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Study on the Use of Language Learning Strategies by Korean University EFL Students*

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The purpose of this study is to investigate the use of language learning strategies by Korean university students learning English as a Foreign Language (EFL) by proficiency and class type. Students of two class types were compared for significant differences in strategy use, one a general English class teaching English conversation (EC) (n=31) and the other an English for specific purposes class teaching business English (BE) (n=31). Students' proficiency was based on their TOEIC scores and their use of language learning strategies was measured by the Strategy Inventory for Language Learning (SILL) version 7.0 for ESL/EFL students. The findings indicated no significant correlation between proficiency and strategy use. With regard to use of learning strategies by class type, EC used compensation strategies most, while BE employed metacognitive strategies most. Between the two classes, a significant difference was noted in cognitive and affective strategies and marginally significant difference in metacognitive and memory strategies. A multiple regression analysis revealed that BE used more learning strategies than EC in all categories except compensation strategies. Furthermore, BE's use of cognitive learning strategies was significantly higher than that of EC. Pedagogical implications are discussed in the final section of the paper.

[language learning strategies/EFL/proficiency/class type]

I. INTRODUCTION

Why are some students more successful in learning English than others? Much effort has been put into answering that question and a substantial body of empirical studies points to

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a positive relationship between language learning strategies and second language (L2)/foreign language (FL) achievement (Green & Oxford, 1995: Griffiths & Parr, 2001; Oxford & Ehrman, 1995; Oxford & Nyikos, 1989; Park, 1997; Wharton, 2000). According to Oxford (1990), learning strategies are "operations employed by the learner to aid the acquisition, storage, retrieval, and use of information…; specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-direct, more effective, and more transferable to new situations" (p. 8). In other words, when learners are cognizant of the process of language learning and attempt is made to meet their language learning needs, strategies could act as effective tools to improve their foreign language communicative ability (O'Malley & Chamot, 1990). Therefore, when guided properly in the use of appropriate language learning strategies, L2/FL learners could benefit greatly and become successful language learners.

Korean university students put in long, hard hours to study English because for them achieving English fluency means not only securing a job where now English is almost always required but also being able to freely communicate with foreign people, advancing their academic career in an English-speaking country, and also gaining access to the wide array of information on the vast worldwide web which is offered mostly in English. The reality, however, is that a vast majority of Korean students suffer from lack of confidence in their English proficiency and are always seeking advice from experts on how to learn English better. That being said, if the students were provided with proper learning strategies, their learning needs would be better met and their L2/FL communicative ability further enhanced.

At present, many universities in Korea are increasing the number of classes within the English program to suit the students' needs with more emphasis on practical needs (Lee, 2014). The increase in number of English teaching classes has given rise to various types of English classes offered (e.g., general English, English for specific purposes, English for academic purposes). A considerable amount of research has been done to examine the relationship between language learning strategies and numerous variables; there is, however, little in the extant literature which focuses on the use of language learning strategies by different class types especially of students learning English as a foreign language (EFL) in Korea. The researcher hopes to add more to the existing literature some empirical evidence to build a more conclusive theoretical framework on the effective use of language learning strategies by Korean university EFL students. To that end, this study aims to explore the use of language learning strategies by Korean university EFL students by (1) proficiency and (2) class type. Two class types, one a general English class and the other an English for specific purposes class, are compared for distinctive differences in the usage of language learning strategies. First, this paper investigates whether there is a significant relationship between proficiency and use of language learning strategies. And

then, it examines how students' use of language learning strategies varies by the type of class they are enrolled in. To meet this aim, the following research questions were designed:

1. Is there a relationship between proficiency and use of language learning strategies?
2. Is there a relationship between class type and use of language learning strategies?

II. LITERATURE REVIEW

1. Language Learning Strategies and SILL

There have been many attempts by L2/FL researchers to clearly define language learning strategies. Cohen (1998) referred to them as ''those processes which are consciously selected by learners and which may result in action to enhance the learning or use of a second or foreign language'' (p. 3). O'Malley and Chamot (1990), more simply, characterized such strategies as involving particular thoughts or behaviors that students may use to help them in understanding and retaining new information. Oxford (1990) claimed that the use of language learning strategies would enhance learning such that it becomes easier, more enjoyable, and more self-directed. Among the various systems developed by different researchers during the past few decades, the framework that Oxford (1990) has constructed is reputed to be the "most comprehensive classification of learning strategies" (Ellis, 1994, p. 539). Her Strategy Inventory for Language Learning (SILL) (Oxford, 1990) has been and still is the most widely used among researchers for its exhaustive taxonomy of learning strategies (Rivera-Mills & Plonsky, 2007). She divides the system into two major types of strategies, direct and indirect. Direct learning strategies directly involve the target language and "the direct learning and use of the new language" (Oxford, 1990, pp. 11-12). Under direct strategy, she lists memory, cognitive, and compensation strategies. Memory strategies focus on memorization, i.e., storing of information, and is useful for beginning to intermediate language learners (Oxford, Cho, Leung, & Kim, 2004). Cognitive strategies focus on a learner's mental efforts to make sense of the learning, and compensation strategies comprise learner's formation of intelligent guesses to substitute for the L2 learners' limitation (Oxford, 1990). Indirect strategies, on the other hand, do not directly involve the target language but "contribute indirectly but powerfully to learning" (Oxford, 1990, pp. 11-12). Under indirect strategies, there are metacognitive, affective, and social strategies. Metacognitive strategies allow learners to coordinate their own learning process by planning, constant monitoring and evaluating (Oxford, 1990). Affective strategies are related to the emotions involved in learning a new language such as anxiety or confidence. Social strategies involve learners'

interaction with people and environment allowing more exposure to the target language and more opportunities to practice their language (Wenden & Rubin, 1987, pp. 23-27).

2. Proficiency and Language Learning Strategies

The relationship between proficiency and language learning strategies has been the focus of much attention and many studies document that there indeed is a significant link between proficiency and language learning strategy (e.g., Green & Oxford, 1995; Oxford & Ehrman, 1995; Park, 1997). The findings indicate more use of strategies by comparatively higher proficiency learners. Comparison of low and intermediate proficiency students showed a difference in the use of metacognitive strategies (Sheorey & Mokhtari, 2001; Vandergrift, 2003). The findings demonstrate more sensitive metalinguistic awareness and a deeper understanding of the linguistic system by comparatively higher proficiency students as opposed to rudimentary repetition in the learning strategies of lower proficiency students. Such findings could be attributed to the fact that good language learners are equipped with the "metacognitive knowledge about task requirements" and could therefore "select appropriate strategies" (Chamot, 2005, p. 116).

The concept of employing learning strategies in the language classroom began to emerge in the 1970s (Naiman, Fröhlich, Stern, & Todesco, 1978; Rubin, 1975), but it was not until the early 1990s that second language acquisition (SLA) researchers took a keen interest in investigating the positive effects of learning strategies on proficiency development (O'Malley & Chamot, 1990; Oxford, 1990). Since that time, a plethora of studies have been conducted to gauge the effectiveness of language learning strategy use and also to examine its relationship to learner-autonomous learning in L2 classrooms (Bonney, Cortina, Smith-Darden, & Fiori, 2008; Cohen & Dörnyei, 2002; Cohen & Macaro, 2007; Dörnyei, 2005; Ehrman, Leaver, & Oxford, 2003; Griffiths, 2003; Gu, 2005; Macaro, 2001; Oxford, 1996; Rivera-Mills & Plonsky, 2007; Vandergrift, 2003, 2005). Amidst the claims of most researchers that there indeed is a positive relationship between the effective use of language learning strategies and achievement in the foreign language classroom, some language experts claim this relationship to be lacking ground and in need of more empirical evidence to give it more credibility (Murray, 2007; Oxford & Ehrman, 1995; Yeon, 2002).

3. Korean University EFL Education and Language Learning Strategies

Studies on Korean students' use of language learning strategies report compensation strategies to be the most widely used strategy (Kim, 1995; Lee, 2002; Grainger, 1997).

Compensation strategies require guessing intelligently to make up for the learners' limitations in speaking and writing (Ok, 2003). On the other hand, memory strategy is documented to be the least used strategy for Korean students (Oh, 1992). What this means is that Korean students have inadequate skills in creating mental linkages, applying images and sounds, and reviewing well the resources offered to an L2 learner. This phenomenon could be owed largely in part to the education climate in Korea which tends to focus on the teaching of grammar and not on meaning-based instruction (Roh, 2011). In most EFL classes in Korea, the instructor stresses error-correction which entails repetition of the correct grammatical form so that accuracy is attained for L2 students. Furthermore, many EFL classes are taught by native Korean instructors who prefer placing more emphasis on linguistic accuracy as successful L2 acquisition. This kind of teacher-led instructional practice leaves no room for self-directed, autonomous learning for the students. Therefore, in order to bolster learners' autonomous efforts in learning L2/FL, the Korean national curriculum of education was revised in 2007 to enforce learner-centered and self-regulated learning in EFL education (Yun & Park, 2012).

The biggest challenge that Korean university students face these days is getting a job after they graduate. Students must be equipped with both English proficiency and job expertise in order to stay competitive in the global job market. In line with the trend, more and more universities are revamping their English programs to establish more practical English classes (Kwon, 2012). English for specific purposes (ESP) and English for academic purposes (EAP), as opposed to general English, teach not only English skills but also job- or major-specific knowledge (Lee, 2014). Students in ESP/EAP classes learn English through communicating in meaningful context and these classes reflect the students' needs to improve their practical English skills (Kwon, 2012). Many L2/FL researchers and teachers are arguing that to accommodate the students' needs in relation to their major and prospective future jobs, general English classes should be changed to ESP/EAP classes (Chang, 2009).

III. METHODOLOGY

1. Subjects and Procedure

Subjects of this study were students enrolled in two different classes offered by the Department of English at a women's university located in Seoul. One was a general English class, English Conversation (EC) class, offered to enhance communicative skills and the other an ESP class, Business English (BE) class, offered to students who were interested in learning English pertaining to business.

EC class is an immersion, communicative class that requires many pair- and group-oriented conversational tasks. In the beginning of the class, the instructor introduces the topic of the conversation and teaches related vocabulary and expressions. Following that, basic grammatical patterns are taught in order to use the words and expressions properly to form well-structured sentences in the dialogues. After going through several drills with the instructor, the instructor assigns to pairs or groups certain topics to talk about. Topics of the conversation encompass themes from all walks of life such as hobbies, cooking, traveling, etc. Students are instructed to incorporate newly learned vocabulary and expressions in their conversations. Since fluidity of the conversation is also considered an important element of speaking, the instructor abstains from intervening for error correction unless requested specifically by a student. The students become each other's principal interlocutors and engage in conversations pertaining to the topics given. For evaluation, students are graded on their ability to carry out a free flowing conversation on a certain topic with their counterparts using appropriately the relevant vocabulary, expressions, and grammar learned in class.

BE is an ESP class in which the students are taught business-specific contents using English as the sole intermediary language. Content-based instructional class precludes teaching of discrete grammatical items as the main objective of the curriculum is to learn the subject matter. Language learning is expected to ensue following tasks that require communication in meaningful context (Snow, Met, & Genesee, 1989). The chapters covered consist of various business-related themes such as marketing, stock market, sales, international trade, etc. In the beginning of the class, the topic is discussed as a class. It is during this discussion time that the technical aspect of business is lectured by the instructor and pertaining words and expressions are introduced. Following the topic discussion class, a question and answer session is held to fill the business knowledge gaps of the English major students who account for the major group of the students. During each class, in-class projects consisting of tasks pertaining to the theme being covered at the time are assigned to groups or pairs so as to allow students to converse with each other in English to convey content-specific knowledge to complete the project. Since the focus of the class is on meaning, i.e., the content of the theme, rather than on the linguistic function, students tended to glide over trivial linguistic errors and focused on exchanging content-specific knowledge to solve various tasks.

Both EC class and BE class consisted of 31 students each. Student profile questionnaire and Strategy Inventory for Language Learning (SILL) were distributed to all the subjects during class in the 2nd semester of 2012. At the researcher's university, a semester consists of 15 weeks including the midterms and finals week. The student profile questionnaires were distributed and collected in the 2nd week of the semester and SILL surveys were distributed and collected in the 14th week. The instructor informed the students of the

purpose of the survey and assured them that in no way the survey would affect their course grade. The researcher emphasized candor in their answers and also told them that this survey was purely for research purpose. The researcher got back 62 questionnaires and all the responses were statistically analyzed.

2. Instruments

The instruments used in this study were the (1) student profile questionnaire and (2) SILL version 7.0 for ESL/EFL student. Student profile questionnaire consisted of 5 questions regarding the students' grade, major, years of having studied English, recent TOEIC score, and self-assessed proficiency. This study used SILL version 7.0 to investigate learners' use of language learning strategies. SILL, developed by Catherine Oxford, an expert in L2 learning strategies, is a system that measures the frequency of the strategies used by L2 learners and to date is the most widely used instrument to measure learning strategies (Dörnyei, 2005). SILL has a total of 50 items which are divided into two major types, direct and indirect strategies, which are then divided into 3 categories under each type. The 3 categories under the direct strategy are memory strategies, cognitive strategies, and compensation strategies. The remaining 3 categories under indirect type are metacognitive strategies, affective strategies and social strategies. These 50 items are to be answered by marking a number on a 5-point Likert scale; 1 indicates never or almost never true of me, 2 generally not sure of me, 3 somewhat true of me, 4 generally true of me, and 5 always or almost always true of me. SILL has been adopted by many researchers in their studies involving language learning strategies, and its reliability and validity has been checked in multiple ways with Cronbach's alpha to be in the range of 0.85 to 0.98 (Oxford & Burry-Stock, 1995, p. 4). In this study, Cronbach's alpha for the SILL was 0.90.

IV. DATA ANALYSIS

Statistical Package for the Social Science (SPSS) 21 for Microsoft Windows and Gauss 5.0 was used for statistical analysis. GAUSS 5.0, a language-based statistical package, was used to supplement for a couple of statistical estimations which are not provided in menu-driven statistical packages such as SPSS.

This study explored the two research questions addressed in the introduction, i.e., i) the relationship between proficiency and strategy use and ii) the relationship between class type and strategy use. To investigate these questions, the most ideal setup would be to classify the subjects into four groups based on a matrix such that one axis is

proficiency level and the other is class type. In other words, if we consider four groups: EC with high proficiency, EC with low proficiency, BE with high proficiency and BE with low proficiency, then it would be possible to disentangle the relationship of proficiency from the relationship of class type with regard to language learning strategies use. Unfortunately, such in-depth classification scheme was infeasible due to teaching constraints. As an alternative, the subjects were simply dichotomized into EC and BE. Consequently, a t-test was necessary to test whether the subjects in the two classes are homogeneous in their proficiency. If the t-test result indicates that the two classes are heterogeneous in their proficiency, it would not be possible to directly disentangle proficiency from class type.

With that in mind, first, this paper explores whether strategy uses are strongly associated with proficiency. To do so, one-way ANOVA test is conducted to test for significant differences in strategy use in relation to all students' proficiency. Second, if the aforementioned t-test shows any heterogeneity in proficiency between the two classes, we need to separate the relationship of proficiency from the relationship of class type to the strategy use. To do so, we conduct a multiple regressions analysis, which statistically delivers the relationship between class type and strategies use after adjusting for the relationship between proficiency and strategy uses. That is, multiple regression is generated to determine the relationship between class type, proficiency, and language learning strategies.

V. FINDINGS AND DISCUSSION

First, the researcher summarized a descriptive statistics of the entire subjects on the TOEIC scores, proficiency, and school year. The students' proficiency was classified into three groups according to their TOEIC scores. Those whose scores were below 760 were labeled low proficiency and assigned categorical value 1, those whose scores were between 761 and 850 were labeled medium proficiency and assigned categorical value 2, and those whose scores were above 850 were categorized as high proficiency with the categorical value 3. The researcher did not include the students' self-assessed proficiency in the statistical analysis because the scores could not be counted as an accurate reflection of the student's proficiency. The proficiency indicated herein are the three levels of proficiency based on the TOEIC scores. The results are shown in Table 1.

TABLE 1

Descriptive Statistics of TOEIC Scores, Proficiency and Language Learning Strategy

	N	Min	Max	Mean	SD	Ranking
TOEIC	62	600	980	805.65	79.48	
Proficiency	62	1	3	1.92	.836	
School Year	62	1	4	2.55	1.08	
Com	62	2.00	4.50	3.64	.53	1
Met	62	2.11	4.67	3.61	.68	2
Soc	62	1.83	5.00	3.31	.75	3
Tot	62	2.27	4.02	3.30	.45	4
Cog	62	2.21	4.14	3.29	.50	5
Mem	62	1.71	4.44	3.12	.52	6
Aff	62	1.67	4.17	2.87	.63	7

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

The mean of frequency of total strategy use was 3.30 within a score range from 1 to 5. There was a difference among the frequency of each strategy that students reported using. The mean of compensation strategies was 3.64, metacognitive, 3.61, social 3.31, cognitive 3.29, memory 3.12, and affective 2.87. Oxford (1990) classified strategy use into three levels; the scale ranges are (1) High usage: 3.5-5.0, (2) Medium usage: 2.5-3.4, and (3) Low usage: 1.0-2.4. According to the scale, compensation and metacognitive strategies belong to the high usage range and the remaining strategies fall in the medium usage range.

In order to address the research questions herein, proficiency of the two classes must be tested for homogeneity in order to disentangle proficiency from class type. Based on the characteristics of the two classes which are presented in Table 2, a t-test is conducted to check for any significant differences between the two classes, especially proficiency.

TABLE 2

Descriptive Statistics of EC and BE's Characteristics

	TOEIC Scores			Proficiency			School Year		
	N	M	SD	N	M	SD	N	M	SD
EC	31	771.13	73.90	31	1.55	.78	31	1.81	.98
BE	31	840.16	70.15	31	2.29	.75	31	3.29	.53

The results, as shown in Table 3, show that BE's students are significantly higher in proficiency, i.e., the two classes are heterogeneous in their proficiency and we cannot directly disentangle proficiency from class type. In fact, significant differences were noted in all three of the categories: school year (tval=-7.42, pval=.00), TOEIC scores (tval=-3.77, pval=.00), and proficiency (tval=-3.88, pval=.00) at $p<.01$ level of statistical significance.

TABLE 3

Breakdown of the Subjects' School Year, TOEIC Scores, and Proficiency

	School Year	TOEIC	Proficiency
Mean(EC)	1.81	771.13	1.55
Mean(BE)	3.29	840.16	2.29
Difference	-1.48	-69.03	-0.74
t-value	-7.42	-3.77	-3.88
p-value	2.43E-10	0.00	0.00

With regard to the first research question, we conduct a one-way ANOVA test to test for significant differences on strategy use in relation to all students' proficiency. The results indicate proficiency is not significantly related to strategy use. The results are tabulated in Table 4.

TABLE 4

One-way ANOVA Test for Differences in Strategies Use according to Proficiency

		SS	df	MS	F	P
Mem	Between groups	.42	2	.21	.77	.47
	Within groups	15.93	59	.27		
	Total	16.35	61			
Cog	Between groups	.63	2	.32	1.31	.28
	Within groups	14.31	59	.24		
	Total	14.95	61			
Com	Between groups	.09	2	.04	.15	.86
	Within groups	16.74	59	.28		
	Total	16.82	61			
Met	Between groups	1.31	2	.65	1.43	.25
	Within groups	27.00	59	.46		
	Total	28.31	61			
Aff	Between groups	.93	2	.47	1.18	.32
	Within groups	23.30	59	.40		
	Total	24.23	61			
Soc	Between groups	.20	2	.10	.18	.84
	Within groups	33.89	59	.57		
	Total	34.09	61			
Tot	Between groups	.29	2	.15	.71	.50
	Within groups	12.19	59	.21		
	Total	12.48	61			

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

The researcher concludes that proficiency is not significantly related to language learning strategies use. Given the pretext of heterogeneous nature of proficiency, the researcher hypothesizes that class type is significantly related to strategy use. Thus, a multiple regressions analysis, which statistically delivers the relationship between class type and strategies use after adjusting for the relationship between proficiency and strategies use, is generated. First, we compute the descriptive statistics analysis of EC to show means, standard deviations, and ranking for the six strategies. The results are tabulated in Table 5.

TABLE 5

Descriptive Statistics of EC

	N	Min	Max	M	SD	Ranking
TOEIC	31	600	943	771.13	73.90	
Proficiency	31	1	3	1.48	.68	
Com	31	2.40	4.50	3.66	.51	1
Met	31	2.11	4.67	3.48	.74	2
Soc	31	1.83	5.00	3.26	.84	3
Tot	31	2.27	4.02	3.22	.51	4
Cog	31	2.21	4.07	3.16	.50	5
Mem	31	1.71	4.00	3.02	.57	6
Aff	31	1.67	4.17	2.72	.71	7

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

The mean for total strategy use turned out to be 3.22, which indicates medium use as identified by Oxford (1990). In light of the usage scale, compensation strategy was considered to be in the high usage range and the remaining five strategies in the medium usage category. The popularity of the compensation strategy has been documented in many studies conducted in Asia (e.g., Goh & Kwan, 1997; Huang, 1997; Park, 1997; Tseng, 2010). The extra effort that the interlocutors put in to convey their message can be actions of guessing the meaning of the word in context, using synonyms, and using body gestures, all of which are examples of the compensation strategy (Tam, 2013). Memory and affective strategies were the least popular among the subjects in this study. The descriptive statistics of BE are presented in Table 6.

With regard to BE class, the mean of frequency of total overall strategy use was 3.39, which lies in the range of medium use (2.5-3.4). Metacognitive and compensation strategies were used very frequently and the remaining strategies were in the medium use range.

TABLE 6

Descriptive Statistics of BE

	N	Min	Max	M	SD	Ranking
TOEIC	31	730	980	840.16	70.15	
Proficiency	31	1	3	2.35	.76	
Met	31	2.11	4.67	3.73	.60	1
Com	31	2.00	4.50	3.61	.55	2
Cog	31	2.50	4.14	3.41	.47	3
Tot	31	2.64	3.91	3.39	.38	4
Soc	31	2.33	5.00	3.35	.65	5
Mem	31	2.33	4.44	3.23	.45	6
Aff	31	2.17	4.17	3.02	.51	7

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

Now, a student's t-test is conducted to see if there are any significant differences in the use of each category by students in EC and BE respectively. According to the results shown in Table 7, significant differences were reported in the cognitive (t value -2.03, p value 0.02) and affective categories (t value -1.96, p value 0.03) and marginally significant difference in memory (t value -1.57, p value 0.06), metacognitive (t value -1.49, p value 0.07), and total strategies (t value -1.53, p value 0.07), but no difference in the use of compensation and social strategies.

TABLE 7

T-test of Equality of Means between Strategies and Class Types

	T	Df	p value (two-tailed)	Difference of Means	SE of Estimate
TOEIC	-3.77	59.84	0.00	-69.03	18.30
Cog	-2.03	59.81	0.02	-.25	.12
Com	.42	59.59	0.68	.06	.13
Met	-1.49	57.50	0.07	-.25	.17
Aff	-1.96	60.00	0.03	-.31	.16
Soc	-.45	56.51	0.33	-.09	.19
Mem	-1.57	57.11	0.06	-.20	.13
Tot	-1.53	60.00	0.07	-.17	.11

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

The results show that BE, with a composition of significantly higher proficiency students, used language learning strategies more than their lower proficiency counterpart (EC) in all categories except compensation and social strategies. BE students' beliefs about language learning, level, and purpose all may have contributed to the surge in quantity and frequency of language learning strategies use (Park, 1997). In particular, given that EC

class is a general speaking class to foster more communication skills, the skill to carry on a conversation would have been more of top priority for the students, which explains EC's high usage of compensation and social strategies therein.

Upon examining past literature, we find Peacock and Ho (2003) to document cognitive and metacognitive strategy to be significantly correlated with proficiency. Ghadessy (1998) reports all language learning strategies to be significantly correlated with proficiency except for affective strategy. Bremner (1999) found significant correlation between cognitive, compensation and English proficiency. Park (1997) in his study on Korean university students found cognitive and social strategy to be significantly correlated with proficiency. This study's finding coincides with the past literature on the significant correlation with cognitive strategy and proficiency. In a nutshell, BE showed significant correlation between cognitive strategy and proficiency while EC showed no significant correlation between strategy use and proficiency. In summary, Table 4 and Table 7 document that the language learning strategy use is not related to proficiency, but is related to class type, which are the answers to the two research questions that this study raised. However, given the high correlation between proficiency and class type, the researcher wanted to confirm the aforementioned findings by running a multiple regression analysis, which accommodates both proficiency and class type as joint explanatory variables.

TABLE 8

Multiple Regression 1 between Proficiency and Language Learning Strategies

REGRESSION 1 (TOEIC only)							
Strat	Inter cept	TOEIC**	tval (intercept)	tval (toeic)	pval (intercept)	pval (toeic)	R^2
Mem	3.33	-0.30	4.86	-0.31	0.00	0.62	0.00
Cog	2.85	0.50	4.37	0.67	0.00	0.25	0.01
Com	4.68	-1.3	6.85	-1.53	0.00	0.93	0.04
Met	3.09	0.60	3.43	0.57	0.00	0.29	0.01
Aff	2.55	0.40	3.06	0.38	0.00	0.35	0.00
Soc	4.08	-0.10	4.14	-0.79	0.00	0.78	0.01
Tot	20.59	-0.10	5.73	-0.21	0.00	0.58	0.00

(strategies = strat) ** = coefficient x 1000

(memory=mem, cognitive=cog, compensation =com, metacognitive=met, affective=aff, social=soc, total=tot)

Multiple regression is generated to determine the relationship between class type, proficiency, and language learning strategies. First, we run strategic score=intercept+b* toeic+epsilon (regression 1). The results are presented in Table 8. It is a simple regression between the TOEIC scores and language learning strategies use, which investigates any significant relationship between language learning strategies use and proficiency (here

measured by TOEIC score, a continuous variable rather than a categorical variable adopted in Table 4). In general no significant relationship between the TOEIC scores and language learning strategies use was detected except for compensation strategy. The results show that the higher the TOEIC score, the less use of compensation strategies by students. Other than that, there was no relationship between the TOEIC score and strategy use, which is consistent with the results reported in Table 4.

Next, we run strategic score=intercept+dummy+b*toeic+epsilon (regression 2), where dummy=1 if a subject belongs to BE otherwise 0. The results are documented in Table 9. For items memory, cognitive, metacognitive, affective, and total, there is a significant increase in the coefficients of the dummy, i.e., the intercept for the BE class. However, there were no statistically significant increase in the use of compensation and social strategies. That is, under the assumption that the slopes are the same between the two classes, the BE class shows higher use of language learning strategies regardless of the TOEIC scores. These results are exactly the same as the findings in Table 7. Unlike the analysis in Table 7, here we control for the relationship between the strategies use and proficiency (TOEIC scores), but the findings are robust. An interesting finding is that after we adjust for the dummy, the slope coefficients of TOEIC scores are all negative, albeit insignificant. This may reflect the fact that the higher TOEIC score, students may be more conservative in using the language learning strategies.

TABLE 9

Multiple Regression 2 between Proficiency and Language Learning Strategies

Strat	Intercept	Dummy	TOEIC**	pval (intercept)	pval (dummy)	pval (toeic)	R^2
Mem	3.80	0.27	-0.10	0.00	0.03	0.86	0.06
Cog	3.30	0.26	-0.20	0.00	0.03	0.58	0.07
Com	4.74	0.04	-1.40	0.00	0.40	0.93	0.04
Met	3.54	0.26	-0.10	0.00	0.09	0.53	0.04
Aff	3.14	0.34	-0.60	0.00	0.03	0.69	0.06
Soc	4.40	0.19	-1.50	0.00	0.19	0.86	0.02
Tot	22.92	1.36	-4.70	0.00	0.04	0.83	0.05

(strategies = strat) ** = coefficient x 1000

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

Next, we run strategic score=intercept+(b+c*dummy)*toeic+epsilon (regression 3) to see whether the dummy affects the slope of TOEIC, rather than the intercept. The results are reported in Table 10. For memory, cognitive, metacognitive, affective, and total strategies, there is a significant increase in the slope for the BE class. That is, under the assumption that the intercepts are the same between the two classes, in general, higher TOEIC scores, i.e., more proficient students in BE, show higher frequency of language learning strategies use than EC. Again, after adjusting the difference in the slope between

the classes, the slope coefficients (of EC) are all negative but insignificant except for compensation strategy use.

TABLE 10

Multiple Regression 3 between Proficiency and Language Learning Strategies

Strat	Intercept	TOEIC**	dum*toeic**	pval (intercept)	pval (toeic)	pval (dum* toeic)	R^2
Mem	3.95	-0.40	0.40	0.00	0.89	0.03	0.06
Cog	3.48	-0.40	0.40	0.00	0.68	0.02	0.08
Com	4.76	-0.00	0.00	0.00	0.92	0.40	0.04
Met	3.66	-0.30	0.30	0.00	0.57	0.09	0.04
Aff	3.33	-0.40	0.40	0.00	0.75	0.02	0.07
Soc	4.51	-0.20	0.20	0.00	0.87	0.18	0.03
Tot	23.68	-1.80	1.80	0.00	0.87	0.03	0.06

(strategies = strat) ** = coefficient x 1000

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

In the final regression, the equation considered is as follows: language learning strategy = intercept+b*dummy + (c+d*dummy)*toeic + epsilon (regression 4). It was formulated to discern which one between the intercept and the slope is more affected by class type. As shown in Table 11, except for cognitive strategy, all coefficients associated with dummy are insignificant. That is, the regression has difficulty with disentangling the effect of dummy on the intercept and the slope. For cognitive strategy, the result indicates that the low TOEIC score students of the BE class use less strategies but as the students' TOEIC scores go up, those students show significantly higher uses of cognitive strategies. In sum, BE class shows higher strategies use overall. However, the last regression does not clearly show whether such gains are driven by the overall enhancement (intercept effect) or by the more frequent uses of strategies by higher TOEIC score students (slope effect). Such failure of disentanglement occurs often when the data size is small. One way to arrive at a conclusion is to compare R^2 of the regressions. When we compare regression 2 and regression 3, R^2 of regression 3 are all higher than those of regression 2. As such, regression 3 is deemed more valid. Therefore, this paper arrives at the conclusion that the higher TOEIC score students of the BE class display higher use of strategies overall, which results in the higher use of language learning strategic use of the BE class on average.

TABLE 11

Multiple Regression 4 between Proficiency and Language Learning Strategies

Strat	Intercept	Dum my	TOEIC**	dum* toeic**	pval (inter cept)	pval (dum my)	pval (toeic)	pval (dum* toeic)	R^2
Mem	4.42	-1.09	-1.80	1.70	0.00	0.77	0.92	0.18	0.07
Cog	4.80	-3.01	-2.10	4.10	0.00	0.98	0.96	0.01	0.15
Com	4.72	0.09	-1.40	-0.10	0.00	0.48	0.85	0.51	0.04
Met	3.68	-0.05	-0.30	0.40	0.00	0.51	0.56	0.44	0.04
Aff	3.92	-1.36	-1.60	2.10	0.00	0.77	0.84	0.17	0.08
Soc	5.13	-1.41	-2.40	0.20	0.00	0.74	0.90	0.24	0.03
Tot	26.7	-6.82	-9.60	1.20	0.00	0.81	0.92	0.15	0.07

(strategies = strat) ** = coefficient x 1000

(memory=mem, cognitive=cog, compensation=com, metacognitive=met, affective=aff, social=soc, total=tot)

VI. CONCLUSION

This study investigated the use of language learning strategies by Korean university EFL students by proficiency and class type in a women's university in Seoul. The findings of this study indicated no significant correlation with any of the six language learning strategies and proficiency. EC students used compensation strategies most while BE students used metacognitive strategies most. As for difference in the use of language learning strategies between the two classes, a significant difference was noted in cognitive and affective strategies, and marginally significant difference was noted in metacognitive and memory strategies. A multiple regression analysis revealed BE students, who had a significantly higher proficiency, to outperform EC in use of all strategies but compensation strategy. In particular, BE students showed a significant outperformance in the use of cognitive language learning strategies than EC students. This finding is similar to Oxford and Ehrman (1995), which also showed cognitive strategy use to have the strongest correlation with proficiency, especially in relation to the skill of speaking.

VII. LIMITATIONS AND IMPLICATIONS

There were some limitations to this study. First, as mentioned in the IV. Data Analysis section, if the samples had been more finely classified based on class type and proficiency, proficiency could have been disentangled from class type much easily. With a bigger sample size, this paper would have presented more powerful statistic results and stronger correlation coefficients between the factors. Second, the relationship between strategy use

and class type needs to be investigated further with other factors taken into consideration such as different population and different data such as teaching methods, interviews, pre- and post-tests, etc. Third, research on diverse factors affecting strategy choice would strengthen the validity of language learning strategies use. Diverse factors indicate learning style, gender, age, attitude about English, values, previous educational experiences (e.g., lived abroad, attended English-speaking preschool, attended private institutes, etc.), previous cultural experiences, and the objective of pursuing such a course.

The results of this study suggest some pedagogical implications for Korean EFL students. First of all, for foreign language learning for students whose native tongue is not English, it is very important to identify the language learning strategies that are needed to improve their English. The challenge, however, is whether learners are actually fully aware of the strategies they use or have the acumen to pick out which strategies to use appropriately. Research indicates that language learners at all levels use strategies (Chamot & Kupper, 1989) but that may not interpret into proper use of language learning strategies; therefore, teachers should guide the students in the right direction of strategy use through learner training or strategy training. Second, classes should be designed accordingly by curriculum and proficiency to accommodate different language learning strategies of learners of different proficiencies. As was evidenced in this study, use of strategies varies by class type. For example, for advanced content-based classes like ESP or EAP, high proficiency students who are adept at navigating their way through language processing through cognitive learning strategies such as directing, organizing, and planning their language learning are at an advantage. Third, teacher's role cannot be emphasized more. Different strategies are required of different curricula, thus the teacher should be prepared to assist the students in any way they can to fully utilize the strategies at appropriate moments. Teachers should help students develop their weak strategies and to teach them to use particular strategies in a timely fashion based on their learning styles and goals.

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Examples in: English

Applicable Languages: English

Applicable levels: Tertiary

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