

**IMPACT OF HIGHER EDUCATION ON
MARRIED WOMEN'S LABOUR FORCE
PARTICIPATION AND EARNINGS IN NEPAL**

A Thesis

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in

ECONOMICS

By

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DECLARATION

I, SUJAN BHATTARAI, declare that this thesis entitled “**IMPACT OF HIGHER EDUCATION ON MARRIED WOMEN'S LABOUR FORCE PARTICIPATION AND EARNINGS IN NEPAL**” submitted to Central Department of Economics is my own original work unless otherwise indicated or acknowledged in the thesis. The thesis does not contain materials which has been accepted or submitted for any other degree at the University or other institution. All sources of information have been specifically acknowledged by reference to the author(s) or institution(s).

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LETTER OF RECOMMENDATION

This thesis entitled “**IMPACT OF HIGHER EDUCATION ON MARRIED WOMEN'S LABOUR FORCE PARTICIPATION AND EARNINGS IN NEPAL**” has been prepared by Mr. SUJAN BHATTARAI under my guidance and supervision. I, hereby, recommend it in partial fulfillment of the requirements for the Degree of MASTER OF ARTS in ECONOMICS for final examination.

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APPROVAL SHEET

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Similarly, I would also like to thank my parents and friends who helped me a lot in finalizing this thesis within the limited time frame. This thesis is designed following the formats and guidelines produced by Central Department of Economics (CEDECON). I am fully liable for any discrepancy as well as errors and mistakes found in this thesis.

ABSTRACT

This thesis examines the impact of higher education on labour force participation and earnings of married women in Nepal. Despite the importance of women's participation in the labour market, they continue to face challenges related to education, skills, wages, and opportunities for career advancement. This thesis uses cross-sectional, and explanatory research design to investigate the relationship between higher education with FLFP, and earnings. After implying probit regression method this thesis finds that higher education level has a significant impact on the labour force participation of married females. In addition, the results after using Mincerian wage equation reveal that women with higher education and above can have more earnings in comparison to women with no education.

Keywords: labour force participation, earnings, Mincerian wage equation, probit regression

ACRONYMS AND ABBREVIATIONS

| | |
|----------|--|
| CBS: | Central Bureau of Statistics |
| CHNS: | China Health and Nutrition Survey |
| EA: | Enumeration Area |
| FLFP: | Female Labour Force Participation |
| HRD: | Human Resource Development |
| ILO: | International Labour Organization |
| ILOSTAT: | International Labour Organization Statistics |
| IT: | Information Technology |
| IV: | Instrumental Variable |
| LFP: | Labour Force Participation |
| NHIS: | National Health International Survey |
| PSU: | Primary Sampling Unit |
| PWE: | Potential Work Experience |
| SSU: | Secondary Stage Units |

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CHAPTER I

INTRODUCTION

1.1 Background of the Study

Education is a key factor for the overall development of mankind. Education further enhances entrepreneurial intentions and act as one of the most important factors responsible for modern civilization (Şeşen & Pruett, 2014). Additionally, education and training impacts on the labour market opportunities of individuals, in particular on earnings and employment probability (Blundell et al., 1999). As emphasized by (Barro, 1991), education is the major variable that plays significant role in inducing economic growth. Labour market and economic growth are mostly defined by educational quality that have significant impacts on national income (Hanushek & Woessmann, 2010). The human capital and productivity of any kind of labour depends upon the degree and quality of education they acquire. Thus, education is a contributing factor to economic performance, through its impact on domestic output and productivity growth at the aggregate level (Blundell et al., 1999). In this regard, (Schultz, 1960) proposed to treat education as a purest form of capital as it becomes an integral part of a person and it renders a productive service of value to the economy.

Labour is the major driving force of the economy. When the labour force participation of a nation increases, measured national income per capita also rises (Goldin, 1986). Labour Force Participation is the indication of relative supply of labour in the labour market, and it is also very useful for the formulation of employment and human resource development (Hussain et al., 2016). The dynamic nature of labour market requires labour with more skills, information and capabilities so that the labour force participation can contribute net positive impact on labour productivity and economic growth (Chebly et al., 2020; Jajri & Ismail, 2010; Salimova et al., 2022). Only the quality labour is not vulnerable to the dynamics of the market economy. The labour with higher education, vocational training and skills can gain compatibility in the labour market. Only if one gains such qualities; he/she can be able in intensification of participation in labour market securely. For instance,

given the COVID-19 Pandemic, workers who had relevant Information Technology (IT) skills might have an edge in an increasingly digital economy (Atasoy et al., 2021). The skills of the labour along with the educational requirements might increase employment probability, and those employment effects can be explained by both increased labour force participation and a higher probability of transitioning from unemployment to employment (Atasoy et al., 2021).

The productivity of women varies in different sectors of the economy. Meanwhile, Female Labour Force Participation (LFP) is mainly driven by the value of the market wages versus the value of their non-market time, and the degree of their LFP further depends upon non-economic factors such as public policies, culture, and norms (Winkler, 2022). In case of married women's, higher child dependency ratio and household heads with higher education significantly constrain women's choice for LFP (Bag, 2020). In the developing economies, women are more vulnerable to job security in comparison to men (Djankov & Ramalho, 2009), and are less likely to get job in the formal sector. Different sectors of the economy possesses different degree of wage gaps, for instance, sectors of comparative advantage in services have the lowest gender wage gap, with women earning 24 percent less than their male counterparts, while women in manufacturing earned on average 40 percent less than male workers (Johannesson & Nordås, 2021).

1.2 Statement of Problem

There are multitude of factors that affect female labour force participation in an economy. Some of them are age, health status, family size, number of young children of different age groups, and higher education of parents. These factors are quite evident in justifying the female labour force participation in underdeveloped economies like Nepal. Furthermore, women's labour force participation and earnings are influenced by various socio-cultural, economic, and policy-related factors (Barslund & Thirion, 2019; Jayachandran, 2021; Miaari et al., 2020). Despite the importance of women's participation in the labour market, they continue to face challenges related to limited education, lack of skills, unequal wages, and limited opportunities for career advancement (Jayachandran, 2021; Klasen, 2019; Rees, 2022).

According to NLFS 2017/18, employment to population ratio and labour force participation rate increased with the level of education for both male and female. Similarly, the report further illustrates that the unemployment rate is highest among young people aged 15 to 24 and 25 to 34 years. However, the employment to population ratio and labour force participation rate increased with age and peaked at age 35 to 44 years. Further, study like (Brauner-Otto et al., 2019) claims that educated labour force with higher education in Nepal are vulnerable to the jobs and thus do not wish to enroll in labour market easily. On the other hand, uneducated female labour force is prone to low wage rate resulting low incomes. There is no efficient assurance of higher education and vocational education in both male and female of rural and urban area. With reference to the basic facts stated above, this study aims to know the extent to which the labour force participation and performance (in terms of earnings) are linked with the higher education. Furthermore, this study will define the difference between the performance of the labour with higher education in married and unmarried female labour force; both in rural and urban area.

According to the Nepal Labour Force Survey (NLFS) undertaken in 2017/2018, it was observed that the rate of employment for women was 62.9 percent, whereas for men it was 81.7 percent. Furthermore, the survey disclosed that women had a higher unemployment rate of 9.7 percent compared to men whose rate of unemployment was 3.4 percent. Additionally, females reported a higher unemployment rate of 13.1 percent, which is 2.8 percentage points higher compared to males which also shows huge disparities in other labour market indicators between females and males, in that female employment to population (EPR) is 22.9 percent, which is 25.4 percentage points lower than male EPR. These statistics indicate that women encounter more obstacles when seeking employment in Nepal compared to their male counterparts.

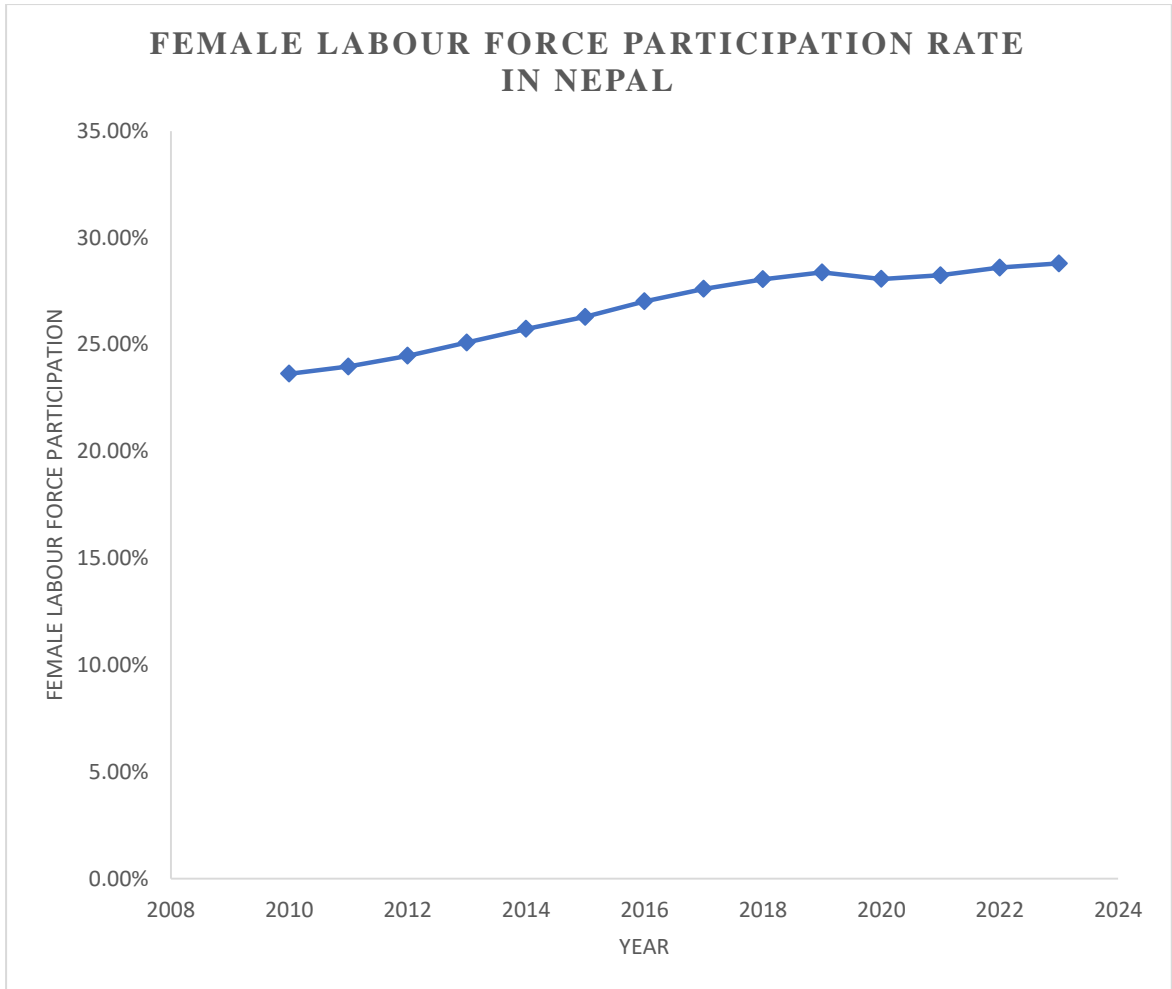


Figure 1.1 Female labour force participation rate in Nepal

Source: Author’s own calculation using International Labour Organization statistics, ILOSTAT (ILO labelled estimate for 15+ female).

Figure 1.1 shows the small increase in female labour force participation (FLFP) rate in Nepal over one and half decade of time period, with a gradual growth from 23.64% in 2010 to 28.80% in 2023, except for a decline in 2020. The slow growth in FLFP is attributed to various factors such as weaker access to education, weak labour market conditions, and household composition (Hotchkiss, 2005). Factors like educational attainment, socioeconomic status, and cultural differences also play a crucial role in this effect (Andres et al., 2017). To achieve promising growth in the FLFP in the long run in Nepal, the lack of significant improvement in social, cultural, and economic factors raises concerns, and further research is required to identify the primary factors contributing to the low growth rate. The main aim of the study is to examine the impact of higher education on FLFP in Nepal and to determine the returns to

education for married women, with the purpose of understanding the extent to which education and earnings are contributing to the slow growth rate of FLFP in Nepal.

The study aims to explore the intricacies between female labour force participation in Nepal for those who are married. It is quite evident from previous studies that all of the labour force participation in an economy is dealt with the factors relating to general feminine traits/characteristics responsible for their participation as labour force.

1.3 Research Questions

Women's labour force participation and earnings are influenced by various socio-cultural, economic, and policy-related factors. Despite the importance of women's participation in the labour market, they continue to face challenges related to limited education, lack of skills, unequal wages, and limited opportunities for career advancement. Thus, to achieve promising growth in the FLFP in the long run in Nepal, there need to be significant improvement in social, cultural, and economic factors. Among different factors such as age, health status, family size, number of young children of different age groups, and higher education of parents, studies (Blundell et al., 1999; Hafeez & Ahmad, 2002; Moretti, 2004) suggest that factors like education, and earnings are further significant in determining the rate. Thus, this study attempts to examine the impact of higher education on labour force participation, and labour force outcome.

The major research questions of this study are;

- i. How does higher education level affect the labor force participation of married women in Nepal?
- ii. What is the impact of higher education on earnings of married women in Nepal?

1.4 Objectives of the Study

The general objective of the study is to investigate the effect of higher education on female labour force participation, and earnings in Nepal.

The specific objectives of the study are;

- i. To examine the impact of higher education level on labour force participation of married women in Nepal.
- ii. To investigate the impact of higher education on earnings of married women's in Nepal

1.5 Significance of the Study

The major significances of the study are;

- i. This study checks whether higher education of labour is significant in context of Nepalese labour force subject to labour force participation.
- ii. The study in the labour market outcomes subject to higher education of labour helps government to formulate plans and policies for both educated and uneducated labour force in Nepal.
- iii. This study is helpful for the academicians, researchers, and stakeholders for the further study on relationship subject to education and labour force participation.

1.6 Scope and Limitations of the Study

1.6.1 Scope of the Study

Because the study is broader in scope in that it tries to understand the relationship between educational efficiency in terms of earnings, and labour force participation, the major scope can be in the field of ensuring higher education for labour and individuals in the economy. However, the study's main focus areas are labour education, public policy formulation, and labour law implementation subject to genders, among others.

1.6.2 Limitations of the Study

The major limitations of the study are;

- i. Validation of this research is totally based on the validity of data.
- ii. At the time of the analysis, no consideration is given to outside migratory labour.

- iii. In high dimensional datasets like NLFS III, simple regression model and Mincerian wage equation can sometimes overstate the accuracy of predictions on the test set.
- iv. The study classification on the field of higher education may not exhibit the level of expertise.

1.7 Outline of the Study

This study is divided into five chapters. Chapter I covers introduction. Chapter II covers review of literatures. Chapter III deals with research methodology. Chapter IV and Chapter V discusses the results and conclusion of this study respectively. Latterly, References is provided.

CHAPTER II

LITERATURE REVIEW

In this chapter, there are three distinct sections, namely a theoretical review, empirical review, and research gap. The theoretical review encompasses an examination of relevant theories concerning higher education and its impact on female labour force participation and earnings. On the other hand, the empirical review is focused on analyzing the research conducted by various scholars to investigate the effects of higher education on the employment and earnings of married women. The gap in the literatures is explained in the last section.

2.1 Theoretical Review

2.1.1 Basic Concept of Capital Theory

Nafukho et al. (2004) examined the concept of 'Capital Theory'. The concept of capital theory suggests that investing in people results in significant changes at both individual and organizational levels. At an individual level, such investments lead to improved performance, while at the organizational level, they result in enhanced productivity and profitability. These benefits extend beyond the organization and can also positively impact society as a whole. Human Capital Theory supports this notion by emphasizing the importance of investing in education and training to enhance workforce development and productivity. Furthermore, Human Resource Development (HRD) emphasizes the value of promoting knowledge sharing and motivation to foster innovation and generate process capital, which have emerged as crucial components of the development process.

2.2.2 Investment in Human Capital and Mincerian Wage Equation

Mincer (1958) proposed the Mincerian wage equation. The equation is a statistical model widely used in labour economics to relate an individual's earnings to their level of education and work experience. To derive the Mincerian wage equation, Mincer used a log linear model that relates an individual's earnings to their education and work experience, as well as other factors that may affect earnings. The equation takes the form of a log-linear model, where the natural logarithm of an individual's

earnings is regressed on their education and work experience, as well as other variables that may affect earnings such as gender, occupation, and industry. The derivation of the equation involves maximizing the expected present value of an individual's earnings over their lifetime. Mincer assumes that an individual's earnings can be modeled as a function of their education and work experience, as well as other factors that may affect earnings.

$$\text{Log}(\text{weekly_wage}) = \beta_1 \text{Educ} + \beta_2 \text{Exp} + \beta_3 \text{Exp}^2 + u_i$$

Mincer shows that the optimal level of education is a function of the rate of return to education, which is captured by the coefficient β_1 in the Mincerian wage equation. He also derives the coefficient β_3 , which captures the interactive effect of education and experience on earnings. The coefficient is positive, which indicates that the returns to education increase with work experience. Overall, the Mincerian wage equation provides a framework for understanding how an individual's investment in human capital, through education and work experience, can lead to higher earnings over their lifetime. It has been widely used in labour economics to estimate the returns to education and experience, as well as to study the effects of policy interventions aimed at increasing the level of education and work experience in the labour force.

2.2 Empirical Review

Ahmed and Hyndman-Rizk (2020) studied the female labour force participation in Bangladesh in accordance with the increasing rate of women's higher education. The study was conducted at public women's college in Northern Bangladesh to examine the women's experiences of higher education. The research was based on mixed methods where 20 students among 1671 were summoned for in-depth interview. The interview guided both open-ended and closed-ended questions for qualitative and quantitative data analysis. Finally, the secondary data sources analysis was also used to check the findings through triangulation process. The authors concluded improvement in the intrinsic empowerment of the female students whereas their instrumental empowerment did not progress. This result occurred due to the four factors: stereotyped subject selection, lack of relevant job skills, limited Information Technology (IT) competence and limited career aspiration. Finally, the study

recommended improvement in the quality of female higher education to meet the labour market requirements.

Assaad et al. (2018) employs regression, and propensity score matching to know how a person's pre-enrollment qualities, along with the quality of higher education they attain, affect labour market outcomes. The findings show that family history significantly influences labour market outcomes, while supply-side issues and institutional incentives have little effect. The study made reform recommendations for higher education and advocated for a greater role for the private sector in the distribution of higher education.

Cameron et al. (2001) studied the impacts of an increase in the wife's education on the household decision making model. The model derived a reduced-form participation index and used ism presumption of household data in five Asian countries: Indonesia, Korea, The Philippines, Sri Lanka and Thailand. This study used data from the World Fertility Surveys conducted by International Statistical Institute in 1975-76. The research concluded that the labour force participation in Asia is independent of women's education and varies significantly by country, since there is dominance of culture and values in most of the nations in Asia. Thus, the authors suggest to consider cultural context trying to link women's education levels on women's participation in the labour force.

Desai and Joshi, (2019) employs Oaxaca–Blinder Decomposition method to study the paradox of declining female work participation in an era of economic growth in India. The findings of this study, which used data from the National Sample Surveys and the India Human Development Surveys for the years 2004–2005 and 2011–2012 respectively, are as follows: (1) The decline in rural women's labour force participation rates reported by National Sample Surveys may be overstated; (2) supply factors account for a relatively small portion of the decline in women's labour force participation rates; and (3) public policies, such as the improvement of transportation infrastructure and other government programs, increase the opportunities for employment.

Grossbard et al. (2022) analyzed the earnings distribution of the spouse's wages. After employing Monte-Carlo-Simulations method as a major methodology, the study finds that earnings distribution across household was not significantly impacted if the couple is participating in labour market. The literature further concluded that increased female labour force involvement and lower fertility had equalizing effects that significantly minimizes inequality in earnings distribution among male and female of the households.

Hafeez and Ahmad (2002) used logit and probit models to empirically determine the impact of female labour force engagement on factors such as spouse and wife education levels, women's ages, household size and structure, household revenue, and asset ownership. According to the analysis, the education level of females is a significant and advantageous predictor of FLFP. However, it is strongly and negatively linked to monthly household revenue, the number of employees in the household who are not the husband and wife, and financial assets. The FLFP rate is favorably impacted by demographic elements such as age and family size, and organization.

Heath and Jayachandran (2016) explored the causes of the increase in female education, and its impact in labour force participation in low-income developing countries. The study reveals that the greater availability of jobs and policy interventions are the important factors that have contributed in increasing female education. The research further revealed the consequences of increase in female education relating fertility, children's health and children's education. In conclusion, the upward trend in the female education levels has raised female labour force participation even in a majority of low-income developing countries, principally in the well-being of women.

Kahn (1998) used three cross-sectional data sets from National Health Interview Survey (NHIS) of the years 1976, 1989 and 1992 to empirically investigate the relation between health status of male and female diabetic patients, and its impact on labour market participation. The study employed probit regression method and observed that the improvement in status of women diabetic patients have significant positive impact in labour force participation, in comparison to male diabetic patients.

The study recommends to increase the medical advancement in curing the patients, and adoption of healthier diets.

Moretti (2004) compared spillovers from college education with the different shares of college graduates in the labour force. The study used longitudinal data to estimate a model of non-random selection of worker among cities. After employing Instrumental Variable approach, the study finds that with small increase in the supply of college graduates raises high school drop-outs wages by 1.9 percent, high school graduates' wages by 1.6 percent, and college graduate's wages by 0.4 percent. The conventional demand and supply model predicted a larger effect for educated groups. Moreover, there is growth in the wages with an increase in the supply of college graduates.

Peng et al. (2022) examined the effect of family size on the returns to education in China, implying Instrumental Variable (IV) approach. The study uses data from the China Health and Nutrition Survey (CHNS) over the period 1989 and 2015 to estimate the impact of these factors on wages and employment status. The study found that having more siblings has a negative effect on wages and employment status. The authors suggested that the negative effect of having more siblings may be due to a reduced amount of resources and attention from parents. The estimation further reveals that having more male siblings can raise female's educational aspirations. Yet, the impact of more female siblings on either males or female's educational success is statistically insignificant. Females are expected to receive larger returns from education (6.6 percent) than males (5.3 percent). The findings suggested that investments in basic infrastructure may improve the labour market outcomes of individuals, particularly those with higher levels of education.

Qing (2020) analyzed the role of conventional gender views on income gaps between men and women. The study implied instrumental variable, causal inferences, and Oaxaca-Blinder decomposition approaches, and used the statistics from the 2013 Chinese National Social Survey. The study finds that conventional gender role attitudes strongly negatively affect women's earnings but have no appreciable impact on men's earnings. Furthermore, the gender pay gap appears to be primarily caused by the varied effects of gender role attitudes on the wages of men and women. Moreover, perceptions about gender roles have a broad and indirect impact on gender income

inequality through factors like educational success, labour force participation, working hours, and occupational position.

Roberts and Schöer (2021) assessed the impact of gender-based segregation in education, jobs and earnings among South African female. The study uses data from nationally representative labour force of African workers, and employs linear regression approach for further analysis. The study finds that women are significantly more likely than men to work in the education and health sectors, while men are more likely to work in the construction and mining sectors. Women are also more likely to work in part-time and informal jobs, which tend to be lower-paying and less secure. The research concluded that the best realistic policy approach to help narrow some of the wage gaps between African men and women is targeted training interventions for women's vocational qualifications in fields of study where males predominate. The gender wage gap and gender-based segregation may be addressed with the use of laws that promote gender equality in the workplace, such as affirmative action and equal pay legislation.

Tanaka et al. (2020) inspected the impact of female higher education on female labour force participation and likewise on gains from marriage and household welfare in Bangladesh. The study carried out a fuzzy regression discontinuity design where the stipend Program for women was introduced. Furthermore, the samples were divided into two groups: treatment and control group, where treatment group was exposed to the stipend program, whereas the control group did not benefit from it based on the initial year of implementation. The findings presented that there were stagnant impacts of female education on female labour force participation. However, it showed positive effects on husband's schooling and household income. Additionally, sanitation control and children's health have improved significantly and enhancement in women's role has been experienced through marriage and household activities rather than their participation in labour market.

Timilsina et al. (2019) uses Nepal's Cross-Sectional demographic health survey (NDHS) 2016/17 with an objective to find out if Nepal's high female labour force participation (FLFP), the caste system and unpaid maternity leave are major factors for under – 5 deaths in Nepal. The research demonstrated the FLFP also to be one major factor to be responsible for under – 5 deaths. Mothers who work are at a higher

risk of experiencing child death compared to mothers who do not work until the child is two years of old in which case the child mortality rate was reduced.

2.3 Research Gap

Existing literature has examined the relationship between education and women's economic outcomes in developing countries, including Nepal. However, most of the studies have focused on general education's impact on women's labour force participation, individual's productivity, earnings, and earnings distribution. Studies like (Nafukho et al., 2004) suggests investment in people tends to increase individuals productivity. In context of women, studies like (Kim & Hahn, 2022) concluded that mothers with poorer academic backgrounds with children can have lesser favorable labour market results. (Grossbard et al., 2022) examined the relationship between spouse's wages earnings distribution using Monte-Carlo simulations method. Similarly, (Qing, 2020) analyzed income gaps considering views on role of gender. In the similar way, (Tran & Van Vu, 2020) also investigated the wage differential among university graduates. (Heath & Jayachandran, 2016) empirically explained the causes of the increase in female education. (Cameron et al., 2001) examined about women's participation on household decision. Furthermore, (Moretti, 2004), and (Assaad et al., 2018) studied the impact of college education to enhance spillover effects on labour market outcomes. Studies by (Hafeez & Ahmad, 2002) investigated multitude of socio-economic and demographic factors affecting LFP. Meanwhile, (Desai & Joshi, 2019) examined the paradox of declining FLFP in an era of economic growth in India.

The research objective of examining the impact of higher education on married women's labour force participation and earnings in Nepal is crucial as it addresses the gender inequalities that exist in the country. Despite the importance of education for women's empowerment and economic outcomes, there is a dearth of research on this specific topic in Nepal. More literatures like (Timilsina et al., 2019) studied nexus of LFP with women in Nepal, and (Ahmed & Hyndman-Rizk, 2020) investigated about gains of marriage and household welfare in Bangladesh. Both of the literatures subject with female labour force participation. However, the research gap lies in the absence of prior research that has investigated the impact of higher education on married women's labour force participation and earnings. There is a lack of research that

examines the role of higher education, especially among married women. This is a significant gap because higher education can potentially have a more substantial impact on women's economic outcomes than primary or secondary education, or general education. Moreover, there is a need for research that specifically focuses on married women. The traditional gender roles and cultural norms in Nepal often restrict married women's ability to work outside the home. Hence, the impact of higher education on married women's labour force participation and earnings might differ from unmarried women or men. Therefore, the proposed research is essential in filling the gap in the existing literature by investigating the impact of higher education on married women's labour force participation and earnings in Nepal. The findings of this study can provide insights into the potential benefits of higher education for married women and inform policymakers and stakeholders in designing programs and policies to support women's education and employment opportunities.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

In this section, a comprehensive research design with detail conceptual framework is presented. This chapter covers the methodological elements like sources of data that are implied in the study, and data analysis tools and techniques (descriptive statistics, and econometric tools etc.). For the generalization of data analysis techniques, a simple model specification is presented along with nature of data implied in the study. The model used in the study is Mincerian wage equation, which this chapter will elucidate in the subsequent sections. Further, this chapter discusses about operational definition of variables used in the study.

3.2 Research Design

This research employs a cross-sectional, and explanatory research design to investigate the relationship between higher education with FLFP, and earnings. The study controls for the other socio-economic and demographic characteristics, and uses a nationally representative household survey NLFS III, taken by CBS. The survey collected comprehensive information on the labour market situation, employment status, and other socio-economic and demographic characteristics of sampled households in Nepal.

3.3 Conceptual Framework

A conceptual framework is a structure that provides a theoretical basis for understanding the relationships between different variables. It outlines the researcher's expectations about how different variables are related to one another and helps to guide the design, analysis, and interpretation of the study. It typically consists of a set of interconnected concepts, variables, and propositions that form the basis for the research model.

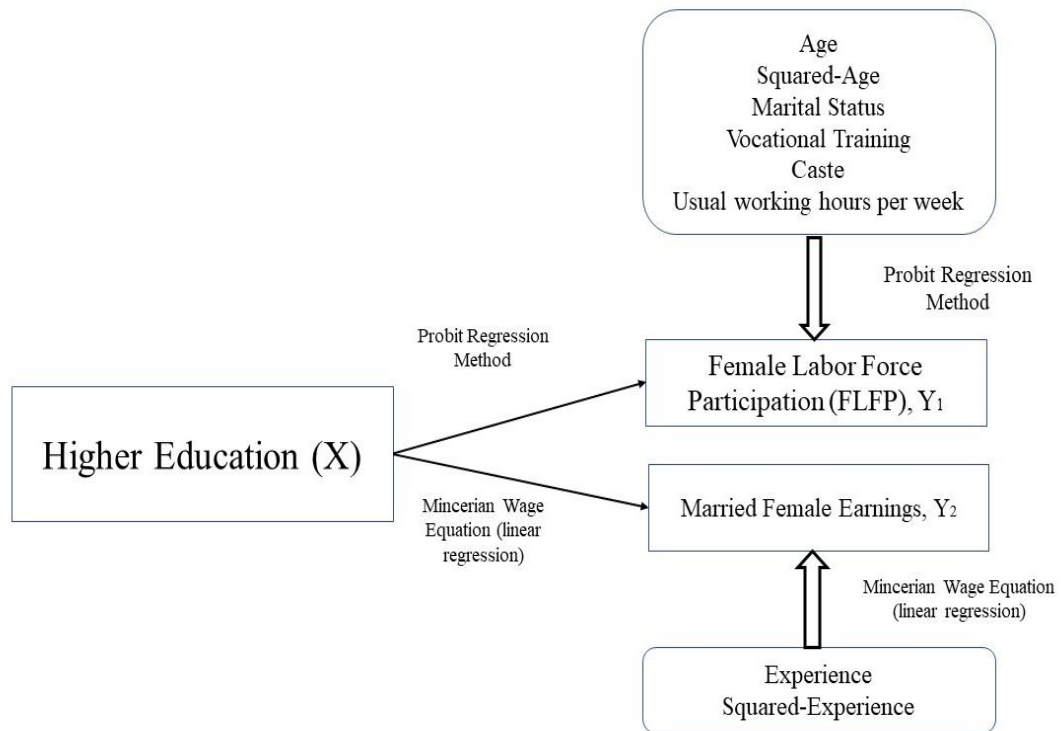


Figure 3.1 Conceptual Framework of the study

Source: Author’s own construction

Figure 3.1 presents the visual illustration of the factors that affect the women’s Labour Force Participation and their earnings. As demonstrated, Higher Education, Age, Marital Status, Vocational Training, Caste, and work hour are the factors that influence the Labour Force Participation of women and acts as the independent variables, along with education. Similarly, Higher education and experience are the factors affecting Women’s income level. An empirical evidence and statistical as well as econometrical analysis carried out establishes the relationship, and marginal effects between these variables.

3.4 Sources of Data

This study utilizes secondary data obtained from Nepal Labour Force Survey - Round 3, which was conducted by the Central Bureau of Statistics in 2017/18. The survey used the 2011 National Population and Housing Census as the frame, and included both rural and urban areas of the seven provinces as domains. The sample was selected using a two-stage stratified design, with Enumeration Areas (EA)

serving as primary sampling units (PSU) and households as Secondary Stage Units (SSU). A total of 900 sample PSUs were selected, and a systematic sample of 20 households per PSU was enumerated, resulting in a total of 18,000 households and 77,638 individual data collected. The survey was conducted over the period of January 2017 to December 2017 and collected data on various aspects of employment, unemployment, labour force participation, and other socio-economic characteristics of households and individuals in Nepal. For instance, the survey provides comprehensive information on the characteristics of the labour force and the employment situation in the country, including data on employment status, industry, occupation, education, earnings, and other relevant factors.

For this study, the individual sample was restricted to women only, defined as individual women aged 15 to 59 who have worked or not for any type of pay, including for at least an hour of work during the last 7 days from the time of survey. Only samples of individuals working for someone else for pay as an employee or paid apprentice/intern were considered. For the first objective of this study, the sample size is restricted to 16,024, and for the second objective of this study 21,455 and 21,914 samples for two different categories are employed, where level of education is treated as both continuous and categorical variable. In order to calculate extent of earnings, wage equations is estimated for married female samples. In summary, this study employed data from Nepal Labour Force Survey - Round 3 to observe the impact of higher education on FLFP, and earnings.

3.5 Tools of Analysis

3.5.1 Descriptive Analysis

The research employs statistical methods, such as calculation of mean and standard deviation, to conduct a descriptive analysis. This analysis aims to define the characteristics of individuals, including their caste, education, age, and the gender. Additionally, the analysis investigates variables of interest, such as usual working hour per week, and vocational training.

3.5.2 Econometric Analysis

The examination of cause and effect relation between higher education and FLFP is made after carrying out a common econometric tool known as probit regression model. Similarly, econometric wage equation known as Mincerian wage equation is employed which uses simple linear regression to estimate the relationship between earnings and higher education of married women.

3.6 Variables Employed and Model Specification

Firstly, the study considers following dependent and independent variables;

3.6.1 Dependent Variables

The first aim of the study is to examine the impact of higher education on married women LFP. Thus, female labour force participation (FLFP) rate is treated as dependent variable. According to ILO, the labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market. As a result, working age population in between 15-59, including for only one hour during the last 7 days from the time of survey, is considered.

Since the second aim of this study is to know the impact of higher education on married women earning, log of the weekly wage is considered as the dependent variable as used by the study (Kanjilal-Bhaduri & Pastore, 2018). The weekly wage includes the cash wages, which are reported in daily, weekly, or monthly terms. If the information on daily wage is provided, the hourly wage rate is calculated by multiplying it by seven. Similarly, if wage information is on monthly basis, weekly wage is obtained after dividing it by four.

3.6.2 Independent Variables

For the first case: higher education, marital status, interaction term (marital status with higher education), attainment of vocational training, age, squared-age, usual working hour (weekly basis), and caste are the independent variables employed. Similarly, for the second case; independent variables implied are higher education, experience, and squared-experience.

3.6.3 Probit Regression Equation

One of the major objectives of this study is to analyze the impact of higher education on LFP of married women in Nepal, implying effective econometric modelling. The model comprises of probit regression equation as the major method employed. Further, F-test is calculated to evaluate the validity of the instrument. Probit regression is a statistical technique used to model binary dependent variables, which take on two possible values (such as yes or no, success or failure). In probit regression, the relationship between the binary dependent variable and one or more independent variables is modeled using a probit function, which is a standard normal cumulative distribution function (Wooldridge, 2015). It is a type of regression analysis used to model binary outcomes, where the dependent variable (FLFP) can take only two values, usually coded as 0 and 1.

Thus, the probit regression is used to model the likelihood of an individual making a certain choice.

The first equation that is employed in the study is:

$$\begin{aligned} FLFP_i = & \alpha + \beta_1 HEL + \beta_2 marital * HEL + \beta_3 Voc_Tran + \beta_4 age \\ & + \beta_5 age_squared + \beta_6 Marital + \beta_7 Week_Wrk_hr + \beta_8 Caste \\ & + e_i \dots \dots \dots \dots \dots \dots \dots \dots \dots (1) \end{aligned}$$

The equation (1) represents a probit regression model that attempts to explain the factors affecting female labour force participation (FLFP), where the major independent variable is level of higher education, and the other variables mentioned in the equation are controlled, that is further mentioned in table 3.1.

3.6.4 Mincerian Wage Equation

The Mincerian wage equation is a statistical model that describes the relationship between a worker's earnings and various individual characteristics, such as education, experience, and other demographic variables. The equation is employed to know the impact of married women's higher education on their earnings.

The relation is exhibited using the equation presented below:

$$\text{Log}(\textit{weekly_wage}) = \beta_1 \text{Educ} + \beta_2 \text{Exp} + \beta_3 \text{Exp}^2 + u_i \dots\dots\dots (2)$$

The equation (2) is a form of multiple regression model known as Mincerian wage equation that is often used in social science research, particularly in economics. The purpose of this model is to examine the relationship between a dependent variable (weekly wage) and several independent variables, which in this case are Education (Educ), Experience (Exp), and Experience squared (Exp²).

The dependent variable, weekly wage, is transformed using the natural logarithm (log), which is a common practice in regression analysis when the dependent variable is continuous and positively skewed.

The independent variables in the equation are Education, Experience, and Experience squared. Education is a measure of the individual's level of education, which is expected to have a positive relationship with weekly wage. Due to the nature of data used, potential work experience is calculated after subtracting grade completion with age, and 6 (the age from which schooling begins).

$$[\text{Potential Work Experience (PWE)} = \text{age} - \text{grade_comp} - 6]$$

Experience squared is included in the model to capture the non-linear relationship between experience and weekly wage, as it is possible that the marginal benefit of experience on weekly wage may decline at higher levels of experience. The coefficients (β_1 , β_2 , and β_3) in the model represent the expected change in the dependent variable (weekly wage) for a one-unit increase in each independent variable, holding all other variables constant. The error term (u_i) represents the unobserved factors that affect weekly wage, which are not captured by the independent variables in the model. Overall, this equation can be used to test the hypothesis that education and experience have a significant impact on weekly wage, and to quantify the magnitude of these effects while controlling for other relevant factors.

In this study, education is a categorical variable. Among different categories, this study emphasizes to know the extent of relationship that exhibits between higher

education level of married women with their earnings, employing effective econometric valid model, known as Mincerian wage equation.

3.7 Operational Definition of Variables

Table 3.1 Operational definition of dependent and independent variables used in the study

| Variables | Definition and measurement | Expected Sign |
|------------------------------|--|----------------------|
| Dependent Variables | | |
| | dummy variable | |
| Female Labour | FLFP | |
| Force Participation | 1=If participates in labour market and 0 otherwise | |
| Log_weekly_wage | The variable is a natural logarithmic function of the weekly wage, The variable is continuous | Positive |
| Independent variables | | |
| | dummy variable | |
| Higher Education | 1= women with higher education and 0 otherwise | Positive/Negative |
| | Two-way treatment, thus it is categorical and continuous variable | |
| | For categorical variable: | |
| | 0 Pre_School | |
| | 1 - Primary_Edu | |
| Education level | 2 - Lower_Sec_Edu | |
| | 3 - Secon_edu | |
| | 4 - Higher_Edu | |
| | 5 - Literate but nongraded | |
| | 6 – Professional degree | |
| | 7 - Illeterate | |
| | Continuous variable | |
| Age | Current age of the individuals during the survey | Positive |
| | Continuous variable | |
| Age squared | Square of current age of the individuals during the survey | Negative |
| Marital status | Binary variable | Positive/Negative |

| | | |
|---------------------------------|--|-------------------|
| | 1=if the individual is married, or 0 otherwise | |
| | Category variable | |
| | 1= if the individual's caste falls into the following category hill Brahmin, Chhetri | |
| | 2= Hill Adhibasi/Janajati | |
| Caste | 3= Hill_dalit | Positive/Negative |
| | 4= Madhesi_adi_jan | |
| | 5 = Madhesi_Brah | |
| | 6 = Madhesi_dalit | |
| | 7= Others | |
| Potential Work Experience (PWE) | Continuous variable | Positive |
| Squared PWE | Continuous variable | Negative |

CHAPTER IV

RESULTS AND DISCUSSION

4.1 Introduction

This section of the study contains the results obtained after carrying out descriptive and econometric analysis. The descriptive analysis includes a measure of central tendency and dispersion for analysing the individual woman's and other economic and socio-demographic characteristics. Along with descriptive analysis, this study portrays the graph and figures for demonstrating the features of survey data. Furthermore, valid econometric analysis has been carried out in order to examine the impact of higher education on labour force participation, and earnings of married women.

4.2 Description of the Study Area and Summary Statistics

The nationally representative Nepal Labour Force Survey Data collected by Central Bureau of statistics between July 2017 to June 2018 which was divided into annual sample for three seasons is used for the econometric as well as descriptive analysis of this study. The goal of sampling design was to achieve high level of efficiency of employment/unemployment estimates at the domain level (14 domains) considered as the primary strata with representative of 18,000 households.

The second version of NLFS questionnaire was developed on the basis of an ILO recommendation including core and supplementary modules comprising 130 questions in eight sections which further provided guidelines for developing the NLFS III questionnaire in order to obtain valid and scientific data, obtained with the reference from 168 questions in fourteen sections. The information are segregated in various forms that reveals different socio-economic and demographic characteristics such as housing information, household composition, education and training received, major paid job or major business activities, identification and details about employment status, major characteristics of both primary paid job or business activities and secondary paid job or business activities, working time of all nature of jobs, related income of main job, job search and availability, past employment

experience, production of goods for household or family use, own-use production of services, volunteer work, absentees information, returnees and short-term migrant workers, and forced labour status.

The descriptive statistics of the major concerned variables is presented in table number 4.1. The information pertains to a dataset with 25,515 observations, which includes variables such as age, caste, marital status, grade completion, labour force participation, and hours spent on the main job per week. Additionally, an interaction term for married women and higher education is included. The mean values for these variables are 32.3987 for age, 1199.62 squared age, 2.4067 for caste, 0.76849 for marital status, 0.0518 for grade completion, 0.08477 for FLFP, 0.03577 for the interaction term, and 0.17699 for usual hours spent on work. Furthermore, the standard deviations for these variables are 12.24539 for age, 0.2216 for grade completion, 1.508418 for caste, 0.4218063 for marital status, 0.2785 for labour force participation, 0.27855 for hours spent on the main job per week, 0.1852 for the interaction term, and 0.3816 usual hours work per week.

Table 4.1 Summary statistics of the major variable used in the study

| Variable | Observations | Mean and Standard Deviation |
|-------------|--------------|-----------------------------|
| Age | 25,515 | 32.3987 (12.24539) |
| age_2 | 25,515 | 1199.62 (869.9039) |
| Caste | 25,515 | 2.4067 (1.5084) |
| Marital | 25,515 | 0.76849 (0.4218) |
| grade_comp | 16,024 | 0.0518 (0.2216)) |
| wrk_paid | 25,515 | 0.08477 (0.2785) |
| usulhr_mwrk | 25,515 | 0.17699 (0.3816) |
| marital_HE | 16,024 | 0.03557 (0.1852) |

Source: Calculation using NLFS III data

The dataset presented provides valuable insights into the characteristics of a population under study. During the course of study, we restricted the sample size of the women whose age is greater than 14 and lesser than 60. The mean values and standard deviations of the variables provide important information about the central tendency and variability of the data. The mean value of age is 32.3987, indicating that the average age of the sample is 32.4 years old. The standard deviation of age is 12.24539, which means that the ages of the respondents vary from the mean by about 12.2 years on average. Similarly, the mean value of age_2 is 1199.62, which is the squared value of age, and the standard deviation is 869.9039. This indicates that the distribution of age_2 is more spread out compared to age, which could have implications for the statistical analysis. The mean value of caste is 2.4067, indicating that the majority of the respondents belong to the middle caste. The standard deviation of caste is 1.508418, indicating that the caste variable has moderate variability.

The mean value of marital is 0.76849, indicating that most of the respondents are married. The standard deviation of marital is 0.4218063, which suggests that the marital variable has moderate variability. The mean value of grade completion is 0.0518, indicating that only a small proportion of respondents have completed higher education. The standard deviation of grade completion is 0.2216245, indicating that the variable has relatively high variability. Furthermore, the mean value of number of women working in last seven days is 0.08477, indicating that only a small proportion of respondents receive paid work. The standard deviation is 0.27855, indicating that the wrk_paid variable has relatively high variability.

4.3 Socioeconomic and Demographic Characteristics

The section discusses about major socio-economic and demographic traits of the variables that are used in the study.

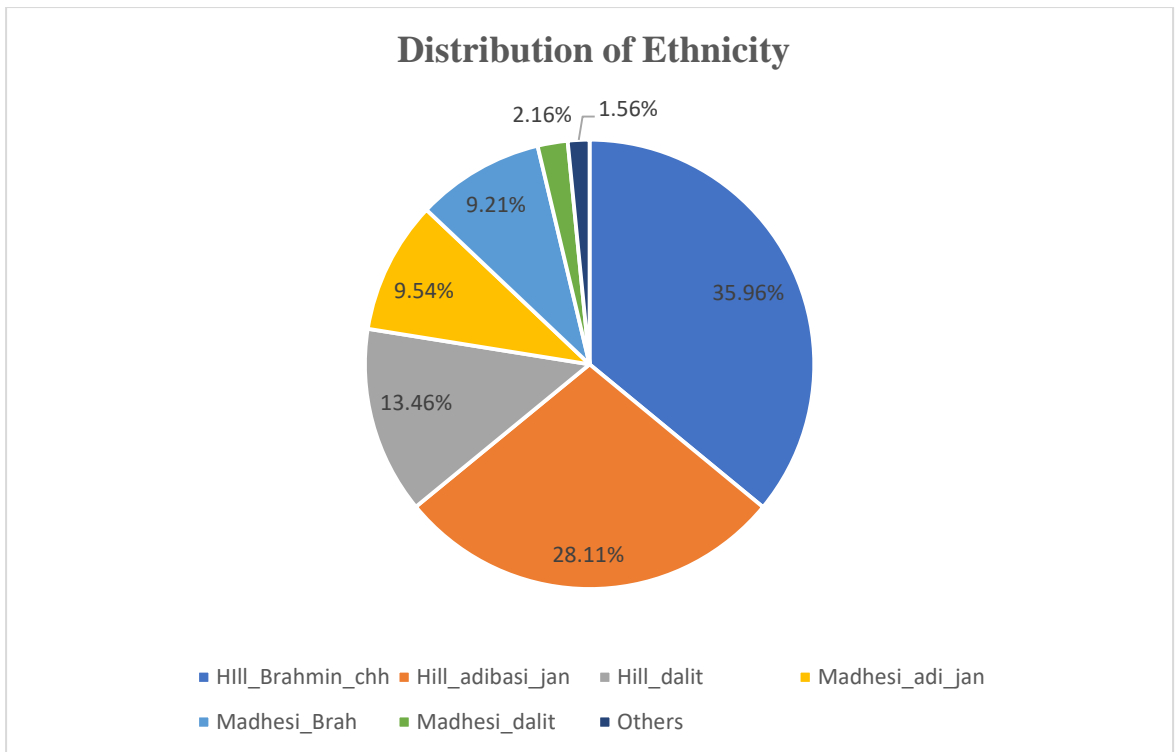


Figure 4.1 Percentage distribution of the ethnicity

Source: Calculation using NLFS III data

Figure 4.1 shows the proportionate distribution of ethnic groups based on the total number of observations. This information pertains to the castes belonging to diverse groups residing in different regions. The highest percentage of the ethnic group, which was 35.96%, was found to be Hill Brahmin/Chhetri. The second-largest group, which accounted for 28.11%, was Hill Adibasi Janajati. Furthermore, Hill dalit comprised 13.6%, while Madhesi Adibasi Janajati constituted 9.54%. Additionally, Madhesi Brahmin represented 9.21%, Madhesi Dalits accounted for 2.16%, and other groups accounted for 1.56%. In summary, Figure 4.1 presents the distribution of ethnic groups in the sample population, providing insight into the demographic composition of the study. The findings highlight the significant presence of Hill Brahmin/Chhetri and Hill Adibasi Janajati, followed by Hill dalit, and Madhesi Adibasi Janajati.

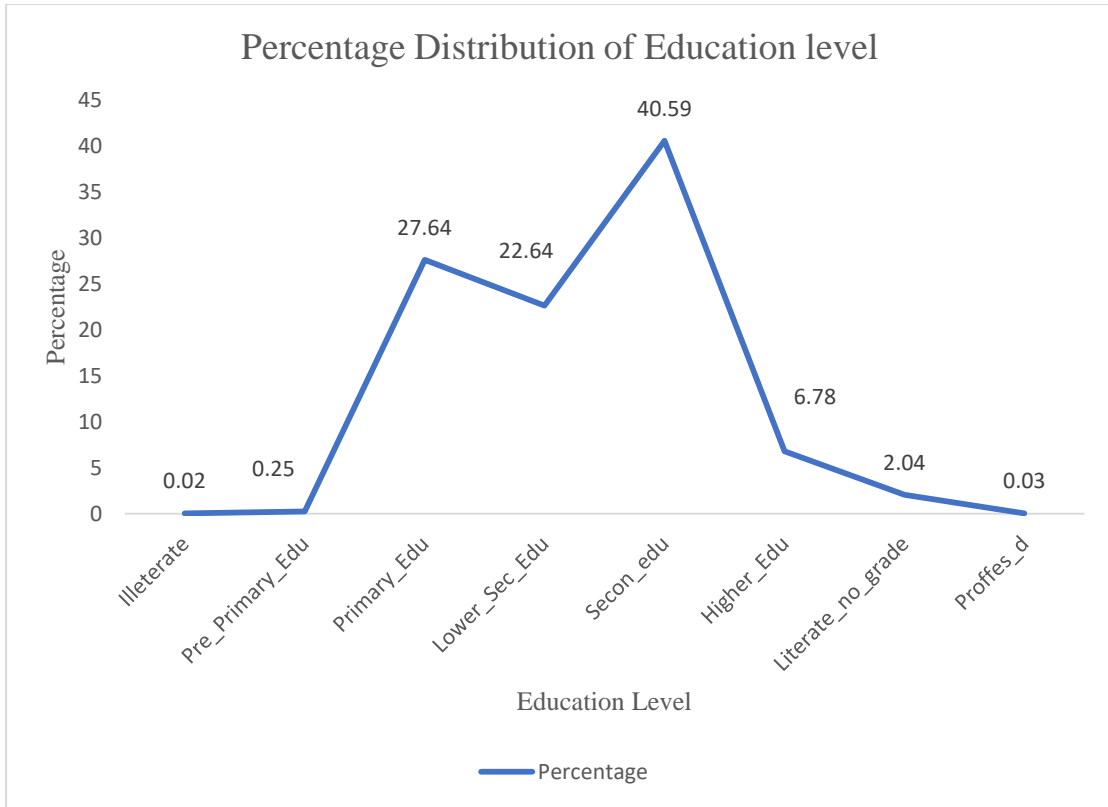


Figure 4.2 Percentage distribution of education level based on the category

Source: Calculation using NLFS III data

Figure 4.2 displays the percentage distribution of the education level of observed individuals. The results indicate that the highest attended education level was secondary education, with 40.59%. The lowest percentage of individuals belonged to the Illiterate category, accounting for only 0.02%. Additionally, the percentages for those who attended pre-primary level, primary level, and lower secondary level were 0.25%, 27.64%, and 22.64%, respectively. Moving further on the educational line graph, 6.78% of the individuals had Higher education. Furthermore, 2.04% of the individuals were literate with no grades, while only 0.03% had a professional degree. In summary, Figure 4.2 provides insight into the education level of members in the study population. The results indicate a majority of individuals attended secondary education, while the percentage of illiterate individuals was found to be extremely low. It is noteworthy that there is a relatively low proportion of individuals with professional degrees, which may have implications for the workforce of the region.

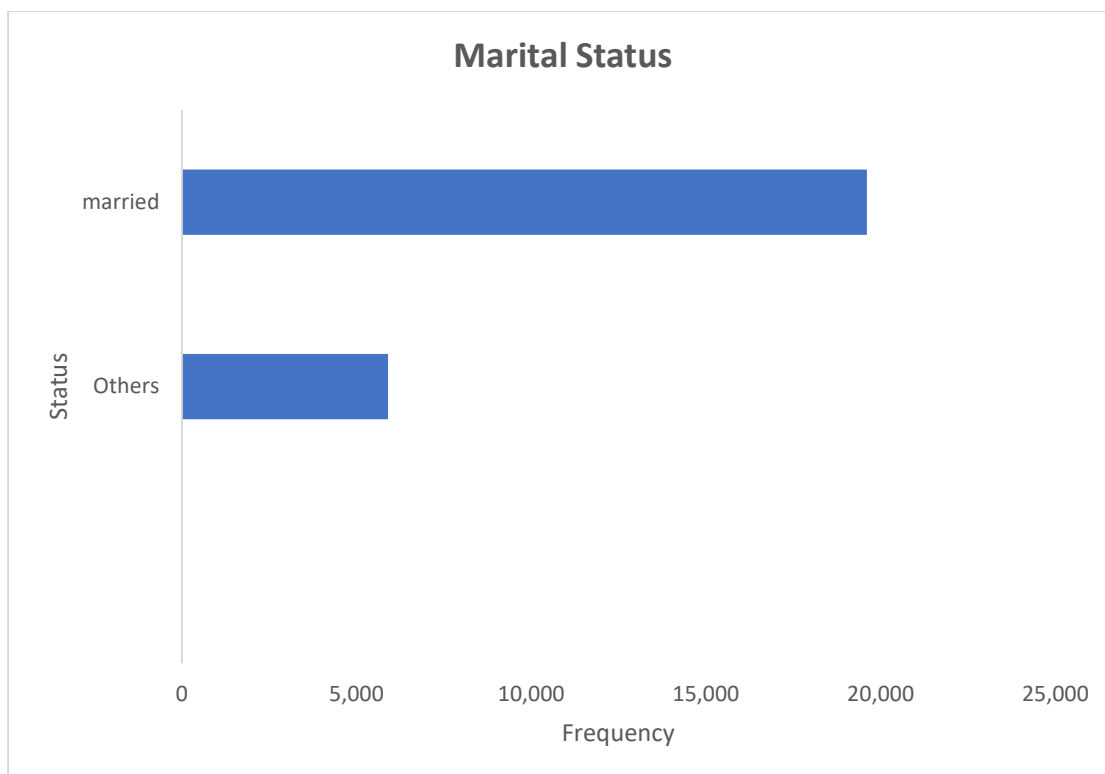


Figure 4.3 Marital status of the female individuals

Source: Calculation using NLFS III data

Figure 4.3 shows the marital status of individuals within the observations based on 25,515 samples. The number of married women was observed approximately 76 percent and other women consists of around 24 percent. The other women except married category consists of individual women who are never married, single women, separated or divorced. The all categories are coded 0 in once side, and on the other side the married is coded as 1, in order to define further specifications and models.

4.4 Results and Discussions

4.4.1 Married Women Labour Force Participation

Table 4.2 reports the specification of the probit model of wage and salaried work participation of women. For the given gender, female, the table provides estimates of participation equations from the reference of NLFS III. Co-efficient of a unit change in a variable on the probability of paid work participation (PWP) holding all other variable constant at their mean values are presented for females aged 15-59 years.

From table 4.2, it is seen that grade completion (attainment of at least higher education or not), interaction term of higher education and marital status, age, squared-age, hours spent on main job per week, Hill adibasi janajati, and Hill dalit are found to have significant positive impact on FLFP. Meanwhile, Madhesi Brahmin, and constant term have negative impact on FLFP.

Table 4.2 Binary Probit estimates of Nepalese married women Labour Force Participation aged 15-59 years

| VARIABLES | Married women LFP |
|-------------------------|------------------------|
| Higher_Edu | 0.4969*** (0.0869) |
| Marital*Higher_Edu | 0.3610*** (0.1038) |
| Tec_voc_training | 0.0129 (0.0449) |
| Age | 0.1449*** (0.0144) |
| Age_2 | -0.0020*** (0.0002) |
| Marital | -0.5411*** (0.0538) |
| Hrs_spent_main_job/Week | 1.6965*** (0.0361) |
| Hill Brahmin Chhetri | 0.0126 (0.0415) |
| Hill_Adi_Janjati | 0.1603*** (0.0615) |
| Hill_dalit | 0.2930*** (0.0612) |
| Madhesi_Brahin | -0.2492*** (0.0774) |
| Madhesi_Dalit | 0.2322 (0.1786) |
| Others | 0.0392 (0.1558) |
| Constant | -4.0434*** (0.1995) |
| Observations | 16,024 |
| R-squared | 0.035 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Calculation using NLFS III data

Table 4.2 further demonstrates that higher education level has a significant impact on labour force participation of married female. According to the results, 49.69 percentage of female are more likely to participate in the labour market if they have at least attained a higher education. However, a female's likelihood of participating in the labour market is considerably lower (36.10 percentage) if she is married, and has at least attained a higher level of education. The evidence reveals that being married, and being women is difficult to participate in formal paid job (in labour market) easily. This further emphasizes that the absence of an urgent need for women to work (the income effect) can create barriers to FLFP (Abu-Qarn, 2019). In addition, social stigmas associated with female employment can also serve as a barrier to LFP for women. Furthermore, an increased propensity to do paid work among different ethnic/caste group is different. Most probably, the increased propensity to do paid work among backward ethnic group like Hill Adibasi Janjati, and Hill Dalit are found to be positive. This effect can be a manifestation of the reservation policy of the government. However, the logic is inappropriate for the case of Madhesi upper caste since it shows negative causation with FLFP.

Age is the significant factor for deciding the labour supply. Most of the studies argue in favour of age to be responsible in case of men. However, along with studies like (Meulenaere et al., 2016; Maestas et al., 2023), this study found a significant impact of age on LFP which shows that with unit increase in age, the probability of percentage increase in FLFP is 14.49 Percent . However, this positive effect is non-linear as age increases, which is further depicted from negative coefficient of the quadratic terms. This may reflect formalisation of the labour market where younger employees from female cohort prefer to work in formal jobs in comparison to informal one.

4.4.2 Labour Market Earnings

This section of the study investigates the returns to education in the form of earnings of married women. Thus, the section is associated to evaluate the impact of higher education on married women's labour market earnings. The mean and standard deviation of the variables included in the earning function are reported in table 4.1.

The reference category in the study is the women not having work during last week (at the time of survey). The variable 'Education' for the Mincerian specification is replaced by a proxy called 'grade completion of the individual women'. Thus,

education as a variable is specified in two ways, viz, as a continuous variable where years of education have been considered in pure Mincerian earnings functions, and as a categorical variable where we have dummies for different levels of education. Two specifications of the earnings functions that are presented in this study:

- i. Pure Mincerian Specification with education, experience, and squared-experience where education is the continuous variable
- ii. An Mincerian Earning Specification with education is the categorical variable

The measures of ‘potential work experience (PWE)’ is calculated as follows:

$$PWE = [age - education - 6 \text{ (age at which primary education usually starts in developing economies like Nepal and India)}].$$

Since, data relating to actual work experience is limited, and they are not provided in detail by NLFS III, PWE has been taken as a measure of experience. The specification does not allow the study to consider the voluntary breaks which may have been taken. Thus, there can be overestimation of PWE of the samples subject to married women.

Pure Mincerian Specification with education, experience, and squared-experience where education is the continuous variable

Table 4.3 Mincerian Earnings Function with education years for female

| VARIABLES | log_weekly_wage (Earnings) |
|--------------|-------------------------------|
| Grade comp | 0.1820*** (0.0076) |
| PWE | 0.1539*** (0.0075) |
| PWE_square | -0.0026*** (0.0002) |
| Constant | -1.3428*** (0.1106) |
| Observations | 21,455 |
| R-squared | 0.0389 |

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Calculation using NLFS III data

Table 4.3 presents the results of pure Mincerian Specification of the earnings function for married women. All the variables along with constant term has significant marginal effect on the dependent variable. The Mincerian rate of returns to education is 18.2 percent.

It is evident from table 4.3 that the returns to PWE, and Squared PWE is 15.39 percent and -0.0026 percent respectively. The entire result signifies that with increase in each grade of married female can lead to higher earnings that in the longer term can lead to women empowerment, and reduce the women dependency over men.

Mincerian Earnings Function with Education Level Dummies for females

Table 4.4 Mincerian Earnings Function with Education Level Dummies for females

| VARIABLES | ln_weekly_wage (Earnings) |
|-----------------------------------|--------------------------------------|
| Preschool Education | 0.2261 (1.5450) |
| Primary Education | -0.1184 (1.4797) |
| Lower Sec. Education | -0.1625 (1.4798) |
| Sec. Education | 0.2893 (1.4795) |
| Higher Education and above | 3.2223** (1.4815) |
| Literate but no grade | -0.8810 (1.4872) |
| Professional degree | 7.0803*** (2.0026) |
| PWE | 0.1351*** (0.0074) |
| PWE_square | -0.0024*** (0.0002) |
| Constant | 0.1437 (1.4811) |
| Observations | 21,914 |
| R-squared | 0.0720 |

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Calculation using NLFS III data

Table 4.4 reveals that four of the independent variables revealed significant causation with labour market earnings for married women. The result shows that in comparison to female with no education, women with higher education and above can have 322.23 percent more earnings. Similarly, women with professional degree can have 708.03 percent of more earnings in comparison to illiterate women. If a woman has experience, she further tends to have more of 13.51 percent earnings.

4.4.3 Discussion

The study finds that among several factors affecting FLFP, the major significant factors are grade completion, age, hours spent on main job on a weekly basis, and caste (specific ethnic groups like Hill Adibasi Janjati, Hill Dalit, and Madhesi Brahmin). Further, the result reveals that the married women with higher education tend to have larger probability to participate in the labour market. Since many factors such as age, caste, ethnic groups are unchangeable, grade completion of the married women should be prioritized in a developing country like Nepal. If women are provided with higher education, in one hand it increases the labour force participation, on the other hand the earnings in the long run reduces gender wage gap. The majority of nations, including Nepal, have legislation mandating equal pay for equal work; however, such measures have not been effective in eradicating gender-based inequities (Elveren, 2014). Furthermore, factors such as gender, caste, and geographical location continue to exert a significant influence on individuals' success, and labour force participation in countries like Nepal (Isserman & Rephann, 1993; Timilsina et al., 2019). Additionally, studies such as (Babalola & Akor, 2013; Münch & van Wijnbergen, 2009) suggest that married women with higher education tend to exhibit higher rates of labour force participation than their non-highly-educated counterparts. Scholarly articles such as (Babalola & Akor, 2013; Münch & van Wijnbergen, 2009) claims that socio-cultural, and socio-economic factors are equally crucial in determining female labour force participation. Since the FLFP is improving in slower pace in Nepal, there is utmost need of effective plans, policies, and programs that can accelerate its rate.

Earnings of the individuals can be affected by several factors such as age, health, level of education, policies, market demand and supply of labour, wage rate, and experience. Since the study aimed to find the impact of education and experience

in the earnings of the married women, it finds both the variables to be significant. In the similar course, the study by (Kanjilal-Bhaduri & Pastore, 2018) also depicted that increase in education level, in the long run can lead to higher earnings. Therefore, the subject of higher earnings in social science is related with higher empowerment, helping to reduce dependency of women over men, with whom she is married. In case of developing country like Nepal, the result put forward the fact that incentivizing women to work also enhance the female's utility. (Rahman & Rao, 2004) reveals that there is consistent improvement in mobility and authority of women with increase in their earnings. Similarly, the increment in extent of earnings promote social inclusion. Since women are the indispensable part of the household in carrying out household activities, in developing countries like Nepal, the increase in female earnings bring augmentation in household welfare through increased household consumption on education and health. Additionally, incremental earnings tend to uphold the level of production, innovation, empowerment, inclusion, and overall economic development.

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary of the Study

Education is a key factor for overall development of a mankind. Education further enhances entrepreneurial intentions and act as one of the most important factors responsible for modern civilization (Şeşen & Pruett, 2014). The dynamic nature of labour market requires labour with more skills, information and capabilities so that the labour force participation can contribute net positive impact on labour productivity and economic growth. The skills of the labour along with the educational requirements they gain might increase employment probability, and those employment effects can be explained by both increased labour force participation, and earnings, both for male and female. The productivity of female, and their participation varies in different sectors of the economy. Female labour force participation (LFP) is mainly driven by the value of the market wages versus the value of their non-market time, and the degree of their LFP further depends upon non-economic factors such as public policies, culture, and norms. In case of married women's, higher child dependency ratio and household heads with higher education significantly constrain women's choice for LFP (Bag, 2020). Women's labour force participation and earnings are influenced by various socio-cultural, economic, and policy-related factors. Despite the importance of women's participation in the labour market, they continue to face challenges related to limited education, lack of skills, unequal wages, and limited opportunities for career advancement. Thus, to achieve promising growth in the FLFP in the long run in Nepal, there need to be significant improvement in social, cultural, and economic factors. Among different factors such as age, health status, family size, number of young children of different age groups, and higher education of parents, studies (Blundell et al., 1999; Hafeez & Ahmad, 2002; Moretti, 2004) suggest that factors like education, and earnings are further significant in determining the rate. Thus, this study attempts to examine the impact of higher education on labour force participation, and labour force outcome. The major objectives of the study are to examine the impact of higher education on labour force participation of married women, and earnings in Nepal.

This research employs a cross-sectional, and explanatory research design to investigate the relationship between higher education with FLFP, and earnings. The study controls for the other socio-economic and demographic characteristics, and uses a nationally representative household survey NLFS III, taken by CBS. This study utilizes secondary data obtained from Nepal Labour Force Survey - Round 3, which was conducted by the Central Bureau of Statistics in 2017/18. The research employs statistical methods, such as calculation of mean and standard deviation, to conduct a descriptive analysis. The examination of cause and effect relation between higher education and FLFP is made after carrying out an econometric tool known as probit regression model. Similarly, econometric wage equation known as Mincerian wage equation is employed which employs simple linear regression to estimate the relationship between earnings and higher education of married women. The findings of this study demonstrate that higher education level has a significant impact on labour force participation of married female. According to the results, 49.69 percentage of female are more likely to participate in the labour market if they have attended a minimum of higher education level. However, a female's likelihood of participating in the labour market is considerably lower (36.10 percentage) if she is married, and has at least attained a higher level of education. Further, the findings of the study suggest that the Mincerian rate of returns to education is 18.2 percent. The result shows that in comparison to female with no education, women with higher education and above can have 322.23 percent more earnings.

5.2 Conclusion and Recommendations

In conclusion, this study highlights the significant role of higher education in the labor force participation (LFP) and earnings of married women in Nepal. The findings demonstrate that higher education level has a positive and substantial impact on the likelihood of married females participating in the labor market. Specifically, women who have attended a minimum of higher education are 49.69 percentage points more likely to engage in the labor force compared to those with lower levels of education. However, the study reveals that marriage, coupled with higher education, leads to a lower probability (36.10 percentage points) of female labor force participation. Furthermore, the research emphasizes the economic benefits associated with higher education for married women. The Mincerian wage equation analysis

indicates that the rate of returns to education is estimated at 18.2 percent. This suggests that women with higher education and above can experience a substantial increase in earnings, with a remarkable 322.23 percent higher earnings compared to females with no education.

Based on the findings of this study, there are several recommendations that can be made for future research and policy-making. In case of developing countries like Nepal, being married have a negative impact on the propensity to do paid work in the labour market (Triebe, 2013) . For instance, for men, it may be that marriage and its consequent responsibilities lowers the reservation wages and couples them to take available jobs (which may include self-employment. For women, marriage brings domestic and home production responsibilities, thus lowering the probability of taking up paid job (Zuo & Bian, 2001). Policy-makers should focus on increasing access to higher education for women in Nepal, particularly those who are married or have children. Policies and programs should be designed to promote gender equality and reduce discrimination against women in the workplace. Further research is needed to understand the specific factors that influence women's labour force participation and earnings in Nepal, particularly in different sectors of the economy. This can help to identify targeted interventions and policies that can support women's economic empowerment. In summary, the major recommendations based on the findings of the study can be pointed as follows:

- i. Increasing access to higher education for married women in Nepal.
- ii. Prioritizing investment in education.

Lastly, the study highlights the importance of education for increasing labour force participation and earnings for women in Nepal. Policy-makers should prioritize investment in education, particularly for women, as a key driver of economic growth and development.

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