

The Relationships between the Self-directed Learning, Learning Strategies, and English Proficiency in L2 Learning

Young Ah Cho & Jee Hyun Ma*

(Dongshin University · Chonnam National University)

Cho, Young Ah & Ma, Jee Hyun. (2015). **The Relationships between the Self-directed Learning, Language Strategies, and English Proficiency in L2 Learning.** *The Linguistic Association of Korea Journal* 23(3), 49-67. The current study aimed to examine the relationships between self-directed learning, learning strategies, and English proficiency in L2 learning. One hundred forty-six university students were classified into three groups: low-, medium-, and high-levels of self-directed learning groups. For the study, a questionnaire on the background was used to examine learners' general information. To gauge the learners' levels of self-directed learning and learning strategy use frequency, a questionnaire about the self-directed learning and learning strategies was carried out as well. In addition, TOEIC scores were used to figure out the learners' proficiency levels. The collected data were analyzed using descriptive statistics, a MONOVA, and Pearson correlations. The results demonstrated that learners from the high- and medium-levels of self-directed learning groups reported using more learning strategies than learners from the low-level self-directed group. The findings also revealed that there existed a positive correlation between self-directed learning and learning strategies as well as between self-directed learning and English proficiency. Pedagogical implications were made based on the results.

Key Words: self-directed learning, language learning strategies, English proficiency level, L2 instruction

* The first author is Young Ah Cho, and the corresponding author, Jee Hyun Ma.

1. Introduction

In the field of second language (L2) as well as foreign language (FL), there has been a growing interest in self-directed language learning and language learner autonomy (Beinborn et al., 2012; Bordonaro, 2006; Stewart, 2007) in that self-directed learning could be a crucial predictor for achieving success in language learning. Successful language learners know how to acquire, apply, and create learning strategies and knowledge independently, which, in turn, lead them to become more autonomous (Khodabandehlou et al., 2012; Wenden, 1991).

According to Benson (2001), self-directed learning could be defined as learning which is complete under the learners' own direction, not under the direction of others. Similarly Beinborn et al. (2012) insisted that a learning setting should be more closely connected with the learners, not so much the interaction with the teachers in the self-directed learning.

With being aware of a gradually increasing recognition of the importance of self-directed language learning in L2 contexts, the majority of researchers demonstrated that L2 learners with a high level of the self-directness know how and why they use learning strategies in a timely manner (Long, 2005; Pitts, 1983; Yang, 1999). Gan (2004), for instance, proved that learners with higher levels of self-directness and stronger beliefs about learners' roles in L2 acquisition reported using a wide range of learning strategies. In Khodabandehlou et al.'s (2012) study, which emphasized the vital role of learning strategies in L2 processes, it was mentioned that strategy training in language instruction could possibly help learners learn more efficiently, and ultimately become self-directed learners.

Considering the close relationship between self-directed learning and learning strategies in L2 instruction, however, relatively little attention has been paid to understanding the relationships between self-directed learning, learning strategies, and English proficiency (Gan, 2004; Kim, 2012). Furthermore, studies targeting college students are rarely performed in Korea. It could be, therefore, pedagogically meaningful and instructive to examine whether L2 learners with different levels of self-directness utilize the different frequency of learning strategies and whether the relationships between self-directed learning, learning

strategies, and English proficiency exist, specifically focusing on Korean college students learning English. To answer this research purpose, we created the following research questions:

1. Is there any difference in learning strategy use frequency depending on Korean college students with different levels of self-directed learning?
2. Is there any relationship between self-directed learning, learning strategies, and English proficiency of Korean college students?

2. Literature Review

2.1. Self-directed Learning in L2

Focusing mainly on self-directed learning and language learner autonomy in the L2 education, researchers have identified the concepts of self-directed learning. Initially, Knowles (1975) described the self-directed learning as following:

[It] ... a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (p. 18)

Knowles (1975, 1990), further stated that teacher-or-other-directed learning is related to learners who are dependent on the teacher for achieving their goals, whereas self-directed learning is concerned with learners who are responsible for meeting their own learning needs.

Guglielmino (1997) proposed an instrument to measure the self-directed learning readiness and explained self-directed learners as those who exhibited independence, responsibility, self-discipline, a strong desire, a high degree of curiosity, and self-confidence in their own learning. Long (2005), later on, attempting to define self-directed learning, suggested that the main characteristic

of the self-directed learning could be the degree to which the learners gain control of the learning process actively.

The earliest models of self-directed learning were the most linear, which moved from diagnosing needs to finding resources for evaluating performance. Danis (1992), on the other hand, pointed out that learning strategies, the content, the learners, and the environmental component should be considered when mapping the process of self-directed learning context. In addition, researchers mentioned that the unifying role of metacognition should be included when approaching learners' self-directed learning (Victori, 2004; Victori & Lockhart, 2000).

To investigate the structure of attitudes towards self-directed language learning and issue underlying learner readiness, Wenden's (1991) study contained three components, namely, a cognition, an evaluation, and behavior. Further Cotterall (1995) described self-directed language learning attitudinal factors as the role of the teacher, the role of the feedback, as well as the learners' sense of independence, confidence in their abilities to study, experience in language learning, and approaches to studying. Some researchers also asserted that other variables such as educational levels, learning styles, creativity, and language proficiency levels should be taken into account as the key enablers for achieving self-directness (Kerka, 2000; Merriam, 2001).

2.2. Learning Strategies in L2

The empirical literature on learning strategies in L2 acquisition started to identify the characteristics of good language learners and suggested that successful L2 learners be aware of appropriate strategy use and also manage to tailor their own strategies to assigned tasks (Cook, 2008; Green & Oxford, 1995; O'Malley & Chamot, 1990).

Concerned with a pivotal role of learning strategies in L2 learning, there have been several attempts to categorize learning strategies into various dimensions. Naiman et al. (1978) introduced the good language learner (GLL) strategies, which included six main learner-centered categories as the followings: "GLL strategy 1: find a learning style that suits you; GLL strategy 2: involve yourself in the language learning process; GLL strategy 3: develop an awareness

of language both as a system and as communication; GLL strategy 4: pay constant attention to expanding your language knowledge; GLL strategy 5: develop the second language as a separate system; GLL strategy 6: and take into account the demand that L2 learning imposes” (pp. 114-115 as cited in Cook, 2008).

More extensive studies related to learning strategies were carried out by O’Malley and Chamot (1990). They concentrated their research primarily on ESL students and proposed three types of strategies that were used by learners, such as metacognitive, cognitive, and social strategies. Oxford (1990) introduced a conceptual framework of learning strategies called Strategy Inventory for Language Learning (SILL) that consists of two main dimensions: direct and indirect. The direct strategy includes memory, cognitive, and compensation strategies while metacognitive, affective, and social strategies are presented in the indirect strategy.

From a pedagogical perspective, researchers have widely come to agree that strategy use tended to efficiently correlate with various language learning skills (Macaro, 2006). Cook (2008) also comprehensively stressed the needs of strategy training, which can encourage learners to develop their independence with directed strategy learning as well as raise their awareness of strategy use in order to become successful learners.

A few studies on the relationship between self-directed learning and learning strategies have been conducted in the field of L2. Khodabandehlou et al. (2012), for instance, investigated the impacts of self-directed learning strategies on reading comprehension with 92 upper-intermediate and advanced female Iranian EFL learners. The results drawn from the research were that learners engaged in the self-directed learning group showed complete superiority over those in the teacher-directed learning group. Kim (2012) examined the relationship between self-directed English learning abilities and learning strategies of Korean college students, indicating that there was a statistically significant correlation between the two variables, and further recommended that a variety of English learning strategies and metacognitive teaching methods be used to facilitate L2 learners’ autonomy. Similar findings were exhibited in Kim’s (2014) study, which explored the relationships between self-directed learning readiness, learning strategies, and achievement for Korean high school students. The results

revealed that there were significant correlations between self-directed learning readiness and learning strategies, as well as between self-directed learning readiness and English performance.

3. Methods

3.1. Participants

The participants consisted of 146 students, 13 male and 133 female students, ranging in age from 20-25. They enrolled in a general English course in a university located in Chonnam province, Korea, and came from various departments including in-flight service, architectural engineering, children's English education, and police administration.

Following the criterion from the Self-directed Learning Readiness Scale (SDLRS) (Guglielmino, 1977) which initially consisted of 5 levels ranged from 1.00 to 5.00, the participants in this study were divided into 3 groups. More specifically, average mean scores of below 3.48 were designated a low-level of self-directness group (hereafter LSG), the medium-level of self-directness group learners got 3.49 to 3.91 mean scores (hereafter MSG), and average mean scores of higher than 3.92 were regarded as a high-level of self-directness group (hereafter HSG) (see Table 1).

Table 1. Distribution of the Participants and Mean Scores of the SDLRS

Group	<i>N</i>	Male	Female	<i>M</i>	<i>SD</i>
LSG	73 (50.0%)	3	70	3.152	.227
MSG	54 (37.0%)	9	45	3.687	.138
HSG	19 (13.0%)	1	18	4.102	.129
Total	146 (100%)	13	133	3.474	.394

3.2. Instruments and Procedures

To ascertain the participants' background information, self-directed learning scales, and learning strategies use frequency in English learning, a questionnaire consisting of three distinct sections was administered: questions on background

information, questions on self-directed learning, and questions on learning strategies. All items were written in Korean, the participants' first language (L1), to exclude the possibility of random answers resulting from the difficulty of understanding their L2, English.

The background section was made up of 5 close-ended questions on the students' gender, age, grade, self-evaluated English proficiency levels, and TOEIC scores. To gauge learners' proficiency, the participants were asked to report their latest TOEIC scores.

The second section was concerned with the SDLRS. It was adapted and modified from Kim and Kim's (2009) study, which was originally based on Guglielmino's (1977) research. Guglielmino (1977) developed the SDLRS with an 8 factor structure consisting of 58 items, namely, openness to learning opportunities, self-concept as an effective learner, initiative and independence in learning, informed acceptance or responsibility for one's own learning, love of learning, creativity, future orientation, and ability to use basic study skills and problem solving skills. To adequately reflect on English education in Korea, the 20 question items in the current study were extracted, slightly modified, and carried out using a 5-point Likert scale ranged from strongly disagree (1) to strongly agree (5) (see Appendix A).

The third section instructed the participants to rate their own opinion about statements related to the language learning strategies based on the Strategies Inventory for Language Learning (SILL) (Oxford, 1990) and marked their answers using a 5-point Likert scale ranged from strongly disagree (1) to strongly agree (5). The SILL contained a six-category taxonomy with a total of 50 items: The six categories were memory, cognitive, compensation, metacognitive, affective, and social strategies (see Appendix B).

Before administering the survey, all the participants in the study were told to answer the questionnaires sincerely based on their experiences of English learning. It took the participants about 30 minutes to complete the questionnaires using regular English classes.

3.3. Data Analysis

By using descriptive statistics, the participants' background questionnaire was examined. Next, Cronbach alpha (α) coefficients in the SDLRS and the

SILL were computed to establish the internal consistency of the quantitative data. The collected data were also analyzed using descriptive statistics and a MONOVA for group comparison in order to investigate whether or not any significant difference existed in the frequency of learning strategy use among groups with different levels of self-directed learning. Additionally, in order to see whether there were significant relationships between self-directed learning, learning strategies, and English proficiency, Pearson correlations were performed in the study. For all these analyses, Statistical Package for Social Studies (SPSS) 20.0 for Windows was used, and the significance level was set at $\alpha < .05$, nondirectional.

4. Results and Discussion

4.1. The Frequency of Learning Strategies use depending on the Levels of Self-directed Learning

First of all, we analyzed the reliability of the SDLRS and the SILL using Chronbach *a*. The overall reliability of the SDLRS was .826 with a total of 20 items and the SILL was .857 with a total of 50 items, showing a proper level of reliability.

The first research question was concerned with what the differences in learning strategy use were depending on the different levels of self-directed learning groups. Table 2 gives an overall picture of the results for the participants' learning strategy use frequency by three different levels of self-directed groups.

The average mean scores of the HSG were numerically the highest ($M=3.611$) among the three groups, followed by those of the MSG ($M=3.413$) and then the LSG ($M=3.024$) in general, with the exception of MSG learners ($M=3.228$), who reported more strategy use frequency than the HSG learners ($M=3.175$) in the area of affective strategies. The results obtained from the present study were consistent with those of the previous studies (Gan, 2004; Khodabandehlou et al., 2012; Kim, 2012; Kim, 2014), stated that learners who rated highly on the self-directed learning scales showed more strategy usage overall. This hints that

autonomous learners could identify their own strategies, take advantage of the practical usage of strategies, and ultimately carry out tasks efficiently and independently, which may foster their language competence.

Regarding strategy use frequency, metacognitive factor emerged as being used at a highest frequency, and then, in descending order, compensatory, social, memory, cognitive, and affective strategies were used. The findings from previous research (Cheon, 2014; Kim, 2014) mentioned that the compensatory strategy was the most frequently used one amongst Korean high school and university students, followed by affective and metacognitive strategies respectively. In this view, the results in the study were slightly different in that metacognitive strategy was founded to be the most frequently used and the compensatory strategy was the second greatest used one. However, this study as well as Kim's (2012) study came to the same conclusion that metacognitive and compensatory strategy were ranked as the first and second, and the affective factor was found to be the least used strategy by Korean university students.

Here, what is noticeable in the current study is that, the MSG learners showed relatively higher mean scores than the HSG learners with regards to affective factors. More specifically, the MSG showed greater mean scores than the HSG on the following two items; "Give self-reward for doing well" (MSG: $M=3.07$, $SD=.949$, HSG: $M=2.42$, $SD=.961$) and, "Notice when I'm tense and nervous" (MSG: $M=3.65$, $SD=.828$, HSG: $M=3.47$, $SD=1.020$). In the two items, a significant difference was found between the two groups when asked if they "Give self-reward for doing well" ($F=.032$, $Sig=.012$). This result might tell us that it can be interpreted to mean that learners involved in the medium level of self-directed learning might be eager to gain better English competence and to find better ways to learn English by controlling their emotions and motivations in a deeper manner.

Table 2. Descriptive Statistics of the Learning Strategy Use by Three Groups

subcategories	group	<i>N</i>	Mean	<i>SD</i>	Min	Max
memory (<i>k</i> =9)	LSG	73	2.988	.394	2.877	3.099
	MSG	54	3.261	.552	3.132	3.390
	HSG	19	3.474	.559	3.256	3.691
	total	146	3.152	.509	2.877	3.691
cognitive (<i>k</i> =14)	LSG	73	2.889	.322	2.791	2.988
	MSG	54	3.283	.511	3.168	3.398
	HSG	19	3.553	.513	3.359	3.746
	total	146	3.121	.491	2.791	3.746
compensatory (<i>k</i> =6)	LSG	73	3.174	.487	3.058	3.289
	MSG	54	3.605	.514	3.471	3.739
	HSG	19	3.825	.495	3.599	4.051
	total	146	3.418	.556	3.058	4.051
metacognitive (<i>k</i> =9)	LSG	73	3.199	.404	3.089	3.309
	MSG	54	3.724	.512	3.596	3.852
	HSG	19	3.977	.608	3.761	4.192
	total	146	3.495	.563	3.089	4.192
affective (<i>k</i> =6)	LSG	73	2.920	.418	2.795	3.045
	MSG	54	3.228	.617	3.083	3.373
	HSG	19	3.175	.702	2.931	3.420
	total	146	3.067	.556	2.795	3.420
social (<i>k</i> =6)	LSG	73	3.085	.446	2.955	3.214
	MSG	54	3.469	.592	3.318	3.620
	HSG	19	3.623	.820	3.368	3.877
	total	146	3.297	.598	2.955	3.877
group total (<i>k</i> =50)	LSG	73	3.024	.279	2.959	3.089
	MSG	54	3.413	.419	3.299	3.527
	HSG	19	3.611	.378	3.429	3.793
Total (<i>k</i> =50)	groups	146	3.244	.416	2.283	4.264

Next, to exactly discover whether or not there were significant differences in terms of the learning strategy use frequency by the three groups, a MANOVA was administrated as well. As noted in Tables 3 and 4, the findings indicated

that there existed significant differences between the three groups across all the learning strategy subcategories.

Table 3. MANOVA Results of the Learning Strategy Use by Self-directed Learning Scales

		Value	F	Hypothesis <i>df</i>	<i>df</i>	<i>Sig.</i>	<i>ES</i>
Intercept	Wilks' Lambda	.003	5820.604	7	137	.000*	.997
Group	Wilks' Lambda	.209	23.203	14	274	.000*	.542

**p*< .05, *ES*= Effect Size

Table 4. Results of Group Comparison on the Learning Strategy Use by Self-directed Learning Scales

subcategories	Source	<i>SS</i>	<i>df</i>	<i>MS</i>	F	<i>Sig.</i>	<i>ES</i>
memory	Between Groups	4.579	2	2.290	9.936	.000*	.122
	Within Groups	32.952	143	.230			
	Total		145				
cognitive	Between Groups	8.873	2	4.696	18.908	.000*	.209
	Within Groups	26.070	143	.182			
	Total		145				
compensatory	Between Groups	9.391	2	4.696	18.908	.000*	.209
	Within Groups	35.512	143	.248			
	Total		145				
metacognitive	Between Groups	13.625	2	6.812	30.134	.000*	.296
	Within Groups	32.328	143	.226			
	Total		145				
affective	Between Groups	3.206	2	1.603	5.509	.005*	.072
	Within Groups	41.604	143	.291			
	Total		145				
social	Between Groups	6.914	2	3.457	10.985	.000*	.133
	Within Groups	45.002	143	.315			
	Total		145				

**p*< .05, *ES*= Effect Size

As for the effect sizes, each factor showed from moderate to large effect sizes. Among all the learning strategy factors, metacognitive strategy revealed a greatest difference in terms of effect size and affective factor had the smallest effect size in the three group learners. In general, it could infer that the learners with a high-level of self-directed learning seemed to rely more on metacognitive strategy aspects than those who were a low-level of

self-directness in learning English.

Moreover, in order to identify where the differences lay, a post hoc pairwise comparison was performed, and the outcomes can be seen in Table 5. The results further revealed that the outcomes of the LSG were significantly lower than those of the MSG and HSG while no significant difference was observed between MSG and HSG for language strategy use. To summarize, for HSG and MSG learners who seemed to have moderate and higher levels of self-directed learning, a similar pattern of diverse learning strategies use in English learning was displayed. The results of the current study appeared to lend support to Kim's (2012) study, which stated that learners needed to be exposed to a variety of learning strategy for promoting learners' self-directness to a certain degree. Therefore, it can be possibly assumed that learners with a low-level self-directed learning could be recommended to do exercises and tasks designed to encouraging learning strategy use explicitly and appropriately in order to get potentially benefits in English learning.

Table 5. Post Hoc Pairwise Comparison of the Learning Strategy Use by Self-directed Learning Scale

subcategories	group		MD (I-J)	Std. Error	Sig.
memory	LSG	MSG	-.2735*	.086	.006
		HSG	-.4859*	.124	.000
	MSG	HSG	-.2124	.128	.298
cognitive	LSG	MSG	-.3936*	.077	.000
		HSG	-.6632*	.110	.000
	MSG	HSG	-.2696	.114	.058
compensatory	LSG	MSG	-.4314*	.089	.000
		HSG	-.6510*	.128	.000
	MSG	HSG	-.2196	.133	.302
metacognitive	LSG	MSG	-.5249*	.085	.000
		HSG	-.7772*	.122	.000
	MSG	HSG	-.2523	.127	.146
affective	LSG	MSG	-.3083*	.097	.005
		HSG	-.2553	.139	.204
	MSG	HSG	.0530	.144	1.000
social	LSG	MSG	-.3847*	.101	.001
		HSG	-.5383*	.144	.001
	MSG	HSG	-.1537	.150	.919

* $p < .05$

4.2. The Relationships between the Self-directed Learning, the Learning Strategies, and English Proficiency

The second research question was about the relationships between the self-directed learning, the learning strategies, and English proficiency in L2 learning. To come to a more complete understanding of the relationships for the three variables in detail, Pearson correlations were computed. Table 6 demonstrates the results for the relationships between the self-directed learning and learning strategies.

Table 6. Results of Relationship between Self-directed Learning and Learning Strategy Use

		memory	cognitive	compen- -satory	meta- cognitive	affective	social
self- directed learning	coefficient	.348*	.501*	.449*	.534*	.225*	.355*
	<i>Sig.</i>	.000	.000	.000	.000	.006	.000

* $p < .05$

The findings revealed that self-directed learning significantly and positively correlated with all six strategic factors, indicating that learners with a higher level in self-directed learning could be more likely to use learning strategies frequently in English learning. Among the strategic factors, metacognitive strategy was connected with the self-directed learning mostly ($r=.534$, $Sig.=.000$), followed by cognitive ($r=.501$, $Sig.=.000$), compensatory ($r=.449$, $Sig.=.000$), memory ($r=.348$, $Sig.=.000$) social ($r=.355$, $Sig.=.000$) factors.

Considering the higher scores of correlation between self-directed learning and metacognitive strategy, the findings in the study were well supported by previous empirical studies. That is, since metacognitive strategies enable learners to exercise more executive control over their learning approach by means of organizing, monitoring, evaluating language knowledge and learning process, it can be said that enhancing learners' metacognitive strategy usage may serve as an influential contributor to raise their levels of self-directness (Breen & Mann, 1997; Kim, 2012; Kim, 2014; Victori, 2004). Plus, the relationship between self-directed learning and the affective strategy showed the least correlation rates. Accordingly, it may suggest that highly self-directed learners appeared to use not so much emotional learning methods but cognitive

learning strategies.

Next, Table 7 reveals that there was a significant correlation between self-directed learning and English proficiency. In a similar vein, previous research stressed that better performance in learning English might hinge on the integrative use of various self-directed learning approaches (Bruen, 2001; Gan, 2004; Kim, 2014; Morris, 1995). Moreover, Stewart (2007) argued that having high self-management skills in self-directed learning appeared to be the most significant predictors in gaining greater learning outcomes. Thus, if learners have opportunities to facilitate their own self-directness with the help of strategy training instruction in L2 classroom settings, learners are more likely to increase their English proficiency.

Table 7. Results of Relationship between Self-directed Learning and English Proficiency

		TOEIC scores
self-directed learning	coefficient	.457*
	<i>Sig.</i>	.000

* $p < .05$

5. Conclusion

The purpose of the current study was to explore the relationships between self-directed learning, learning strategies, and English proficiency of Korean college students. As for the learning strategy use frequency, while the HSG learners in the self-directed learning group showed greater use of learning strategies than both the MSG and LSG learners overall, there was a statistically significant difference between the LSG, and both the MSG and the HSG, but not between the HSG and the MSG. This could mean that learners who gained a certain level of the self-directed learning tended to use learning strategies properly in English learning. Therefore, learners with a low-level of self-directed learning need to be taught how to use and manage their own learning strategies through explicit instruction in language learning contexts. Another finding in the study was that there was a significantly positive correlation among the three variables observed. That is, the self-directed

learning was closely related with not only learning strategies but English proficiency as well.

Based on the results of the present study and what Khodabandehlou et al. (2012) had pointed out, teaching methodology that practices self-directed learning activities need to be designed in order to develop learners' competence since learners who are equipped with self-directed learning could have better potential to identify and use appropriate strategies in their own learning, resulting in L2 proficiency improvement. In particular, generating suitable classroom tasks towards exercising self-directness could be useful for a low-level learners. In a similar vein, teachers need to promote students' levels of self-directness by utilizing diverse learning strategy tasks in L2 classrooms such as reflective essays, persuasive communication, and group discussion.

Although this study tried to examine the relationships between self-directed learning, learning strategies, and English proficiency in L2 learning settings, the findings were mainly drawn from the participants' survey responses, not based on experimental data. Therefore, the need for more concrete studies on this topic through experimental sessions still remains. In addition, the English proficiency levels of the participants were measured using their TOEIC scores, which might also be another limiting factor in the study. For future study, it would be better to measure the students' specific language skills such as speaking, reading, listening, and writing so that researchers can have a more complete understanding of the relationship between self-directed learning and specific English language abilities in L2 instruction.

References

- 김미선. (2012). *대학생들의 자기주도 영어학습능력과 학습전략과의 관계*. 미출간 석사학위논문. 한국외국어대학교 교육대학원.
- 김연수. (2014). *자기주도성과 학습전략 사용 및 학업성취도의 관계: 한국 고등학교 영어 학습자의 경우*. 미출간 석사학위논문. 건국대학교 교육대학원.
- 김혜영, 김민진. (2009). *초등학생의 자기 주도적 영어 학습능력 조사연구*, *초등영어교육*, 15(3), 37-55
- 천혜진. (2014). *자기주도 학습에 따른 중학생의 학습방법의 전략과 효과*. 미출간 석사학위논문.

문. 조선대학교 교육대학원.

- Beinborn, L., Zesch, T., & Gurevych, I. (2012). Towards fine-grained readability measures for self-directed language learning, *Electronic Conference Proceedings*, 80, 11-19.
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. London: Pearson Education.
- Bordonaro, K. (2006). Self-directed language learning of ESL students in an American college library. *Journal of Language and Learning*, 5(1), 29-49.
- Breen, M. P., & Mann, S. (1997). Schooling arrows at the sun: Perspectives on a pedagogy for autonomy. In P. Benson, & P. Voller (Eds.), *Autonomy and independence in language learning* (pp. 132-149). London: Longman.
- Bruen, J. (2001). Strategies for success: profiling the effective learner of German. *Foreign Language Annals*, 34, 216-225.
- Cook, V. (2008). *Second language learning and language teaching*. London: Hodder Education.
- Cotterall, S. (1995). Developing a course strategy for learner autonomy, *ELT Journal*, 49(3), 219-226.
- Danis, C. (1992). A unifying framework for data-based research into adult self-directed learning. In H.B. Long and Associates (Eds.), *Self-directed learning: application and research*. (pp. 47-72). Morman: Oklahoma Research Centre for Continuing Professional and Higher Education.
- Gan, Z. (2004). Attitudes and strategies as predictors of self-directed language learning in an EFL context. *International Journal of Applied Linguistics*, 14(3), 389-411.
- Green, J. M., & Oxford, R. L. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29, 261-297.
- Guglielmino, L. (1977). *Development of self-directed learning readiness scale*. Doctoral dissertation, University of Georgia.
- Kerka, S. (2000). *Self-directed learning*. New York: Association Press.
- Khodabandehlou, M., Jahandar, S., Seyedi, G., & Abadi, R. (2012). The impact of self-directed learning strategies on reading comprehension. *International Journal of Scientific & Engineering Research*, 3(7), 1-19.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teacher*. Chicago, IL: Association Press.

- Knowles, M. S. (1990). *The adult learner: A neglected species*. Gulf Publishing, Houston, TX.
- Long, M. H. (2005). *Second language needs analysis*. Cambridge: Cambridge University Press.
- Macaro, E. (2006). Strategies for language learning and for language use: revising the theoretical framework. *Modern Language Journal*, 90, 320-337.
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adults and Continuing Education*, 89, 3-13.
- Morris, S. S. (1995). *The relationship between self-directed learning readiness and academic performance in a nontraditional higher education program*. Unpublished doctoral dissertation, University of Oklahoma.
- Naiman, N., Fröhlich, M., Stern, H., & Todesco, A. (1978). *The good language learner*. Research in education series No. 7. The Ontario institute for studies in education, Toronto. Reprinted Clevedon, Avon: Multilingual Matters (1995).
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. New York: Cambridge University Press.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Rowley, MA: Newbury House.
- Pitts, M. M. (1983). Comprehension monitoring: definition and practice. *Journal of Reading*, 26, 516-523.
- Stewart, R. A. (2007). Investigating the link between self directed learning readiness and project based learning outcomes: the case of international Masters students in an engineering management course. *European Journal of Engineering Education*, 4(32), 459-465.
- Victori, M. (2004). Eliciting and fostering learners' metacognitive knowledge about language learning in self-directed learning programs: A review of data collection methods and procedures. In Documents de Recerca, Vol. 13. Universitat de Vic, 3-20.
- Victori, M., & Lockhart, M. (2000). Enhancing metacognition in self-directed language learning. *International Journal of Education Research*, 23(2), 223-234.
- Wenden, A. L. (1991). *Learner strategies for learner autonomy*. London: Prentice Hall.
- Yang, N. D. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System*, 27, 515-535.

Appendix

Appendix A. Selected Question items for SDLRS

문항	내용	1	2	3	4	5
1	영어공부는 평생 필요한 것이다.	1	2	3	4	5
2	나는 이해하기 힘든 단어나 문장도 알아내려고 노력한다.	1	2	3	4	5
3	영어 공부를 하다가 모르는 것이 있을 때 해결하는 방법을 알고 있다.	1	2	3	4	5
4	나는 영어 배우는 것을 좋아한다.	1	2	3	4	5
5	나는 영어선생님께 우리에게 정확하게 하나하나 설명해 주시기를 바란다.	1	2	3	4	5

1: 전혀 그렇지 않다 2: 그렇지 않다 3: 보통이다 4: 그렇다 5: 매우 그렇다

Appendix B. Selected Question items for SILL.

문항	내용	1	2	3	4	5
1	나는 새로 배운 것과 알고 있는 것 사이에 연상관계를 생각해 본다.	1	2	3	4	5
2	나는 새로운 영어 단어를 잘 기억할 수 있도록 문장 속에 넣어서 단어를 사용해 본다.	1	2	3	4	5
3	나는 새로운 영어 단어를 잘 기억하기 위해 그 단어의 발음과 단어의 의미나 그림을 연관지어 본다.	1	2	3	4	5
4	나는 새로운 영어 단어가 쓰일 만한 상황을 머릿속으로 그려보면서 단어를 기억한다.	1	2	3	4	5
5	나는 새로운 영어 단어를 기억하기 위해 같은 소리로 끝나는 단어들을 생각해본다.	1	2	3	4	5

1: 전혀 그렇지 않다 2: 그렇지 않다 3: 보통이다 4: 그렇다 5: 매우 그렇다

Cho, Young Ah

Department of Fire Fighting
Dong Shin University
185 Kunjaero, Naju,
Chonnam 520-714, Korea
Tel: (061) 330-3607
E-mail: blanche05@hanmail.net

Ma, Jee Hyun

Department of English Education
Chonnam National University
77 Yongbong-ro, Buk-gu,
Gwangju 500-757, Korea
Tel: (062) 530-2445
E-mail: jeehyun@jnu.ac.kr

Received on June 29, 2015

Revised version received on September 23, 2015

Accepted on September 30, 2015