A Case Study on Testing English Grammatical Collocation Use of University Students in Korea

Hyojin Jeon
(Seoul National University)

Jeon, Hyo-jin. 2010. A Case Study on Testing English Grammatical Collocation Use of University Students in Korea. SNU Working Papers in English Linguistics and Language 9, 145-158. This paper explores the grammatical collocation use of adult learners at high-intermediate and advanced level. English being a foreign language in Korea, learners necessarily need linguistic knowledge of English. This paper focuses on English verbs and the following elements in particular. Considering that English verb-particle collocations represent English grammatical collocations, a set of multiple-choice written test of 96 items and a questionnaire was designed to test learners' knowledge and use of English verbs and their following particles. Seventeen undergraduate students at Seoul National University participated in the test. Despite their high English proficiency level, many of them showed the lack of knowledge and appropriate use of English verb-particle collocations. (Seoul National University)

Keywords: collocation, grammatical collocation, verb-particle, multi-word, collocation test

1. Introduction

From various standpoints of the linguistics and language education, there is no room for doubt that grammar is one of the most essential components in language due to the fact that it is intimately related to both knowledge and production of meaningful chunks in language. From this reason, the acknowledgement of the importance of learning, teaching, training, and testing grammatical knowledge requires in-depth studies and the intensive evaluation of the educational programs. It is probably true that some words accompany other words as a unit — whether they are decomposable or not — in all languages. Such language units are called collocations, which could be also considered

as a part of vocabulary domain. The main interest of this paper is particularly in verb-particle constructions (henceforth VPC), which is precisely put in perspective of a subcategory of grammatical collocations. The distinction is for the research of the internalized knowledge and use of verb-particle constructions of the Korean EFL learners in collage level. For this purpose, a set of VPC tests is designed to investigate the performance of the Korean EFL learners, whose scope of target collocation forms to be measured is limited only to the English verb-particle phrases. The main research question of this paper is whether or not a connection exists between the Korean EFL learners' knowledge of verb-particle collocations and general English proficiency; if any, how much relationship there could be, and to what extent they are correlated.

The remainder of this paper is structured as follows. Section 2 offers the main concept and knowledge on collocations. Section 3 describes the data and methods for this research. Section 4 evaluates the results concerned with the data and methods in statistical ways. Finally, Section 5 concludes this paper with the evaluation and implication of the research.

2. Background information 2.1 Collocation

Since Firth (1957) introduced the concept of collocations, 'the company words that keep together', in linguistics, many researchers in the branches of vocabulary have attempted to define and use them in their own studies related to language learning and teaching; Nesselhauf (2005) argued that they are composed lexically, syntactically, and even semantically, pragmatically, or idiosyncratically.

Collocations can be roughly said to be formulaic sequences, and according to various researchers, called by various terms: prefabricated patterns, multi-word phrases, semi-fixed word expressions, and so on. It is likely that collocations are in the intersection of the sets of idioms and free word combinations. Some of them can be grouped by the degree of the strength of collocates, while they are broadly divided into two subcategories, lexical and grammatical collocations. Lexical collocations are fixed and loose in the word combinations, the meanings

of which are predictable from the elements of the associated words, such as *commit a crime*, *start a family*, *keep a diary*. In contrast, grammatical collocations are lexicalized as single units. These chunks considerably co-occur with each other, whose meanings are formulaic or sometimes idiomatic, as in the examples of *extend to*, *look forward to*, *fall for*, and include the multiple word expressions which combine verbs and particles, whether prepositions or adverbs. Benson, Benson, and Ilson (1986) classified the types of lexical collocations into seven groups and grammatical collocations into eight groups on the basis of the associated word patterns. Benson et al. (1997) also suggested a list of lexical collocations in their The BBI Combinatory Dictionary on English Grammatical Collocations as follows: noun + preposition, noun + to-infinitive, noun + that-clause, preposition + noun, adjective + preposition, predicative adjective + that-clause, and the 19 verb patterns. These are briefly displayed in Table 1.

Table 1. Categories of collocations (Benson et al., 1997)

Lexical collocations		Grammatical collocations		
Pattern	Example	Pattern	Example	
V + N/ PRON/PP	wind a watch come to a result	N + PP/to V /that clause	an argument about it a problem to solve	
A + N	strong tea	P + N	in advance	
N + V	Bombs explode	A + PP/to V/	fond of it	
N1 of N2	a school of whales	A + PP/to V/ that clause	afraid that it appeared	
Adv + A	strictly accurate	19 verb patterns:	offer to help	
V + Adv	affect deeply	V + to V/that clause V + wh-clause	admit that it is wonder whether it is	

Note. V = verb, N = noun, PRON = pronoun, PP = prepositional particle, A = adjective, Adv = adverb, to V = infinitive

2.2 Grammatical collocation

The history of the researches related to collocations not being short, collocation studies have been partially conducted with too much emphasis on lexical collocations. Relatively less attention on grammatical collocations might be paid due to the fact that they are dependent on grammatical principles rather than on the meanings of the associated elements. However, since grammatical collocation can be an excellent medium, it is possible for the learners to learn both vocabulary and grammar at the same time, each of which would be closely connected with a set of words and grammatical principles. It is also possible for the teachers to see the collocational ability of the learners. For instance, the English verb phrase *look forward to*, which means 'be eager for', is followed not by the base form of verb but by a gerund. Such phrases are particularly referred to as lexico-grammatical units (Nattinger & DeCarrico 1992).

3. Methodology

To date, various verb-related researches have provided a common denominator between lexical collocations and grammatical collocations. Lexical collocation of verb-noun has been the most focused on verbs having their own following nouns, while grammatical collocations have mainly focused on the patterns of verbs associated with the preposition which can be sometimes regarded as a subtype of the particle. This is the driving force that impelled this paper to examine the phenomena related to verb-particle constructions, combining forms of verbs and adverbial prepositions and particles, representing the grammar and collocation knowledge of the learners.

When it comes to language tests, it could be masked by interactions with attributes of the learners or the test task itself. However, the performance of learners' grammar might not be captured fully enough to illustrate their underlying grammatical knowledge because it involves what test-takers not only understand but also produce; it is precise in grammar and meaningful in context. Knowledge of grammatical meanings represents the collaboration of semantic, phonological, lexical, morphosyntactic, and cohesive information management and interactional forms (Purpura 2004). In other words, the research on

learners' collocation usage can pertinently reflect their general English proficiency.

3.1 Participants

The research for this study was conducted in Seoul National University with 17 students under undergraduate and graduate courses (7 males and 10 females) in the age between 19 and 31. All of the subjects were paid for the reward of the participation, retaining the scores of both TOEFL and TEPS ranging between advanced and near-native levels. However, they were not classified into proficiency level groups according to official scores, taking several facts into consideration: (1) all of them have different educational background, such as major, the length of English study in public education system, the year of arrival, and duration of residence in English-speaking countries (2) the number of participants was not large enough to get statistically significant results. Thus, no subject was excluded by reason of the TOEFL score fallen below or going above a standard deviation. The average scores of them will be suggested in the Results section with their verb-particle collocation test scores.

3.2 Classification of verb-particle construction types

As described in Table 1, Benson et al. (1997) gave a distinction on the types of grammatical collocations, leaving something to be desired. It led this paper to reclassify the verb-related collocations, particularly restricted to the phrases consisting of verbs and the particles and prepositions linked with them.

The classification of English verb-particle constructions into seven units in conformity with the following elements of verbs, as Benson et al. (1997) already did. English verb phrases can be roughly sorted into four groups with the criterion of the types of the verb-following elements: intransitive verbs and particles, intransitive verbs and preposition, transitive verbs and particles, and transitive verbs and prepositions. However, for an in-depth study, they can be reclassified into seven units according to the patterns of the associated words: (1) intransitive verb plus particle (2) intransitive verb plus preposition (3) transitive verb plus immovable particle (4) transitive verb plus movable

particle (5) transitive verb plus preposition (6) transitive verb plus noun and preposition (7) transitive verb plus preposition phrase. Table 2 provides the summary of these and the relevant examples.

Table 2. Classification of verb-particle collocation types

Pattern		Example	
Type 1	Vi+particle	come up, look on, settle down	
Type 2	Vi+preposition	believe in, get over, run across	
Type 3	Vt+immovable particle	bring up, make out, take off	
Type 4	Vt+movable particle	carry on, fill in, tell apart	
Type 5	Vt+preposition	confuse with, engage in, put through	
Type 6	Vt+noun+ preposition	keep an eye on, make sense of, take advantage of	
Type 7	Vt+prepositional phrase	bring into focus, have on one's mind, take into account	

Note. Vi = intransitive verb, Vt = transitive verb

3.3 Verb-particle collocation test

Independently of the existing English proficiency tests officially accepted over the world, a set of verb-particle collocation test (henceforth, VPC test) was designed for the research, which combined three sections consisting of the questions restricted only to verb-particle constructions that were sub-categorized as Table 2 showed; section 1 contains 10 multiple-choice test items to examine the learners' grammar knowledge in English prepositions and particles; sections 2 and 3 are 40 gap-filling test items to measure the learners' use of grammatical collocations on verb-particle constructions, respectively. All the verbal phrases of test items were consulted in Oxford Collocations Dictionary for Students of English (2002) and The Oxford dictionary of idioms

(2004). Instead of giving time limit, all the subjects were asked to record the time spent in solving the whole 90 questions without pause; 31.13 minutes was the average time consumed for the participants, according to their responses. For a more objective and fair judgment, participants' TOEFL and TEPS (The Test of English Proficiency developed by Seoul National University) scores are also to be investigated in order that this study may show us clearer views of their English ability. At the end of the test was attached a 10-item questionnaire to examine the extra-linguistic factors, such as learner age, gender, educational background, any particular experience to have studied collocations, etc.

3.4 Scoring and data analysis

The subjects' answer sheets were collected and scored by the researcher at first hand, and then analyzed using computational measurement. Microsoft Excel 2007 was used to process the data and make charts, particularly for the simple calculation on the raw scores of the test items. Descriptive statistics was as well performed to observe the mean score of VPC; the correct response of the subjects on VPC was recorded as 1, the wrong response as 0. For the statistical analysis, korean version 12.0 of SPSS (Statistical Package for the Social Science) was used. Scoring the subjects' answers to the questionnaire was not essentially a mechanical task and they were briefly recorded as a document form. This will be touched on in the next section.

4. Results and discussion 4.1 Major findings of the study

To begin in earnest, the scores of participants got in each test need to be presented, as mentioned in section 3.3, 17 students under undergraduate and graduate courses were not divided according to the proficiency level based on their officially accepted test scores. It is because although they showed a difference between the lowest and the highest scores, the gap was not huge enough to be meaningful: from 700 to 930 in TEPS and from 80 to 118 in internet-based TOEFL (iBT TOEFL). Table 3 shows the description of the test-takers' scores.

Table 3. Descriptive statistics among VPC Test, TEPS, and iBT TOEEL scores of participants

	N	Min.	Max.	Mean	SD
VPC test	17	42	68	54.59	8.14
TEPS	17	700	910	<i>7</i> 95.88	68.72
iBT TOEEL	17	68	115	93.47	14.46

Note. N = number of participants, Min. = minimum score of participants, Max. = maximum score of participants, SD = standard deviation

For the further investigation on the status of participants, they were divided into gender groups according to the test types. Here, female students were positioned higher in their overall test scores, as shown in Table 4. However, the number of the subjects was so small that it might not represent the Korean EFL students based on the gender variable; this is the reason why no figures would be calculated according to the genders henceforth.

Table 4. Average scores of standardized test scores and VPC test

	Average score				
Gender	Gender		VPC		
	TEPS	TOEFL	Section 1	Section 2	Section 3
Male	823.5	97	7.5	16.5	34.83
(7)	(990)	(120)	(10)	(40)	(40)
Female	841.88	102.88	8.5	25.25	51.25
(10)	(990)	(120)	(10)	(40)	(40)
Total	834	100.36	8.05	21.5	44.21
(17)	(990)	(120)	(10)	(40)	(80)

Note. The numerical values in parentheses stand for the number of the subjects or full mark in each test.

4.2 Analysis of seven subtypes of verb-particle collocations

Next, Pearson Product-Moment Correlation Coefficient was computed for each test to see the correlation among VPC and standardized English proficiency tests, that is, TOEFL and TEPS. Unfortunately, the result seems insignificant judging from the p-values are over 0.05, but this might be due to the small number of total participants: see Table 5.

Table 5. Test Reliability between VPC test and official English tests

	VPC test	TEPS	iBT TOEEL
VPC test	1		
TEPS	.874	1	
iBT TOEEL	.889	.913	1

This possibly weakens the meaning of the results, but is still positive, in that the numerical values show a high degree of meaningful relationships of VPC test to other kinds of tests. In respect of the sub-test reliability between sections of VPC test, as Table 6 displays, the VPS test can be powerfully effective only after the whole sections are included in the test. Figure 1 gives the whole picture of the participants' test scores.

Score distribution of participants

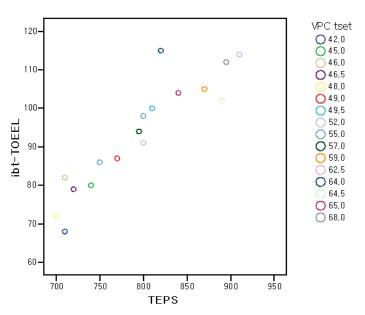


Figure 1. The measure of dispersion from VPC test and standardized English test of the participants

Table 6. Sub-test reliability between sections of VPC test

	Section A	Section B	Section C	Total
Section A	1			
Section B	.166	1		
Section C	.202	.664	1	
Total	.400	.819	.945	1

When it comes to the test reliability, instead of the inter-relationships among the test scores of standardized official English tests, Cronbach's Alphas were calculated to see the reliability of the VPC test. As for the level among the three tests — VPC test, TEPS, and iBT TOEEL, it was moderate at first: according to Cronbach's Alpha, VPC test's alpha was only 0.563. Yet, after adjusting the level based on the standardized items, the numerical value was raised up to 0.961. The case of intra-test reliability of VPC test had the similar results; first Cronbach's Alpha level was 0.793, and then Cronbach's Alpha Based on Standardized Items went up to 0.83.

4.3 Discussion

In developing VPC test used in this study, pretest was performed to one native speaker and one near-native speaker of English in order to find out whether there were any awkward expressions or not and how difficult the levels of the test were by native speaker intuition.

However, both of them got around half or a bit more than half scores of the perfect scores. This was rather disappointed, considering that all of the test items were written in standard English used in practice, and referred to on Oxford Collocations and Idioms Dictionary, and that the two pretest-takers regarded the test as approximately medium level. This is the reason that the item difficulty and item discrimination are necessary for further study. Perhaps, that is interpreted as some of the expressions are confusing or are not habitually used in the everyday language.

Meanwhile, it was difficult for this study to get statistically meaningful results and to generalize them beyond the subjects of this study due to the insufficient subjects. The small number of the subjects led this research to remain a pilot-level study for the further.

Based on the questionnaire of the end of the VPC test, this study revealed that the learners tend to think that the materials and instructions in their education are very restricted or inadequate to acquire enough collocation knowledge and to train themselves in actual use. In addition, most of them point out that simply throwing the bundles of lists to memorize is not useful, without any practical exercises, such as making use of sample sentences included in concrete contexts and in the real life situations. In this respect, EFL teachers need to make greater efforts constantly to develop a variety of materials for learners. It would be desirable for the EFL teachers to drill their students to have a good command of meaningful expressions such as collocations

in the authentic situations, and to break away from the traditional memorization-based collocation teaching methods. They should enhance the learners' interests in learning under classroom-centered educational conditions.

5. Conclusion

The current study has attempted to explore the relations between English verb-particle constructions and EFL acquisition. Up to date, few or no studies have yet been conducted to report the relationship among the knowledge of verb-particle constructions in Korea. This can make this study significant, in that it directly helps our understanding of the nature of collocations. The study indicates the correlations between the level of learners' verb-particle construction use and general language proficiency, although the further studies of larger scale should be carried out so as to investigate if the quality and quantity of verb-particle construction use will benefit EFL learners' ability to have a command of collocational expressions.

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Hyojin Jeon tohyojin@snu.ac.kr

APPENDIX 1

Test score conversion table

TEPS	cbt-TOEFL	iBT TOEFL
901~990	271~300	110~120
821~900	251~270	100~109
741~820	231~250	90~99
651~740	216~230	81~89
501~650	193~215	69~80
0~500	0~192	0~68

Note. cbt-TOEFL = computer-based TOEFL iBT TOEFL = internet-based TOEFL