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# UNEMPLOYMENT DURATION OF FIRST TIME JOB SEEKERS: A CASE STUDY OF BAHAWALPUR

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## **ABSTRACT**

Educated youth unemployment is crucial issue for developing countries. The social and economic costs of unemployment at individual, household and national level are universal. But there are few studies on unemployment duration when the individuals start jobs and its determinants in developing countries. We have analyzed the determinants of unemployment for first time jobs seekers, taking primary data of all employed or self- employed individuals between the age group of 20-35 years. The dependent variable is duration of unemployment, which a person has to suffer after obtaining last degree of education, before leaving unemployment to employment. Professional and general education levels, training, age, salary, gender preference for public / private sector job, marital status has been taken as independent variables. Our findings are that professional degree holders suffer greater unemployment duration, but in case of general education, higher education degree holders suffer less unemployment duration than their counterpart of low degree holders. Training, marital status, high salary, head of household and household size reduce the duration of unemployment, but the stated preference for government job increases the duration of unemployment.

**Keywords:** Public sector job, General education, Professional education, Job training.

#### INTRODUCTION

Educated unemployment is one of the throbbing issues in both developing as well as developed countries. Educated unemployment results in wastage of human capital and erosion of work habits. The educated unemployment may be due to poor education, poor training system, preference for public sector job and absence of an effective labor market information system. It has been endlessly and painstakingly debated worldwide in literature that unemployment causes cost at economic,

social and individual levels. Further it is also found that the economic, social and individual costs are faced by the developed and developing countries (Sabot, 1982). At the macroeconomic level, unemployment causes loss of output, non-payment of taxes which result in revenue loss to government (Reyher et al., 1980). Unemployment in developing countries is an urban problem and is higher among well-educated and first-time job seekers, particularly caused by preference for public sector or a formal sector job (Tasci and Tansel, 2005). Job creation is not sufficient to absorb the rising labor force, particularly well-educated individuals in developing countries. Pakistan is facing high educated youth unemployment figure due to demographic transition, and unemployment among well-educated and first time job seekers is high (Arif and Chaudhry, 2008). Higher education is blamed for this very rising trend in unemployment (Qayyum, 2007). In developing countries like Pakistan, labor market is segmented into formal and informal sector. The informal sector is characterized as absence of protection legislation, non-implementation of minimum wage legislation, lack of social coverage within job period or after retirement both, high proportion of self-employment, home-based work are the prominent features of labor market. In Pakistan Labor market has strong supply side pressure because of high population growth rate, widespread employment in informal sector, high unemployment rate, slow growth of employment opportunities, low manufacturing growth, and agricultural based activities leading to increase the number of home based workers. At the same time Pakistan is passing through the transitional development phase, in which people are much concentrating on the accumulation of human capital, devoting the greater proportion of their income to education of their children, particularly middle income group and low middle income group.

The objective of the study is to find out the socio-economic determinants of duration of unemployment spell which first time job seekers, has to face after completing their last degree of education between age group of 18-35 years. In other words when an individual enter labor market after completing his/her college or university education, for what time period, he/she has to face hardships of unemployment, until he/she got employed or goes to the second option of self-employment. Unemployment is an important issue from individual and social context. The analysis of unemployment duration will contribute to understand the unemployment problem of first time job seekers from social, individual and household perspective. The significance of the study is that the increase in duration of unemployment spell involves depreciation of skills and work habits, loss of motivation and discouragement, mental frustration and inclination to crime, which can be avoided through policy making.

## **BACKGROUND OF THE ISSUE**

The earlier studies of Ghayur (1989), Ghayur (1992), Arif (1996), Koch (2006), Kingdon and Knight (2001) reported positive relationship between level of education and employment rates and concluded that variable indicating human capital like education, work experience have greater

influence on employment probabilities. So, by increasing high level of education, unemployment can be eradicated. Stenberg. (2005) using data from Sweden analyzed unemployment duration by considering both selection bias and censored observations, concluded that training and skill-enhancing program reduce unemployment duration. Hernaes (1999) detects that expected duration of joblessness has gone down for male as compared to females. The loss of employment has considerable effect upon health status of an individual. Stankunas *et al.* (2006) found a positive relationship between duration of unemployment and depression for Lithuania. The long-term unemployed individuals have more episode of depressive mood, Ordine and Rose (2006) reported that unemployment duration is higher for individuals that exit toward bad occupation, and further individuals having higher education level face spell length higher than that of their undergraduate counterpart.

Hyder and Reilly (2006) reported that the stated preference for a public sector job controlling for education and other characteristics was found to be associated with higher unemployment durations. Podivinsky and McVicar (2002) for Ireland found that young people are 25-50 percent less likely to experience long-term unemployment. Kettunen (1997) reported that education has positive effects on re-employment probability up to about 13-14 years of education in other words the possibility of getting an unacceptable offer decrease toward the highest levels of education. Unemployment stress compels people to migrate, as the duration of unemployment increases (Beccaria, 2007; Fan et al., 2011) for Argentine. It is also reported that the behaviors of men may be changing over the course of unemployment while that of women remain the same. The positive relationship between unemployment and crime is well-documented in literature (Fajnzylber et al., 1998; Gould et al., 2002; Huang et al., 2004; Fougère et al., 2009). Lee (2002) detected the association between crime occurrence and poor labour market condition in three Asia-Pacific countries, i.e. Australia, Japan and South Korea. Nicole (2003) and Rafiq (2008) detected that joblessness, poverty, high school and college education, penitentiary population as well as high population growth rate, earnings inequality contribute to increase crime. Ehrlich (1973) concludes that increase in unemployment rate actually decreases job opportunities which lead the frustrated individuals to engage in criminal activities.

Lee (2002), Teles (2004) and Gumus (2004) proved for USA that unemployment deprives people especially youth from their livelihood, they are discouraged and got frustrated, so unemployment results in loss of self-esteem (Goldsmith *et al.*, 1996). The relation between suicide and unemployment has been proved significantly as compared to relation between suicide and other socio-economic measures (Platt, 1984; Lewis and Sloggett, 1998). The Impacts of unemployment in socio-economic lives of individuals is evident, it creates stress, adversely affect mental health and result in loss of dignity (Jackson and Warr, 1984; Darity and Goldsmith, 1996; Murphy and Athanasou, 1999; Cooper *et al.*, 2007). Many studies provide evidence that unemployment

negatively affects life satisfaction (Clark and Oswald, 1994; Frey and Stutzer, 2000; Clark, 2006; Eggers *et al.*, 2006; Powdthavee, 2006).

## DATA AND METHODOLOGY

This study uses cross-section data collected from different private and government institutions of Bahawalpur district Pakistan. Our Sample consist of highly educated individuals having high degree both professional and non-professional degree as well as employed or self-employed between the age group 18-35 years, who were first time job seekers some time ago. The sample used for the primary analysis comprised of 350 employed individuals. The definition of unemployment given by ILO has been implied. According to United Nation definition the youth comprises of the age group 15-24 (but in our study the young people of age group 18-35 has been included). The dependent variable is duration of unemployment in months, while independent variables have been categorized into personal characteristics and demographic characteristics. Unemployment duration is affected by various factors. In our model the explanatory variables are education, age, gender, training, salary, government/private job, preference for job, head of household, household size, marital status, self-employed.

# **Defining Dependent variable**

Dependent variable is duration of unemployment measured in the number of months in which the individual has obtained the last degree to the year of first entry in job and have used at least one of the search channels to seek a job during the time duration of job search process.

**Table-1.** Definition of Dependent and Explanatory Variables in the Model

	1		1	2		
Variables		Definition	ons			

# Dependent variable

UND (Unemployment Duration)

Unemployment duration measured in months

# **Personal Characteristics**

AGE (Age) Age in completed year GED (Gender) Male=1, 0 otherwise SAL (Salary) The monthly income of an employed individual PREF (Preference) Preference for government job = 1, 0 otherwise GVPR (Government/Private Last degree obtained from Government Institution=1, Educational Institution) 0 otherwise PEDU (Professional Education) Professional Education = 1, 0 otherwise EDUI (Intermediate Education) 12 years of educations =1, 0 otherwise EDUB (Bachelor Education 14 year of Education =1, 0 otherwise EDUM (Master Education) 16 years of Education =1, 0 otherwise SEMP (Self-employed) Self-employed = 1, 0 otherwise TRAIN (Training) Training obtained = 1, 0 otherwise

## **Demographic Characteristics**

HOH (Head of the Household) Head of Household =1, 0 otherwise

HH (Household Size)
MARS (Marital status)

Number of Family Members Married =1, 0 otherwise

## **Model Estimation**

Steiner (2001) states that the hazard rate of unemployment is actually the reduced form of a standard job-search model. In the job-search model, the cost and benefits of job-search and unemployment determine the intensity of the job-search and the reservation wage of the individual. The job offers are accepted or rejected depending on whether they are above or below the reservation wage. High wage offers relative to the reservation wage result in high exit rates from unemployment. The possibility of obtaining employment depends on individual characteristics such as gender, age education, reservation wage, wage offer, search intensity, time spent in unemployment as well as labor market conditions, such as the local unemployment rate. In this paper we analyze the determinants of unemployment duration, which is measured by the time involved from the last degree obtained to full time wage employment. This Paper finds out the probability of ending up the unemployment spell by taking an interval of time, say that, given that it has lasted until time t. Duration of unemployment is denoted by T.

$$F(t) = Pr(T \le t) \dots (1)$$

Equation 1 represents the cumulative distribution of T, where T means actualization of T.

$$S(t) = 1 - F(t) \dots (2)$$

Equation 2 is the Survivor function of T. T is a continuous random variable in the form of months. Various individual and demographic characteristics affect the probability of a person to have unemployment for employment. The survivor function shows the proportions of people who survive unemployment as time proceed. Here we want to find out that what is the probability of ending up an unemployment spell in the next time, say dt, when it has lasted until time t.

Unemployment Duration = f (Demographic characteristics, Personal characteristics)

We have implied simple Single Equation Linear Regression Model (SELRM) for the analysis of determinants of unemployment duration in Bahawalpur District (Pakistan). Simple specification of SELRM is given below.

UND = 
$$\alpha_0 + \alpha_1 AGE + \alpha_2 GEN + \alpha_3 SAL + \alpha_4 PREF + \alpha_5 GVPR + \alpha_6 EDUP + \alpha_7 EDUI + \alpha_8 EDUB + \alpha_9 EDUM + \alpha_{10G} SEMP + \alpha_{11} TRAIN + \alpha_{12} HOH + \alpha_{13} HH + \alpha_{14} MARS + U \dots$$
 (3)

#### RESULTS AND DISCUSSION

The results of OLS model have been shown in table-2.

**Table-2.** OLS Results of Determinants of Duration of Unemployment

Variables	Coefficient	T-Statistics	
AGE	0.09842	4.4837*	
GEN	-0.14320	-2.3234**	
SAL	-0.0211	-3.2120*	

PREF	2.3291	2.1362**
GVPR	4.6213	2.1962*
EDUP	2.5210	3.1932*
EDUI	4.4691	-2.0161*
EDUB	3.3216	3.6210*
EDUM	-2.6121	2.0130**
SEMP	-3.1236	-1.9361
TRAIN	-0.0452	-2.3621**
НОН	-0.02217	-2.1631**
НН	-0.0123	-3.2453*
MARS	-0.3421	-4.1234*

<sup>\*</sup> represents 5 percent level of significance and \*\* represents 10 percent level of significance

## Age of the Respondent

Age of an individual who is seeking job is an important factor affecting her/his duration of unemployment. Our estimation has shown that unemployment duration increases as age increases. Increase in age lowers the probability of exiting unemployment. Lower hazard rates at older ages are also found by Serneels (2001) for Ethiopia and by Tasci and Tansel (2004) for Turkey.

## **Gender of the Respondent**

The coefficient estimates of the female dummy variable are significant with a negative sign indicating that a male suffer lesser unemployment duration as compared to females. The reason may be that an individual being male accept any job offer as soon as possible because in our social set up males are bound to take the family responsibilities. Women face longer unemployment duration than male, these results are similar with Tasci and Tansel (2004) for Turkey but it contrasted with Grogan and Vanden (2000) for Russia. Women may suffer higher unemployment duration perhaps they have high shadow value (opportunity cost) of home production activities and thus a high reservation wage or it may be due to discrimination against women in the labor market.

# Salary of the Respondent

It is found that salary has negatively affected the unemployment duration. The coefficient value of this variable shows that the independent variable higher salary decreases the unemployment duration. If the individual get higher salaried job he will accept the job quickly but if the salary is low he will look for other jobs resulting in greater unemployment duration.

#### Preference for Government or Private Job

A person having preference for government job suffer greater unemployment duration as compared with a person having preference for private job as depicted by the coefficient of variable. The preference for government job has positively affected the unemployment duration. Our results are in accordance with Hyder and Reilly (2006) which revealed that stated preference for public sector job was found to be associated with higher unemployment duration. The estimated effects suggest that, on controlling for all other characteristics, those unemployed who stated a preference for

public sector job has higher unemployment duration, that's why there are long queues for public sector jobs in Pakistan.

#### **Government or Private Education**

The results show that education from public sector organizations enhance the duration of unemployment. This may be due to the provision of counseling in better job search skills, better information about labor market condition perceived by private sector institution than public sector. They may be flexible in adopting curricula primarily responding to the demand from industry, developed dynamic quality potential that enhanced employability skills among educated youth. The individual who has obtained his last degree from government institution suffer higher unemployment duration, as compared with an individual obtaining last degree from private university or college.

#### **Education**

Our results have shown that a person having professional degree has the probability to suffer greater unemployment duration as compared with a person having non-professional degree. The person having professional degree like doctors, engineers has higher reservation wage due to which they don't go for low salaried jobs, they wait and search for higher salary job and suffer greater unemployment duration. So, higher reservation wage leads to higher unemployment duration. If the reservation wage falls job offers will be accepted readily reducing unemployment duration. Our results are similar with Kettunen (1997) who concluded that on the lowest levels additional education increases the probability of re-employment, but on the highest levels the relationship turns negative. Ordine and Rose (2006) stated that when graduates are overeducated they have a spell length higher than that of their undergraduate counterpart. However, the exit rate from unemployment to employment is higher for vocational high school graduates than for high school graduates It may be due to higher opportunity cost of unemployment for individuals with university education.

The results for general education are different, a person having undergraduate degree and graduate degree has the probability to suffer greater unemployment duration. A person having master degree has the probability to suffer lesser unemployment duration as compared to the person having graduate and undergraduate degree. Our result are in accordance with Arif (1996) who stated that variable indicating human capital like education, occupation, work experience appear to have greater influence on employment opportunities. The probability of finding a job is increased for both men and women with the level of education. Tasci and Tansel (2004) found that individuals with four or more years of university education have significantly high exit probabilities than with no formal education. Higher levels of education actually tend to reduce the probability of leaving unemployment, which reduce the average unemployment duration. The development of human capital and skill enhancement can help youth to adjust in labour market (Arif and Chaudhry, 2008).

# **Self-employed**

It is found that an individual who is self-employed or engaged in his own business suffer lesser unemployment duration as compared to person who is not self-employed. Self-employment could be solution for employment in Pakistan as supported by other studies.

# Training obtained by the Respondent

Our results have shown that a person having an extra skill from training in addition to his/her degree. If a person has attended any training or skill enhancing program then he has the probability to suffer lesser unemployment duration as compared to the person having no training and skill as depicted by the coefficient of variable. Training programs are helpful in allowing the individual to enter employment (see also, (Crepon *et al.*, 2005; Stenberg., 2005; Tansel and Ogawa, 2005; Fitzen and Volter, 2007; Nivorozhkin and Nivorozhkin, 2007).

#### Head of Household

It is found that a person being the head of the household suffer lesser unemployment duration as compared to the person who is not the head of household. The head of household has the responsibility of his family so he/she accepts job even at low salary thus reduces the unemployment duration. The head of household due to family responsibility has low reservation wage due to which they have low unemployment duration.

## **Household Size**

The current study estimated that larger household size favors an individual to suffer less unemployment duration. An individual belonging to large family size suffer lesser unemployment duration because the individual accept job offer readily due to the burden of large family size.

#### Marital Status

The marital status of an individual is a socioeconomic variable. In our estimation the marital status has negatively affected the unemployment duration as depicted by the coefficient of variable. The individuals who are married suffer lesser unemployment duration as compared to a person who is single because individual who are married have family responsibilities and accept job offer even at low wage.

Being married implies family responsibilities and higher opportunity cost of unemployment and job searching intensified. The unemployment rate among not married is higher than married and we can conclude that young people have higher reservation wage when they are unmarried, but after getting married they compromise on their wages and even accept low paying job to meet domestic liabilities (Qayyum, 2007). Particularly for man being married increase the probability of exiting unemployment.

## **CONCLUSION**

The importance of educated unemployment cannot be ignored when limited public and family resources are spent on education. In this paper we have analyze the determinants of duration of unemployment faced by first time jobs seekers, after completing their last degree of education in the age group of 20-35 years. Our results indicate that graduates of private university/ college suffer less unemployment duration as compared with public sector university / college. The reason may be excessive burden of enrollment on public sector universities, which has hindered in the way of adopting dynamic quality enhancement programs. Higher education system has not been successful in enhancing the employability of youth, so there is need to start job market responsive disciplines in public sector universities. First time job seekers should be provided counseling in job search skills. People having professional education are facing higher unemployment duration. Self-employed people are suffering less unemployment duration. The creation of self-employment opportunities for educated youth could be a solution to unemployment.

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