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Household Level and Individual Antecedents of Employment Status in Malawi

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Abstract: In the face of high levels of poverty and unemployment, there is need to dissect and turn upside down any possible explanations that can assist in discovering a working formula. The most recent data collected by statistics office of Malawi, has information on the employment status of individuals and some important social economic characteristics. This paper uses the data to uncover the socioeconomic and household level antecedents of employment status of individual using the individual set of data. The main variables used were age, gender, literacy, religion, disability, and education level to properly profile the nature of individuals that are employed, to see if this is an issue of the supply side of the labour force or the demand side of labour from the industry. An understanding of this dynamic can go a long way in finding lasting solutions to the unemployment questions and subsequently the poverty question. The study used descriptive analysis, cross tabulation, and a binary logistic regression model to analyse the data. The results showed that males had a higher chance of getting employment as compared to the counterpart women, being literate also had a higher chance of getting employment than those who were illiterate. Age of an individual showed that older people up to a certain age had a better chance of getting employed than the younger generation and on education level, those with at-least some form of education had a better chance of being employed than those without, the disabled had a lower chance of getting employed than those not disabled. Lastly the study recommended policy makers to emphasise on the policy of increase in school attendance across gender to improve the literacy levels in the country and the level of education. Policies on gender discrimination in workplaces should also be emphasised. Government should introduce and increase the number of incubators of SMMEs to enhance entrepreneurship in the country which later may have.

Keywords: Household; individuals; employment status; poverty; binary logistic regression; antecedents

JEL Classification: J2; J21; J23

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1. Introduction

Poverty reduction as stipulated in the global Agenda 2030, which is also understood as goal one in the sustainable development goals (SDGs) and in the Malawi Vision 2063, remains a priority for both national and international organisations (Nation Planning Commission (NPC), 2021; UNDP, 2020; World Bank, 2020a). There is an effort both at national level in Malawi and at international level to find lasting solutions to the poverty question. In Malawi the levels of unemployment have been very high especially among the youth (Nation Planning Commission (NPC), 2021). Although one can also question the validity of the statistics as the definition of employment is suspect to a greater extent (S. H. Dunga, 2014). The National Statistics Office (NSO) of Malawi, a government department responsible for data collection and statistical estimates for Malawi reports unemployment to be around 5.6 percent in 2019 and 6.0 percent in 2020 (ILO, 2022) clearly this is not accurate however the definition of unemployment as used by NSO is so narrow that anyone who may have done any piece work in the last two weeks including those in subsistence farming are considered as employed, thus it makes a mockery of the unemployment measure as a statistic to be relied on to determine the economic wellbeing of the country. If a proper definition of employment was used where employment should mean a secure job that earns one above the minimum wage, the unemployment figures would be alarming.

The definition used by NSO is in keeping with the conceptualisation of the International Labour Organisation (ILO) as they define employment as *"All persons of working age who during a specified brief period such as a week or one day, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work)* (Bourmpoula et al., 2015; ILO, 2017)*"* This definition is clearly misleading if one considers meaningful employment that should be created in an effort to combat poverty. Clearly, the application of this definition rightly so, by the NSO of Malawi leaves Malawi with unemployment figure that are better than those of developed countries. Leaving the estimations and the methodological misgiving aside, there is still enough information available especially from the raw data collected by National statistical Office of Malawi that is useful in painting a picture of the employment situation in Malawi, quality of the employment notwithstanding. This paper uses the data collected in 2019 and draws conclusions as regards the social economic characteristics of those that reported to be in employment.

The rest of this paper is organised as follows, the section that follows will be a literature review, where further interrogation with the literature in terms of employment conceptualisation and empirical applications are reported and discussed. The third section of the paper presents the methodology employed in the statistical estimations and analysis and the data sources for the data used in the

analysis. The fourth section of the paper presents the results and discussions emanating from the statistical estimations explained in section three. And the fifth and last section of the paper presents the conclusions drawn from both the literature analysis and the statistical estimations.

2. Literature Review

The link between poverty reduction and employment is ubiquitous in the literature (Bourmpoula et al., 2015; Kapsos, 2006; Khan, 2007) The understanding is that poverty is highly linked to income to the extent that a number of poverty measures are purely based in income (Grobler & Dunga, 2019; Han et al., 2020; Sen, 1976) Gainful employment should however be the goal of economic policies as opposed to jobs that leave people still trapped in poverty. There are several pre-requisites for one to achieve gainful employment especially in periods of high unemployment where labour has less to no bargaining power when there is a high supply of labour in the face of diminishing demand for the same.

2.1. Education in the Face of 4IR and Employment

Human capital theory postulates that education is an investment which must yield a return higher than the capital outlay for such skills so as to yield a positive return, usually in terms of gainful employment (Laura & Jeff, 2017). Thus, Theodore Schults (1960) conceived education not as just a demand for Knowledge but for productive knowledge that would be useful in helping the recipient to be more productive. Thus, education attainment would be one of the determinants of employment status of an individual. Education does not only provide a measure, inaccurate as it maybe, of the expected productivity of an individual, hence it is used as a screening tool for recruitment (Assaad et al., 2002; Dunga & Sekatane, 2014). The literature shows that many countries have seen a movement from unskilled and semi-skilled labour to highly skilled labour. Although skilled labour is associated with a high cost on the employer in terms of salaries, the argument could be that productivity is more certain with quality of labour than quantity Bhorat (2007). There are new trends globally that are going (it is not done already) to revolutionize the workspace. The fourth industrial revolution (4IR) has also necessitated certain basic skills as a minimum requirement for labour as technology has become part of the work environment (OECD, 2017). It goes without saying that a highly skilled and more technologically exposed applicant would have a greater chance of security employment than one with mild disposition to skills. Although there are also cases of high levels of graduate unemployment in countries that have made great strides in education participation by masses. Literature argues that the majority of incidences of unemployment among highly skilled people is usually frictional unemployment

and it basically has a short time span where within a certain given time they get employment (Dunga, 2016).

2.2. Employment and Gender

Gender equity has been a major policy imperative for decades. Many countries have overtime reduced the huge imbalance that existed between women and men in all sectors of life. That's gender equity and woman involvement or empowerment have also been recognised as one of the important goals in the sustainable development goals (SDGs) (Kring, 2017). The role of women in the labour market has been realised as lacking. There are several reasons that have led to this disparity however, overtime there has been significant strides made to bridge the gap and have unequal representation of men and women. One way of closing the gender gap is to make job available to women. Studies have shown a closing gap in gender disparity in other parts of the world compared to others (Durbin & Fleetwood, 2010; Perrons, 2009). There are several reasons that are traditionally considered as the main reasons for the disparity in the labour market between men and women. Overtime these have changed considerably with the western world having made more progress than Asia and Sub Saharan Africa (Durbin & Fleetwood, 2010; Khan, 2001; Perrons, 2009). Malawi just like several other developing countries; gender disparity starts from access to schooling all the way to the labour market. There are traditions that have also pulled the girl child back where she has been expected to be the helper at home and the boy child is give preference to go to school.

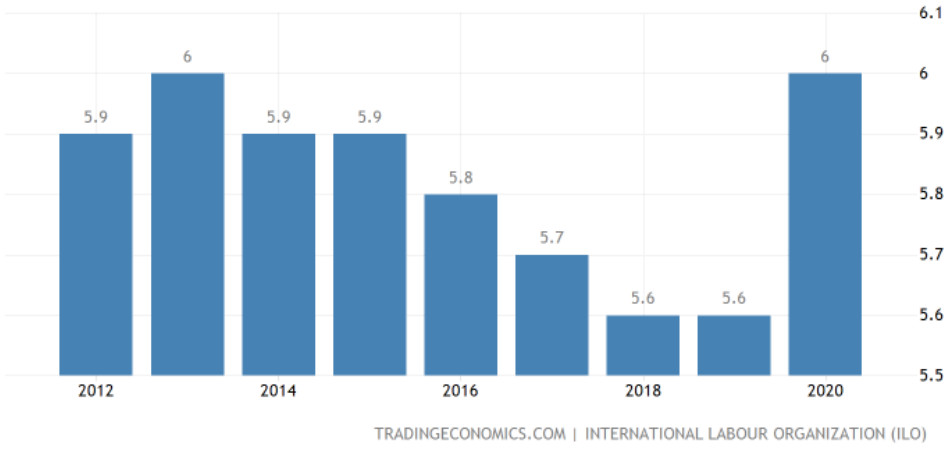
2.3. Employment and Age

The importance of age in employment has never been more relevant than now. The OECD (2019) pointed out that "*Never in history have people lived as long as they live today, mostly in good health. At the same time, people have fewer children than ever before, and birth rates continue to fall or remain at low levels. As a result, region after region and country after country is facing an unprecedented shift in the age structure of its population. The timing and extent of ageing differs across countries, but the development is widespread*'' (OECD, 2019:3) Other studies have shown that if the older workers are given the same access to training and other enhancements to cognitive ability, then their performance in not only good but improved (Chung et al., 2015).

Most of the people making up the unemployment percentage are the young people as such this is becoming a common global problem whereby most countries are struggling with increasing numbers of youth unemployment. There is therefore an uncontested link between employment and age (Dunga, 2016; Mncayi & Dunga, 2016; World Bank, 2020b). Research shows a quadratic link between employment

and age, where jobs are scarce when one is younger and also when one is above a certain age. The literature is also awash with cases of age discrimination in the workplace, where people are denied employment or training opportunity due to their age. This is common especially among the older employees. Thus, the importance of age in assessing employment is very crucial.

Unemployment measures in Malawi have not painted a correct picture especially because the definition used is so weak as to include piece work as employment. It also captures those that are in subsistence farming as self-employed and hence employed. Thus, the statistics available present Malawi as having unemployment rates of less than 6% which is to a greater extent misleading.



3. Methodology and Data Analysis

The study uses Malawi data from the World Bank on High-Frequency Phone Survey on COVID-19, a World Bank LSMS Harmonized Dataset that was collected between 2019 to 2022. The data comprises of a national survey from all regions of the country (Malawi), containing two data files, the household harmonised data and the individual data. The study then selected only the variables fit necessary for the study for the analysis. After data cleaning a sample size of 16317 was selected to be fit for the study. Because of the nature of the study the individual data set was mostly used as it includes the basic characteristics of individuals such as age, gender, marital status, literacy, education, and work.

3.1. Model Specification

The main aim of the study was to analyse the socioeconomic and household level antecedents of employment status of individuals using the individual data set. To

achieve the main objective, the study used statistical package for social sciences as a measuring tool to analyse the antecedents of employment status using age, gender, disability, marital status, and education level as the testing variables. The study further used descriptive analysis and cross tabulations to analyse, among others and to properly profile the nature of individuals that are employed and further to see if this is an issue of the supply side of the labour force or the demand side of labour from the industry. Finally, the study employed a binary logistics regression to access the antecedents of employment in the study area.

3.2. Regression Model Specification

The regression model was employed to investigate on the Household level and individual antecedents of employment factors that are significant in determining the probability of whether an individual will be employed or not. The regression model was established as follows.

The model uses employment status as a dependent variable whereby employment status is measured as a categorical variable with two categories namely employed and or not employed. The study further employed the following as the independent variables, gender, literacy rate, education level, disability, age and religion. A binary logistic regression was specified as follows.

$$ESt = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \varepsilon_i \quad (1)$$

The regression therefore will have all the variables of interest included as

follows.

$$ESt = \beta_0 + \beta_1(gender) + \beta_2(literacy) + \beta_3(education\ level) + \beta_4(age) + \beta_4(religion) + \beta_5(disability) \ldots \varepsilon_i \quad (2)$$

β_1_β_5 are the coefficients for the corresponding variables,

Where ESt is the dependent variable which is categorical measuring the probability of someone being employed or not employed and hence the dependent variable will be defined as follows.

1- employed, 0- not employed

β_0 is the constant

The other parameters are defined as follows,

$\beta_1 \rightarrow is\ the\ intercept\ term\ of\ the\ regression$

$\beta_{1,2,\ldots n}$
$\rightarrow are\ the\ coefficients\ corresponding\ to\ independent\ variables\ X_{1,2\ldots n}$

$\varepsilon_i \rightarrow is\ the\ error\ term\ of\ the\ regression$

4. Results and Discussion

This section discusses the results of the paper as follows. The first section discusses descriptive results followed.

4.1. Descriptive results

This section presents descriptive results of the population as follows.

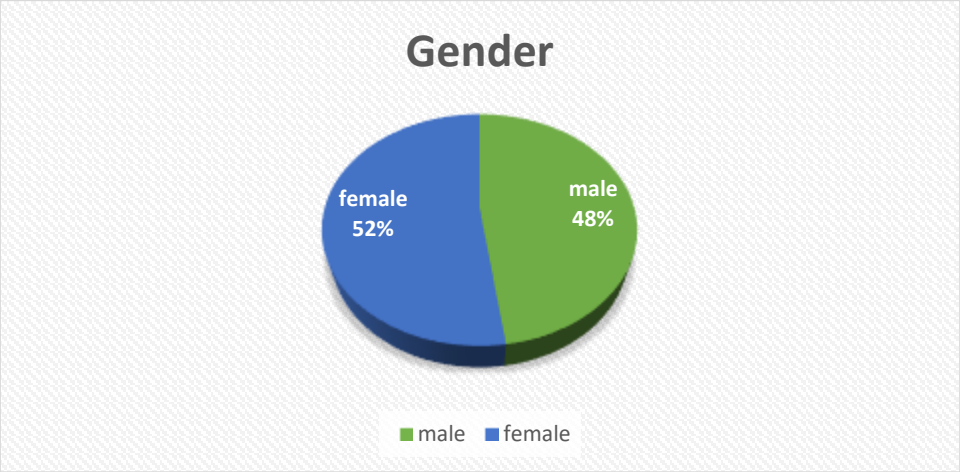


Figure 1. Gender Dynamics

Figure 1 presents results of gender dynamics of the study it shows that there is no significant difference between gender, 52 percent were female, and 48 percent were males.

Table 1. Education Level

highest level of education completed		
	frequency	percentage
0. none	8364	67%
1. primary	3697	29.6%
2. secondary	6	0.0%
3. tertiary	417	3.3%
missing Total	386 12484	23.6% 100.0%

Table 1 presents results of education level of population its shows that 67 percent of population had no education, those that attained primary education were higher 29 percent as compared with the other level primary 30 percent. As discussed in the literature section, education is one of the most important aspect which contributes to the requirements of one to get sensible employment, the descriptive results indicate the distribution of employment as not being proportionate with a higher percentage of the population having basic primary education, as such the country may experinence higher levels of unemployment especially in the unskilled labour force. The subsequent result is high levels of poverty.

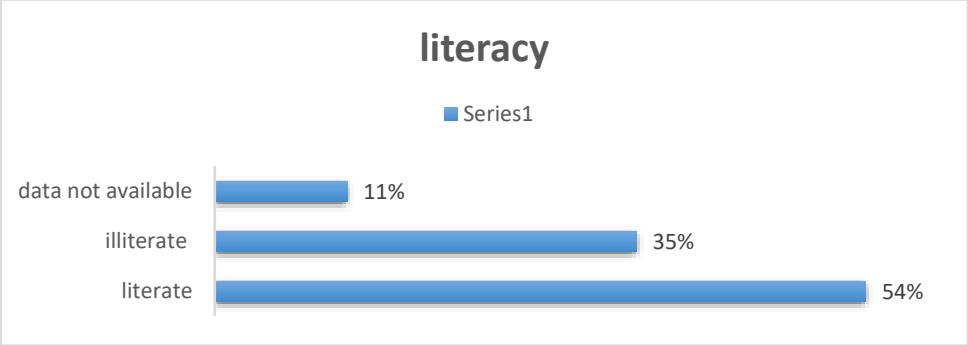


Figure 2. Literacy Level

The literacy levels of the population are presented in figure 2, the results indicate that 54 percent of the population were literate, and 35 percent were illiterate. Comparing the education levels of the population presented in table 1, the level of literacy could be from basic education or of primary education as the statistics indicated in the table.

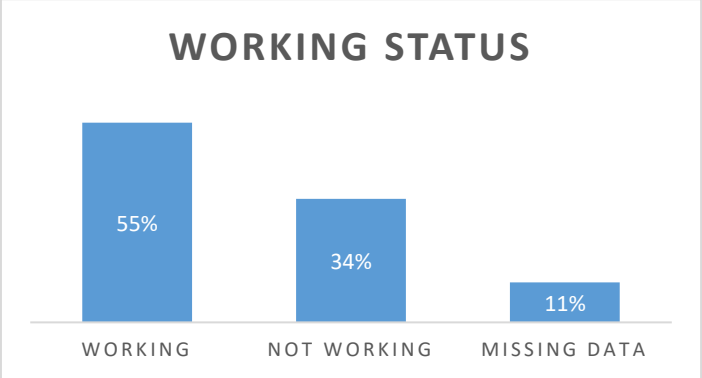


Figure 3. Employment Status

Figure 3 presents results of the employment status of the population; the results indicate that 55 percent of the population were working at the time data was collected and 34 percent indicated not working the rest of the data was recorded as missing

data. Comparing the results with education level, with a higher percentage of working population this could mean that most of those who indicated to be working could be in unskilled labour force. As discussed in the literature that the Unemployment measures in Malawi have not painted a correct picture especially because the definition used is so weak as it includes piece work as employment, and that it also captures those that are in subsistence farming as self-employed. This and could be the reason of the mismatch

4.2. Cross tabulation results of the study

This section presents cross tabulation between employment status and selected independent variables which have been chosen in the study as what may explain the differences in education status presented as follows;

Table 2. Cross Tabulation Literacy and Employment Status

			Literacy	
			0. NO	1. YES
Working status	0. NO	Count	3708	1864
		% Within Working status	66,5%	33,5%
		% Within Literacy	64,7%	21,0%
		% of Total	25,4%	12,8%
	1. YES	Count	2019	7027
		% within Working status	22,3%	77,7%
		% within Literacy	35,3%	79,0%
		% of Total	13,8%	48,1%

Table two presents cross tabulation results between working status (employment) and literacy level. From the results, it shows that from those who indicated to have not been working at that time data was collected, within the working status were, 35 percent indicated to have been literate while 77 percent indicated to be illiterate. Those who indicated to have been working at that time, within the working status 78 percent indicated to be literate while 22 percent indicated to be illiterate. The overall results shows that most of those working could at least read and or write but the level of the literacy is still questionable.

Table 3. Cross Tabulation Employment Status and Highest Level of Education

			Highest level of education completed				
			0. none	1. primary	2. secondary	3. tertiary	Total
Working status	0. NO	Count	2753	607	1	77	3438
		% within Working status	80,1%	17,7%	0,0%	2,2%	100,0 %
		% within Highest level of education completed	32,9%	16,4%	16,7%	18,5%	27,5%
		% of Total	22,1%	4,9%	0,0%	0,6%	27,5%
	1. yes	Count	5611	3090	5	340	9046
		% within Working status	62,0%	34,2%	0,1%	3,8%	100,0 %
		% within Highest level of education completed	67,1%	83,6%	83,3%	81,5%	72,5%
		% of Total	44,9%	24,8%	0,0%	2,7%	72,5%

Table 3 presents cross tabulation results of employment status and education level. In this regard education level is in four categories, comparing those who indicated to have been working at the time the data was collected within the working status it shows that, 62 percent had no any education qualification, 34 percent had primary qualification and 4 percent had tertiary qualifications. For those who indicated to have had not been working at the time data was collected, 80 percent had no education qualification, 18 percent had primary qualification and 2 percent tertiary education. The overall results indicate that with no and or lower qualification levels it's difficult to get employment, this could also mean as discussed earlier in the paper that there is high unemployment rate in the unskilled labour market due to increase in numbers of lower levels of education amongst most of the population in the country. The result is evidence to existing literature that, education attainment would be one of the determinants of employment status of an individual. The importance of education as argued by Theodore Schults (1960) states that there exist more advantages of education, that apart from demand for Knowledge it also contributes to productive knowledge that would be useful in helping the recipient to be more productive.

Table 4. Cross Tabulation Employment Status and Age in Categories

			Age			Total
			0-20	21-40	41-60	
Working status	0. NO	Count	5018	369	185	5572
		% within Working status	90,1%	6,6%	3,3%	100,0%
		% within age cat	60,7%	9,0%	8,3%	38,1%
		% of Total	34,3%	2,5%	1,3%	38,1%
	1. YES	Count	3243	3752	2051	9046
		% within Working status	35,9%	41,5%	22,7%	100,0%
		% within age cat	39,3%	91,0%	91,7%	61,9%
		% of Total	22,2%	25,7%	14,0%	61,9%
Total		Count	8261	4121	2236	14618
		% within Working status	56,5%	28,2%	15,3%	100,0%
		% within age cat	100,0%	100,0%	100,0%	100,0%
		% of Total	56,5%	28,2%	15,3%	100,0%

Table 4 presents results of cross tabulation between age and employment status from those who indicated to be employed 36 percent were between age 0 to 20 years, 42 percent were between 21 to 40 and 23 percent between 41 and 60. The statistics for those working under the age of 20 are worrisome, in normal circumstances this age group should be school going age, the results could mean most of them either dropped out of school to look for employment or only completed basic education. The results shows that age is a contributing factor to employment in the country. Its rather difficult for those below age of 20 to get employment this could be because of lack of experience from this age group but also below a certain age one may not be allowed to work as this could be regarded as child labour.

4.3. Regression Results

This section presents the regression results of our model, as explained in the methodology, the dependent variable used in the regression analysis was employment status, which was categorised into two groups, the employed and the unemployed. Thus, the regression was based on the nature of the dependent variable and hence a binary logistic regression was estimated with employed as a success category or coded as 1 and unemployed was coded as 0. Table 5 presents the frequency distribution of the two categories.

Table 5. Working Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	5572	34.1	38.1	38.1
	Employed	9046	55.3	61.9	100.0
	Total	14618	89.4	100.0	
Missing	System	1731	10.6		
Total		16349	100.0		

Source: Authors Calculations from the NSO data

The results in Table 5 shows that most of the respondents indicated to be in employment. This is dependent on the definition of what is considered as employment in the questionnaire. Other (S. H. Dunga, 2014) have disputed the categorisation of subsistence farmers as employed, however in this study we proceed to use the results as were reported in the survey. Also, of importance is how the variables in the regression were coded especially the categorical variables. This helps to make sense of the values and the signs of the coefficients associated with each variable in the regression results. Table 6 presents the variable coding table.

Table 6. Categorical Variables Coding

		Frequency	Parameter coding		
			(1)	(2)	(3)
Highest level of education completed	0. none	8364	1.000	.000	.000
	1. primary	3697	.000	1.000	.000
	2. secondary	6	.000	.000	1.000
	3. tertiary	417	.000	.000	.000
Religion	1. Christianity	7965	1.000	.000	
	2. Islam	1361	.000	1.000	
	3. other	3158	.000	.000	
Literacy	0. NO	3593	1.000		
	1. YES	8891	.000		
Sex	1. MALE	5949	1.000		
	2. FEMALE	6535	.000		
With Disability	0 not disabled	12194	1.000		
	1 disabled	283	.000		

Table 7 presents the regression results, it shows that almost all the variables were statistically significant with p-values of less than 0.01, for the 1 percent significance level. Only secondary level as a category did not have a statistically significant p-value, although the overall variable of education level was also statistically significant. The results are presented as follows;

Table 7. Regression Results

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Gender (1= male)	.359	.063	31.906	1	.000	1.431
	Religion (Other religions)			232.985	2	.000	
	Religion (Christianity)	1.277	.089	205.130	1	.000	3.584
	Religion (Islam)	1.544	.134	132.900	1	.000	4.684
	Literacy (1= illiterate)	-.451	.086	27.767	1	.000	.637
	Highest level of education completed (No education)			354.150	3	.000	
	Highest level of education completed (Primary)	.915	.050	333.482	1	.000	2.498
	Highest level of education completed (Secondary)	.897	1.096	.671	1	.413	2.453
	Highest level of education (tertiary)	.773	.128	36.290	1	.000	2.166
	Constant	.712	.023	936.351	1	.000	2.038
	Age	.060	.003	327.628	1	.000	1.062
	Disability (with disability)	2.163	.170	161.053	1	.000	8.693
	Constant	-1.702	.184	85.335	1	.000	.182

a. Variable(s) entered on step 1: gender, Religion, Literacy, Highest level of education completed, Age (Round 1+), disability.

4.3.1. Gender

The result in the regression shows that gender was statistically significant predictor of employment status in Malawi with a P-value of 0.000. The coefficient for gender was .359 which was positive, and since gender was coded as 1 for male and 0 for females, the positive coefficient indicates the relationship between males and the success category of the dependent variable which was employed. Thus, it implies that males in the sample were more likely to be employed than females with the odds of 1.431 represented by the Exp(B) which is the exponential value of the coefficient. This is in agreement with the literature (H. M. Dunga & Dunga, 2017; S. H. Dunga, 2017; Kring, 2017) where most studies have found women to be less active in the labour market or having a lower probability of securing employment as compared to males. There are studies that also indicated that even when women are employed, they tend to receive an income that is below the average income of males which mostly covered in gender based discrimination research (Baker et al., 2010; Chan, 2011; S. H. Dunga & Sekatane, 2014; Kring, 2017; OHCHR, 2012).

4.3.2. Religion

There are few studies that have considered religion as a determinant of employment status. In this study religion was also entered in the regression analysis. The information was only on Christianity and Islam, with all the other religions capture under other. The results were statistically significant and positive for both Christianity and Islam, where the positive coefficients (1.277 for Christianity) and (1.544 for Islam) had a P-value of 0.000 which was significant at the 1 percent level of significance. The positive coefficient implied that both Christians are Moslems were more likely to be employed as compared to the base category.

4.3.3. Literacy

Literacy is another variable considered in the study, entered as 1 for illiterate and 0 for literate. the results shows that literacy was statistically significant predictor of employment status with a P value 0.000. The coefficient was -.451 which was a negative, literacy being coded as 0 for literate and 1 for illiterate, it means that those that were illiterate were more unlikely to be employed as compared with the literate with the olds of .637 represented by Exp(B) which is the exponential value of the coefficient. The results are like the cross tabulations results in table 2 where it indicated that a higher percentage of those illiterate were not working. With the advancement of technology most jobs require someone who can atleast read and write job a as basis as housekeeping.

4.3.4. Highest Level of Education

Highest level of education was another independent variable being categorical was coded as 1 for no education and 0 otherwise. The results shows that Primary education, secondary education, and tertiary education were all statistically significant predictors of employment status with P value .000. The results shows that all mentioned independent variables had a positive coefficient, .915 for primary education, .897 for secondary education and .773 for tertiary education. The positive coefficients implied that an individual with primary, secondary and or tertiary education was more likely to get employed as compared to the base category which was someone with no education at all. The results make sense in a way that education is one component necessary for someone to get employment one may argue that the type of employment may differ according to the qualification held however, in this study the type of employment was not specified. The result is adding to the evidence found in the descriptive section that, education attainment would be one of the determinants of employment status of an individual. Also, argued the importance of education by Theodore Schults (1960) that there exist more advantages of education, that apart from demand for Knowledge it also contributes to productive knowledge that would be useful in helping the recipient to be more productive.

4.3.5. Age

Age was considered as a continuous variable in the regression model. The coefficient was statistically significant P value .000 which means age contributed to the probability of one being employed or not. The results indicate age had a positive coefficient of 0.060 and an odds ratio of 1.062 which suggest that with an increase in age increases the probability of one to be employed. The results can be related to the fact that as people get older, they become more matured hence acquired a lot more experience to get a job and, it's a norm that a person can only start working after a certain age hence younger people of below certain age may find it difficult to get a job.

4.3.6. Disability

Disability was another variable considered in the study, entered as 1 for not disabled and 0 for disabled. The coefficient was statistically significant P value .000 which means disability contributed to the probability of one either being employed and not employed. The results indicate the variable had a positive coefficient of 2.163 and an odds ratio of 8.693 which means those who were disabled were more unlikely to be employed as compared to their counterparts. The results are against the human rights laws of Malawi on employment equity (ILO, 1990).

5. Conclusion

The main aim of the study was to analyse the antecedents of employment status of individuals in Malawi, to achieve the main objective the study employed data from National statistics office in Malawi. Descriptive statistics, cross tabulations and a binary logistics regression were employed to analyse the data using SPSS as a statistical tool to analyse the data. Employment status was employed as the dependent variable with age, gender, literacy and level of education as the independent variables.

The descriptive results showed that according to gender there were more males 52% than females 48% from the sampled population, on education level, a larger population had no education 67%. Literacy levels showed that a larger population were literate 54%. From the cross-tabulation results, the first was on literacy and employment status, the results showed that according to those who were working, 22% indicated to be illiterate and 78% literate meaning literacy influenced employment status with only the literate being consumed in the labour force. On employment and level of education, the results showed that those who indicated to be working 60% had no education while those who indicated to not be working 80% had no education. On employment status and age for those who indicated to be employed, a higher percentage was between the age group 21 to 40 while those who

indicated to be unemployed the higher percentage was between the age group of 0 to 20.

Lastly the binary logistic regression model had employment status as a dependent variable. The variable was categorical with employed as a success category or coded as 1 and unemployed was coded as 0. The other independent variables were age, gender, literacy, disability, education level and religion. The results showed that age was statically significant variable at 1%, with a positive coefficient meaning that older people had a greater chance of being employed than younger people, to be specific below a certain age as per the descriptive results. On gender, males statistically significant at 1% and a positive coefficient .359 were found to be in a higher position of getting employment than females. Literacy levels being categorical variable with 1 for those illiterates, the results shows that illiterate was statistically significant at 1% and had a negative coefficient of -.451 meaning those who were illiterate were very unlikely to get a job as compared to the counterpart's literate. similarly on education level those who were educated had a greater chance of getting employment than those with no education. under religion Christians and Moslems had a better chance of getting employment than those of other religion and lastly on disability the results showed that those who were disabled were less likely to get employed than their counterpart not disabled group. The results can be concluded that there exist several determinants that influence the chances of one to get employed and from the results gathered in this study some of the individual and household characteristics impacting one to get employment are no education, being illiterate, being of young age, being female and being of certain type of religion group. The final variable, disability indicated that those who were disabled were more unlikely to get employment, this is against the Malawi laws which states everyone should be treated equally regardless of their physical abilities it is mandatory for companies to make sure to have facilities that would enable the disabled to use in the workplaces.

6. Recommendation

The study recommends that in a way to solve the problem of unemployment and in a nutshell poverty in Malawi, policy makers should have deliberate policies that should encourage the younger generation to go to school, from what the study has observed apart from the other variables being educated which also leads to improving literacy levels, may improve the chances of one getting a job. Policies of no discrimination in workplaces should also be emphasised to improve the gender dynamics in workplaces. Utmost policies of entrepreneurship should also be emphasised in the country, the government should introduce more funding schemes for SMMEs to assist them into growing their business as well enhance SMMEs by creating or increasing number of incubators in the country. Lastly, there should not

exist any discrimination in terms of employment, every person has the right to employment regardless of the basis of a person's disability.

References

Assaad, R.; El-Hamidi, F. & Ahmed, A. U. (2002). *Discussion Paper BRIEFS* (Discussion paper 88).

Baker, C. K.; Billhardt, K. A.; Warren, J.; Rollins, C. & Glass, N. E. (2010). Domestic violence, housing instability, and homelessness: A review of housing policies and program practices for meeting the needs of survivors. *Aggression and Violent Behavior*, 15(6), pp. 430–439. https://doi.org/10.1016/j.avb.2010.07.005.

Bourmpoula, Kapsos & Pasteels (2015). Employment by status in employment. *Conference of Labour Statistics*, pp. 3–5.

Chan, Y. H. (2011). Multinomial logistic regression. *Singapore Medical Journal*, *46*(6), pp. 259–269. https://doi.org/10.1016/j.cose.2005.05.003.

Chung, J.; Park, J.; Cho, M.; Park, Y.; Kim, D.; Yang, D. & Yang, Y. (2015). A study on the relationships between age, work experience, cognition, and work ability in older employees working in heavy industry. *Journal of Physical Therapy Science*, *27*(1), pp. 155–157. https://doi.org/10.1589/jpts.27.155.

Dunga, H. M. & Dunga, S. H. (2017). Coping Strategies Among the Food-Insecure Household in Malawi, a Case of Female and Male-Headed Household in South Eastern of Malawi. *International Journal of Social Sciences and Humanity Studies*, *9*(1), pp. 91–107.

Dunga, S. H. (2014). *The Channels of Poverty Reduction in Malawi : a District Level Analysis By* (Issue April). NWU South Africa.

Dunga, S. H. (2016). An Exploratory Study Of The Variation In Unemployment Length Of Graduates Of Different Degree Programs. *International Business & Economics Research Journal (IBER)*, 15(2), p. 69. https://doi.org/10.19030/iber.v15i2.9636.

Dunga, S. H. (2017). *A Gender and Marital Status Analysis of Household Income in a Low-Income Township*. *62*(1), pp. 20–30. https://doi.org/10.1515/subboec-2017-0002.

Dunga, S. H. & Sekatane, M. B. (2014). Determinants of employment status and its relationship to poverty in bophelong township. *Mediterranean Journal of Social Sciences*, *5*(21), pp. 215–220. https://doi.org/10.5901/mjss.2014.v5n21p215.

Durbin, S. & Fleetwood, S. (2010). Gender inequality in employment: Editors' introduction. *Equality, Diversity and Inclusion: An International Journal*, 29(3), pp. 221–238. https://doi.org/10.1108/02610151011028831.

Grobler, W. C. J. & Dunga, S. (2019). *Analysis of Food Security Status Among the Elderly in South Africa*. *September*, pp. 91–102. https://doi.org/10.20472/iac.2019.050.013.

Han, J.; Meyer, B. D. & Sullivan, J. X. (2020). Income and poverty in the COVID-19 pandemic. In *Brookings Papers on Economic Activity*. No. 27729; Vol. 2020, Issue Special Edition). https://doi.org/10.1353/eca.2020.0007.

ILO. (2017). ILO Labour Forces Estimates and prjections: 1990-2030 Methodological description. In *Ilo: Vol. Vol. 2017*, (Issue No. November,). https://www.ilo.org/ilostat-files/Documents/LFEP.pdf.

Kapsos, S. (2006). *The employment elasticity of growth: Trends and macroeconomic determinants*. https://doi.org/10.1057/9780230627383.

Khan, A. R. (2001). *EMPLOYMENT POLICIES FOR POVERTY REDUCTION* (Discussion Paper 1; Issues in Employment and Poverty (ILO), Issue November).

Khan, A. R. (2007). Growth, employment and poverty: An analysis of the vital nexus based on some recent UNDP and ILO/SIDA studies. In *DESA Working Paper No 49* (Vol. 49, Issue 49). http://www.un.org/esa/desa/papers.

Kring, S. A. (2017). Gender in employment policies and programmes: What works for women? *International Labour Organization*, *235*, pp. 1–71. www.ilo.org/publns.

Laura, H. & Jeff, B. (2017). The Introduction of Human Capital Theory into Education Policy in the United States Laura. *History of Political Economy*, *49*(4), pp. 537–574.

Mncayi, P. & Dunga, S. H. (2016). Career choice and unemployment length: A study of graduates from a South African university. *Industry and Higher Education*, 30(6), pp. 413–423. https://doi.org/10.1177/0950422216670500.

Nation Planning Commission (NPC). (2021). *Malawi vision 2063: An Inclusively Wealthy and Self-reliant Nation*.

OECD. (2017). Future of work and skills. *Organisation for Economic Co-Operation and Development*, *February*, 24.

OECD. (2019). Agwing and employment policies: Working better with age. *Ageing and Employment Policies*. https://doi.org/10.1787/c4d4f66a-en.

OHCHR. (2012). *Women and the Right to Adequate Housing. An Introduction to Central Issues* (Issue HR/Pub/11/02).

Perrons, D. (2009). Women and Gender Equity in Employment Patterns, Progress and Challenges. *Institute of Employment Studies*, *WP23*, pp. 1–23.

Sen, A. (1976). Poverty: An Ordinal Approach to Measurement. *Econometrica*, *44*(2), pp. 219–231.

UNDP. (2020). Global MPI 2020 – Charting pathways out of multidimensional poverty: Achieving the SDGs. In *United Nations Development Programme (UNDP) and Oxford Poverty and Human Development Initiative (OPHI)* (Issue July). http://hdr.undp.org/sites/default/files/2020_mpi_report_en.pdf.

World Bank. (2020a). *Poverty and Shared Prosperity 2020: Reversals of fortune: Vol. 3678 LNBI*. https://doi.org/10.2307/j.ctv14npk3p.9.

World Bank. (2020b). The Economic and Social Impact of Covid -19: How COVID-19 Could Affect Poverty and Household Welfare in the Western Balkans. In *World Bank Group* (Issue 17). http://documents1.worldbank.org/curated/pt/236311590680555002/pdf/The-Economic-and-Social-Impact-of-COVID-19-Poverty-and-Household-Welfare.pdf.