

EMPOWER THE ABILITY: WHAT DRIVES PERSONS WITH FUNCTIONAL DIFFICULTIES INTO WORK IN SRI LANKA?

P.A.D.I. Sachinthana^{1*}, G.R.S.R.C. Samaraweera²

^{1,2}Department of Economics and Statistics, Sabaragamuwa University of Sri Lanka

Abstract

Disability which is defined as Functional Difficulties (FD) in physical or mental health is one of the major disadvantageous situations of people's lives. It limits their ability to effectively involve themselves in day to day life roles, enter the labour market and also reduces the quality of their lives. Generally, persons without FD enjoy a better chance in labour market participation than those with such difficulties. This creates inequality and poverty among the people with FD by creating a huge barrier against the development goals of the country as well. The main objective of this study is to identify the key drivers of employment choice of persons with FD in Sri Lanka. The Binary Logistic Regression Model was used for econometric modelling by using a sample of 10,470 persons with FD from the Sri Lanka Labour Force Survey in 2018. This study identified that being married, being male, their per capita income, suffering from only hearing difficulty, only walking difficulty, only remembering difficulty, only communication difficulty, only self-care difficulty, only vision difficulty and dual difficulty as the significant and positively affecting factors; while age, being Sri Lankan Tamil, being Moor and other ethnicities, being in urban sector and years of education as significantly negatively affecting factors for employment probability among persons with FD. According to the study, occupation, education, self-employment and workplace related policies are proposed for empowering the ability of those with FD.

Keywords: Disability; Difficulty, Employment; Persons with Functional Difficulties; Physical and Mental Difficulties

Article Information

Article History

Received: 22 November 2020

Reviewed: 22 January 2021

Accepted: 03 February 2021

JEL Classification:

J200, J220, J280



Journal of Insurance and
Finance

Volume I Issue I, 2021

PP 81 - 100

eISSN: 2773-7276

pISSN: 2673-1258

© Department of Insurance and
Valuation,
Wayamaba University of Sri
Lanka

^{1*} Corresponding Author: ishini289@gmail.com

ORCID: <https://orcid.org/0000-0003-3040-2257>

1. INTRODUCTION

1.1. Background of the study

Disability is defined as Functional Difficulties (FD) of people including physical and mental difficulties (Department of Census and Statistics [DCS], 2012) that leads to common forms of impairments, activity limitation and restriction of participation (International Classification of Functioning [ICF], 2001). It is one of the specific disadvantageous conditions that can happen to someone in their lives. Generally, persons with disabilities face many psychological and sociological difficulties in daily life. They have less ability to work and also they have less social acceptance. There are many factors that can cause disabilities to an individual. Accidents, malnutrition, violent clashes and injuries, diseases, aging etc. can render a person disabled. Among the global population, 15 percent of the people suffer disabilities. They are considered as the largest minority group in the world (World Health Organization [WHO], 2011). There are some types of disabilities such as vision disability, hearing disability, learning disability and disability of movement, disability in mental health, remembering disability, communication disability and disability in social relationships (Disabled World, 2019).

Generally, persons with FD face many challenges in society. They face some barriers in access to transport services, workplaces, communication and other services. They enjoy low labour market participation and lower earnings, low levels of education, low levels of training and vocational training (World Report on Disability, 2011). Further, 3.8 percent of people aged 15 and above were recorded as those with significant functional difficulties. Also, the prevalence of disabilities is increasing due to chronic diseases and ageing population. (WHO, 2011)

Verbrugge and Jette (1994) defined disability as difficulty performing activities at any point of life due to a problem of physical or health. According to the World Report on Disability (2011), disability can affect persons in various ways. They are;

1. Children who are suffering from intellectual, sight and hearing disabilities are weaker at school than the children who are suffering from physical disabilities.
2. When finding jobs, persons who are suffering from intellectual disabilities and mental health problems face more difficulties.
3. When receiving equity in rights as same as persons without disabilities, people with severe disabilities face many problems.
4. Women with disabilities are not treated fairly due to their being disabled.

Disability causes disadvantages to both men and women alike. Among them, women with disabilities face greater discrimination including in employment and education than men with disabilities (Arnade and Haefler, 2006). In Europe, labour market participation of persons with disabilities is 47%, while it is very high (67%) for persons without disabilities. Further, 31% of the persons with disabilities (16 and over) face higher risks of social exclusion and poverty than persons without disabilities (21%) in the same age category. (Grammenos, 2013). It is emphasized that persons with disabilities have lower chances of participating in the labour market in Europe.

In the Sri Lankan context, according to the Census of Population and Housing (CPH, 2012), among the total population (5 years and over), the proportion of population with difficulties is recorded as 8.6. Further, as a proportion of population by type of difficulties, 5.3 proportion suffer vision difficulties, 2.1 proportion suffer hearing difficulties, 3.9 proportion suffer walking difficulties, 1.9 suffer cognition difficulties, 1.1 suffer self-care difficulties and 1.0 suffer communication difficulties. Also, among the population of 15 years and over with difficulties, 28.7% are economically active and 71.3% are not engaged in any economic activities (CPH, 2012). Therefore, the highest percentage has been recorded in the economically inactive group. Further, according to the CPH (2012), Arunathilaka (2016) stated that a high percentage of people with difficulties remained as own account workers (45.7%) and when compared with people without any difficulties, the number of unpaid family workers and own account

workers are higher among the people with difficulties. According to the Sri Lanka Labour Force Survey (LFS, 2018), among the total economically inactive population, people with difficulties are recorded as one of the reasons for being economically inactive. It is 8.5 percent. Also, according to the reason for being inactive and based on gender, people with difficulties are represented by 16.2 percent of males and 5.7 percent of females.

Therefore, inclusion of persons with FD into the labour market is not easy, because future working trends may create adverse impacts on them according to their disability conditions. Furthermore, persons with FD have fewer chances of gaining higher earnings and quality employment. Therefore, it is important to facilitate and empower persons with FD. This study attempts to observe the impacts of functional difficulties on employment in Sri Lanka.

1.2. Research problem

Disability is an emerging issue globally. According to WHO (2011), persons with disabilities are sometimes excluded from society due to their inability or lesser ability to perform their own tasks. They do not enjoy equal access opportunities to education, healthcare, social opportunities, livelihoods and earnings. They have fewer chances to raise their voice against discriminations. According to the Global Disability Summit (2018), 9.7 million of them are vigorously displaced due to the violation of human rights, violence, disputes and persecution. In Sri Lanka, a high percentage among those with difficulties is economically inactive. It is about 71.3 percent (CPH, 2012).

Although the persons with disabilities are employed, they experience discrimination and lower earnings. They face more challenges in access to employment, public facilities and awareness and policy implementation. When they are encouraged towards decent work, their employment opportunities should be redesigned by providing education and raising their awareness to encourage them to work towards the important strategies. (Anomasari and Mursalim, 2020).

Furthermore, employers' attitudes towards persons with FD are not favourable. Employers do not have the confidence to include them in their work places. Also, work places are inaccessible and work tools are more standard for them. They are not suitable if they have low educational knowledge and training. Past researchers in different countries have revealed that disability and employment has a negative relationship (Jones et al. 2006; Mussida and Sciulli, 2016).

Different types of disabilities create different issues in the labour market. Most of them are not related to employment alone. Also, the labour market does not provide adequate provisions and infrastructure facilities to persons with FD to adjust to their work places. Generally, most of them are engaged in vulnerable employments. Persons with FD are generally physically vulnerable. When they also become vulnerable in employment, they have to face more problems. Further, they tend to be poor and this too may cause difficulties in their sustenance. So, poverty and disability are interlinked (Trani and Loeb, 2012). Also, people do not show much interest in even buying products manufactured by persons with FD due to their prejudice on quality. Due to this reason, they should be included into acceptable quality jobs. Generally, they do not enjoy any pension schemes, paid leave, job security, life coverage, social welfare or any collective bargaining powers. Furthermore, they have not been considered in any specific actions for them to achieve their rights and self-respect (Global Disability Summit, 2018).

Therefore, it is important to identify the characteristics of employed persons with FD to provide them with decent work without discrimination and gain the opportunity to work and enjoy their right to work.

Due to these reasons, empowering people with FD by providing more and better employment opportunities and improving their welfare are very important dimensions under the concept of decent work for all. Therefore, this research also attempts to examine the impact of disability on employment by identifying the key drivers of employment choice of persons with FD in Sri Lanka.

1.3. Research question

What are the key determinants of employment probability among persons with functional difficulties Sri Lanka?

1.4. Research objective

The main objective of the study is to identify the key drivers of employment choice of persons with functional difficulties in Sri Lanka.

2. LITERATURE REVIEW

2.1. Theoretical Literature

According to Sultana (2010), disability can be defined as a significantly impaired situation which is related to the general standard of a person or a group. Further, disability can be used to explain individual activities which include impairments of sensory, physical, cognitive, mental, intellectual and different categories of chronic diseases. Further, Mckinney and Swartz (2019) stated that persons with disabilities face barriers in the amalgamation stage of employment.

Ang et al, (2015) stated that most of the people fail to identify that the population with disabilities is an important but largely unutilized part of human resources. Also, the reason for this may be the prejudice and misunderstanding about their ability to compete and participate in the open market.

There are some theories which are relevant to this study. They explain the employers' attitudes in promoting and hiring decisions of persons with disabilities. These theories are the status characteristics theory, statistical discrimination theory and queuing theory (Maroto and Pettinicchio, 2014).

Webster and Hyssom (1998) introduced the status characteristic theory. It revealed that all people are not the same. They vary by age, sex, race, ability of reading, wealth and other factors. These differences represent a considerable social importance. As well as, according to the Maroto and Pettinicchio (2014), this theory explained that assignment of merit or worth should vary by type of disabilities. The reason for this is the employers' expectations that productivity among various disability groups are different. Also, workers with disabilities may like to engage in occupations which are perfectly suitable for their disabilities. It may also create rough impacts on their earnings and employment.

The statistical discrimination theory also explained that perceptions about the workers' change the real placement of people. When employers are risk averse, they try to reduce the recruiting uncertainties (Lundberg and Startz, 1983). It is strongly related to offering employment opportunities and earnings for persons with disabilities. Earnings and employment opportunities of persons with disabilities are dependent on the perception of the employers, because employers have negative attitudes on their working ability (Hunt and Hunt, 2004; Mcfarlin et al. 1991).

Further, the queuing theory predicates the employers' low level of perfect hiring information and sorts and ranks the possible employees by using human capital level and noticeable characteristics (Reskin and Roos, 1990; Thurow, 1975 cited in Maroto and Pettinicchio, 2014, p.78). Further, they noted that perception of employers about persons with disabilities and their human capital level keep them in the bottom level of the queue by limiting their job opportunities. Also, Friedman (2020) stated that low level of employment rates of persons with disabilities are created due to the high level of prejudice against their disabilities. There is a link between prejudice on disability and disparities of employment.

Bonaccio et al. (2019) stated that despite legislations on workplace diversification, persons with disabilities do not gain equal access opportunities to work similar to those without disabilities. According to Mussida and Sciulli (2016), an employment gap exists between disabled and non-disabled people. Further, productivity depends mainly on the disability characteristics and the job requirements. According to the theoretical predictions in labour supply which are related to the monetary transfer roles, it is explained that gaining disability benefits highly affects the declining employment

opportunities. Also, Zhu et al. (2019) stated that high workplace insertion can buffer the probable negative impacts of individual level disability, can be built further by a climate of high team learning.

Hotchkiss (2004) stated that both labour demand and supply issues affected some population groups in relation to their employment levels. Also, disabled people have to bear the high cost of engaging in the labour market and have to make higher sacrifices than the non-disabled workers. Therefore, disabled persons' reservation wage is very high and the selection of labour market is very limited for disabled individuals. Further, disabled workers who participate in the labour market possess fewer qualifications for the relevant job positions. Therefore, employers do not show high preference for hiring disabled workers. According to the above labour demand and supply reasons, he stated that disabled persons enjoy lower employment levels than the non-disabled persons.

According to previous studies, there are fewer theories which relate disability to employment. Previous researchers have not sufficiently studied how employment determinants theoretically relate to disabilities. Furthermore, they have not given adequate consideration to studying the effect of disability on employment in Sri Lanka, in a proper and broader theoretical perspective. Therefore, this study plans to fill this gap as well.

2.2. Empirical Literature

The empirical literature will discuss key disabilities and the socio-economic, demographic and geographic factors associated with employment decision making on persons with FD.

Age, gender, marital status, ethnicity are the key demographic factors associated with employment decision making on those with FD. In the aspect of age, generally, employed disabled persons are younger than the non-employed disabled persons (Ho, 2002). Also, the earliest onset of disability represents the differences in outcomes of employment. Younger (0-14) and older (45-64) onset of disability reduced the probability of being employed (Jenson et al., 2005). Further, Zamo-Akono (2013) revealed that the relationship between age and participation in labour market is nonlinear.

Gender was identified as another key pillar of the employment decision making on persons with FD. Ho (2002) stated that more employed people with disabilities are male than the non-employed people with disabilities. Naami (2015) examined that women with disabilities face more challenges for engaging in employment than men with disabilities. Regarding the females, mental problems and employment has a negative relationship (Jones, 2011). Smith (2007) also stated that disabled women's unemployment was strongly predicted by gender and disability.

According to the marital status, Jones et al. (2006) stated that a person who is a married male, whether being disabled or not, has a higher probability of being employed than an unmarried male. On the other hand, a woman who is married, whether being disabled or not, has a lower probability of being employed than an unmarried woman. Further, Ho (2002) stated that a person being a married man makes a positive association with work. Furthermore, most employed persons with disabilities are unmarried when compared to the non-employed persons with disabilities.

Impact of ethnicity on employment of persons with FD was identified by the literature as follows: Employment level of people who are in the Pacific and other ethnicities are mostly influenced by the disability than the employment level of Maori and European ethnicities (Jenson et al., 2005). Webber et al. (2015) also stated that Europeans are more likely to be employed than the Maori and Pacific islanders.

According to the above literature this study has established the following hypotheses:

H₁: Demographic factors are associated with employment choice of persons with FD.

Nature of the disability is the next consideration in the context of getting employment opportunities. Mussida and Scullli (2016) identified that disability has a negative relationship with employment. As well as, they also emphasized that strong disability has the highest negative impact on employment. Ho

(2002) stated that persons with disabilities generally enjoy a lower employment rate. Further, the employment status of persons with disabilities differs by their types of disability.

O'Donnell (1998) examined that disabled people who are suffering from hearing or communication difficulties have a high capacity for work. Further, people who are suffering from sensory and learning disabilities enjoy more opportunities for being employed. (Ho, 2002)

Further, Jenson et al. (2005) found that among the disability variables, the hearing disability group is the only variable which did not explain the persistent relationship with outcomes of employment. Finally, their results showed that all six disability groups have negative relationships with employment, while the effect of hearing disability is lesser than the other groups. Furthermore, persons who are suffering from vision disability create an ever negative impact on employment expectations. Ho (2002) stated that adults with communication, physical, mental and functional disabilities have lower chances of engaging in employment.

According to the CPH 2012, Arunathilaka (2016) stated that females who are suffering from self-care difficulties face high unemployment. According to Ta and Leng (2013), the highest unemployment was recorded among learning disabilities in Malaysia and the lowest rate was recorded among visual disabilities. Deleire (2000) revealed that men who are suffering from mental and physical disabilities find their employment probability decreasing by a large margin. Further, people who are suffering from mental illnesses have a low probability of being employed (Blackaby et al., 1999; O'Donell, 1998; Barnay et al., 2015). Based on this study, the second hypothesis is derived as follows.

H₂: Nature of the Functional Difficulty is associated with employment choice of persons with FD.

Education plays a predominant role among social factors that affect the employment choice of persons with FD. Most of the previous researchers revealed that education and employment have a positive relationship (Kittelssa et al, 2015; Tossebro and Wik, 2015; Bjerkan and Veenstra, 2000 cited in Bliksvaer, 2018, p.13; Mussida and Scuilli, 2016; Ho, 2002). Further, Naami (2015) stated that men with disabilities possess a higher education level than women with disabilities.

Deleire (2000) stated that disabled men who are within working age have gained less education. Blackaby et al. (1999) revealed that generally, disabled people have gained only a few years of education. Therefore, increasing or investing in education causes an increase in the employment probability of disabled people. However, Yelln and Tupin (2003) revealed that although the persons with disabilities possess any educational levels, their employment probability is low.

According to the income, disabilities limiting work and narrow replacement of earning losses by social security disability insurance and spouses' lower earnings cause to generate a less average family income. Also, two-thirds of the family income was contributed by husbands who are disabled or had married a disabled woman. (Haveman et al., 2000). Also, non-employed disabled persons' household income was half of the employed person's total household income. (Ho, 2002). Hence, the third hypothesis of the study is derived as follows:

H₃: Socio-economic factors are associated with employment choice of persons with FD

Geographical factors including residential sector was another driver of the employment choice of the differently abled community. If a disabled female has no literacy level, it is associated negatively with their employment probability in urban areas. If a person suffers from sight and movement disabilities, it increases the employment probability in rural and urban areas. Also, for persons with disabilities, their employment probability in urban areas increased than in the rural areas (Naraharisetti and Castro, 2016). Further, more employed disabled persons live in non-metropolitan areas than non-employed disabled persons. (Ho, 2002). Finally, the fourth hypothesis is made based on geographical factors as follows:

H₄: Geographical/locational factors are associated with employment choice of persons with FD.

According to this study, there are fewer researches that have checked the relationships of relevant variables. Also, some variables such as ethnicity, disability, residence etc. have not been sufficiently measured by previous studies. Furthermore, disability characteristics are defined in various ways in different countries. However, Sri Lanka has defined the disability characteristics in a specific way. There are fewer researches available on evaluating how disability affects employment in Sri Lanka with respect to various disability categories. Therefore, this research has been carried out to fill these gaps in literature as well.

2.3. Methodological Literature

Table 1 presents the models used in the literature to analyse the impact of disability on employment in different countries. Random utility models including the logistic and probit model were commonly used for the analysis.

Table 1: analysis models

<i>Analysis Model</i>	<i>Researchers</i>
Partial observability model & Sample separation model	O'Donnell (1998)
Spatial autoregressive model	Naraharisetti and Castro (2016)
Linear regression model	Naraharisetti and Castro (2016)
Logistic regression model	Mizunoya et al. (2016); Matthews et al. (2005); Jenson et al. (2005)
Probit model	Jones et al. (2006); Brown and Emecy (2009); Deleire (2000); Jones (2011)
Multiple regression	Chi and Qu (2004)
Random effect dynamic Probit model	Mussida and Scullilli (2016)
Factor Analysis	Chi and Qu (2004)
Multinomial logit	Zamo-Akono (2013); Yelln and Tupin (2003)

Source: Researcher developed

This study uses the Binary Logistic Regression Model for analysis due to the dependent variable of this study being binary and presents the results in different aspects. Therefore, this research is done to fill the gap of not conducting sufficient researches on the Sri Lankan and world contexts.

Meanwhile, many researches have also been done by using secondary data from country-wise surveys in different aspects. Therefore, this study also uses the secondary data from LFS (2018) in Sri Lanka for representing results to generate new knowledge about this area. Hence, this study also attempts to fill the gaps of not conducting direct and sufficient researches on the above areas in the world and in the Sri Lankan context.

3. CONCEPTUAL FRAMEWORK

Conceptual framework of the model is given in Figure 1 and the respective abbreviations are given in Table 2.

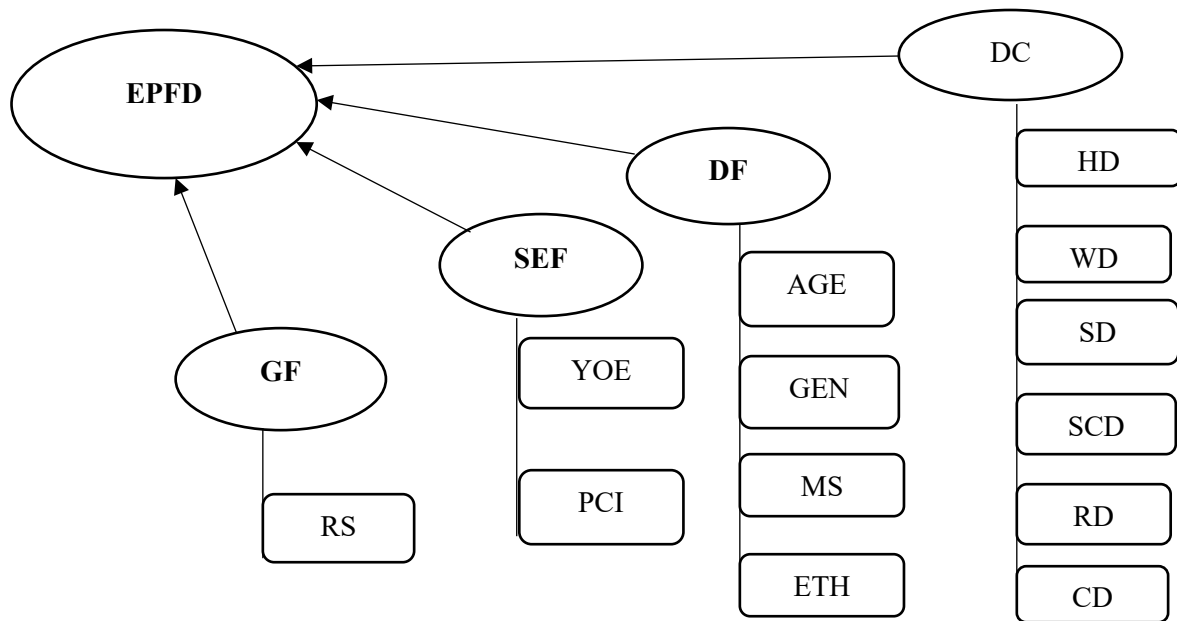


Figure 1: conceptual framework for determinants of employment probability of persons with FD based on literature.

Source: Researcher developed

Table 2: abbreviations of conceptual framework

Abbreviation	Variable Name	Abbreviation	Variable Name
EPFD	Employment Probability of persons with FD	SCD	Self-Care Difficulty
DF	Demographic Factors	CD	Communication Difficulty
SEF	Socio-Economic Factors	AGE	Age
GF	Geographical Factors	GEN	Gender
DC	Disability Characteristics	MS	Marital Status
HD	Hearing Difficulty	YOE	Years of Education
WD	Walking Difficulty	ETH	Ethnicity
SD	Seeing Difficulty	RS	Residential Sector
RD	Remembering/ Concentrating Factors	PCI	Per Capita Income

Source: Researcher developed

4. METHODOLOGY

The data, sample, econometric model specification and the way of deriving variable were explained under this section.

4.1. Data and the Sample

The study used secondary data from LFS (2018) in Sri Lanka covering all nine provinces of the country. The population of the study is all working age people with FD in Sri Lanka in year 2018 and the people with FD in the LFS (2018) was used as the sample. Sample derivation mechanism is explained next. LFS consists of 80,577 observations. This study removed 18,917 observations due to age being less than 15 years. Also removed were the 70 observations of respondents who had gained education from special educational institutions as their actual years of education could not be calculated properly. Finally, the sample was created as 61,590 respondents. It includes both persons with and without FD. This study also removed 51,120 of persons without FD from the above sample. Finally, the sample consisted of 10,470 persons with FD. It includes 3,277 employed, 44 unemployed and 7,149 economically inactive persons with FD.

4.2. Econometric Model

The Binary Logistic Regression model is used for the analysis.

$$Li = \ln\left(\frac{Pi}{1-Pi}\right) = \beta_0 + \beta_1 X_1 + \beta_2 D_1 + \beta_3 D_2 + \beta_4 D_{3-5} + \beta_5 D_{6-12} + \beta_6 X_2 + \beta_7 X_3 + \beta_8 D_{13-14} + \varepsilon_i$$

Where P_i = Probability of being employed, $(1-P_i)$ = Probability of not being employed (either unemployed or economically inactive), Age (X_1), Being male (D_1), Being married (D_2), Ethnicity (D_{3-5}), Disability characteristics (D_{6-12}), Years of education (X_2), Per capita income (X_3), Residential sector (D_{13-14})

4.3. Variable Description

According to the LFS (2018), disability is categorized into the six categories. It is represented in question number 15 to 20. LFS has considered disability and difficulty in the same aspect. These questions represent whether the person is suffering from any difficulty in hearing, even if using a hearing aid, difficulty in walking or climbing steps, having difficulty seeing, even if wearing spectacles, difficulty in remembering or concentrating, self-care difficulty and having communication difficulties when using usual language. Here, all categories of difficulties are prepared by adding all persons who cannot do anything, major and minor difficulties. Minor difficulty represents every minor disability situation. Persons with minor difficulties are also considered as those with FD in this study. Therefore, if a person is wearing spectacles for reducing his/her difficulty, he/she may also have answered as being a person with a minor vision difficulty. Therefore, all the minor difficulty categories are also considered as a disability in this study. Likewise, this study also considered all persons who are having major, minor difficulties and those who cannot do anything, as persons with disabilities.

According to LFS (2018), if persons are employers, paid employees, own account workers or unpaid family workers, then they are identified as being employed. Further, it includes the persons who have a job but, do not work in the reference period. If a person looking for work or is available for work, had taken any steps to seek employment in the last four weeks but had been unsuccessful and however is ready to accept a job if offered in the next two weeks, he or she is still identified as unemployed. Also, all the persons who were not working, available or were not looking for work during the reference period are identified as economically inactive. According to this study, dependent variable is the binary variable which represents 1= employed 0= unemployed and economically inactive. Further, in the LFS schedule, question number 02 and 04 are used for preparing employment for people with FD. Questions number 47, 48, 51, 50 and 52 are used for creating unemployment and inactive for people with FD in this study.

Explanatory variables of the model are categorized into four types as demographic factors, disability characteristics, socio-economic factors and geographical factors. Further, gender, age and marital status and ethnicity are identified under the demographic factors. Marital status is categorized as married and unmarried while gender is categorized as male and female. Age variable is used as a continuous

variable. Further, ethnicity is categorized as Sinhala, Sri Lankan Tamil, Indian Tamil, Moor and other. The Moor people are included in the ‘other ethnicity’ category.

In the analysis of this study, disability characteristics were categorized into eight categories. They are, having only hearing difficulty, only walking difficulty, only remembering difficulty, only self-care difficulty, only vision difficulty and only communication difficulty. Furthermore, if a person has only one difficulty which is mentioned above, they were entered into the relevant category. The other two categories were for dual difficulties and multiple difficulties. If a person has any two of the above difficulties, it is considered as dual difficulties. Also, if a person has three, four, five or six difficulties, then he/she is considered as having multiple difficulties.

Years of education and per capita income are identified as socio-economic factors. Here, these two variables are used as continuous variable. The residential sector is categorized as urban, rural and estate in the geographical factors.

5. RESULTS AND DISCUSSION

This section will explain the descriptive and inferential results of the study.

The percentage of employment of persons with FD by gender and marital status are explained under Figures 2 and 3.

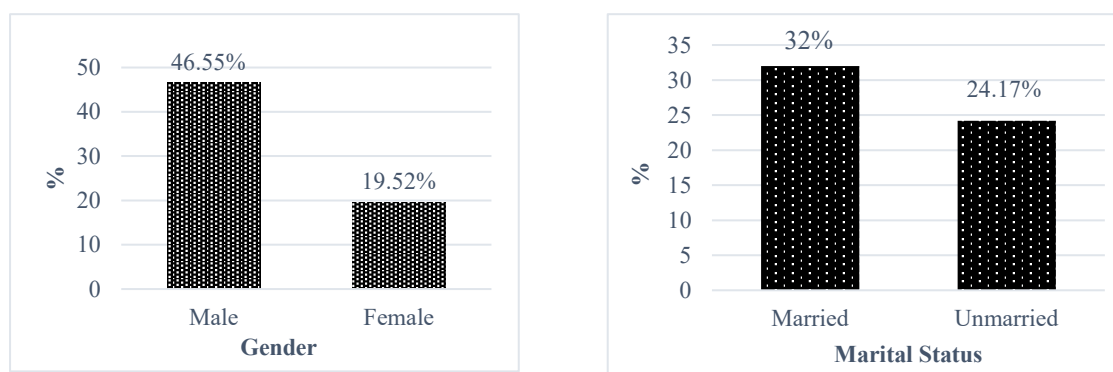


Figure 2: employment by gender

Figure 3: employment by marital status

Source: Researcher developed by using LFS (2018)

Males with FD do not search for job security or white collar jobs when being employed. However, women search better job security and good employment positions when being employed. However, it is difficult to find quality employment for them due to their disability conditions, cultural values, low levels of labour market entrance opportunities and low productivity levels. According to Figure 2, the highest employment percentage is recorded among males with FD.

Unmarried persons with FD do not have high responsibilities and hence they can depend on family members due to their disability and low responsibilities, while married persons with FD face more responsibilities. They encounter financial problems and hence they engage in any employment. Therefore, their employment percentage is higher than that of the unmarried persons with FD. (Figure 3).

Table 3 represents that the majority of the persons with hearing difficulty works as crop farm workers, tea pluckers, paddy, tea and mixed crop growers. Persons with walking difficulties are highly involved in the labour market as vegetable growers, paddy growers, tea growers, tea pluckers and tailors, etc. Employed persons with seeing difficulty mainly work as paddy growers, vegetable growers, crop farm workers and cleaners while those with remembering difficulties are engaged as street vendors, crop farm workers, tea and paddy growers. Also, paddy, tea and mixed crop growers, three wheel drivers,

cleaners and helpers, tailors and street vendors are the most popular jobs among the persons with communication difficulties, while the majority of persons with self-care difficulty work as vegetable growers, paddy growers and crop farm workers, etc. The majority of the persons with dual difficulties work as paddy, tea and mixed crop growers, crop farm workers and tailors while people with multiple difficulties engage as crop farm workers, tea pluckers, vegetable growers, basic service occupations and tobacco makers.

Nature of employment of persons with FD is explained in Table 3.

Table 3: analysis of employment of persons with FD under the standard occupational classification in Sri Lanka

<i>Occupation</i>	<i>Disability (%)</i>							
	Hearing (143)	Walking (507)	Seeing (1087)	Rememb er. (94)	Comm. (32)	Self- care(109)	Dual (729)	Multiple (576)
Field crop and vegetable growers (Except cereals, plantation crops and minor export crops) and Grain crops growers except paddy - for trade	4.90	5.52	5.24	3.19	6.25	7.34	6.31	6.77
Paddy, Tea and Mixed crop growers, Livestock and dairy producers– for trade	13.99	11.83	13.89	9.57	9.38	8.26	15.64	4.17
Crop farm workers	9.09	5.33	5.52	6.38	-	9.17	6.72	12.85
Tea pluckers and Coconut growers – for trade	10.49	6.11	3.58	4.26	-	3.67	3.98	5.21
Carpenters, furniture makers and Craftsmen (Wooden, cane and related materials)	2.80	3.35	1.84	3.19	3.13	2.75	2.33	2.43
Manufacturing workers (Not mentioned)	3.50	3.16	1.84	2.13	-	1.83	2.47	1.74
Tailors, dress makers, fur merchants and hat makers and three wheel drivers	4.20	6.31	3.40	4.26	9.38	3.67	3.98	2.08
Cleaners in hotels and other organizations and office assistants and Household cleaners and helpers	1.40	4.14	3.77	2.13	6.25	2.75	3.16	3.13
Employees engaged in basic service occupations (Not mentioned elsewhere)	1.40	3.35	3.40	3.19	-	1.83	3.43	3.13
Security officers	1.40	0.79	1.10	2.13	3.13	3.67	0.69	0.87
Street vendors (except foods) and Tobacco makers, tobacco products market	2.80	2.56	1.75	4.26	6.25	1.83	2.47	3.30
Other categories	44.03	47.55	54.67	55.31	56.23	53.23	48.82	54.32
Total	100	100	100	100	100	100	100	100

Source: Researcher developed by using LFS (2018)

Note: Disability types represent all the persons with FD (cannot do anything, major, minor difficulty) who were employed in each category. Highest proportion of participation for occupation types are represented here. Lowest participation categories represented in other categories.

Descriptive statistics of the variables are explained under the conceptual framework in Table 4.

Table 4: descriptive Statistics of dependent and independent variables in the model

Variable	Mean / Proportion	Standard Deviation
<i>Dependent variable</i>		
Employment	0.3129	0.4637
<i>Independent variables</i>		
<i>Age (X₁)</i>	62.2479	15.237
<i>Gender</i>		
Male (D ₁)	0.4358	0.4959
Female (Ref)	0.5642	0.4959
<i>Marital status</i>		
Married (D ₂)	0.9103	0.2857
Unmarried (Ref)	0.0897	0.2857
<i>Ethnicity</i>		
Sri Lankan Tamil (D ₃)	0.1819	0.3857
Indian Tamil (D ₄)	0.0267	0.1613
Moor and other (D ₅)	0.0893	0.2852
Sinhala (Ref)	0.7021	0.4574
<i>Disability</i>		
Only hearing difficulty (D ₆)	0.0296	0.1695
Only walking difficulty (D ₇)	0.1175	0.3221
Only remember difficulty (D ₈)	0.0237	0.1521
Only communication difficulty (D ₉)	0.0055	0.0742
Only self-care difficulty (D ₁₀)	0.0251	0.1565
Only seeing difficulty (D ₁₁)	0.1937	0.3952
Dual difficulty (D ₁₂)	0.2213	0.4151
Multiple difficulty (Ref)	0.3835	0.4863
<i>Years of Education (X₂)</i>	6.6146	3.9728
<i>Per Capita Income (X₃) (000')</i>	8.6327	15.8867
<i>Residential Sector</i>		
Urban (D ₁₃)	0.1384	0.3453
Estates (D ₁₄)	0.0400	0.1960
Rural (Ref)	0.8216	0.3829

Source: Researcher developed by using LFS (2018)

Note: Total number of observations: 10,470, D-Dummy variables

31 percent of people with FD (Cannot do anything, major and minor) are employed while the mean age was recorded as 62 years and this varies from 15-99 years old. The female proportion is higher than that of males and the majority of the sample are married. Among the people with FD, only with one difficulty, seeing difficulty shows the highest proportion while the walking difficulty comes second. 22 percent has dual difficulties while 38 percent has multiple difficulties. The majority of the sample are Sinhalese while Sri Lankan Tamils come second. The highest proportion is in the rural sector. The majority are educated up to Grade 6. Table 5 shows the Binary Logistic Regression model.

Table 5: binary logistic regression model

Variable	Logit coefficient	Standard Error	Probability value	Marginal coefficient
<i>Age (X₁)</i>	-0.0571	0.0023	0.000	-0.0089
<i>Gender</i>				
Male (D ₁)	1.5026	0.0519	0.000	0.2342
<i>Marital status</i>				
Married (D ₂)	1.9511	0.1472	0.000	0.3040
<i>Ethnicity</i>				
Sri Lankan Tamil (D ₃)	-0.2663	0.0672	0.000	-0.0415
Indian Tamil (D ₄)	-0.0419	0.1971	0.832	-0.0065
Moor and other (D ₅)	-0.5211	0.0861	0.000	-0.0812
<i>Disability</i>				
Only hearing difficulty (D ₆)	1.2436	1.1412	0.000	0.1938
Only walking difficulty (D ₇)	1.1718	0.0827	0.000	0.1826
Only remember difficulty (D ₈)	0.5680	0.1688	0.001	0.0885
Only communication difficulty (D ₉)	1.2238	0.3309	0.000	0.1907
Only self-care difficulty (D ₁₀)	0.6497	0.1490	0.000	0.1012
Only seeing difficulty (D ₁₁)	1.4545	0.0737	0.000	0.2267
Dual difficulty (D ₁₂)	0.6619	0.0726	0.000	0.1031
<i>Years of Education (X₂)</i>	-0.0197	0.0070	0.005	-0.0031
<i>Per Capita Income (X₃)</i>	0.0229	0.0059	0.000	0.0036
<i>Residential sector</i>				
Urban (D ₁₃)	-0.4645	0.0773	0.000	-0.0724
Estates (D ₁₄)	-0.2202	0.1654	0.183	-0.0343
Constant	-0.5115	0.1522	0.001	

Source: Researcher developed by using LFS (2018)

Note: Base category: A person who is a female, unmarried, having multiple difficulties, Sinhala, lives in rural area

Significant level: 10%

According to Table 5, age is one of the significant factors among the demographic factors for the employment of persons with FD. They are generally suffering from physical illnesses. Therefore, when their age is increased, they get older with their difficulties. Generally, they were unable to work properly with their disabilities plus natural biological deprivation with age. Getting older further creates negative impacts on their employment probability in the aspect of demand. Profit-oriented business firms show lesser tendencies towards hiring older persons with FD due to their low efficiency. Old age creates further deficiencies in their work with their losing memory capacity. Therefore, increase in the age of those with FD reduces his/her employment probability by 0.89% with reference to the base category. According to previous researchers, O'Donnell (1998) revealed that age and work capacity has a negative relationship.

In the aspect of gender, being male also positively affected the employment of persons with FD. In the general contest of labour force participation and employment, females are deprived than the males. If a female is disabled, then employment level will be further reduced to them due to their physical inability, in addition to the cultural and social problems. Men with disabilities engage in any formal or informal employment. Availability of work opportunities for females are generally lower in the market than for the men due to the triple burden of productive, reproductive and socially productive roles played by them and this will be further intensified by physical difficulties among females. Therefore, being a male increases the probability for a person with FD being employed by 23.42% with reference to the base category. This aligns with the findings of Ho (2002) who revealed that employed disabled persons are male than non-employed disabled persons and Naami (2015) who examined that women with disabilities face more challenges when joining employment than men with disabilities.

According to the marital status, when a person with FD is married, they have more responsibilities with their disability conditions. Therefore, they tend to engage in employment than the unmarried people. They engage in any employment such as self-employment or in the agricultural sector. However, married persons with FD engaged in any employment due to their economic conditions. Therefore, being married increases the probability of employment of a person with FD by 30.43% in comparison to the base category. Further, Jones et al. (2006) stated that a disabled or non-disabled married man has a higher probability of being employed than an unmarried man.

According to the ethnicity, Sri Lankan Tamil, Moor and other ethnicities are significant with employment probability of persons with FD, while Indian Tamil is insignificant. Sri Lankan Tamil people with FD have a low tendency of being employed. Sometimes they have to face some barriers against engaging in employment due to their language problems and disability. They prefer more to work with Tamil organizations. The Sinhalese enjoy better employment opportunities than the Tamils due to their language advantage and socio-cultural settings. However, Tamil people do not engage in more employment due to their cultural values. Some organizations are prejudiced and compare their working efficiency with the Sinhala people. Job opportunities too are different according to their culture. Therefore, being Sri Lankan Tamil decreases the probability of being employed for a person with FD by 4.15% with reference to the base category. Jensen et al (2006) stated that various ethnicity groups effect the employment level of persons with FDs.

Meanwhile, persons with FD in the Moor and other ethnicity categories such as Malay, Burgher etc. do not prefer to be employed with their disability conditions in comparison to the base category. Moor females with FD face problems in engaging in employment due to their disability and some religious restrictions. If they start their own business, there too certain cultural and disability issues create negative impacts on their employment. Therefore, it reduces the probability of a person with FD being employed by 8.12% with reference to the base category.

Based on the above results, the relationship between demographic factors and employment probability of persons with FD was established by this study, as given in the first hypothesis.

The main factor regarding physical and psychological preparedness for employment is the disability characteristics and this is dealt with in the second hypothesis. Here, all the disability characteristics were significantly and positively affecting the employment probability of a person with FD with reference to the base category including persons with multiple disabilities.

Generally, suffering from only hearing difficulty, in comparison to the base category with multiple difficulties, created more chances of getting employment. They engage in any work which is not highly affected by the hearing ability, such as cultivation activities and self-employment, including tailoring and handcraft work etc. Therefore, suffering from only hearing difficulty increases the probability of a person with FD being employed by 19.38% in comparison to the base category. O'Donnell (1998) examined that disabled persons suffering from hearing difficulties, have a higher capacity level for work.

Also, people with only walking difficulties have a higher tendency to engage in jobs than people with multiple difficulties. They engage in some jobs where walking ability is not necessary, such as lottery selling, dressmaking and some self-employment which does not need moving about everywhere but can be performed while on a wheel chair or in a suitable place. Therefore, having only walking difficulty increases the probability of being employed for a person with FD by 18.26% in comparison to the base category including the existence of multiple difficulties.

If a person suffers only from remembering or memory difficulties, they can still be employed in some low-quality jobs. For example, they can engage in cultivation activities, production or cleaning jobs etc. Further, having memory difficulties is a serious problem. However, if they do not suffer from any other difficulties, they have chances of engaging in any suitable jobs in comparison to the people with multiple FD. Generally, people with memory difficulties can engage in only one type of work. They cannot think and also cannot make decisions in vast areas. They can perform only monotonous tasks. Therefore, suffering from only remembering difficulty increases the probability of being employed for a person with FD by 8.85% in comparison to the base category with multiple difficulties.

If persons have only communication difficulties, they can engage in any job which suits this particular disability. They have some probability to engage in jobs like self-employment, as cleaners, street vendors, tailors etc. If they have communication difficulties, they engaged in some employment by using sign language. They can work according to the same work schedules. Therefore, having only communication difficulty increases the probability of being employed for a person with FD by 19.07% in comparison to the base category including multiple difficulties. According to O'Donnell (1998) he examined that people who were suffering from communication difficulties have a higher capacity for work.

Further, if a person has only self-care difficulties without multiple difficulties, they tend to engage in some self-employment with their disability types. However, they require assistance from someone to adjust to their work. If they have assistance from other persons they can engage in work such as crop farm workers, hat makers, craftsmen and basic services etc. However, if they have multiple disabilities, they cannot engage in work. Therefore, having only self-care difficulty increases the probability of being employed for a person with FD by 10.12% in comparison to the base category.

Further, when a person has only seeing difficulty, he can engage in the jobs which do not require visual ability. If a person has only seeing difficulty, they can engage in office or clerical work also by using the Braille system. Further, they can engage in self-employment and cultivation activities. Therefore, having only seeing or visual difficulty increases the probability of being employed for a person with FD by 22.67% in comparison to the base category including persons with multiple difficulties.

Having dual difficulty creates some probability of being employed in basic service occupations, some production jobs, cultivation activities etc. than persons with multiple difficulties. For example, if a person has dual difficulties such as communication and seeing difficulties, they mostly engage in jobs with Braille assistance. However, if they have multiple difficulties, they cannot productively engage in employment. Furthermore, if a person has walking and hearing difficulties, they also can engage in any employment than people with multiple disabilities. They can perform some minor jobs like lottery sellers, handicraftsmen, some cultivation activities while resorting to sign language. Therefore, having dual difficulties increases the probability of being employed for a person with FD by 10.31% in comparison to the base category. Further, according to past researchers, Mussida & Sculli (2016) emphasized that strong disabilities cause the highest negative impact on employment. As well as, people with sensory and learning disabilities have more chances of being employed than people with other disabilities. (Ho, 2002).

Hence, the second hypothesis on the relationship between the nature of functional difficulty and employment was also established by the study

The third hypothesis is dealing with socio-economic factors associated with employment decision making. One of the main social factors is the years of education and this is an important component of

human capital investment of the person. Persons with FD and high level of human capital have less opportunity to join the formal sector employment due to the restrictions from the demand side. The majority of the people with FD are self-employed in basic occupation categories that require relatively lower levels of education. Therefore, increasing years of education create a negative impact on the employment probability of a person with FD. If a person with FD has more educational years and suffering from disability, they have fewer tendencies of being employed. Business firms mostly do not prefer to recruit persons with FD even if they are more educated. Though a person with FD is highly educated, he or she may not easily find any job opportunities like a normal person due to their major or minor physical and or physiological difficulties. Therefore, they remain unemployed or inactive until they gain quality employment opportunities in keeping with their educational qualifications. Therefore, increasing years of education decrease the probability of a person with FD being employed by 0.31% with reference to the base category. This shows the issues in relation to being employed in decent work for persons with FD. According to Blackaby et al. (1999), generally disabled persons gain only a few years of education. So, increasing or investing in education helps to increase their employment probability. However, Yelln & Tupin (2003) revealed that although persons with disabilities have any educational levels, their employment probability is low.

Per-capita income is the second factor that deals with economic potential of the persons with FD. This has established a significant positive relationship with employment probability of functional difficulties, since they have financial capabilities to start their own business. Social networks that facilitate employment opportunities are also wider for the higher income group. Therefore, having high per capita income increases the employment probability of a person with FD by 0.36% in comparison to the base category. Also, Ho (2002) stated that household income of employed persons with disabilities is higher than the non-employed persons with disabilities.

Therefore, the importance of socio-economic factors in employment decision making of persons with FD was proved by this study supporting the hypothesis 3.

The residential sector is important among geographical/location factors. Being a resident in the urban sector is a significant factor for employment probability among person with FD while estate sector is insignificant in comparison to the rural sector in the base category. Generally, the urban sector is very competitive. If a person lives in the rural sector, there are employment opportunities based on agriculture and other self-employment opportunities while the urban sector is generally highly competitive even for persons without any disabilities due to the working environments with high competence and efficiency. The persons with FD at the bottom of the job queue are in this sector. Therefore, living in the urban sector decreases the probability of a person with FD being employed by 7.24% with reference to the base category. According to the Ho (2002), it has been revealed that a large number of non-employed persons with disabilities live in metropolitan areas.

The fourth hypothesis of this study was also statistically established with the proved relationship between the residential sector and employment choice of persons with functional difficulties.

Pseudo R square for the model is 0.2358 and it explains that 23.58% of the employment probability of persons with FD is described by the independent variables in the model.

The Likelihood Ratio test is used to identify whether or not the independent variables create a significant effect on employment probability of those with FD and the P value for the test is less than the 5% level. It means, all the independent variables in the model create a significant effect on the employment probability of persons with FD. Therefore, the above model has overall validity.

6. CONCLUSION AND POLICY RECOMMENDATIONS

The study has revealed that being male, being married, per capita income, disability characteristics (only hearing difficulty, walking difficulty, only remembering difficulty, only communication difficulty, only self-care difficulty, only seeing difficulty, dual difficulty) are significantly and positively affect the employment probability of persons with FD with respect to the base category. Also, age, ethnicity (Sri

Lankan Tamil, Moor and other ethnicities), years of education, residential sector (Urban) significantly and negatively affects the employment probability of those with FD with respect to the base category. Further, Indian Tamils and the estate sector are statistically insignificant variables for employment probability of people with FD.

6.1. Research contribution

This study makes theoretical and empirical contributions to the Sri Lankan literature on labour supply studies. Most of the theories are related to the general labour supply and employment characteristics of people and do not provide an appropriate theoretical framework for persons with functional difficulties. Further, those theories examined less of the factors that associated with employment of persons with FD. This study contributes towards generating new knowledge about key drivers of gaining employment in the selected group for Sri Lanka. According to the empirical contribution, most of the previous researches have defined and analysed whether or not having disabilities has an impact on employment. They do not check on how each disability category, dual disability and multiple disabilities affect employment, and it has not been measured sufficiently. However, this study explored these distinctive factors. This study area too has not been properly and sufficiently explored in previous studies in Sri Lanka and in the world context. Therefore, this study generates new empirical contributions to the existing knowledge, so as to understand the determinants of employment probability of persons with functional difficulties. Therefore, this study generates new contributions to the knowledge in these aspects.

6.2. Policy implications

Providing facilities to persons with FD who are in the older age category to engage in self-employment or own businesses by offering proper advice and technology and providing opportunities for them to market their own products in the local and foreign markets. This would be an important policy option to achieve decent work targets of the country with the involvement of the Ministry of Industries and Commerce and the Ministry of Small and Medium Business and Enterprise Development.

New self-employment opportunities should be introduced and persons with seeing or visual difficulties should be encouraged under the Visually Handicapped Trust Fund Act.

The Ministry of Skills Development and Vocational Training should conduct workshops and training sessions for unmarried people with FD to start new businesses for their effective inclusion in the labour market.

Creating decent work opportunities for educated persons with FD should be included into the policy dialogue to achieve labour market goals under sustainable development goals of the country. Both schools and work places should be facilitated with Braille printed materials, computer and other equipment for those who suffer visual difficulties. Awareness programmes on sign language for persons with hearing and communication difficulties in workplaces would be an important intervention to facilitate decent work requirements for persons with disabilities. The Sri Lanka Council for the Blind should improve the Braille system for those with visual difficulties by conducting workshops and also employ them in relevant occupations.

The Government should identify the different job opportunities in the urban, rural and estate sectors and make available proper job opportunities through the Provincial Councils for persons with FD.

Further, the Ministry of Plantation Industries, the Ministry of Agriculture as well as the plantation authorities should encourage and provide financial support to persons with FD to engage in plantation and cultivation activities such as tea growing, field crop and vegetable growing, as crop farm workers, tea pluckers and paddy growers etc.

The Ministry of Labour should arrange easy access to workplaces according to the different disability types. Also, providing auxiliary equipment to people with major disabilities for their employment is

also very important. For example, providing wheelchairs for walking difficulty persons, hearing aids for hearing difficulty persons etc. should be done by involving NGOs and other relevant organizations.

Women with FD should be empowered for employment opportunities such as cultivation, handicraft occupations, tailoring etc. by the Association of Disabled Women.

The Ministry of Labour should establish agencies to offer employment opportunities for those with FD.

ACKNOWLEDGEMENT

Authors would like to acknowledge the Department of Census and Statistics in Sri Lanka for providing the micro level data of the Sri Lanka Labour Force Survey, 2018 for this study.

REFERENCES

- Ang, M. C., Ramayah, T., & Amin, H. (2015). A theory of planned behavior perspective on hiring Malaysians with disabilities. *Equality, Diversity and Inclusion: An International Journal*.
- Anomsari, E. T., & Mursalim, S. W. (2020). Mainstreaming Disability: Challenges and Strategies Toward Equality and Decent Work in Indonesia. *Soshum: Jurnal Sosial dan Humaniora*, 10(1), 1-9.
- Arnade, S., & Haefner, S. (2006). Gendering the draft comprehensive and integral international convention on the protection and promotion of the rights and dignity of persons with disabilities. *DPI, Berlin*
- Arunatilake, N. (2016). Labour Market Characteristics-Thematic Report based on Census of Population and Housing 2012.
- Barnay, T., Duguet, E., Le Clainche, C., Narcy, M., & Videau, Y. (2015). The impact of a disability on labour market status: A comparison of the public and private sectors. *Annals of Economics and Statistics/Annales d'Économie et de Statistique*, (119/120), 39-64.
- Blackaby, D., Clark, K., Drinkwater, S., Leslie, D., Murphy, P., & O'Leary, N. (1999). Earnings and employment opportunities of disabled people. *Department for Education and Employment, Research Report*, (133).
- Bliksvær, T. (2018). Disability, labour market participation and the effect of educational level: compared to what?.
- Bonaccio, S., Connelly, C. E., Gellatly, I. R., Jetha, A., & Ginis, K. A. M. (2019). The participation of people with disabilities in the workplace across the employment cycle: employer concerns and research evidence. *Journal of Business and Psychology*, 1-24.
- Brown, C. L., & Emery, J. C. (2009). The impact of disability on earnings and labour force participation in Canada: Evidence from the 2001 PALS and from Canadian case law. *J. Legal Econ.*, 16, 19
- Census of Population and Housing (CPH) 2012 - Sri Lanka, Department of Census and Statistics, Sri Lanka
- Chi, C. G. Q., & Qu, H. (2004). Integrating persons with disabilities into the work force: A study on employment of people with disabilities in foodservice industry. *International journal of hospitality & tourism administration*, 4(4), 59-83.
- DeLeire, T. (2000). The wage and employment effects of the Americans with Disabilities Act. *Journal of human resources* 693-715.

Department of Census and Statistics (DCS) 2012 , Disability in Sri Lanka

<https://unstats.un.org/unsd/demographic-social/meetings/2016/bangkok--disability-measurement-and-statistics/Session-6/Sri%20Lanka.pdf>

Disabled World, 2019, Definition, Types and Models of Disability

Friedman, C. (2020). The relationship between disability prejudice and disability employment rates. *Work*, (Preprint), 1-8.

Global Disability Summit. (2018). Routes to economic empowerment. London: International Disability Alliance.

Grammenos, S. (2013). European comparative data on Europe 2020 & people with disabilities.

Haveman, R., Holden, K., Wolfe, B., Smith, P., & Wilson, K. (2000). The changing economic status of disabled women, 1982–1991 Trends and their determinants. In *The economics of disability*. Emerald Group Publishing Limited.

Ho, P. (2002). Disability and employment status among older workers. *Retrieved September, 1, 2006*.

Hotchkiss, J. L. (2004). A closer look at the employment impact of the Americans with Disabilities Act. *Journal of Human Resources*, 39(4), 887-911.

Hunt, C. S., & Hunt, B. (2004). Changing attitudes toward people with disabilities: Experimenting with an educational intervention. *Journal of Managerial Issues*, 266-280.

International Classification of Functioning (ICF),2001: Disability and Health

Jensen, J., Sathiyandra, S., Rochford, M., Jones, D., Krishnan, V., & McLeod, K. (2005). Work participation among people with disabilities: Does the type of disability influence the outcome?. *Social Policy Journal of New Zealand*, 24, 134-159.

Jones, M. K. (2011). Disability, employment and earnings: an examination of heterogeneity. *Applied Economics*, 43(8), 1001-1017.

Jones, M. K., Latreille, P. L., & Sloane, P. J. (2006). Disability, gender, and the British labour market. *Oxford Economic Papers*, 58(3), 407-449.

Lundberg, S. J., & Startz, R. (1983). Private discrimination and social intervention in competitive labour market. *The American Economic Review*, 73(3), 340-347.

Maroto, M., & Pettinicchio, D. (2014). Disability, structural inequality, and work: The influence of occupational segregation on earnings for people with different disabilities. *Research in Social Stratification and Mobility*, 38, 76-92.

Matthews, R. J., Smith, L. K., Hancock, R. M., Jagger, C., & Spiers, N. A. (2005). Socioeconomic factors associated with the onset of disability in older age: a longitudinal study of people aged 75 years and over. *Social science & medicine*, 61(7), 1567-1575.

McFarlin, D. B., Song, J., & Sonntag, M. (1991). Integrating the disabled into the work force: A survey of Fortune 500 company attitudes and practices. *Employee Responsibilities and Rights Journal*, 4(2), 107-123.

McKinney, E. L., & Swartz, L. (2019). Employment integration barriers: Experiences of people with disabilities. *The International Journal of Human Resource Management*, 1-23.

Mizunoya, S., Yamasaki, I., & Mitra, S. (2016). The disability gap in employment rates in a developing country context: new evidence from Vietnam. *Suguru Mizunoya and Izumi Yamasaki and Sophie Mitra, (2016) "The Disability Gap in Employment Rates in a Developing Country Context: New Evidence from Vietnam", Economics Bulletin*, 36(2), 771-777.

- Mussida, C., & Sciulli, D. (2016). Disability and employment across Central and Eastern European countries. *IZA Journal of Labor & Development*, 5(1), 1-24.
- Naami, A., 2015, 'Disability, gender, and employment relationships in Africa: The case of Ghana', *African Journal of Disability* 4(1)
- Naraharisetti, R., & Castro, M. C. (2016). Factors associated with persons with disability employment in India: a cross-sectional study. *BMC public health*, 16(1), 1-8.
- O'Donnell, O. (1998). *The effect of disability on employment allowing for work incapacity* (No. 9813). Department of Economics Discussion Paper.
- Smith, D. L. (2007). Employment status of women with disabilities from the Behavioural Risk Factor Surveillance Survey (1995–2002). *Work*, 29(2), 127-135.
- Sri Lanka Labour Force Survey (LFS)-2018 (Department of Census and Statistics)
- Sultana, Z. (2010). Agony of persons with disability - a comparative study of Bangladesh. *J. Pol. & L.*, 3, 212.
- Ta, T. L., & Leng, K. S. (2013). Challenges faced by Malaysians with disabilities in the world of employment. *Disability, CBR & Inclusive Development*, 24(1), 6-21.
- Trani, J. F., & Loeb, M. (2012). Poverty and disability: A vicious circle? Evidence from Afghanistan and Zambia. *Journal of International Development*, 24, S19-S52.
- Verbrugge, L.M., Jette, A.M. (1994). The disablement process, *Social Science & Medicine*, 38(1), 1-14
- Webber, D. J., Pacheco, G., & Page, D. (2015). Temporary versus permanent employment: Does health matter? *Australian Journal of Labour Economics*, 18(2), 169.
- Webster Jr, M., & Hysom, S. J. (1998). Creating status characteristics. *American Sociological Review*, 351-378.
- World Health Organization (WHO), 2011
- World Report on Disability, Easy read (2011) ISL017 11, World Health Organization (WHO) and World Bank
- Yelln, E. H., & Trupin, L. (2003). Disability and the characteristics of employment. *Monthly Lab. Rev.*, 126, 20
- Zamo-Akono, C. (2013). Disability and labour force participation in Cameroon. *work*, 3(1).
- Zhu, X., Law, K. S., Sun, C., & Yang, D. (2019). Thriving of employees with disabilities: The roles of job self-efficacy, inclusion, and team-learning climate. *Human Resource Management*, 58(1), 21-34.