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Examining the labour market outcome of volunteer
workers

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DECLARATION

I declare that “*Examining the labour market outcome of volunteer workers*” is my own work, that it has not been submitted for any degree or examination in any university, and that all the sources that I have used or quoted have been indicated and acknowledged by complete references.

Jaydro Fondling

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Date: 1 July 2022



ABSTRACT

As democracy cracked the gloom of Apartheid, South Africa has experienced economic transformations; however, unemployment is still an Achilles heel that cripples the labour market. This study examined the labour market outcome of volunteer workers. Overall, volunteering individuals have experienced changes on the employed and unemployed side.

This study analysed the three (2010, 2014 and 2018) available waves of the under-utilised Statistics South Africa's Volunteer Activities Survey (VAS) data, which is linked to the Quarterly Labour Force, to investigate the activities of the volunteers and their outcomes in the labour market. The empirical findings indicated that volunteers were mainly aged between 25-64 years as well as residents in urban areas of some provinces. Women were more likely to volunteer compared to men, whereas Africans were domineering the volunteering spectrum in relation to all other races. However, the results revealed that volunteers were not highly educated as many did not complete secondary education. Additionally, volunteers were 25%, on average, less likely to be employed than those who did not volunteer. This point was further proved by the insignificant volunteer dummy in the labour force participation probit and the significant (negative marginal effects) volunteer dummy in the employment Heckprobit regressions, respectively.

Through numerical data conclusions were extracted. The employed who volunteered enjoyed better labour market outcomes by having greater involvement in high-skilled occupations. Also, volunteers were associated with higher LFPR but in 2014 and 2018 volunteers were also associated with high unemployment rates. Lastly, volunteers were more likely to involve in cooking or elementary occupations for religious as well as charity/NPO/NGO organisations. The study concluded with various policy suggestions and recommendations.

Keywords: Volunteer, Volunteer Activities Survey, labour market, South Africa

JEL Codes: J00, J24

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TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Introduction	1
1.2 Research Objectives	3
1.3 Significance of the study	3
1.4 Structure of the study	4
CHAPTER TWO: LITERATURE REVIEW	5
2.1 Introduction	5
2.2 Defining volunteers	5
2.3 Motives for volunteering	6
2.4 Benefits of volunteering	8
2.5 Theoretical framework	9
2.5.1 Budget line and indifference curve	9
2.5.2 Consumption Model.....	10
2.5.3 Human Capital Theory	11
2.5.4 Other theories	13
2.6 Review of past review studies	14
2.6.1 International studies	14
2.6.2 Local Studies.....	17
2.7 Conclusion.....	18
CHAPTER THREE: METHODS AND DATA	19
3.1 Introduction	19
3.2 Methods.....	19
3.3 Data	20
3.4 Conclusion.....	21
CHAPTER FOUR: EMPIRICAL FINDINGS	22
4.1 Introduction	22

4.2	Descriptive statistics.....	22
4.3	Econometric analysis.....	35
4.4	Conclusion.....	43
CHAPTER FIVE: CONCLUSION.....		44
5.1	Introduction	44
5.2	Review of key findings	44
5.3	Conclusion and policy suggestions	46
5.3.1	Stipend paid for volunteers	46
5.3.2	The Expanded Public Works Programme.....	47
5.3.3	Youth Wage Subsidy	48
5.3.4	Improvement of the panel data set	49
REFERENCES		51



LIST OF TABLES

Table 1: Profile of volunteers (% , unless stated otherwise).....	23
Table 2: Profile of employed by volunteering status (% , unless stated otherwise).....	25
Table 3: Main activities of the volunteers (% , unless stated otherwise).....	32
Table 4: Top 10 detailed occupations of the main activities of volunteers (%)	34
Table 5: Probit regressions on labour force participation likelihood, volunteers only	36
Table 6: Heckprobit regressions on employment likelihood conditional on participation, volunteers only.....	38
Table 7: Probit regressions on labour force participation likelihood, all working-age population	39
Table 8: Heckprobit regressions on employment likelihood conditional on participation, all working-age population	41
Table 9: Probit regressions on volunteering likelihood of the working-age population.....	42



LIST OF FIGURES

Figure 1: Equilibrium at three different points	9
Figure 2: Earnings earned by matriculant, a matriculant involved in volunteer activities and college graduates between ages 18 and 65 years	12
Figure 3: Skills level of occupations of employed by volunteering status (%)	28
Figure 4: Labour market status of working-age population by volunteering status (%)	30



CHAPTER ONE: INTRODUCTION

1.1 Introduction

As democracy dawned on South Africa more than 25 years ago, South Africa has experienced vicissitudes in the labour market. Pertaining to the movements in the labour market, due to the end of apartheid with the abolishment of unfair labour legislation¹ and the advent of democracy, the previously disadvantaged people² are no longer excluded. However, the post-apartheid economy experiences various persistent economic problems, most notably inequality, poverty and unemployment. With regard to the latter, the Quarterly Labour Force Survey (QLFS) data showed that the unemployment rate in the third quarter of 2021 was 34.9%, with 7.6 million unemployed in the labour market.

The South African government has been determined in creating and implementing many economic policies to boost employment by creating more jobs. Black Economic Empowerment (BEE) and Broad-Based Black Economic Empowerment (BBBEE) were created to include more black people in more senior working positions and further addressed issues of social and gender inequality. The implementation of the new labour legislations has brought about positive change in the labour market by promoting the previously disadvantaged group of people's labour market outcome. The Growth, Employment and Redistribution (GEAR) is a macroeconomic strategy, implemented in 1996, aimed to enhance economic reform and fasten the process of economic growth. The Accelerated and Shared Growth Initiative for South Africa (AsgiSA) was implemented in 2006 to help cope with the country's unemployment, poverty and economic downfall. One of the most recent economic policy, National Development Plan (NDP), released in 2011, intend to reduce the unemployment rate to 6% and increase employment by 84.62% (from 13 million to 24 million) by 2030. However, one over-looked policy is encouraging people to be involved in volunteer activities, as the experience gained from these can somehow boost their labour market outcomes.

Since the start of democracy, service programmes have been growing in South Africa which were created by new policy frameworks (Perold et al., 2006). The South African government

¹ These related to Acts such as the Job Reservations Act, Group Areas Act, Black Land Acts, Separate Representations of Voters Act, Bantu Education Act, the Education Act and Black Labour, to name but a few.

² The previously disadvantage groups were females of all races, the black/African men and the disabled.

recognised the potential that volunteering could have because volunteering played an important part in South Africa by addressing political and key socio-economic challenges but, a lack of government support and research are hampering its effectiveness, Barnard & Furtak (2020). The UNICEF implemented a Volunteering Programme in South Africa to improve the lives of children for future development.

It is somehow surprising that three waves of Volunteer Activities Survey (VAS) have been conducted by Statistics South Africa (StatsSA), but there are hardly any empirical studies examining how the volunteers fared in the South African labour market. Hence, this motivates our proposed study to fill this research gap.

Given the high unemployment level and rate in South Africa, there is a passive expectation for government to implement policies to boost the employment likelihood of jobseekers. Passive labour policies are usually implemented when the unemployment level is low in a country and helps lessen structural unemployment (Martin, 2014), whereas active labour market policies provide active support for the labour market, such as training various work programmes and passive labour market policies implements replacements during periods such as recession and high unemployment (Pignatti & Van Belle, 2018).

Volunteering can be implemented as an activity to encourage the need to work. However, the question that could be asked is whether implementing such an initiative could be associated with better labour market outcomes. In first world countries such as the United Kingdom, United States of America, Australia and Canada, involvement in voluntary activities is quite common. As of recently, developing countries (e.g. Columbia, Portugal, Argentina and Brazil) have also experienced an increase in voluntary activities (Nelson, 2005).

Throughout the world, there are efforts aimed at promoting volunteerism globally (Stukas, 2015). The aim was to create oneness and unity in various communities. The author also infers that, even though the aim is to create oneness, many people feel comfortable connecting with their kinfolk, thereby creating a closely bonding system. Additionally, diversity in various communications has a negative connotation when related to the volunteering rates. There is a sense of not fully trusting people. However, as of recent years, volunteering begs individuals to erase social norms and encourages people to engage more. In certain parts of the world, people believe that volunteering creates ethical values. In certain

parts of the United States of America, volunteering is considered as common ethics, when people freely sacrifice their time to help other (Grimm et al., 2007). Additionally, the elderly volunteers (aged 65 and older) is estimated to increase by 4 million over 13 years (from 2007 to 2020)

Volunteering has escalated over the past years. From 2010 to 2014³, Stats SA confirms that there has been an increase of 898 000 volunteers. As the number of volunteers increased, so did the hours that were contributed to volunteerism. For the same period, 2010 to 2014, there was a 191.2 million hours increase. Stats SA also confirms that the volunteer 610.4 million hours in 2014 corresponded to 293 000 non-voluntary employment.

1.2 Research Objectives

The study generally aims to find the relationship between volunteering activities and the impact it has on the labour market outcomes of the volunteers. Furthermore, below is a list of the specific objectives that the study aims to achieve:

- Derive the personal characteristics of volunteers.
- Examine the ‘work’ activities the volunteers are involved in.
- Investigate how the volunteers fared in the labour market in terms of labour force participation and employment probabilities as well as work activities (if employed), compared to those who are not volunteers, upon controlling for differences in other characteristics.

1.3 Significance of the study

The employment of voluntary work/activities has been in existence for long periods. Brundle (2015) claims that volunteering activities can be traced back to the medieval times in Britain, thereby suggesting that volunteering has a bountiful history. Examining the labour market outcome of volunteer activities in South Africa will provide valuable data and information on how the labour market is affected by the activities of volunteers. Moreover, understanding the impact the volunteers have on the labour market could help the government create more informed and effective policies – considering volunteers and businesses.

³ Chapter Four of this study will examine not only the 2010 and 2014 data but also the most recent 2018 data.

The phrase “volunteerism” is common in South Africa. However, the research conducted on the topic is not extensive. This is one of the topics that has potential to grow as more research are produce, enforced and employed. Hence, this is another reason why this study will be conducted.

1.4 Structure of the study

The study is structured as follows: Chapter One covers four aspects: background and problems statement, research objectives, significance of the study and structure of the study. Chapter Two provide the literature review. In this chapter the concept of volunteer is defined, reasons for involving in volunteer activities are discussed and a review of past empirical studies is conducted. Chapter Three elaborates on the methods and data employed in this study, before Chapter Four presents the empirical findings. Chapter Five concludes the study.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter aims to firstly define what a volunteer is. This will be accomplished by looking at various authors definitions and how different fields describe volunteering. Secondly, the motives for volunteering will be discussed. Directly thereafter, the benefits for volunteering will be discussed. The chapter will then move on by discussing the theoretical frameworks; specifically, the budget line and indifference curve, the consumption model and finally the human capital theory. Thereafter, past empirical studies, dividing into international and local studies, will be reviewed. Finally, the conclusion ends the chapter.

2.2 Defining volunteers

A volunteer is described as an individual who is fully willing to give unremunerated help – it can be in the form of services, skills and time for organisations (StatsSA, 2010). Five year later, StatsSA enhanced the definition: someone aged at least 15 years is defined as a volunteer when he/she completes any work that is non-compulsory without remuneration outside one's household in four weeks prior to the interview. Chacon (2017) explains volunteering as a non-obligatory (it is not compulsory), well planned (minimising error) and assisting behaviour that continuously grow overtime. This behaviour benefits various parts of the society as a whole and the individual volunteering.

Wilson (2012) reiterates the definition provided by Snyder and Omoto (2008) concerning volunteers. They are distinguished as people who freely and deliberately help with activities, usually formal activities that they show interest in, over a time without the expectation of any form of compensation. In addition, Verduzco (2010) defines volunteers as people who provide unpaid help to someone they are not related to.

With volunteering being in the centre, there are many branches that extend from it. Volunteering can be direct or indirect. Yeung et al. (2018) categorised volunteering into two sub-divisions: Other-oriented volunteering and self-oriented volunteering. Other-oriented volunteering takes into consideration those individuals volunteering in religious, philanthropic services, health and social services. Self-oriented volunteering, on the other hand, relate to people who are involved in arts and culture, animal welfare, environment,

political and other services – these people are involved in services that promote self-development and self-actualization (Yeung et al., 2018).

Volunteering takes on various explanations in the different fields of study. Psychologically, self-concepts, motivation and personality are taken into consideration when defining volunteers (Wilson, 2012: 178). Thus, factors that drive individuals and affect people internally and externally are what lead to participation in voluntary activities. Extroverts are more likely to participate in volunteering activities given the fact that they are more outgoing individuals who form part of social groups (Binder and Freytag, 2013). Sociologically, Wilson (2012: 178) emphasises volunteering by focusing on sociodemographic characteristics (gender, race, social class and ecological aspects) to define volunteering. These individuals are more comfortable to volunteer where their beliefs and values are respected.

In South Africa, most Non-Profit Organisations (NGOs) are composed of individuals who free willingly offer to do the work. NGOs are usually independent organisations that rely on charitable funding from businesses. Matthews (2017) suggests that voluntary activities should be divided into two categories: voluntary during apartheid and voluntary post-apartheid. The author indicates that volunteerism pre-apartheid referred to civilisation whereas post-apartheid NGOs are involved in development initiatives that customarily involved service delivery, policy influence and building capacity (Matthews, 2017).

2.3 Motives for volunteering

In 1992, the volunteering functions inventory (VFI) was created and it is still a prominent model. Charon et al. (2017) reported that the purpose of VFI is to evaluate the motivators of volunteering. The results of the VFI were composed of six subscales namely protective, social, enhancement, understanding, career and values.

The different components of the model are as follows:

- Protective: people volunteer to avoid negativity or personal issues.
- Social: people volunteer because one may know other people who also volunteer.
- Enhancement: people feel better about oneself by volunteering.
- Understanding: the opportunity to learn new things and gain adequate experience.

- Career: volunteering is a good preparation for employment opportunities.
- Values: the expression of altruism.

Additionally, Cnaan & Goldberg-Glen (1991) asserted that there are two motives that drive volunteering: altruistic and non-altruistic motives. The former motive relates to one's unselfish concern towards others and the latter relates to one's personal benefits. Altruistic volunteering reveals one's awareness of others; their welfare and needs. When one volunteers for self-benefits and self-motive, without the regard for others, this is known as non-altruistic.

There are three aspects that form a holistic framework of employability (McQuaid & Lindsay, 2005):

- Individual factors, such as skills needed for employment, well-being and health, demographic, mobility and adaptability.
- Personal circumstances, e.g. culture at work, resources accessibility and household circumstances.
- External factors (demand and supply factors).

The impact of volunteering can have an effect on personal circumstances and individual factors but not on external factors – which can weaken the positive effect volunteering has on employability (McQuaid & Lindsay, 2005).

Snyder et al. (2004) found that when there is a link between recruiting strategy and certain motivation types, individuals are highly likely to take part in volunteering activities. For example, when an upcoming chef is motivated to seek work in the food industry, he or she is highly likely to volunteer in field that best suits their skills. Thus, one can come to the summation that certain individuals volunteer for career purposes. The impact of personal identity can be seen by creating a positive environment that can endorse a healthy self-image and steer away from elements that can affect ones physical, emotional and mental well-being.

According to a study conducted by Clary and Snyder (1999), there were three motivators ranked as important – using the Volunteer Functions Inventory as an instrument: value, understanding and enhancement. The less important motivators were social, career and

protective. Also, enhancement and values are the most important motivators for volunteering while career is the least important (Chacon et al., 2011).

There are values and traits that can be learnt through one's involvement in volunteering activities. People also tend to volunteer to appease their religious values. A study conducted by Akintola (2011) – qualitative data was used from volunteer caregivers – revealed that individuals that practice Christianity represented God through the acts of love and care for others. These acts can be seen through giving alms, praying and visiting the sick, and lending a helping hand wherever it is needed.

2.4 Benefits of volunteering

Many individuals volunteer at various places to gain experience for future endeavours. Brudney et al. (2010) state that one of the reasons why younger people volunteer is to boost work-related experience. For example, individuals interested in philanthropic work are interested in philanthropic volunteering opportunities. On the contrary, some volunteers quit due to frustrating feelings of not being able to find paid employment within an organisation (Akintola, 2011). A volunteering programme was introduced to assist the unemployed (Hunter & Ross, 2013); the programme was aimed at skills development, training, building work experience and social welfare. It is evident that unemployment is an important motive for volunteering by the stipend-paid volunteering programme introduced, given the high level of unemployment. Work produced by Rego et al. (2016) composed a soft skills matrix and further states that the transferral of soft skills are best developed through volunteer programmes with the aim to ultimately increase employability.

In addition, volunteering in a community is linked with the creation of an environment that is cohesive and fundamentally stable. Volunteering has also been attributed to the increase of social benefits and health benefits of the individual. Those involved in volunteering have great functional abilities, lower morality rates and depression than those who do not partake in volunteering activities (Grimm et al., 2007). Also, relating to health benefits, older volunteers are seen to have gained more from volunteering. Socially, volunteering helps individuals through the challenging social issues. Furthermore, one's participation in volunteering reinforces social ties that can protect one from feeling isolated in tough times (Grimm et al., 2007).

Even though volunteering assists in building social bonds, Akintola (2011) notes that certain people only volunteer because they were asked to do so; the free-willing aspect is not present. However, the author also notes that through volunteering, opportunities are provided for people, who share the same dreams and wishes for the future, to work together. Volunteering is also associated with socioeconomic benefits. In some developed countries (USA and Canada), it is believed that through volunteering chances of obtaining a tertiary qualification and potentially finding employment are stronger (Wilson, 2012).

2.5 Theoretical framework

2.5.1 Budget line and indifference curve

Given the limited resources and the unlimited needs of individuals, consumers are forced to make choices. Choices such as what to buy and how much quantity of a good are made. Most goods and services in the economy force a consumer to use money in order to attain goods and services. Thus, consumers must make choices that will fall within their budget range. In Figure 1, the budget lines, *BC* and *DE*, show the combination of the good on the y-axis and the x-axis that a consumer is able to consume. The curving lines that touch the budget line is the indifference curve. The indifference curve, on the other hand, also shows a combination of two goods that equally yield satisfaction. An individual's utility is maximized at the point where the budget line is tangent to the indifference curve.

Figure 1: Equilibrium at three different points

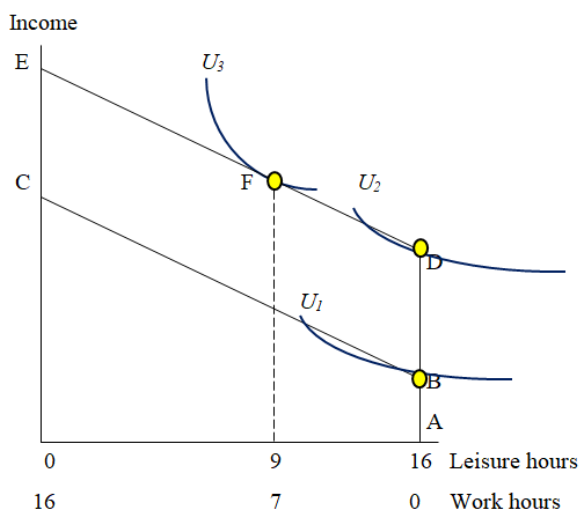
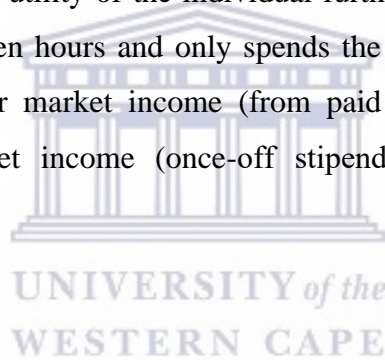


Figure 1 accounts for income, leisure hours and work hours. Firstly, *BC* is the budget line before the person takes part in volunteering activities. When the person is involved in

volunteering activities, DE is the new budget line after the person becomes a volunteer by assuming he/she unexpectedly receives a once-off lump-sum of money by taking part in the volunteering activities (e.g. receive stipend ‘income’ to support the transport spending).

Points B , D and F convey different messages. First of all, at point B , before the individual becomes a volunteer, work hours are zero and leisure hours are 16. These results indicate that the individual at point B used all their time for leisure, thereby attaining a utility level of U_1 . After the individual partook in volunteering activities, this person reached point D . At this point, the person’s utility increased to U_2 but still did not take part in work activities in the labour market.

After getting the volunteering experience for a while, the person eventually feels more confident to seek work, so he/she supplies his labour services in the labour market, and ends up at point F . At this point, the utility of the individual further increases to U_3 . Also at this point, the individual works seven hours and only spends the nine hours on leisure. Finally, total income consists of labour market income (from paid work activities in the labour market) and non-labour market income (once-off stipend ‘income’ from volunteering activities).



2.5.2 Consumption Model

Volunteering infers a utility-bearing activity (Varian, 2010). Utility was first described as an individual’s overall well-being; thus, it was easy to associate a person’s decision making to maximizing one’s utility. Today, consumer behaviour is monitored by consumer preferences (Varian, 2010). In relation to volunteering, a consumer who wants to maximize utility will choose activities according to her/his preference structure for a given income constraint. Partaking in voluntary activities is time consuming. This implies that for every hour offered, opportunity cost has to be considered (Varian, 2010). When taking the consumption model into consideration, income and time constraints should be considered.

Volunteering has various meanings for each individual person. Many economists assume individuals are governed by self-interest in rewards, in other words, investments and consumption models (Wilson, 2012). Hence, many people partake in volunteering activities that will benefit them in the long run. Binder & Freytag (2013) explain volunteering as consumption is achieved for what it produces – by reaping psychological rewards (increased

reputation or enhanced well-being) or building relationships with people. Moreover, the authors explain further that volunteering as an investment implies one acquires the necessary and relevant for the future. In addition, Niyimbanira & Krugell (2017) link income to the consumption model. The consumption model branches to into three subgroups: volunteer work, time spent on paid work and free time.

2.5.3 Human Capital Theory

Economist Adam Smith formulated the basis of what became the science of human capital (Almendarez, 2011); therefore, human capital can be traced back to the early periods. This theory is concerned with the skills and knowledge that individuals obtain in their lives that will be beneficial in the long run (Russell, 2013). Hence, it promotes economic and social development in individuals that are deemed previously disadvantaged as more people gain education, intelligence, skills and better health. However, there are costs involved when acquiring new skills.

Ehrenberg & Smith (2012) state that workers undertake three labour investments: search for new employers, training and education, as well as migration. The authors further argue that these investments are created for individuals that will pay off in the future as skills are further developed. Thus, economists agree that education and health are essential to help improve human capital to increase economic growth of the nation (Almendarez, 2011).

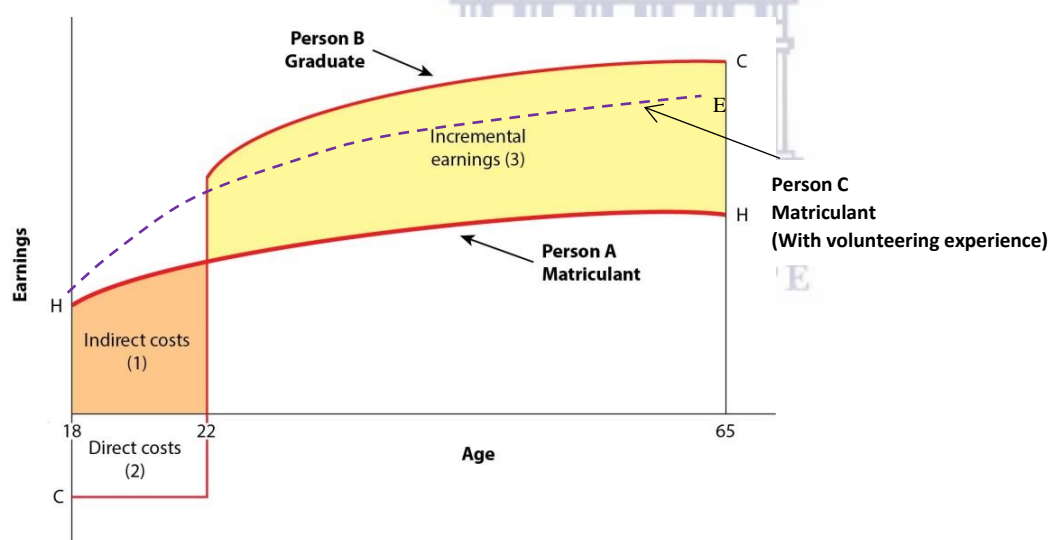
Niyimbanira & Krugell (2017) state that the investment model can be a form of human capital development. Human capital theory is concerned with the skills and knowledge that individuals obtain in their lives that will be beneficial in the long run (Russell, 2013). Hence, it promotes economic and social development in individuals that are deemed previously disadvantaged as more people gain education, intelligence, skills and better health. However, there are costs involved when acquiring new skills.

Roy & Ziemek (2000) writes that individuals can be motivated by a yearning for an increase in labour market experience; in other words, to accumulate human capital or to indicated their ability to future employees. Furthermore, the authors also make reference to the eigenvalues of volunteers – this is where volunteers obtain personal utility from partaking in volunteer activities. Furthermore, the public goods theory implies that people volunteer because they

care for others. Hence, those volunteering find satisfaction when other, the public, benefits. This is known as pure altruism (Ziemek, 2006).

Figure 2 compares the earnings of three people by highest educational attainment and volunteering status. Person A, who decided not to study further after high school, will experience a relatively flat earnings stream of *HH* until the age of retirement at 65 years. However, when another person (*B*) decided to go to college after high school and obtains a college degree, that particular individual would experience the earnings stream of *CC*. This individual first incurs indirect cost (e.g. tuition fees, campus accommodation expenditure) and direct cost (foregone earnings) for four years during university studies. After obtaining the degree, this person *B* enjoys more than person *A* until retirement. In fact, the earnings gap between the two people is expected to widen throughout the years.

Figure 2: Earnings earned by matriculant, a matriculant involved in volunteer activities and college graduates between ages 18 and 65 years



Source: Adapted from Yu & Roos (2018: 235).

Lastly, person *C* only has Matric just like person *A*. However, the key difference between the two people is that person *C* volunteers while person *A* does not. The more volunteering experience the individual *C* obtains is associated with improved earnings in the labour market (i.e. *HE* is steeper than *HH*). Nonetheless, person *B* still fares the best in the labour market out of the three individuals given he is the only one with tertiary educational qualification. In addition, if person *B* also volunteers, his earnings stream could become even steeper (despite not shown in the figure).

2.5.4 Other theories

Rational Choice theory

The economy is guided by choices made by consumers. The Rational Choice Theory or the Choice Theory is defined as the study of social phenomena that is characterized by core assumptions (Lovett, 2006). Wittek (2013) further elaborates by classifying the Rational Choice Theory as an umbrella term for models that explain social phenomena of the outcomes of people constructed in a rational manner.

Ogu (2013) explains five assumptions of the theory. The first assumption is individualism. It is explained that decisions depend solely on individuals. It is individuals that act rationally maximising self-interest. The second assumption is Optimality. Actions are chosen optimally by individuals taking their constraints and opportunities into account. The third assumption is structures – choices might differ from one person to the other. The fourth assumption relates to self-regarding interest – an individual's actions are solely determined by their wealth. The final assumption is rationality. According to Ogu (2013), it is the most predominant assumption and states that all individuals act in a way that put their needs above others.

When we look at volunteering, individuals rationally choose to take part in volunteering activities, albeit individually or within a group. The choices made are usually in alignment with their self-interests, assuming that the positives and negatives of voluntary involvement were considered. Furthermore, people volunteer for various reasons, as stipulated in sections 2.3 and 2.4. It is important to note that as they are providing a service to others, their needs are also being met through the service.

Prospect theory

The prospect theory was developed by Daniel Kahneman and Amos Tversky in 1979. The theory is developed for prospects with stated probabilities and monetary outcomes; however, it can extend additional involved choices, Kahneman & Tversky (1979). Furthermore, the choice process in the prospect theory is distinguished by two phases: the early phase of editing and the evaluation phase, Kahneman & Tversky (1979). The former related to the analysis of the prospects offered whereas the latter refers to the edited prospects with the highest value being chosen. Furthermore, the prospect theory is based on psychophysical

models – investigating the precise relationships between the psychological and physical worlds, McDermott (1998).

There are three aspects of the Prospect theory that can affect one's decision making (Fulfer & Maille, 2018). The first aspect is the reference point. From a reference point, individuals evaluate results form in relative terms. This point in volunteering could indicate the reason why people volunteer. The second feature is the diminishing marginal utility experienced from the point of reference. The more a particular activity is administered, the lesser the satisfaction grows. Thus, some people volunteer to gain experience for a particular employment opportunity. The final aspect is that individuals are more likely to be risk-averse. Individuals will not volunteer in programmes that do not attract their interest. This aspect aligns with the argument of Ogu (2013).

2.6 Review of past review studies

2.6.1 International studies

There are many international studies that link the association of volunteering and employment. Empirical results derived by Paine et al. (2013) show that volunteering has a positive impact for individuals volunteering on a monthly basis and there was a negative impact for yearly and weekly volunteering. Many volunteer organisations states that the skills and experience gained though volunteering are high (Ockenden & Hill, 2009). In essence, about 50% of organisations noted that it had assisted volunteers to procure employment. Furthermore, some organisations, through volunteering, proved to be successful in placing individuals from being employed directly to being employees (Ockenden & Hill, 2009).

Empirically, Paine et al. (2013) proved the impact of volunteering on employment. The authors made use of the British Household Panel Survey (BHPS). The results showed that volunteering was positive for individuals volunteering on a monthly basis and negative for individuals volunteering weekly and yearly. Furthermore, volunteers aged below 45 years did not benefit from volunteering; however, the unemployed benefitted. In the study it is suggested that volunteering does not have a strong positive impact on entering the labour market as well as retaining employment. On the other hand, it should be viewed as a complement to personal activity and employment. A study conducted in the United States by Spera et al (2013) investigated the likelihood of being employed given their participation in volunteering. The study examined the Current Population Survey (CPS) data of 2002-2012 in

the study. The results yielded that there was a 27% chance of being employed. Spera et al. (2013) continued by stating that the positive effect on people who completed primary school and those that live rural areas.

Partaking in volunteering activities has had an impact on employability. Wilson (2012) found that volunteering can function in numerous ways related to employment. There is a positive association providing help on an informal basis and caring for family which portrays an individual's need to be active amongst groups of people. Wilson (2012) confirms that those individuals who participated in volunteer activities showed less depression symptoms than individuals who neither worked nor volunteered. Additionally, there are studies that discovered that volunteering is also linked to better mental health. Hopper (2020) claimed that individuals who volunteer once a month at least has experienced better mental health than those who do not volunteer or volunteer inconsistently. Thus, overtime, people that volunteer become happier overtime.

Furthermore, Hackl et al. (2007) based their study on interpreting volunteering in relation to the consumption and investments model. Quantitatively, the evidence provided shows that the investment model had a positive impact to the wage rate in regards to volunteering. Day and Devlin (1998) found astounding results that prove the positive impact volunteering has on earnings. In this study the human capital model was employed which provided a framework to study the determinants of earnings such as education years and experience. The use of the human capital in this study was a good framework as volunteering could result to acquiring skills. The effect of volunteering has on earning was only positive for international and environmental organisations and negative for religious organisations.

A study conducted in the United Kingdom, particularly Northern Ireland by Coen et al. (2014) focused on the impact of volunteering on employability skills, by mainly examining students attaining employment and the impact volunteering has on employers. In this particular study, the authors used a mixed approached in attaining data; a quantitative and qualitative approach was used. Quantitatively, the results revealed that involvement in volunteering secured employment. Also, students who participated in volunteering activities were involved in activities relating to their field of study. Further, the involvement of employers in volunteering opportunities helped them understand the characteristics, attributes and traits of future employees. However, an employer expressed that the participation in

volunteering should not only be attributed to finding employment. Qualitatively, the results of the study revealed that those who participated in volunteering experienced employment in future endeavours. The study also disclosed that a main reason behind volunteering was to improve employability and work experience.

Van Willingen (2000) used data from the first two waves of the Americans' Changing Lives Survey. The study consisted of interviews conducted at home during 1986 and 1989. During the period of 1986-1989, about 47% respondents were involved in volunteering activities. Of these volunteers, 39% were older adults and 48% were young adults. Additionally, the black counterparts were less likely to participate in the in volunteering than the persons of colour. For the over-60 years age group, about 32% of Black individuals volunteered compared to 40% of non-Black individuals in 1986. For those under the age of 60 years, 49% of White and others ethnic groups volunteered compared to the 42% in the Black population. The author also found that those individuals that volunteered for more than one organization have experienced a 26% increase in life satisfaction and a 63% increase in health benefits than those individuals who only volunteered at one organization.

In a similar study conducted by Meier & Stutzer (2004), they found that that there was a correlation between life satisfaction and volunteering. The German Socio-Economic panel was used to interview around 22 000 individuals between 1985 and 1999. The interviews focused on their demographic characteristics and socio-economic statuses. An average of 32.1% participated in volunteering activities in Europe, compared with over 50% in the United States. In Germany, 23% of the population has volunteered. Also, about 14% of the German population frequently volunteered, while the remaining 86% volunteered less frequently or not at all. The authors also found that those who volunteered on a weekly basis had an average life satisfaction of 7.35 points. On the flip side, individuals who do not volunteer had a moderate life satisfaction of 6.93 points (0.42 point less than those who volunteer). Also, by dividing people into groups – those who volunteer monthly or weekly versus those who do not volunteer or volunteer less frequently – those who volunteered on a weekly or monthly basis were satisfied with their lives at an average level of 7.30 points, 0.35 points higher than those who do not volunteer or volunteer less frequently.

Mellor et al (2009) sent out surveys, with a completion time of 20 minutes, with a cover letter to potential participants, contacted through a project called the Australian Unity Well-being

Index project, to complete and mail back in a reply-paid casing. Approximately 39% returned the survey. Across the age groups, there was an increase of 27 percentage point of volunteer participation rate. On the contrary, Hirst (2001) found that volunteering does not necessarily lead to employment. About 45% revealed that it is difficult to combine work and volunteering. This is seen even though participants claimed that volunteering was important in the pursuit to find employment; 49% of people involved in volunteering believed that volunteering aided their employment. However, certain employed individuals indicated that their involvement in volunteering helped them gain experience and improved chances of promotion.

2.6.2 Local Studies

South Africa has a serious shortage of empirical studies related to volunteering. Niyimbanira and Krugell (2014) used the 2010 VAS data to conduct statistical and econometric analysis to gather results on volunteering. The findings revealed that black South Africans were more likely to volunteer than the white counterparts. Income and rewards were positively related to volunteering; the more hours spent volunteering, the higher the reward.

Niyimbanira and Krugell used the same data to publish another study in 2017 by examining the link between volunteerism and individuals' resources. The authors stated that volunteerism can also be affected by income concerning the consumption model. The empirical findings revealed that White South Africans has a negative association with hours volunteered to other population groups; evidently 8.5% fewer hours compared to Coloured and Black population groups.

In 2015, Niyimbanira conducted another study where he used two Labour Force Surveys (LFS) gathered from Statistics SA; the LFS of September 2006 and March 2007. Empirically, during the age of 24-34 years, this is when most people took part in volunteering activities. Interestingly, about 23.6% were young volunteers; however, only 2.7% participated in volunteering activities. Also, in various parts of the world the relationship between volunteering and gender differed. Niyimbanira (2015) also indicated that in North America, women were more likely to volunteer than men but it was no such gender difference in Europe. In South Africa, 58.4% of volunteers were female and 41.6% were males. Additionally, the province with the highest volunteering percentage was the Eastern Cape

(11.4%), followed by Western Cape (6.5%) and Mpumalanga has the lowest volunteer percentage (2.7%).

2.7 Conclusion

In closing, this chapter first defined what a volunteer worker before explaining the motives of volunteering. Directly thereafter, the benefits for volunteering were discussed. Next, three theoretical frameworks were discussed. Thereafter, past local and international empirical studies were discussed. These studies revealed that many people from developed countries partake in volunteering activities. In South Africa, more females volunteered compared to their male counterparts and Black South Africans were more likely to volunteer than the White individuals. Nonetheless, there was clearly lack of comprehensive South African empirical studies that investigated volunteering activities as well as the relationship between volunteering status and labour market outcomes in the country.



CHAPTER THREE: METHODS AND DATA

3.1 Introduction

This chapter provides the outline of what data and methodology to be employed in the study. The method employed in the study will first be discussed. Secondly, the data sources – all are collected by StatsSA, specifically, the Volunteer Activities Survey – will be explained. Finally, the conclusion will end the chapter.

3.2 Methods

By establishing the connection between the employability and volunteering activity, this research study will employ a quantitative method. The sample will differentiate between volunteers and non-volunteers when analysing the descriptive statistics and administering the econometric analysis. The data will be gathered from the 2010, 2014 and 2018 Volunteer Activities Survey (VAS) data set that is linked to the second quarter of the Quarterly Labour Force Survey (QLFS) taking place in the same year.

The study will conduct descriptive analysis on the personal characteristic of volunteers such as gender, race, age, education, provinces, area type and work activities of volunteers. This is followed by examining the labour force participation and unemployment probabilities of volunteers versus those who do not volunteer.

Thereafter, the study will then conduct econometric analysis. There are various factors that may affect volunteers in the labour market and individuals being employed or unemployed. Thus, a probit regression on the labour force participation likelihood will be conducted. In this probit regression, the dependent variable is binary, labour force is discerned by one (labour force) and those that are inactive in the labour market is denoted by zero. This is followed by Heckprobit regression on employment likelihood, conditional on labour force participation. In this Heckprobit, the dependant variable is also binary, one denotes the employed and zero indicates the unemployed. It is vital to run the second probit regression as Heckprobit due to the sampling selection bias, Oosthuizen (2006). The authors confirm that the Heckman two-step approach is the best at alleviating the sample selection bias.

In both multivariate regressions, the following explanatory variables are included, namely:

- Gender (Reference category: Female)

- Age in years and age in years squared
- Area type (Reference Category: Rural)
- Province (Reference category: Eastern Cape)
- Years of education and years of education squared
- Volunteer dummy variable (Reference category: not volunteer)
- Number of children 0-14 years in the household
- Number of male adults 15-59 years in the household
- Number of female adults 15-59 years in the household
- Number of elderly 60+ years in the household

The study also aims to find if the volunteer dummy variable is positive and significant. The study speculates that the volunteering dummy in the labour force participation probit and the Heckprobit employment regression will be positive – but this needs to be proved in the empirical findings chapter of the forthcoming research full thesis.

A probit regression will be run the other way round as volunteering status (1: volunteer and 0: not volunteer) as a function of the above mentioned personal – and household – level characteristics. Additionally, labour market status dummy variables will be added (the employed and unemployed dummies are included in the regression, omitting the inactive as a reference category). The inclusion of these dummies may illustrate a two-way relationship between volunteering status and labour market status.

3.3 Data

The VAS collects household-base information on volunteering activities. The VAS is merely linked to QLFS (respondents are from households who took part in the QLFS), as the VAS participants also took part in the QLFS. The survey began in 2010 and is currently used to track and report on the trends in volunteer activities.

These are the main objectives of the VAS⁴:

- Collecting accurate data about those involved in volunteer activities.
- Identify direct volunteering and organisation-based volunteering.
- To provide a profile to people involved in volunteering.

⁴ Data retrieved from Statistics South Africa (2020).

- To make correct estimations of economic value of volunteer opportunity.

The survey was conducted in two stages. Firstly, individuals were identified who were involved in volunteering activities. Secondly, follow-ups were administered determining the different activities the individuals were involved in. There are some downsides to the data of the study. Only the 2010 VAS will be analysed; the reason being because the VAS data set is not panel data. Hence, the study will not be able to track the dynamics of volunteering activities and also it will be difficult to investigate the employment status of an individual in various periods.

3.4 Conclusion

The chapter first discussed the methods going to be employed in the study; the regressions going to be estimated and expanded on the explanatory variables. Lastly, the data used in the study was discussed. The following chapter, Chapter Four, will present and discuss the empirical findings of the study.



CHAPTER FOUR: EMPIRICAL FINDINGS

4.1 Introduction

The chapter presents the empirical findings related to the study. Section 4.2 discusses the descriptive statistics while Section 4.3 presents the econometric findings. Finally, Section 4.4 concludes this chapter.

4.2 Descriptive statistics

Table 1 presents the profile of volunteers for 2010, 2014 and 2018. Firstly, the number of volunteers more than doubled from 2010 to 2018. The female share has always been more dominant than the male share (at least 60% throughout the study period), thereby clarifying that more females engaged in volunteering activities than males and corresponding with the finding by Niyimbanira (2015) that females are more likely to volunteer than males.

The African share of volunteers has been the most domineering compared to all the other races involved in volunteering. In fact, this share increased from 71.78% in 2010 to 88.52% in 2018 (an increase of 17 percentage points). The Coloured and White shares experienced a downward trend, with the former dropping from 10.68% to 3.97% and the latter declining from 14.95% to 5.61% for the studied period. Moving on to results by age cohorts, the majority of volunteers were aged 25-54 years at the time of survey, with a mean age of 39-40 years.

Turning to the provincial share, the results gathered are varied. Gauteng has always featured in the top two provincial shares, with more than 20% share. Limpopo is also a sturdy province after Gauteng. However, Western Cape, on the other hand, has been on a downward trajectory – the province's share decreased by almost 10 percentage points (2010: 14.53%: 2018: 4.79%). Impressively, the KwaZulu-Natal share has more than doubled (from 9.97% to 23.63%); on the contrary, the Northern Cape share became the lowest in 2018 (1.76%).

In all three survey years, most volunteers resided in urban areas with the highest share being in 2010 (67.38%). Over the years, urban share's dominance diminished; however, it is still about 50%. Otherwise, the rural share has increased from 32.62% to 48.06% during the 8-year period. This result suggests that more rural residents are involved in volunteering.

Table 1: Profile of volunteers (% , unless stated otherwise)

	2010	2014	2018
<u>Number (1 000s)</u>			
Number	1 109	2 047	2 556
<u>Gender</u>			
Male	34.86	39.50	37.44
Female	65.14	60.50	62.56
	100.00	100.00	100.00
<u>Race</u>			
African	71.78	79.79	88.52
Coloured	10.68	6.57	3.97
Indian	2.59	2.65	1.91
White	14.95	10.98	5.61
	100.00	100.00	100.00
<u>Age cohort</u>			
15-24 years	11.28	13.05	12.64
25-34 years	24.28	25.75	27.41
35-44 years	26.96	25.97	26.15
45-54 years	23.18	22.29	20.54
55-64 years	14.30	12.94	13.26
	100.00	100.00	100.00
<i>Mean (years)</i>	<i>39.96</i>	<i>39.27</i>	<i>39.09</i>
<u>Province</u>			
Western Cape	14.53	9.10	4.79
Eastern Cape	9.48	15.42	8.57
Northern Cape	3.81	2.38	1.76
Free State	11.60	7.53	6.81
KwaZulu-Natal	9.97	18.04	23.63
North West	2.53	6.30	4.18
Gauteng	24.90	22.59	20.01
Mpumalanga	4.10	5.82	13.35
Limpopo	19.08	12.82	16.89
	100.00	100.00	100.00
<u>Area type</u>			
Urban	67.38	56.87	51.94
Rural	32.62	43.13	48.06
	100.00	100.00	100.00
<u>Educational attainment</u>			
None	3.13	4.12	2.95
Incomplete primary	10.29	9.03	8.51
Incomplete secondary	40.90	40.97	45.84
Matric	23.32	24.87	26.57
Matric + Cert/Dip	12.67	9.92	8.38
Degree	9.43	10.19	7.30
Other/Unspecified	0.24	0.90	0.45
	100.00	100.00	100.00
<i>Mean (years)</i>	<i>10.25</i>	<i>10.27</i>	<i>10.29</i>

With reference to education, individuals without a secondary education background have been dominating the volunteering sphere (40.90% in 2010, 40.97% in 2014 and 45.84% in 2018), while those with Matric only represented about a quarter of volunteers. Moreover, the volunteers were not highly educated, as their mean years of education hovered around 10 years in all three survey years under study. All these findings stress the importance of gaining experience and soft skills through volunteering initiatives, and could also imply that many volunteers (especially the lowly educated ones) 'kill' time by involving in volunteering activities while waiting for employment.

Table 2 provides results on the profile of employed by volunteering status by comparing volunteers, non-volunteers and all employed of the three waves of VAS. Looking at results by gender, the female share was more dominant (52-55%) when it comes to volunteers who were employed. On the contrary, the male share was more dominant (about 57%) when looking at volunteers who were not employed. Unquestionably, the African shares, for all three columns of each year, are the highest indicating that there are more Africans in the labour market. This could be a result of various labour market legislations such as BEE and BBEEE to promote employment of Africans (one of the previously disadvantaged groups).

In relation to the race cohort, for the 'employed and volunteers' group, Africans represented the greatest racial share, and this share increased gradually over the years (2010: 59%, 2018: 89%). On the other hand, for the 'employed and not volunteers' group, Africans were also the most dominant racial group, accounting more than 70% racial share.

With reference to the age cohort, the majority of employed who volunteered were aged 35-44 years for all studied surveys (2010: 32.95%; 2014: 31.82%; 2018: 33.33%, with a mean age of 41.58, 41.24 and 41.29 respectively). For the employed who did not volunteer, of the first two surveys, the greatest share is accounted for by individuals aged 25-34 years (2010: 32.81% and 2014: 31.59% - besides mean ages of 37.88 and 38.45) whereas the dominant share in 2018 was observed amongst the 35-44 years group (31.02%) with a mean age of 38.98 years.

Table 2: Profile of employed by volunteering status (% , unless stated otherwise)

	2010			2014			2018		
	Volunteer	Not volunteer	All employed	Volunteer	Not volunteer	All employed	Volunteer	Not volunteer	All employed
<u>Gender</u>									
Male	46.59	57.19	56.78	47.12	56.49	56.09	43.64	56.57	55.90
Female	53.41	42.81	43.22	52.88	43.51	43.91	56.36	43.43	44.10
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<u>Race</u>									
African	59.51	70.67	70.24	74.80	73.29	73.35	84.43	74.35	74.88
Coloured	12.51	11.03	11.08	7.46	10.75	10.60	5.15	10.66	10.38
Indian	4.29	3.61	3.64	2.38	3.25	3.22	2.45	3.30	3.26
White	23.69	14.69	15.04	15.35	12.71	12.82	7.97	11.68	11.49
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<u>Age cohort</u>									
15-24 years	4.24	9.57	9.37	4.19	8.70	8.51	3.97	7.88	7.67
25-34 years	22.16	32.81	32.40	25.65	31.59	31.33	24.15	30.17	29.85
35-44 years	32.98	29.81	29.93	31.82	30.81	30.86	33.33	31.02	31.14
45-54 years	29.41	19.80	20.17	27.36	19.96	20.28	27.71	21.47	21.79
55-64 years	11.21	8.00	8.12	10.98	8.94	9.03	10.85	9.48	9.55
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean (years)</i>	<i>41.58</i>	<i>37.88</i>	<i>38.03</i>	<i>41.24</i>	<i>38.45</i>	<i>38.57</i>	<i>41.29</i>	<i>38.98</i>	<i>39.10</i>
<u>Province</u>									
Western Cape	20.91	14.49	14.74	13.27	14.58	14.52	7.04	15.68	15.23
Eastern Cape	8.97	9.00	9.00	16.52	8.64	8.98	6.77	8.58	8.48
Northern Cape	3.09	1.92	1.96	1.76	1.97	1.97	1.25	2.01	1.97
Free State	10.29	5.38	5.57	8.36	4.78	4.94	7.50	4.57	4.72
KwaZulu-Natal	8.99	17.21	16.89	14.09	16.54	16.43	21.10	15.81	16.08
North West	1.77	5.98	5.82	3.98	5.91	5.82	4.40	6.06	5.98
Gauteng	26.71	32.07	31.86	23.13	32.22	31.83	16.89	31.78	31.00
Mpumalanga	3.11	7.32	7.16	6.93	7.49	7.47	14.64	7.12	7.52
Limpopo	16.16	6.63	7.00	11.96	7.87	8.04	20.41	8.39	9.02
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 2: Continued

	2010			2014			2018		
	Volunteer	Not volunteer	All employed	Volunteer	Not volunteer	All employed	Volunteer	Not volunteer	All employed
<u>Area type</u>									
Urban	78.70	78.14	78.17	66.47	78.29	77.78	58.48	77.57	76.57
Rural	21.30	21.86	21.83	33.53	21.71	22.22	41.52	22.43	23.43
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
None	1.75	3.11	3.06	2.30	2.42	2.42	1.55	1.76	1.75
Incomplete primary	6.51	8.65	8.57	7.31	7.29	7.29	7.34	5.95	6.02
Incomplete secondary	32.69	38.32	38.10	33.61	36.90	36.75	39.40	37.75	37.84
Matric	21.56	29.93	29.61	23.10	32.48	32.08	26.71	32.31	32.02
Matric + Cert/Dip	19.32	11.29	11.60	14.61	10.50	10.68	12.23	9.75	9.88
Degree	17.82	7.08	7.49	18.06	9.18	9.56	12.43	11.30	11.36
Other/Unspecified	0.35	1.61	1.56	1.01	1.23	1.22	0.35	1.19	1.14
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean (years)</i>	<i>11.30</i>	<i>10.35</i>	<i>10.39</i>	<i>11.21</i>	<i>10.69</i>	<i>10.72</i>	<i>10.96</i>	<i>10.96</i>	<i>10.96</i>
<u>Broad occupation category</u>									
Managers	12.35	7.49	7.68	11.04	8.42	8.53	8.68	8.74	8.74
Professionals	9.75	5.65	5.81	7.50	6.04	6.11	6.53	5.75	5.79
Associate professionals	18.65	10.63	10.94	16.57	10.27	10.54	9.40	8.50	8.54
Clerks	9.75	11.24	11.19	8.47	11.05	10.94	10.18	10.32	10.31
Service workers	11.01	14.54	14.41	13.22	15.18	15.10	15.27	16.25	16.20
Skilled agriculture	1.43	0.84	0.86	0.83	0.36	0.38	0.53	0.35	0.36
Craft and related trades	8.82	12.24	12.11	7.90	11.70	11.54	9.98	12.45	12.32
Operators	3.66	8.63	8.43	3.39	8.57	8.34	4.82	8.64	8.44
Elementary occupations	16.89	21.73	21.54	23.43	21.68	21.75	27.50	23.05	23.28
Domestic workers	7.69	7.01	7.03	7.64	6.71	6.75	7.12	5.94	6.01
Other/Unspecified	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.02	0.02
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 2: Continued

	2010			2014			2018		
	Volunteer	Not volunteer	All employed	Volunteer	Not volunteer	All employed	Volunteer	Not volunteer	All employed
Broad industry category									
Agriculture	4.03	4.77	4.47	2.94	4.50	4.44	4.37	5.18	5.14
Mining	0.68	2.48	2.41	1.08	2.85	2.78	1.89	2.51	2.48
Manufacturing	8.48	13.27	13.08	5.42	11.84	11.56	7.25	10.67	10.49
Utilities	0.58	0.75	0.74	0.78	0.78	0.78	0.74	0.96	0.95
Construction	6.43	8.01	7.95	6.70	7.88	7.83	8.07	9.23	9.17
Wholesale and retail	20.09	22.20	22.12	20.97	21.06	21.06	19.47	20.22	20.18
Transport	3.30	5.97	5.87	4.88	6.34	6.28	4.77	6.15	6.08
Finance	11.48	13.28	13.21	13.15	13.34	13.33	12.12	15.45	15.27
CSP services	36.38	20.13	20.75	35.36	22.85	23.39	32.47	21.88	22.44
Private households	8.56	9.08	9.06	8.73	8.54	8.55	8.84	7.67	7.73
Other/Unspecified	0.00	0.05	0.05	0.00	0.02	0.02	0.00	0.07	0.06
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Sector of industry									
Primary	4.71	7.25	6.88	4.02	7.35	7.22	6.26	7.69	7.62
Secondary	15.49	22.03	21.77	12.90	20.50	20.17	16.06	20.86	20.61
Tertiary	79.81	70.66	71.01	83.09	72.13	72.61	77.67	71.37	71.70
Other/Unspecified	0.00	0.05	0.05	0.00	0.02	0.02	0.00	0.07	0.06
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Formal/Informal sector									
Formal sector	71.32	73.79	73.69	67.33	75.39	75.04	65.03	73.55	73.10
Informal sector	20.12	17.13	17.24	23.96	16.07	16.41	26.13	18.78	19.16
Private households	8.56	9.08	9.06	8.73	8.54	8.55	8.84	7.67	7.73
	100.00	100.00	99.99	99.99	100.00	100.00	100.00	100.00	99.99
<i>Mean real monthly earnings</i>	<i>10 136</i>	<i>8 840</i>	<i>8 890</i>	<i>9 588</i>	<i>11 562</i>	<i>11 474</i>	<i>7 730</i>	<i>8 031</i>	<i>8 015</i>
<i>Median real monthly earnings</i>	<i>5 246</i>	<i>4 059</i>	<i>4 112</i>	<i>3 456</i>	<i>3 456</i>	<i>3 456</i>	<i>2 793</i>	<i>3 315</i>	<i>3 292</i>
<i>Mean number of other employed members</i>	<i>0.68</i>	<i>0.77</i>	<i>0.76</i>	<i>0.69</i>	<i>0.78</i>	<i>0.78</i>	<i>0.59</i>	<i>0.75</i>	<i>0.75</i>
<i>Mean number of other unemployed members</i>	<i>0.18</i>	<i>0.27</i>	<i>0.26</i>	<i>0.24</i>	<i>0.28</i>	<i>0.28</i>	<i>0.22</i>	<i>0.27</i>	<i>0.27</i>

Similarly to Table 1, the province cohort results are assorted. Gauteng has consistently had the highest share of individuals that are employed and not involved in volunteering (32.07% in 2010, 32.22% in 2014 and 31.78% in 2018). On the flip side, Gauteng had dominance in the first two surveys relating to individuals being employed and engaging in volunteering; 26.71% and 23.13% respectively. In 2018, however, the share dominance was exceeded by KwaZulu-Natal (21.10%). Additionally, Western Cape has also consistently had the third highest shares of non-volunteers employed for each survey (14.49%, 14.58% and 15.68%). The lowest shares, be it employed volunteers or non-volunteers, are seen in North West province.

Focusing on results by area type, for the volunteers and employed, the results indicate that the majority of them resided in urban areas. However, there has been a 20.22 percentage point decrease (from 2010 to 2018) in this share. For those employed who did not volunteer, the share dominance result is similar to those employed who volunteer with more than 77% of people residing in urban areas. The difference between the results is that the latter is constant and the former is decreasing.

Turning our attention to educational attainment, individuals categorized as ‘volunteer and employed’ group and as ‘non-volunteer and employed’ group are more likely to have not completed a secondary education. There has been an increase of 6.71 percentage points from 2010 to 2018 for the ‘volunteer and employed’. Additionally, the share of ‘non-volunteer and employed’ dwindles about 36-38 percent across the conducted surveys. The second highest share, be it employed volunteers or employed non-volunteers, are those who completed matric.

Focusing on the broad occupation category for volunteers who were employed; the results yield the following outcome: elementary occupation has been in the top two for each conducted survey – being first in 2014 (23.43%) and 2018 (27.50%). Even though associate professionals have been in the top two broad occupation for 2010 (it had the highest percentage – 18.65% in 2010) and 2014, it decreased by 9.25 percentage points over the years. Oppositely, service workers have experienced an upward trend – being in the top three in 2014 and 2018, service workers experienced a 4.26 percentage point increase across the past surveys. On the other hand, the top three categories for the broad occupations category has been the same throughout all surveys: elementary occupations (21.73%, 21.68% and

23.68%), service workers (14.54%, 15.18% and 16.25%) and craft and related trades (12.24%, 11.70% and 12.45%). In either group, volunteer or not volunteer – elementary occupation had the greatest share.

The top three broad industry categories for the volunteer and employed group are consistent for all surveys. The highest share is in CSP services – hovering around 32-36%, followed by wholesale and retail – floating around the 19%-20% mark and lastly finance – fluctuating around 11-13%. The industries for the employed and not volunteer group are the same as those who volunteer and are employed however, the percentages differ; CSP services (20.13%, 22.85% and 21.88%), wholesale and retail (22.20%, 21.06% and 20.22%) and finance (13.28%, 13.34% and 15.45%). Although CSP service is the greatest share for employed who volunteer, there has been a 3.91 percentage point decrease in the period of 2010 to 2018 for the non-volunteer and employed group. Also, wholesale and retail declined by 1.98 percentage point whereas finance increased by 2.17 percentage points for the studied period. Furthermore, when looking at the sector of industry, the greatest shares, be it employed volunteers or non-volunteers, are seen in the tertiary sector (more than 70%). The high percentage share is accounted for by the top 3 broad occupations category.

Additionally, for both the ‘volunteer and employed’ and the ‘not volunteer but employed’ groups, individuals were highly likely to work in the formal sector. However, there are differences in both groups. The ‘volunteer’ group has been experiencing a downward trend - with a decrease of 6.29 percentage points for the studied period. On the other hand, the percentage share for the ‘not volunteer’ group lingers around the 73-75%.

Lastly, across the spectrum, the mean real⁵ monthly earnings for ‘volunteers who were employed’ group has decreased (10 136 in 2010 and 7 730 in 2018). For the ‘not volunteer but employed’ group, however, the mean fluctuated – and reached a high of 11 562 in 2014. Also, for both groups, the median real monthly earnings had decreased but the ‘volunteer group’ experienced a 88% decrease from 2010 to 2018 and the ‘not volunteer’ group’s median decreased by 22.44%. Further, the mean real monthly earnings are more than the median real monthly earnings for both groups indicating that the data is positively skewed.

⁵ Using 2016 December (CPI = 100) as the base month.

Figure 3: Skills level of occupations of employed by volunteering status (%)

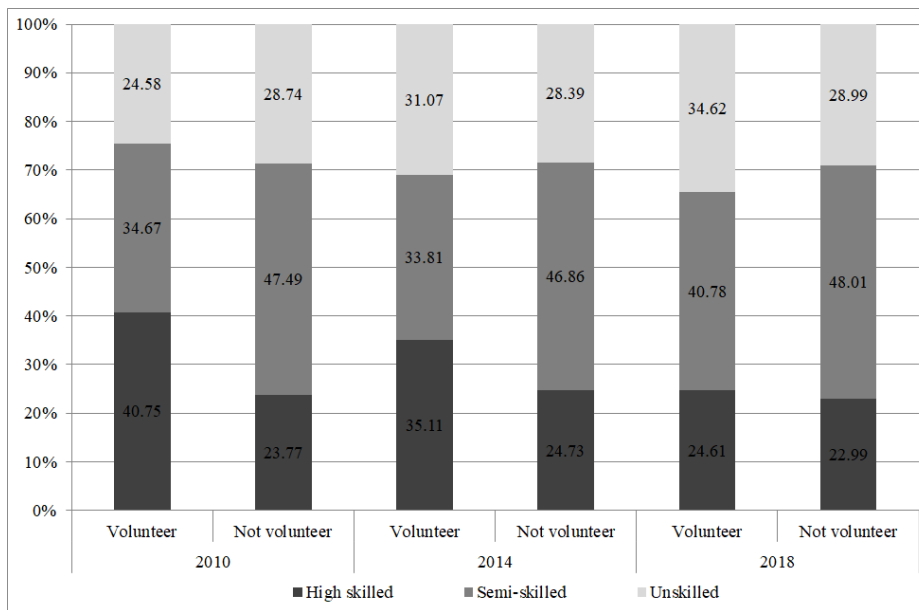


Figure 3, which portrays the skills level of occupation of employed by volunteering status, clearly illustrates that the employed who were also volunteers had a greater involvement in high-skilled occupation (40.75% in 2010, 35.11% in 2014 and 24.61% in 2018), compared to those who were employed and did not take part in volunteering. Otherwise stated, the experience gained by volunteering improves soft skills, this reiterates the point made by Rego et al. (2016) as discussed in Chapter Two. Through the skills gained, they successfully climb up the rank in the labour market more rapidly to work in high-skilled occupations.

Figure 4 illustrates the labour market status of working-age population by volunteering status; it shows the LFPR and unemployment rate. The graph clearly depicts that volunteers are associated with higher LFPR compared to those who were not involved in volunteering. However, it seems in 2014 and 2018, volunteers were somehow associated with higher unemployment rate compared with non-volunteers. Perhaps some of the volunteers are engaged in volunteering activities to stall time as they struggled to find a fixed-paying employment.

Figure 4: Labour market status of working-age population by volunteering status (%)

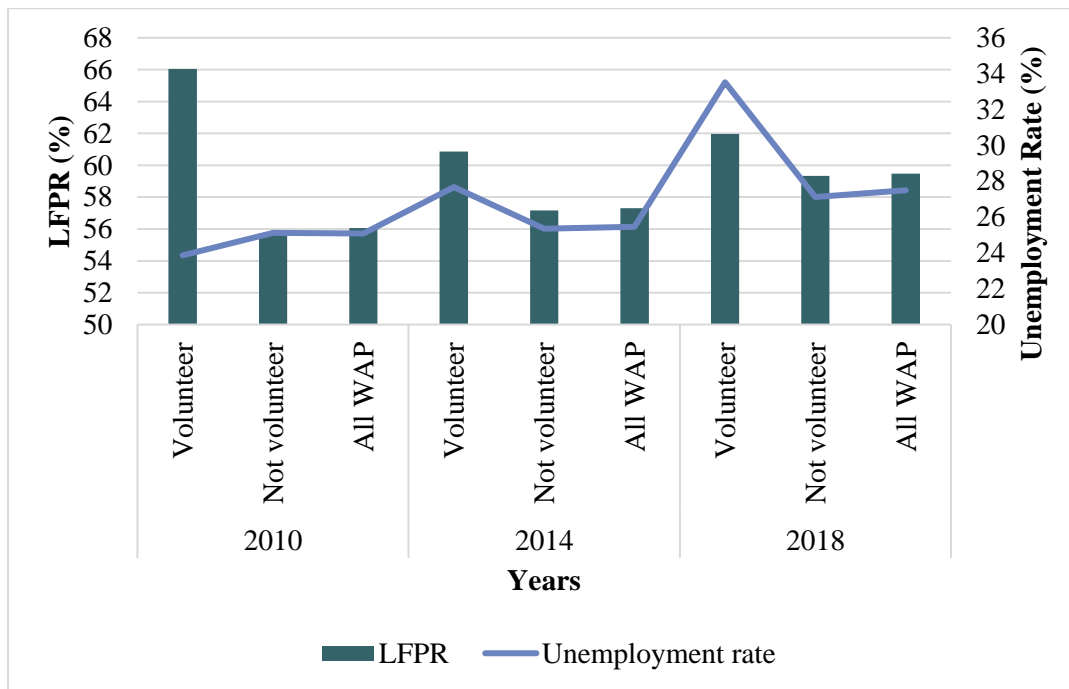


Table 3 shows the broad occupation categories of activities of the volunteers. For the first two surveys, 2010 and 2014, the top three occupations were the same (service workers – about 29% in 2010 and 39% in 2014, elementary occupation – about 27% in 2010 and 31% in 2014 and associate professionals – around 17% in 2010 and 12% in 2010). In 2018, the results suggest that the shares represented by ‘elementary occupations’ (about 44%), ‘service workers’ (about 30%) and ‘craft and related trades’ (about 8%) were the greatest. The results also suggest that there has been an upward trend in the share represented by service worker but a decrease in the proportion represented by associate professionals. Given the high shares in broad occupation category of the activity, the high shares in semi-skilled levels are expected. Semi-skilled activities had the greatest shares compared to high-skilled and low-skilled activities; whereby 2014 had the highest share (above 49%) in semi-skilled.

Table 3: Main activities of the volunteers (% , unless stated otherwise)

	2010	2014	2018
<u>Broad occupation category of the activity</u>			
Managers	4.19	0.65	1.14
Professionals	3.94	0.93	0.22
Associate professionals	16.68	11.71	6.10
Clerks	3.74	1.78	1.47
Service workers	29.24	39.10	29.81
Skilled agriculture	0.30	0.76	0.12
Craft and related trades	5.05	5.36	8.45
Operators	1.96	2.22	1.19
Elementary occupations	27.25	31.19	43.65
Domestic workers	7.61	6.26	7.86
Other/Unspecified	0.00	0.00	0.00
	100.00	100.00	100.00
<u>Skills level of the activity</u>			
High skilled	24.81	13.29	7.46
Semi-skilled	40.29	49.22	41.04
Low skilled	34.86	37.45	51.51
Other/Unspecified	0.00	0.00	0.00
	100.00	100.00	100.00
<u>Hours spent on the main activity past four weeks</u>			
1-5 hours	32.22	30.05	31.21
6-10 hours	24.05	27.53	34.91
11-20 hours	15.76	19.00	16.19
21-30 hours	6.34	5.79	5.29
31-40 hours	5.96	4.34	4.02
More than 40 hours	12.07	8.81	5.26
Unspecified	3.60	4.48	3.12
	100.00	100.00	100.00
<u>Mean volunteering hours past 4 weeks</u>	22.30	19.72	15.30
<u>Expectation on receiving something from the activity</u>			
Yes	13.87	6.12	4.63
No	86.13	93.88	95.37
	100.00	100.00	100.00
<u>Item/Reward expected to receive</u>			
Out of pocket expenses	33.01	60.77	61.28
Food	12.51	47.26	74.48
Transport	1.99	28.16	51.07
Clothes	3.31	25.17	48.75
Shelter	2.54	19.53	55.95
Experience/Skills	29.55	47.06	52.95
Other	17.09	25.01	52.28
	100.00	N/A [#]	N/A [#]

[#] More than one option could be chosen in 2014 and 2018, and therefore the proportions did not add up to 100%.

Table 3: Continued

	2010	2014	2018
<u>Activity done through an organisation or as an individual</u>			
Through an organisation	38.83	28.48	19.43
As an individual	54.77	67.06	77.16
Both	6.40	4.46	3.42
	100.00	100.00	100.00
Type of organisation (if the activity was done through an organisation)			
Charity/NGO/NPO	31.78	19.03	20.10
Religious	43.39	44.51	49.62
Political	1.78	7.70	2.49
Union	0.49	1.02	0.73
Private business	4.07	3.60	1.99
Education institution	5.85	5.17	4.38
Health institution	2.34	1.39	1.94
Economic, social and community development	N/A	4.95	3.68
Culture and recreation	N/A	2.25	3.15
Fund-raising organisation	N/A	0.40	0.00
Natural resource conservation and protection	N/A	0.49	0.32
Law enforcement	N/A	4.23	2.38
Other government entity	10.30	1.66	0.86
Other	N/A	3.18	8.36
Unspecified	N/A	0.41	0.00
	100.00	99.99	100.00

Turning our attention to hours spent on the main activity in past four weeks, for the first two surveys, volunteers mainly worked for 1-5 hours. As off the last conducted survey, the hours increased as about 35% of volunteers worked for 6-10 hours. The expectation upon receiving compensation for volunteering has been on a downward trend; in 2018 the share was at a low of 4.63%. The share of not receive anything has grown to about 95% in 2018. If they really expected to receive something from volunteering, the two items they most anticipated are food and out-of-pocket expenses, followed by shelter as third in 2018. This could be an indication of the state of living in South Africa; the impact of high unemployment and slow job creation on households.

Continuing with other results of Table 3, most people preferred volunteering individually. Those who declared they volunteered for an organization were asked a follow-up question - to report the type of organisation they volunteered for. The results in Table 3 show that the two most dominant organizations were religious (always above 40% in all three VAS waves) and Charity/NGO/NPO (decline from 31% to 20% but still ranked second by 2018). This

indicates that people believe that it is their duty to help and assist others throughout life agreeing with Akintola (2011) in section 2.3 of the study.

Table 4: Top 10 detailed occupations of the main activities of volunteers (%)

SASCO code	Detailed occupation	%
2010		
5122	Cook	11.52
9190	Elementary sales and services occupations n.e.c.	7.83
9131	Domestic worker	7.61
5133	Home-based personal care worker	6.51
9152	Doorkeepers, watchpersons and related workers	4.94
5162	Police or traffic officer	4.21
3480	Religious associate professional	3.83
5139	Personal care and related workers n.e.c.	3.47
3460	Social work associate professional	3.44
9132	Helpers and cleaners in offices, hotels and other establishments	3.21
2014		
5122	Cook	25.81
9152	Doorkeepers, watchpersons and related workers	7.14
9312	Construction and maintenance labourers: roads, dams and similar constructions	6.42
9131	Domestic worker	6.26
5133	Home-based personal care worker	5.92
9190	Elementary sales and services occupations n.e.c.	5.35
5139	Personal care and related workers n.e.c.	3.73
9132	Helpers and cleaners in offices, hotels and other establishments	3.56
3480	Religious associate professional	3.01
3475	Athletes, sportspersons and related associate professionals	2.43
2018		
5122	Cook	19.91
9190	Elementary sales and services occupations n.e.c.	15.84
9312	Construction and maintenance labourers: roads, dams and similar constructions	10.02
9131	Domestic worker	7.86
9132	Helpers and cleaners in offices, hotels and other establishments	4.99
9152	Doorkeepers, watchpersons and related workers	4.99
5131	Childcare workers	3.58
5133	Home-based personal care worker	3.50
9211	Farmhands and labourers	3.19
7411	Butchers, fishmongers and related food preparers	2.97

Table 4 above shows the top 10 detailed occupations that volunteers were involved with. There were six occupations that has been present throughout all surveys namely Cook, Elementary sales and services occupations n.e.c., Domestic workers, Home-based personal

care worker, Doorkeepers, watchpersons and related workers and Helpers and cleaners in offices, hotels and other establishments. As ranked by SASCO, the most dominant occupation that volunteers were involved in was cooking. The result is expected as those associated in volunteering are mainly individuals with incomplete secondary education.

4.3 Econometric analysis

The following section displays the results for the Probit and Heckprobit regression for each VAS conducted. Tables 5 and 6 focus solely on volunteers. Table 5 shows the results of probit regressions on the labour forces participation likelihood followed by the Heckprobit regressions (Table 6) on employment likelihood conditional on participation. Lastly, Tables 7 and 8 completely pivots on all working-age population.

Table 5 presents the regressions on labour force participation likelihood on volunteers only. First of all, male volunteers were associated with a more that 18% likelihood of participating in the labour market compared to their female counterparts, after controlling differences in other characteristics and the result was statistically significant in all three survey years. Accounting for the race variable, in 2014 and 2018, Indians volunteers were significantly less likely to participate in the labour market relative to Black volunteers. All age cohorts are linear and significant for all years. For the volunteers aged 25-54 years, they were significantly more likely to enter labour force, compared with volunteers aged 15-24 years.

Controlling for province, in 2014, volunteers residing in KwaZulu-Natal, North West and Limpopo were significantly less likely to contribute to the labour market compared to those residing in Eastern Cape. However, volunteers residing in Free State, Gauteng and Mpumalanga were significantly likely to be part of the labour market (in 2018). In 2010, the results were insignificant. When looking at the area type, volunteers living in urban area exhibit a significantly higher probability of entering into the labour force compared to those residing in rural areas, *ceteris paribus*. In the surveyed years, on average, the volunteers residing in urban areas were about 12% significantly more likely to be labour force participants compared to rural residents.

Table 5: Probit regressions on labour force participation likelihood, volunteers only

	Marginal effect		
	2010	2014	2018
Gender: Male	0.2416***	0.2081***	0.1825***
Race: Coloured	-0.0368	-0.0770	-0.0499
Race: Indian	0.0261	-0.3790***	-0.2301**
Race: White	-0.0274	-0.1224	-0.0660
Age: 25-34 years	0.2121***	0.2572***	0.2911***
Age: 35-44 years	0.2418***	0.3430***	0.3504***
Age: 45-54 years	0.2131***	0.2609***	0.3214***
Age: 55-64 years	0.0250	0.0836	0.1087**
Province: Western Cape	0.0082	0.0009	0.0536
Province: Northern Cape	-0.0292	-0.0144	0.0135
Province: Free State	-0.0414	0.0114	0.1530***
Province: KwaZulu-Natal	-0.0638	-0.1350***	0.0043
Province: North West	-0.0501	-0.1654***	0.0825
Province: Gauteng	-0.0301	-0.0175	0.1579***
Province: Mpumalanga	0.0692	0.0730	0.1506***
Province: Limpopo	-0.0088	-0.1083**	0.0673*
Area: Urban	0.1672***	0.1935***	0.1244***
Education years	-0.0212	-0.0327***	-0.0214*
Education years squared	0.0031***	0.0038***	0.0030***
Married	-0.0320	-0.0340	-0.0094
Number of children	-0.0269**	-0.0109	-0.0257***
Number of males 15-59 years	-0.0175	-0.0035	0.0052
Number of females 15-59 years	0.0531***	0.1920	0.0075
Number of elderly	-0.0541*	-0.0619**	-0.0497**
Number of observations	1 970	2 495	2 590
Observed probability	0.6510	0.6160	0.6290
Predicted probability at \bar{x}	0.6830	0.6458	0.6561
Chi-squared statistic	270.95	373.46	460.16
Prob > Chi-squared	0.0000	0.0000	0.0000
Pseudo R-squared	0.1618	0.1886	0.1729

*** Significant at 1%

** Significant at 5%

* Significant at 10%

In the three conducted surveys, education squared variable was positive and significant in all three surveys. This implies that there is a non-linear convex (but significant) relationship between education of individuals partaking in volunteering activities and labour force participation likelihood. That is, as years of education of volunteers increased, labour force participation likelihood increased but it increased at an increasing rate.

Lastly, the results suggest that in 2010 and 2018, the higher the number of children in the households, the significantly lower the likelihood of volunteers to enter labour market to seek work. This makes sense as the adults in need to stay at home and care for the children. Kamerāde (2019) found that families are less likely to partake in formal volunteers when the household consists of three or more children compared to households with fewer children. Also, in all three waves, the presence of more elderly members was associated with a significantly lower likelihood of the volunteers to seek work in the labour market. The reason for this is that volunteers become indolent due to getting some indirect income for pension of the elderly members (old-age social grant). Furthermore, Bradley (2003) notes that many older individuals are less likely to volunteer due to negative changes in health – a decline in one’s physical strength and mental capacity.

Table 6 focuses on regressions on employment likelihood conditional on participation of volunteers only. Lambda is statistically significant and negative only in 2018. This implies that the sample is unbiased providing a more accurate report on the employment likelihood conditional on participation. In 2018, being a male volunteer significantly decreased the probability of being employed relative to their female counterparts, *ceteris paribus*. Whites and Coloureds, 13.13% and 22.86% respectively, were significantly more likely to find employment in 2010. Additionally, in 2018, Indians were 30.09% likely and Whites were 26.53% likely to be employed compared to Blacks. There were no results of Indians in 2014.

Turning to the age variable, the results reveal that in 2010 and 2014, compared to 15-24 years, those volunteers aged between 25 and 64 years were significantly likely to be employed. In addition, only in 2018, 27 percent of those aged 55-64 years were significantly like to be employed. The reason for this could be due to the experience older people have in their field compared to the younger generation – indicated how useful their skills are. Again, the province results are mixed. Northern Cape, Free State, North West, Gauteng and Mpumalanga residents exhibit negative probabilities of employment bearing comparison Eastern Cape. Shockingly, volunteers residing in Gauteng has a significantly 23% likelihood of not being employed.

In the case if the education years squared variable, only the first VAS are significant. This indicates a convex and unmethodical link between employment likelihood and education years. As employment probability increased as education years increased, this probability

increased at an increasing rate as the person became more educated (hence convex relationship). Furthermore, there are significantly positive marginal effects of the married variable were anchored at 0.5% employment likelihood. This could be a result of the financial pressure to accept job offers to provide the needs of married households.

Table 6: Heckprobit regressions on employment likelihood conditional on participation, volunteers only

	Marginal effect		
	2010	2014	2018
Gender: Male	0.0302	0.0675	-0.1222**
Race: Coloured	0.1313***	-0.0644	0.1503*
Race: Indian	0.1335*		0.3009***
Race: White	0.2286***	0.0621	0.2653***
Age: 25-34 years	0.1039**	0.2162***	-0.1182
Age: 35-44 years	0.1923***	0.2868***	-0.0207
Age: 45-54 years	0.2094***	0.3315***	0.0671
Age: 55-64 years	0.1569***	0.2796***	0.2722***
Province: Western Cape	-0.0936	0.0795	0.0611
Province: Northern Cape	-0.0601	-0.1363	-0.0611
Province: Free State	-0.0265	-0.1150**	-0.1825**
Province: KwaZulu-Natal	0.0916*	0.0120	0.0953*
Province: North West	-0.0535	-0.1644*	-0.0426
Province: Gauteng	-0.0459	-0.0934*	-0.2361***
Province: Mpumalanga	-0.0855	-0.0361	-0.1365*
Province: Limpopo	0.0804*	0.0187	0.1342**
Area: Urban	0.0920**	0.0458	-0.0463
Education years	-0.0313**	-0.0241	-0.0381
Education years squared	0.0026***	0.0030***	0.0017*
Married	0.0563**	0.0555*	0.0568**
Lambda	0.0007	0.0654	-0.5980***
Number of observations	1 241	1 413	1 544
Observed probability	0.7509	0.7194	0.6611
Predicted probability at \bar{x}	0.8540	0.7634	0.6976
Chi-squared statistic	168.77	165.01	237.80
Prob > Chi-squared	0.0000	0.0000	0.0000
Pseudo R-squared	0.2465	0.1564	0.1498

*** Significant at 1%

** Significant at 5%

* Significant at 10%

Table 7 shows the probit regressions on labour force participation likelihood for all working-age population. The results are as follows: Firstly, the volunteering result is contrastingly

intriguing. Figure 4 clearly illustrated that the LFPR is clearly higher for volunteers (compared with non-volunteers), but now in the regression, after controlling for differences in other characteristics, the volunteer dummy was insignificant in all three VASs, meaning volunteering status did not result in a significantly higher or lower LFPR, *ceteris paribus*.

Table 7: Probit regressions on labour force participation likelihood, all working-age population

	Marginal effect		
	2010	2014	2018
Gender: Male	0.1966***	0.1813***	0.1694***
Race: Coloured	0.0040	0.0311***	-0.0165***
Race: Indian	-0.0883***	-0.1430***	-0.1399***
Race: White	-0.1053***	-0.0894***	-0.1063***
Age: 25-34 years	0.3872***	0.3898***	0.3945***
Age: 35-44 years	0.4073***	0.4257***	0.4200***
Age: 45-54 years	0.3723***	0.3747***	0.3761***
Age: 55-64 years	0.2079***	0.2262***	0.2210***
Province: Western Cape	0.1202***	0.0843***	0.0936***
Province: Northern Cape	0.0493***	0.0546***	0.0229
Province: Free State	0.0690***	0.0493***	0.0717***
Province: KwaZulu-Natal	0.0136	-0.0086	-0.0451***
Province: North West	0.0341***	0.0041	-0.0142
Province: Gauteng	0.1154***	0.0644***	0.0742***
Province: Mpumalanga	0.1032***	0.0888***	0.1090***
Province: Limpopo	-0.0180	-0.0383***	-0.0274**
Area: Urban	0.1323***	0.1221***	0.0877***
Education years	-0.0245***	-0.0260***	-0.0186***
Education years squared	0.0040***	0.0038***	0.0034***
Married	0.0430***	0.0389***	0.0434***
Volunteer	0.0049	-0.0057	-0.0075
Number of children	-0.0175***	-0.0177***	-0.0108***
Number of males 15-59 years	-0.0183***	-0.0156***	-0.0126***
Number of females 15-59 years	0.0013	0.0090***	0.0019
Number of elderly	-0.0813***	-0.0860***	-0.0811***
Number of observations	53 745	51 839	42 630
Observed probability	0.5592	0.5729	0.5946
Predicted probability at \bar{x}	0.5776	0.5928	0.6199
Chi-squared statistic	9553.31	8760.01	9205.22
Prob > Chi-squared	0.0000	0.0000	0.0000
Pseudo R-squared	0.2484	0.2425	0.2491

*** Significant at 1%

** Significant at 5%

* Significant at 10%

Table 7 outlines the results of labour force participation likelihood of all working-age population. The volunteer variable was insignificant and negative in 2014 and 2018. This indicates that volunteering has no impact on labour force participation likelihood for the working-age population. For the other explanatory variables, the results are highly similar between Tables 5 and 7. That is, the following groups are associated with significantly greater labour force participation likelihood, compared with their respective reference categories: Indian males mostly aged 35-44 years, residing in urban areas of Western Cape, Free State, Gauteng and Mpumalanga. Also, the education squared variable is positive and significant. That is, as years of education increased, labour force participation likelihood increased at an increasing rate.

Contrarily, the following groups are associated with significantly lower labour force participation likelihood, compared with their reference categories: Indians and Whites; People situated in Limpopo; the number of children, the number of males aged 15-59 years and the number of elderly in households– this relates to the evidence provided in the discussion of Table 5. Also, the results are expected of the elderly as they reach a point of leisure in their lives.

Next, Table 8 shows the Heckprobit regressions on employment likelihood conditional on participation of all working-age population. The lambda in this instance, compared to Table 6, it is statistically significant in all surveys. Further, this illustrates the importance of stabilizing the labour force participation results and the accuracy thereof. In this instance the volunteer variable is statistically insignificant and negative imply that volunteers are less than likely to be employed conditional on participation. Starting with the volunteer result, the results are quite interesting. After controlling for differences in other characteristics, volunteers were 25%, on average, significantly less likely to find employment than those who did not volunteer. The reason could be that volunteers usually have lower educational attainment compared to non-volunteers, as found in the earlier descriptive statistics.

Concerning the other explanatory variables, the results are similar between Table 6 and 8. The following groups are associated with significantly greater employment likelihood conditional on participation of all working-age population, compared with their respective reference categories: all age groups are likely to be employed – this could due to experience

obtained in the past; People living in the rural parts of Limpopo. The education years squared are convex and positively significant concluding that as employment probability increased as education years increased, this probability increased at an increasing rate as the person became more educated; those married - confirms the financial responsibility of married couples to uphold household duties.

Table 8: Heckprobit regressions on employment likelihood conditional on participation, all working-age population

	Marginal effect		
	2010	2014	2018
Gender: Male	-0.0163*	-0.0171*	-0.0129
Race: Coloured	0.0658***	0.0440***	0.0786***
Race: Indian	0.1334***	0.1206***	0.1620***
Race: White	0.1815***	0.1584***	0.1901***
Age: 25-34 years	-0.0016	-0.0373	-0.0552**
Age: 35-44 years	0.0764***	0.0258	0.0204
Age: 45-54 years	0.1181***	0.0873***	0.0826***
Age: 55-64 years	0.1851***	0.1997***	0.1993***
Province: Western Cape	-0.0378**	-0.0228	0.0381***
Province: Northern Cape	-0.0611***	-0.0603***	0.0336*
Province: Free State	-0.0401***	-0.0839***	-0.0471***
Province: KwaZulu-Natal	0.0676***	0.0612***	0.1259***
Province: North West	-0.0197	0.0290**	0.0565***
Province: Gauteng	-0.0823***	-0.0349***	-0.0405***
Province: Mpumalanga	-0.0406***	-0.0320**	-0.0038
Province: Limpopo	0.0584***	0.1213***	0.1534***
Area: Urban	-0.0430***	-0.0572***	-0.0039
Education years	-0.0356***	-0.0358***	-0.0414***
Education years squared	0.0019***	0.0022***	0.0023***
Married	0.0824***	0.0785***	0.0891***
Volunteer	-0.2446***	-0.2709***	-0.2682***
Lambda	-0.0564***	-0.0583***	-0.0879***
Number of observations	27 794	27 915	24 702
Observed probability	0.7480	0.7439	0.7239
Predicted probability at \bar{x}	0.7850	0.7772	0.7584
Chi-squared statistic	2391.31	2345.97	2517.68
Prob > Chi-squared	0.0000	0.0000	0.0000
Pseudo R-squared	0.1364	0.1253	0.1285

*** Significant at 1%

** Significant at 5%

* Significant at 10%

On the other hand, the following group are associated with significantly lower employment likelihood conditional on participation of all working-age population, compared with their respective reference categories: Indian males aged between 25-34 years - policies attracting more women to join the labour force are in effect thus, this result is expected; those residing in the Free State and Gauteng. The education years variable was negative and significant.

Table 9: Probit regressions on volunteering likelihood of the working-age population

	Marginal effect		
	2010	2014	2018
Gender: Male	-0.0136***	-0.0141***	-0.0235***
Race: Coloured	-0.0014	-0.0073	-0.0078
Race: Indian	0.0202***	-0.0057	-0.0094
Race: White	0.0026	0.0043	-0.0085
Age: 25-34 years	0.0095*	0.0089*	0.0173***
Age: 35-44 years	0.0246***	0.0219***	0.0324***
Age: 45-54 years	0.0480***	0.0439***	0.0494***
Age: 55-64 years	0.0619***	0.0405***	0.0540***
Province: Western Cape	0.0117**	-0.0209***	-0.0118*
Province: Northern Cape	0.0224***	-0.0168***	0.0056
Province: Free State	0.0334***	0.0023	0.0619***
Province: KwaZulu-Natal	-0.0159***	-0.0257***	0.0362***
Province: North West	-0.0185***	-0.0263***	-0.0018
Province: Gauteng	-0.0065	-0.0309***	-0.0050
Province: Mpumalanga	-0.0100**	-0.0228***	0.0700***
Province: Limpopo	0.0442***	-0.0147***	0.0665***
Area type: Urban	-0.0056*	-0.0320***	-0.0317***
Education years	-0.0009	-0.0038***	0.0005
Education years squared	0.0002***	0.0004***	0.0001
Marital status: Married	0.0053**	-0.0016	0.0035
Labour market status: Employed	-0.0129***	-0.0153***	N/A
Labour market status: Unemployed	N/A	N/A	0.0258***
Number of children 0-14 years in the household	0.0025***	0.0047***	0.0008
Number of males 15-59 years in the household	-0.0072***	-0.0035**	-0.0037**
Number of females 15-59 years in the household	-0.0037***	-0.0078***	-0.0066***
Number of elderly 60+ years in the household	-0.0084***	-0.0027	-0.0037
Number of observations	27 794	27 915	24 702
Observed probability	0.0382	0.0447	0.0574
Predicted probability at x -bar	0.0288	0.0375	0.0460
Chi-squared statistic	614.35	440.73	698.30
Prob > Chi-squared	0.0000	0.0000	0.0000
Pseudo R-squared	0.0777	0.0551	0.0744

*** Significant at 1%

** Significant at 5%

* Significant at 10%

N/A: Imperfect collinearity

Finally, Table 9 summarizes the results of the probit regressions on volunteering likelihood of the working-age population. It is revealed that males aged 35-65 years residing in urban parts of South Africa were significantly less likely to volunteer compared to females. In both 2010 and 2014, employed individuals were significantly less likely to volunteer. This result indicates that there was not a two-way relationship between the employed and volunteers. In 2018, on the other side of the spectrum, the unemployed were 2.6% significantly likely to volunteer – suggesting a two-way relationship between volunteers and the unemployed. This result could further emphasize the need to keep busy or lessen time as they wait for employment. Throughout the studied period, females aged 15-59 years in the household were significantly less likely to be involved in volunteering initiatives

4.4 Conclusion

Descriptive statistics and econometric findings were the focus of this section. The results revealed the following: Volunteering African females residing in urban areas with Matric or lower educational attainment have a highest share of being employed compared to males. The province variable produced mixed results; however, Gauteng and KwaZulu-Natal had the greatest share. Additionally, the employed who are volunteers have better labour market outcomes. This can be seen by high level of engagement in high skilled occupations. Volunteers are more likely to work as cook or elementary sales workers for religious and charity/NPO/NGO organisations. In closing, after controlling for differences in other characteristics, volunteers were 25%, on average, significantly less likely to be employed than those who did not volunteer.

CHAPTER FIVE: CONCLUSION

5.1 Introduction

Over recent years, many international studies investigated volunteering. However, this is a topic that can intensively be expanded locally. This study focused on the labour market outcome of volunteers gathering data for Statistics SA, mainly the VAS for 2010, 2014 and 2018 to analyse the profile of volunteers and the effect it has on the labour market. This chapter aims to review the key empirical findings before providing a conclusion and policy suggestion.

5.2 Review of key findings

The study first discussed the key concepts and theories as well as reviewed the past local and international empirical studies in Chapter Two, before explaining the methods and data in Chapter Three. The study then proceeded to Chapter Four which presented empirical findings: descriptive and econometric findings. The findings revealed that the number of volunteers more than doubled between 2010 and 2018 (1.11 million versus 2.56 million) with females having an upper hand (more than two-thirds) to their male counterparts. The in-depth analysis of the volunteers' profile shows that that the African share of volunteering surpasses the other three races since 2010. These volunteers primarily reside in urban areas of Gauteng and of late KwaZulu-Natal. The descriptive findings also suggest that volunteers are usually individuals who have not completed secondary education followed by matric certificate holders.

Turning attention to the profile of employed by volunteering status, volunteers and not volunteers were examined. These are the results for the volunteer group are as follows: individuals are likely to be African females who have not completed a secondary education aged between 35-44 years residing in the urban areas Gauteng and KwaZulu-Natal. These individuals worked in the formal tertiary sector completing semi-skilled labour, mainly in elementary occupations such as CSP services. The results for the not volunteer groups follows: These individuals are likely to be African males living in the urban areas of Gauteng without a secondary education aged between 25-34 years and, as of the last survey, 35-44 years. These individuals worked in the formal tertiary sector, mainly in elementary occupations such as CSP services and wholesale and retail.

Furthermore, volunteers worked for 1-10 hours past four weeks. While working more than 85% did not expect to receive any remuneration, however, if they received payments for work completed, it would be out of pocket expenses, food or experience. Volunteers prefer to work for religious organisation followed by charity/NPO/NGO. The activities they usually partake in is cooking which shows the caring nature of volunteers.

Moving on to the econometric analysis, the first probit regression model on labour force participation likelihood (volunteers only) revealed that working-aged African males living in urban areas are more likely to join the labour force relative to females. The regression also reveals that the higher the number of children in the households, the smaller the probability of volunteers of entering the labour market. After the first regression follows the regression on employment likelihood conditional to participation (volunteers only). Interestingly, lambda is only statistically significant in 2018 – indicating that the likelihood of bias data could have aroused in the 2 previous surveys. The results suggest that male volunteers are less likely to be employed compared to female volunteers.

The probit regressions on labour force participation likelihood (working-age population) shows that Indians and Whites are less likely to engage in the labour force compared to Blacks. Further, people residing in Limpopo are rarely participating in the labour force. Lastly, the Heckprobit regression on employment likelihood conditional to participation of all working-age population reveals that for all surveys, lambda was statistically significant (unlike the result in Table 6). Working-aged Whites are more likely to obtain employment compared to Blacks. This shows the discrepancies in the labour market. Importantly, individuals without education have employment opportunities. The marital status results are expected as many married people have responsibilities within their marriage. Importantly, the insignificant volunteer dummy in the labour force participation probit in Table 7, and the significant (negative marginal effects) volunteer dummy in the employment Heckprobit (Table 8) implies that fewer volunteers are part of the labour market. Lastly, the findings of Table 9 suggest that employed individuals were significantly less likely to volunteer, after controlling for differences in other characteristics.

5.3 Conclusion and policy suggestions

The dynamic changes in the South African post-Apartheid created ripples in the labour market, by improving the labour market prospects of the previously disadvantaged groups with the abolishment of the past discriminatory labour legislations. However, high unemployment remains a serious phenomenon affecting all South Africans even more than 25 years since the advent of democracy; thus, reaching equality in the labour market seems farfetched as obtaining employment is difficult in South Africa. The research aimed, through descriptive and empirical findings, to examining the labour market outcome of volunteers with the aid of the VAS of 2010, 2014 and 2018 data, and the empirical findings revealed that volunteers were less likely to be employed than those who did not volunteer, after controlling for differences in other characteristics. The findings undeniably proves that there are benefits associated to volunteering and may be helpful in terms of the labour market prospects.

Given the instability of the labour market, to ensure successful economic transition, there are various initiatives that the government can implement to tackle socio-economic activities, encourage the unemployed working-age to seek employment and promote participation in volunteer activities. The below policies can affect the economy directly or indirectly through its implementation mainly focusing on improving the lives of discouraged and job-seeking volunteers.



5.3.1 Stipend paid for volunteers

As seen in this study, one of the reason people volunteer is to gain necessary skills that can be applied in medium to long term employment opportunities. A stipend is a financial remuneration rewarded to volunteers for services conducted (McBride et al., 2009) – this is a way of encouraging people to seek employment and lessen the strain that unemployment has on the working-age. There is a difference between a stipend and a wage. A wage is money earned after a week of work completed by an employee. A stipend may promote diverse population inclusion in service. One of the objectives for the stipend-paid for volunteers was a creative strategy to improve skill levels of the youth and to provide social welfare services with restricted resources, through the EPWP initiatives (Hunter & Ross, 2013).

Based on studies conducted in South Africa, paying a stipend to volunteers assisted recipients as a survival plan in certain scenarios by assisting poor households to meet basic needs as it is not big enough to cover other expenses (Smith et al., 2020). Akintola (2011) argues that

people who receive a stipend are highly motivated to gain extra skills than those who have low paid jobs. This emphasizes the positive impact that the stipend has on individuals.

In contrast, some individuals believe that volunteers should not be paid. The core of volunteering is sacrifice, as stipulated by McBride et al. (2009), who argued that if one is financial reimbursed for volunteering, it is not considered as a sacrifice. On the other hand, people who receive a stipend are prone to experience high levels of guaranteed benefits implying that the stipend may promote efficiency, effectiveness and inclusion (McBride et al., 2009). However, Akintola (2011) adds that a stipend paid to volunteers, by means of EPWP, is an easy way out.

5.3.2 The Expanded Public Works Programme

The EPWP was introduced by Thabo Mbeki in 2003 and was officially launched in 2004. Heradien (2013) notes that enhancing economic growth was not the suitable solution to eradicate unemployment and poverty as initiatives such as RDP and GEAR was unsuccessful. The aim of EPWP was to create 1 million jobs between 2004 and 2009 for phase 1 and 4.9 million for phase 2 (Bokolo, 2013). These jobs will particularly enhance work experience, skills and training. The EPWP has more than one purpose: to generate short-term employment, reduce poverty, training individuals to be better equipped for the labour market, Hlatshwayo (2017) – influentially affect the unemployed in productive employment.

Certain research in South Africa indicates mixed results of the EPWP. Heradien (2013) reports that there are some researches that concludes that EPWP has done nothing to counteract unemployment in SA whereas other authors believe that it has a positive impact on unemployment. Most government departments implemented EPWPs which contributed tremendously in providing employment, however, the programmes failed to implement the necessary skills development and employment creation (Bokolo, 2013). Furthermore, international countries – this includes low- and middle-income countries – have also adopted this programme. Particularly in OECD countries, interest in public programmes grew after the Great Depression, Altman (2004). The EPWP was implemented to country that have substantial labour market policies – focusing on target oriented techniques. Countries such as Bangladesh and India have successfully implemented these types of programmes resulting in poverty reduction and lowering unemployment, Bokolo, 2013.

Given that volunteers were about 25% less likely to find employment than those who did not volunteer (*ceteris paribus*), programmes benefitting the improvement of volunteer skills should be created and systematically implemented. The interest of the programmes must serve as a mechanism to improve the lives of unemployed individuals. Programmes should be altered to better suit the education of the youth for the foreseeable future, increasing one's opportunity of employment. Importantly, to strengthen the economy even further, everyone – from the those with no or little education to the most educated – should be included in EPWPs. Those involved in the programmes should be linked to the VAS so that better conclusions can be drawn.

5.3.3 Youth Wage Subsidy

One of the reasons for unemployment, especially youth unemployment, is that many South Africans live in rural locations which are far from employment opportunities. Bhorat (2012) states that those that are unemployed usually live in rural areas. These individual usually lack skills and has limited excess to opportunities. This makes travelling from one place to another expensive. Expensive transportation costs can discourage a working-age individual from actively seeking work.

Staggering unemployment is not only a local phenomenon. Nevondwe & Odeku (2014) reported that certain middle-income countries such as Korea, Mexico, Turkey, Chile and the Slovak Republic implemented wage subsidies due to the increase of unemployment in economic crisis. The impact on two countries are as follows: Chile implemented an employment subsidy focused on recruiting youth aged 18-24 years and Korea introduced a wage subsidy to SMMEs, Nevondwe & Odeku (2014).

Further, Bhorat (2012) found that, on average, South Africans spend about approximately 34 minutes commuting to work on a daily basis. This is the same for both males and females. The implementation of the transport subsidy would lessen the pressure on the wallets of those unemployed individuals living in rural areas to get from one to another. The implementation of the subsidy can actually be used to transport volunteers to interviews and other work opportunities. Given the lack of obtaining a basic education in South Africa, for volunteers and non-volunteers, Yu (2012) notes that the EPWP could complement the youth wage subsidy to improve employment likelihood by helping uneducated youth to acquire the necessary skills for future employment opportunities.

Maziya (1999) asserts that the government should focus on employment subsidies. This will stipulate a demand amongst the unskilled labour and ease the challenges that the low-paid labours are facing. Another proposal to implement the wage subsidy – the implementation of the wage subsidy was to intervene in the high unemployment rate that the youth of South Africa was experiencing (Levinsohn et al., 2014) – is to implement it through the Unemployment Insurance Fund (UIF). Some individuals do not receive funding when they become unemployed. A wage subsidy can cover for the first two months after unemployment or until the person become employed, however, it must be with the two months.

Post offices are easily accessible buildings for this subsidy, the wages can be paid to the nearest post office and those relying on the subsidy should collect it there. A system can be created online whereby individuals can safely enter their banking details to get the subsidy directly into their personal bank accounts. This is a way of preventing the money being stolen or lost.

5.3.4 Improvement of the panel data set

The South African labour force instrument, QLFS, does not capture all the necessary information to follow trends and conclude key findings. Borat, Hill & Steenkamp (2019) noted that the survey does not analyse labour market indicators such as earnings over time and the evolution of employment. Additionally, the authors also identified measurement disparities – which affects the previous mentioned issues. As mentioned before, volunteering is not discussed in its entirety, thus, recommending the question, “have you been involved in volunteering activities in the past year?” The National Income Dynamics Study is a panel used to obtain data from South African households. A main feature of this survey is that it follows South Africans as the move from their childhood residence to their own houses (Woolard, Leibbrandt & De Villiers, 2010) – it tracks people’s activities (including labour market activities) over time.

Given that the regression, in this paper, shows that the volunteer dummy is insignificant in the participation probit but, negative and significant in the employment probit, it would be instrumental for NIDS to add questions, to the panel data set, directed at volunteers. Thus, there will be a record of those who “worked” as a volunteer at a certain point, X , that were later employed in period $(X + 1)$, – as the volunteering experience eventually helped them to

find work easier in the labour market. Furthermore, the QLFS (which is not panel data) can add a question to ask the survey participants who were employed to answer, “Have you ever been involved in volunteering activities in the past year?” This will give a clear indication if past volunteering experience give volunteers an advantage to later find work in the labour market.



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