# The Effect of Career Preparation Program on Self-Leadership and Career Locus of control among University Students in Korea

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# 대학생의 진로준비프로그램이 셀프리더십, 진로자기통제위에 미치는 효과

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Abstract This study was conducted to investigate the effects of a career preparation program (CPP) on self-leadership (SL) and career locus of control (CLOC) among University Students in South Korea. Self-leadership is the ability to control and lead oneself to achieve goals. CLOC is that attribute own's success of failure to own's effort and ability internally or luck or environment externally. Both have been known to strongly affect variables associated with career planning. We also explored SL and CLOC based on the variable related subjects' characteristics. Method: After receiving informed consent, 58 subjects were collected from University in D metropolitan area in Korea from March to June 2016. CPP was provided to college students who agreed to join this study, which consisted of a 15 week career development program. During the program, recruitment information was provided as well as encouragement and motivation. The program also focused on self-exploring and self-initiating experiences by themselves. Data were collected before and post CPP and were analyzed using SPSS 21.0. Result: self-leadership increased from 3.02±0.36 points to 3.23±0.35 points after CPP (t=-4.45, p=0.00). There were significant differences in self-leadership and in internal attribution (t=-3.26, p=0.00). The CPP based on the understanding of oneself was effective to cultivate university students' self-leadership. Moreover, the CPP increased internal attribution of the college students significantly from 2.96±0.35 points to 3.15±0.32 points (t=-3.26, p=0.00). CPP was also found to effectively influence the internal locus of control. Although external attribution was reduced from 2.19±0.31 to 2.13±0.35, this different was not significant (t=1.68, p=0.09). Conclusion: The results of this study suggest that the CPP based on understanding of oneself should be actively applied in career education.

**요 약** 본 연구는 진로지도준비교육이 대학생의 셀프리더십과 진로내외통제위에 미치는 영향을 확인하기 위하여 수행되었다. 목표를 성취하기 위하여 스스로를 통제하고 이끌어 가는 능력인 셀프리더십과 진로 및 취업결과에 대해 가족 및 환경 등 외부의 탓으로 여기거나 스스로 역량이나 준비 등 자신의 능력 등 내부의 탓으로 생각하는 진로내외통제위는 취업에 대한 중요한 변수로 알려져 있다. 연구에 대한 목적과 참여방법을 설명하고 이에 동의한 대학생 58명을 대상으로 15주간 진로준비 프로그램을 제공하였고, 자료수집은 2016년 3월부터 6월까지 D시에 위치한 H대학교에서 수행되었다. 진로준비프로그램은 취업 준비에 대한 구체적인 내용뿐만 아니라 구직을 준비하는 학생 스스로 자신에 대한 이해를 높이도록 자기탐색 및 자기주도 기반으로 구성되었다. 프로그램의 사전과 사후 시점에서 셀프리더십과 진로자기통제위가 측정되었고 SPSS 21.0으로 분석 되었다. 연구결과, 자기탐색과 자기주도기반의 진로준비프로그램은 학생들의 셀프리더십을 높였고(t=4.45, p=. 00), 진로내 외통제위 중 특히 내적통제위를 높이는 것으로 확인되었다(t=3.26, p=. 00). 따라서 본 연구결과 추후 자기탐색을 기반으로 하는 진로지도 프로그램을 대학생의 진로준비에 적극적으로 적용 할 것을 제안한다.

Keywords : College students, Career education, Career, Self-leadership, Locus of control

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# 1. Introduction

College students are an early adulthood. One of their life span tasks is to find a job they pursue in their life. They are on the step toward making decisions about job and making final preparations just before entering society. However, the change of society and job structure, and difficult job market conditions make challenging to college students. They have a hard time to prepare for a job and to decide what job is good for them [1][2]. Amid fierce competition, they also feel the burdens not only about acquiring ability to work but also demonstrating good impression through the job interview and resume [1][3]. Because students have not been exposed to the real job markets before and they have not experienced in a formal prepared career course, they feel stress and instability about getting a new job and entering society as a social member. They need to lessen their psychological burdens on career decisions and career preparation. In the flood of information related to a career, they should be guided to choose the right information and to navigate a career path [4]. What they have taken before as career guidance or counseling, has been focused mainly on entering college during the high school period. At that time, many students don't care about the connection of the personal specialty (ability, characteristics and interests and so on.) and the job they chose in the future. So, it was reported that over 40 percent of Korean workers have different jobs from their majors [5].

Universities help students prepare themselves for their jobs and enter the job market they chose as their career [1]. Recently, many universities in South Korea, tend to provide career preparation program for their students. The career preparation programs for college students have been developed and advanced mainly in content [1][6].

In the view of regularity, the career preparation program in the early era only provided them only singe episode or special lecture, not running on regular base.

Students were stressed about participating in a career program without detailed guidelines. In early era, career preparation programs have spent a lot of time preparing students for resume, self-introduction and interviews. Students were like rushing into the job market without reflecting on what they would do with what they would do. It made the students provoke only hard feeling. These programs only caused students to feel pressured [7][8]. It is reported that instead of handling job interviews and preparing employment applications, the job seekers should be able to navigate their careers and prepare themselves for employment based on their own interests [7][8]. Some previous studies which dealt a career preparation program, emphasized to encourage "exploring one's self" in the career program [1], [6-9], it was needed for the developing for students.

By this need, we have developed a job preparation program called Career Preparation Program, CPP. This program consisted of two sections. At the beginning of the program, university students spend time exploring and understanding themselves. And then they provide information on job markets, preparing for the job interview, and meeting and connecting the jobs they want with the abilities they have.

Self-leadership is defined as 'the process of influencing oneself to establish the self-direction and self- motivation needed to perform' [9-11]. It is the ability to influence oneself to achieve one's objectives. It also increases purposeful action and has immediate applications for personal development, leadership and achievement [12]. The practice of intentionally influencing someone's thinking, feeling and behaviors to achieve someone's objectives [12]. Previously, there are many evidences that the self-leadership affects someone's goal attainment in various fields [9-15].

The concept of locus of control (LOC) refers to causal beliefs that outcomes are determined either by one's actions or by external forces beyond one's control [16-18]. It also was the individuals' general beliefs on

the internal and external factors that determine consequences in their life [16-18]. Especially, career locus of control refers to attitudes toward career planning. An individual possessing an internal career locus of control views career outcomes as dependent on one's own actions, whereas an individual possessing an external career locus of control views career outcomes as largely under the control of the difficulty of the task, powerful others, or chance factors [19]. Locus of control is one of most widely studied attitudinal constructs. As a psychological variable, it has influenced the study of vocational indecision and career decision-making difficulties. Scholars in the field of career development have generally concluded that an internal locus of control, called internal attribution, the belief that life rewards are the result of personal behavior, is linked with adaptive career outcomes, whereas an external locus of control, called external attribution, or the belief that rewards are contingent upon forces operating outside of one's own efforts, reveals the opposite relationship (i.e., maladaptive career outcomes) [20-21].

The purpose of this study was to examine the effect of the career preparation program on self-leadership and career locus of control among university student in South Korea. With the results of this, it will be extended the career preparation program for university students. It may identify the basic data for career education to encourage and promote the efficacy and ability of student job seekers.

# 2. Method

# 2.1 Design

This study was designed non-equivalent one-group pretest posttest study. It was performed to investigate the effect of the career preparation program(CPP) on the self-leadership and career locus of control in college students. According to provide the CPP among college students, it was compared between pretest score and posttest score of the self-leadership and career locus of control.

# 2.2 Participants

The participants were recruited at a university in metropolitan area in South Korea from March to June 2016. They were college students who agreed to join in this program and participated the survey voluntarily. The sample size was calculated by the G-Power 3.1.9.2 program. Under the condition of the two tailed, the effect size 0.5, alpha value 0.05, and power of analysis 0.95, 54 samples were suggested by estimating the difference between pre- and post- means matched paired. For considering the drop rate of the program, it was collected 60 students at the initial phase. But two of them were not completed the questionnaires. At last, 58 students were analyzed as set pre- and post-matched data.

# 2.3 Operational definition and measurement2.3.1 CPP(Career Preparation Program)

The CPP is the program which prepared the people entering the job market newly. At the first step, we made the components and contents of it. Discussing previous literatures review and refining the previous similar program, CPP was designed for college students to prepare recruitment of their new jobs. It can be run the 100-minuets 15-week program on the college base. It consisted of five steps; These were introduction, understanding themselves, exploring the job fields they want to work, bridging their aptitude to new job, continuing their career development self-directly and rounding program off. It showed by 'Figure 1'. It was consisted of not only giving information about recruiting but also encouraging and motivating them. It also was focused on self-exploring and self-initiating experiences by themselves.

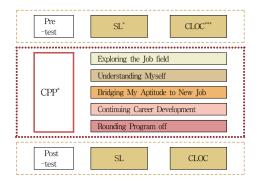


Fig 1. Diagram of Research Design \* CPP: Career Preparation Program \*\* SL: Self-Leadership \*\*\* CLOC: Career Locus of Control Scale

# 2.3.2 Self-leadership

The RSLQ (Revised Self-Leadership Questionnaire) was developed to measure the self-leadership of college students by Houghton and Neck [10]. Shin, Kim & Han [9]were modified it for Korean university students. The tool was 35 items-questionnaire and consisted of three categories, behavior-focused strategies, natural reward strategies and constructive thought pattern strategies. Using a 5-point Likert scale, it meat that the higher the score, the higher self-leadership.

In this study, it was used the 35-items RSLQ-Korean version, which was validated for Korean college students by Shin, Kim, and Han [14]. The Cronbach's  $\alpha$  was .73~.93 in Houghton and Neck's study [10]. The Cronbach's alphas in each subcategory ranged in .75~.78 in Shin, Kim, and Han's study. In this study, the Cronbach's alphas were .85 in pretest, .85 in posttest.

#### 2.3.3 Career Locus of control

A Career Locus of Control Scale (CLOC) was invented by Millar and Shevlin [22], and it represented multidimensional expectations related to internality, luck, helplessness, and powerful others. It designed for use with adolescent school pupils engaged in the career development and decision-making process [22]. Kim [8]has developed CLOC for Korean university students. Kim reconfigured the variables for Korean university students. Kim's the career locus of control scale consists of 23 items in 5 factors. These are mainly two areas; internal attribution and external attribution. 'Internality' and 'Self-Efficacy and Helplessness' was belong to internal attribution. 'Indirect Environment', Direct Environment' and 'Luck and Chance' were external attribution. Kim introduced the Cronbach Alpha of career LOC ranged from .69 to .85 in her study. In this study, Cronbach Alpha ranged from .73 to .75 in internal attribution and from .73 to .77 in external attribution.

# 2.4 Data Collection

#### 2.4.1 Ethical consideration

Before starting this study, the students were provided the explanation about the goal of this study, how they participate in it, and their opportunity to give up the program anytime whenever they want to quit. When the participants agreed to join it, they submitted the informed consents and participate in this study.

# 2.4.2 Collecting data

After getting informed consents, 58 subjects were collected at a University in D metropolitan area in Korea from March to June 2016. At the first meeting and last meeting, the subjects were checked the pre-test and post-test by the self-reported questionnaires about self-leadership and career locus of control. C-Prep Program was provided in 15weeks.

## 2.5. Data Analysis

Data were analyzed by using SPSS 21.0.

- The analysis of general and career-related characteristics was used percentage, mean and standard deviation.
- Self-leadership and career development readiness were analyzed with mean and standard deviation at the point of pretest and posttest. They were compared with paired t-test.

- One-way ANOVA was used to analyze the self-leadership and career locus of control by general and career-related characteristics
- Pearson coefficient was used to analyze relationship between self-leadership and career locus of control.

# 3. Results

# 3.1 General and Career–Related Characteristics

The general characteristics of subjects showed by < Table 1 >. The mean of age in the subjects was 22.2 years (SD:  $\pm 1.57$ ). Female students (32 students, 55.2%) were more than male students (26 students, 44.8%). 55.2 percent of them were senior students. The majors of subjects were engineering (34.5%), business & social sciences (25.9%), humanities (22.4%) and natural science (17.2%) in order.

their employment. Among the respondents, 23 students (39.7%) were in the 3.0-3.4 academic point range. Next, students belonged to range of 3.5 - 3.9 of academic point were followed.

 Table 1. General characteristics of subjects
 (n=58)

Characteristics	Categories	Number (%)	Mean (SD)
Age(yr)		(70)	22.2
/ ge(yi)			(1.5)
Gender	Male	26(44.8)	( )
	Female	32(55.2)	
Grade	Junior	26(44.8)	
	Senior	32(55.2)	
Majors	Humanities	13(22.4)	
	Engineering	20(34.5)	
	Business & Social	15(25.9)	
	Sciences	10(20.5)	
	Natural science	10(17.2)	
Taking career	Yes	36(62.1)	
class	No	22(37.9)	
Getting job	Yes	2(3.4)	
	No	56(96.6)	
Academic	above 4.0	5(8.6)	
Score	3.5-3.9	19(32.8)	
	3.0-3.4	23(39.7)	
	below 2.9	11(18.9)	

# 3.2 Comparison of self-leadership and career locus of control between pre-test and post-test

It was compared between pre-test and post-test in two dependents variable, self-leadership and career locus of control and showed in the  $\langle Table 2 \rangle$ .

Self-leadership was increased from  $3.02\pm0.36$  points to  $3.23\pm0.35$  points after CPP(t=-4.45, p=. 00). According to analyzing subcategories of selfleadership, the scores rose in statistically significant level in all subcategories.; from  $3.43\pm0.41$  to  $3.62\pm0.41$ in behavior-focused strategies sector (t=-3.20, p=.00), from  $3.32\pm0.63$  to  $3.63\pm0.68$  in natural reward strategies sector (t=-3.83, p=.00) and from  $2.31\pm0.30$  to  $2.42\pm0.31$  in constructive thought pattern strategies sector (t=-2.42, p=.02).

 
 Table 2. Comparison of Self-leadership and career locus of control between pre-test and post-test

of control octiveen pre test and post test						
pre-test mean (±SD)	post-test mean (±SD)	t	р			
3.02±0.36	3.23±0.35	-4.45	.00			
3.43±0.41	3.62±0.41	-3.20	.00			
3.32±0.63	3.63±0.68	-3.83	.00			
2.31±0.30	2.42±0.31	-2.27	.02			
2.50±0.17	2.54±0.22	-1.38	.17			
2.96±0.35	3.15±0.32	-3.26	.00			
3.17±0.37	3.37±0.36	-3.01	.00			
2.75±0.44	2.92±0.39	-2.50	.01			
2.19±0.31	2.13±0.35	1.68	.09			
2.40±0.43	2.32±0.53	1.51	.13			
1.58±0.38	1.55±0.40	0.62	.53			
2.59±0.48	2.52±0.53	1.17	.24			
	mean (±SD) 3.02±0.36 3.43±0.41 3.32±0.63 2.31±0.30 2.50±0.17 2.96±0.35 3.17±0.37 2.75±0.44 2.19±0.31 2.40±0.43 1.58±0.38	mean (±SD)         mean (±SD)           3.02±0.36         3.23±0.35           3.43±0.41         3.62±0.41           3.32±0.63         3.63±0.68           2.31±0.30         2.42±0.31           2.50±0.17         2.54±0.22           2.96±0.35         3.15±0.32           3.17±0.37         3.37±0.36           2.75±0.44         2.92±0.39           2.19±0.31         2.13±0.35           2.40±0.43         2.32±0.53           1.58±0.38         1.55±0.40	mean ( $\pm$ SD)mean ( $\pm$ SD)t3.02 $\pm$ 0.363.23 $\pm$ 0.35-4.453.43 $\pm$ 0.413.62 $\pm$ 0.41-3.203.32 $\pm$ 0.633.63 $\pm$ 0.68-3.832.31 $\pm$ 0.302.42 $\pm$ 0.31-2.272.50 $\pm$ 0.172.54 $\pm$ 0.22-1.382.96 $\pm$ 0.353.15 $\pm$ 0.32-3.263.17 $\pm$ 0.373.37 $\pm$ 0.36-3.012.75 $\pm$ 0.442.92 $\pm$ 0.39-2.502.19 $\pm$ 0.312.13 $\pm$ 0.351.682.40 $\pm$ 0.432.32 $\pm$ 0.531.511.58 $\pm$ 0.381.55 $\pm$ 0.400.62			

The total score of career locus of control was changed from  $2.50\pm0.17$  to  $2.54\pm0.22$  points, it did not show statistically significant(t=-1.38, p=. 17).

When the LOC is divided into internal attribution and external attribution, The internal attribution, tendency to own responsible for the employment was increased to  $2.96\pm0.35$  points from  $3.15\pm0.32$  points(t=-3.26, p=. 00). On the other hand, after the CPP, external attribution which is a tendency to attribute responsibility for their job results to direct/indirect environment surroundings them and their luck instead of their own, was reduced from  $2.19\pm0.31$  to  $2.13\pm0.35$ . But it was also not supported statistically significance (t=1.68, p=.09).

# 3.3 Self-leadership control by General and Career-Related Characteristics

The score of self-leadership was compared the differences between pretest before CPP and Posttest after CPP by the characteristics of the subjects and it was presented in <Table 3>.

Regardless of sex, grade, or previous experiences of career programs, the score of self-leadership has increased after the CPP. By analyzing by majors, self-leadership rose to statistically significant levels. However, there was an exception to the Business & Social Science majors.

The students group with above average 4.0 point in academic score, got the creasing score from 3.20 to 3.59 points in the self-leadership. And students group in 3.0~3.4 in academic score was followed. Their scores rose from 2.93 to 3.21 points and was statistically significant.

The self-leadership scores of students who were belong to other group, also rose but they did not meet statistically significant levels.

 
 Table 3. Self-leadership by General and Career-Related Characteristics (N=58)

			Self-leadership			
Characteristics	Categories	Categories pre-test post-test		( <b>F</b> ( )		
	-	means ±SD	means ±SD	t/F(p)		
Gender	Male	3.03±0.36	3.24±0.31	-3.08(.00)		
	Female	3.01±0.37	3.21±0.39	-3.16(.00)		
Grade	Junior	2.96±0.39	3.22±0.37	-3.75(.00)		
	Senior	3.07±0.34	3.23±0.35	-2.61(.01)		
Majors	Humanities	2.91±0.43	3.14±0.43	-3.55(.00)		
	Engineering	3.06±0.36	3.27±0.31	-2.10(.04)		
	Bus.& Soc.Scie <sup>*</sup>	3.04±0.29	3.18±0.35	-1.62(.12)		

	Natu. science <sup>**</sup>	3.06±0.41	3.30±0.37	-2.57(.03)
Taking career	Yes	3.04±0.33	3.24±0.39	-3.51(.00)
class	No	3.00±0.42	3.19±0.30	-2.67(.01)
Academic Score	above 4.0	3.20±0.35	3.59±0.32	-2.24(.00)
	3.5-3.9	3.11±0.32	3.17±0.34	-0.81(.45)
	3.0-3.4	2.93±0.39	3.21±0.39	-3.70(.00)
	below 2.9	2.99±0.39	3.16±0.26	-1.95(.08)

\* Business & Social Science

"Natural Science

# 3.4 Career locus of control by General and Career-Related Characteristics

The score of career locus of control was compared the differences between pretest before CPP and Posttest after CPP by the characteristics of the subjects. it was presented in <Table 4>.

Table 4.	The career locus of control	by General and
	Career-Related Characteristics	(N=58)

Career-Kenaleu Characteristics (N=36)							
		LOC: internality			LOC: external		
	Categories	attribution			attribution		
Characteri stics		pre- test	post- test	t/F	pre- test	post- test	t/F
		mean ±SD	mean ±SD	(p)	mean ±SD	mean ±SD	(p)
	Male	2.95	3.15	-2.66	2.21	2.10	1.78
Sex	Male	±0.29	±0.35	(.01)	±0.31	±0.38	(.08
	Fe	2.97	3.14	-2.06	2.17	2.15	0.4
	male	$\pm 0.40$	$\pm 0.30$	(.04)	±0.32	$\pm 0.32$	(.63
Grade	2.1	2.93	3.20	-3.01	2.14	2.06	1.44
	3rd	±0.38	±.33	(.00)	±0.32	±0.35	(.16
	441-	2.99	3.10	-1.62	2.23	2.19	0.9
	4th	±0.34	±0.31	(.11)	±0.30	±0.34	(.37
Major	Humanities	2.98	3.18	-1.84	2.12	2.09	0.4
		±0.42	±0.35	(.09)	±0.35	±0.33	(.66
	Engineering	3.06	3.18	-1.42	2.16	2.13	0.10
		±0.25	±0.30	(.17)	±0.31	±0.33	(.66
	Bus.&	2.92	2.99	-0.61	2.21	2.19	0.2
	Soc.Scie*	±0.11	±0.27	(.54)	±0.30	±0.11	(.80
	Natu.	2.82	3.25	-3.33	2.32	2.10	0.3
	science**	±0.29	±0.34	(.00)	±0.27	±0.28	(.01
Career	Yes	2.97	3.13	-2.10	2.18	2.13	0.9
Class		±0.41	±0.31	(.04)	±0.34	±0.37	(.32
	No	2.95	3.16	-2.77	2.21	2.13	1.4
	INO	±0.25	±0.34	(.01)	±0.26	±0.32	(.16
	-h 4 0	2.98	3.26	-2.03	2.28	1.98	2.3
Academic	above 4.0	±0.26	±0.28	(.11)	±0.28	±0.32	(.07
	2520	2.97	2.98	-0.11	2.15	2.19	-0.8
	3.5-3.9	±0.41	±0.26	(.91)	±0.38	±0.36	(.43
Score	2024	2.99	3.18	-2.21	2.21	2.20	0.1
	3.0-3.4	±0.35	±0.33	(.03)	±0.28	±0.36	(.85
	h -1 2 0	2.91	3.31	-4.23	2.17	1.95	3.1
	below 2.9	±0.34	±0.31	(.00)	±0.29	±0.26	(.01

Business & Social Science

\*\*Natural Science

Regardless of sex and previous experiences of career programs, the score of internal attribution has increased after the CPP. Internal attribution score has increased and it meant that they thought they were responsible for getting their own's job.

The most noticeable groups in the internal attribution were the group of the junior and group with 3.0~3.4 in academic score. Their internal attribution score has significantly increased statistically compared to the before CPP participation.

External attribution, which seeks to outsource the responsibility for his/her own career and employment, has been generally decreasing since the participation of CPP. Only a group of natural sciences majored and group with a score of below 2.9, showed statistically significant declines.

# 3.5 relationship between self-leadership and career locus of control

The correlations between self-leadership and its' three sub-categories and two types of career locus of control are given in < Table 5 >. Behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies showed a significant positive correlation with each other (r=.35~51. P=.00). Internal attribution showed the positive correlation in the two sub-categories of self-leadership, behavior-focused strategies, constructive thought pattern strategies (r=.31,

 Table 5. Correlation among self-leadership and locus of control (n=58)
 career

	locus of	control (	n-38)		
Variables	SL1	SL2	SL3	LOC int.	LOC ex.
SL1					
SL2	.50 (.00)				
SL3	.35 (.00)	.51 (.00)			
LOC in.	.31 (.01)	.22 (.09)	30 (.01)		
LOC ex.	02 (.84)	.06 (.65)	08 (.51)	30 (.01)	

SL1):self-leadership behavior-focused strategies

SL2):self-leadership natural reward strategies

SL3):self-leadership constructive thought pattern strategies

LOC int.4):Career locus of control internal

LOC ext.5):Career locus of control external

p=.01, r=.30, p=.01,). Two variables, external attribution and internal attribution represented a strong negative correlation and were identified statistically significance (r=-.45, p=.00).

## 4. Discussion

The mean score of self-leadership in this study showed pretest, 3.02 points and posttest, 3.23 points. Compared to other studies using the same tool, it is slightly lower than others. Two studies which used by same tools for nursing students, scored 3.43 points [15] and 3.41 points [24] of self-leadership.

Lee[23]also tried to figure out the characteristics of a typical Korean university student by using convenient stratified sampling method. In their study, mean score of self-leaderships showed 3.44 points on average. Comparing previous studies showed lower self-leadership score. We considered the reason the self-leadership score in this study were as follows; Lee & Kim & Kim [15] and Lee [24] targeted the students majored a specific field, nursing. We may have sampling bias. The subjects of this study were recruited only in certain areas instead of national wide.

According to participation CPP program, the score of self-leadership in the participations rose from 3.02 points to 3.23. The scores rose to a statistically significant level in all three subcategories, as well as the total score of self-leadership.

Nevertheless, we did not mention or deal with it in CPP directly, students might have had a chance to learn about themselves through various vocational and self-aware tests during the CPP. Eventually, students were encouraged to take the initiative in making career decisions and preparations. Through this process, they were encouraged to have a positive impact and strengthen self-leadership. We assume that the self-seeking process, which is characteristic of this program, leads to the results.

In the three subareas of the self-readership, the area

that showed the greatest change is referred to as the area of natural reward strategies. For example, the following items apply: " I construct my own way of doing whatever I can to entertain myself. ", " I try to put things around me or someone who can help me do something good. ", " Rather than taking care of the tasks, I try to do things in a way that I can entertain. ", " I am interested in finding the most interesting areas I enjoy, or find the most interesting areas in my study. ", " I have more fun ideas than unhappy aspects of activities involving schools and academics. ".

Based on the characteristics of the subject, we examined whether the difference in the score of the self-leadership score was different after the CPP participation. We have identified improvements in self-leadership, regardless of gender, grade, or experience of career programs.

After the CPP, the self-Leadership score was not unique to each major and showed a statistically significant rise in statistics. But only business and Social Science majors showed no statistically significant evidence.

There were 20 students who were majoring in Business & Social Sciences and and there are fewer studies related to them. Because of it, it is difficult to explain the phenomenon. We strongly recommended the research should be studied later in the various major field and in the larger sample size population.

The self-leadership score of students with superexcellent grades marked the biggest rise, from 3.20 points to 3.59 points. It is considered that they intend to lead their own achievements, and serve themselves more. We could identify that they were more susceptible to changing themselves with the same stimulus. This meant that the career education to meet students' abilities and needs in order to be more efficient career programs is needed. Some people believe that they have control over the outcome of events in their lives, internal attribution, as opposed to external forces beyond their control, external attribution. Especially, internal attribution is the belief that their own lives are rewarded with their own actions. It has showed strong links to career path development and career decisions [20].

We compared the career LOC level with the study of Kim's research [2]studied by using the same tool for 476 university students. We converted the career LOC value to a 100-point scale of 100 points, since Kim YT converted the original tool from four points into a 5-point scale. Compared to the internal attribution of the two studies, 2.96 (74 point of 100) in this study and 3.72 (74.4 point of 100) in Kim's research were similar. Either the sum of the external controls or the value of each zone has been reduced. But it was not statistically significant. Kim [8] surveyed 308 university students in Seoul and Gyanggi Province, and developed a tool of career locus of control for Korean college students. By participating in the survey, respondents could understand the dominant type of locus of control they have used and known how they have made decisions in the area of career. The participants can also explore how it have influenced their current career decisions or career indecision. Kim [8]emphasized the importance of ' understanding oneself in career counseling or education. This is the same context that highlighted the importance of self-knowledge in this CPP. Therefore, the CPP which was based on self-reading and promoted internal locus of control as well as self-leadership, seems that participants were responsible for the increased sense of responsibility and motivation. The increase in internal attribution is a significant change in the way in which college students can expect significant positive outcomes.

The internal attribution, career internal locus of control, made the college students to get career information, establish goals, and set the future plans affecting the skill to solve the problems and self-evaluation, and influencing the entire self-efficacy. Cho analyzed how locus of control and self-expectation belief which are internal belief system university student has effect stability of career plan, goal orientation for career and confidence in career decision [25]. It showed that locus of control of university student effects meaningfully on stability of career goal and career goal had meaningful effects with higher internal locus of control. Cho explained that students with high internal locus of control think that the incident originated from their actions, and they control their behavior well and believe they will succeed through their efforts [25]. In this study, it is considered academic and practical to identify two important variables, self-leadership and career locus of control for job preparation in a fierce job market. In addition, the study provided a link between self-understanding and job matched well in the CPP. It provides important point of view for future career preparation programs.

# 5. Conclusion

The effect of CPP based on the understanding of oneself affected university students' self-leadership. Also, the CPP may have contributed to enhance the internal locus of control of them. We strongly suggested that the CPP based on the understanding of oneself should be actively applied further more. This study was conducted without control group. So, we could not eliminate completely the exogeneous variables, such as the maturity effect. We propose the repeated study with controls in the future. It is also suggested the repeat study of a more extended subjects of representative populations since it targeted only one metropolitan area in this study.

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