Analysis of the Relationship among Career Education Program Participation and Satisfaction, Work Value, Career Goal Setting in Higher Education

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Abstract

This study aimed to analyze the causal model of career education program participation, satisfaction, and career goal setting mediated by work values in higher education. Also, this study analyzed the differences between departments. In this study, data from the 2018 Graduate Occupational Mobility Survey (GOMS), the most recent data, was used. The Graduates Occupational Mobility Survey is the largest short-term panel survey of a representative sample of Korean Graduates. The GOMS is conducted annually and has its results compiled each year. Structural equation modeling and multiple SEM were used for this study. The results were as follows. First, career education program participation had a statistically significant positive effect on extrinsic and intrinsic work values and career goal setting. Second, career education program satisfaction had a statistically significant positive effect on intrinsic work values and career goal setting, except for extrinsic work value. In addition, only the intrinsic work values positively affected career goal setting. Third, the career education program satisfaction impacted intrinsic work values, and the intrinsic work value impact on career goal setting was the difference between department and majors. In conclusion, this study proposed the provision of career education programs considering the difference between departments and majors in higher education.

Keywords: career education program, work values, career goal setting, SEM, GOMS

1. Introduction

In the futuristic society we live in, the concept of a lifetime job is increasingly blurred. In society, a job means that individuals are involved in the professional process of society through their abilities, interests, and decision-making. Also, the meaning of one's job is not limited to one's self-realization; it needs to be understood in economic and social dimensions. Choosing a job that one does not want personally will reduce one's happiness. This will also lead to a decline in job performance. In addition, from the macroscopic point of view, it decreases the economic efficiency of a job society, increases the cost of calibration, and may lead to an increase in social instability. Therefore, occupational safety, activeness, and satisfaction are never trivial personal or social dimensions.

Career exploration for university students is critical in the sense of understanding their identities and life's goals. It also influences university students in deciding what to do after graduation. Therefore, career exploration is one of the important aspects of an individual's career development (Wang et al., 2019). Career exploration activities not only provide individuals with important knowledge for career choices but also promote successful career development progression (Lent et al., 2016). Even after graduating from university and moving into society, career exploration and decisions may be repeated several times over their lifetimes. Therefore, reasonable career exploration and career preparation are also important for personal self-realization. It also has important implications in terms of national human resources and appropriate staffing.

In many universities, there has been an increase in the number of employment support centers in charge of human resource development, career guidance, and consulting support. The centers of each university have expanded and operated employment- and career-related courses and programs. The activities of these centers are designed to meet the demands of university students and industry at the same time. The quantitative and institutional growth of career

centers at each university is a positive phenomenon. In fact, among the career education programs provided by universities, programs related to business connections, special lectures, and counseling were found to increase the overall usefulness of the employment support program (Nam & Choi, 2022). However, despite the quantitative increase in employment and career centers, university student satisfaction is not very high because of the provider-oriented education system, lack of cooperation from the industry, and the lack of government financial support. These aspects suggest that scattered challenges complement career education in higher education institutions.

The steps for Korean university students (ages 19-26) are specialization, implementation, and stabilization in their career development. In university, students are trained for a job and perform the duties and exercise their powers. The fulfillment of this task should be connected to the consolidation of jobs. Therefore, the period of higher education is a very crucial time in career choices and decisions. In Korea, the youth unemployment problem continues because of increased college enrollments, experienced corporate preferences, and small business employment evasion. So, career guidance for university students is urgently requested by society (Kim & Lee, 2018).

The number of previous studies related to employment and careers at universities suggested specialized departments and full-time employees in higher education institutions. However, most college career center professionals (professors, counselors, etc.) are hired as temporary workers and are guaranteed employment for only one or two years. For this reason, university career services have not led to quality improvement. In addition, the majority of the centers' career staff are in cyclical work (one to three years). This type of work has increased skepticism regarding vocational education in universities. In the absence of appropriate compensation, career center staff are demanding that university students improve their performance in career guidance (Kim & Kim, 2022). For this reason, career centers have become one of the tasks to be avoided by university staff.

A well-structured career education program will have a major impact on student's career choices. And students want to have a more effective career education program. This study investigates the effects of satisfaction and participation in career education programs on university students' setting of their career goals. In the process, the intrinsic and extrinsic work values are assumed to be important variables. Work values are a very vital factor that can influence job satisfaction and life satisfaction in the future as well as career goal setting. This study investigates the difference between students of Humanities, Social Sciences, Natural Science, and Technology on the assumption that career education programs should be designed to be detailed depending on the department and major. Finally, this research contributes to the career education program design and construction well exposed between two majors' department characteristics. The research problems set to achieve the objective of these studies are as follows.

First, does the career education program participation and satisfaction significantly impact career goal settings?

Second, does the career education program participation and satisfaction significantly impact intrinsic work values and extrinsic work values?

Third, do the intrinsic and extrinsic work values significantly impact career goal settings?

Fourth, were there statistically significant differences between students of the Humanities, Social Sciences, and Natural sciences?

2. Literature Review

According to the model of Ginzburg's study published in 1951, the career development model has 3 steps: fantasy period, tentative period, and realistic period (Ginzburg et al., 1951). The fantasy period is from 6 to 10 years old, the tentative period is from 11 to 17 years old, and the realistic period, to which university students belong, is from 18 to early adulthood (Ginzberg et al., 1051). Super (1951) devised 5 steps of career development: the growth stage (birth-14 years old), the exploratory stage (15-24 years old), the establishment stage (25-44 years old), the maintenance stage (45-65 years old), and the disengagement stage (65+ years old). University students in Korea are in the late exploratory and early establishment stage. The exploratory stage has self-verification, function operation, and occupational exploration through school life, leisure activities, and part-time work. The early establishment stage experiences several job changes in their chosen field which are not suitable.

Korean college students often go to college without setting their career goals due to the stress of entrance exams and the characteristics of the Korean education system that ranks universities. It is very important to consider and decide one's career goals during university. Career goals are vital factors that play a key in career choices and career decisions. Therefore, an individual must set career goals. Organizational members of society strive to achieve career goals, and there are representative theories associated with these goals including Lent, Brown, and Hackett's (1994)

social cognitive theory and Locke and Latham's (1990) goal-setting theory. Career goal setting is a basic assumption that directly regulates the goal of individual behavior and is the basic motivation mechanism to explain the reason for individual behavior. By setting the career goal mechanism specifically, the concentration of personal competence and the direction of action is determined. To achieve personal goals, people make the effort to have patience. On the other hand, the social cognitive theory focuses on setting the goal's course and selecting and implementing actions to achieve the goal. The environment and context of personal experiences affect the learning experience. This influences self-efficacy and the outcome expectation selects the goal. Factors affecting career goals are often present. However, the present study focuses on career education programs at the university.

Kim (2012) analyzed the educational requirements for the competence of university students' career development in South Korea. This study argues that career guidance should be applied to configure the program to suit the university students' level and the need to show results. From a long-term perspective, this study emphasized systems that enable students to develop skills. Hwang (2007) analyzed the effects of the operation on university students' career exploration courses in South Korea. This study aims to analyze the differences between groups (career program participants vs. career program non-participant groups). For the analysis, we examined job identification (full-time and non-regular), a career decision level test, a job preparation behavior test, and a college life test. The result of analyzing the difference between the two groups, depending on whether students take the course curriculum, career identities, career decision levels, and career preparation behaviors showed a statistically significant difference. Therefore, this study argues for the need for interventions through the course curriculum.

Work value refers to the attitudes of individuals toward a career as a generalized concept rather than a specific job. These professional values are developed through interaction with family, school education, and social media (Prainsack & Buyx, 2018). In this study, work value is classified into external work value and intrinsic work value. 'Extrinsic work value' is regarded as economic, power-seeking, and awareness of social prestige (Gesthuizen et al., 2019). In other words, 'extrinsic work value' is considered a career instrumental value (Gesthuizen et al., 2019). In addition, this concept is to give more meaning to the physical rewards or conditions (wages, welfare, and job security). 'Intrinsic work value' is defined as demonstrating their skills through professional life, giving to the community and dedication, and focusing on human relations, giving meaning to the job itself.

The concept that extrinsic rewards such as material possession, and prestige, pay is the main factors in the scientific study of work itself (Thorndike, 1898). Although organizational theory deemphasized extrinsic rewards (Ryan & Deci, 2000), extrinsic factors still play an important in the employment process. Intrinsic rewards motivate one to work for work's sake, unlike extrinsic rewards. Interestingly, they provided responsibility and variety, enable the employee to see the results, offer a challenge, and have a significant impact on others which is characterized as essentially motivating (Deci & Ryan, 2000). Extrinsic and intrinsic rewards have been extended to values for work.

Mortimer and Lorence (1979) selected honor, status, remuneration, contributions, alternative opportunities, the ability to exert opportunity, interest, originality, and demonstrated opportunities as measuring factors of work values. Thomas and Alderfer (1989) had chosen other factors: the opportunity to earn a lot of money, the opportunity to help people socially, the opportunity to be a leader, and the opportunity to work with people. Lim et al. (2003) constructed factors of professional values: diversity, wages, stability, social recognition, demonstrated leadership, social services, creativity, and autonomy. Lee (2009) selected components such as achievement, altruism, creativity, aesthetics, intellectual stimulation, management, cooperatives, wages, independence, honor, reliability, and versatility.

In this study, I chose some factors for measuring extrinsic work values including wages, job stability, company size, and well-being. I also selected factors to measure the intrinsic work values including relevance to the majors, personal development possibilities, job prospects, interests, and personal attitudes. Based on the results of reviewing the preceding studies, major variables and items were selected and analyzed. This study aims to discover issues regarding career education programs that can contribute to the formation of career values for college students.

3. Research Methodology

3.1 Research Process and Method

For this study to analyze the effectiveness of career education in universities, the research process of setting research questions, selecting diagnostic tools, selecting analysis data, reviewing and selecting items, analyzing, and concluding was performed. This study analyzed Structural Equation Modeling by the two-step approach. The two-step approach with the measurement model and the structural equation model sequentially verified the model. A two-step approach is a possible form of rigorous validation of the measurement tool's reliability and validity. A major

comparative study of this research model is used in the multi-group structural equation analysis. This study used χ, CFI, RMSEA, and TLI. The model fit was based on RMSEA less than. 06, TLI 0.9, and CFI 0.9 (Bentler, 1990; Hu & Bentler, 1999; Tucker & Lewis, 1973).

3.2 Data and Variables

This study used the 2018 Graduates Occupational Mobility Survey data (the most recent data). The GOMS is the panel survey of a representative sample of Korean Graduates. The GOMS is conducted annually, and its results are compiled each year. The GOMS data is conducted by Korea National Statistical Office (the Korea Employment Information Service: KEIS). The GOMS is funded by the Employment Insurance Fund and sponsored by the Ministry of Labor in Korea.

The GOMS aims to provide vital information to policymakers and researchers so it can be used for employment policy-making and studies of the educated unemployment problem. The GOMS provides expansive information on youths' labor behavior and retrospective educational experience. This information facilitates research that investigates characteristics of the transition that youths make from university, and college to the labor market. The GOMS is a survey that uses graduates of colleges or universities as its population.

This study used workers who graduated from university in the 2018GOMS survey data and selected the final number of 6579 full-time workers. The data comprised 4072 people (61.9%) full-time male workers and 2507 (38.1%) who were full-time female workers. The Major was as follows. 761 in the Humanities (11.6%), 2030 in Social Sciences (30.9%), 1942 in Engineering (29.5%), 775 in Natural Sciences (11.8%), 282 in Medicine (4.3%), 302 in Education (4.6%), 487 in Art/Physical (7.4%). We composed the two groups for multi-group SEM. The group of literary students was composed of the Humanities, Social Sciences, Education, and Art/Physical (a total of 3580). The group of science students was composed of Engineering, Natural Sciences, and Medicine (a total of 2999).

3.3 Measurement and Reliability

Table 1. Questions and Reliability

Variables		Questions	Cronbach's α
Extrinsic work values	1)	How important is income?	.795
	2)	How important is employment stability?	
	3)	How important is the size of the company?	
	4)	How important is the welfare system?	
Intrinsic work values	5)	How important is the relevance of the major?	.753
	6)	How important is the possibility of personal development?	
	7)	How important is the prospect of the profession?	
	8)	How important are the aptitudes and interests?	
participation in the career development program	9)	Did you participate in job-related courses Career?	.856
	10)	Did you participate in work experience programs	
	11)	Did you participate in such a hearing professional, check aptitude test?	
	12)	Did you participate in campus career fairs?	
participation in the career development program	13)	Did you participate in career-related individuals and group consulting programs?	.856
	14)	Did you participate in a program interview technique and resume writing you?	
	15)	Did you participate in the work camp?	
	16)	Was this helpful to your career choice that participation in a career course?	
	17)	Was this helpful to your career choice that participation in work experience programs (including internships)?	
	18)	Was this helpful to your career choice that participation in such a hearing professional, you check aptitude test?	
	19)	Was this helpful to your career choice that participation in campus career fairs?	
Helpfulness to the career choice	20)	Was this helpful to your career choice that participation in career-related individuals and groups consulting program?	.911
	21)	Was this helpful to the career choice that participates in a program interview techniques and resumes writing you?	
	22)	Was this helpful to your career choice and participation in the work camp?	

The dependent variable in this study is the career goal setting of the 1 item; yes or no. The independent variables are the measure of participation in the career development programs and helpfulness to the career choice; each consists

of 7 items. Independent variables are measured in a dichotomous way (yes or no). The mediating parameter is separated by; extrinsic work values and intrinsic work values; each consisting of 4 items. Mediating parameter items are measured on a Likert scale (5-point) ranging from 1 (very low) to 5 (very high). Table 1 shows the question items and reliability. The reliability analysis was conducted for variables with Cronbach's α. Cronbach alpha consistency reliability estimates were all above Nunnally's (1978) recommended level of .70. In conclusion, our measures were reliable.

4. Analysis Results

4.1 Statistics Results

Table 2. Result of Invariance Tests

Variables	Questions	Mean	Standard deviation	Skewness	Kurtosis
Career goal setting	Did you set a job goal during the registered period at the university	.59	.492	-.364	-1.868
Extrinsic work values	How important is income?	4.23	.663	-.622	.956
	How important is employment stability?	4.22	.692	-.806	1.434
	How important is the size of the company?	4.18	.676	-.528	.451
	How important is the welfare system?	3.47	.923	-.318	-.151
Intrinsic work values	How important is the relevance of the major?	4.31	.681	-.775	.818
	How important is the possibility of personal development?	3.59	.999	-.568	-.064
	How important is the prospect of the profession?	4.37	.667	-1.005	1.840
	How important are the aptitudes and interests?	4.36	.667	-.921	1.485
Participation in the career development program	Did you participate in job-related courses Career?	.47	.499	.119	-1.986
	Did you participate in work experience programs (including internships)?	.28	.447	1.004	-.992
	Did you participate in such a hearing professional, check aptitude test?	.52	.500	-.062	-1.997
	Did you participate in campus career fairs?	.38	.486	.485	-1.766
	Did you participate in a career-related individuals and groups consulting program?	.28	.447	.998	-1.004
	Did you participate in program interview techniques and resume writing you?	.37	.482	.547	-1.701
	Did you participate in the work camp?	.16	.364	1.889	1.569
Helpfulness to the career choice	Was this helpful to your career choice that participation in a career, course?	.78	.415	-1.347	-.185
	Was this helpful to your career choice and participation in work experience programs (including internships)?	.87	.333	-1.245	2.044
	Was this helpful to your career choice that participation in such a hearing professional, you check aptitude test?	.72	.448	-.991	-1.019
	Was this helpful to your career choice and participation in campus career fairs?	.74	.441	-1.074	-.848
	Was this helpful to your career choice that participation in career-related individuals and groups consulting program?	.81	.396	-1.541	.376
	Was this helpful to the career choice that participates in a program interview techniques and resumes writing you?	.87	.338	-1.179	1.752
	Was this helpful to your career choice and participation in the work camp?	.83	.373	-1.790	1.206

The basic statistics results were standard deviation, skewness, and kurtosis of the model variables. These statistics show the state of the suitability of this data. On the other hand, the Structural equation model (SEM) should have continuous variables to meet the normal distribution assumption. Skewness and kurtosis are variables used to

determine the normal distribution. The normal distribution can estimate that these indicators have a value of 0 (zero) when, in reality, this distribution is impossible. If skewness is not greater than 2, and kurtosis is not greater than 7, then it could be estimated by the maximum likelihood method (Curran, West & Finch, 1996). The descriptive statistics of this study showed abnormal distributions. Non-normality variables could be estimated by the bootstrapping analysis (West, Finch & Curran, 1995).

4.2 Structural Equation Model (SEM) Results

This study was analyzed according to the 2-step approach. The 2-step approach with the measurement model and the structural equation model sequentially verified the model. The two-step approach is a possible rigorous validation of the measurement tool's reliability and validity.

A confirmatory factor analysis was first conducted to examine the four-factor structure of the scale. The results suggested that the four-factor model fit best with the empirical data ($x2$ =836.246, df=221, p=.000, TLI=.942, CFI=.953, RMSEA=.021). This means that all measured variables for each latent variable were included, as well as each of the measured variables and the latent variable. All regression weights in the model were significant at p<.05.

The results of the structural equation model analysis were as follows. The goodness of fit index is $x2$=1100.579, df=223, p=.000, TLI=.918, CFI=.934, and RMSEA=.024. These indexes are at acceptable levels. The standardized path coefficient (β) is used to compare the relative effect size of the paths between the latent variables. The hypothesis test results, which are statistically significant estimates of the path coefficients to the path, are as follows.

First, participating in career development programs had a positive (+) effect on intrinsic and extrinsic work values. These values provided statistically significant results at the p<.001 level. Second, helpfulness in career choice had a negative (-) effect on extrinsic work values and that path provided statistically non-significant results. On the other hand, helpfulness in the career choice had a positive (+) effect on intrinsic work values and that path provided statistically significant results at the p<.05 level. Third, extrinsic work values had a negative (-) effect on career goal setting, and that path provided statistically non-significant results. On the other hand, intrinsic work values had a positive (+) effect on career goal setting and that path provided statistically significant results at the p<.01 level. Fourth, participating in career development programs had a positive (+) effect on career goal setting. These values provided statistically significant results at the p<.001 level. Helpfulness in career choice had a positive (+) effect on career goal setting and that path provided statistically significant results at the p<.01 level.

Table 3. Estimates of SEM

Path			b(S.E.)	β	P
Extrinsic work values	←	participation in the career development program	.262(.060)	.206	***
Intrinsic work values	←	participation in the career development program	.386(.093)	.177	***
Extrinsic work values	←	Helpfulness to the career choice	-.003(.045)	-.004	.941
Intrinsic work values	←	Helpfulness to the career choice	.166(.076)	.109	.029
Career goal setting	←	Extrinsic work values	-.007	-.003	.936
Career goal setting	←	Intrinsic work values	.130	.106	.005
Career goal setting	←	participation in the career development program	.274	.102	***
Career goal setting	←	Helpfulness to the career choice	.102	.055	.003

Note. *** p < .001

4.3 Multi-SEM Result with Major

Depending on the major of the university, the coefficients were compared and analyzed by utilizing a multi-group structural equation. In this study, there were 3580 Literature graduate workers and 2999 science graduate workers. First, the basic model compared the partial metric invariance model with the chi-square and the degrees of freedom. In addition, it examined the established measurement equivalence. Next, it found the critical ratios for the differences verified by the structural invariance model. In addition, the coefficient values between the two groups were compared. The metric invariance constraints verify whether the same reaction results hold between each group. In addition, between-group equality constraints were verified on each path difference (Byrne, 2001). The results of the invariance tests are shown in table 3.

Table 4. Result of Invariance Tests

Model	x^2	*df*	TLI	CFI	RMSEA
Model 1: Basic Model	1381.009	446	.913	.929	.018
Model 2: Metric invariance model	1408.673	464	.915	.929	.018
Model 3: Metric invariance and Structural invariance model	1426.600	472	.916	.928	.018

The result of basic model invariance was *x2* =1381.009, *df*=446, *p*=.000, TLI=.913, CFI=.929, and RMSEA=.018. These indexes are at acceptable levels. The result of metric invariance was *x*2=1408.673, *df*=464, p=.000, TLI=.915, CFI=.929, and RMSEA=.018. The TLI, CFI, and RMSEA indexes are at acceptable levels. Also, the χ difference (model 1 & model 2), 27.664, with 18 degrees of freedom was statistically significant at α =.05.

The result of structural invariance was *x*2=1426.600, *df*=472, *p*=.000, TLI=.916, CFI=.928, and RMSEA=.018. The TLI, CFI, and RMSEA indexes are at acceptable levels. Also, the χ difference (model 2 & model 3), 17.927, with 8 degrees of freedom was statistically significant at α = .05. So, multi-group SEM's invariance tests were evaluated.

Table 5. Result of x^2 Difference Tests

Model vs. Model	x^2 Difference	*df* Difference	Decision
Model 1 vs. Model 2 (Test of metric invariance)	27.664	18	Accept
Model 2 vs. Model 3(Test of structural invariance)	17.927	8	Accept

It presents the analysis around the path difference between the group of literary graduated workers and the group of science graduated workers, as follows. First, the path of helpfulness to career choice and intrinsic work values had statistically significant results in the group of science graduated workers, but the group of literary graduated workers did not have significant results. Second, the path on intrinsic work values and career goal setting was statistically significant in the group of literary graduates workers, but the group of science graduates workers did not have significant results.

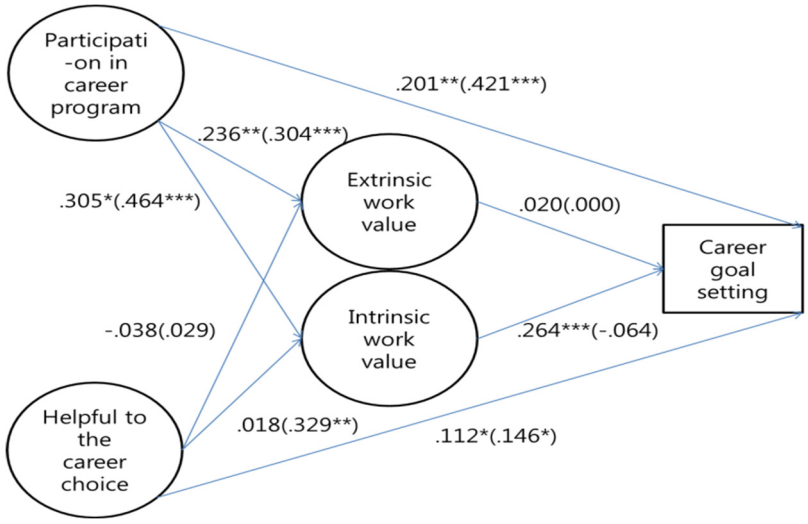

Figure 1. Results of Multi-Group Analysis

Note. the first number is the group of literary graduated workers' B; the next number is the group of science graduated workers' B Conclusion

5. Discussion and Suggestions

This study aimed to analyze the causal model of career education program participation, satisfaction, and career goal setting mediated by work values. Also, this study analyzed the department and major differences.

First, career education program participation had a statistically significant positive effect on extrinsic and intrinsic

work values and career goal setting. This result suggests that when employees (four-year college graduates) retrospectively considered their college times, participation in career programs offered by their university had positive effects on the formation of their career values and career goal setting.

Second, career education program satisfaction had a statistically significant positive effect on intrinsic work values and career goal setting, excluding extrinsic work value. This result shows that when workers (the analysis subject in this study) retrospectively recount their college times, satisfaction with the career programs offered by their universities seems to have contributed substantially to the establishment of intrinsic job values and career goals. Also, the higher the satisfaction with the career program, the higher the degree of job satisfaction. In addition, the higher the satisfaction with the career program, the higher the possibility of setting career goals during college.

Third, only the intrinsic work values had a statistically significant positive effect (+) on career goal setting. If we focus only on the relationship between career value and career goal setting, implicit career value has a positive effect on career goal setting. However, external career values do not significantly affect career goal setting. In conclusion, as a four-year college graduate and working as a full-time employee, I think retrospectively that the job values that help set career goals are intrinsic job values.

Four, the results of the difference between department and major were as follows. The career education program satisfaction impacts intrinsic work values. And the intrinsic work value impact on career goal setting was the difference between department and majors. Essentially, in the case of literary students, the satisfaction of the career program did not have a statistically significant effect on intrinsic job values. But the intrinsic job value had a positive effect (+) on career goal setting. On the contrary, in the case of science students, the satisfaction of the career program had a positive effect (+) on the formation of intrinsic job value, but the degree of intrinsic job value did not have a statistically significant effect on career goal setting.

The various events that students experience during their career development may lead to different work preferences as they develop and begin to make key decisions about their future careers (Twenge, Campbell, Hoffman & Lance, 2010). Many students experience early stages of career development, including career exploration, and self-assessment during university (Super, 1980). During these university stages, students begin to establish their identities through their choices, and decisions about jobs.

Recently hired workers in temporary jobs emphasized intrinsic values more than college and university students. A recent analysis of young workers' work behaviors and attitudes that differ from older workers has an interest in aspects of career socialization (Aldag & Brief, 1975; Herzberg & Snyderman, 1959; Porter & Steers, 1973). The demand for support for career planning among college students continues to grow. Accordingly, career counselors must devise ways to provide more effective alternatives while maintaining the traditional one-on-one counseling approach (Niles & Garis, 1990). The results of this study are consistent with the conclusions of previous studies on the career path of college students in many respects.

To form and strengthen the intrinsic professional values of college students, universities should consider these characteristics when planning career competency reinforcement programs. In addition, the programs should be planned with consideration of the differences in professional values by field of specialization. Universities and society will have to work together for the job values and job satisfaction of the future generations who will live in the era of the 4th Industrial Revolution. Realization of that will be possible with strong support from society and the tight program operation of the university.

6. Conclusion

This study statistically revealed that college students' career goal choices depend on the career programs and professional values provided by their universities. In particular, the path by which participation in college career programs affects internal career values and career goal setting causing significant issues in college career program planning. Finding differences between majors is also an important research result. For science and engineering students, the formation of internal vocational values does not have a significant effect on vocational goal setting. Therefore, a career education program should be planned in consideration of the differences between majors.

Korean universities serve as a preparatory stage for entering the world of work. Therefore, various programs should be provided to improve the values, attitudes, skills, and knowledge that college students should have as professionals. In particular, various career programs should be operated so that career goals can be clearly defined. Programs tailored to the characteristics of students should be carefully designed.

Although this study was analyzed with the limited research target of Korean university students, it is necessary to

broaden the scope of the research target in future studies. In addition, although this study conducted a different analysis by major, it is necessary to conduct a different analysis with various classifications.

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