

Factors Affecting Employment after Vocational Training of National Human Resource Development in Korea

JiHyun Shim*
Sookmyung Women's University

Youngmin Lee
Sookmyung Women's University

JiHyun Oh
Sookmyung Women's University

JungYeon Im
Sookmyung Women's University

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ABSTRACT

The human capital theory assumes the relationship between high education and high wage. Many decisions related to the training/education based on the assumption. However, very few have been investigated which factors affecting the relationship. Thus, this study tries to find out factors affecting employment for those who completed training. Based on the literature review, age, gender, training hours, training cost, training contents, training satisfaction level, counseling satisfaction level were selected and analyzed using logistic regression analysis. The result showed that age, gender, training hours, training cost and training contents includes training satisfactory level, training counseling were found to be significant to employment after vocational training.

Keywords: NHRD, training, employment

INTRODUCTION

The human capital theory(HCT) lies beneath government and companies' decision to provide vocational training to its citizen or employees. Also, human capital theory works when individuals decide to take vocational education and training by their own will. The human capital theory (Becker, 1981) asserts that additional education or training increase individual's useful knowledge and skill level so that eventually increases individual's productivity and expected lifelong income. Under the human capital theory, job selection is affected by the amount of education that the worker receives because labor market is perfect competitive market. Therefore, individuals increase the investment of human capital to increase expected profit. The decision is

made based on the calculation of present investment and cost, and future income level (profit). In case of government's or corporation's decision on the investment of training and education depends on the future contribution to corporation and national economy growth of individual's productivity increased after the investment of education and training and its comparison to current opportunity cost.

Many research studies that emerged after the introduction of human capital theory acknowledge the importance of HTC. But at the same time previous researchers have pointed out other problems and warned the necessity of including other causes for more inclusive analysis of corporation/government's decision on the investment of education and training. According to previous research the effect of training may differ from gender, age, duration, and cost of training. The result implies that individual's education and training has positive relationship to higher wage level or better job but it never always guarantees the positive result. Thus, this study tries to find out other variables that may affect the relationship between completion of vocational training and getting a job based on literature review and statistical analysis in terms of HTC.

The effect of vocational training for unemployed and employment has been researched since 1960, after the introduction of vocational training in Korea. And the research has been growing in terms of its effect and efficiency analysis when the training for unemployed has been increased in quality and quantity after the Asian economic crisis. Training for unemployed refers to the training that unemployed worker attends for future job employment. This study selectively analyzed studies that focus on the effect of training for unemployed people.

Age

Individual's age variable is found to be mediating the relationship between vocational education and employment. Castle (1989) found that the effect of vocational education is stronger in the adult group compare to the adolescent group. In other study the result was confirmed (Basi et al., 1984, Bloom et al., 1994). However, the reverse result was also found in Nam's study in 2004.

Gender

Gender difference in labor market has been an important analysis constitute among labor economist. Gender has been treated as one of the important variable that mediates the correlation between vocational education and employment. According to many Korean studies, gender differentiated the result of vocational education. It was found that the increased intensity of training brought positive effect on male sample's employment and the increased intensity and cost of training brought positive effect on

female sample's employment (Jeon, 2008). Other studies about the employment quality also found that the effect of gender difference on the consequence of vocational training and labor market treatment (Hwang, 2008; Jung, 2010)

Training duration (training hour)

Not only has the quality of the training but also quantity of the training been considered as one of the important variable that explains the relationship between vocational training and employment. You (2008) found that the duration of unemployed was shorter in the unemployed and trained than the one of unemployed and not trained. Similar result were also found in the studies of Kong (1997) and Kim(2004), however the reverse results were also found in the studies of Castle(1989) and Nam(2004)

Training Cost

There are very few research studies that tried to find out the effect of training cost in the relationship between vocational training and employment. However, it was found that selection criteria of training and behavior after training of trainee are affected by training cost. In that sense, Jeon's (2008) study that tried to find positive effect of training cost to women's employment confirmed the view point. However, there has not been enough study tried to find the effect of training cost, there is still a need to conduct further study.

Training contents

There are also very few studies that tried to find out the relationship between vocational training and employment. However, there are some existing case that proved the partial effect of training contents and employment. Lee (2000) compared the result of two groups. One group received training and the other didn't receive any. The result did not confirm any significant effect of training contents on employment. However, Chai (2004) found significant effect of training contents on employment. Since there are very few studies in this field and the results are various, there is strong need to conduct a study to find the effect of training contents.

ANALYSIS

Through literature review to find out possible factors affecting the relationship between vocational training and employment, some of the factors were already found to be affective but some are not has been proved their influence. Since this study is focus on the government providing vocational ability development ITAs(Individual Training Accounts) and try to find possible factors affecting the relationship between vocational

training and employment, it is meaningful to find factors' different effects comparing in public and private sectors.

Research question

The research question for this study is following:

What is the factors affecting the relationship between vocational training and employment in public sector?

Research method

For this study, 60,635 trainees were selected who received vocational training with Individual Training Accounts (ITAs). The research was conducted with telephone interview and finally 33,555 who answered by the telephone interview were included for this study. Interviewee's age, gender, vocational training program, training duration, training hour, training cost, employment, employment in same field with vocational training, vocational training satisfaction, employment contribution level of vocational training, satisfactory level of vocational training institute's counseling were asked and collected.

RESULT

To search the factors affecting employment under government providing vocational ability development ITAs(Individual Training Accounts), logistic regression analysis was conducted with employment as dependent variable and gender, age, training hour, training duration, training cost, training satisfactory level, employment contribution level of vocational training, satisfactory level of vocational training institute's counseling as independent variables.

Following is a summary of descriptive statistics of sample and the employment and unemployment

Figure 1 Summary of descriptive statistics

		unemployed	employed	total
Total (number, %)		19,774(58.9)	13,781(41.1)	33,555(100.0)
gender	male	4,059(49.6)	4,121(50.4)	8,180(100.0)
	female	15,715(61.9)	9,660(38.1)	25,375(100.0)
age	10-20	3,315(43.0)	4,389(57.0)	7,704(100.0)
	30	7,267(60.7)	4,707(39.3)	11,974(100.0)
	40	5,868(64.0)	3,297(36.0)	9,165(100.0)
	over 50	3,324(70.5)	1,388(29.5)	4,712(100.0)
hour	average	159.8	211.8	181.2
	S.D	182.9	293.1	235.9
duration (day)	average	41.6	48.3	44.3
	S.D	30.2	45.0	37.1
Cost (won)	average	845,112.7	965,357.0	894,496.9
	S.D	504,029.6	643,813.3	568,710.3
satisfaction (10)	average	7.6	8.2	7.8
	S.D	2.1	1.8	2.0
contribution (10)	average	7.4	8.2	7.7
	S.D	2.4	2.1	2.3
Counseling satisfaction (10)	average	6.2	7.0	6.5
	S.D	3.3	3.1	3.2

The total employment rate of ITAs training receiver is 41.1%, and male employment rate is higher than female employment rate. Compared between age ranges, 10-20's employment rate is 57% and it was the highest and the rate decreased as age increased. Training hour and duration, and training cost were found longer among employed group comparing unemployed group. Training satisfactory level, employment contribution level of vocational training, satisfactory level of vocational training institute's counseling were all found to be higher in employed group comparing unemployed group.

Figure 2 Result of logistic regression

	regression-coefficient	S.D	Wald	degree of freedom	p-value	Exp(B)
10-20	1.142	.041	789.414	1	.000	3.133
30	.488	.038	161.825	1	.000	1.630

40	.409	.040	103.492	1	.000	1.505
gender (m=1,f=0)	.465	.028	282.980	1	.000	1.592
contribution	.104	.008	168.768	1	.000	1.110
counseling satisfaction	.009	.005	3.423	1	.064	1.009
program satisfaction	.072	.010	52.269	1	.000	1.075
hour	.002	.000	139.526	1	.000	1.002
duration	-.009	.001	70.306	1	.000	.991
cost	.000	.000	21.531	1	.000	1.000

The accuracy rate of analytical model after backward selection of independent variable, gender, age, training hour, training duration, training cost, training satisfactory level, employment contribution level of vocational training, satisfactory level of vocational training institute's counseling, is 64.9%. It was significant with 8 independent variables and dependent variable at $\alpha=.001$. Thus the analytical model including 8 independent models significantly proved compare to the proto-typed model that does not include independent model.

Based on the result of the logistic regression analysis, all independent variables except counseling satisfaction provided by training institute for the trainees were found to be significant to the dependent variable, employment. Gender is coded as 1=male and 0=female, employment possibility is found to be higher in male group compare to female group about 1.592. Since training duration, training cost, training satisfactory level, and employment contribution level of vocational training were all found to be significant in value, as the level of conscious increase, the employment possibility.

DISCUSSION

Vocational education should increase not only employment ability but also increase of psychological stabilization, social adaptability, and vocational ability preservation. Thus, some say that it is not proper to evaluation the effect of vocational education with short-term employment and income increase. However, the first objective of vocational education is on employment, some quantitative criteria such as employment, income increase, and same industry employment are all meaningful in the evaluation of vocational education's success. In this point of view, followings are the main findings of this study.

First, if the trainee is younger and male, the employment possibility increased. The tendency is interpreted the circumstances that male are more participating in the

vocational education. Also, it comes from the distribution of female unemployed, which include stay home wives who are not tend to getting jobs. Second, this study found if the trainee satisfied with the vocational training program they selected, or they perceive that the program is closely related with employment possibility, and then the employment possibility increased. The result confirmed that the trainees who participated the vocational training have enough ability to evaluate which program is needed for them to get jobs which was the main direction of national vocational training reform to ITAs. Third, this study also found that as the training hour is longer and the duration is shorter, the employment possibility increased. Intensive but short period training program may helpful for the trainees participating vocational education. National vocational training policy working with ITAs is developing in quantity and quality every year. However, there are very limited efforts to critically evaluate its effect and improve. Thus, this study implies that not only very superficial quantitative variables such as employment rate cannot reflect all the effect of vocational education and not enough to be used for improvement. More integrated criteria that represent participant's demographic characteristics and quantitative criteria should be considered in the future study of national vocational training.

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