



## **Determinants of the Job Search Method among Rural Youth: The Case of Vhembe District in South Africa**

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### **ABSTRACT**

The paper investigates the extent to which socio-demographic factors influence the job search methods used by unemployed youth when seeking jobs in South Africa. The study used cross-sectional data on a representative sample of youth in the Vhembe District of South Africa's Limpopo Province. A structured questionnaire was administered on a face to face basis to collect data from the respondents. A multistage probability sampling procedure was used to select a total of five hundred and eighty respondents. A multinomial logistic regression model was used to investigate how socio-demographic characteristics impact on the methods used by unemployed youth in their job search. The results show that only education has a bearing on the employment search method adopted, by the youth. Those who had secondary school education and below were more likely to search for employment at worksites, seek assistance from friends and relatives, but less likely to respond to adverts in the media than their counterparts with tertiary education. The latter used the method of direct application. The study recommends that Human Resource experts and managers should build their recruitment and selection strategies around adverts in the media, seek assistance from friends and relatives and using worksites as recruitment areas.

**Keywords:** Determinants, Job search methods, multinomial logistic regression, Unemployed Youth, Vhembe District, South Africa

**JEL Classifications:** J64; J21; C41

### **1. INTRODUCTION**

Unemployment among young people has been and continues to be South Africa's main policy challenge (Bernstein, 2008). Yu (2013) stated that chronically high young unemployment is one of South Africa's most serious social and economic concerns. It has become a contentious issue as the rate is much higher than that of adults in most countries of the world (Dale, 2014). Almost three quarters (70.8%: 3, 4 million) of the 4.8 million South Africans who are unemployed are youths between the ages of 15 and 34 (Stats SA, 2013). High and rising youth unemployment is a serious concern in South Africa where only one in three young people of working age is employed (Shankar, Cooper and Koh, 2016). This notion was also supported by the Statistics South Africa (2018) who pointed out that unemployment rate among young people aged 15-34 was 38.2%, implying that more than one in every three-young

people in the labour force did not have a job in the first quarter of 2018. It was also stated that the burden of unemployment is also concentrated amongst the youth as they account for 63.3% of the total number of unemployed persons. The unemployment rate among the youth is higher irrespective of education level. The graduate unemployment rate was 33.5% for those aged 15-24 and 10.2% among those aged 25-34 years, while the rate among adults (aged 35-64 years) was 4.7%. According to Statistics South Africa (2015), youth unemployment rates for South Africa between 2008 and 2015 were 32.7% in 2008; 33.7% in 2009; 35.7% in 2010; 36.1% in 2011, 35.8% in 2012; 36.2% in 2013; 36.1% in 2014 and 36.9% in 2015. In addition, youth unemployment rates for South Africa between 2012 and 2019 were 35.8% in 2012; 36.2% in 2013; 36.1% in 2014; 36.9% in 2015; 37.1% in 2016; 38.4% in 2017; 38.9% in 2018 and 40.1% in 2019, and 46.1% in 2020 (Stats SA, 2020). This trend in youth unemployment from 2008

to 2020 indicates that youth unemployment in South Africa is a cause for concern.

Youth unemployment has severe economic and social consequences. It is a serious concern as it impacts severely on the economic welfare and production of communities, resulting in loss of human capital, social exclusion, crime, and social instability (Kingdon and Knight, 2001). Furthermore, if timely intervention is not provided, youth unemployment can lead to a slew of socio-economic issues, including violence, substance abuse, mental health issues, theft, prostitution, and migration, all of which can result in societal instability and riots. Anh (cited in Tangtipongkul and Wangmo, 2017). This assertion is supported by Freeman's (1999) study, which states that youth inactivity (not in school, not looking for a job and out of the labour force), is assumed to be the source of other social ills such as youth violence. Furthermore, lack of employment opportunities in rural areas triggers rural to urban migration among young people who migrate to bigger cities in search of better economic opportunities (Tolan, 2005). However, these migrants become jobless in the unfamiliar environment of the city where they may not have networks and where they can become destitute as the cost of living is higher in urban areas (IRN, 2009). Unemployed youth, according to Odeh and Okoye (2014), may also be a source of violent uprisings that destabilize society. This was also supported by Alanana (2003) who pointed out that, unemployment generates socially unapproved behaviour among the unemployed youths such as armed robbery, drug use and abuse and part-time commercial sex work. The issue of youth unemployment extends beyond young people and their families; it impacts business, government and society at large (Shankar, Cooper and Koh, 2016).

With unemployment stubbornly remaining high in the last decade, attention is now being paid to factors that determine the job search behavior of the unemployed, particularly among the youth, as this may determine whether they get employment or remain unemployed. At present, the number of empirical studies in South Africa, on the kind of search methods used by unemployed youth and the reasons why they employ these strategies, are very few.

It is important to try and understand which factors determine the choice of the search methods. One may ask if the choice of the search method is solely influenced by its success rate in getting people employed or by other factors. This paper argues that the household and environment in which the youth find themselves, as well as labor market conditions, enable or restrain their choice of search methods. The paper used a random utility multinomial logit model of choice to investigate the extent to which socio-demographic factors guide job search methods among unemployed youth in the Vhembe District of South Africa. This paper adds to existing literature on the factors influencing the choice of job search methods.

The rest of the paper is organized as follows: Section 2 provides a review of related literature; section 3 describes the methodology employed in the study, and this comprises the econometric analysis of the cross-sectional data; in section 4 discusses and presents the results; while section 5 presents conclusions and policy recommendations.

## 2. LITERATURE REVIEW

This section surveys the results of certain scholars, researchers, and writers to provide a review of some connected literatures on this topic.

### 2.1. Theoretical Review

#### 2.1.1. Job Search

Job searching is the act of looking for employment, due to unemployment or discontent with a current position. The immediate goal of job seeking is usually to obtain a job interview with an employer, which may lead to getting hired. The job hunter or seeker typically first looks for job vacancies or employment opportunities (Goal, 2009). Roshchin and Marova (2004) point out that the job search problem is a consequence of information imperfection and uncertainty that exists on the labor market. Searching for a job is one of the most important processes in the labor market. Job seekers' requirements must coincide with characteristics of the real workplaces offered by employers within this process. During the search, the worker collects information on the distribution of job offers and on the most successful job search strategies to adopt. The worker can influence the search outcome by putting effort into the job search and by choosing among several search methods (Ngarambe, 2008; Weber and Mahringer, 2007). According to Boutte (2006), educational attainment impacts job searching because individuals with college or higher levels of education are usually recruited by companies at higher rates than those with lower educational attainments.

Generally, a job search takes place through two distinct channels, namely formal and informal. The formal methods specifically emphasize the impersonal intermediaries between searchers and firms, while the informal methods are more personal in nature. Formal search methods include advertisements in a newspaper, employment exchanges and private agencies. By comparison, frequently used informal search methods include referrals from an employee or employer, personal contacts and family members. Formal channels are realized with the help of formal intermediaries, such as public employment services and private recruitment agencies that deal with employment mediation. Search channels, such as "friends and relatives' help", and "direct contacts with employers" are informal (Roshchin and Markova, 2004; Boutte, 2006).

Kingdon and Knight (2000) suggest two explanations to account for the existence of non-searching jobless people who claim that they want a job. Firstly, a jobless person might develop a "taste for unemployment" when there is the possibility of redistribution within the household. That is, higher household income may lower search efforts among its unemployed members. If high income households support their poorer members according to need, this could be an incentive to remain needy and a disincentive to search for a job. However, the "discouraged - worker" hypothesis argues that non-search is the outcome of the perception of the jobless person that the probability of finding a job is too low relative to the cost of the search. Thus, because the jobless person finds himself or herself in adverse economic conditions which place a high cost on search, the decision not to search is a choice made

under duress. This is a clever line of argument as it challenges the clear mapping between the narrow and broad definitions of unemployment and between those who want to search and between those who do not. If the major reason for not searching for a job is the lack of resources to search, then excluding such non-searchers from the definition of unemployment and from the ambit of policy attention is clearly unacceptable (Schoer and Leibbrandt, 2006).

### 2.1.2. Job Search Theory

The Job search theory gained popularity in the 1970s as an alternative to the “standard” neoclassical labor supply theory. The neoclassical framework, which assumed of perfect information, did not allow for unemployment where individuals actively sought work, but were unable to find it. Individual agents only had two options, that is, either being employed or being inactive (i.e., not part of the labor force). However, evidence showed that unemployment and its duration were not negligible. This led a group of scholars to formulate an alternative theory, which could account for unemployment, namely the job search theory. The main premise of job search models is that, looking for a job is a dynamic sequential process and that under conditions of uncertainty and imperfect information, individuals must decide when to stop this process. Frictional unemployment is a natural outcome of this process (Faggian, 2014).

According to search theory, the amount of time spent work searching and the probability of getting an offer are also positively associated (McCall, 1970). A greater search effort is expected to improve the job seeker’s awareness of open positions and, thus, increase the likelihood of finding work (Nyarko et al., 2014). Job search theory suggests that unemployed individuals should choose their search methods by comparing the expected returns/benefits and costs associated with the available alternatives. Benefits are mainly in the form of job offers, which may vary in their typology, quantity, and quality by affecting the probability of being employed and the income earned in the next period. Costs may be of a pecuniary nature or related to time and effort (Mussida and Zanin, 2020). Job search theory, according to Holzer et al. (as cited in Mussida and Zanin, 2020), suggest that unemployed people should choose their search methods by weighing the anticipated returns/benefits and costs associated with the available alternatives. Most benefits come in the form of work offers, which may vary in topology, quantity, and consistency, impacting the likelihood of being hired and the income earned in the next period. Costs may be monetary or are linked to time and effort.

The theory of search is an important young actor on the stage of economic analysis. It plays a major part in a dramatic new field, the economics of information and uncertainty. By exploiting its sequential statistical decision theoretic origins, search theory has found success by specializing in the portrayal of a decision-maker who must acquire and use information to take rational action in an ever changing and uncertain environment (Mortensen, 1986).

## 2.2. Empirical Review

Using data from the Ghana Living Standards Survey from 1998 to 1999, Sacky and Osei (2006) investigated the extent to which schooling, age and gender influenced the choices made by

unemployed youth when looking for employment. They found that unemployed youth who have completed higher levels of schooling are more likely than those who have less than a basic level education, to opt for job search methods involving the submission of job applications to potential employers. They further pointed out that, in anticipation of formal sector jobs, unemployed individuals with relatively higher levels of education were more likely to take their own initiative in terms of applying for jobs, and less likely to depend on relatives and friends for jobs, *ceteris paribus*. Studies by Gustavo and Cristobal (2004), Heath (1999) and Labini (2005), in Venezuela, Australia and Italy respectively, similarly found that unemployed individuals with more highly skilled or better educated parents are more likely to use direct application methods as their main job search activity. The implication is that individuals with a higher education are more likely prefer formal search methods than informal methods.

Several studies have also found that informal networks tend to be used by lowly educated individuals than their counterparts who are highly educated. For example, a study by Boutte (2006) found that having some college education decreases the odds of choosing informal methods relative to formal methods by 54 %. Garcia and Nicodemo (2013) also found that jobs obtained through formal channels have a higher percentage of individuals with tertiary education (52%), while jobs found through informal channels have a much higher percentage of individuals with primary and secondary school education (71%). This shows that education, particularly higher levels of education, have a positive relationship with the use of formal networks to find a job. This was also confirmed by Weber and Mhringer’s (2007) study, which found that highly educated individuals prefer formal search methods over informal methods.

Regarding gender, studies by Sacky and Osei (2006), Gustavo and Cristobal (2004) and Heath (1999) confirmed that males are more likely to use direct application search methods than informal methods. This seems to contradict the findings of a study by Garcia and Nicodemo (2013) which found no significant differences between job search channels of women and men. Garcia and Nicodemo (2013), using data from the Great Integrated Household Survey (GIHS) for 2009 and the multinomial logit model, to explore how the neighborhood influenced the channel used to search for a job in Colombia, reported a negative and increased effect of age on the probability of using formal networks. Sacky and Osei (2006) also found that an additional year to the age of the unemployed youth is positively associated with the choice made of applying to potential employers.

In South Africa, a study by Schoer and Leibbrandt (2006) found that personal characteristics of the individuals do not seem to explain the differences between the search methods. It was argued that, although some significance might have been lost with the low number of observations, neither race, age, marital status nor education are significant in explaining the choice of the various search strategies. In this regard, even a breakdown of different educational attainment levels has not shown any significance in any equation. Thus, the characteristics of the individuals seem to be unimportant in choosing any search strategy.

The only individual characteristic which had some significance was gender. It was found that being female increased the probability of not searching compared to all other search strategies. Using the 1993 household survey data from the South African Labour and Development Research Unit (SALDRU), Kingdon and Knight (2000) investigated whether the non-searching unemployed are a distinctly different group from the searching unemployed. Their findings suggest that these two groups are not distinguishable by individual characteristics. Rather, non-search is the outcome of discouragement as the job search is hampered by impediments such as poverty, cost of search, long duration of unemployment, and adverse local economic conditions.

Mussida and Zanin (2020) used a multivariate probit model and cross-sectional microdata to analyze the factors influencing the job search channels of unemployed individuals in Italy from 2014 to 2018. The study's findings revealed no significant changes in the variables in common across unemployed people with and without previous work experience, such as age, education, and citizenship. The survey also found that better-educated job seekers use more than one channel to look for work than their less-educated colleagues. Furthermore, for unemployed people with prior work experience, the features of their past position have an important impact in determining the search channel they use (s). Unemployed high-skilled workers, for example, unemployed people in high-skilled occupations (which often need more education) are more likely to use the internet than traditional channels, whereas those in low-skilled professions and with manufacturing experience are more likely to use employment agencies than those in qualified professions in commercial activities and services. A strong, positive, and significant correlation is found between job searching through the internet and direct contact with firms, but with some spatial differences between macro-areas of the country.

### 3. RESEARCH METHODOLOGY

To analyze the relationship between socio - demographic factors and job search methods among the youth in the Vhembe District, this study used cross - sectional data gathered from a representative sample of 580 youth aged between 15 and 34. The youth were selected from all four local municipalities of the district. Data were collected using a structured questionnaire. The questionnaire enabled the researcher to gather detailed data on the respondents' demographic profiles, as well as information on their human capital assets. To analyze the choice of job search methods among the unemployed youth, Thurston's random utility model of choice was used. In this model individuals draw a member of a set of numerical scale functions at random and then select the alternative whose attributes maximize the value of the chosen scale function (McFadden, 1976).

To determine the extent to which schooling, age, and gender influence the choice of job search method among the unemployed youth, the random utility model specified for this study is as follows: Suppose that  $Y_n$  denotes the polytomous outcome variable with categories in coded form and represents a discrete choice among  $J$  alternatives (job search methods) and  $W_{nj}$  is the maximum utility that will be attained for individual 'n' if he/she

chooses job search methods or options  $j = 1, \dots, J$  and the utility (that is,  $W_{nj}$ ) is decomposed into deterministic  $V_{nj}$  and a random component  $\varepsilon_{nj}$ , such that

$$W_{nj} = V_{nj} + \varepsilon_{nj} \quad (1)$$

Where  $W_{nj}$  is the true utility of the alternative  $j$  to the decision maker  $n$

$V_{nj}$  is a function of observed or choice variables and  $\varepsilon_{nj}$  is a function of unobserved or choice variables.

Taking into consideration the axioms of choice, the individual is assumed to be rational and makes a choice among the alternatives (that is, job search options) that maximize utility. That is, the individual  $n$  will choose alternative  $j$  if:

$$W_{nj} > W_{ni}, \quad \forall i \neq j$$

To estimate the model, it is, therefore necessary to specify a functional form of the non-stochastic component of the indirect utility function  $V_{nj}$  (that is,  $V_{nj} = X'_n \beta_j$ ). This component is approximated in linear form

$$W_{nj} = X'_n \beta_j + \varepsilon_{nj}, \quad j=1, \dots, J \quad (2)$$

Where  $W_{nj}$  refers to utility,  $n$  is the index of observation or individual, and  $j$  is index of choices,  $X$  is a vector of explanatory or conditional variables such as age, gender and educational status;  $\beta$  denotes the vectors of unknown parameters to be estimated; and  $\varepsilon$  is a random error term. The probability that the  $n$ th individual (i.e. unemployed youth) chooses the  $j$ th alternative (i.e. job search methods) is given by

$$P_{nj} = \Pr[W_{nj} > W_{ni} \text{ for } i \neq j, i = 1, \dots, J] \quad (3)$$

In this study, job search options are the dependent variables (i.e.  $y = j, j = 1, 2, \dots, 5$ ), and are defined as follows:

- Checking at work sites ( $y=1$ )
- Answering media ( $y=2$ )
- Seeking assistance from friends and relatives ( $y=3$ )
- Recruitment agency ( $y=4$ )
- Direct application ( $y=5$ )

Based on the above job search alternatives, the model of this study is summarized as follows:

$$P_{nj} = \frac{\exp(x'_n \beta_j)}{1 + \sum_{j=1}^5 \exp(x'_n \beta_j)}, \text{ For } j = 1, 2, 3, 4, 5 \quad (4)$$

Where  $P_{nj}$  is the probability of being in each of the groups 1, 2, 3 and 4

$$P_{n0} = \frac{1}{1 + \sum_{j=1}^4 \exp(x'_n \beta_j)}, \text{ For } j = 0 \quad (5)$$

$P_{n0}$  is the probability of being in the reference group or group 0.

The natural logarithms of the odd ratio of equations (4) and (5) give the estimation equation as suggested by (Greene, 2012) as:

$$\log \frac{P_{nj}}{P_{n0}} = X'_n (\beta_j - \beta_0) \tag{6}$$

Where n indexes individuals and j indexes 1... J choices or options

The interpretation of the coefficients varies according to which alternative is normalized to have a zero coefficient and hence one needs to choose a natural base category. One value, typically the first or last, is designated as the reference category (Williams, 2017). In this study, direct application (DA), which is the last value, has been chosen as the reference category in the multinomial logit. Thus, the relative probabilities of the other options will be relative to the reference group. The coefficient for the  $Y_n = 1$  alternative is specifically interpreted as the relative risk of choosing alternative j rather than alternative j' i.e.

$$\frac{\Pr[Y_n = j]}{\Pr[Y_n = j']} = \exp(X'_n \beta_j) \tag{7}$$

The exponentiated value of the coefficient is the relative risk ratio for a one unit change in the corresponding variable; it is understood that risk is being measured as the risk of the category relative to the base category (Viitanen, 1999).

#### 4. EMPIRICAL RESULTS AND DISCUSSION

The aim of this study was to investigate the extent to which schooling, age and gender influence the choices made by unemployed youth in South Africa, Vhembe District Municipality in their search for jobs. A multi-category logit model was used to address this question. Multi-category logit models apply to situations where the response variable J has (more than two) categories. We assume that the categories have corresponding probabilities  $\pi_1, \pi_2, \dots, \pi_j$  where  $\pi_1 + \pi_2 + \dots + \pi_j = 1$ . Multinomial logit models compare the probability of a given category with that of a baseline category. The choice of baseline category is arbitrary.

In this study, four logit regression models were estimated as follows: one comparing 'checking at work sites' with the reference category (direct application); comparing 'using media' with direct application; comparing 'seeking assistance from friends' with direct application; and comparing 'recruitment' with the reference category (direct application). An illustration of a multinomial logistic regression model with one predictor variable is shown below:

$$\log \frac{\Pr[Y = j]}{\Pr[Y = J^i]} = \alpha_j + \beta_j X_i$$

Where,

j is the identified category

1. Checking at work sites
2. Answering media
3. Seeking assistance from friends and relatives
4. Recruitment agency

$J_i$  is the reference category (i.e., direct application)

$X_i = 1$  for primary and secondary education

$= 0$  for tertiary education

Initially, a multi-category logit model with age (4 levels, that is Age 1=15-20, Age 2=21-25, Age 3= 26 – 30 and Age 4 =31 – 34); gender (2 levels, namely gender 1= male and gender 2 = female); and education (5 levels; that is, education 1= primary, education 2=secondary, education 3 = tertiary, education 4 = postgraduate and education 5 = 'other') as explanatory variables was fitted to the data for the study.

Table 1 summarizes the job search methods reported by the respondents, who claimed that they had made an effort in the last week prior to the survey to find work. The respondents were requested to indicate common steps they took to look for work. The most common job-search methods used by the young people were direct application, checking for employment at worksites, checking for employment advertisements in newspapers, asking friends or relatives and recruitment agencies. The findings show that the common steps taken by the respondents in the search for jobs were direct application (20.5%), answering media (17.9%), checking at work sites (16.2%), and seeking assistance (12.4%). Searching through use of recruitment agencies constituted only 3.6%, while 29.3% of the respondents did not respond to this question.

Direct application is generally believed to be the most commonly used method when people are searching for employment. This is also revealed by the information in Table 1. Thus; direct application was used as the reference category. Using the above multi-category explanatory variables in the estimation of the logit model, none of these explanatory variables was significant (Table 2). This could probably be because of the many categories for each of the explanatory variables, there were many cells in the cross-tabulation table with very low expected frequencies. This resulted in biased parameter estimates and standard errors and, ultimately, the p-values. Thus, it was decided to combine some of education and age categories, in order to increase the ratio of the sample size in relation to the number of cells in the cross-tabulation table (Bryman and Cramer, 2001).

The re-categorized explanatory variables for analysis were as follows: age with two categories, that is, 25 and below = 1 and above 25 = 2. Education had two categories, that is, 1 = secondary school education and below and 2 = tertiary and postgraduate. Table 3 presents the results of the estimated multinomial logit model on the extent to which schooling, age and gender influence the choices made by the unemployed youth in Vhembe District

**Table 1: Descriptive overview of job search efforts by unemployed youth in the Vhembe District/Percentage distribution of steps taken by the respondents to find a job, Vhembe District**

Step/Job search method	Number of respondents	Percentage
Direct application	119	20.5
Checking at work sites	94	16.2
Answering media	104	17.9
Seeking assistance	72	12.4
Recruitment	21	3.6
No response	170	29.3
Total	580	100

Source: Data Survey

**Table 2: Parameter estimates**

Steps taken to look for work	B	SE	Wald	df	(Sig.)	Exp(B)
<b>Checking at work sites</b>						
Intercept	0.292	1.463	0.040	1	0.842	
[Age=1]	-0.179	0.526	0.116	1	0.734	0.836
[Age=2]	-0.088	0.427	0.042	1	0.837	0.916
[Age=3]	-0.337	0.457	0.544	1	0.461	0.714
[Age=4]	0 <sup>b</sup>	.	.	0	.	.
[Gender=1]	-0.201	0.292	0.476	1	0.490	0.818
[Gender=2]	0 <sup>b</sup>	.	.	0	.	.
[Education=1]	1.396	1.809	0.595	1	0.440	4.038
[Education=2]	-0.108	1.428	0.006	1	0.939	0.897
[Education=3]	-1.063	1.466	0.526	1	0.468	0.345
[Education=4]	-0.570	1.594	0.128	1	0.721	0.566
[Education=5]	0 <sup>b</sup>	.	.	0	.	.
<b>answering media</b>						
Intercept	1.251	1.185	1.113	1	0.291	
[Age=1]	0.119	0.558	0.045	1	0.831	1.126
[Age=2]	0.297	0.435	0.467	1	0.494	1.346
[Age=3]	-0.001	0.458	0.000	1	0.999	0.999
[Age=4]	0 <sup>b</sup>	.	.	0	.	.
[Gender=1]	0.009	0.284	0.001	1	0.974	1.009
[Gender=2]	0 <sup>b</sup>	.	.	0	.	.
[Education=1]	-0.706	1.665	0.180	1	0.672	0.494
[Education=2]	-1.803	1.138	2.513	1	0.113	0.165
[Education=3]	-1.276	1.153	1.225	1	0.268	0.279
[Education=4]	-0.554	1.241	0.199	1	0.655	0.575
[Education=5]	0 <sup>b</sup>	.	.	0	.	.
<b>seeking assistance</b>						
Intercept	1.309	1.286	1.037	1	0.309	
[Age=1]	-0.897	0.590	2.315	1	0.128	0.408
[Age=2]	-0.384	0.431	0.794	1	0.373	0.681
[Age=3]	-0.833	0.481	2.994	1	0.084	0.435
[Age=4]	0 <sup>b</sup>	.	.	0	.	.
[Gender=1]	-0.284	0.320	0.792	1	0.373	0.752
[Gender=2]	0 <sup>b</sup>	.	.	0	.	.
[Education=1]	0.524	1.698	0.095	1	0.758	1.689
[Education=2]	-1.078	1.248	0.746	1	0.388	0.340
[Education=3]	-2.084	1.306	2.545	1	0.111	0.124
[Education=4]	-0.992	1.405	0.498	1	0.480	0.371
[Education=5]	0 <sup>b</sup>	.	.	0	.	.
<b>Recruitment</b>						
Intercept	-0.133	1.553	0.007	1	0.932	
[Age=1]	-0.485	0.962	0.255	1	0.614	0.615
[Age=2]	-0.022	0.672	0.001	1	0.974	0.979
[Age=3]	-0.421	0.751	0.315	1	0.575	0.656
[Age=4]	0 <sup>b</sup>	.	.	0	.	.
[Gender=1]	0.406	0.500	0.658	1	0.417	1.501
[Gender=2]	0 <sup>b</sup>	.	.	0	.	.
[Education=1]	0.039	2.014	0.000	1	0.984	1.040
[Education=2]	-1.751	1.457	1.443	1	0.230	0.174
[Education=3]	-2.076	1.549	1.797	1	0.180	0.125
[Education=4]	-0.235	1.572	0.022	1	0.881	0.791
[Education=5]	0 <sup>b</sup>	.	.	0	.	.

a. The reference category is: direct application

b. This parameter is set to zero because it is redundant

when searching for jobs. This followed the model specified in Equations (2) and (3) above. The results for each of the choice categories shown in Table 2 relate to the reference category, which is “direct application”. In this table, the employment search methods which differed significantly from the baseline across the educational levels, included “checking at worksites”

(P = 0.013), “answering media” (P = 0.029) and “seeking assistance” (P = 0.057).

The likelihood ratio test was, consequently, performed to test the overall significance of all the coefficients in the model. In this analysis, the distribution reveals that the probability of the model chi-square (46.895) was 0.043, less than the level of significance of 0.05 (i.e. P < 0.05). The null hypothesis that there was no difference between the model without independent variables and the model with independent variables was rejected. As shown in Table 4, this suggests that the existence of a relationship between the independent variables and the dependent variable was supported, hence the acceptance of the alternative hypothesis.

For a young unemployed person with only a secondary school education and below compared with a young person with tertiary or postgraduate qualification, the log odds of checking at work sites as opposed to direct application would increase by 0.905 units. The point estimate of the odds ratio is 2.473(e<sup>0.905</sup>). This means that, for youth with secondary education and below, the odds of checking at worksites as opposed to direct application are about twice those with tertiary and postgraduate qualifications. Alternatively, for youth with secondary school education or less, the odds of checking for employment at work sites as opposed to direct application were between 1.208 and 5.061 times those of youth with tertiary education. This means that, in comparison to their counterparts with tertiary education, youth with secondary school education and below in the Vhembe District are more likely to check for employment at worksites than to apply directly. This is consistent with the study by Green et al. (2011) who found that job seekers with degree or equivalent level qualifications were markedly less likely than average to visit a job center seeking for employment.

Regarding answering media, it was found that, for young person with only secondary school education and below, the log odds of answering to a media advertisement, as opposed to direct application, compared to their counterparts with a tertiary education, would decrease by 0.638 units. The point estimate of the odds ratio is 0.528 (e<sup>-0.638</sup>). This means that, the odds for youth with secondary education and below of using media than direct application are 0.528 times less than the odds for their counterparts with tertiary and postgraduate education. Alternatively, for youth with secondary education and below, the estimated odds of answering media as opposed to direct application were between 0.298 and 0.937 times those for youth with tertiary qualifications. This means that, youth with a lower level of education were less likely to respond to job advertisements in the media (as opposed to direct application). A study by Sacky and Osei (2006), in Ghana, similarly found that unemployed youth who had completed higher levels of schooling were more likely than those who had less than a basic level of education to opt for a job search involving submission of job applications to potential employers.

Regarding seeking assistance, it was found that, for young persons with only secondary education and below, the log odds of seeking assistance, as opposed to direct application, would increase by 0.744 units compared to their tertiary qualifications counterparts.

**Table 3: Results of the multinomial logistic regression model**

Steps taken to look for work	B	SE	Wald	DF	Sig.	EXP(B)	95% Confidence Interval for Exp(B)	
							Lower bound	Upper bound
<b>Checking at work sites</b>								
Intercept	-0.932	0.327	8.093	1	0.004			
Secondary Edu and below	0.905**	0.365	6.136	1	0.013	2.473	1.208	5.061
Tertiary education	0 <sup>b</sup>			0				
<b>Answering media</b>								
Intercept	0	0.231	1.308	1	0.253			
Secondary Edu and below	-0.638**	0.292	4.769	1	0.029	0.528	0.298	0.937
Tertiary education	0 <sup>b</sup>			0				
<b>Seeking assistance</b>								
Intercept	-1.099	0.348	9.957	1	0.002			
Secondary Edu and below	0.744*	0.391	3.623	1	0.057	2.104	0.978	4.525
Tertiary education	0 <sup>b</sup>			0				
<b>Recruitment</b>								
Intercept	-1.551	0.416	13.885	1	0.000			
Secondary Edu and below	-0.228	0.513	0.198	1	0.656	0.796	0.291	2.175
Tertiary education	0 <sup>b</sup>			0				
-2 Log Likelihood	271.							
Model Chi-square	815							
	46.895							

The reference choice category is "direct application" \*P<0.10, \*\*P<0.05, \*\*\*P<0.01

**Table 4: Model fitting information**

Model	Model fitting criteria		Likelihood ratio tests	
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	318.710			
Final	271.815	46.895	32	.043

The point estimate of the odds ratio is 2.104 ( $e^{0.744}$ ). This means that, the odds of seeking assistance compared to direct application for youth with secondary education and below are 2.104 times higher than the odds for their counterparts with tertiary and postgraduate education. The results imply that when looking for a job, unemployed youth with only high school qualifications are more likely to seek assistance from friends and relatives instead of applying directly, compared to their counterparts with tertiary qualifications.

## 5. CONCLUSIONS AND RECOMMENDATIONS

The aim of the study was to investigate the effect of age, gender and educational level on the methods that unemployed youths in Vhembe District of Limpopo Province South Africa preferred when seeking for employment. The study used the Multinomial logistic regression model to examine the relationship between schooling, age, gender and the choice of job search methods. It was hypothesized that, these factors exerted an impact on the choice of job search methods used by the youth in Vhembe District. The results showed that only education had a bearing on employment search methods. The results showed that youth who had secondary school education and below, were more likely, than those with tertiary qualifications, to search for employment at work sites instead of applying directly. Youth who had secondary school education and below were less likely (compared to those with tertiary qualifications), to respond to adverts in the media than to use direct application. Youth who had only high school

qualifications were more likely to seek assistance from friends and family instead of applying directly when looking for a job, compared to their counterparts with tertiary qualifications.

Based on these findings, the researcher recommends that Human Resource experts and managers should build their recruitment and selection strategies around adverts and worksites. The results and suggestions from this study can be used by government agencies and policy makers to design effective recruitment and selection strategies to attract the best talent into the labour market. This study will serve as a source of reference for other researchers who want to investigate the phenomenon further. The results of this research offer a new direction in understanding the impact of socio-demographic factors on the choice of job search methods.

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