifically on its difficult nature, lack of its instruction, and the traditional approach to teaching and learning phrasal verbs. In Section 2.2, CL approach and its potential merits in L2 pedagogy are reviewed. Lastly, previous studies that confirm the CL approach to be helpful in facilitating learners' L2 vocabulary are presented in Section 2.3.

2.1 English Phrasal Verb

This section is further divided into three main issues related to the English phrasal verb learning and teaching. Section 2.1.1 examines the difficulties of learning phrasal verbs followed by lack of phrasal verb instruction in Section 2.1.2. Section 2.1.3 reviews the traditional approach to phrasal verb instruction.

2.1.1 Difficulties of Learning Phrasal Verbs

Phrasal verbs are extremely common, and appear in all registers (Cornell,

1985; Gardner & Davies, 2007; Kurtyka, 2001) but they are notoriously difficult to learn for L2 learners causing common avoidance. Its difficulty even starts with the definition. It is tricky to define phrasal verb and it has been on the constant debate among the language experts (Liu, 2011). Gardner and Davies (2007) write, “if even the linguists and grammarians struggle with nuances of phrasal verb definitions, of what instructional value could such distinctions be for the average second language learner?” (p. 341). Because it would be efficient to move on to the more practical issues of phrasal verbs, phrasal verb in the present study is defined as “a verb + particle combination that functions as a single verb” from Darwin and Gray (1999), since this definition is clear and simple while showing the core form and function of the phrasal verb. To be specific, a verb *finish* combined with a particle *up* can be used as in *I want to finish up my work before lunch* and it works as a single verb *finish* in *I want to finish my work before lunch*.

Aside from the definition, the major difficulties that phrasal verbs present to the L2 learners could be summed up by 1) the great number of phrasal verbs; 2) its polysemous nature; 3) the unpredictability of the meanings; and 4) grammatical complexity (Cornell, 1985; Darwin & Gray, 1999; Lee, 2012; Liu, 2011; Side, 1990; White, 2012). The great number of phrasal verbs is expected to be overwhelming to L2 learners when there are already so many one-word units they need to learn and phrasal verbs do not tend to be easily taken into consideration. In addition, phrasal verbs generally have more than one meaning, and Gardner and Davies (2007) found that among the most frequent 100 phrasal verbs from the British National Corpus, each phrasal verb has 5.6 meanings on average (p. 353).

For example, the phrasal verb *go down* possess a literal meaning of moving from a higher place to a lower place as in *go down the stairs* but also maintain various other meanings that are more idiomatic. *Go down* means to sink when a ship goes down, and it means to be recorded or remembered if someone goes down in history. Seeing that a host of the phrasal verbs include idiomatic meanings, it is likely to be even more difficult to learn the various meanings of the phrasal verbs especially when the meanings are unpredictable. On top of that, phrasal verbs have syntactic restrictions (Cornell, 1985). The usage of phrasal verbs such as whether they can form passives and whether the verb proper and the particles could be separated would be difficult for the learners to learn.

For the aforementioned reasons, phrasal verbs are one of the most difficult parts of English and L2 learners tend to avoid using phrasal verbs despite its importance in English learning (Dagut & Laufer, 1985; Kweon, 2006; Liao & Fukuya, 2004). Furthermore, many researchers note that it is even harder to learn phrasal verbs for the learners of L1 that does not contain verb + particle construction (Darwin & Gray, 1999; Liu, 2011; White, 2012). L1-L2 difference belongs to the main reasons for avoidance in using phrasal verbs (Dagut & Laufer, 1985; Kweon, 2006; Liao & Fukuya, 2004). By comparing Chinese ESL learners from Liao and Fukuya's (2004) study and Korean EFL learners on phrasal verb avoidance, Kweon (2006) states that L2 environment is another crucial factor affecting phrasal verb avoidance. The phrasal verb avoidance of advanced Chinese ESL students in the United States was not significantly different from that of the native speakers while the advanced Korean EFL learners in Korea showed greater

avoidance pattern than the native speakers. This reveals that the environmental context is another important consideration in teaching and learning phrasal verbs. For Korean EFL students, whose L2 input is mostly limited, phrasal verb learning is perceived to be even more difficult. Moreover, since L1-L2 difference makes it harder to learn phrasal verbs, Korean learners have a tendency to struggle with phrasal verbs enormously because Korean falls into different typology from English (Kurtyka, 2010). Therefore it seems plausible to state that teaching phrasal verbs is indispensable for Korean EFL learners, but the problem arises in the question of how to teach phrasal verbs.

2.1.2 Lack of Phrasal Verb Instruction

Research on teaching phrasal verb is rare even with its crucial role in language (Darwin & Gray, 1999; Schimitt, 2010). This may be due to its difficult nature to categorize and analyze phrasal verbs leading to inconclusive approaches to teaching (Liu, 2011; Side, 1990; White, 2012). Darwin and Gray (1999) present some of the main reasons for the lack of progress in phrasal verb pedagogy and research. They point out three factors: the difficulty in defining phrasal verbs; lack of organization of frequent phrasal verbs that are useful; and the limited approach to presenting phrasal verbs. Efforts to consolidate the foundation of phrasal verb classification is certainly needed in the literature, but more research is required to determine how to present phrasal verbs to the learners. As mentioned earlier,

clinging to the definition and classification of phrasal verbs does not guarantee any practical help for L2 learner's actual learning. Additionally, due to enormous databases available nowadays, it is easier to check the usage of phrasal verbs and there are some studies on sorting out some of the most frequent phrasal verbs (Gardner & Davies, 2007; Liu, 2011). Research on how to teach phrasal verbs is far less in literature and is what is needed to be studied (White, 2012). White (2012) argues that it is not the systematic classification but the systematic pedagogy that is necessary, and underscores the importance of the instruction rather than analyzing phrasal verbs. If the researchers wait until the perfect definition and classification of phrasal verbs before they ever present them to the learners, learners are missing out on a substantially important aspect of English.

Presently, there has been an increased interest on the new approach to teaching phrasal verbs, since the traditional approach to presenting phrasal verbs has been criticized by many (Darwin & Gray, 1999; Side, 1990; Tyler & Evans, 2003; White, 2012). However, it is not until recently that the research area has moved on to the instruction of phrasal verbs and still lacks empirical research on it (Blais & Gonnerman, 2013).

2.1.3 Traditional Approach to Phrasal Verb Instruction

Phrasal verbs belong to the category of idiom, which was traditionally regarded as a larger category of words. Therefore, phrasal verbs were treated as

multiword units that had idiomatic meanings, which were to be memorized as a whole (Kovecses & Szabo, 1996). This made phrasal verbs seem arbitrary and this seemingly unsystematic nature of phrasal verbs demotivated both teachers and learners to deal with them. This traditional approach comes from considering the idiomatic words to be independent of our conceptual system and this is the major block in understanding them and treating them in the foreign language teaching (Kovecses & Szabo, 1996). If these idiomatic words are considered as independent linguistic expressions from our conceptual system, there is no other recourse than to present them unsystematically listing the items alphabetically according to verbs. In this way, their meanings seem to be randomly given to the expressions that need to be memorized as a whole. This arbitrariness of the traditional way of presenting phrasal verbs has been criticized in numerous studies (Darwin & Gray, 1999; Side, 1990; Tyler & Evans, 2004; White, 2012).

Side (1990) explains the problems of the traditional approach to presenting phrasal verbs in detail. Because phrasal verbs are polysemous, it will be excessively difficult for the learners to learn the many meanings unsystematically. In addition, when phrasal verbs are listed according to the verbs, it would bring much confusion to the learners. There are numerous combinations of a verb, the same verb combined with various particles, containing unrelated meanings. Thus, many idiomatic phrasal verbs have seemingly unpredictable meanings from the consisting parts, and particles may seem random. Furthermore, traditionally, phrasal verbs were often presented with the explanation in a one-word Latinate definition. However, this makes learners to adhere to the Latinate word which

seems easier, and not all phrasal verbs even have corresponding alternative words. Side concludes that these confusions make learners “often see phrasal verbs as comprising a verb and a randomly interchangeable particle” (p145). However, this is inaccurate. Researchers found that phrasal verb constructions are not random, but in fact, systematic and therefore should be grouped by the particles (Rudzka-Ostyn, 2003; Side, 1990; Tyler & Evans, 2004; White, 2012).

2.2 Cognitive Linguistics Approach

Tyler and Evans (2003) posit that in the last few decades, “a new paradigm in linguistics, Cognitive Linguistics (CL), has revealed that much that has been deemed idiosyncratic and arbitrary under the traditional view of language is, in fact, systematic” (p. 258). Cognitive linguistics assumes that language reflects the cognitive structure of a human mind and is linked to the human conceptual system (Kovecses & Szabo, 1996; Lee, 2012; Tyler & Evans, 2003). Specifically, the meaning of idiomatic expressions is inseparable from the conceptual system as the concept takes part in the creating process of idiomatic expressions. Therefore, idioms are linked to the conceptual system, and their meanings are not arbitrary but motivated (Kovecses & Szabo, 1996). Motivation is what makes cognitive paradigm applicable to language teaching and learning. Learners learn and use polysemous and idiomatic words with more ease if they know the motivations of their meanings (Csabi, 2004). The more prototypical

senses of vocabulary could be extended to the less prototypical senses and these more abstract meanings are seen to be motivated, though not necessarily predictable (Lee, 2012). In other words, cognitive mechanisms connect idiomatic senses to more literal ones and the acquisition of this knowledge facilitates the motivation of idiomatic vocabulary (Kovecses & Szabo, 1996).

Conceptual metaphor is the main mechanism that leads to motivation. It is what links the idiomatic meanings and the conceptual knowledge and thus the study of metaphor is the major part of cognitive linguistics (Achard, 2004; Kovecses & Szabo, 1996; Lakoff & Johnson 1980). Therefore, motivation and meaning extension, conceptual metaphor and image schemata are some of the primary notions in cognitive linguistics studies. Extended meanings are motivated through conceptual metaphors that work as a link, and image schemata could also aid in facilitating the semantic networks (Csabi, 2004; Kovecses & Szabo, 1996; Kurtyka, 2001; Lee, 2012; White, 2012).

Kovecses and Szabo's (1996) example of fire shows how conceptual metaphors work as a linking mechanism to motivate the senses of the idiomatic expressions. For instance, anger and love can be comprehended via the concept of fire. Conceptual metaphor ANGER IS FIRE, LOVE IS FIRE can be used for the expression "spit fire" and "the fire between them finally went out". The conceptual metaphor acts as a link between abstract expressions such as anger and love. In other words, conceptual metaphor represents how people think, typically in A IS B structure and links the underlying relationships between two abstract concepts (Littlemore & Low, 2006).

Cognitive linguistics studies emphasize the pervasiveness of metaphor and suggest the possibility of incorporating it into foreign language learning and teaching (Kovecses & Szabo, 1996; Kurtyka, 2001; Lee, 2012; MacLennan, 1994; Tyler & Evans, 2003). Littlemore and Low (2006) highlight the fact that metaphoric competence does indeed play a significant role in all areas of communicative competence and therefore understanding their metaphoric thinking processes would promote learners' L2 learning and use. They further note that if "teachers systematically draw the attention of language learners to the source domains of linguistic metaphors and of vocabulary involving metaphor, then the learners' depth of knowledge for that language, and their ability to retain it can improve significantly" (p. 272). Vocabulary is considered to be the most applicable area in learners' L2 learning because conceptual metaphor could provide learners the useful insights into motivation for the senses associated with words or expressions (Tyler & Evans, 2003). MacLennan (1994) states that "knowing conceptual links could provide students of English as an L2 with a useful tool to accelerate their learning" (p. 100). Therefore, approaching L2 vocabulary with cognitive linguistics view would allow L2 learners a useful tool to use, which would potentially lead them to obtain learner autonomy in the long run.

By all accounts, these previous research on cognitive linguistics approach shows that this approach has great insights to offer to foreign language learning and teaching, specifically in the learning and teaching of vocabulary and particularly on idiomatic words. As Csabi (2004) mentions, most polysemous words and idioms could be motivated. Cognitive linguistics approach to teaching

these linguistic expressions would facilitate both the teaching and learning in foreign language pedagogy, especially when the vocabulary is one of the most demanding parts. L2 learners are likely to constantly and inevitably encounter words that have metaphorically extended meanings, and cognitive linguistics approach would elicit more learner independence since the learners would be equipped with basic tools to use (Littlemore & Low, 2006; MacLennan, 1994).

2.3 Previous Studies on Cognitive Linguistics Inspired Vocabulary Instruction

Research on cognitive linguistics suggests that polysemous and idiomatic words can be explained systematically as the senses of the vocabulary are motivated, and knowledge of the motivation and the cognitive mechanism behind it can aid in learning them (Berendi et al., 2008). Therefore, it is highly recommended that the teachers apply cognitive linguistics framework in language classrooms whenever possible and explicitly teach the cognitive links between the target words and their meanings (Csabi, 2004). Section 2.3.1 illustrates studies on CL approach to figurative vocabulary instruction and CL-based teaching of phrasal verbs follows in Section 2.3.2. Section 2.3.3 provides a mixed approach to teaching phrasal verbs that includes cognitive linguistics.

2.3.1 Cognitive Linguistics Approach to Figurative Vocabulary

Instruction

Previous studies have investigated the potential benefits of raising learners' metaphorical awareness in figurative vocabulary learning. Boers' (2000) first experiment and Berendi et al.'s (2008) study examined the effect of prompting the metaphoric awareness on the recollection of the target expressions and Boers' (2000) second experiment further investigated the effect on the more active use of the idiomatic vocabulary in the production task. For Boers' (2000) first experiment, the participants were instructed to read the text and study a vocabulary note, then take a cloze test to elicit the studied lexis. The only difference between the experimental and control groups was on the organization of the vocabulary. The experimental group received the vocabulary note that was organized under the metaphoric themes while the control group's vocabulary list was organized along pragmatic or functional lines. Students who belonged to an experimental group were more likely to reproduce the studied expressions, showing that the lexical organization along metaphoric themes enhanced students' formulaic vocabulary recollection. This finding was corroborated by Berendi et al.'s (2008) study that researched whether the learning of L2 idioms could be enhanced through students' awareness of underlying conceptual metaphors. For the experimental and control groups, the text was given to read and translate with the list of idioms that belonged to several conceptual metaphors related to the

emotion of anger. The listed idioms for the experimental group had metaphoric themes as headings and were grouped under them whereas the control group's idioms were listed in order of appearance without the headings. Several post-tests were administered using the same gap-filling tasks to check students' learning and the learning retention for the expressions. The result indicated that the participants in the experimental group comprehended and remembered the target idioms significantly better than those in the control group. For Boer's (2000) second experiment, the participants received the vocabulary list related to the upward and downward trends of an economy. The introductory lines were provided with the vocabulary list, but only the introductory lines for the experimental group invited students to apply imagery for studying the words while the lines for the control group explained the general usage of the listed words. Then, some of the graphs depicting various countries' economic situations were shown and the participants had to write an essay describing the graphs. Students in the experimental group used the vocabulary they studied more actively in their essays and this revealed that studying figurative words by associating the learning process with metaphorical sources benefited the reproduction of the vocabulary.

In a similar vein, Csabi (2004) investigated the effect of conceptual knowledge of the motivated senses in learning the target vocabulary including polysemous words *hold* and *keep*. The experimental groups were taught the meanings through the cognitive linguistics approach. Students memorized the target items based on their knowledge of sense motivations after being given the explanation on the main motivating factors through the conceptual metaphors. The

control groups were given the Hungarian equivalents instead, without the motivation for the meanings. The experimental groups significantly outperformed the control groups on the gap-filling tasks administered for testing both groups' performance. Therefore, the notion that the explicit knowledge of conceptual metaphor and motivated senses have a positive effect on learning the target vocabulary items is deemed to be valid. This finding encourages the teaching of idiomatic vocabulary based on cognitive linguistics approach through an explicit explanation of the underlying metaphorical concepts, which facilitates acquiring the metaphoric senses of the target items.

2.3.2 Cognitive Linguistics Approach to Phrasal Verb Instruction

In order to examine the potential benefits of using metaphorical motivation in the teaching and learning of phrasal verbs in particular, Kovecses and Szabo (1996) conducted an experiment with 30 Hungarian adult learners at the intermediate level. Participants were divided into the experimental and control groups, and they were taught and asked to memorize the phrasal verbs presented on the board. The presentation of the orientational metaphors that underlay the target phrasal verbs was the only difference between the groups. The orientational metaphors were briefly explained to the experimental group, while the meanings of the target items were explained with Hungarian equivalents to the control group. Subsequently, the participants took the gap-filling test where they needed to put

down the missing particles in the given sentences. Half of them were the previously taught phrasal verbs and the rest were not taught in advance. The experimental group performed better than the control group for both the learned phrasal verbs and the others that were not covered in class. This showed that the metaphorical motivation played a positive role not only in the learning process of the target phrasal verbs but also in the transferring the strategy using orientational metaphors in the task process for the new phrasal verbs.

However, Boers' (2000) similar experiment yielded a different result. With the participants of 74 university students whose first language was French and English proficiency was intermediate level, Boers' (2000) third experiment explored the effect of raising learners' awareness of the underlying conceptual metaphors to teaching and learning phrasal verbs. The control group was presented alphabetically listed explanatory notes on the target phrasal verbs whereas the experimental group received categorized phrasal verbs under the orientational metaphor headings. When students took a cloze test, the experimental group of students was more likely to fill in the gaps correctly with the taught phrasal verbs. On the other hand, for the novel phrasal verbs that were not included in the vocabulary notes, the students' result in the experimental group did not show much distinction compared to the control group. Although the superior retention of the learned phrasal verbs does support Kovecses and Szabo's (1996) finding that cognitive linguistics framework helps students' phrasal verb learning, there was no sign of benefit from learners' enhanced metaphoric awareness in dealing with the novel phrasal verbs which does not confirm the transferability.

Unlike Kovecses and Szabo's (1996) and Boers' (2000) studies including one-shot treatments, Condon (2008) integrated a large-scale experiment into the normal curriculum for eight weeks with 111 intermediate level university students studying Economics, whose first language was French. In order to verify whether the cognitive linguistics-based teaching of phrasal verbs could aid students' learning of phrasal verbs, some of the metaphorical motivations of the phrasal verbs were explained to the experimental groups and not to the control groups. In the delayed post-test, the experimental group showed higher retention of the taught phrasal verbs. However, the test result on the novel phrasal verbs did not show any evidence of successful transfer, which contradicts the result in Kovecses and Szabo's (1996) study and supports Boers' (2000) finding.

The first languages of the participants in Kovecses and Szabo's (1996), Boers' (2000) and Condon's (2008) studies were Hungarian and French, which are the languages very close to English, falling in the same typology. Since the difference between the mother tongue and the target language influence the second language acquisition, Yasuda (2010) included EFL students whose L1 belongs to different language typology from English. Yasuda (2010) also researched the effect of metaphorical awareness on the learning of phrasal verbs with 115 Japanese freshmen university students. Again, the participants were divided into two groups. The phrasal verbs given to the control group were listed alphabetically with the Japanese translation of the meanings. They were categorized under the headings of orientational metaphors, and its effect on the meanings of the whole phrasal verb was explained to the experimental group. According to the results of

the gap-filling task, there was no significant difference between the groups on the exposed phrasal verbs. Yasuda (2010) noted that the selected taught phrasal verbs frequently occurred in the idiom textbooks for Japanese high school students so the students were expected to be already familiar with them. Therefore, the result supports the likelihood that those phrasal verbs were already stored in the mental lexicon as a whole so that they did not need to use their cognitive insights to recall them. Yet, the experimental group outperformed the control group on the unexposed phrasal verbs. This result corresponds with Kovecses and Szabo's (1996) finding indicating that the awareness of orientational metaphors could be used to process the meaning of novel phrasal verbs compositionally while it contradicts Boers' (2000) and Condon's (2008) result.

The aforementioned studies generally verify the potential merits of explicitly presenting cognitive linguistics insights when teaching phrasal verbs to some extent. However, the effect on the learning of the taught phrasal verbs and on the knowledge transferring to the unexposed phrasal verbs yielded mixed results. In addition, only Condon's (2008) study included a delayed post-test to examine the lasting effect of the instructional method. Checking on the retention of the learning and transferring would allow a better understanding of the CL-based teaching of phrasal verbs. Moreover, most of the previous research on phrasal verbs with CL-based instruction includes adult learners as participants and therefore, examining the effect of CL approach to teaching and learning of phrasal verbs on high school learners can possess some implications on English vocabulary instruction for younger students. Learners of a distant language are

also expected to yield comprehension difficulties and there needs to be more follow up research focusing on EFL students with different L1 backgrounds (Boers, 2000; Yasuda, 2010). Since Korean is a language distant from English, research with Korean EFL students would have some significance in this field of study.

Kim and Lee (2017) studied the effects of cognitive linguistics-based phrasal verb instruction in the Korean EFL context. Instead of comparing the effects to the traditional approach, Kim and Lee (2017) used two types of cognitive linguistics approach to instructing phrasal verbs for Korean EFL learners in order to test different effects of each instruction. Four Korean graduate students with high English proficiency participated in the study. One type of instruction was focused on using conceptual metaphors and the other type was using Rudzka-Ostyn's categorization of the particles and their meanings with the corresponding image. After the instruction, a post-test was administered, and a think-aloud protocol was adopted to examine students' cognitive process. Though students' comprehension from both groups was facilitated for the instructed phrasal verbs, the instruction based on Rudzka-Ostyn's model turned out to be easier for Korean EFL students and aided them more than the other type of method.

This finding presents the more effective instructional method for Korean EFL students, which is perceived to be a useful guide to consider when setting up an experiment on cognitive linguistics-inspired phrasal verb teaching. However, since there were only four adult learners participants in the study, there need to be more studies involving younger learners using Rudzka-Ostyn's CL-approach to

phrasal verb teaching for the Korean EFL context in order to verify its effect.

2.3.3 Concept-Based Approach to Phrasal Verb Instruction

Some studies adopted the combination of two theoretical frameworks, Gal'perin's concept-based instruction (CBI) from Sociocultural Theory (SCT) as well as cognitive linguistics. From the sociocultural view, concept formation is fundamental in teaching and Gal'perin's CBI is one major pedagogical application of sociocultural theory. CBI is a stepwise instruction that guides teaching in a way that enables students' concept formation through processes such as internalization and verbalization. White's (2012) and Lee's (2012) studies validate a significant role of using cognitive linguistics approach to teaching phrasal verbs and also the positive effect of implementing CBI together with cognitive linguistics. The major difference between the two studies is the presence of Scheme of a Complete Orienting Basis of an Action (SCOBA), which is an orienting chart that includes systematically organized information students need to know. White (2012) implemented an experiment for seven weeks with university students in English for Academic Purposes (EAP) reading course, and the study consisted of five steps. First, students were introduced to a new way of viewing phrasal verbs and told that phrasal verbs could be conceptually motivated in a systematic way. Then they collected some phrasal verbs themselves and discussed the meaning of some of the collected items afterward. Next, they put them into drawings to express the

meanings and finally shared their drawing and talked about them. Rudzka-Ostyn's model was referred to for the last step. The number of accurate explanation increased when the pre-test and the post-test were compared. More importantly, in terms of the incorrect explanations, students' explanation for the incorrect answers became more metaphorical and was focused on the particles, which reflected a new perspective of the conceptual approach. This suggested students' enhanced conceptual thinking when processing phrasal verbs. In Lee's (2012) study, SCOBA was additionally provided as a tool, and twenty-three intermediate level graduate students with different L1 in the ESL course participated in this experiment for six weeks. For the instruction of each particle and phrasal verbs, the conceptual metaphors and SCOBA were presented and students took part in diverse activities including collocation and writing practices as well as homework assignments. The participants' performance improved significantly according to the post-test result. Moreover, the metaphoric and image associations were found to be transferred to novel phrasal verbs.

A similar experiment from the combination of sociocultural and cognitive linguistics framework was undertaken by Ko (2018) in a Korean EFL context. Ko (2018) studied the effect of concept-based instruction (CBI) using SCOBA and the meanings of phrasal verb particles from Rudzka-Ostyn's (2003) textbook in the instruction. Sixty-two third-year students in middle school (9th grade) were separated into concept-based instruction group (CBI-G), verbalization-based instruction group (VBI-G), and memorization-based instruction group (MBI-G), and students in each group were further divided according to their proficiency

level. CBI-G students were provided the image schema as SCOPA and the meanings of the particles. Then they did a group activity where they completed a worksheet and verbalized what they had learned. At the end of the lesson, students were asked to review SCOPA and internalize the images. VBI-G was not provided with SCOPA and the meanings of the target phrasal verbs were presented as a whole. Then they were also asked to do a group activity completing the same worksheet as CBI-G did, verbalizing what they learned in groups and comparing plain verbs with phrasal verbs focusing on the particles. The students in MBI-G merely memorized phrasal verbs, presented as a whole with Korean translation. After the treatment, each group had a post-test, which was the same as the pre-test except ten newly added phrasal verbs. The result showed that there was no significant difference between the groups' performance. Ko (2018) attributes this to two main reasons, which are students' lack of linguistic and cognitive abilities.

Sociocultural theory and cognitive linguistics try to answer different questions in teaching, where "the former is responsible for the question of 'how' and the latter for the question of 'what'" (Lee, 2012). Because CBI, the major pedagogical implication of SCT, involves many steps to follow, too short a period would not be suitable for examining the effect of such a method in teaching. What the current study intends to investigate is not on the application of both sociocultural and CL-based phrasal verb instruction but on the effect of the CL-based teaching of English phrasal verbs compared to the traditional teaching approach. Furthermore, the present study includes high school students as participants since most of the previous studies on CL-based phrasal verb

instruction involved adult learners. High school students were chosen instead of middle school students as Ko's (2018) findings with middle school students showed there was no facilitation in phrasal verbs learning and lack of linguistic and cognitive ability were assumed to be the main reasons. Kurtyka (2001) also argues that learners need to be at a certain level of mental maturity in order to understand Rudzka-Ostyn's (2003) materials. Moreover, most of the studies only focused on quantitative results, so the present study will be also examining students' perceptions of the new approach through the interview. In sum, this study will explore the effect of the CL approach to teaching and learning of phrasal verbs among Korean high school students.

CHAPTER 3.

METHODOLOGY

This chapter reports the methodology employed in the present study. Section 3.1 provides the participants' information. In Section 3.2 and Section 3.3, the instruments and procedure are explained respectively. Finally, Section 3.4 describes data analysis.

3.1 Participants

Thirty second-year high school students in Siheung, Korea, participated in the current study. Because one student missed out on the pre-test and another student did not follow the instruction for the test, the remaining 28 participants were selected for the data analysis in this study. Participants comprised of 15 female and 13 male students whose English proficiency levels were assumed to be low to low intermediate based on their English test scores in the first semester of 2018 school year. Out of the total score of 100, the overall mean score of the 11th grade was 42.1. All the participants had eight years of formal English education in the elementary, middle and high school, and they were in 50-minute English classes four times a week in their current school. The second-year high school students were selected for the participants, as they seemed the most suitable group representing the high

school learners' traits. The first- and third-year high school students are relatively close to the middle school students and adult learners respectively.

Twenty-eight students were divided into the experimental group and the control group. Except for two students in the experimental group, students in each group were from the same classes. To check the homogeneity between the two groups, an independent samples *t*-test was used for analyzing the mean difference between the groups' pre-test scores. There was some statistical difference between the two groups as the *p*-value was not larger than 0.05 ($t(26) = 2.06, p = .05$). Therefore, the pre-test scores were controlled for the later data analysis when comparing the changed scores between the groups.

3.2 Instruments

This section further divides into four parts. Section 3.2.1 describes the target phrasal verbs. Subsequently, Section 3.2.2 and Section 3.2.3 explore instructional and test materials, respectively. Interview questions are presented in Section 3.2.4.

3.2.1 Target Phrasal Verbs

The target phrasal verbs are combined with particles *up*, *out* and *down* as these are the most frequent top three particles among others (Gardner & Davies,

2007). The target phrasal verbs selected for this study derive from Rudzka Ostyn's (2003) textbook as the textbook is "specifically designed for use by EFL learners" (Condon, 2008, p. 137) and using Rudzka Ostyn's material was perceived to be more effective for Korean EFL learners when teaching phrasal verbs than only through conceptual metaphors (Kim & Lee, 2017). Rudzka Ostyn (2003) analyzed each particle on the basis of an emphasis that the abstract realities are conceived in concrete domains, presenting different senses of a particle that are spatial and prototypical to metaphorical. For example, one relatively simpler meaning of the particle *out* is 'entities are moving out of containers' as in *throw out*, and the container metaphor could be extended for the explanation of more abstract concepts such as a change of states or situations. The metaphorical sense 'states/situations are containers' as in *wear out* can be used for understanding the meaning of the phrasal verb. Of the lists of phrasal verbs that belonged to the category of each meaning, this study selected verbs that did not seem to exceed the participants' vocabulary level, which have not too obvious meaning, when combined with the particles. Thirty phrasal verbs were selected and are presented with the senses of the particles in Table 3.1. Fifteen of the target items were explicitly taught to the participants and fifteen were not covered during the instruction.

Table 3.1 List of Target Phrasal Verbs

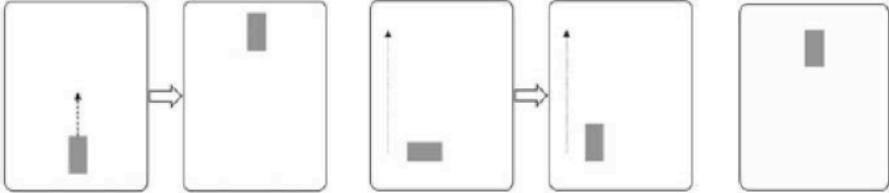
	Senses of the Particles	Taught PVs	Novel PVs
UP	position at a high place or moving up to a higher one	<i>sit up</i>	<i>throw up</i>
	aiming at or reaching a goal, an end, a limit	<i>follow up</i>	<i>take up</i>
	moving to a higher degree, value or measure	<i>brush up</i>	<i>build up</i>
	higher up is more visible, accessible, known	<i>set up</i>	<i>cook up</i>
	covering an area completely/reaching the highest limit	<i>wind up</i>	<i>blow up</i>
OUT	entities moving out of containers	<i>set out</i>	<i>cut out</i>
	eat or inviting to eat away from home	<i>ask out</i>	<i>invite out</i>
	sets, groups are containers	<i>count out</i>	<i>cross out</i>
	bodies, minds, mouths are viewed as containers	<i>stick out</i>	<i>hold out</i>
	states/situations are containers	<i>wear out</i>	<i>put out</i>
DOWN	movement from a higher to a lower place	<i>talk down</i>	<i>shoot down</i>
	time and geographically orientated motion	<i>go down</i>	
	decrease in intensity, quality, quantity, size, degree, value, activity, status, strength...	<i>bring down</i>	<i>cut down</i> <i>put down</i>
	reach a goal, completion, extreme limit down the scale	<i>tear down</i>	<i>knock down</i> <i>pull down</i>
	movements of eating or writing	<i>take down</i>	

3.2.2 Instructional Materials

The experimental group and the control group were given different handouts with a list of phrasal verbs. As shown in Figure 3.1, phrasal verbs were categorized based on each particle for the experimental group. Particle's different senses were written down with the corresponding image schema, and individual

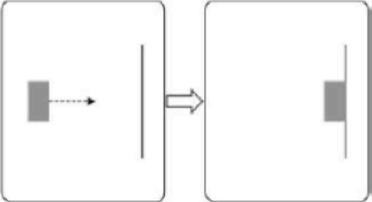
UP-----

1. **UP: position at a high place or moving up to a higher one**



■ Sit up - 바로 앉다
Ex) He was so weakened by his illness, he couldn't even **sit up**.

2. **UP (to): aiming at or reaching a goal, an end, a limit**



■ Follow up - 추가로 더 하다
Ex) A good start is fine, but now you have to **follow up** your initiative.

Figure 3.1 A Sample Handout for the Experimental Group

phrasal verbs were presented under the image or diagram together with the Korean translation and an example sentence.

On the other hand, phrasal verbs with the Korean translation of the meaning and example sentences were listed alphabetically for the control group (See Figure 3.2). There was no image schema on the control group’s handout. For the full handouts that the experimental and control groups received, refer to Appendices 1 and 2, respectively.

1	ask out	불러내다/ 청하다	I would like to ask you out to lunch.
2	bring down	과멸시키다/ 도산, 붕괴시키다	The growing inflation rate is bound to bring down the government.
3	brush up	빨리 되찾다, 되살리다/ 향상시키다	I need to brush up my English. How should I go about it?

Figure 3.2 A Sample Handout for the Control Group

3.2.3 Test Materials

Pre-test, post-test and delayed post-test were conducted for the experiment. The purpose of the pre-test was to gauge students’ prior knowledge of the selected phrasal verbs, and the delayed post-test was to check the retention for any change in students’ performance. Each test consists of thirty questions with thirty

underlined phrasal verbs in each of the given sentences. A sample test question is presented in Figure 3.3 (For the complete test sheets, see Appendix 3, 4 and 5). Fifteen of the thirty phrasal verbs in the post-test and the delayed post-test were the taught items while the rest were not. The taught items were given to observe the learning effect of the instruction whereas the novel items were included to examine the knowledge transferability in the present study.

In each sentence, complete the phrasal verb by filling in the blank with the correct particle (out/ up/ down) and write down the meaning of the underlined phrasal verb in Korean.		
Number	Sentence	Meaning
1	The smell was so disgusting. It made you want to <u>throw</u> _____.	

Figure 3.3 A Sample Test Question

A gap-filling task is implemented for the test material in this experiment like the most related previous studies. Because an entirely productive task is perceived to be too difficult for the learners, Condon (2008) and Boers (2000) conducted a semi-productive test for the students to fill in the gaps by choosing the correct phrasal verbs from the given list. In those cases, however, the target phrasal verbs are already in the form of verb combined with the corresponding particles. On the contrary, a gap-filling task provided by Kovecses and Szabo (1996) and Yasuda (2010), which allowed students to complete the target phrasal

verbs by putting in a few particles, was open to students' easier guessing. Considering these potential limitations, the participants in the present experiment were asked to fill in the missing particles of the phrasal verbs among *up*, *out* and *down* to complete the sentences and then they also needed to write down the meanings of the phrasal verbs in Korean. Filling in the particles but not the whole phrasal verbs would lower the students' burden, and the possible problems from spelling mistakes could be solved. More importantly, since the difference in the instruction for the two distinct groups lies in the cognitive linguistics-based explanation of the particles, completing the phrasal verbs by filling in the particles was considered appropriate for the present study. The rationale for asking the students to write down the meaning in Korean is to prevent them from filling in the blanks with any particles by guessing, which would likely mislead to considering students' mere guess as for their knowledge of the phrasal verbs.

Though the tested phrasal verbs were the same, the presented sentences were different for the pre-test and the immediate post-test to reduce the potential facilitating effect. Sentences for the phrasal verbs were taken from *Collins COBUILD phrasal verbs dictionary* (Hands, Walter & Woodford, 2012) and *Longman phrasal verbs dictionary* (Longman, 2000) along with the example sentences in Rudzka Ostry's (2003) textbook. For the immediate post-test and delayed post-test, identical sentences were used, as there was a term between the two tests. An instruction sentence for the task was provided in Korean on the top of the task sheet.

For each of the questions, the maximum score the students could receive

was two, one for the particle and one for the Korean meaning. If students filled in the blanks with the correct particles and provided the core meanings in Korean, two full points were given. For example, two points were given to the student who filled in the correct particle *up* in the sentence “*The government will set ___ a committee to look into the plane crash.*” and also wrote down the core meaning for the phrasal verb *set up* in Korean, which means to organize or build. If students filled in the blanks with the correct particles and provided the meanings close to the core meaning (e.g., *install* for *set up*) in Korean, they received 1.5 points. One point was given when they filled in the blanks with the correct particles but provided the wrong meaning far from the core meaning (e.g., *start* for *set up*) in Korean or left it empty. However, no score was given to those who did not get the particles right, regardless of the answers to the meaning part. In other words, even if the students provided the core meaning or what is close enough to the core meaning (e.g., *organize* or *install* for *set up*), if the gap was either filled in with the wrong particle or left empty, they received 0 point.

For the more objective scoring of the tests, there were two raters including the researcher and a PhD candidate in the Foreign Language Education Department at the Graduate School of Seoul National University. The inter-rater reliability between the two scorers was verified through Cronbach’s alpha in SPSS and the statistics showed a very strong reliability between the raters with the α value of .999.

3.2.4 Interview

In order to obtain information on students' perceptions of the phrasal verb instruction and learning phrasal verbs, a semi-structured interview was administered after the delayed post-test in Korean to each of the eight selected students. At first, six students were selected for the interview according to the test results, three students in each of the two groups with the highest score, average score, and the lowest score for the various opinions of the students with different learning patterns. Eventually, however, two students were additionally selected from each group as one student also had the same lowest score in the control group. The other student had the second lowest score in the experimental group, and both the additional students' scores remained the same from the pre-test. Interview questions were structured in advance and asked in order as listed in figure 3.2, but the interview was open to include any additional topic students provide. Using participants' L1 was to avoid any unnecessary inconvenience preventing them from freely sharing their thoughts during the experiment.

- Q1 Were you ever taught phrasal verbs in class?
- If yes, was the instruction helpful in learning phrasal verbs?
- If so, how?
- Q2 What was your opinion on phrasal verbs or learning them before participating in this project?
- Q3 What is your opinion on phrasal verbs or learning phrasal verbs now?
- Q4 Do you think the instruction has affected how you think about phrasal verbs or learning them in any way? What is your opinion on the instruction?
- Q5 If available, would you be willing to study phrasal verbs or take part in learning phrasal verbs in class in the future?

Figure 3.2 Interview Questions

3.3 Procedure

The present study conducted two meetings (two sessions) for the experiment after school from the last week of August to the second week of September, 2018. The first session consisted of a pre-test, instruction and a post-test and lasted for an hour and the second session consisted of twenty minutes delayed post-test with short interviews with eight selected students. Because the same researcher undertook the experiment alone, the two groups met on different days. Moreover, due to the unexpected change of the school schedule, the term between the first and the second sessions was twelve days for the experimental group and eleven days for the control group. However, all the procedure and the

time spent on each session were identical. The only difference was the instructional treatment of the experimental and control groups. The procedure is further described in 3.3.1 with the layout table, and in 3.3.2, which provides the description of the different instructional treatments between the groups.

3.3.1 Layout of the Procedure

Table 3.2 Layout of the Procedure

Session	1 st			2 nd	
Procedure	Pre-test	Instruction	Post-test	Delayed post-test	Interview
Time (minutes)	20	20	20	20	2-3

The participants were given 20 minutes for the pre-test. Immediately after the test, the test sheets were collected and handouts were distributed for the instruction. The students were first introduced what a phrasal verb is along with its importance and difficulties. Then the instructor went through 15 phrasal verbs explaining their meanings and example sentences. After the explanation, the students were given 1 or 2 minutes to ask for any clarification and to go over the phrasal verbs. The explanation and clarification were completed in 20 minutes. Then, the handouts were removed and the immediate post-tests were given. The students had 20 minutes for the post-test.

During the second meeting, students were asked to take the delayed

post-test for 20 minutes. Then the selected students were interviewed for around 2 minutes each. Table 3.2 shows the outline of the procedure.

3.3.2 Instructional Treatment

Instructional treatment was the only difference in the current experiment between the groups. Students in the experimental group were taught phrasal verbs through a cognitive linguistics approach while those in the control group were instructed based on the traditional teaching of phrasal verbs.

To introduce phrasal verbs, in addition to the basic construction, importance, and difficulty, the experimental group of students was proposed a 'new orientation' (White, 2012) of the phrasal verbs, pointing out that the mere memorization is no longer the only way to learn phrasal verbs. The students were told that there is a new way of viewing phrasal verbs, which were traditionally considered arbitrary, that the phrasal verbs could be systematically categorized under each particle. Then for the 15 phrasal verbs, the instructor explained the target items with the images or diagrams, core and extended senses of each particle along with the Korean meaning and the brief comments on the example sentences.

For the general introduction to the phrasal verbs, the students in the control group were told the basic construction of a phrasal verb and the fact that most of the students perceive it to be too difficult that they tend to avoid using one despite its importance in the English language. Then the instructor explained 15

phrasal verbs only through L1 translation of the target items, explaining the example sentences and paraphrasing them with synonymous words.

3.4 Data Analysis

In order to ascertain whether the two different instructional approaches have a pedagogical effect and to examine the retention of the effect, the test results of groups A and B were analyzed using SPSS version 22 for Mac with the significance level set at 0.05. The independent variable was an instructional treatment and the dependent variable was the test scores.

For the first research question regarding the effects of the instructions on the taught phrasal verbs, the pre-test and the immediate post-test results were analyzed with the paired samples *t*-test to determine whether the scores before and after the instruction changed in a meaningful way. For the second step, ANCOVA was used setting the pre-test scores as covariance and immediate post-test scores as dependent variables in order to find out any significant difference between the two groups' post-test results. The rationale for employing ANCOVA for the between-group comparison is to gain a more precise comparison since the homogeneity of the experimental and control groups was not proved through an independent *t*-test with the pre-test scores. ANCOVA enables controlling preexisting group difference by using the covariance, such as the pre-test scores in this case.

For the second research question, the same methods were repeated with the novel phrasal verbs. Firstly, the score change within the groups was examined through the paired samples *t*-test. Then ANCOVA was conducted for investigating the change of the immediate post-test scores between the two groups.

The third research question was on the effect of instructional methods on the retention of the phrasal verb learning and transferability. To determine whether the different instructions had a distinct influence on the retention of students' test performance, the pre-test and the delayed post-test results were analyzed using the pairwise *t*-test and ANCOVA.

Lastly, the students' interview responses were analyzed in terms of their perceptions of phrasal verb learning and the instructions as well as their motivation for future learning of the phrasal verbs.

Overall, the present study is analyzed through a mixed method, including both the quantitative and qualitative measure. Though the focus is placed on the quantitative data analysis, adopting a mixed approach would provide a better understanding of the complex underlying factors that contribute to second language acquisition research compensating each method.

CHAPTER 4.

RESULTS AND DISCUSSION

This chapter presents the result of statistical analysis on students' performance as well as qualitative analysis on students' perceptions of the phrasal verb learning and the instructions. This chapter is further divided into four sections based on the four research questions. Section 4.1 presents the results and discussions of the effects of different instructional methods on learning the phrasal verbs. Section 4.2 illustrates the results and discussions of how the different methods of teaching phrasal verbs influence transferability to the novel items. Section 4.3 presents the results of the effects of instructions on the retention of the students' phrasal verb learning, followed by students' perceptions about the instruction and their learning of phrasal verbs in Section 4.4.

4.1 The Effects of Instructional Methods on Learning Phrasal Verbs

In order to explore the effects of instructional methods on the students' learning of the phrasal verbs, the test results for the taught phrasal verbs were compared. The overall means and the standard deviations of the test scores for the pre-test along with the post-test of the taught phrasal verbs are outlined in Table 4.1.

Table 4.1 Descriptive Statistics of the Pre-test and Post-test Scores on Taught Phrasal Verbs

	Experimental Group			Control Group		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Pre-test	4.32	2.08	14	3.07	2.39	14
Post-test	9.29	7.25	14	7.50	5.60	14

As shown in Table 4.1, the mean score of the post-test increased in both groups compared to the average pre-test scores. To find out if the increased post-test scores from the pre-test scores have any statistical significance, two-tailed paired samples *t*-test was conducted within each group. The result is summarized in Table 4.2.

Table 4.2 Paired Samples *t*-test Results of the Pre-test and Post-test Scores on Taught Phrasal Verbs

Group	<i>Mdiff</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Experimental	-4.96	7.31	-2.54	13	.025
Control	-4.43	5.13	-3.23	13	.007

The result indicates that the students' scores increased in the post-test and the change of the scores are statistically significant in the experimental group ($t(13) = -2.54, p = .025$). There was a statistically significant change from

the pre-test scores to the immediate post-test scores within the control group as well ($t(13) = -3.23, p = .007$). Therefore, it can be implied that the instructional treatments for both groups were helpful in recollecting the taught items.

In order to test whether the post-test scores between the two groups differ significantly, ANCOVA was conducted. The result is shown in Table 4.3.

Table 4.3 Results of ANCOVA on the Post-test Scores for Taught Phrasal Verbs

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	Partial η^2
Corrected Model	87.366	2	43.683	1.065	.360	.079
Intercept	238.695	1	238.695	5.820	.024	.189
Pretest	65.045	1	65.045	1.586	.220	.060
Group	5.279	1	5.279	.129	.723	.005
Error	1025.312	25	41.012			
Total	3085.000	28				
Corrected Total	1112.679	27				

Table 4.3 suggests that the immediate post-test scores for taught phrasal verbs are not significantly different between the experimental and control groups ($F = .129, p = .723$). This finding implies that the cognitive linguistics approach to the phrasal verb instruction did not enhance students' learning of the taught phrasal verbs more significantly than the traditional approach.

Overall, while there was a significant increase in the post-test scores within each group, the statistically significant difference between the groups in terms of recollecting learned items was not found. No significant difference between the groups answers the first research question—Is CL-based instruction more effective for the learning of taught phrasal verbs by Korean high school students compared to the traditional approach?—which is inconsistent with some earlier findings (Boers, 2000; Kovecses & Szabo, 1996) while coinciding with Yasuda's (2010) study.

In Yasuda's (2010) study, recollecting the taught phrasal verbs did not have a statistically significant difference between the experimental and control groups. The reason for this was assumed to be the already stored target items in students' mental lexicon since the taught items were thought to be already familiar to the participants in both groups. This might have led the experimental-group students not using the cognitive knowledge to recall the items. However, this cannot explain the current study's finding. The participants were not familiar with the target items, as most of the students reported that they have never learned the phrasal verbs before engaging in the experiment. Moreover, participants' lack of prior knowledge to the target items can be seen from their notably low pre-test scores in both groups ($M = 4.32$ and $M = 3.07$) out of the maximum score of thirty.

Other than the familiarity of the target items, the non-significant difference between the groups could be explained with the participants' cognitive and linguistic levels, L1-L2 difference, and the length of the

experiment. The participants in previous studies that yielded a contrasting finding with the current study were the adult learners with intermediate English proficiency. Compared to those in the previous studies, the participants in the present study are younger learners, whose cognitive and linguistic levels are presumably lower and appear to have affected the inconsistent result. This is in line with Ko's (2018) study, which has implemented a concept-based approach to teaching phrasal verbs for Korean EFL learners. Korean middle school students participated in Ko's (2018) experiment and their lower cognitive and linguistic levels were ascribed to be the main reasons for the result that the concept-based instruction did not help learning the phrasal verbs significantly better than the mere memorization-based instruction. According to Kurtyka (2001), a certain level of cognitive maturity is needed for the thorough understanding of the cognitive insights. Although the minimum age is suggested to be the puberty and the participants in Ko's (2018) study and the present study were middle school and high school students respectively, concept-based instruction did not lead to students' better learning of the phrasal verbs. Considering the fact that they were both Korean EFL students, understanding the cognitive concepts is perceived to be more difficult for the learners whose L1 is distantly different from English compared to Hungarian or French in the previous studies, which revealed the cognitive linguistics approach to be more beneficial for the learners' phrasal verb learning (Boers, 2000; Kovecses & Szabo, 1996). In addition, the instruction in the current study was a short, one-shot treatment and this limited length of instruction may be another reason for

the result. Kovecses and Szabo's (1996) and Boers' (2000) studies have also implemented a short, one-time treatment and revealed the conceptual instructions' better learning effect. However, more time might have been needed for the Korean high school learners before they could fully digest the cognitive concepts since their cognitive and linguistic levels are assumed to be lower, and their L1 falls in different typology from English.

4.2 The Effects of Instructional Methods on Transferability to Novel Phrasal Verbs

With respect to the second research question about the effects of cognitive linguistics-based instruction on the knowledge transferability, the same analysis procedures used for the taught phrasal verbs were repeated with the novel phrasal verbs. The pairwise *t*-test was run for the within-group difference and ANCOVA was conducted for the between-group comparison. The overall means and the standard deviations of the pre-test and the post-test scores for the novel phrasal verbs are displayed in Table 4.4.

Table 4.4 Descriptive Statistics of the Pre-test and Post-test Scores on Novel Phrasal Verbs

	Experimental Group			Control Group		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Pre-test	5.36	2.66	14	3.57	1.96	14
Post-test	5.04	2.51	14	1.96	1.90	14

In Table 4.4, it is noticeable that the mean score of the immediate post-test on the novel phrasal verbs decreased in both the two groups. However, the average post-test score on the novel phrasal verbs in the experimental group ($M = 5.04$, $SD = 2.51$) is higher than that of the control group ($M = 1.96$, $SD = 1.90$). In order to determine whether there is a statistically significant difference between the pre-test and the post-test scores within each group, two-tailed paired samples *t*-test was employed. Table 4.5 presents the result.

Table 4.5 Paired Samples *t*-test Results of the Pre-test and Post-test Scores on Novel Phrasal Verbs

Group	<i>Mdiff</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Experimental	.32	2.29	.53	13	.609
Control	1.61	1.98	3.03	13	.010

Table 4.5 shows that the score change in the experimental group is not

statistically significant ($t(13) = .53, p = .609$) whereas the change in the control group is statistically significant ($t(13) = 3.03, p = .010$). Because the mean score of the post-test fell from the pre-test in both groups, any statistical significance for the changed scores means that the scores decreased in a meaningful way, which in this case explains the result of the control group. In other words, while the scores decreased significantly in the control group, the decreased scores in the experimental group are not statistically significant. This difference between the groups could be attributed to the two distinct instructional methods. The traditional teaching method in the control group did not help students' successful knowledge transfer to the new phrasal verbs.

Again for the second step, ANCOVA was used to examine the significant difference of the post-test scores for the novel phrasal verbs between the experimental group and the control group. The result is outlined in Table 4.6.

Table 4.6 Results of ANCOVA on the Post-test Scores for Novel Phrasal**Verbs**

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	Partial η^2
Corrected Model	106.127	2	53.064	15.011	.000	.546
Intercept	7.173	1	7.173	2.029	.167	.075
Pretest	40.092	1	40.092	11.342	.002	.312
Group	27.213	1	27.213	7.699	.010	.235
Error	88.373	25	3.535			
Total	537.500	28				
Corrected Total	194.500	27				

The outcome of the analysis displayed in Table 4.6 indicates that the post-test scores on the novel phrasal verbs of the experimental and control groups are significantly different, $F = 7.699$, $p = .010$, with a high effect size, $\text{Partial } \eta^2 = .235$. This finding suggests that the instructional treatments in two groups maintain different effects on dealing with novel phrasal verbs. The more beneficial effect of cognitive linguistics approach to phrasal verb teaching on the better test result for the novel items is in accordance with Kovecses and Szabo's (1996) and Yasuda's (2010) study.

Yasuda (2010) posits that the significant difference between the groups comes from the experimental group using the metaphorical awareness compositionally for the meaning of novel phrasal verbs. Kovecses and Szabo

(1996) also note that the conceptual knowledge needs to be explicitly taught for its use as is the case with the experimental group, to which the conceptual tool was explicitly explained and provided to transfer the knowledge when working with the new phrasal verbs. Therefore, the second research question—Is CL-based instruction more effective for the transferability to novel phrasal verbs by Korean high school students compared to the traditional approach?—could be answered in the affirmative, that the cognitive linguistics-based instruction did allow transfer of the conceptual knowledge for the novel phrasal verbs while the traditional teaching method did not.

Some might question the transferability of the conceptual knowledge to the novel phrasal verbs, because the test results on novel phrasal verbs show different tendency from the findings on phrasal verb learning. Unlike taught phrasal verbs, the average post-test score decreased in both groups, but this is an outcome not unexpected. Whereas the task for the taught phrasal verbs simply requires students to recollect the target items and their meanings depending mostly on the memorization, in terms of novel phrasal verbs, students needed to go beyond the simple step to infer the meaning and connect their knowledge. Since answering questions on taught phrasal verbs require less effort, students are likely to have focused more on the taught items than the more demanding questions on the new items and this pattern is shown in other studies as well (Kovecses & Szabo, 1996; Yasuda, 2010). Nevertheless, the result of the between-group comparison shows that the two groups' test results possess a significant difference. Since the instructional treatment was the only difference

between the groups, the transfer effect of the CL instruction seems to be the only plausible explanation.

Moreover, according to the result of the within-group comparison, the decreased mean score in the experimental group did not show any statistical significance whereas the control group yielded a statistically significantly poorer result. This indicates that the reduced scores in the experimental group despite successful knowledge transfer could be merely due to the students' attention attracted to the comparatively easier test items. Since the recollection of the taught phrasal verbs is plausibly much easier in the immediately following task than to apply any newly learned knowledge, students are more likely to have used most of their efforts for the recollecting of the taught phrasal verbs. For the students to take the extra step, they need something to make use of, and cognitive linguistics-based instruction appears to have provided the cognitive insights as the tool. Consequently, although it was not to the extent that the scores increased with a statistical significance, only the experimental group that received the explicit instruction of the conceptual mechanisms appears to have been able to transfer the knowledge, and the control group ended up with the significantly poorer outcome, as the knowledge of cognitive mechanisms was not provided.

4.3 The Effects of Instructional Methods on the Retention of the Phrasal Verb Learning and Transferring

To address the third research question regarding how the two groups' instructional treatments influence the retention of the pedagogical effects, this section is further divided into two subsections. Section 4.3.1 discusses the effect of different instructional methods on the learning retention for the taught phrasal verbs. Section 4.3.2 treats whether there is any lasting effect of different instructions on the transferability to the novel phrasal verbs.

4.3.1 The Effects of Instructional Methods on the Retention of the Phrasal Verb Learning

In Section 4.1, within-group comparison has revealed that the immediate post-test scores have increased with a statistical significance in both groups, showing that both CL-based instruction and the traditional instruction have a positive influence on the students' learning of the taught phrasal verbs. In order to explore whether the learning effects of the different instructional methods on taught phrasal verbs continue and to find out any significantly different retention pattern between the groups, pre-test and the delayed post-test scores in the experimental and control groups are compared in two steps using the paired

samples *t*-test and ANCOVA. Table 4.7 reports the overall means and the standard deviations of the pre-test and the delayed post-test scores for the taught phrasal verbs. Figure 4.1 shows the overall trend of the score changes on all the pre-, immediate post-, and delayed post-tests.

Table 4.7 Descriptive Statistics of the Pre-test and Delayed Post-test Scores on Taught Phrasal Verbs

	Experimental Group			Control Group		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Pre-test	4.32	2.08	14	3.07	2.39	14
Delayed post-test	5.82	2.02	14	4.29	2.59	14

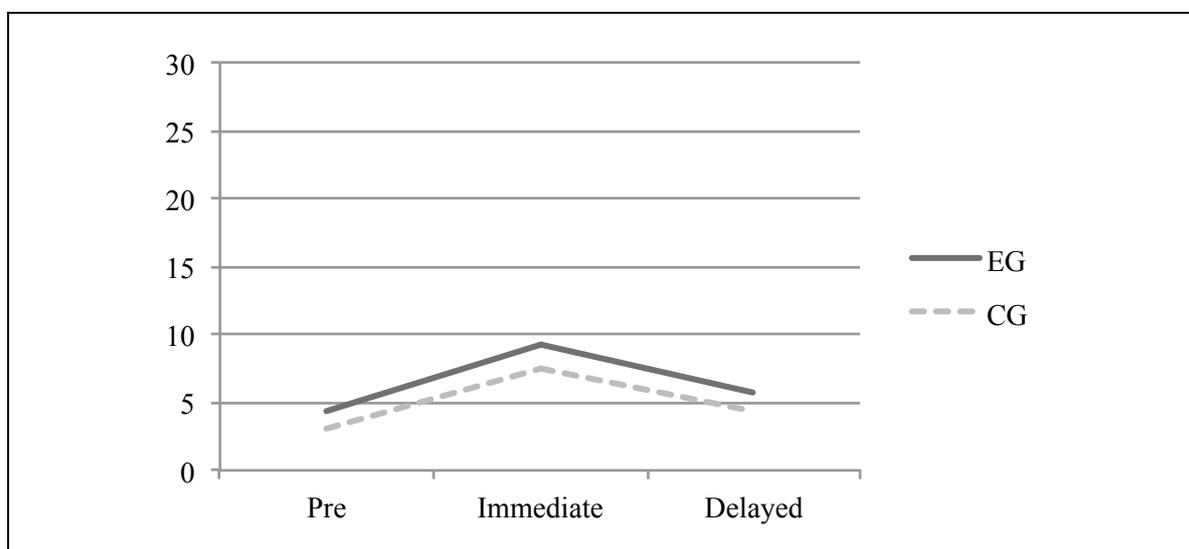


Figure 4.1 The Overall Trend of the Changed Mean Scores on Taught Phrasal Verbs

Although the average scores of the delayed post-test are lower than that of the immediate post-test as displayed in Figure 4.1, they increased compared to the pre-test in both groups. Table 4.7 shows that the average score increased more in the experimental group and is higher (M= 5.82, SD= 2.02) than that of the control group (M= 4.29, SD= 2.59). To examine whether the increase in the average delayed post-test scores possesses any significant meaning in each group, paired samples *t*-test was conducted. Table 4.8 displays the results.

Table 4.8 Paired Samples *t*-test Results of the Pre-test and Delayed Post-test Scores on Taught Phrasal Verbs

Group	<i>Mdiff</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Experimental	-1.50	2.43	-2.31	13	.038
Control	-1.21	2.11	-2.15	13	.051

Table 4.8 shows that the increased scores of the delayed post-test in the experimental group was statistically significant ($t(13) = -2.31, p = .038$) while they were not in the control group ($t(13) = -2.15, p = .051$). Hence, only in the experimental group, the learning effect was retained. To find out if the different result is significantly meaningful between the groups, ANCOVA was conducted. Table 4.9 displays the result.

Table 4.9 Results of ANCOVA on Delayed Post-test Scores for Taught Phrasal Verbs

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	Partial η^2
Corrected Model	52.158	2	26.079	6.238	.006	.333
Intercept	69.565	1	69.565	16.640	.000	.400
Pretest	35.649	1	35.649	8.528	.007	.254
Group	5.036	1	5.036	1.205	.283	.046
Error	104.511	25	4.180			
Total	871.750	28				
Corrected Total	156.670	27				

The figures in Table 4.9 indicate that there is no significant difference between the groups ($F = 1.205, p = .283$). This result means that the effect of the instructional method in the experimental group on the learning retention does not significantly differ compared to that of the control group. However, the non-significant difference between the groups cannot be equated to the same effect of the instructions in each group. This is because the increased score within the experimental group is statistically significant while that within the control group is not. This leads to the conclusion that only CL instructional method allowed the meaningfully increased recollection of the taught items in the delayed post-test.

The insignificant difference for the between-group comparison could be mainly attributed to the limited time spent for the instructions. Condon's (2008)

study implemented over eight-weeks duration of the instructional treatments and there was a significant difference between the groups, which contrasts to the present finding. Furthermore, in the present study, the term between the pre-test and the delayed post-test was not kept exactly the same between the groups due to the unexpected change of the school schedule. The control group took their delayed post-test a day earlier than the experimental group. This could have positively affected the control group's test results in the delayed post-test since memorization generally plays an important role in recollecting the taught items. Moreover, the positive effect of the cognitive linguistics-based teaching method on the learning retention could not have been depicted to be statistically significantly different from the traditional teaching method with a small sample size in the present experiment.

4.3.2 The Effects of Instructional Methods on the Durability of Transfer to Novel Phrasal Verbs

For the novel phrasal verbs in Section 4.2, the significant difference between the groups for the immediate post-test results was ascribed to the distinct effect of the instructional treatments, and only the CL-based instruction allowed the transfer. Therefore, it appears to be valid to discuss the lasting effect of the CL-based instruction on transferability for the experimental group but not for the control group. With the pre-test and delayed post-test results, the students'

performance for the novel phrasal verbs in the experimental and control groups was investigated using a pairwise *t*-test and ANCOVA. The overall means and the standard deviations of the test scores for the novel phrasal verbs are summarized in Table 4.10. Figure 4.2 displays the overall trend of the score changes on all the pre-, immediate post-, and delayed post-tests for the new phrasal verbs.

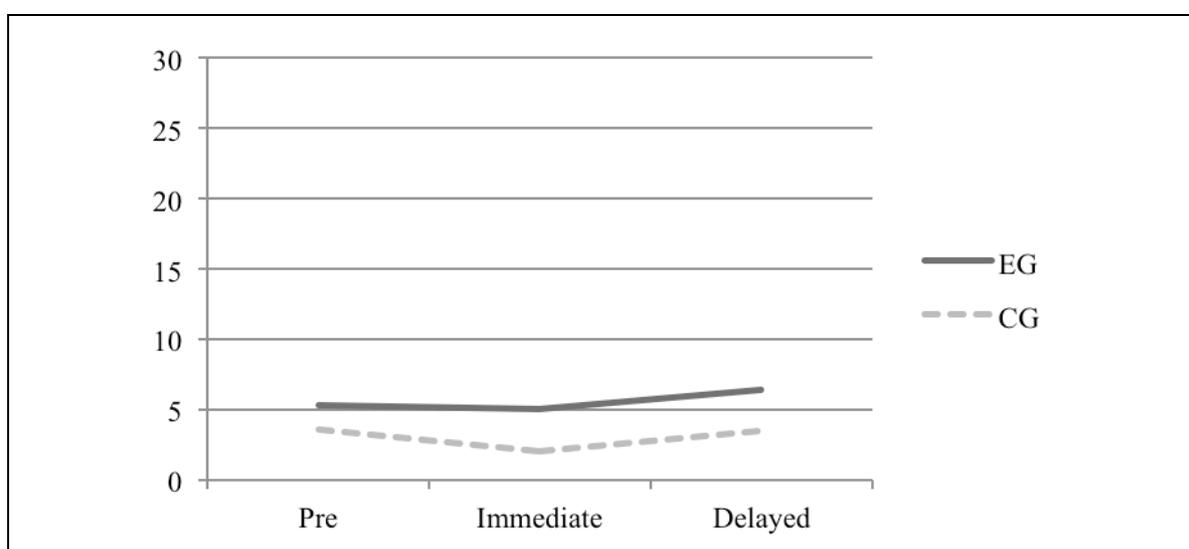


Figure 4.2 The Overall Trend of the Changed Mean Scores on Novel Phrasal Verbs

Figure 4.2 shows that the average scores of the immediate post-test fell from the pre-test, and those in the delayed post-test increased compared to the immediate post-test in both groups. However, Table 4.10 indicates that the mean score of the delayed post-test on the new phrasal verbs in the experimental group increased ($M = 6.46$, $SD = 2.78$) compared to the pre-test score, whereas it decreased in the control group ($M = 3.39$, $SD = 3.32$). This shows the apparent

Table 4.10 Descriptive Statistics of the Pre-test and Delayed Post-test Scores on Novel Phrasal Verbs

	Experimental Group			Control Group		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Pre-test	5.36	2.66	14	3.57	1.96	14
Delayed post-test	6.46	2.78	14	3.39	3.32	14

distinction between the groups' instructional methods on the transferability of the conceptual awareness for the new phrasal verbs. Paired samples *t*-test was used to explore the statistical significance of these changes within each group over time, and Table 4.11 presents the results.

Table 4.11 Paired Samples *t*-test Results of the Pre-test and Delayed Post-test Scores on Novel Phrasal Verbs

Group	<i>Mdiff</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Experimental	-1.12	2.81	-1.48	13	.164
Control	.18	3.07	.218	13	.831

According to the result in Table 4.11, both the increased test result in the experimental group ($t(13) = -1.48, p = .164$) and the decreased test result in the control group ($t(13) = .218, p = .831$) for the delayed post-test were not statistically significant. As a second step, ANCOVA was conducted in order to

see if there is a significant difference between the groups regarding the delayed post-test scores. The result is presented in Table 4.12.

Table 4.12 Results of ANCOVA on Delayed Post-test Scores for Novel Phrasal Verbs

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	Partial η^2
Corrected Model	111.260	2	55.630	7.021	.004	.360
Intercept	32.813	1	32.813	4.141	.053	.142
Pretest	45.224	1	45.224	5.707	.025	.186
Group	25.721	1	25.721	3.246	.084	.115
Error	198.097	25	7.924			
Total	989.500	28				
Corrected Total	309.357	27				

Table 4.12 indicates that there is no significant difference between the experimental and control groups on the delayed post-test scores for the novel phrasal verbs ($F = 3.246, p = .084$). This suggests that the two instructional treatments do not tend to influence the retention of the knowledge transferability in a significantly different way. In other words, the conceptual knowledge transfer to the novel phrasal verbs was not durable in the experimental group, when this result was already expected for the control group as there was no sign of transfer in the first place from the immediate post-test.

According to Boers (2004), only “a short, one-time treatment wouldn’t lead to the long-term retention” (p.216). However, the results in Condon’s (2008) and Ko’s (2018) studies are in accordance with the present finding that there is no sign for the long lasting effect of the concept-based instruction on transfer compared to the traditional approach to teaching phrasal verbs. Considering the fact that the instructional treatments were provided to the participants for over eight weeks in Condon’s (2008) and over two weeks in Ko’s (2018) studies, there should be other reasons for such a finding. The common factor in the three experiments including the current study is the use of Rudzka-Ostyn’s (2003) analyses for the phrasal verbs based on the senses of the particles. Since the explanation on the senses and image schema were substantially abstract, the participants could have not fully understood the concepts.

Though there came out to be no statistical significance in the changed scores within and between the two groups, it needs to be noted that there is an evident distinction in the students’ performance between the two groups. The mean score of the delayed post-test in the experimental group increased when it decreased in the control group, causing the mean difference between the groups to be quite large (3.07). In Section 4.2, the reason for the reduced scores in the experimental group in spite of the successful knowledge transfer was ascribed to the students attempting to work more on the taught items, which require less effort than the new phrasal verbs, and the increased mean scores of the experimental group in the delayed post-test further supports this. Unlike in the

immediate post-test, the powerful effect of the memory would have decreased in the delayed post-test, and the recollection for the taught items would not have been considerably easier any longer, causing the participants to perform on both the test items with similar attention. Therefore, the beneficial effect of the CL instruction on the transferability to the new phrasal verbs explains the experimental group's increased average score in the delayed post-test and the decreased score in the control group.

In sum, the increased scores for the taught phrasal verbs in the delayed post-test having statistical significance and the increased mean score in the experimental group compared to the decreased average score in the control group for the novel phrasal verbs imply the positive effect of CL-based instruction on the better learning retention for the taught phrasal verbs and the transferability to the novel phrasal verbs, respectively. Nevertheless, there was no significant difference between the delayed post-test scores in the experimental and control groups. This can be an answer to the third research question—Is CL-based instruction more effective for the retention of phrasal verb learning and transferring by Korean high school students compared to the traditional approach?—that the cognitive linguistics approach to phrasal verb teaching does not maintain more beneficial effects on the learning retention for the taught phrasal verb and transfer durability compared to the traditional approach.

4.4 Student Perceptions of Phrasal Verb Instruction and Learning

With the purpose of in-depth understanding of the student perceptions for the last research question, the participants' responses to the semi-structured interview will be analyzed and discussed in three themes. Section 4.4.1 discusses students' perception change on phrasal verbs and learning the phrasal verbs. In Section 4.4.2, students' opinion on the instruction is presented, followed by their motivation for future phrasal verb learning.

4.4.1 Perceptions About Phrasal Verbs and Learning Phrasal Verbs

In the experimental group, among the four interviewees, only one person knew what a phrasal verb was before participating in the study and thought that phrasal verbs are difficult to learn. The rest of the students did not even know what a phrasal verb was. With respect to the prior learning experience, one student was not sure, and the rest reported that they never had a lesson for phrasal verbs. In the control group, two students had no prior knowledge about phrasal verbs at all. Among the other two students, one student had experienced learning phrasal verbs in class but this did not help him learn more about phrasal verbs. When asked

about his prior thoughts on phrasal verbs or learning them prior to the experiment, he simply said, “*oh... there is such a thing...*” The other student was uncertain whether he was taught phrasal verbs before or not. Regarding his prior thoughts about phrasal verbs and learning phrasal verbs, the student only reported that a phrasal verb was English words not frequently used.

In short, most of the students in both groups reported that they had not learned phrasal verbs in class and knew almost nothing about phrasal verbs. However, considering the fact that phrasal verbs appear in the middle and high school English textbooks (Noh, 2016; Kim & Park, 2002), it is unlikely that the students had never learned phrasal verbs in class until the 11th grade in school. Therefore, students not being aware of the phrasal verbs and even the fact that they think phrasal verbs are never covered in classes reveal the limitation of the currently existing phrasal verb teaching in schools. There seems to be an urgent need for the reconsideration for the in-class phrasal verb instruction.

When asked about their opinions about phrasal verbs and phrasal verb learning after the experiment, all four students in the experimental group showed some change in their perception. Except for the student with the highest score, three students reported that they became aware of what the phrasal verb was, and one of them said it was a good opportunity for learning the phrasal verbs. It is interesting for the rest of the students except the one with the highest score to show higher awareness of the phrasal verb. However, the student with the highest score seemed to be aware of the possible merits of CL approach in a long term from the student’s interview response saying that it would have been helpful if they were

taught phrasal verbs from earlier on.

In the control group, one of the two students who had no prior thoughts or learning experience on phrasal verbs continued to have no opinions on them. The other student said learning the phrasal verbs was a new experience, but did not report anything about the actual learning or awareness of the phrasal verbs. Among the other two, one student did not show any change in his perception of the phrasal verbs from his prior thoughts and reported the identical line, “*oh... there is such a thing...*” Another student said that phrasal verbs were in fact frequently used than he had previously thought.

Overall, regarding the phrasal verbs and learning the phrasal verbs, there seems to be a more positive change in the students’ perceptions in the experimental group than those of the control group.

4.4.2 Perceptions About Phrasal Verb Instruction and Motivation for the Future Phrasal Verb Learning

As for the experimental group, some distinctly different opinions on the instructional method emerged. While two interviewees showed positive attitudes toward the teaching method, the other two did not. Their test performance was regarded whether the different views on the instruction was related to the scores they gained in the post-test, but there appeared to be no certain aspect. Student A2 gained the highest score in the immediate post-test but reported the difficulty of

understanding the instruction when Student A6 with the lowest post-test score also said that the methods other than using the images would be better (All the translations are the researcher's):

Excerpt 1, Student A2

The presented image should be in more detail... I think it wasn't that helpful because those drawings just had rectangular boxes and circles inside them and it was hard to understand.

Excerpt 2, Student A6

It would be better to learn through other ways than with the images.

Nonetheless, while Student A6 said other methods would be better, Student A2 did not deny the cognitive linguistics method itself but wanted the image to be in more detail. This student is the one who mentioned that it would have been helpful if he had been continuously taught in this way. Therefore, the limited effect of a one-shot treatment of the cognitive linguistics is manifested through this interview, which is in line with Boer's (2004) and Condon's (2008) assertion. It can be difficult to understand the complex cognitive concepts and images for a single treatment, even for the student who gained the highest test scores. On the other hand, Student A7 with the average post-test score in the experimental group said, "*I think it's better to understand the items than merely memorizing them*", and Student A13 whose post-test score remained unchanged

also reported that the instruction was helpful by saying “*I liked this teaching method because I could understand them better with the images*”. These students’ responses depict the possible merits of the cognitive linguistics instruction.

In the control group, students did not comment much on the teaching method, with two of the students not mentioning anything on the instructional method at all. Since the instructional treatment in the control group was the traditional method that did not differ considerably from those of other lessons they usually get, there may not have been many special things to comment on. Between the other two students, one said it would have been easier and more fun if they learned through quizzes. The other student just said it was fun. Since there was no fun element during the instructional treatment, they might have thought it was fun to learn something that seemed new to them apart from school curriculum, for the two students reported that they had never been taught phrasal verbs before.

The contrasting responses between the two groups reveal the students’ different perceptions about the phrasal verb instruction they received. While a few students who were taught through the traditional instruction of the phrasal verbs avoided answering the question on the teaching method, the students that received the CL-based instructional treatment were more willing to report their thoughts on the instruction. A few students from the experimental group also showed the beneficial effects of the approach for their understanding of the phrasal verbs.

When students were asked if they were willing to learn phrasal verbs in the future, all the students from the experimental group said an absolute yes while in the control group, three students said they would and one student

reluctantly said he would, only if he had enough time for that. Consequently in spite of the small difference, all the students from both groups said they would. This suggests that students' motivation for the phrasal verb learning could be raised only through the explicit teaching of the phrasal verbs.

CHAPTER 5.

CONCLUSION

This chapter is composed of three sections. Section 5.1 summarizes the major findings of the present study, followed by their pedagogical implications in Section 5.2. Lastly, Section 5.3 reports the limitations of the current study and makes suggestions for further research.

5.1 Summary of the Major Findings

The present study investigated the effect of cognitive linguistics-based instruction on Korean high school students' learning of English phrasal verbs and the transferability to the novel phrasal verbs along with the retention for both compared to the traditional phrasal verb instruction. In addition, the interview responses were categorized into three themes for the in-depth understanding of the students' perceptions regarding the phrasal verbs, phrasal verb learning and teaching and their motivation for the future phrasal verb learning.

Concerning the first research question that examined students' phrasal verb learning for the items taught through CL approach compared to the control group, the result showed no significant difference between the instructional methods. The result of ANCOVA comparing post-test scores revealed no significant difference between the groups. Nevertheless, this should not be equated

with the CL-based teaching maintaining no pedagogical effect on students' phrasal verb learning since the students in both groups did significantly better on their immediate post-test. Participants' low cognitive and linguistic levels along with their L1 background are assumed to be the reasons for the insignificant difference between the groups. Additionally, more time may have been needed for the conceptual knowledge to have enhanced experimental group's performance.

With respect to the second research question exploring the effect of cognitive linguistics-based instruction on the transferability to the novel phrasal verbs, the result indicates that only the CL instructional treatment allowed the knowledge transfer. When ANCOVA was conducted, there was a significant difference between the groups. Moreover, the pairwise *t*-test result of the control group was significantly poorer, although both groups gained lower scores for the immediate post-test.

For the third research question regarding the effect of instructional treatments on the learning retention and the lasting effect of the transferability to novel items, there was no significant difference between the instructional methods. The result of ANCOVA with the delayed post-test scores between the groups revealed that there was no significant difference. When investigated further, however, in terms of taught phrasal verbs, the increased scores in the delayed post-test of the experimental group were statistically significant whereas it was not statistically significant in the control group, supporting the continued learning through the cognitive linguistics instructional approach. As for the novel items, the delayed post-test score increased in the experimental group while it decreased in

the control group.

Finally, for the fourth research question about the students' perceptions related to learning and teaching of phrasal verbs, the interview responses were looked into three themes. In regard to student perceptions of the phrasal verbs and learning them, students from the experimental group enhanced their awareness of the phrasal verbs more than those from the control group. Moreover, more students considered the instruction helpful among the experimental group compared to the control group. When it came to students' motivation for the future learning of the phrasal verbs, there seemed to be little difference between the two groups.

In sum, the present study provides empirical evidence that the cognitive linguistics-based instruction maintains potential merits for students' phrasal verb teaching and learning. More specifically, while the explicit teaching of phrasal verbs itself was helpful in students' phrasal verb learning and their motivation for future learning regardless of the teaching methods, the cognitive linguistics-based teaching method was more beneficial for the learning retention and knowledge transfer to the new phrasal verbs.

5.2 Pedagogical Implications

Phrasal verbs should be taught in class as the explicit teaching of the phrasal verbs was helpful in itself both for learning the phrasal verbs and for students' motivation. Furthermore, the overall findings indicated that the cognitive

linguistics-based instruction has a positive effect on both the phrasal verb learning and transferring to the novel phrasal verbs to some extent. Since the meanings of the particles share some semantic link in a systematic way and cognitive linguistics approach investigates the semantic networks of the particles, cognitive linguistics-based phrasal verb teaching could be suggested to be an effective phrasal verb teaching method. Providing conceptual knowledge in class would make it easier for the learners to learn phrasal verbs. When applied in class, however, there are several things to be considered.

First, the cognitive linguistics-based teaching of phrasal verbs should be continued for a longer duration. It is difficult for the students to understand the cognitive concepts with only a few lessons. As reported in the interview, students would benefit more with a continued instruction for the phrasal verbs.

Second, it would be more helpful for the students if modified images were to be used for the students' better understanding. This does not mean the image should be eliminated. Although the students who gained the highest score in the post-test expressed his difficulty of understanding the images, suggesting more detailed images to be used, the student with the lowest score reported that the images were helpful for her understanding of the phrasal verbs.

Third, students' individual differences including their cognitive level should be considered. As discussed earlier, the high school participants seemed to need more time and explanation to digest the cognitive concepts compared to the adult learners whose cognitive level is higher. Students' interview responses also indicated that even when the learners' cognitive level may almost be the same,

different students take in the same instruction distinctively.

5.3 Limitations and Suggestions for Future Research

There are some limitations of the present study and these drawbacks could be considered as possible suggestions for future studies.

One major limitation of the current study is the short duration of the experiment and a small number of participants. Since cognitive concepts could be too complex for the learners to understand only through a single instructional treatment in a short time, the result could have been different with the longer duration of the experiment. Moreover, the result would be more reliable with a larger number of participants.

In a similar vein, it is questionable whether the significantly improved immediate post-test results could indicate the students' actual learning, considering the fact that the test was conducted shortly after the 20-minute phrasal verb instruction between the pre-test and the immediate post-test. Future studies should administer tests with long enough time intervals.

In addition, the time intervals between the immediate and the delayed post-test were not the same between the experimental and control groups. Even though the difference was only a day, it should have been controlled for the more precise comparison between the groups.

The considerably low general test scores could be another limitation and

another plausible reason for questioning students' actual learning. The participants' low to low-intermediate English proficiency in the present study is perceived to be the main cause of comparatively low scores. They also do not represent the general 11th-grade Korean high school learners. In future studies, it would provide helpful insights if different learning and transferring patterns were studied regarding students' various proficiency levels.

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APPENDIX 1. A Handout for Cognitive Linguistics-Based Phrasal Verb

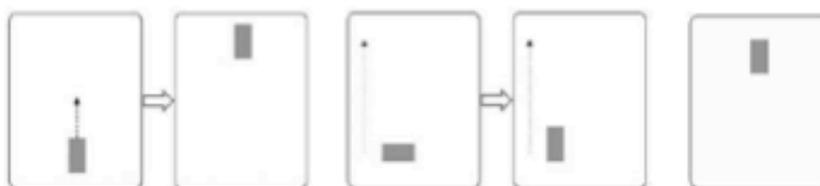
Phrasal Verbs

- Multi-word verbs
- Verb + Particle

Ex) I will explain, so please **calm down!**

UP

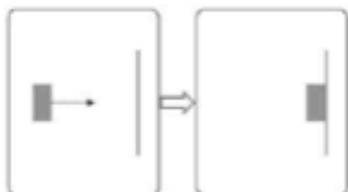
1. **UP: position at a high place or moving up to a higher one**



- Sit up - 바로 앉다

Ex) He was so weakened by his illness, he couldn't even **sit up**.

2. **UP (to): aiming at or reaching a goal, an end, a limit**



- Follow up - 추가로 더 하다

Ex) A good start is fine, but now you have to **follow up** your initiative.

3. **UP: moving to a higher degree, value or measure**

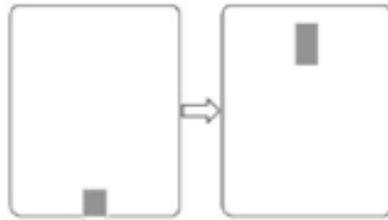
We should further remember that in western cultures and perhaps everywhere in the world:

- ↑ what increases or what is good, beautiful, cheerful, big, strong, solid, courageous/positive, is on top of this vertical dimension or up (or high);
- ↓ what decreases or what is bad, ugly, sad, small, weak, fragile, discouraging or negative is at the bottom of this vertical line of evaluation or down (or low):

- Brush up - 빨리 되찾다, 되살리다/ 향상시키다

Ex) I need to **brush up** my English. How should I go about it?

4. **UP: higher up is more visible, accessible, known**



- Set up - 구성 V/진행 V/조성 V/ 만들다

Ex) The government will **set up** a committee to look into the plane crash.

5. **UP: covering an area completely/reaching the highest limit**

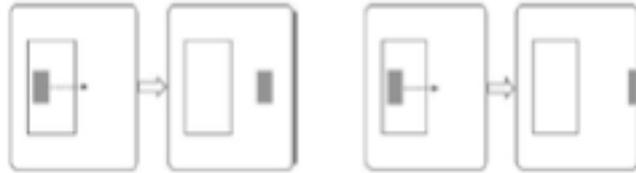


- Wind up - 처하게되다/ 있게 되다

Ex) I never thought I would finally **wind up** in Japan.

OUT-----

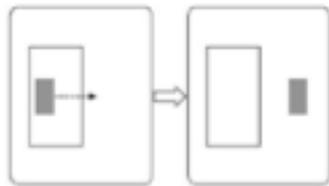
1. OUT: entities moving out of containers



- Set out - 출발하다 / (여행을) 시작하다

Ex) The explorers **set out** at 5 o'clock in the morning.

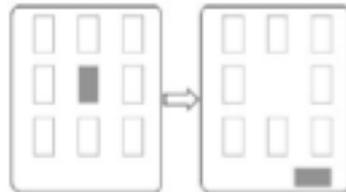
2. OUT: eat or inviting to eat away from home



- Ask out - 불리나다 / 청하다

Ex) I would like to **ask you out** to lunch.

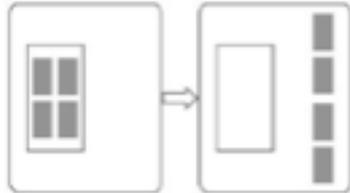
3. OUT: sets, groups are containers



- Count out - 빼다 / 제외시키다

Ex) **Count me out**, I won't be able to come to your party.

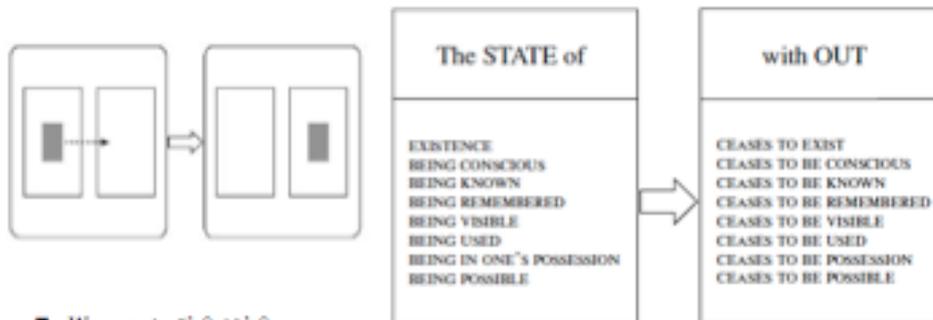
4. **OUT: bodies, minds, mouths are viewed as containers**



■ Stick out - 내밀다

Ex) The little girl **stuck out** her tongue at the old lady.

5. **OUT: States/situations are containers**

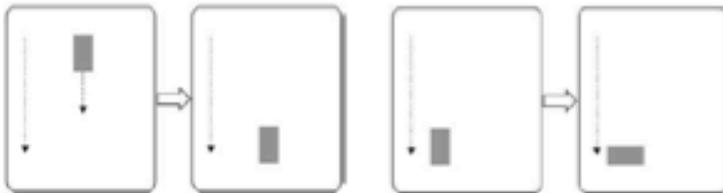


■ Wear out - 닳은 / 낳은

Ex) You need new shoes: these are completely **worn out**.

DOWN-----

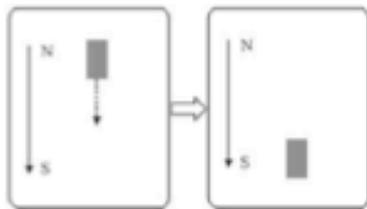
1. DOWN: movement from a higher to a lower place



- Talk down - 폼하하다/잡아내리다

Ex) The ground crew **talked** the inexperienced learner pilot **down**.

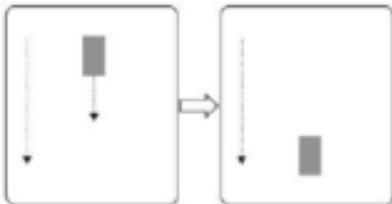
2. DOWN: time and geographically orientated motion



- Go down - 기록되다/기억되다

Ex) She will **go down** in history as the greatest opera singer.

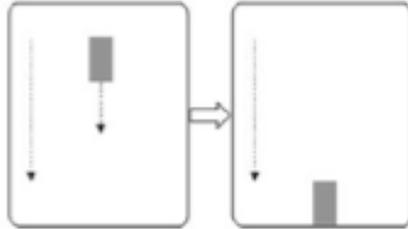
3. DOWN: decrease in intensity, quality, quantity, size, degree, value, activity, status, strength...



- Bring down - 꺾어내리다/도산,붕괴시키다

Ex) The growing inflation rate is bound to **bring down** the government.

4. **DOWN: reach a goal, completion, extreme limit down the scale**



- Tear down - 허물다 / 해체하다

Ex) They'll **tear down** all the old buildings to make room for a new development.

5. **Down: movements of eating or writing**

- Take down - 필기하다 / 적다 / 쓰다

Ex) He listened very attentively but did not **take down** anything.

APPENDIX 2. A Handout for Traditional Phrasal Verb Instruction

Phrasal Verbs

- Multi-word verbs
- Verb + Particle

Ex) I will explain, so please **calm down!**

=====List of Phrasal Verbs=====

번호	구동사	뜻	예문
1	ask out	물리내다/ 청하다	I would like to ask you out to lunch.
2	bring down	과열시키다/ 도산, 붕괴시키다	The growing inflation rate is bound to bring down the government.
3	brush up	활리 되찾다, 되살리다/ 향상시키다	I need to brush up my English. How should I go about it?
4	count out	떼다/ 제외시키다	Count me out , I won't be able to come to your party.
5	follow up	추가로 더 하다	A good start is fine, but now you have to follow up your initiative.
6	go down	기록되다/ 기억되다	She will go down in history as the greatest opera singer.
7	set out	출발하다/ (여행을) 시작하다	The explorers set out at 5 o'clock in the morning.
8	set up	구성 V/건립 V/조성 V/ 만들다	The government will set up a committee to look into the plane crash.
9	sit up	바로앉다	He was so weakened by his illness, he couldn't even sit up .
10	stick out	내밀다	The little girl stuck out her tongue at the old lady.
11	take down	필기하다/ 적다/ 쓰다	He listened very attentively but did not take down anything.
12	talk down	폄하하다/ 꺾어내리다	The ground crew talked the inexperienced learner pilot down .
13	tear down	허물다/ 해체하다	They'll tear down all the old buildings to make room for a new development.
14	wear out	낡은/ 닳은	You need new shoes: these are completely worn out .
15	wind up	저하게되다/ 있게 되다	I never thought I would finally wind up in Japan.

APPENDIX 3. Pre-Test

Pre-Test		
		개인 코드: _____
각 문장의 빈칸에 들어갈 적절한 particle (out/ up/ down) 을 써서 구동사를 완성하고 밑줄 친 구동사의 뜻을 한국어로 적으세요. -총 30문제-		
번호	문장	뜻
1	Our oldest has digestive problems and <u>throws</u> all the time.	
2	The explorers <u>set</u> at 5 o'clock in the morning.	
3	You'll see, he is a liar and will be trying to <u>cook</u> an excuse again.	
4	The ground forces <u>shot</u> two enemy planes.	
5	Our daughter wants to <u>take</u> music and maths.	
6	He will <u>blow</u> when he sees what you have done.	
7	The little girl <u>stuck</u> her tongue at the old lady.	
8	A good start is fine, but now you have to <u>follow</u> your initiative.	
9	She will <u>go</u> in history as the greatest opera singer.	
10	The government will <u>set</u> a committee to look into the plane crash.	
11	The ground crew <u>talked</u> the inexperienced learner pilot _____.	
12	The fire was <u>put</u> very fast.	
13	This diet will allow you to <u>build</u> your strength in no time.	

14	The growing inflation rate is bound to <u>bring</u> the government.	
15	I never thought I would finally <u>wind</u> in Japan.	
16	The government is trying to <u>cut</u> scholarships by 25% to save money.	
17	I need to <u>brush</u> my English. How should I go about it?	
18	Teenagers like to <u>cut</u> articles about their idols.	
19	I <u>invite</u> you _____ to the party we are organizing this Friday.	
20	The government is trying to <u>put</u> all political opposition.	
21	<u>Cross</u> the word that does not fit in each series.	
22	He <u>held</u> his hand to greet us.	
23	They'll <u>tear</u> all the old buildings to make room for a new development.	
24	I would like to <u>ask</u> you _____ to lunch.	
25	<u>Count</u> me _____, I won't be able to come to your party.	
26	He was so weakened by his illness, he couldn't even <u>sit</u> _____.	
27	You need new shoes: these are completely <u>worn</u> _____.	
28	The force of the blast <u>knocked</u> us _____.	
29	Before constructing a new building, the old one must be <u>pulled</u> _____.	
30	He listened very attentively but did not <u>take</u> anything.	

APPENDIX 4. Immediate Post-Test

Post-Test		
		개인 코드: _____
각 문장의 빈칸에 들어갈 적절한 particle (out/ up/ down) 을 써서 구동사를 완성하고 밑줄 친 구동사의 뜻을 한국어로 적으세요. -총 30문제-		
번호	문장	뜻
1	The smell was so disgusting. It made you want to <u>throw</u> _____.	
2	The next morning, at five o'clock, they <u>set</u> _____ on the twelve-hour drive north to Lake Tahoe.	
3	Rachel <u>cooked</u> _____ some excuse about her car breaking down, but I guessed that she'd been seeing Rupert.	
4	American war planes <u>shot</u> _____ an Iraqi jet inside the no-fly zone.	
5	When did Bryan <u>take</u> _____ golf?	
6	Why did he <u>blow</u> _____ like that? He's usually so calm.	
7	Lally <u>stuck</u> her head _____ of a window.	
8	The band is planning to <u>follow</u> _____ their new record with a three-month tour of the US.	
9	David Robinson is sure to <u>go</u> _____ as one of the greatest ever basketball players.	
10	They want to <u>set</u> _____ their own import-export business.	
11	Pessimists who <u>talk</u> _____ the achievements of our manufacturing industries.	
12	Please stay in your seats and <u>put</u> _____ your cigarettes.	
13	Don't do too much - you need to <u>build</u> _____ your energy for the match.	

14	A defeat on this issue could <u>bring</u> _____ the government.	
15	Stricter discipline is needed in order to stop children like these <u>winding</u> _____ in reform school or prison.	
16	Could you try and <u>cut</u> _____ the amount of time you spend on the phone?	
17	I need to <u>brush</u> my French _____ a bit.	
18	Slice the avocado in half and <u>cut</u> _____ the stone.	
19	I've been <u>invited</u> _____ to dinner, but I don't feel like going.	
20	The government had successfully <u>put</u> _____ a series of revolts.	
21	She <u>crossed</u> _____ the word 'Miss' and wrote 'Dr' instead.	
22	"Have you seen this?" Casey said, <u>holding</u> _____ a piece of paper.	
23	The church had been so badly damaged that it had to be <u>torn</u> _____ and rebuilt.	
24	Brad wouldn't have <u>asked</u> her _____ for a meal if he didn't like her.	
25	If you're going to gossip, you can <u>count</u> me _____.	
26	Sandie forced herself to <u>sit</u> _____ straight during the interview.	
27	He did not want them walking up and down the stairs and <u>wearing</u> _____ the stair carpet.	
28	As Tracey was getting out of her car, a motorcycle nearly <u>knocked</u> her _____.	
29	The old railway station was closed and <u>pulled</u> _____ around 1965.	
30	Let me <u>take</u> _____ your name and phone number.	

APPENDIX 5. Delayed Post-Test

Delayed Post-Test		
		개인 코드: _____
각 문장의 빈칸에 들어갈 적절한 particle (out/ up/ down) 을 써서 구동사를 완성하고 밑줄 친 구동사의 뜻을 한국어로 적으세요. -총 30문제-		
번호	문장	뜻
1	The smell was so disgusting. It made you want to <u>throw</u> _____.	
2	The next morning, at five o'clock, they <u>set</u> _____ on the twelve-hour drive north to Lake Tahoe.	
3	Rachel <u>cooked</u> _____ some excuse about her car breaking down, but I guessed that she'd been seeing Rupert.	
4	American war planes <u>shot</u> _____ an Iraqi jet inside the no-fly zone.	
5	When did Bryan <u>take</u> _____ golf?	
6	Why did he <u>blow</u> _____ like that? He's usually so calm.	
7	Lally <u>stuck</u> her head _____ of a window.	
8	The band is planning to <u>follow</u> _____ their new record with a three-month tour of the US.	
9	David Robinson is sure to <u>go</u> _____ as one of the greatest ever basketball players.	
10	They want to <u>set</u> _____ their own import-export business.	
11	Pessimists who <u>talk</u> _____ the achievements of our manufacturing industries.	
12	Please stay in your seats and <u>put</u> _____ your cigarettes.	
13	Don't do too much - you need to <u>build</u> _____ your energy for the match.	

14	A defeat on this issue could <u>bring</u> _____ the government.	
15	Stricter discipline is needed in order to stop children like these <u>winding</u> _____ in reform school or prison.	
16	Could you try and <u>cut</u> _____ the amount of time you spend on the phone?	
17	I need to <u>brush</u> my French _____ a bit.	
18	Slice the avocado in half and <u>cut</u> _____ the stone.	
19	I've been <u>invited</u> _____ to dinner, but I don't feel like going.	
20	The government had successfully <u>put</u> _____ a series of revolts.	
21	She <u>crossed</u> _____ the word 'Miss' and wrote 'Dr' instead.	
22	"Have you seen this?" Casey said, <u>holding</u> _____ a piece of paper.	
23	The church had been so badly damaged that it had to be <u>torn</u> _____ and rebuilt.	
24	Brad wouldn't have <u>asked</u> her _____ for a meal if he didn't like her.	
25	If you're going to gossip, you can <u>count</u> me _____.	
26	Sandie forced herself to <u>sit</u> _____ straight during the interview.	
27	He did not want them walking up and down the stairs and <u>wearing</u> _____ the stair carpet.	
28	As Tracey was getting out of her car, a motorcycle nearly <u>knocked</u> her _____.	
29	The old railway station was closed and <u>pulled</u> _____ around 1965.	
30	Let me <u>take</u> _____ your name and phone number.	

국 문 초 록

본 연구는 인지언어학적 접근의 교수법이 한국 고등학생들의 영어 구동사 학습과 학습의 지속성에 주는 영향을 분석하고자 하였으며 구동사 학습과 지도에 대한 학생들의 인식 또한 조사하였다. 지금까지 인지언어학에 근거한 어휘 교육 관련 문헌이 늘어나고 있지만, 이 접근법을 구동사 교수법에 적용한 주요 연구들은 일치하지 않는 결과를 보인다 (Kovecses & Szabo, 1996; Boers, 2000; Condon, 2008; Yasuda, 2010). 본 연구는 이러한 상이한 연구들에 추가적인 표본을 제시하고, 나아가 영어와 확연히 다른 L1을 사용하는 한국인 학생들을 포함함으로써 영어와 다른 유형의 모국어를 갖는 다양한 EFL 학생들 대상의 인지언어학적 기반 구동사 지도의 유용한 시사점을 제공하고자 하였다.

본 연구에서는 한국 공립 고등학교 2 학년 28 명이 참가했으며 학생들은 실험 집단과 대조 집단에 배정되었다. 각 집단은 두 번의 모임을 가졌으며 첫 번째 모임은 사전 검사, 구동사 강의 및 인접 사후 검사로, 두 번째 모임은 지연 사후 검사와 8명의 선발된 학생들을 대상으로 한 면담으로 구성되었다. 대조 집단은 알파벳 순서로 구성된 구동사 목록을 받고 한국어 번역과 동의어, 예문 설명을 들은 반면 실험 집단에게는 첨사(particle) 위주로 분류된 구동사 목록, 이미지 도식과 함께 첨사에 대한 인지적 개념 설명이 제공되었다.

배운 구동사 학습에 대한 ANCOVA 결과에 따르면 두 집단 간의 유의미한 차이는 드러나지 않았으며 이는 실험 집단의 인지언어학 기반 교수법이 대조군의 교수법보다 학습에 보다 큰 도움을 주지는 않았음을 보여준다.

새로운 구동사로의 전이에 관하여서는 실험 집단과 대조 집단 간의 차이가 통계적으로 유의미했으며, 이는 인지언어학적 지도가 새로운 구동사의 의미를 유추하는데에 미치는 긍정적인 효과를 보여준다. 두 교수법이 학습과 전이에 갖는 지속적 효과에 대하여서는 그룹 간의 유의미한 차이가 없었다. 하지만 각 그룹 내의 비교에서 실험 집단만이 배운 구동사에 대한 학습이 통계적 유의성을 가지고 지속되었다. 또한 지연 사후 검사에서 실험 집단의 평균 점수는 오른 반면 대조 집단의 평균 점수는 떨어졌으며 이는 두 집단의 서로 다른 교수법이 상이한 효과를 가졌음을 드러낸다. 실험 집단 학생들의 면담에서는 구동사에 대한 인식이 더욱 향상되었고 지도에 대해서도 긍정적인 태도를 보였다.

이러한 결과들은 인지언어학적 접근의 교수법으로 구동사를 가르칠 때의 잠재적 이점을 제시하며 교육적 함의를 지닌다. 그러나 수업에 적용 할 때에는 충분히 긴 수업 기간, 학생들의 보다 쉬운 이해와 함께 개인의 능숙도에 적합한 도식 등의 사항들이 충분히 고려되어야 할 것이다. 이러한 쟁점들은 앞으로의 연구를 위한 제안으로 제시될 수 있다고 사료된다.

주요어: 인지언어학적 접근, 구동사 지도, 한국어 EFL / L1 학습자, 구동사 학습 인식

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