# The Type of Career Decision Change and Prediction Variables of Korean Youth

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## **ABSTRACT**

The purpose of this study was to investigate the type of career decision change of Korean youth and to investigate variables that predict the difference in the type of career decision change. The analysis of this study utilized data from 4-year university students from the 5th year to 8th year of the YP (Youth Panel), and a total of 395 data were used. The data were analyzed using descriptive statistics and reasoning statistics, a statistical significance level of 0.05 was utilized as the criterion. The latent hierarchical analysis was performed using the SAS program's Proc Traj, and the Predictive Variables analysis was performed using the Multivariate Logistic Analysis of SPSS 22.0. The key findings are as follows. First, (1) the career decision of Korean youth (university student) is a healthy decision group that maintains a high level from 1st grade, (2) a hesitated decision group whose level of career decision was low from the start (1st grade) but gradually increased, (2) an overdue decision group that had moderate decision level in the 1st grade but progressively declined. Second, as the change patterns, the gradual determinants and decision reservists changed and crossed over in the second grade. Third, the type of significant group, school life satisfaction, job stability preference, economic reward preference, and home economics were variables that classified groups according to type. The implications are as follows. First, it is necessary to strengthen career support for undergraduates. Second, it is essential to provide practical alternatives rather than exhausting career problems from the lower grades. Third, Multiple follow-up studies were required.

Keywords: university student career, career decision, career guidance, latent hierarchy analysis.

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## 1. INTRODUCTION

The international youth unemployment rate proves the big problem of current youth. The majority of youth go forward to tertiary education which produce more university graduates but with fewer jobs to consider after. This became a pressure for school themselves as well as for the society (Jung, D. Y., 2017; Ministry of Employment and Labor, 2016). Particularly, the average employment rate of South Korean graduates by 2014 was only 64.5% (Ministry of Education, 2015), while the unemployment rate of youths remained high at 11.6% as of March 2018. The degree of severity in unemployment that is sensed by the youth is also becoming more serious. It should be

addressed in terms as a national problem since it is now far beyond an individual problem (Kim, H. & Lee, Y, 2015)

For a youth to complete a university education, a successful career comes from establishing clear career paths and preparing them for capacity building. Unlike in other countries that the youth searches for their career paths from earlier stage (e.g. middle school) and taste a career experience even before entering university, Korean youths usually prepare their earnest career after university admission. Therefore, once they enter the university, career decision of youth is considerable than other times before because it has been made with 'self-understanding', 'career exploration' and this transition is a strong linkage to their employment (Lim, 2011; Jung, 2017; Guay et al., 2006).

However, there are many aspects of career decisions of youth. While there are the cases the most reasonable form of career decision is done from the lower grades of university, however, there are a significant number of students who could not decide the career path until they reach the upper grades after entering the university with vague expectation from the university education. Besides, there are some cases where students decide their career gradually through various experiences or support from the university. A large number of researches reported earlier the students who set and prepare career goals, quicker to enter the labor market and perform better than those who are not (Ministry of Employment and Labor, 2016; Korea Employment Information Service, 2016).

Even if many studies verify the positive relationship between early career decision making and labor market performance, there was a less academic outcome to look at its longitudinal changes. There was an error has commonly made from the previous discussions that consider all youth as one group which offset the effect of their different career characteristics. Besides, limitations of cross-sectional studies cannot address in detail about individual or group differences in the degree of career decision.

Therefore, this study analyzed how the career decision level changes during the university life of young people in Semi-parametric Group-based Model and investigated how the change patterns are typified. Besides, we found how variables differentiate each typified groups.

The purpose of this study was to investigate the types of career decision change among young people and to identify the variables that can predict the difference of change types. In order to achieve this goal, specific research goals are as follows. First, we will investigate the type of change in career decision according to a grade change. Second, the factors that form the type of career decision change and the influence of each factor are examined.

This study is based on Korean Youth Panel Data. First, there are restrictions on the subject of analysis. Data were analyzed for four years to investigate the type of change, and subjects with two or more missing values were excluded. As a result, the value of university students who were in the army while paused their university education was excluded. Second, there was a limit to the use of predictive variables.

The defined variables have been used since it is based on the variables provided by the panel.

# 2. LITERATURE REIVEW

## 2.1. Career Decision of Youth

Career decision refers to the degree to which a person is reasonably confident about his/her future career at a critical period to determine a career such as school entrance, employment (Goh, 1992; Lee & Jeong, 2007). The career decision is directly related to the self-actualization and happiness of an individual. The career choice depends on the overall elements and aspects of individual life (Moon & Lee, 2002).

Career decision refers to the degree of progress in the career decision process related to university major selection, university choice, career choice, and firmness of a future career path. In other words, the level of career decision refers to a certain point on a continuous line in between the career undecided and the firm career decision as the opposite ends (Lee, 1997).

#### 2.2. Previous Studies

Recent research on career decision (or career indecision) has shown an interest in sub-factors (Lucas, 1997; Gati, Krausz, & Osipow, 1996) and there was a great interest in factors such as career barriers, fear of failure, career stagnation, which negatively affected career decision making. The attention on those factors was attributed to the collective nature of young adults who have already matured to explore. The initial discussion of the subtype of career indecision is to classify in groups of Decision hesitated, Distraction, and Decision avoided (Crites, 1969).

Notably, Korea has high in university entrance rate; still, 4 out of 10 students have not decided on their career even after entering university (Korea Times, March 22, 2017). This result triggers the further discussion on Korean context which is extreme. Kim (1997) classified the relationship between career decision level and type of career preparation behavior. There are four types defined according to career decision level (high and low) and career preparation behavior (high and low). These four types show essential differences in career maturity, career identity, decision type, and trait anxiety. Followed studies supported the career disorders of youth should be considered in these two dimensions (career decision level (CDL) & career preparation behavior (CPB)). There is a significant relationship between CDL & CPB (Son & Son, 2005; Lim, 2011; Ahn & Han, 2002), still the opposite relationship between those two factors also been found. In addition, Career preparation activity affects career decision level by increasing career decision commitment (Ha & Hong, 2013). In other words, the level of career decision can be greatly influenced by changes in the world of work and labour market.

The research on career decision (CD) has proceeded from the simple confirmation of CD to desirability of CD (Goh, 2007). Based on the three dimensions of decision-making – Decisiveness, Comfort, and Reason, Career Indecision of youth

can be divided in the following 4 types; Decided-comfortable, Decided-uncomfortable, Undecided-comfortable, and Undecided-uncomfortable. Also, Jang (2003) classified the career decision status of university students into 4 types - Decision error, Decision avoidance, Decision obsession, and Undecided & confused – that defines the major obstacles in career decisions of youth. There was a qualitative research that classifies students into mature decision-making and immature decision-making to see the difference of those two (Goh & Kim, 2008).

## 3. METHOD

#### 3.1. Procedure

The purpose of this study is to investigate the variables that predict the type of career decision change of Korean youth and its type of change. The analysis flow has consisted of two parts; first, we collected four years of career decision level of Korean youth and grouped the types of its change through the semi-parametric group-based model analysis, and the names are assigned to each group. Second, we analyzed the predictive variables of that change type through polynomial logistic regression analysis.

Table 1. Analysis procedure and method

Analysis procedure	Analysis contents	Analysis method			
Analysis of career change type	<ul> <li>Determine the number of career change decision types</li> <li>Name designation reflecting characteristics of change type</li> </ul>	Semi-parametric group-based model analysis			
Analysis of predictive variables	<ul><li> Predictor Variable Classification Accuracy Analysis</li><li> Group predictions</li></ul>	Multivariate logistic regression analysis			

# 3.2. Samples

The sample included 395 individual who was born in the year 1992, entered four-year University, and participated in Youth Panel Survey. The Youth Panel (hereafter "YP") is a longitudinal survey conducted annually from 2001 (YP2001) on a sample of 5,956 that represents Korean youth (from 15 to 29 years old). From 2007, the second cohort of YP (YP2007) was conducted on a sample of 10,206 Korean youth (from 15 to 29 years old). The data used in this study was from YP05 (conducted in the year 2011) to YP08 (conducted in the year 2014). The sample excluded who did not respond more than two years of survey questionnaire asks their career decision level.

#### 3.3. Measures

<sup>&</sup>lt;sup>1</sup> The YP is approved by the National Statistical Office (Approval No. 32705).

The dependent variable is a career decision level of individuals who entered a four-year university in YP05 (Year 2011). For the longitudinal analysis, multi-year data were necessary, instead of the specific year's value. Therefore, data from the YP05 to the YP08 were used. Career decision score was determined with the average value of the three questionnaires:

- '02. I have a clear career plan for my age. ',
- '03. I have a plan to get the job (or career) I want. ',
- '18. I do not want to do anything special (reserve coding).'

Each item has a 6-point scale consisting of 1(=very untrue of me) ~ 6 (=very true of me).

To test the independent variable for predicting the career change decision type, following 10 variables had analyzed; (1) gender, (2) university major, (3) overall school life satisfaction, (4) satisfaction with university support on job searching, (5) importance of occupational stability when choosing a job, (6) importance of economic rewards when choosing a job, (7) average GPA, (8) number of part-time participation, (9) career decision subjectivity, (10) economic level of the family.

Gender was coded as male = 1, female = 2, and the university major series were coded as humanities, social science and arts = 1 and science and engineering = 2. The 5-point Likert scale measures the school life satisfaction (overall and university support on job searching), career decision subjectivity, and occupational stability / economic compensation when choosing a job, which is composed of 1 (= not at all) ~ 5 (= very yes). The average GPA was coded from  $A \sim A + = 1$  to D + & below = 4. The number of part-time job participation is composed of 'one' to 'three times or more', and the economic level of one's family is converted from the annual income of households, which is cut by 20 million KRW; 1 = 20 million KRW,  $2 = 2,000 \sim 40$  million KRW,  $3 = 4,000 \sim 60$  million KRW,  $4 = 6,000 \sim 80$  million KRW, and 5 = 80 million KRW or more.

Table 2. Data used for analysis by variables

	Variables	YP survey questionnaire (code)
Dependent variable	Career decision level	· Average of values below · Year05~ Year08: y ** f202, y ** f203, y ** f218 (inverse)
	gender	· Year06: gender
	School Major Type	Year06: y06a034  1. Humanities, social science and arts 2. Engineering, natural science, and medical
	Overall school life satisfaction	· Year06: y06a039
	University job support satisfaction	· Year06: y06a046
	Importance of job stability when choosing a job	· Year06: y06a258
Independent variable	Importance of economic compensation when choosing a job	· Year06: y06a255
variable	Average GPA	· Year06: y06a065
	Number of part-time work experiences	· Year06: y06a502
	Career decision identity	Year06: average of values below y06f206, y06f207 (inverse), y06f209
	Economic level of family	Year06: a one-year income(y06g702)  1 = 20 m KRW, 2 = 20 m ~ 40 m KRW, 3 = 40 m ~ 60 m KRW, 4 = 60 m ~ 80 m KRW, and 5 = 80 m KRW or more

## 3.4. Analysis method

# Semi-parametric group-based model analysis (Latent hierarchy analysis)

To identify the developmental trajectory patterns for the career decision changes of young people and to examine the predictive variables that affect the classification of these developmental trajectories, the SAS 9.3 program used the Semi-parametric Group-based Model. The semi-parametric group-centered model, which was developed by Nagin (1999), has the advantage of being able to analyze the types of potential groups and the predictors affecting these types of patterns at once (Jeong, 2014). That is, it distinguishes between the types of potential groups of changes in the dependent variables over time. Furthermore, it is a useful statistical technique that enables polynomial logit analysis to identify the impact of each independent variable by adding independent variables that affect the classification of each potential group (Nagin, 1999).

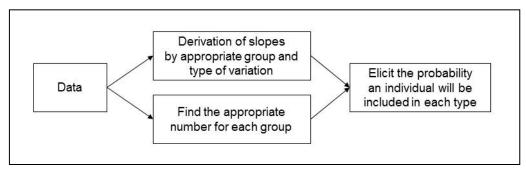


Figure 1. Semi-parametric group-centered model

The metric model of the semi-parametric group-centric method of Nagin (1999) is as follows.

$$Y_{i}[t]^{J} = \beta_{0}^{J} + \beta_{1}^{J} X_{i}[t] + \beta_{1}^{J} X_{i}^{2}[t] + e_{i}[t]$$

 $Y_i[t]^J$  is the dependent variable value obtained at the time [t] of the individual i belonging to the potential hierarchy J, and the independent variable X is the time-coded value. The coefficient of this model determines the shape of the change line, and subscript J of the coefficient means that the line of change differs for each potential layer. The above model includes the k-th order function, and the function of the first or second order can be selected according to the type of the change.

Meanwhile, the model used NORM in Proc Traj for the analysis of potential layers. In other words, when selecting a model, the connection function that links observation yit with the potential variable yit\*j can be classified into a CORM (nominal) model, a CNORM (censored nominal) model, Zero-inflated Poisson Model, and Binary logit models. School Satisfaction Scale has a minimum value and a maximum value of 1 to 5, but the regular model is used because it can be regarded as following Normal distribution.

Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) were used to determine the number of potential layers. On the other hand, when these

two indices are used, there is a problem that the larger the sample, the more complex the model is likely to be selected (Jedidi et al., 1997). In this case, it is necessary to consider whether the ratio of constructing each potential layer is appropriate when determining the number of potential layers, and whether the graph of each potential layer is well-defined in consideration of the explanatory power and the interplanetary reputation.

In the case of missing values, Proc Traj analyzes the missing data by applying the general quasi-Newton procedure, assuming that the missing data is the MAR (missing at random) and the missing data (Nagin, 1999; Hong, 2010). Since the three-year data were used in detail, it is assumed that the data was used for analysis until one of the four values was missing (Jeong, 2014).

# Predictive Variable Analysis

Multivariate logistic regression analysis was performed to analyze variables that predicted career decision of young people Multivariate logistic regression analysis is an effective analytical method that can use dependent variables consisting of nominal variables with two or more unclear sequences. It expands logistic regression analysis based on the probability between when an event occurs and when it does not (Allison, 1999). In this study, we analyzed the change types derived from latent hierarchical analysis as dependent variables composed of nominal variables. On the other hand, the polynomial logistic regression analysis utilized the YP06 (at the time of sophomore at university) out of the four-year survey period. Multinomial logistic regression analysis is based on the initial and special time points, and it is possible to analyze the timing of rapid change between the groups. In this study, the YP06 year value was used in the regression analysis because it is the time when a special change is found in the value of the career change decision type (dependent variable). Multivariate logistic regression analysis was performed via the SPSS 22.0 program.

## 4. RESULTS

#### 4.1. General characteristics

Table 3 shows the results of the technical statistics of the young people's career decision and related variables. The career decision score shows 3.95 (in the first grade), 3.91 (in the second grade), 3.92 (in the third grade) and 3.98 (in the fourth grade). This is slightly higher than the average (=3 out of 6).

The school life satisfaction was 3.59 points, which was somewhat higher than the average (= 3) and the career decision subjectivity was 3.81, which was also above the normal (= 3) level. The satisfaction level of employment support at the universities was 3.44, and the level of job security and economic compensation was 4.04 (job stability) and 4.03 (economic compensation). The average number of part-time work experience was 0.45 times.

The gender distribution was 44.3% of males and 55.7% of females. 46.3% of student who studies in humanities, social studies and arts, and 36.7% were in natural science and engineering. The average GPA distribution was 56.7% for students who received B- to B+, followed by 17.5% for students who received A- to A+. The

economic level of family is based on the one-year income. The highest level of household income is between  $40M \sim 60M$  KRW (28.4%), followed by the high rate of  $20 M \sim 40 M$  KRW (21.0%).

According to the general characteristics, the level of career decision of female was 3.96, which was higher than that of male (3.82). The humanities, social science, and art students had a bit higher level of career decision (3.94) than that of natural science and engineering students (3.88). By average GPA, the A grade group had the highest score of 4.05. The lower GPA, the lower the career decision level (D + or under = 3.06). As for the economic level of family, the highest score was 4.01 for the young people with income over 80M KRW, followed by the 20M  $\sim$  40M KRW group (3.91) and the lowest in the 60M  $\sim$  80M KRW group.

**Table 3.** Mean and standard deviation: Dependent variables and independent variables

	Variables -			Year 1 Year 2		ear 2	Year 3		Year 4	
				SD	M	SD	M	SD	M	SD
Dependent variable	Career decision level			0.782	3.91	0.688	3.92	0.718	3.98	0.700
	Overall school life satisfaction			3.59	0.587					
	Career decision identity				3.81	0.657				
	University job support satisfaction				3.44	0.744				
Independent	Importance of job stability wh	en choosing a job	-	-	4.04	0.693	-	-	-	-
variable (Personal	Importance of economic compensation when choosing a job				4.03	0.613				
characteristics)	Number of part-time work experiences				0.45	0.712				
	[Gender]									
	Male	n=175(44.3)			3.82	0.726				
	Female	n=220(55.7)			3.96	0.665				
	[University Major]									
	Humanities, Social Science, and Art n=183(46.3)				3.94	0.681				
	Natural Science	n=145(36.7)			3.88	0.696				
	[Average GPA]									
	A- ~ A+	n=69(17.5)			4.05	0.783				
T 1 1 .	B- ~ B+	n=224(56.7)			3.94	0.639				
Independent variable	C- ~ C+	n=33(8.4)			3.60	0.600				
(School & Home characteristics)	P D+ or under n=6(1.5)				3.06	0.882				
characteristics)	[Economic level of family (one-year income)]									
	~ 20M KRW	n=9(2.3)			3.85	0.900				
	20M ~ 40M KRW	n=83(21.0)			3.91	0.687				
	40M ~ 60M KRW	n=112(28.4)			3.88	0.713				
	60M ~ 80M KRW	n=34(8.6)			3.76	0.762				
	80M KRW ~	n=76(19.2)			4.01	0.644				

1) n=395

# 4.2. Types of change in career decision level

# Determine the number of career decision change type

The AIC and BIC were compared with increasing the number of potential layers to determine the appropriate number of potential layers in the change of career decision level of young people. As a result of the comparison, AIC and BIC increased sharply until the number of potential layers was 'three', and when the layer exceed three or more, the difference of change was small (see Figure 2). This allowed us to judge the number of potential subordinates to be three or more.

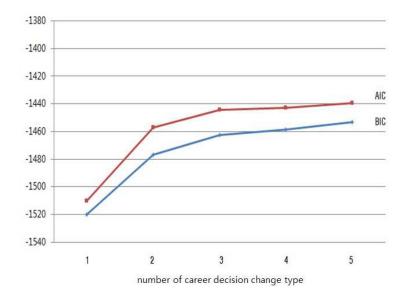


Figure 2. Changes in AIC and BIC according to the number of types of change  $(1 \sim 4)$ 

In addition, when the number of potential classes is three or more, the degree of classification by potential class is compared. As a result, the number of cases included in each type of change was sharply reduced when there were four or more potential hierarchies (see Table 4). As a result, considering the AIC, BIC, and group distribution, the career change decision type was set as three potential layers.

Table 4. Model Fit	and Group Distribution	on of Semi-parametric	Group Focused Model

Model BIG	DIC	BIC AIC	Variation type distribution					
	ыс		1st	2nd	3rd	4th	5th	
One-group	-1520.18	-1510.23	100.0					
Two-group	-1476.94	-1457.04	48.5	51.5				
Three-group	-1462.55	-1444.52	27.3	31.7	41.0			
Four-group	-1458.47	-1442.71	9.1	32.4	19.8	38.6		
Five-group	-1453.42	-1439.59	9.3	1.8	20.0	32.1	36.8	

## Types of career decision change

After classifying the group of models according to the change of career decision degree into three groups, the overall average remained constant, but there were groups in which the degree of career decision increased or decreased. This result confirmed the necessity of research to distinguish groups and to see its change patterns (see Table 5).

	<u> </u>		
Group		Coefficient	SE
Desigion Desagned Crown (1)	Intercept	5.52*	0.655
Decision Reserved Group (1) —	Slope	-1.49*	0.991
P Df:iti C (2)	Intercept	2.70**	0.777
Progressive Definitive Group (2)	Slope	0.97**	1.086
Fired desiries are (2)	Intercept	3.56**	0.513
Fixed decision group (3)	Slope	0.32**	0.757

Table 5. Estimates of the Semi-parametric group-centered model for career decision

When we look at the three groups, we can classify them as Decision Reserved Group (1), Progressive Definitive Group (2), and Fixed decision group (3). (1) Decision Reserved Group - 27.3% of all students showed a lower degree of career decision level and the higher the grade, lower career decision level. (2) Progressive Definitive Group - The second gradual determinant is 31.7% of the total youth, and the career decision is becoming more evident as the grade got higher. (3) Fixed decision group - 41.0% of all youths whose career be already decided from the first grade and they are maintained. According to the characteristics of the group composition, Progressive Definitive Group (2) showed a higher degree of career decision from the second grade than Fixed decision group (3). Besides, it can be seen that the degree of career decision is considerably changed based on the second grade in whole four years.

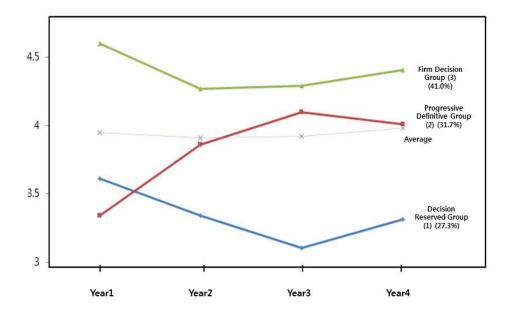


Figure 3. Classification of career decision change group & its pattern by group

# 4.3. Predictors of the type of change in career decision

Multivariate logistic regression analysis was conducted to determine how the three types of change groups -obtained through the semi-numerical group-centric model-are distinguished (see Table 6).

The predictive variable classification table shows that 15 out of 23 cases in the Decision Reserved Group (1), 24 out of 35 cases in the Progressive Definitive Group (2), and 56 out of 63 Fixed Decision group (3) are correctly classified. The overall classification accuracy was 78.5%. -2 log likelihood represents the fitness of the model; the lower the likelihood, the higher the fitness. According to the Cox & Snell  $R^2$  and Nagelkerke  $R^2$  score, 59.6%~68.7% of the variance of the dependent variable is explained by the model.

		ε		`				
	<del>-</del>		Decision Reserved Group (1)	ed Group Definitive Group Group (3)			Accuracy	
	Decision	Reserved Group (1)	15	0	8	23	65.2%	
Ob	Progress	ve Definitive Group (2)	3	24	8	35	68.6%	
Observation	Fixed De	cision Group (3)	3	4	56	63	88.9%	
	Total		21	28	72	121	78.5%	
-2 Log likelihood		$x^2$		Cox & Snell R <sup>2</sup>	]	Nagelkerke		
134.288		109.765(DOF=66, p	=0.001) 0.596		0.68	7		

**Table 6.** Accuracy of Modeling and Potential Hierarchy Classification (Unit: Person, %)

Multivariate logistic regression analysis shows the following results (see Table 7).

First, the variables that increase the probability of becoming a progressive deterministic group as compared to the decision reserve group are the job stability and economic reward importance in employment. This means that the younger the job stability and the economic rewards are, the more likely they are to leave the career decision.

Second, predictive variables between graduated and firm decision groups were school major type and overall school life satisfaction. This means that younger students who are majoring in the humanities, social sciences, arts and physical education, and who are satisfied with the school life are more likely to make career decisions gradually.

Third, it was found that school life satisfaction, the importance of job stability, the importance of economic reward, and economic level of the family were examined. This is because they are satisfied with the school life of the young, think that job security and economic reward are important in employment, and make sound career decision rather than retention of career decision when the home economic level is high.

Decision Reserved (1) vs. Progressive Definitive (2) Decision Reserved (1) Progressive Definitive (2) vs. Fixed Decision (3) vs. Fixed Decision (3) Standard SE Coefficient Coefficient Coefficient 0.201 0.183 -0.182 Gender (Standard=Female) -0.018 0.192 0.183 School Major Type (Standard=Humanities, Social -0.48 0.218 0.397\* 0.202 0.350 0.119 Science, and Art) 0.644\*\*\* 0.208 0.187 0.436\*\* 0.160 0.171 Overall school life satisfaction 1.099 0.577 1.099 University job support satisfaction 0.816 0.000 0.816 1.124\*\*\* Importance of job stability when choosing a job 0.767\* 0.336 0.357 0.246 0.319 0.767\* 0.336 0.197 0.281 0.767\* 0.336 Importance of economic compensation when choosing a job 1.225 Average GPA -1.099 1.155 0.693 -0.4050.913 Number of part-time work experiences 0.693 1.225 0.693 0.866 1.386 1.118 11727.292 18.623 7051.027 -19.056 0.566 3645.939 Career decision identity 0.245 0.315 -0.420 0.268 0.662\* Economic level of family 0.290

**Table 7.** Predictors of the type of change in career decision

## 5. DISCUSSION

#### Conclusion

First, career decision changes were classified into three types: Decision Reserved Group (1), Progressive Definitive Group (2), and Fixed decision group (3). There is no significant change in the total respondents' four-year spectrum but in the three groups' classification. Especially the level of career decision is changing from the first grade to the second grade. This means that a career decision must be made at the time of the lower grades so that it is possible to prepare for continuous career development or capacity building up to the senior year or graduation. Also, if the career decision is not made in the lower grades, it is pointed out that the worries and decisions in one's career cannot be made until the senior year. The characteristics of career development level by the group are as follows. The Progressive Definitive Group (2) had lower career decision level than the Decision Reserved Group at the Year1 but crossed in the Year2 with the increased career decision level. On the other hand, the Decision Reserve Group (1) did not have a high degree of career decision level even in the Year1, but the level decreased as the year passed, showing recovery from the Year4.

Second, regarding the predictive variables, it is confirmed that job stability and economic compensation are important for the predictive variables of the Decision Reserving Group (1) and the Progressive Definitive Group (2). This suggests that the higher the expectations for employment stability and economic compensation, the longer the career decision is held. This means that young people are highly dependent on the conditions of their jobs when they decide on their career path and therefore cannot easily make career decisions.

On the other hand, school major type and school life satisfaction were confirmed as a predictor of Progressive Definitive Group (2) and Fixed decision group (3). It is possible to find out the nature of the group that cares about the career slowly while satisfying the school life and choosing the major in humanities • social • arts. In the

<sup>1) \*</sup>p<.05, \*\* p<.01, \*\*\*p<.001

<sup>2)</sup> The front group is the reference group.

case of Progressive Definitive Group (2) & Fixed Decision Group (3), it is evident that efforts should be made to solve the wearisome career hitches by the more specific understanding of the factors that weaken the career decision level according to the major characteristics.

Lastly, school life satisfaction, job security importance, economic reward importance, and economics level of family were confirmed as predictive variables between Fixed Decision Group (3) and Decision Reserved Group (1). In other words, satisfaction with school life, and stability & economic rewards in selecting a career are important. Therefore, a group with a higher economic level of family means a secure career decision than a group that delays their career decision.

## **Implications**

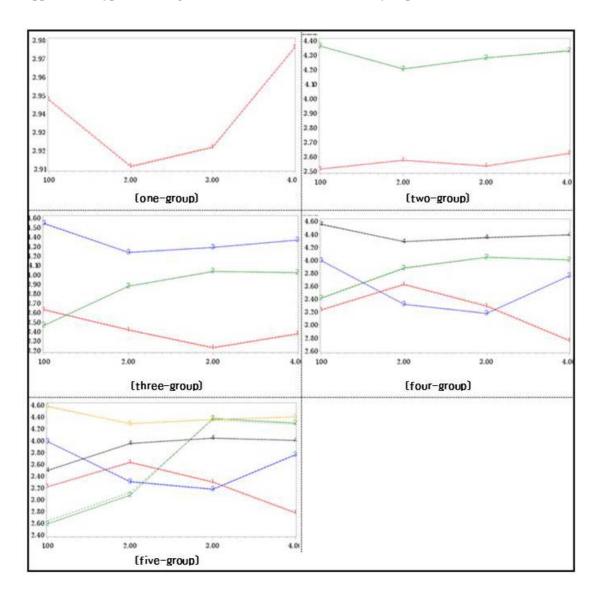
First, it is necessary to strengthen career support for lower grades of undergraduate students. In detail, it is necessary to provide exploratory activities that enable them to worry about their understanding and career in the lower grades, and various understandings about the career world. At the university level, it is necessary to support them through curriculum and related activities.

Secondly, it is necessary to provide support that will enable practical alternatives to be made from the earlier stage rather than exhausting struggles in a career. In particular, support is needed for young individuals to find career paths fits in their majors or situations and to design their capabilities based on them.

Third, follow-up research for career decision study of young people is needed. In this study, university students were only described. The future research should consider the non-academic youth and vocational university students as the target. Besides, it is necessary to explore various activities and changes between the first grade and the second grade, which is the drastic change point of career decision level.

## **APPENDIX**

Appendix 1. Types of Change in Youth Career Determination by Population



# **REFERENCES**

- [1] Ahn, K. S., & Han, G. H. (2002). The relationship between personal characteristics of adolescents, sexual role identity, career decision level, and career preparation behavior. Korean Youth Research, 13 (2), 73-102.
- [2] Chang, S. C. (2003). An Analysis of the Relationship between the Type of Career Decision and the Individual Cognitive Variables in University Students. Dissertation of Ph.D.
- [3] Chung, I. J. (2007). Development Trajectory and Predictors of Self Esteem in Adolescence. Korean Youth Research, 18 (3), 1027-166.

- [4] Chung, Y. K. (2000). A Study on the Types of Career Decision Problems of High School Students for Career Counseling. Research Note 00-5. Seoul: Korea Vocational Training Institute.
- [5] "Four out of 10 students in the 4th grade in university" could not decide on their career ", Korea Daily, March 22, 2017. Retrieved from http://news.jtbc.joins.com/article/article.aspx?news\_id=NB11441664
- [6] Goh, H. W. (2007). Analysis of career maturity level of Korean university students. Ph.D Thesis, Seoul National University.
- [7] Goh, H. W., & Kim, K. H. (2008). Career counseling: The relationship between career decision making maturity level and decision making status in Korean university students. Counseling Research, 9 (1), 147-164.
- [8] Ha, J., & Hong, J. Y. (2013). Mediation Effect of Career Decision Commitment in the Relationship Between University Student's Career Preparation Behavior and Career Decision Level.
- [9] Hong, S. Hee. (2010). A Methodology of Longitudinal Study Using Multi-layered Model (Workshop Materials). Seoul: S & M Research Group.
- [10] Jung, D. Y. (2014). The purpose of this study was to investigate the relationship between school satisfaction and school performance. Agricultural Education and Human Resource Development, 41 (4), 49-72.
- [11] Jung, D. Y., Park, C. W., & Lee, Y. M. (2017). Analysis of the effectiveness of youth employment policy through policy monitoring and operation. Arts and Humanities Society Convergence Multimedia Journal, 7 (9), 501-508.
- [12] Kim, B. H. (1997). The purpose of this study was to investigate the relationship between career decision making and career preparation behavior.
- [13] Kim, H., & Lee, Y. (2015). On the status of Korean Unemployed Female Youth and the Policy Plan. Review of Integrative Business and Economics Research, 4(4), 288.
- [14] Kim, S. J. (2005). The Effects of Career Barriers, Hope, Career Decision Self Efficacy on Career Preparation Behavior. Hong Ik University Ph.D dissertation.
- [15] Korea Employment Information Service (2016). Status and Characteristics of Employment Preparers for Young Adults. Employment Trend Brief, June, 2016. Eumsung: Korea Employment Information Service.
- [16] Lee, J. K. (1997). Comparison of Career Decision Level and Career Readiness Behavior Development by University Major Fields. Seoul National University.
- [17] Lee, S. S., & Jeong, C. Y. (2007). A causal model of career barriers, career decision self-efficacy, and career decision level recognized by female university students. Agricultural Education and Human Resource Development, 39 (4), 83-109.
- [18] Lim, E. M. (2011). Exploring career decision process and intervention factors in university students. Counseling Research, 12 (2), 447-466
- [19] Ministry of Education (2016). Employment Statistics for Graduates of Higher Education Institutions in 2015. Retrieved from: http://moe.go.kr/boardCnts/view.do?boardID=294&boardSeq=70019&lev=0&se archType=null&statusYN=W&page=1&s=moe&m=0503&opType=N
- [20] Ministry of Employment and Labor (2016). 2016 Work Plan. Retrieved from: http://www.moel.go.kr/policy/busireport Sejong: Ministry of Employment and Labor.

- [21] Moon, S. T., & Lee, S. R. (2002). Relationship between high school students' career decision level and gender, family, and socio-economic background. Journal of Agricultural Education, 34 (4), 83-96.
- [22] Son, E. R., & Sohn, J. H. (2005). Career Decision Making and Preparing Behavior of Korean University Students Focused on Social Cognitive Career Theory. Korean Psychological Association: Counseling and Psychotherapy, 17 (2), 399-417.
- [23] Woo, S. H. (2012). Major satisfaction and career maturity according to career decision status type. KunKuk University Master's Thesis.
- [24] Allison, P. D. (1999). Logistic Regression Using the SAS System, Cary. NC: SAS Institute, 141.
- [25] Crites, J. O. (1974). Problems in the measurement of vocational maturity. Journal of Vocational Behavior, 4(1), 25-31.
- [26] Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. Journal of counseling psychology, 43(4), 510.
- [27] Guay, F., Ratelle, C. F., Senécal, C., Larose, S., & Deschênes, A. (2006). Distinguishing developmental from chronic career indecision: Self-efficacy, autonomy, and social support. Journal of Career Assessment, 14(2), 235-251.
- [28] Jedidi, K., Jagpal, H. S., & DeSarbo, W. S. (1997). Finite-mixture structural equation models for response-based segmentation and unobserved heterogeneity. Marketing Science, 16(1), 39-59.
- [29] Lucas, M. (1997). Identity development, career development, and psychological separation from parents: Similarities and differences between men and women. Journal of Counseling Psychology, 44(2), 123.
- [30] Nagin, D. S. (1999). Analyzing Developmental Trajectories: A Semiparametric, Group-Based Approach. Psychological Methods, 4(2), 139-157.