JOURNAL OF DEVELOPMENT ECONOMICS AND FINANCE
Vol. 6, No. 2, 2025, pp. 325-346

URL : www.arfjournals.com
https://DOI:10.47509/JDEF.2025.v06i02.05

Factors Influencing Youth's Unemployment: Does Gender Matter in Youth Unemployment in Nepal?

Indra Prasad Pyakurel[1] & Bhim Prasad Bhusal[2]
[1]Lecturer (Economics), Tribhuvan University, Janta Multiple Campus-Itahari, Nepal.
E-mail: ippyakurel@yahoo.com
[2]Lecturer (Economics), Nepal Open University.
E-mail: bhusal1875@gmail.com/bhusal_30bhim@yahoo.com

Article History

Received : 20 September 2025

Revised : 18 October 2025

Accepted : 22 October 2025

Published : 23 December 2025

To cite this article

Indra Prasad Pyakurel & Bhim Prasad Bhusal (2025). Factors Influencing Youth's Unemployment: Does Gender Matter in Youth Unemployment in Nepal?. *Journal of Development Economics and Finance,* Vol. 6, No. 2, pp. 325-346. https://DOI:10.47509/JDEF.2025.v06i02.05

Abstract: Youth-the most productive stage of human life-covers nearly 16% of the world's total population in recent. However, youth unemployment-mainly prevailing in developing countries-is a major challenging problem for the countries. This problem seems severe in Nepal and the government assumed it as a serious problem for a long time even with the policies launched to increase the employment opportunities. Concerning this issue, we employed a probit regression model to access the effects of unemployment determining factors on youth unemployment in Nepal using survey data. The analysis found that some of the socio-economic and demographic factors; age, gender, marital status, household size, job application, family income, and internship affect youth unemployment significantly in Nepal. A large size family has less probability to be unemployed compared to low membered family. Similarly, other factors; job search intensity, internship, level of income, social bonding networks, and graduation marks inversely affect to unemployment. Among the independent factors; gender and graduation marks are the crucial factors to increase graduate unemployment than other factors indicating gender discrimination and graduation marks are the dominant factors affecting to unemployment in Nepal and employers prefer higher marks graded employees than the lower graded ones to employ in their work.

Keywords: Unemployment, demographic factors, youth, human capital, job search

JEL Classification: E24, J10, J13, J24, J64

Introduction

Youth population covers a significant portion of the world's population, i.e., around 16% of the total, according to UN (2019), in one hand and on the other hand, the ILO (2020) highlights the youth population in the world increased from one billion in 1999 to 1.3 billion in 2019. However, one of the most challenging issues globally is youth unemployment (Shah & Mehta, 1998), and the countries- whether developed or underdeveloped- are facing youth unemployment problem (Gatzia, 2012). This problem is of both males and females' at global level. The recent global trend predicts that within the youth unemployment rate 13.6%, the female unemployment rate is 5.5% and the male unemployment is 4.8% which varies according to region base. For instance, this rate in Northern America lies below 9% whereas in Northern Africa, it is above 30%. At the same time, it is also observed that youth are three times more likely to be unemployed than adults (ILO, 2019) because of lack of high degree quality education, no link of human capital to develop youth force and their experience, since employers prefer more experienced labour than youth labor (Pastore, 2018).

Especially, the South Asian countries with of one-fourth population of the world, more than 100 thousands youths per day enter into the labour market (Khatri, 2019). The massivesupply of youth labour force in the international market may inversely affect the sustainable development of the economy. However, youths face problems created by the interaction of economic globalization forces with the national and regional economic structures and their policies (Assaad & Levison, 2013).

Despite some structural changes, situation of Nepal is not different from the global context over the four decades even if implementation of the economic liberalization policies to ensure the economic stability and to increase the country's growth rate through the structural transformation. However, the country could not be succeeded to generate employment opportunities to enhance growth (Shrestha, 2017). Different policies like National Employment Policy (2007) and Employment Policy (2062 BS) and announcement of National Employment Policy (2007) were implemented in the year 2008 to create employment opportunities but these were not effective as expected (Lohani, 2016). Therefore, it seems due to the lack of ground analysis, implemented plans seem likely to be ineffective to achieve the expected output from the youth labour market (Raju & Rajbhandary, 2018).

Previous researches by Adhikary (2005), Raju & Rajbhandary (2018), & Prasain (2019) also identified a lack of study between youth's qualification and the actual

requirement of the labour market in Nepal. Such a mismatch between demand for and supply of labour results to raise social and administrative deformities: corruption, robbery, thief, and other political digesters (Bay & Blekesaune, 2002; Fougère *et al*., 2009; Gregg, 2001). Among various reasons, the education system of Nepal focuses on knowledge based education rather than technical and vocational based which may be a reason for resulting the mismatch between quality education and employment (Neupane, 2020). However, business institutions today expect to hire skilled and technical manpower (Wats & Wats, 2009).

A significant portion of youths, i.e., about 40.3% of the total population, falls within the age category of 15-40 years in Nepal (CBS, 2011). And, around 40 to 50 thousand youths with their academic degrees; bachelors and masters, do not have a permanent job and the persons who get a job are compelled to work below the ruling wage rate. Due to such a problem and lack of employment opportunities in the market, more than 4 million youths migrate to abroad for seeking jobs and it increased by 47% in average between the years 1999 to 2009 (Jones & Basnett, 2013). On the other hand, presence of high unemployment rate in Nepal seems more challenging to stop migration and problematic to government in coming years if universities do not provide skilled based quality and technical education (Mathema, 2007). Yet, there seems lacks in researches on to identify the causes of highly existence youth unemployment in Nepal, especially, graduate youth unemployment. Only a few studies can be found related to highlight the consequences and effect of youth unemployment but researches concerned to examine the factors affecting graduate youth unemployment seem very few.

In the context of Nepal, researchers Chakravarty *et al*. (2019), Ahmed *et al*. (2015) and Sitoula (2015) tried to link the unemployment issues with the role of the education, prospects and job search challenges to meet the employment opportunities. However, the issues; the causes and effect of youth unemployment, the linkages between study programs and employment, general scenarios for graduates, (projection of unemployed time period) and its effect on their life satisfaction, and transitions from university to job placement are less researched.

Similarly, the researchers have focused on the outcome of youth unemployment, their impact on the country's economy, society, families, and individuals. Investigating the determinants of youth unemployment and their effect on unemployment can be a researchable area in the developing country like Nepal. In this regard, here we

tried to investigate the major determinants of unemployment of graduate youths and the relationship between unemployment and the factors affecting to youth unemployment in Nepal. To fulfill the objectives, research questions 'What are the major determinants of graduate unemployment in Nepal? And to what extent the personal and social factors define the graduate youth unemployment in Nepal; are set to find their answers.

Literature Review

The World faced high economic fluctuations due to the change in the rate of unemployment in the beginning of 1930s or beyond the classical period. Economies faced great depression as a result of highly increasing unemployment along with overproduction and unequal distribution of wealth and income in the world (Keynes, 1936). However, classicists argued the overproduction and unemployment simultaneously are impossible because supply in the market creates its own demand (Say & Reynaud, 1953) to equilibrate the economy. They only concerned with frictional unemployment even though it disappears in the long-run by wage-price adjustment. On contrast, Keynesians believe that the economy's equilibrium is always below the full employment that is determined by the interaction of aggregate demand and supply.

According to the ILO (1982) report, unemployment refers to a state of a person who is concurrently without work, i.e., not worked more than one hour during the short reference period and is actively seeking a job. If people are unable to capture employment opportunities due to the lack of financial resources and lack of labour market information it is said to be unemployed. The Ministry of Labour Employment and Social Security–Nepal (MLES) says, a person who is within the age category 18 to 69 years and does not involve in any self-employed business or does not work minimum 100 days in a fiscal year falls under unemployed (Employment Rights Act, 2075).

ILO (1982) explains the unemployment rate is the percentage ratio of the total number of unemployed persons to the total number of labour force of the corresponding country; i.e.,

$$\text{Unemployment rate} = \textit{Unemployment rate} = \frac{\textit{number of unemployed}}{\textit{total number of labor force}} \times 100$$

The productivity of the economy can be enhanced only by skilled and educated citizens. Governments, therefore, emphasize to produce skilled and capable graduates in the country. However, a high proportion of graduates and post-graduates degree holders who are capable and willing to work are unable to find their jobs (Oppong & Sachs, 2015) is existing in the country. Generally, graduate youths are more energetic, capable and skillful so that track of the development path depends on them. In this research, graduate unemployment is treated as a mean condition of involuntary idleness for higher education graduates who are seeking remunerative employment but cannot find any job under the prevailing economic circumstances.

Youth are viewed as the key to the future of the nation building, with their most productive and energetic time representing a significant portion of human resource, specifically, in relation to human and social capital. In this concern, two interconnected theoretical frameworks; human capital and social capital theories – are crucial for understanding youth unemployment and addressing the existing gaps in the literature, as well as how the research questions help to bridge these knowledge gaps.

The capital has multidimensional concept including financial, organizational, intellectual, and human in the economic literature. Among them, human capital is a significant component of the economy to promote income and employment generating programs (Chase-Lansdale *et al*., 2019) which indicates the productive capacity of human beings is generated through investment in education and skill development activities. In the words of Becker (1962), human capital refers to the present value of a past investment in education and skills development of the people, i.e., it is the skills and knowledge developed by economically productive agents. Moreover, Schultz (1961) explains that human capital is the investment in basic requirements of education, health, and internal migration in order to take benefit of better employment opportunities. In the long-run, such investment in human increases the range of choices and progresses the economic and social welfare (Barro, 2009). Human capital is also used for the indication of economic development as well as productivity of the economy (Tamura, 2006). Therefore, it can be said that an increase in investment in human capital can improve country' productivity.

The argument for investment in human capital is premised on the need for the youth to acquire the knowledge previously amassed by the older generations.

Secondly, the youth need to be taught how to acquire existing knowledge in developing new products and services to enhance their living standards of life. Investment in human capital is a way to motivate the development of new products and ideas through creativity that meets the current global needs.

The social capital, on the other hand, is opined by different social researchers with different opinions. Portes & Landolt (2000) show the ability to secure resources by virtue of membership in social networks or larger social structures and it focuses on the resources embedded in one's social network or in social relations and access in networks and use of such resources benefit the individual's actions (Lin *et al*., 2001). Similarly, social capital is related to the characteristics of social structure such as networks, customs, and social conviction which provides social benefit through the society's coordination and cooperation (Putnam, 2000). These concepts reveal that an individual can achieve monetary as well as non-monetary benefits by involving in the social network or being part of the social group. In this context, the social network also helps unemployed youth to enter in the labour market.

Generally, social capital includes mainly the three aspects; trust, norms, and networks (Putnam, 2000). The trust derived from the social capital provides bonds that help the individuals together. Social networks, on the other hand, provides useful information about the labour market and it becomes helpful to link individuals (Putnam, 2000) and the result of such social network may either be direct or indirect which depends upon the nature of these networks. Social capital is different from other capitals because the social capital associates with other individuals and organizations not with the individual themselves (Narayan, 1997). In a comprehensive manner, social capital is not only important for the internal and external relationships, it is more important for the sources and effects of these relationships (Leek & Canning, 2011).

Byg & Herslund (2016) argued that social networks engage people in high-input agriculture, business, and paid employment and social capital helps in the development and improvement in education, healthcare, communication, generating economic activities (Thapa & Sein, 2010). Researches concerned to elaborate the challenge and preventive policies are also suggested to address this issue. Concerning to the size of the youth unemployment problem, Chuang (1999) examined the determinants of youth graduate unemployment in Taiwan considering the personal characteristics; family background and job search variables. The result

shows personal characteristics and job search variables are significant determinants of graduate unemployment whereas family background shows considerably less effective in Taiwan.

Age is another responsible factor for graduate youth unemployment (Little, 2001). Little argues older graduates have less chance to be employed than younger graduates in UK because older graduates cannot convince employers of their worth and they are belonging to those institutions that are not part of large employers' targeted recruitment practices. In contrast, Philbert (2016) revealed the negative relationship between unemployment and age of youth.

With a focus on the use of skills acquired by young graduates, Chiandotto & Bacci (2007) used the proportional odds logistic model and order logistic model to analyze the skill used in work of the students. The study reports-with the higher graduation marks, students have more opportunities of finding a suitable position and the more the graduate's qualification is useful for job hunting he revealed that who have more graduation marks and degrees, they are more satisfied with their job because a rational entrepreneur seeks a qualified and skilled man power in his office rather than average graduates.

In an effort to examine the extent, nature and causes of graduate unemployment in South Africa, de Rheede & Joy (2012) applied descriptive statistics and multivariate probit analysis to determine the trends and characteristics of graduate unemployment. On the basis of survey research, labour market rigidities, high reservation wages, a lack of soft skills and experience are the causes of graduate unemployment. Mncayi (2016) estimates the magnitudes of a few variables on the unemployment of college graduates using a regression model to analyze the linear effects of factors; gender, marital status, religion, age, job searching skills. The findings suggest qualification and major subjects held by the graduates play an important role in the employment opportunities for graduates. The variables; job market information, lack of job experience and not having political connection directly influence the unemployment status of graduate students. Other variables; age, race, self-confidence and higher education institution attended have no influence on unemployment.

Longe (2018) identified a combination of casual factors such as poor political governance and diversification of the economy, lack of synergy of supply and demand for graduates, corruption and lack of national employment policy are responsible for graduate unemployment in Nigeria.

Under the probit analysis, Abdallah (2018) studied on the determining factors of labour market outcomes of university graduates. His results show the university female graduates have more chances to get employment opportunities than the male graduates. Further, the social networking bonding and linking capital decrease the duration of unemployment. Gender is found as a significant determinant of unemployment in the study of Tangtipongkul & Wangmo (2018). The variables used in this study; education, number of graduates, work experience, career advice, market information, family income, aspire to the low-income job, and education quality significantly affect unemployment rate except entrepreneurial ability. But in the case of Greece, Mitrakos *et al*. (2010) found program selection is as a main determinant of graduate unemployed among males and females. This study reports students who graduated from Law school or IT face no real unemployment problem whereas graduates from School of Physical Sciences, Mathematics and Statistics have a high risk of unemployment and the probability of unemployment with female graduates is high compared with men and with similar educational qualification.

Baert *et al*. (2019) tried to establish a relationship between student internships and employment opportunities. In his study, students with internships have more chances to be invited for a job interview than students without such experiences. Similarly, a study by Shandra (2020) observed that internship is helpful to meet the employer expectation that they have more chances to be employed. Researches could not find similar type of relationship among determinants of unemployment and its factors. The relation varies across country's development status, region and policy formulation and implementation.

The social capital in Nepal only has to face pressure in adding employment opportunities. Undoubtedly, the attention of unemployment, in general, has received in recent years because the challenge among the educated youth is alarming, thus has raised an attention to the policy makers. Higher degree holder graduate youths in Nepal are suffering from unemployment problem and only social networks are unable to provide employment opportunities. However, there is a lack of studies about the probability of employment opportunities through social networks. Likewise, there is a knowledge gap about whether graduate youths are receiving appropriate support from their network relation when they enter into the labour market. In this context, to investigate the influence of socio-demographic, economic, individual factors and social networks on the unemployment are the major issues in this study.

Both the micro and macroeconomic factors such as family size, lack of resources, insufficient employment opportunities, unmatchable education influence the youth unemployment and it may lead to social and individual problems like drug addiction, robbery, prostitution, etc. in the society. In this regard, to investigate the impact of components influencing unemployment like age, gender, student internships, family background and new research area appears imperative.

Research Methodology

The study falls under the post-positivist philosophical paradigm in which the aggregate impact of some independent variables on a dependent variable attempt to investigate at certain level of confidence because the level of confidence in social reality may change due to various factors. Personal, social and demographic factors such as age, graduation marks, family income, internship, gender and others can affect the unemployment condition of graduate youths in general.

Social reality is measurable and knowable but difficult to access. However, data, evidence and rational considerations, the knowledge about unemployment driven forces is shaped. Hence, this helped to interpret and analyze the unemployment driven forces in graduate youths through the lens of post-positivist philosophical paradigm.

Sampling Process and Data Collection

The research is value free in the sense that survey method is used to collect required data to examine the relationship among the factors (Cresswell, 2014), and the result is interpreted on the basis of data obtained from the provided questionnaire. To fulfill the aims of this research, quantitative research design is adopted because the research sought to establish the relationships between the dependent and independents variables concerned to unemployment and predict the outcomes. The research area is Biratnagar which is located in Morang district of Nepal. This area is selected purposively for the convenience of researchers.

In this study, the targeted population includes all the male and female (35 years or less) youths who finished their academic degree (at least bachelor degree) between 2009 and 2019 AD from different colleges of Biratnagar. The appropriate number of samples is calculated mathematically derived relation because a sample greater than 30 is deemed sufficient for normal distribution (Kwak & Kim, 2017) which is statistically large enough. For this extent, the following relation derived by Cochran

(1977) is adopted to determine the size of sample: $\frac{z \times p(1-p)}{}$ where; n_0 = sample size, which was estimated, z^2= selected critical value of desired level of confidence, at 95% level of significance and its value is 1.96, p = 50% variability of the population, e = desired level of precision or margin of error (or, margin error = 5%). Substituting these values in the above relation, the minimum number of samples is; $n_0 = \frac{(1.96)^2 \times 0.5(1-0.5)}{(0.05)^2} = 384.16$. Therefore, the minimum sample size is 384.

To avoid the bias of this technique, data were collected for the alumni databases of different colleges, and graduates which were selected randomly.

Under this method, a list of questionnaires pertaining to the survey was prepared and validated by presenting to the research committee of the Faculty of Social Sciences and Education-Nepal Open University and provided physical questionnaire and some of them were sent through E-mail. The idea of questionnaire formation were adapted from Abdallah (2018) and Mncayi (2016) because they are likely to meet the purpose of this research.

Model specification and econometric model setting

The probit regression model is used to identify the unemployment-driven forces and their effect in the unemployment. So, a significant test is applied to estimate the coefficient of the variables. The dependent variable is dichotomous and it can be represented by a variable taking the value 1 with probability π and the value 0 with probability 1-π. This model was chosen the cumulative probit regression model for its easiness and more significant interpretation of odd ratios; even though the probit model yields similar parameter estimates (Gujarati, 2004).

Suppose, U_i is observed binary variable showing whether graduate youth is employed or unemployed and U_i^* is unobserved which helps to predict the observed effect. So, the model becomes; $U^*_i = X_i\beta_i + \varepsilon_i$ (1)
where, $X_i\beta_i$ stands for a vector of independent variables and ε_i stands for stochastic error term. Here, U_i is 1 if $U_i^*> 0$ if unemployment and 0 if $U_i^*\leq 0$ if the graduate youth is employed. The probability of individual being unemployed can be expressed as;

$$prob\left(U_i = \frac{1}{X_i}\right) = prob\left(U_i^* > \frac{0}{X_i}\right) \quad (2)$$

From equations (1) and (2), $prob(U_i = 1/X_i) = prob\left(X_i\beta_i + \varepsilon_i > \frac{0}{x_i}\right)$, the simplified version of this model under MLE is; $L(\delta_i U_i, X_i) = \Pi_{U_{i=1}} w_i \Phi(\delta_i X_i) \Pi_{U_i} w_i [1 - [\Phi(\delta_i X_i)]]$..

Then, taking logarithm both sides, the log maximum likelihood function becomes;

$$\ln L(X_i\beta_i / U_i, X_i) = \Sigma_{U_i} w_i \ln \Phi(\delta_i X_i) + \Sigma_{U_i} w_i \ln[1 - [\Phi(\delta_i X_i)] \quad (3)$$

This function is useful to interpret the sign of coefficients. To interpret the magnitude of coefficients, marginal effect will be calculated. The marginal effect can be calculated by differentiating the equation (3) with respect to X_i, then, $\frac{\partial\, prob(U_i = 1/X_i)}{\partial X_i} = \frac{\partial \Phi(X_i\beta_i)}{\partial X_i} = \Phi(X_i\beta_i)\delta_i$.. The modified version of this equation is also employed by Abdallah (2018) which we also employ the same. $U_i = \alpha + \beta_o + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots\ldots + \beta_k X_k + \varepsilon$, where = ($\beta_0$, β_1, β_2,…, β_k) are the model parameters and = (X_1, X_2, …, X_k) are the explanatory variables.

The aforementioned theoretical background of the model to be used to estimate the parameters, the functional form of unemployment and factors affecting it is; $prob\left(U_i = \frac{1}{X_i}\right) = prob(U_i = 1/AGE, GD, MS, HS, JSI, HMI, SI, BSN, GM) = \Phi(\beta_0 + \beta_1 AGE + \beta_2 GD + \beta_3 MS + \beta_4 HS + \beta_5 JSI + \beta_6 HMI + \beta_7 SI + \beta_8 BSN + \beta_9 GM + \varepsilon_i)$, where, GYUS = graduate youth employment status (1 for unemployment and 0, for otherwise), β_0 = constant term, AGE = age of graduate, GD = gender, MS = marital status, HS = household size, JSI = job search intensity, HMI = household montly income, SI = · student internships, BSN = bonding social networks, GM = graduation marks

Since the graduate youth unemployment is influenced by other independent factors, refers to the age group between 15 to 25 who have not worked more than one hour during the short reference period but who are available for and actively seeking work (O'Higgins, 1997), is a dummy defined to have two outcomes. If the graduate youth is unemployed (1) and 0, otherwise.

Data analysis, Presentation and Discussion of the results

The variation inflation factor (VIF) and correlation matrix were employed to test the problems of multi-collinearity and collinearity within the variables, but we did not

report the results due to space deficiency. And finally, the coefficients of the variables are estimated using probit regression using the statistical softwares- SPSS and STATA. The survey instrument included the demographic, educational, employment status, family background, job search, and social network profiles of respondents in order to collect the information and are defined as the unemployment-driven forces in graduate youths.

The probit model is appropriate to estimate the probability of factors affecting graduate unemployment since the estimated probabilities of all variables lie between two extreme values; 0 and 1. The value 0 indicates there is no chance of prediction by predictors and 1 indicates there is a perfect chance of prediction. The value of coefficients obtained from this model only tells how dependent and independent variables are related. To overcome this weakness and to observe the relationship between dependent and independent variables and to examine the probability of an individual being unemployed, the marginal effect is calculated. The likelihood ratio of chi–square is 117.74 with the p-value 0.000 tells the model as a whole is statistically significant.

The personal factor-age negatively and significantly correlated with unemployment. The signaling theory is relevant to describe the individual and organization's behavior when there is information asymmetry between two parties

Table 2: Probit Regression Estimates for the Unemployment Driven Forces

	Coefficients		*Marginal Effects*	
Variables	*Coefficient*	*Robust Std. Err.*	*dy/dx*	*Std. Err.*
Age	-0.042**	0.018	-0.011	0.005
Male	-0.782***	0.150	-0.213	0.037
Married	-0.384**	0.152	-0.104	0.040
Household size	0.145***	0.054	0.039	0.014
Job application	-0.062***	0.020	-0.017	0.005
Monthly family income	-0.729***	0.226	-0.198	0.059
Internship	-0.714***	0.159	-0.194	0.040
Size of friends	-0.487***	0.095	-0.132	0.023
Graduate marks	-2.527**	1.120	-0.689	0.297
Constant	10.111***	2.344	-------	-------
Number of observations	384	Wald $chi^2(9)$	117.74	
Prob > chi^2	0.000	Pseudo R^2	0.283	
Log likelihood	-186.067			

Note: ** and *** show the level of significance at 5% and 1% respectively.

(Connelly *et al*., 2011). This theory suggests when there is a lack of information, generally, employers made hiring decisions on the basis of normal characteristics like age and other demographics (Spence, 1973). Therefore, a rational employer always wants to hire more energetic and younger manpower rather than older.

An extension of the Human Capital Theory, Polachek (1987) says labour skill depreciates because females spend less time in the labour market than their household activities. However, some contradictory observations in European cases are found. Mooi-Reci & Ganzeboom, (2015) observed that females are more likely to get subsequent jobs than males. This result matches with also the finding of Abdallah (2018)) in Ghana. Similarly, statistical evidence from Tanzania shows gender is as a significant determinant of unemployment and male youths have more chances of being employed than the females (Msigwa & Kipesha, 2013). Similar findings are also observed by Alawad *et al*. (2020), Longe (2018), Baah-Boateng (2013), Tangtipongkul, & Wangmo (2018), and Sackey & Osei (2006). It indicates there is still gender discrimination in the different parts of the world in regards to the nature of jobs, job opportunities and some stereotypes about the productivity of females. Different cases and researches show that Nepal is not different from the global trend in female discrimination.

In regard with marital status, according to the marginal effect of this variable the married graduates have around 10% high opportunity to be employed than unmarried or a single graduate youth. According to the social capital theory, marriage is one of the significant sources of bonding capital that helps to create the social network through the new relations and it may increase employment opportunities (Putnam, 2000b). In line with this finding, Abdallah (2018), Tangtipongkul, & Wangmo (2018), and Schnebelen & Bruhn (2018) also reported same type of results. In the context of Nepal, married graduates have more financial and social responsibilities as well as obligations than unmarried or single graduates (Guinée, 2014). Therefore, married graduates are more employed than unmarried or single graduates in Nepal.

Household size is statistically significant at 1% level of significance with a coefficient 0.145 and with the expected sign implying those who live in the high-member family have higher chances to be unemployed as compared to neutral family (i.e., the family of a couple with their dependent children). When there are more family members, some of the members are unwilling to work because they have no financial responsibilities as they face in small household size that can cause

to remain unemployed. Similarly, in some families, females are generally not allowed to work after marriage which is also found in the work of Kingdon & Knight (2004) and Tangtipongkul & Wangmo (2018).

Similarly, an inverse relationship between student internship and the probability of being an unemployed is significant at 1% with the predicted sign. The marginal effect reveals a student having internship experience has around 20% more chances to be employed than someone who has no internship experience. This result matches with the view of theory of human capital, which says the investment in education, training, and health of the individual incur a positive impact on employment and employment outcomes (Becker, 1962). Similarly, Baert *et al.* (2019), Silva *et al.* (2018), Price & Grant-Smith (2016), Nunley *et al.* (2016) and Callanan & Benzing (2004) also reported that internships as a significant instrument to raise the probability of not being unemployed. It indicates no one wants to hire less experienced graduates as compared to experienced and intern holder graduates because employers can be benefitted more from such educated human resource.

The number of job applications sent by graduates' youth to get employment opportunities assumed as a proxy for job search intensity and the result shows it is statistically significant at 1% with a negative sign implying graduates who sent more job applications are likely to decrease the chance of being unemployed by 2%. This finding is consistent with the findings of Abdallah (2018), Kanfer *et al.* (2001), Nyarko *et al.* (2014) and Franzen & Hangartner (2006). The job search intensity is affected by factors; time, money, and dedication. So, the graduates who are willing to get a job needs to increase job search activities with the hope of employment opportunities. Hence, the graduates who sent more job applications will have more probability to be employed than those who sent applications in less numbers.

The income of a household refers to family income, here is statistically significant at 1% level with negative sign. This indicates a high membered family income is less likely to make them unemployed by 20%. High-income families might have more social networks and their members may involve in different business activities that helps to search for employment opportunities.

The result of bonding social network measured in the form of the number of close friends and relatives who can help the youths to find job opportunities is statistically significant at 1% level with the expected sign and this result is in line with Abdallah (2018) and Bentolila *et al.* (2010) indicating an additional increase

in bonding social networks decreases the probability of being unemployed by 13%. In Nepal, it is an important instrument of financial and emotional support to get employment opportunities that more the networking higher will be the chance of success to enter in labor market.

The graduation score is statistically significant at 5% with the expected sign implying an individual having higher marks in comparison to those who have lower marks is less likely to remain unemployed by 69% points. In contrast, previous researches revealed that the graduation grade is insignificant to determine the employment status of graduates. For example, Baldry (2016) reports marks of a graduate are not a significant influencer of both employment and unemployment status. For the case of Nepal, the graduation mark is assumed to be the best measurement of efficiency (Lockheed *et al*., 1980) showed that employers prefer higher graded employees than the lower graded one. Thus, the employers have more benefitted from higher graded employees than others.

In nutshell, this study found that personal and social factors: age, gender, marital status, household size, number of job applications, family income, internship, size of friends, and graduation marks were significant to explain unemployment suggesting -these factors helped in predicting unemployment driven forces in Nepal.

Conclusions and Policy Implications

Human capital hypothesis depends on the principle of improvement in human efficiency through skill advancement and investment in education that eventually creates income and employment opportunities, in one hand. On the other hand, social capital theory centres on the resource embedded in social networks through involvement in the social activities. Relying on these ideologies, a nation focuses on to promote income and employment opportunities for youths. However, the unemployment issue is getting more challenging within all sorts of economies. Researchers' thinking settles at the point whether there is mismatch between the theories and increasing unemployment issue of the society.

Based on the research objectives in two folds; primarily, it tries to examine the determinants of youth unemployment: age, marital status, gender, household size, job application, family income, internship, friends' size, and graduation marks. Secondly, to examine the impact of those factors on youth unemployment, we estimated the impact of factors affecting the unemployment of youth in Nepal

using cross-section data collected through survey method in the probit regression model. The findings uncovered that the factors: number of job applications, sex, age of graduates, marital status, number of family members via household size, household's income, internship taken by the graduates, number of friends, and graduation scores influence the unemployment prospects of graduates which are supported by the recent studies that examined the driven forces of graduate youth unemployment. Specifically, since sex or gender cannot be excluded in the analysis of youth unemployment in Nepal, the finding of this study confirms that female graduates have more likelihood to be unemployed than male graduates.

The extent of personal characteristics to explain the graduate unemployment were found statistically significant. Similarly, the other factors; job search intensity and family background are also the significant predictors of youth unemployment. and the factors; age, marital status, household size, job search intensity, bonding social network have weak effect on unemployment but gender, income of household, internship and graduation marks indicated a higher impact on youth unemployment.

This research reveals that the policies concerned to youth unemployment prepared in Nepal without finding the ground realities and needs of the youth. So, along with the lack of proper policies to address youth unemployment in Nepal, most of the implemented policies seemed ineffective to maintain employment opportunities.

Findings of this study may be important to graduates, and other stakeholders and the society may be benefitted from the outcomes of this research because this research tried to seek the probabilities of control variables for the unemployment status of graduate youth. It can be useful to different responsible authorities; government policy makers, college authorities, and other sectors related to this issue to address the most probable variable and to use remedial measures in order to check graduate unemployment.

References

Abdallah, A. A. (2018). *Labour market outcomes and subjective wellbeing of university graduates in Ghana* [Doctoral Thesis, University of Ghana]. University of Ghana. https://ugspace.ug.edu.gh/server/api/core/bitstreams/bb0ab6cf-00ba-4dce-b5e7-f5d5b242b4f8/content

Adhikary, P. K. (2005). Educational reform for linking skills development with employment in Nepal. In Singh, M. (Eds.), *Meeting basic learning needs in the informal sector.*

Technical and vocational education and training: Issues, concerns and prospects, 215–228. Springer, Dordrecht. https://doi.org/10.1007/1-4020-3427-X_11

Alawad, A. S., Kreishan, F., & Selim, M. (2020). Determinants of youth unemployment: Evidence from Jordan. *International Journal of Economics and Business Administration*, *8*(4), 152–165.

Assaad, R., & Levison, D. (2013). Employment for youth–A growing challenge for the global economy. *Commissioned Paper for the High-Level Panel on Post-2015 UN MDG Development Agenda Employment and Economic Growth, University of Minnesota*, *166*.

Baah-Boateng, W. (2013). Determinants of Unemployment in Ghana. *African Development Review*, *25*(4), 385–399. https://doi.org/10.1111/1467-8268.12037

Baert, S., Neyt, B., Siedler, T., Tobback, I., & Verhaest, D. (2019). *Student internships and employment opportunities after graduation: A field experiment*. Discussion paper series IZA DP No. 12183, Institute of Labor Economics, Germany.

Baldry, K. (2016). Graduate unemployment in South Africa: Social inequality reproduced. *Journal of Education and Work*, *29*(7), 788–812. https://doi.org/10.1080/13639080.2015.1066928

Barro, R. J. (2009). A Cross-country study of growth, saving, and government. In Bernheim, B. D. & Shove, J. B. (Eds.), *National saving and economic performance*, University of Chicago Press.

Bay, A. H. & Blekesaune, M. (2002). Youth unemployment and political marginalization. *International Journal of Social Welfare*, *11*(2), 132-139. https://doi.org/10.1111/1468-2397.00207

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, *70*(5, Part 2), 9–49.

Bentolila, S., Michelacci, C., & Suarez, J. (2010). Social contacts and occupational choice. *Economica*, *77*(305), 20–45.

Byg, A., & Herslund, L. (2016). Socio-economic changes, social capital and implications for climate change in a changing rural Nepal. *GeoJournal*, *81*(2), 169–184.

Callanan, G., & Benzing, C. (2004). Callanan, G., & Benzing, C. (2004). Assessing the role of internships in the career-oriented employment of graduating college students. *Education & Training, 46(2), 82-89.* https://doi.org/10.1108/00400910410525261

Central Bureau of Statistics. (2011). *National population and housing census 2011*. Central Bureau of Statistics, Kathmandu.

Chakravarty, S., Lundberg, M., Nikolov, P., & Zenker, J. (2019). Vocational training programs and youth labor market outcomes: Evidence from Nepal. *Journal of Development Economics*, *136*, 71–110. https://doi.org/10.1016/j.jdeveco.2018.09.002

Chase-Lansdale, P. L., Sabol, T. J., Sommer, T. E., Chor, E., Cooperman, A. W., Brooks-Gunn, J., Yoshikawa, H., King, C., & Morris, A. (2019). Effects of a two-generation human capital program on low-income parents' education, employment, and psychological wellbeing. *Journal of Family Psychology*, *33*(4), 433-443. doi: 10.1037/fam0000517

Chiandotto, B., & Bacci, S. (2007). Measurement of university external effectiveness based on the use of the acquired skills. In Fabbris, L. (Eds), *Effectiveness of university education in Italy* (pp. 89-104), Physica-Verlag HD. https://doi.org/10.1007/978-3-7908-1751-5_7

Chuang, H. L. (1999). Estimating the determinants of the unemployment duration for college graduates in Taiwan. *Applied Economics Letters*, *6*(10), 677–681. https://doi.org/10.1080/135048599352493

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*, *37*(1), 39–67. https://doi.org/10.1177/0149206310388419

Cochran, W. G. (1977). *Sampling techniques* (3rd ed.), John Wiley & Sons, New York.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage

de Rheede, V., & Joy, T. (2012). *Graduate unemployment in South Africa: Extent, nature and causes*. University of the Western Cape.

Fougère, D., Kramarz, F., & Pouget, J. (2009). Youth Unemployment and Crime in France. *Journal of the European Economic Association*, *7*(5), 909–938. https://doi.org/10.1162/JEEA.2009.7.5.909

Franzen, A., & Hangartner, D. (2006). Social networks and labour market outcomes: The non-monetary benefits of social capital. *European Sociological Review*, *22*(4), 353–368.

Gatzia, D. E. (2012). The problem of unemployment. *Economics, Management, and Financial Markets*, *7*(2), 36–54.

Gregg, P. (2001). The impact of youth unemployment on adult unemployment in the NCDS. *The Economic Journal*, *111*(475), F626–F653. https://doi.org/10.1111/1468-0297.00666

Guinée, N. (2014). Empowering women through education: Experiences from Dalit women in Nepal. *International Journal of Educational Development*, *39*, 173–180.

Gujarati, D. N. (*2004*). *Basic econometrics* (4th ed.), McGraw-Hill Companies.

https://doi.org/10.1080/03610910600591610

International Labour Organization. (1982). *The Thirteenth International Conference of Labour Statisticians*. International Labour Organization, Bureau of Statistics. https://www.ilo.org/public/english/bureau/stat/download/res/ecacpop.pdf

International Labour Organization. (2019). *Eight Ways to grow Nepal's agricultural sector*. International Labour Organization. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_713334.pdf

International Labour Organization. (2020). *Technology and the future of jobs*. ILO. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_737648.pdf

Jones, H., & Basnett, Y. (2013). Foreign employment and inclusive growth in Nepal. *Overseas Development Institute*.

Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality–motivational analysis and meta-analytic review. *Journal of Applied Psychology*, *86*(5), 837-855.

Keynes, J. (1936). *The General theory of Employment, Interest and Money*. Palgrave Macmillan.

Khatri, K. (2019, October 30). More than half of South Asian youth are not on track to have the education and skills necessary for employment in 2030. *UNICEF for Every Child*. shorturl.at/apNR8

Kingdon, G. G., & Knight, J. (2004). Race and the incidence of unemployment in South Africa. *Review of Development Economics*, *8*(2), 198–222.

Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: The cornerstone of modern statistics. *Korean Journal of Anesthesiology*, *70*(2), 144-156. https://doi.org/10.4097/kjae.2017.70.2.144

Leek, S., & Canning, L. (2011). *The role of networking and social capital in the initiation of relationships in passion-based service networks* [Paper presentation]. 27th IMP Conference 2011, Glasgow.

Lin, N., Fu, Y., & Hsung, R.-M. (2001). The position generator: Measurement techniques for investigations of social capital. In Lin, N., Cook, K. and Burt, R.S., (Eds), *Social capital: Theory and research* (57-81), Walter de Gruyter, New York.

Little, B. (2001). Reading between the lines of graduate employment. *Quality in Higher Education*, *7*(2), 121–129. https://doi.org/10.1080/13538320120060015

Lockheed, M. E., Jamison, T., & Lau, L. J. (1980). Farmer education and farm efficiency: A survey. *Economic Development and Cultural Change*, *29*(1), 37–76.

Lohani, S. (2016, May 21). Educated and qualified, but no job for us. *The Himalayan*.

Longe, O. (2018). Graduate unemployment in Nigeria: Causes, consequences and remediable approaches. *American International Journal of Contemporary Research*, 7(4), 63-72.

Mathema, K. B. (2007). Crisis in education and future challenges for Nepal. *European Bulletin of Himalayan Research*, *31*, 46-66 http://himalaya.socanth.cam.ac.uk/collections/journals/ebhr/pdf/EBHR_31_04.pdf

Mitrakos, T., Tsakloglou, P., & Cholezas, I. (2010). Determinants of youth unemployment in Greece with an emphasis on tertiary education graduates. *Economic Bulletin*, *26*, 21–62.

Mncayi, N. P. (2016). *The determinants of employment status of young graduates from a South African University* [MA Dissertation, South African University], South African University. http://dspace.nwu.ac.za/bitstream/handle/10394/17038/Mncayi_NP.pdf?sequence=1

Mooi-Reci, I., & Ganzeboom, H. B. (2015). Unemployment scarring by gender: Human capital depreciation or stigmatization? Longitudinal evidence from the Netherlands, 1980–2000. *Social Science Research*, *52*, 642–658.

Msigwa, R., & Kipesha, E. F. (2013). Determinants of youth unemployment in developing countries: Evidences from Tanzania. *Journal of Economics and Sustainable Development*, *4*(14), 67-77.

Narayan, D. (1997). *Voices of the poor: Poverty and social capital in Tanzania*, (Report No. 17387). World Bank Group.

Ministry of Youth and Sports (2015). *National youth policy 2072*, Ministry of Youth and Sports, Nepal. https://www.moys.gov.np/sites/default/files/nitiheru/National%20Youth%20Policy%202072_2.pdf

Neupane, M. S. (2020). TVET Programs in Nepal: Issue of access and relevancy. *Journal of Training and Development*, *5*, 16–28. https://doi.org/10.3126/jtd.v5i0.33888

Nunley, J. M., Pugh, A., Romero, N., & Seals Jr, R. A. (2016). College major, internship experience, and employment opportunities: Estimates from a résumé audit. *Labour Economics*, *38*, 37–46.

O'Higgins, S. N. (1997). *The challenge of youth unemployment*. Employment and Training Department, International. Labour Organization, Geneva.

Opoku Nyarko, C., Baah-Boateng, W., & Nketiah-Amponsah, E. (2014). *The Effect of Search Effort on the transition from Unemployment to Work: Evidence from a Cross Section of Ghanaian Formal Sector Workers*.

Oppong, S., & Sachs, P. R. (2015). Managing graduate unemployment in emerging economies: Critical analysis of the skills mismatch and oversupply Theses. *Poslovna Izvrsnost: Znanstveni Časopis Za Promicanje Kulture Kvalitete i Poslovne Izvrsnosti*, *9*(1), 125–137.

Pastore, F. (2018). Why is youth unemployment so high and different across countries? *IZA World of Labor*. https://hdl.handle.net/10419/177798

Philbert, E. (2016). *Factors Influencing Youth Unemployment in Tanzania*. The Open University of Tanzania. http://repository.out.ac.tz/id/eprint/1570

Polachek, S. W. (1987). Occupational segregation and the gender wage gap. *Population Research and Policy Review*, *6*(1), 47–67. https://doi.org/10.1007/BF00124802

Portes, A., & Landolt, P. (2000). Social capital: Promise and pitfalls of its role in development. *Journal of Latin American Studies*, *32*(2), 529–547. https://www.jstor.org/stable/i208513

Prasain, K. (2019, April). Disconnect between employees and employers. *The Kathmandu Post*.

Price, R., & Grant-Smith, D. (2016). What evidence is there that internships secure employment? *The Conversation, June (17)*.

Putnam, R. D. (2000). Bowling alone: America's declining social capital. In In Crothers, L., Lockhart, C. (Eds.), *Culture and politics* (pp. 223–234), Palgrave Macmillan, New York. https://doi.org/10.1007/978-1-349-62397-6_12

Raju, D., & Rajbhandary, J. (Eds.). (2018). *Youth employment in Nepal* (Report No. 127629). The World Bank Group. https://doi.org/10.1596/978-1-4648-1276-7

Sackey, H. A., & Osei, B. (2006). Human resource underutilization in an era of poverty reduction: An analysis of unemployment and underemployment in Ghana. *African Development Review*, *18*(2), 221–247. https://doi.org/10.1111/j.1467-8268.2006.00140.x

Say, J. B., & Reynaud, P. L. (1953). *Jean-Baptiste Say*. Dalloz.

Schnebelen, S., & Bruhn, M. (2018). An appraisal framework of the determinants and consequences of brand happiness. *Psychology & Marketing*, *35*(2), 101–119.

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, *51*(1), 1–17.

Shah, V., & Mehta, K. T. (1998). Workforce, information technology and global unemployment. *Industrial Management & Data Systems, 98*(5), 226-231. DOI**:** https://doi.org/10.1108/02635579810227742

Shandra, C. (2020). *What employers want from interns: Demand-side trends in the internship market?* Working Paper, State University of New York at Stony Brook. https://doi.org/10.31235/osf.io/4mzbv

Shrestha, P. K. (2017). Economic liberalization in Nepal: Evaluating the changes in economic structure, employment and productivity. *Journal of Development Innovations*, *1*(1), 60–83.

Silva, P., Lopes, B., Costa, M., Melo, A. I., Dias, G. P., Brito, E., & Seabra, D. (2018). The million-dollar question: Can internships boost employment? *Studies in Higher Education*, *43*(1), 2–21.

Sitoula, T. (2015). *Challenges and prospects of youth entrepreneurship in Kathmandu*. Universitetet i Nordland. http://hdl.handle.net/11250/2385486

Spence, M. (1973). Job market signaling the quarterly journal of economics, 87(3). *MIT Press, August*, *355*-374.

Tamura, R. (2006). Human capital and economic development. *Journal of Development Economics*, *79*(1), 26–72.

Tangtipongkul, K., & Wangmo, D. (2018). Determinants of unemployment: Characteristics and policy responses in Bhutan. *Southeast Asian Journal of Economics*, *6*(2), 27–48. retrieved from https://so05.tci-thaijo.org/index.php/saje/article/view/109468

Thapa, D., & Sein, M. K. (2010). ICT, social capital and development: The case of a mountain region in Nepal. *Proceedings of the Third Annual SIG GlobDev Workshop* (GlobDev 2010. 1). https://www.researchgate.net/publication/259934987

The Right to Employment Act. (2018). *The Right to Employment Act, 2075 (2018)*. https://www.lawcommission.gov.np/en/wp-content/uploads/2019/07/The-Right-to-Employment-Act-2075-2018.pdf

United Nations. (2019). *World population prospects 2019: Highlights,* Department of Economic and Social Affairs, & Population Division, UN. https://doi.org/10.18356/13bf5476-en

Wats, M., & Wats, R. K. (2009). Developing soft skills in students. *International Journal of Learning*, *15*(12), 1-10.