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Determinants of Educated Women's Low Labour Force Participation in Sri Lanka

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Abstract

As suggested by the literature education widens the path for the labour force participation and employment for both men and women. During the last four decades the level of female education in Sri Lanka has increased rapidly, narrowing the gender gap in education. Despite this rapid increase in the female education level labour force participation of females has not increased significantly. It seems that progress in education has not resulted in higher female labour force participation. Within this puzzling background, this study seeks to identify the major determinants of low labour force participation of educated women in Sri Lanka. In order to figure out the determinants of educated women's low labour force participation a Logit Model was employed. This analysis was based on data taken from the labour force survey 2012, which has been carried out by the Department of Census and Statistics in order to estimate the levels and trends of employment, unemployment and labour force in Sri Lanka. Empirical results suggest that age, education level and English literacy have strongly affected the low labour force participation of educated women. Additionally, belonging to the employer headed house hold or being the spouse of the head of the house hold also determines the low labour force participation of educated women. Residing in rural areas can also be a cause for this. The results imply the labour force participation of educated women could be improved by encouraging them to attain higher education level with formal training and English literacy, and by enhancing the economic opportunities in rural areas.

Keywords: Labour Force Participation, Educated Women, Labour Force

Introduction

As suggested by the literature, education widens the path for the labour force participation and employment for males and females, as well as increasing the amount of human capital in the country. Hence, increasing education level opens the door for females to enter the labour force. During last four decades, level of education of females in Sri Lanka has increased rapidly. Female's literacy rate which was 71% in 1971 has increased to 95% by 2013 (Central Bake Report 2013). This remarkable increase has taken Sri Lanka to the second place in the South Asian region in terms of female literacy rate, which is second only to Maldives. Rate of female school enrolment at primary level has increased to a level similar to the male enrolment rate, representing gender equality in education. At the secondary level, majority of female students enrol for studies similar to male students. In the boundary

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examination they show even higher performance than male students. At the tertiary level, majority of the university students enrolling for undergraduate programmes in universities are females. However, the labour force participation of females has not increased significantly along with this rapid increase in the female education level.

During the last four decades, it has fluctuated slowly and has stagnated around 30 to 35 percent. It seems that narrowing the gender gap in education has not resulted in higher female labour force participation. This trend has generated a higher percentage of economically inactive female population, despite rapid enhancement in the female education all over the country. From an economic point of view, this unutilized human capital may have a negative impact on economic growth and economic efficiency. This paper is an attempt to answer the question of why educated females have low level of labour force in Sri Lanka.

Problem and Objectives of the Study

Problem of the Study

It seems that narrowing the gender gap in education has not resulted in higher female labour force participation. Hence, there is a specific problem about why the enhancement in the female education level has not resulted in higher female labour force participation in Sri Lanka. So this study aims to explore why female labour force participation is low in Sri Lanka despite having higher educational achievements.

Objective of the Study

The general objective of this study is to distinguish the determinants of educated women's low rate of labour force participation. Especially this study will examine the following specific objectives.

Specific Objectives

1. Distinguish the main determinants that influence the low rate of labour force participation of educated women.
2. Identify the areas or sectors where there should be policy amendments.

Literature Review

Determinants of Male and Female Labour Force Participation

The measure of education can be important to an analysis of the determinants of labour force participation, because it is the main factor that creates human capital in the country. Many studies have considered education to be a factor that strongly and positively influences male and female labour force participation. The studies are Naude and Serumage (2010), Faridi, Chaudhey and Basit (2009), Magidu (2010), Stephans (2008) and Faduyomi and Olurunt (2010). Specially, Magidu (2010) shows that education has positive impact on female labour market participation and also indicates a positive effect which is large at higher education levels. However Contreras, Mello and Puestes (2010) studying the determinants of labour force participation in Chile, found that labour supply depends on education for male and female both, although it is less so for most educated men than it is for women.

Many studies have considered “Marital Status” as a determinant of labour force participation separately for male and female. Naude and Serumage (2010), Faridi, Chaudhey and Basit (2009) and Stehpens (2008) studying the determinants of labour force participation have considered marital status for male to be a factor that positively influence. However Naude and Serumage (2010), and Magidu (2010) studying the determinants of labour force participation found this relationship to be negative for females. Contreras, Mello and Puestes (2010) studying the determinants of labour force participation in Chile, find that the marginal effect of marriage is more positive, or less negative, for males than for females. These effects can be better understood by noting that participation increases with marriage among indigenous males in Chile, but declines significantly among married indigenous females, who are also less likely to be unemployed than their unmarried counterparts. Stephens (2008) shows that in his study on Australians labour force participation, marriage or being a widow decrease and average female’s probability of participation of wage employment or labour income activities. The reason for this may be dependence on a husband, responsibilities towards children or other home responsibilities. Insurance pay outs in the case of husband’s death may also be a reason. Specially being a widow in urban area decreases the probability of participation of labour force considerably, than rural area widow in Australian situation.

Age is included as a determinant in many models of labour force participation in order to capture the role of life – cycle effects on labour force participation. Faridi, Chaudhey and Basit (2009), Contreras, Mello and Puestes (2010), Stephens (2008) and Faduyomi and Olurunt (2010) have determined a significant positive relationship between the age and LFP in countries. Naude and Serumage (2010) finds age to have strong significant positive impact on labour force participation for male in age 24 - 34 and female in age 34 – 65. Magidu (2010) studying the determinants of labour force participation establish a significant positive relationship between the age and labour force participation. Age has an overwhelming impact on the labour force participation for older workers, because the effect of age indicates that older workers are more experienced.

Many studies have considered regional residence as a socially related variable in the model of determinants of labour force participation. Many of these study the regional resident categorized as urban, semi urban and rural area. Stephens, (2008) and Faridi, Chaudhey and Basit (2009) studying the determinants of labour force participation, find that the probability of labour force participation is higher for residents of urban and semi urban areas compared to the rural area. Further, residing in an urban or semi urban area puts an individual in a better position to participate in the labour force. Naude and Serumage (2010) also indicate that “region” is a significant determinant of labour force participation for African males and females both. On average, for individuals residing in urban areas, the chance of labour force participation is greater than those in the rural areas, because the rural areas of Africa are characterized by low level of education and less economic activities.

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Several studies have investigated the implication of gender with labour force participation decision of individuals, especially gender taken as an individual's characteristic. Chaudhey and Basit (2009), Magidu (2010), Stephans (2008), Faduyomi and Olurunt (2010) and Magidu (2010) studying the determinants of labour force participation, has found that gender is a significant determinant of labour force participation. However the relationship between males and labour force participation is positive, while between females the relationship becomes negative. Naude and Serumage (2010) also find similar results. They mention that the reason may be influence of labour force related factors and cultural factors.

Magidu (2010), Faridi, Chaudhey and Basit (2009) and Contreras, Mello and Puestes (2010) studying the determinants of labour force participation has established a significant negative relationship between the non-labour income and labour force participation using household asset income as a proxy. Naude and Serumage (2010) study the determinants of labour force participation in Southern Africa. They found that non labour income and relationship of the head of household labour force participations lower for Africans in general. A higher general level of economic activities in the household may allow some members (including heads) move time for non-market activities.

Naude and Serumage (2010) shows that renting a dwelling for the household to live in can effects as a positively for males and females both. Faridi, Chaudhey and Basit (2009) have determined a significant positive relationship between the household size and labour force participation of individuals. Wives' labour force participation can act as a negative incentive for male labour force participation. This relationship was found by Faridi, Chaudhey and Basit, (2009) who studied the Pakistan labour force. They show that dependency burden can be a positive influence for labour force participation for both males and females.

According to the Contreras, Mello and Puestes (2010) findings, female participation is strongly discouraged by the presence of young children in the household. However in the case of males it has a positive influence. Contreras, Mello and Puestes (2010) discuss the significant impact of household income on labour force participation. Especially in Chile the effect of household income on female labour force participation changed over time. It was positively correlated with participation in 1990 to 1996, but estimated coefficient has turned negative in 2003. However participation falls with the household income for males.

Determinants of Female Labour Force Participation

As a key determinant of human capital it is unsurprising that virtually all studies have found increased female education level to be associated with strong statistically positive effect on labour force participation for females. (Bhalla & Kaur 2008; Ntuli 2007; Attanasio, Low & Marco 2005; Mghadam 1990). Bhalla and Kaur (2008) studying the determinants of female labour force participation in India, shows that education of the spouse (male) is operating in the opposite direction for the female labour force participation. In India this has a larger effect than the positive effects of female education. Finally the net effects are determined by the amount of these negative and positive effects. This opposition direction effect of male

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education is because of the gap in earnings of men and women. Women tend not to work if they are married to higher educated males who earn a substantial income. If the earning gap was not too high, the status of the women labour force participation would be low. This situation points out the male female education and skill gap in India.

A variable for “difficulty in English” is often considered and is typically found to have a negative effect on the female labour force participation. Education and English difficulty generally have a strong effect on the female labour force participation relative to males, according to Patel (2012) who also examines the inter-regional variables’ effect of educational attainment on the probability of females labour force participation. In general, it is found that education has a strong effect in remote areas than in metropolitan areas. It is suggested that this difference is driven by the stronger effect of signalling in remote areas, where education levels are generally lower, meaning that those who have more qualification send a strong positive signal to potential employers regarding their ability and motivation.

Marital status is included as a determinant in many models of females labour force participation. This factor is considered an individual characteristic. Differing conclusion have been reached regarding the labour force participation implication of marriage among females. Bhalla and Kaur (2008) found that marriage is negatively effects for female labour force participation. However, Ntuli (2007) in his paper shows that in the case of marital status, the outcomes display that apart from being married or a divorcee other states were not always negatively influence. Most African households live in poverty. So being divorced increases the prospects of participating in the labour market. Logically, the chance of participation is higher for such group of women as they lack prospects for economic dependence on a spouse.

Very important issue concerning female labour force participation in India stems from the fact that women earn substantially lower wages than men. This “discrimination in wage” against females can lead to the lower female lower labour force participation rate. As showed by the study, two possible reasons for this disparity in wage are discrimination per sex, and occupational choice by women into lower paying jobs, for an example, clerical versus production. In India, gender discrimination occurs even before a woman enters into the labour force. It happens at birth when sex selection technology is employed to ensure fewer female births.

This discrimination then continues into the education space – girls obtain fewer years of schooling than boys, and/or lower quality education. And since education is an important determinant of wages, women obtain less income than men, a third factor. So unlike a comparator country, the sex wage gap in India is caused at least in part by less education of women. Finally, there is a fourth factor at work – women typically have less work experience than men and therefore obtain lower wages (Bhalla & Kaur 2008).

The labour market implication of “household income” among female has also been considered in a number of studies. Attanasio, Low and Marcos (2008) this study established a

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significant negative relationship between household income and female labour force participation. However, Bhalla and Kaur (2008) concluded that income growth (proxied by growth in real per capita consumption) has a persistently positive effect on female participation. There is little evidence of a U shaped relationship between labour force participation rate and income in urban India. Indeed, the finding is of an inverted U, and the inflexion point is observed at very high levels of income. “Non Labour Income”, Ntuli (2007) studying the determinants of female labour force participation in South African and Bhalla and Kaur (2008) studying the determinants of female labour force participation in India have both concluded a significant negative relationship between the non-labour income and female labour force participation.

Attanasio, Low and Marcos (2005) studied changes in female labour force participation in a life – cycle model by using data those who borne in the 1930, 1940 and 1950 in America. The dynamic of female labour supply depends on child costs (relating to earning), returns to experience and the rate of depreciation of human capital when out of the labour market. Reducing child care cost increases median duration of non-participation for those who exit after childbirth. If households face borrowing constraints, median duration does not increase as child costs fall. Indeed, the effects of increased returned to experience goes in the opposite direction, leading to a reduction in participation when children are very young. Finally they conclude that shift in the cost of children relating to life time earnings are the most likely explanation.

Attanasio, Low and Marcos, (2008) studies the determinants of female labour force participation by including Number of Working people in a family as a family related factor. They concluded that Number of Working people have positively influence to female labour force participation. This measures the earning capacity of the household as well as outward orientation of the family. As the number of working people increases in a household, members encourage their women to participate in economic activity as well. The greater the number of working people in the family, the higher would be the probability of women participating in the workforce. The demonstration effect may also be one of the reasons for a positive relationship between working people in the family and female labour force participation of females.

Patel (2012) included a provision of any kind of vehicle such as motorcycle, cycle or car as a determinant factor of female labour force participation. Finally he points out that provision of any kind of vehicle increases the probability of women entering the labour force. The more you facilitate the women with a conveyance, the more she would feel secure while travelling from home to workplace. Hence, ownership of a vehicle by the household has a significant effect on women’s decision to participate in the labour force.

The availability of home appliances such as a refrigerator, air conditioner, television, VCD/VCR/CD and computer also affect the decision of labour force participation of female as pointed out by Patel (2012). He concludes that availability of home appliance has a

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negative impact on women to work. The impact of this variable can be explained by the financial status as well as the value placed on leisure. The availability of such goods implies higher earnings of the household, which may lead to a greater preference for leisure.

Costs of child bearing suggest as a family characteristic in female labour force participation models. Attanasio, Low and Marcos (2008) and Ntuli (2007) discover that the cost of child bearing has an overwhelming positive impact on the female labour force participation. Bhalla and Kaur (2008) examine the impact of poverty on female labour force participation and conclude that there is a positive significant relationship between female labour force participation and poverty, due to the financial pressure of household.

Attanasio, Low and Marcos (2008) show that return to experience can act as a negative but not strong incentive for female labour force participation. Living in urban or semi urban area compare to living in rural area has been shown to have a significant positive effect on female labour force participation (Ntuli 2007).

Determinants of Educated Women Labour Force Participation

There are number of empirical evidences on the determinants of male and female LFP and the determinants of female LFP in the globe level, but it is more difficult to find the empirical evidence on the determinants of educated women labour force participation.

Hafeez and Ahmed (2002) analyze factors determining the LFP decision of educated married women in a Punjab district. The study is based on the field survey conducted in the district of Punjab. They have employed a “Logit and Probit model” in order to empirically indent the determinants of the LFP decision of educated married women. The results indicate that LFP is inversely associated with monthly household income, number of workers in the household and financial assets. However education level, age, household structure (nuclear family or extended family), household size and father’s education level affect the educated women LFP positively. Further, they imprecise age, education level and household size as the major factors that affects the educated women labour force participation.

Method

Data Source

The study is based on cross – section data from annual Labour force survey which has been carried out by department of census and statistics in order to estimate the level and trends of employment, unemployment and labour force in Sri Lanka. This analysis is based on 2012 labour force survey. The survey has covered 19,420 housing units with 62,298 individuals.

Sample Selection

The aim of the study is identify the determinants of educated women law LFP in Sri Lanka. For this purpose, females who have passed G.C.E O/L and above such as G.C.E A/L, degree and post graduate were defined as educated women. According to this definition there are 8,568 observations pertaining to educated women.

Table 01: Content of Sample

Content	Size
Educated women LFP	2,829
Educated women non LFP	5,739
Total sample size	8,568

Data Analysis Methodology

The main objective of this study is to demonstrate the determinants of educated women’s non labour force participation decision by studying the determinants of educated women labour force participation decision. The observed response variable is a qualitative variable. Because of the qualitative nature of the response variable, ordinary least square or standard economic estimators are not appropriate. Because of this reason, a qualitative response regression model, which is the Logit Model was applied.

Estimate Model

$$\begin{aligned}
 \text{Pr (if } Y=1/X) = & \beta_0 + \beta_1 \text{ Age} + \beta_{3i} \sum_{j=1}^3 MS_j + \beta_{4i} \sum_{j=1}^4 EDU_j \\
 & + \beta_{4i} \sum_{j=1}^2 EL_j + \beta_{5i} \sum_{j=1}^4 RACE_j + \beta_6 \text{INC} \\
 & + \beta_{7i} \sum_{j=3}^3 RHH_j + \beta_{8i} \sum_{j=1}^3 OSHH_j \\
 & + \beta_{9i} \sum_{j=1}^2 HH_j + \beta_{10i} \sum_{j=1}^3 RS_j
 \end{aligned}$$

i stand for individuals and j stand for number of dummies. Y is dichotomous dependent variable and X stand for a vector of explanatory variables. The description of explanatory variables is provided by Table 01 (Appendix 01).

Finding and Discussion

The empirical model highlights the major determinants of the labour force participation of educated women in Sri Lanka. Estimated parameters of the Logit Model on labour force survey 2012 are reported in Table 02 (Appendix 02).

It appears that the individual characteristics, household related characteristics and residential sector are most important factors affecting the labour force participation decision of educated females. Individual female characteristics such as age, marital status, education level, English literacy, and house hold characteristics such as income, relationship to household head, and occupation status of household head are the significant determinants of the educated women labour force participation. Residing in the rural sector also significantly influences the decision of female labour force participation.

Age is included as a determinant in many models of labour force participation in order to capture the role of life-cycle effects on labour force participation. The sample consists of the females of the age 16 and above, because of the females who are passed G.C.E (O/L) and above have considered in here. The coefficient of the age for the Logit Model reflects that

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women's age has a sizeable impact on their labour force participation decision. When age increases they are more likely to participate to the labour market.

The likelihood of participation of women in the labour market is expected to increase by about 14 percent with female age. As proved by result, this would be due to the fact that younger females would not enter the labour force because of lack of experience and training. Magidu (2010) also establishes that age has an overwhelming impact on the labour force participation for older workers because the effect of age indicates that older workers are more experienced.

Education level is also a very important individual characteristic in determining the probability that a female would enter the labour force. Unexpectedly, empirical model shows a significant negative relationship between the education level and female labour force participation. Further, the results show that higher education attainment leads to the less negative effect to the decision of educated women labour force participation. According to the Logit estimates, the probability of non-labour force participation for a woman with G.C.E (A/L) qualification is less than that for a woman with G.C.E (O/L) qualification. Similarly the likelihood of the non-participation of a woman with a bachelor degree is less than those with the G.C.E (A/L) qualification. This result denotes that attaining higher education level influences women to participate in the labour market. There is clear evidence that those moved to attain higher levels of education tend to be engaged in economic activities due to the higher opportunity cost of producing non market output.

English literacy is an equally important factor in determining female labour force participation decision. To estimate this, a dummy variable is used. According to the estimated results, literacy in English is likely to increase female labour force participation by 27 percent, compared to those who are not well literate in English. According to this, the ability to work with English opens the door for educated women to enter the labour force. As Patel (2012) points out, English literacy has a higher positive effect on female labour force participation decision than males. Generally, education and English literacy both have a strong effect on the female labour force participation decision.

Considering the marital status, being never married or married strongly decrease the probability of being employed. The results indicate that if a woman is never married, the negative effect on labour force participation decision is higher than currently married women. The reason for this is having less family responsibilities due to the parental protection. Being married also negatively affects female labour force participation decision. The effect is negative for such groups of women perhaps due to the fact that married women are less likely to be involved in income generating activities due to their preference for household activities. On the other hand dependence on spouse also might be reason for this negative effect. But results denote that women who are currently married tend to be engaged in economic activities compared to women who never married. The reason may be pressure of economic resource due to the cost of child bearing in the household.

When we look at the household characteristics, household monthly income is one important factor influencing the labour force participation decision of women as mentioned in literature. Surprisingly, the estimated results suggest that an increase in household income is likely to decrease female labour force participation, but this relationship is statistically significant. Although the women labour force participation decision is positively influenced by monthly income of family, the magnitude of this effect is small. If the household monthly income increases by about 10,000 the likelihood of labour force participation of women increases by about 6%. As discussed in the literature review section, Bhalla and Kaur (2008) also conclude that income growth has a positive effect on female labour force participation.

Relationship to head of household is another important factor which influences the decision of labour force participation of women. Being wife or daughter is likely to reduce female labour force participation. According to the estimated results, the probability of non-labour force participation for a woman who is related to the household head as a wife is higher than that for a woman who is related to the household head as a daughter. According to the life-cycle labour supply theory, the participation pattern (with age as a determinant factor) is not stable for women. When considering women's age, from 20 to 40, women's participation reduced by half by late 20's and early 30's perhaps due to educated married women's fertility decisions and their preference for household activities due to child care.

Occupation status of the head of the household is another characteristic which has been estimated as a determining factor of female labour force participation in this model. Belonging to an employee's headed household and an employer headed household have been treated differently for female labour force participation. Belonging to an employee headed household is likely to increase the likelihood of female labour force participation while belonging to an employer headed household is likely to reduce this. Estimated results show that belonging to an employee headed household is likely to increase the female participation by 32 percent and this is significant at 1 percent level. The reason would be the financial pressure of the household. Belonging to an employer headed household is likely to reduce the women labour force participation by 99 percent. Generally, employer headed households are high income earning families. Coming from such a family background can mean that they allocate more time for leisure as explained by Neo-classical labour supply theory.

Residential sector is included in the model as a social determinant of labour force participation. Unsurprisingly, results suggest that being in the rural sector has a negative impact on labour force participation of females. According to the estimates, residing in a rural area is likely to decrease female labour force participation by 9 percent compared to those who are in the estate sector. This negative effect might be due to the lack of availability of economic opportunities in the rural sector in Sri Lanka. Even though now Sri Lanka is experiencing the higher development process, this situation highlights the fact that distribution of the development process is not equal all over the country.

Conclusion

The study explores the factors that affect the labour force participation of educated women, in order to derive the determinants of educated women's low level of participation in the labour force. This paper analyses this scenario based on data from the 2012 Labour Force Survey employing a Logit Model. It appears that individual characteristics, household characteristics and residential area are important factors affecting the labour force participation decision of educated females. Individual female characteristics such as age, marital status, education level, English literacy, household characteristics such as income, relationship to household head, and occupation status of household head and resident in the rural area are the significant determinants of the educated women labour force participation.

Estimated results suggest that there are strong and systematic factors that affect the labour force participation decision of educated women. The main finding of the study is that the individual related factors have the biggest influence on the decision of educated women labour force participation. Attaining higher levels of education and English literacy appear to strongly influence female labour force participation. This proves the current trend of the labour market where attaining a higher level of education together with English proficiency has the ability to open the doors of the labour market for women.

Among individual characteristics, age also positively influences educated women to take a decision on the labour market. It highlights that having experience is also necessary to access the labour market. As proved by the results, being currently married also has a major positive impact of labour force participation due financial pressures of the family or because of child bearing cost. We can conclude that there is a greater probability of labour force participation for an educated woman with a high level of education, literacy in English and more experience.

The highlight of this information is that educated women who have not aspired for higher education, or not English illiterate or lack experience may not participate in the labour force. When we look at the household characteristics, monthly income is one important factor influencing the labour force participation of women. Surprisingly the results suggest that increasing the household income is likely to increase the labour force participation. Bhalla and Kuar (2008) conclude that there is a positive relationship between income growth and labour force participation highlighting the inverted "U" shape concept of income growth and labour force participation. According to that, income growth positively influences the participation decision of educated women. This provides evidence for the inverted "U" shape relationship between household income and labour force participation of educated women in Sri Lankan context as well.

Being a wife or a daughter of the household head negatively influences labour force participation. As explained by the life-cycle labour supply theory women who are aged between late 20's and early 30's reduce participation by half due their preference for household activities and because of child care. Educated women labour force participation

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decisions are thus strongly affected by their fertility decisions. The dependence on a spouse for economic needs may also be a reason for this.

Women's labour force participation decisions are by the occupation status of household head. Women who belong to employee headed households are more likely to participate to the labour force. The reason could be the pressure on the economic resources of the family. Women who belong to the employer headed household are likely to reduce labour force participation proving the Neo-classical labour supply theory. Generally, employer headed households are high income families in the economy. According to the theory, a woman belonging to a high income family tends to allocate more time for leisure than working. It will reduce educated women's labour force participation.

Additionally, educated women related to household head as a wife, belonging to a highly economically capable family can result in low labour force participation of educated women. Residential area is also an important social factor that influences the labour force participation decision of educated women. Unsurprisingly, results suggest that being in the rural sector has a negative impact on labour force participation of females. This negative effect might be due to lack of economic opportunities in the rural sector in Sri Lanka. Even though now Sri Lanka is enjoying higher development, this situation highlights the fact that distribution of the development process is not equal over the country. Concluding this, it shows that being in a rural area is the reason for low labour force participation of educated women.

It can be concluded that not attaining higher education, lack of English literacy, lack of experience, being currently married, belonging to a high income family and residing in rural areas can determine educated women's low rate of participation in the labour force.

Policy Amendments

Not attaining higher education, English illiteracy and lack of experience are important influences on educated women's low rate of participation in the labour force. To address this issue, there is a need for suitable policies which can absorb these educated females to the labour market. In that light the government has a responsibility to encourage educated females to achieve higher education together with formal training to get the more experience as well. In this regard certain internal training program should be generated through their policies, from that they can contribute to the development process of the country in very positive manner.

Today, English literacy has become a necessary qualification to enter the labour market for educated females, due to the fact that within the open economy system and globalization, labour market has been converted to a place where local as well as foreign needs are being fulfilled. Government should concentrate on enhancing English literacy among educated women in absorbing more educated women to the labour market.

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This study highlights that being located in rural area has a negative influence on entry of educated women to the labour force due the lack of economic opportunities available within the area. This suggests that generation of more employment opportunities in rural areas for educated women should be focused by government policies. Women from rural areas tend aspire for higher education along with the high rates of education among women all over the country. The labour market should be able to generate more job opportunities for females residing in rural areas. The government has the responsibility to generate more employment opportunities focusing these areas.

References

- i. Attanasion, O, Low, H & Marcos, VS 2005, *Explaining Changes in Female Labour Supply in a Life - Cycle Model*, London, University College London.
- ii. Attanasion, O, Low, H & Marcos, VS 2008, *Explaining Changes in Female Labour Supply in a Life - Cycle Model*, London, University College London.
- iii. Bhalla, SS & Kaur, R 2008, *Labour Force Participation of Women in India: Some Factors and some Queries*, London, Asian Research Centre.
- iv. Census and Statistic Department 2014, *Annual Labour Force Survey Report 2014*, Colombo, Census and Statistic Department.
- v. Central Bank of Sri Lanka 2014, *Annual Report 2013*, Colombo, Central Bank of Sri Lanka .
- vi. Contreras, D, Mello, L & Puestes, E 2010, *The Determinants of Labour Force Participation and Employment in Chile*, The Department of Economics, Universidad de Chile.
- vii. Faduyomi, TO 2010, *Determinants of Labour Force Participation in Nigeria: The Influence of Household Structure*, Nigeria, Department of Economics and Development Studies, Covenant University.
- viii. Faridi, MZ, Chaudhry, IS & Basiot, AB 2009, 'An Analysis of Determinants of male Labour Force Participation and employment Status in Pakistan: The Case of Bahawalpur District', *Pakistan Journal of Social Science*, Vol. 29, No. 2, Available at: http://www.bzu.edu.pk/PJSS/vol29no2_2009/FinalPJSS3.pdf (Accessed: 2.10.2014).
- ix. Female labour force participation, Available at: <C:\Users\E-Line\Dropbox\research 2\Female labour force participation DailyFT - Be Empowered.htm> (Accessed: 3rd November 2014).
- x. Gender gap on Female Labor Force Participation a vital challenge—World Bank, Available at: <C:\Users\E-Line\Dropbox\research 2\The Island.htm> (Accessed: 2nd November 2014).
- xi. Getting Started in Logit and Ordered Logit Regression, Available at: <http://dss.princeton.edu/training/> (Accessed: 13th December 2014).
- xii. Getting Started in Data Analysis using Stata 10, Available at: <http://dss.princeton.edu/training/> (Accessed: 13th December 2014).
- xiii. Gujarati, DN & Sangeeth 2007, *Basic Econometrics*, 4th edn, New Delhi, Tata McGraw Hill Education Private Limited.
- xiv. Hafeez, A & Ahmed, E 2002, *Factors Determining the Labour Force Participation Decision of Educated Women in a District of Punjab*, Punjab, Sustainable Development Policy Institute.
- xv. High Achievement in Education but Low Participation of Labour Force: a case of Females in Sri Lanka, Available at:

ISSN: 2420-7608

- http://iussp.org/sites/default/files/event_call_for_papers/IUSSP-Exten-abs2-pdf.pdf
(Accessed: 17th October 2014).
- xvi. Human Capital, Available at: <http://www.ssc.wisc.edu/~walker/wp/wp-content/uploads/2012/01/e623HC1.pdf> (Accessed: 19 November 2014).
- xvii. Labour Supply, Available at: https://mitpress.mit.edu/sites/default/files/titles/content/9780262033169_sch_0001.pdf (Accessed: 16th October 2014).
- xviii. Labour Supply over the Life Cycle, Available at: F:\disertation_2\2nd chapter\theory\Labour Market Economics Chapter Notes.htm (Accessed: 3rd October 2014).
- xix. Labor force participation rate for ages 15-24, female (%), Available at: C:\Users\E-Line\Dropbox\research_2\Sri Lanka - Labor participation rate.htm (Accessed: 2nd November 2014).
- xx. Magidu, N 2010, *Social - Economics Investigation into Determinants of Labour Force Participation in Labour Markets: Evidence from Uganda*, Uganda, Economic Policy Research center.
- xxi. Ministry of Higher Education 2011, *Education in Sri Lanka*, Available at: <C:\Users\E-Line\Dropbox\research\Education in Sri Lanka - Wikipedia, the free encyclopedia.htm> (Accessed: 16th October 2014).
- xxii. Moghadam, VM 1990, *Determinants of Female Labour Force Participation in the Middle East and North Africa*, United Kingdom, World Institute for Development Economics Research of the United Nation University.
- xxiii. Naude, W & Serummage, PZ 2010, *An Analysis of the Determinants of Labour Force Participation and Unemployment in South African North*, South Africa, development Bank of South Africa.
- xxiv. Ntuli, M 2007, *Determinants of South African Women's Labour Force Participation, 1995 - 2004*, South Africa, Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor for the Study of Labour.
- xxv. Patel, S 2012, *Determinants of Women's Labour Force Participation in India: An Econometric Analysis*, United Kingdom, University of Nottingham.
- xxvi. Schuetze, HJ n.d., *Life-Cycle Labour Supply*, Available at: http://web.uvic.ca/~hschuetz/econ370/Topic2_3b.pdf (Accessed: 16th October 2014).
- xxvii. Stephens, BJ 2009, *The Determinants of Labour Force Participation Status Among Indigenous Australian*, Australia, The University of Western Australia.
- xxviii. *The Basic Neoclassical Model of Labor Supply*, Available at: <http://www.hks.harvard.edu/fs/gborjas/publications/books/LE/LEChapter2.pdf> (Accessed: 16th October 2014).
- xxix. Wijayaweera, U 2014, Labor force participation rate for ages 15-24, female (%), Available at: C:\Users\E-Line\Dropbox\research_2\Sri Lanka - Labor participation rate.htm (Accessed: 2nd November 2014)., Available at: http://www.ips.lk/news/newsarchive/2012/25_06_2012_promoting_productive_ips/05_upali_wijeweera.pdf (Accessed: 2nd November 2014).

Appendix 01

Table 01: Description of explanatory variables

Variable	Description
Individual Characteristics	
Age (AGE)	Year
Marital status (MS)	1= Never Married 2=Married 3= Other (Widowed, Divorce, Separated)
Education Level (EDU)	1= Passed G.C.E (O/L) 2= Passed G.C.E(A/L)3=Degree4=Post Graduate
English Literacy (EL)	1= Able to read and write 2= Unable to read and write
Race (RACE)	1= Sinhala2= Tamil3= Moor
Head of Household H: (HH)	1= Household head2= if not
Household Characteristics	
Monthly income INC)	Rupee
Relationship to household H:(RHH)	1= Wife2=Daughter3= Parents
Occupation Status of HH(OSHH)	1= employee2= Employer 3= Won Account Workers
Residential Sector (RS)	1= Urban Sector2= Rural Sector 3= Estate Sector

Appendix 02

Table 02: Result of Logit Model Estimation
 Result of Logit Model for educated women in labour force survey 2012

	Model One	Model Tow	Model Three
Constant	3.69** (0.21)	3.12* (0.21)	2.94** (0.19)
Individual Characteristics			
Age	0.12* (0.09)	0.14* (0.07)	0.14* (0.07)
Marital Status			
Never Married	-2.32*** (0.32)	-2.48* (0.05)	-2.49* (0.05)
Married	-1.02** (0.00)	-1.59* (0.04)	-1.59* (0.04)
Education Level			
Passed G.C.E (O/L)	-1.45* (0.15)	-1.47* (0.19)	-1.48* (0.18)
Passed G.C.E (A/L)	-1.21*** (0.17)	-1.24** (0.18)	-1.25** (0.18)
Degree	-0.73* (0.16)	-0.74* (0.17)	-0.74* (0.17)
English Literacy	0.09* (0.00)	0.27* (0.00)	0.27* (0.00)

	(0.24)	(0.24)	(0.23)
Race			
Sinhala	-0.15** (0.19)	-0.19 (0.19)	-0.21 (0.19)
Tamil	-0.18 (0.17)	-0.18** (0.12)	-0.20 (0.08)
Moor	-0.25 (0.21)	-0.26 (0.20)	-0.29 (0.17)
Household Characteristics			
Relationship to Household H:			
Wife		-1.72* (0.34)	-1.73* (0.34)
Daughter		-1.34* (0.34)	-1.34* (0.33)
Occupation Status of HH			
Employee		0.32* (0.24)	0.32* (0.24)
Employer		-0.75** (1.03)	-0.99* (1.03)
Head of Household		-0.002 (0.52)	-0.002 (0.54)
Family Income		0.0004* (0.02)	0.0006* (0.02)
Residential Sector			
Urban			0.04 (0.03)
Rural			-0.09** (0.02)
Pseudo R2	0.07	0.16	0.29
No. Observation	8568	8568	8568

Source:
Force
2012

Labour
Survey,

Note: significant level at 1%, 5% and 10% are indicated by *, ** and *** respectively.



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