

Analysis of the Long-Term Trends in the Influence of Variables on College Graduate Employment

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Abstract

The purpose of this study is to analyze how the effects of college and individual variables on college graduates' employment have changed over the past decade. This study investigates the relationship between college variables and individual variables and college graduates' employment, the influence of college and individual variables on college graduates' employment and the changes in the influence of college and individual variables on college graduates' employment for 10 years. The survey subjects were 26,544 graduates in 2005 and 18,056 graduates in 2014. As a result, the correlations between college and individual variables, employment type, size of companies, and income were significant at $p=.000$ level in 2005 and 2014. The effect of college and individual variables on the employment type, number of employees, and income of college graduate was also statistically significant. The influence of employment type, size of companies, and income over 10 years increased more in individual variables than college variables. In other words, the influence of college variables has increased on the employment type, the size of the employed companies, and income.

Keywords: *College graduates, Employment, College variables, Individual variables*

1. Introduction

The enthusiasm of education in Korea is focused on preparing for entrance examination because of this, the reputation of the university in Korea has a very strong social influence that the college determines social status. However, the enthusiasm of Korea's education is focused on how to enter a college with a high reputation based on its strong belief rather than how much individuals have grown through college education. In this context, it is very timely to study the influences of individual variables and the influence of college variables on the employment of college graduates.

It is very timely to study the influences of individual variables and the influence of college variables on the employment of college graduates. It is necessary to study the influence of college reputation and individual college life after college graduation. And it is time to analyze the long-term influence trend of university reputation and individual college life after college graduation.

The purpose of this study is to analyze how the influence of college variables and individual variables on college graduate employment has changed over the past decade. The results of this study are valuable to reveal the employment structure of college graduates in the

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individual dimension and social context by expanding the scope of previous studies limited to the analysis of college graduates to individuals and colleges.

2. Research background

2.1. Employment and impact variables for college graduates

There have been various studies on what variables are influencing the first college graduates. Based on the results of this study gender, major, graduation average grade, and university satisfaction were significant influences on college graduates' labor market performance. In addition, the type of university establishment, location, student education cost, university type, and average university satisfaction have a significant impact on university characteristics [1]. These studies are valuable in that they extract the individual variables of the college graduates who have been set up and the variables that affect the employment and decent job employment among university variables.

2.2. College life and employment

There is an increasing number of studies predicting the relationship between college life experience and labor market entry. Although these studies have the problem that college education must respond promptly to the acceptance of industry, these researches have been carried out with the aim of developing tools to collect factors affecting the competence of college graduates required by industry [6]. On the other hand, some researches have argued that the students' experience of college life as part of their job preparation activities is closely related to the experience of college students entering the labor market [4][8]. It is emphasized that personal variables related to college life experiences such as credit, experience of participating in vocational training, qualifications are important variables in deciding whether or not to work.

3. Research methods

3.1. Research target

In order to analyze the research content, this study utilized data from the college career path survey (GOMS 2013) The survey subjects were 26,544 graduates in August 2004 and February 2005 graduates, 18,056 graduates in August 2013, and February 2014 graduates.

3.2. Research tools and analysis method

Analytical data are from the 2005 and the 2014 GOMS data from Korea Employment Information Service(KEIS) The GOMS data is collected a sample of two or three-year-college graduates and four-year-college graduates, panelized and accumulated every year. This study used the correlation, F test, and regression analysis using the SPSS statistical package.

In the analysis of this study, the employment variables were the employment type, the number of employees, income. And the influence variables included the establishment type, the college-university type, the location of college, the majors as the college variables and the gender, the age, the college life (whether or not to acquire double major, credit, experience of language training and whether or not to have a certificate) as individual variables.

4. Analysis results

Table 1. Correlation between the employment variables of college graduates

Variables			2005			2014		
			Employment type	Number of employees	Income	Employment type	Number of employees	Income
College variables	Establishment type	P-value	.038**	-.017*	-.034**	-.069**	.032**	-.069**
			.000	.012	.000	.000	.000	.000
		N	21244	21242	21076	13347	13347	13347
	College-university type	P-value	-.060**	.084**	.123**	.115**	-.048**	.127**
			.000	.000	.000	.000	.000	.000
		N	21244	21242	21076	13371	13371	13371
	Location of college	P-value	.042**	-.082**	-.081**	-.076**	-.008	-.050**
			.000	.000	.000	.000	.384	.000
		N	21244	21242	21076	13371	13371	13371
	Majors	P-value	.091**	-.026**	-.062**	-.096**	.083**	-.067**
			.000	.000	.000	.000	.000	.000
		N	21244	21242	21076	13371	13371	13371
Individual variables	Gender	P-value	.023**	-.064**	-.257**	-.124**	.018*	-.210**
			.001	.000	.000	.000	.033	.000
		N	21244	21242	21076	13371	13371	13371
	Age	P-value	.162**	-.008	.384**	-.035**	.168**	.259**
			.000	.229	.000	.000	.000	.000
		N	21244	21242	21076	13371	13371	13371
	College life_double major	P-value	.000	.007	.029**	-.054**	-.009	-.026**
			.997	.338	.000	.000	.281	.003
		N	21244	21242	21076	13371	13371	13371
	College life_credit	P-value	.026**	.014*	.043**	.101**	-.031**	.065**
			.000	.046	.000	.000	.000	.000
		N	21244	21242	21076	13371	13371	13371
	College life_language training	P-value	.030**	-.065**	-.083**	-.074**	.027**	-.062**
			.000	.000	.000	.000	.002	.000
		N	21244	21242	21076	13371	13371	13371
	College life_certificate	P-value	.030**	.023**	.005	-.020*	.064**	-.026**
			.000	.001	.471	.021	.000	.003
		N	21244	21242	21076	13371	13371	13371

In 2005, the correlation between the employment variables (the employment type, the number of employees, the incomes) and the university variables or the individual variables were all significant at $p=.000$ level. This statistical significance was also analyzed in 2014.

These results show that there is a statistically significant correlation between the employment variable (the employment type, the number of employees, the incomes) and the college variables (the establishment type, the college-university type, the location of college, the majors), and a statistically significant correlation between the employment variable (the employment type, the number of employees, the incomes) and the individual variable, the gender, the age, the college life (the whether or not to acquire double major, credit, the experience of language training and the whether or not to have a certificate)

Table 2. Influence of variables on college graduate employment

Model	2005				2014			
	R-value	coefficient of determination	F	Significance level	R-value	coefficient of determination	F	Significance level
Employment type	.220	.048	108.299	.000	.222	.049	69.406	.000
Number of employees	.144	.020	44.776	.000	.249	.061	87.868	.000
Income	.455	.207	550.033	.000	.347	.120	182.589	.000

* Response variable: Employment type, Number of employees, Income

** Explanatory variable: Establishment type, College-university type, Location of college, Majors, Gender, Age, College life (whether or not to acquire double major, Credit, Experience of language training, whether or not to have a certificate)

The effect of the college variables (the establishment type, the college-university type, the location of college, the majors) on the employment variable (the employment type, the number of employees, the incomes), and the individual variable, the gender, the age, the college life (the whether or not to acquire double major, credit, the experience of language training and the whether or not to have a certificate) are statistically significant, and the results are the same in both 2005 and 2014.

Table 3. Long-term trends in the influence of college variables on college graduate employment

College Variables	Employment type			Number of employees			Income		
	2005(a)	2014(b)	b-a	2005(a)	2014(b)	b-a	2005(a)	2014(b)	b-a
Establishment type	.022	.004	-.018	-.010	-.042	-.032	-.034	-.033	.001
College-university type	-.030	-.046	-.016	.068	.078	.010	.109	.091	-.018
Location of college	.027	-.015	-.042	-.074	-.080	-.014	-.115	-.080	.035
Majors	.104	.095	-.009	-.008	-.074	-.066	.002	-.021	-.023

The above results show the effect of the college variables (the establishment type, the college-university type, the location of college, the majors) on the employment variable (the employment type, the number of employees, the incomes) Compared to 2005 and 2014, the effect of the college variables (the establishment type, the college-university type, the location of college, the majors) on the employment type was all lowered. In the case of the number of employees, the influence of the establishment type, the location, the majors have been higher, but the influence of the college-university type has been somewhat lower. And the effect of the college-university type, the majors on the income was lowered, but the effect of the establishment type, the location on the income was higher somewhat.

Table 4. the Long-Term Trends in the Influence of Individual Variables on College Graduate Employment

Individual variables		Employment type			Number of employees			Income		
		2005(a)	2014(b)	b-a	2005(a)	2014(b)	b-a	2005(a)	2014(b)	b-a
Gender		.090	.062	-.028	-.079	-.148	-.069	-.167	-.170	-.003
Age		.194	.193	-.001	-.024	-.075	-.051	.348	.221	-.127
College Life	double major	.016	-.026	-.042	-.011	-.024	-.013	.014	.000	-.014
	graduate credit	.005	-.029	-.034	.028	.095	.067	.040	.057	.017
	language training	.009	.019	.010	-.044	-.055	-.011	-.058	-.049	.009
	certificate	.044	.061	.017	.001	-.032	-.033	-.036	-.047	-.011

Comparing 2005 and 2014, the gender, the age, the whether or not to acquire double major were found to have a declining influence on the employment type, the number of employees, the income. In the case of the graduation credits, the impact on the employment type is lower, but it has an impact on firm size and income. It is analyzed that the experience of language training, the whether or not to have a certificate have an influence on the employment type, but it has less influence on the size of the company and income.

5. Conclusions

Based on the above analysis, in 2014, the effect on employment type, firm size, and income increased more in individual variables than in university variables, compared with 2005. In detail college variables have influence on the size and income of the employed firms, but individual variables affect the employment type, the size of the employed companies, and income.

These results can provide a new perspective on the belief that colleges have a profound impact on social status. The results of analysis that the experience of college life of individual rather than characteristics of college is influential on employment as a bigger company, and more income after graduation. And how thoroughly they prepared for employment in the period could ultimately have a greater impact on stable employment and income higher.

The results of the analysis of the influential change of the variables influencing the admission of college graduates are valuable as a major viewpoint of insight into the social structural changes in the university. It is necessary to follow up research to clarify the change of the structural paradigm of Korean college graduates in the future.

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