

# **Who are the good Samaritans? An analysis of volunteers and volunteerism in South Africa**

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## **DECLARATION**

I, FERDINAND NIYIMBANIRA declare that the thesis, which I hereby submit for the degree of PhD in Economics, is my own work and that all the sources obtained have been correctly recorded and acknowledged. This thesis was not previously submitted by me for a degree at any institution of higher learning.

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## ABSTRACT

Economic theories usually assume that the amount of work offered by individuals increase as wages and salaries increase. However, there are volunteers who present their work without payment for the production of goods and services, for the benefit of others. Volunteer work is of significance in a time when social safety nets are weak and there are ever increasing demands on welfare organisations. Volunteers can make a difference in their communities and entire society in general which means that if they are understood better, it may be possible to harness their power for the greater good. Therefore, this thesis analyses volunteers and volunteerism in South Africa and the factors that determine their efforts.

The manuscript presents a critical discussion of economic theories of volunteering, major concepts and types of volunteers to arrive at a plausible set of models explaining volunteerism and the general motives of volunteers. The descriptive analysis of data sets from the Labour Force Survey was conducted. The data also allows for the estimation of a limited dependent variable regression model of the probability of volunteering as a function of individual-specific predictors. The results from Logit (Binary LogitRegression) regression showed that all estimated coefficients have the expected signs: Females are more likely to do volunteer work more than males; older people are more likely to participate more in volunteer activities than middle age and younger ones. The results also reveal that the higher your level of education, the more likely you will be to do volunteer work. This was the same with income: higher income individuals are more likely to do volunteer work.

This study also used data from the Volunteer Activities Survey (VAS) to describe volunteers and estimate a model of the determinants of hours of volunteer work supplied. The results indicate a robust relationships between volunteered and determinant such as gender, age group; population group, level of education, income category, marital status and employment status, to mention few. Results from the regression model show that age is positively related to hours spend doing volunteer work. Even though the gender variable is found to be not statistically significant, the results indicated that women do volunteer work more than men. The further a person is educated the more he/she will participate in voluntary work. The evidence indicated that there is a positive relationship between income and hours of volunteering.

The evidence provides a number of findings that are important to policymakers, non-profit organisations and all other stakeholders in volunteerism. This study could be used to devise more efficient and effective plans of how the number of volunteers and the hours that they volunteer could be retained and increased.

**Keywords:** volunteer, volunteerism, consumption model, investment model, South Africa

## OPSOMMING

Ekonomiese teorieë neem aan dat die hoeveelheid arbeid wat mense aanbied, toeneem soos wat lone en salarisse toeneem. Daar is egter vrywilligers wat hulle arbeid aanbied vir die produksie van goedere en dienste, tot voordeel van ander mense, sonder om daarvoor vergoed te word. Vrywillige werk is toenemend belangrik in 'n tydgleuf waarin sosiale veiligheidsnette swakker is en daar toenemend druk is op welsynsorganisasies. Vrywilligers maak 'n verskil in hulle gemeenskappe en dit is belangrik om hulle beter te verstaan, om hulle krag beter in te span. Hier proefskrif ondersoek vrywilligers en vrywillige werk in Suid-Afrika.

Die manuskrip gee 'n kritiese bespreking van die ekonomiese teorieë van vrywillige werk, die belangrikste begrippe en tipes vrywilligers om 'n model te bepaal wat die gedrag van vrywilligers verklaar. Die empiriese analise bestaan uit twee dele. Eerste word data vanuit die arbeidsmag-opname gebruik om die eienskappe van vrywilligers te beskryf en 'n model te beraam wat verklaar waarom mense vrywilligers is of nie. Die resultate van die logistiese regressie wys dat daar 'n groter waarskynlikheid is dat iemand as 'n vrywilliger sal werk as die persoon vroulik is, ouer is, en hoër vlakke van opleiding en inkomste het. Tweede word data van *Volunteer Activities Survey* gebruik om ondersoek in te stel na die dryfvere van die aantal ure wat mense as vrywilligers werk. Die resultate van die regressie model wys dat daar is 'n positiewe verwantskap tussen die ure wat mense werk as vrywilligers en hulle ouderdom, vlak van opleiding en inkomste.

Hierdie resultate is van belang vir beleidmakers, nie-winsstrewende organisasies en ander belangegroeppe. Dit kan gebruik word om meer doeltreffende planne in plek te stel om meer mense volhoubaar te betrek by vrywillige werk.

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## **LIST OF ABBREVIATIONS**

**FTE:** Full-Time Equivalent

**ILO:** International Labour Organisation

**LFS:** Labour Force Survey

**LOGIT:** LogitRegression

**NGO:** Non-Government Organisation

**NPO:** Non Profit Organisation

**NTC :** National Technical Certificate

**OLS:** Ordinary Least Squares

**QLFS:** Quarterly Labour Force Survey

**SPSS:** Statistical Package for the Social Science

**STATSSA:** Statistics South Africa

**UK:** United Kingdom

**USA:** United States of America

**VAS:** Volunteer Activities Survey

# CHAPTER 1: INTRODUCTION

## 1.1 BACKGROUND

Volunteers are people who supply labour for the production of goods and services for the benefit of others. Volunteer work is of significance in a time when social safety nets are thinning and there are ever increasing demands on welfare organisations. If volunteers are understood better, it may be possible to harness their power for the greater good. The question is: Who are these Good Samaritans (Niyimbanira & Krugell, 2013)?

Classical economic theory highlights that individuals will not supply goods and services without being compensated (Katz & Rosenberg, 2005). However, large numbers of individuals volunteer their work to contribute to the economy without pay. The economic literature is rich with discussions of fundraising and monetary contributions to non-profit organisations. It contains, however, only a limited discussion of volunteering, or contributions of time (Govekar & Govekar, 2002). According to Winniford *et al.* (1997), the literature on the characteristics of volunteering for non-profit organisations is highly complex, and no conceptual model has received general support.

Many economists have studied labour force participation extensively, expending a great deal of effort to discover the determinants of market work. Traditional economic theory assumes that the individual chooses between work and leisure. This simplifying assumption is close enough to reality to produce valuable insights into labour force participation (Mueller, 1975). In other words, what was really being analysed was paid labour force participation. According to Mueller (1975:326), volunteer work remains one significant area of work almost totally ignored by economists. However, one of the most significant contemporary developments in the market sector of the economy is that the boundaries of the theory and subject matter have broadened to include unpaid work. There are a number of questions that need to be asked. Why would a utility-maximising economic worker find it rational to volunteer? What are the characteristics of such an individual? What types of volunteer activities are there and how do they contribute to private enterprise or public service provision? What role can volunteers play to enhance economic performance and society's wellbeing?

Volunteerism has a big impact on the economy of the country. According to Handy and Srinivasan (2005), in 2000, gifts of money and time amounting to \$4.9 billion and 1.1 billion hours, were given in private donations to non-profit activities in Canada. Brudney and Duncombe (1992) found that in the United States of America (USA), 70 percent or more of local governments involve volunteers in the delivery of services. Brudney (1993) discovered that often, help from volunteers is promoted as an answer to contemporary problems facing governments, such as eroding fiscal capacity. Thus, volunteers are reputed to enhance government productivity by reducing labour costs while simultaneously expanding the scope and even the quality of public services.

Volunteerism is topical in applied economics in developed economies, especially in assisting to understand its contributions to the economy. However, even though the contribution of volunteerism to the economy may be remarkable, and is receiving more attention in many countries (Anheier & Salamon, 1999), little research has been done on this topic in developing countries and South Africa in particular.

Rose-Ackerman (1996) argues that as the study of volunteerism has developed and the database in developed countries has grown, analytic efforts that preserve sharp distinctions between the for-profit and not-for-profit activities (volunteerism) look increasingly problematic. Therefore, clarity on terminologies used, economic theories, characteristics of volunteers, and factors that motivate their efforts, is needed. Hence, addressing this gap in the literature and empirical analysis shows the uniqueness of this study.

This thesis is based on the theory that volunteer work is a productive activity. According to Wilson and Musick (1997), it means that it is much like any other work (paid or nonpaid) rather than a simple act of consumption, or leisure time pursuit, with purely expressive goals. It should be kept in mind that volunteers may eventually become paid employees (Jones, 1995). Therefore, a market exists for volunteer labour, much like the market for paid labour.

## **1.2 PROBLEM STATEMENT**

This thesis will attempt to answer a number of questions about volunteers and volunteerism:

- ❖ What economic theories explain the behaviour of volunteers?
- ❖ What is the scope and importance of volunteering in South Africa?

- ❖ What are the characteristics of different types of volunteers in communities, not-for-profit organisations, and family businesses?
- ❖ What are the predictors of the efforts of volunteers?

This study asks what the characteristics of volunteers in South Africa are, and what factors determine their efforts. Thus the title: Who are the Good Samaritans? An analysis of volunteers and volunteerism in South Africa.

### **1.3 MOTIVATION**

Answering the above questions for South Africa is significant first for the scope of volunteering activities elsewhere. According to the Bureau of Labour Statistics (2008), in the USA, participation rates in organised volunteering were 27 percent in 2002, 29 percent in 2003, 2004 and 2005, 27 percent in 2006, and 26 percent in 2007. Govekar and Govekar (2002) wrote that 93 million USA volunteers give more than 20.3 billion hours every year to non-profit organisations. In Canada, participation rates in organised volunteering grew from 27 percent in 1987 to 31 percent in 1997, but then were back to 27 percent in 2000. Hall *et al.* (2006) noticed that 45 percent of Canadians who are 15 years and older volunteered through an organisation in 2004, and 83 percent of Canadians had engaged in informal volunteering by helping others directly, without involving an organisation, at least once in 2004. Furthermore, in the United Kingdom (UK), according to the Institute for Volunteering Research (2008), volunteering surveys showed formal volunteering rates were 44 percent in 1981, 51 percent in 1991 and 48 percent in 1997; and informal volunteering rates of 62 percent in 1981, 76 percent in 1991 and 74 percent in 1997. Given this international evidence, the question need to be asked on how South Africa is doing regarding volunteerism.

Secondly, volunteering creates social output that would otherwise require paid resources. In other words, its demand increases day-to-day because it is required by a nonprofit organisation to supply welfare to the beneficiaries. As confirmed by Akintola (2011:53), volunteers are relied upon increasingly to provide home-based care in South Africa. For example, the HIV/Aids pandemic in South Africa is putting significant pressure on social safety nets and providing volunteers with a key health care role. This will help in easing the government budget expenditure, which is supposed to be allocated to this type of work. Govekar and Govekar (2002) writes that most economic research presents the demand for volunteer labour is a horizontal line at price zero; thus, an infinite number of volunteers can be obtained for no cost. Emmanuelle (1996) disagrees with this assumption by saying that

volunteer labour is not free because the organisation must train and supervise them, which requires the work of paid labour. Even a significant increase in volunteer efforts, therefore, may not eliminate the need for government programmes. To examine the possible role of volunteers in the provision of public services there is a need to know more about their characteristics.

Thirdly, South Africa is characterised by remarkably high levels of unemployment and a small informal sector. However, there are many people who work without compensation in family businesses and nonprofit organisations. Whether this can be explained in terms of the consumption or investment theories of volunteering would allow a discussion of the possible role of volunteering in skills development, and the fostering of entrepreneurship. Again, it is important to know more about the characteristics of volunteers and the factors that determine their efforts.

#### **1.4 RESEARCH OBJECTIVES**

The general objective of this thesis is to investigate and analyse volunteers and volunteerism in South Africa, and the factors that determine their efforts.

This general objective will be attained by achieving the following specific objectives:

- ❖ To evaluate the theoretical models of volunteerism from neo-classical microeconomics through to modern behavioural economics
- ❖ To review the international empirical literature on the characteristics of volunteers and the factors which determine their volunteering efforts
- ❖ To estimate a regression model of the predictors of volunteering
- ❖ To undertake a thorough analysis of variance of the predictors of the hours worked by volunteers.

#### **1.5 RESEARCH METHOD**

To achieve the objectives of this study, it is very important to make use of a review of the literature as well as empirical analysis. The focus of the literature review is on the models of volunteerism. The key theories are explained in the consumption and investment models but the aim is to explain these within the broader framework of microeconomic analysis of consumer behaviour, altruism and behavioural economics. The consumption model of volunteer work states that individuals choose to spend time on paid work, leisure and

volunteer work. It is then an empirical question whether volunteers are high-income or low-income individuals. If the substitution effect dominates, an increase in the wage rate will lead to a decrease in volunteer work, as the opportunity cost of an hour of volunteering increases as the remuneration of paid work increases. If the income effect dominates, a higher wage rate means that an individual can work fewer hours to earn the same income as before, and this will lead to an increase in volunteer work. In contrast, the investment model of volunteer work states that individuals volunteer as an investment in human capital. Future earnings may be increased through the skills and contacts that are developed during volunteer work. The predictions from the theoretical models and international empirical literature are then tested in the South African context.

The empirical analysis consists of two parts. The first is analysis of data about volunteers from the labour force survey (LFS). The available data allows for the estimation of a limited dependent variable regression model of the probability of volunteering as a function of individual-specific predictors. Under this empirical evidence, descriptives are analysed in detail followed the logit model used to estimate determinants of individuals who volunteer. The second part of the empirical analysis is to test the consumption model of volunteering explicitly, by estimating an ordinary least squares (OLS) regression model of the hours worked by volunteers, and the predictors thereof using the Volunteer Activities Survey (VAS) from Statistics South Africa (2011).

## **1.6 DEMARCATION OF THE STUDY**

In pursuit of the objectives above (Section 1.4), this thesis is organised as follows. Chapter 1 is the introduction to this thesis. It consists of the background, problem statement, motivation, objectives, and the explanation of the method. Chapter 2 delves into the theories and reviews the literature on volunteers and volunteerism. Chapter 3 presents the first part of the empirical analysis of the characteristics of volunteers from the South African labour force survey. Chapter 4 of this thesis uses secondary data from Statistics SA (Volunteer Activity Survey) by reporting on hours volunteered and the analysis of the predictors thereof. Chapter 5 presents the conclusion and recommendations of this thesis. The conclusion is drawn regarding the characteristics of volunteers in South Africa and the factors that determine their efforts. To unlock the potential of volunteers in South Africa, recommendations are made to civil society organisations and policymakers. This final section will also include recommendations for future studies of volunteers and volunteerism.

## **CHAPTER 2: THEORIES AND LITERATURE REVIEW ON VOLUNTEERISM**

### **2.1 INTRODUCTION**

A literature review is important for the clear formation of the problem, as well as the execution of the planning, and the actual implementation of an investigation. Therefore, meaningful research can only be conducted based on the existing knowledge. According to Roy and Ziemek (2000) the literature on volunteering is vast and rich; however, it is scattered across different types of social sciences (*inter alia* Psychology, Economics, Sociology and Anthropology, to mention a few).

An understanding of the economic characteristics of the volunteers is important in the context of the models used in this thesis. When investigating the theory of volunteerism, there are some important issues that need to be considered, specifically the economics of volunteering in macro and micro perspectives. This chapter deals with theories surrounding economics of volunteering. Apart from attempting to analyse some major concepts and types of volunteers critically, it is also the intention of this chapter to arrive at a plausible set of models explaining volunteerism and the general motives of volunteers. These models are the public goods model, private consumption model, impure altruism model, and the investment model. In addition, this chapter will provide the basis from which to derive an econometric model.

The chapter is organised as follows, after this introduction, the next section (2.2) presents a number of conceptual and formal definitions of volunteers or volunteering. Section 2.3 examines types of volunteer work, while Section 2.4 focuses on economic theories of volunteering, in which the discussion on the decision to supply volunteer labour, known as the core theories (Roy & Ziemek, 2000), and altruism and voluntary giving, are included. Section 2.5 deals with theoretical framework, while Section 2.6 will be a concluding remark on the chapter.

### **2.2 CONCEPTUAL CLARIFICATIONS**

#### **2.2.1 Definitions**

The characteristics cannot be examined, together with the determinants and the role/importance of volunteerism, without defining it and clarifying related concepts. The

definition of volunteer and related concepts, such as volunteerism and volunteering, is controversial (Brudney, 2005). Although the term volunteer has been always used across a wide range of settings to denote unpaid and un-coerced services, many authors such as Cnaan and Amroffell (1994) and Cnaan *et al.* (1996) argue that there is still lack of a clear and consistent definition. In fact, according to Roy and Ziemek (2000) to find a workable definition for volunteering is not an easy task because activities are very diverse and complex.

Smith (1999) gives a list of criteria, which may be considered when defining volunteering. The list is as follow:

- ❖ **Notion of reward:** This needs to address issues of whether a volunteer should be undertaking the activity for purely altruistic reasons, or whether incentives (material and non-material) should be allowed.
- ❖ **Notion of free will:** There is a need to consider whether volunteering should be un-coerced, or whether activities based on peer pressure and social responsibility should also be considered volunteer work.
- ❖ **Nature of benefit:** There should be a beneficiary other than the volunteer himself/herself, but there are different opinions as to whether friends, neighbours, and extended relations are allowed as beneficiaries, or whether the beneficiary has to be a complete stranger in order to regard the activity as volunteerism.
- ❖ **Organisational setting:** In this case, the focus may be only on volunteering in a structured or formal setting, while another approach may also include informal (one-to-one) volunteering.
- ❖ **Level of commitment:** Some researchers/writers provide definitions with a certain level of commitment and regularity in volunteering; others give ones, which allow for once-off volunteer activities to be included.

Therefore, the conclusions could be that definitions of volunteering or volunteerism differ according to the individual researcher's criteria, and characteristics selected from the list above. In this thesis, in attempting to understand the meaning of the term volunteer, the most frequently cited definitions are used. Smith (1982:25) defines a volunteer as,

“An individual engaging in behaviour that is not bio-socially determined (e.g. eating, sleeping), nor economically

necessitated (e.g. paid work, housework, home repair), nor socio-politically compelled (e.g. paying one's taxes, clothing oneself before appearing in public), but rather that is essentially (primarily) motivated by the expectation of psychic benefit of some kind as a results of activities that have a market value greater than any remuneration received for such activities.”

According to Brudney (1999), a volunteer is someone who maybe has the aim to benefit or help a stranger, friends, relatives, him/herself, or some combination of these beneficiaries. But, Wilson and Musick (1999:141) tend to differ slightly by defining a volunteer as someone, “who contributes time to helping others with no expectation of pay or other material benefit to herself.” In other words, volunteer activity is the work performed without monetary recompense (Freeman, 1997). Similarly, Ellis and Noyes (1990:4) define volunteering narrowly by stating that, “to volunteer is to choose to act in recognition of a need, with an attitude of social responsibility without concern for monetary profit, going beyond one's basic obligations”.

Likewise, volunteering means any activity in which time is given freely to benefit another person, group or cause (Wilson, 2000: 216). Generally, it is considered as an altruistic activity, intended to promote good or improve the quality of life. Volunteerism may have different meanings to different people. According to Ascoli and Cnaan (1997:299), volunteerism is defined as, a social phenomenal of unpaid care and citizen participation in society and is highly regarded in all parts of the world.” According to Penner (2004:645), “volunteerism is one form of civic participation which includes long-term, planned, and nonobligatory prosocial activities that benefit another person, cause or group.” Wilson (2000) confirms that typically, volunteerism is proactive rather than reactive, and entails some commitments of time and effort.

When conceptualising voluntary activity, it is necessary to unpack some of the concepts and principles involved, and offer a typology, which will aid in understanding their relationship to one another. Therefore, this section intends to clarify the relationship of ethics of volunteers per se, to individual and organised voluntary effort. In order to include this fundamental concept, it is necessary to develop this typology further. Table 2.1, adapted from Osborne

(1998), shows the distinction between the concepts involved, voluntaryism, volunteerism and voluntarism.

**Table 2.1: Typology of voluntary concepts**

Concept	Focus of concern	Normative statement
Voluntaryism	Relationship of individual and society	Free or 'active' society
Volunteerism	Individual action in society	Voluntary society
Voluntarism	Organised action in society	Plural society

**Source: Osborne (1998:22)**

According to Osborne (1998:22), with regard to the normative concepts, voluntaryism “refers to the societal principle of voluntary action as building block for the society.” Volunteerism combines both individualism and deemed beneficial. In other words, the focus here is upon individual action involved, while voluntarism corresponds to the organised voluntary action. Consequently, these concepts are defined below.

Voluntaryism has two definitions, the first stresses its ecclesiastical origins, concerned the independence of the church, as an institution, from the state. According to Collins and Hickman (1991), this is the basis of the distinctive contribution of voluntary activity to society. The second definition is that voluntaryism is any system, which rests upon voluntary action or principles (Osborne, 1998). Such has as its ideal state, a society where all action is freely chosen and can be characterised as the free or active society (Schütz, 1972).

Volunteerism represents the fundamental principle of voluntary action as an organising principle of society; hence, it encompasses the reality of individual action in society in ideal terms. It is the principle of voluntaryism applied to everyday affairs. Til (1988:84) gives a link between voluntaryism and volunteerism stating that,

Volunteerism is a quality of participation, which at any time and in any institution empowers the individual and enriches the organisational setting in which the individual is sited...Such voluntary action is a critical aspect of the person who is genuinely alive. It may be seen as the hallmark of both

the authentic person and the active society, as no mere appendage to the business of life but rather as its very core.”

Hence, the concept of volunteerism is complex and paradoxical.

Voluntarism does not focus only on individual action, but also on the voluntary organisational characteristics of the bodies concerned. This means that these characteristics define the voluntariness of an organisation or structure. Therefore, essentially the characteristic of such an organisation is not the product of its paid or un-paid labour (Bourdieu, 1986). According to Wilson and Musick (1997), entry into the labour force requires three different kinds of capital, cultural, human and social. Therefore, different forms of volunteer work draw on different kinds of capital that needs to be established by the organisation.

This thesis is based on the theory that volunteer work is a productive activity. For Wilson and Musick (1997) it is like any other work (paid or non-paid), rather than a simple act of consumption, or leisure time pursuit with purely expressive goals. It should be kept in mind that volunteers may eventually become paid employees within organisations (James, 1989). Therefore, a market exists for volunteer labour, much like the market for paid labour. Therefore, the term volunteer is somehow misleading in this last case, where voluntary labour might not be the only significant input to the organisation. Thus, for the purpose of this thesis, a volunteer is a person who is willing to give his/her time and service to a specific task, without remuneration, and during the course of service, earns mostly moral credit. Roy and Ziemek (2000) confirm that a major part of volunteering occurs outside of traditional voluntary organisations. Therefore, it gives the reason why a distinction between types of volunteering is a need.

### **2.2.2 Criteria/conditions of volunteering**

As seen in detail in Section 2.4 when discussing theories of economics of volunteer work, there are three criteria/conditions that show the distinction of volunteering from other activities that may superficially resemble it (Dingle, 2001). These criteria/conditions are:

### **2.2.2.1 Volunteer work is not undertaken primarily for financial gain**

If the monetary compensation a person receives for the work that he/she does is equal to or greater than the market related value of the work, this cannot be regarded as volunteering. But, this does not mean people who earn less than what they should be paid for their work such as those who are underpaid and who are volunteers.

### **2.2.2.2 Activities should be a person's free will**

Volunteering should be done with his/her own free will. This is different from what is found in many schools where students are required to volunteer as a subject or module prerequisite. This is also found in some companies, such as a higher education institution that requires employees to participate in community engagements; this is not considered as volunteering.

### **2.2.2.3 Volunteer work must bring benefit to the next individual as well as to the volunteer**

This will help in distinguishing between a volunteer who gets involved in volunteer work to satisfy his/her own needs, such as a university student who get involved in unpaid work for him/her to gain experience versus to get some credits required for completing the qualification. It is also when someone gets involved in volunteer work, which may benefit the next person, regarded as a third party, and who can be a family member, neighbour, friend, a community, or a society.

## **2.3 TYPES OF VOLUNTEER WORK**

Many volunteers may be unaware that their activities are considered to be volunteering. For instance, a family member who provides care to an elderly person, or someone who assists and tutors high school students to pass their final exam, may not consider themselves as volunteers. Hence, as stated above, volunteering itself can mean different things to different people. As shown by many studies, there are many types of volunteer work such as those who work at hospitals (Handy & Srinivasan, 2005), firefighters (Thomson III & Bono, 1993), those who volunteer their time to church, charities, cultural organisations and colleges (Freeman, 1997). Many volunteers spend their time also volunteering in their communities to help in alleviating poverty and provide services for people with HIV/AIDS and other diseases.

According to Brudney (1990) and Duncombe (1985), volunteerism is not associated with non-profit organisations only, but also with public and for-profit organisations. Furthermore, many educational programs in the USA teach elementary, middle, and high school students to view voluntarism as worthy and desired work (Mizenko & Smith, 1991). Many universities and other higher education institutions give academic credits to reward volunteer work done by students (Bojar, 1989; Cooley *et al.*, 1989; Redfering & Biasco, 1982). All this describes how important the volunteerism is for the economy and the society. However, according to Ironmonger (2008) the national accounts, most of time, make visible only part of the valuable economic activities – the productive activities that are paid for through the market economy. While unpaid non-market activities, that are just as valuable, are omitted from the national accounts. Thus, unpaid household and volunteer work are invisible and; consequently, tend to be ignored from national objectives and from indicators of the national performance (Ironmonger, 2008).

In his analysis of extensive research on the scope of volunteer activity and public service, Brown (1999) discovered that volunteer work is often classified by the area of endeavour such as the art, education, environment, health, human service, youth development, private and community foundation, public and societal benefit, adult recreation, religious organisations, and international or foreign concerns. This may be called formal volunteering. Similarly, Brown (1999) shows that volunteer activities represent different costs and benefits to different individuals, depending on the status of the individual, and the nature of the task involved. The other category of volunteer work is informal volunteering, “whatever the nature of the service provided, and giving time to work-related organisations, whatever their mission might be” (Cnaan *et al.*, 1996:371). This category is confirmed by Brudney (1999), who states that volunteering may be informal and outside of an organisation. In other words, volunteering is differentiated from informal helping, either in the form of the family or the neighbours. This is an important distinction because often, all three concepts (voluntaryism, volunteerism and voluntarism) are thrown together as part of the homogeneous informal sector (Osborne, 1998). For example, helping a neighbour or a friend should be distinguished from organised volunteering, as suggested by Abrams *et al.* (1989) in their analysis.

When writing about the typology of volunteering and volunteer organisations, a person needs to differentiate between the role and contribution of the economy of a particular country. This is because scholars’ interests in volunteering have created two types of literature,

1) literature on volunteerism in developed countries, called a non-profit or voluntary organisation, and 2) literature on volunteerism in developing countries, termed generally as non-governmental organisations. Due to this scale order of problems of developing and developed countries, they may both be struggling, in different ways, to deal with a similar set of issues. However, according to Roy and Ziemek (2000), despite their increasing importance, non-governmental organisations in developing countries remain poorly understood, as much of the available theory underlying such third sector organisations have been developed in the western countries, and then applied to quantify and understand similar organisations in developing countries. Therefore, there is a need to fill in the gaps in the comprehension of the role and contribution of volunteerism in developing countries.

According to Smith (1999), volunteering is probably more formal and well organised in economically advanced countries, as compared to developing countries. It is confirmed that in developing countries, volunteerism often takes the form of an informal support system and networks of mutual aid and self-help, while in developed countries it lays in charitable activities (Smith, 1999). For example, while conducting a study of the voluntary sector in Sri Lanka, James (1989) discovered that the majority of non-governmental organisations are involved in social-service activities such as day-care centers and human capital formation, such as education and health care. James (1989) also finds that a considerable number of organisations are engaged in providing social overhead capital services such as building roads, and supplying water tanks, wells and sanitation facilities. From this, it is clear that voluntary organisations take on the activities that would be expected to be provided by the public sector. Evidently, the types of volunteering differ across countries; this seems to be especially true when comparing developing with developed countries, as mentioned earlier (Roy & Ziemek, 2000).

Furthermore, Robinson and White (1997) divide volunteering organisations into large groups relying on whether they serve a public service function:

- ❖ **Expressive groups:** These combine organisations, which do not serve a public function but merely act to express or satisfy the interests of their direct members. For example, recreational and sport associations, social clubs and scientific societies.

- ❖ **Social influence groups:** These are organisations, which “seek to achieve a condition or change in a limited segment of society.” They combine pressure groups and groups established to perform a public service.

According to Roy and Ziemek (2000:9), expressive groups, while merely serving the interests of their immediate members, also intentionally or unintentionally “serve a social function by helping to establish a social infrastructure and improving social integration.”

## **2.4 THE ECONOMIC THEORIES OF VOLUNTEERING**

On the one hand, the objective of economic studies of volunteering is to make a link between the individual behaviour to decide to volunteer, and the economic theory to analyse that phenomenon and to explain the choice to volunteer in economic terms (Sardinha, 2003). On the other hand, economists tend to attribute the production of economic services either to the private, profit-oriented sector, or to the public sector, ignoring mostly the potential of volunteerism. This ignorance leads to the fact that research on volunteering is mainly and abundantly found in political science, sociology and social politics, “while the relevant theories from economics perspective cannot be explicitly identified or have not been sufficiently explored” (Roy & Ziemek, 2000:1). This is a reason why this section discusses microeconomic and macroeconomic perspectives of voluntarism.

### **2.4.1 A Microeconomic perspective**

According to Mohr *et al.* (2008), the central elements of economic theory are scarcity and choice. In Economics, every resource is limited/scarse and one of these resources is time. It is impossible to do everything that one needs to do within 24 hours; this thesis asks what reason(s) makes volunteers sacrifice their time volunteering? Menchik and Weisbrod (1987), Andreoni (1990), and Freeman (1996) have generally put forward microeconomic models as explanations of volunteer labour supply. Therefore, the following are models explaining the determinants of volunteering time:

- ❖ Public goods model
- ❖ Private consumption model
- ❖ Impure altruism model
- ❖ Investment model

It is crucial to present each of these models for the purposes of empirical verification in later chapters. The following analysis will focus on these four models, even though there other models, which are also relevant, such as the demonstration effect model, developed by Stark (1995), in which voluntary work can be explained by the incentive to set an example for others.

#### **2.4.1.1 Public good model**

In the public good model, the assumption is that individuals, who spend some of their time providing a public good or service, do it to increase the total supply of the public good or service. Considering that, this public good or service is defined as non-rivalrous and non-excludable. Non-rivalrous good means that its consumption by one beneficiary does not reduce its consumption by others. A non-excludable good means that once it has been produced, there is no way of stopping anyone from consuming it (Mohr *et al.*, 2008). Therefore, these individuals obtain an increase in their happiness from increasing the utility of others who benefit from the consumption of the public good or service (Ziemek, 2006). According to Becker (1976) this kind of behaviour of an individual, who is willing to reduce his/her own consumption in order to increase consumption of others, is known as pure altruism (see Section 2.5).

According to Badelt (1999), an altruistic person prefers to be defined not only by his/her consumption level, but also by the other people's consumption levels. Therefore, the preferences of altruistic volunteers depend on the private consumption and the aggregate supply of the public good or service (Andreoni, 1990). Thus, the altruistic volunteer will reduce his/her donations when contributions of others increase, and vice versa, in order to maintain the utility obtained from the public goods (Sardinha, 2003:5).

The public good model dismisses the self-interested rationality, which is the fundamental paradigm of economic theory, driven solely by self-interest; individuals interact to benefit each other (Smith, 2005). Many studies have been conducted based on this notion. However, some studies, such those of the Sen (1977), argue convincingly that the self-interest assumption is not supported by empirical results; meaning that this assumption often misleads findings. However, it should be kept in mind that economic theory rests on a set of assumptions about human nature and behaviour. Therefore, in response to this argument some economists such as Gary Becker (1976), and Haltiwanger and Waldman (1993) provide

models that explicitly incorporate a population that consists of both altruists and egoists. To understand why some individuals volunteer when others do not, a closer examination of altruism and its role in volunteering appears warranted. The next sub-section deals with altruism.

### **Altruism and volunteering**

The modelling framework significantly affects the empirical interpretation when theorising on what motivates volunteers to make charitable contributions of time or money. It could be questioned on why for example, irrespective of their income level, many households give nothing to charity. This leads to a discussion about the role played by altruism in the individual decision to volunteer.

Chou (1996:297) defines altruism as, “Voluntary, intentional behaviour motivated to benefit another that is not motivated by the expectation of eternal rewards or avoiding externally produced punishment or aversive stimuli.” According to Monroe (2002:107), altruism is described by these characteristics:

- ❖ Altruism must involve action. Good intentions or well-meaning thoughts are not enough.
- ❖ The action must have a goal, although the goal may be either conscious or reflexive.
- ❖ The goal must be designed to help another. If another person’s welfare is an unintended or secondary consequence of behaviour motivated primarily to further one’s own welfare, the act is not altruistic.
- ❖ Consequences are less important than intentions.
- ❖ Altruism sets no conditions. The purpose of the altruistic act is helping another; there is no anticipation or explanation of reward for the altruist. In addition to these five points, conceptualisations of altruism often contain a sixth:
- ❖ Altruism must carry the risk of diminution of the actor’s well being

The economic approach assumes that all behaviour results from maximising utility function that depends on different goods or services. The following is a model presented by Becker (1976:285). Assume that there are two individuals,  $h$  who is an altruist, and  $i$  who is a stranger to  $h$ . From the definition,  $h$  is willing to give some of his wealth to  $i$ , but the question

to be asked is: How much is  $h$  willing to give? By assuming also that both  $h$  and  $i$  consume a single aggregate of market goods and services, the utility function of an altruist  $h$  is represented in Equations 2.1 below:

$$U^h = U^h(X_h, X_i) \quad [2.1]$$

Where  $X_h$  and  $X_i$  are the own consumptions of  $h$  and  $i$  respectively. Subject to the budget constraint of  $h$  below:

$$pX_h + h_i = I_h \quad [2.2]$$

Where  $h_i$  the amount of money is transferred to  $i$ , and  $I_h$  is  $h$ 's own income. If  $h$  transfers to  $i$  without any loss or gain, the amount received by  $i$  is equal to the amount transferred by  $h$  and  $p$  being the coefficient. Therefore,  $i$ 's budget constraint is:

$$pX_i = h_i + I_i \quad [2.3]$$

Where  $I_i$  is  $i$ 's own income. Hence, the derived  $h$ 's budget constraint becomes:

$$pX_h + pX_i = I_i + h_i = S_h \quad [2.4]$$

Where  $S$  is known as social income. The equilibrium condition for maximising utility function given by Equations [2.1] subject to the social income constraint given by Equations [2.4] is:

$$\frac{\partial U^h / \partial X_h}{\partial U^i / \partial X_i} = \frac{MU_h}{MU_i} = \frac{P}{P} = 1 \quad [2.5]$$

Therefore,  $h$  would transfer enough to  $i$  for him to receive the same utility for increment to his own or  $i$ 's consumption. Individuals' altruism is very relevant, not only to transfers of income but also to the production of income. An individual would pursue all actions that raised his social income and refrain from all that lowered it because his/her utility would be increased by all increases in his social income (Becker, 1976).

For Burns *et al.* (2006) the relationship between altruism and motivations to volunteer is complex and unclear. According to Pearce (1983), altruistic reasons are given as answer to the question of why people become involved in volunteering. However, others give self-oriented reasons, as is reported by Chambré (1987). Therefore, this means that altruists have lower personal income (or wealth) than those who are not altruists, because altruists do not take advantage of all opportunities to raise their own income (Becker, 1976). This is a reason why this thesis asks who are these Good Samaritans. Wilson (2000) articulates that to volunteer is part of cluster of helping behaviours, entailing commitment rather than spontaneous assistance, but also argues that it is narrower in scope than care provided to family and friends.

According to Badelt (1999), when writing about public good within a non-economic perspective, altruism can be explained by religious, moral or ethical arguments. From an economic perspective, altruism can be explained by economically rational behaviour, which is built on the assumption of interrelated utility functions. Therefore, the preferences of altruists are not only defined on an own consumption level, but also on the consumption of others (Ziemek, 2003). Hence, a model needs construction, which establishes the preferences of an altruistic volunteer as a standard utility-maximising problem. The following assumptions are made, and adapted from Ziemek (2003 & 2006):

- ❖ There is only one public good
- ❖ There is only one private good
- ❖ There are  $n-1$  individuals and the public sector, which contributes towards the provision of public good. (Where  $n-1$  stands for all other individuals except one)

Based on assumptions above, an altruistic volunteer's utility function is represented as:

$$U = U_i(x_i, G) \tag{2.6}$$

$$\text{Subject to: } x_i + g_i = \omega_i, \quad g_i > 0$$

Where each individual is represented by  $i$ ;  $G$  is the total supply of the public;  $\omega_i$  is wealth which can be allocated between private good and private contributions to the public good represented by  $x_i$  and  $g_i$  respectively.

In other words,  $g_i$  stands for the individual's contribution in terms of either monetary value or his time as his or her voluntary donations. According to Ziemek (2003 & 2006), the price per unit of volunteer labour and of the private consumption good is normalised to one. In addition, it should also be highlighted that when referring to  $G$ , it is the sum of all contributions from individuals  $n-1$  and the government sector, indicated by  $G = \sum_{i=1}^n g_i$ .

Therefore, an assumption of the private contributions by others and government contributions being perfectly substitutable is made. Their sum is given by  $G_{-i}$  where  $G_{-i} = \sum_{j \neq i} g_j$  where  $j$  is the total contribution of everyone but individual  $i$ .

This subsection requires the incorporation of the assumption that the utility function represented by Equation 2.6 is assumed to be strictly quasi-concave, and increasing in both its arguments:  $g_i$  which is the individual's own contribution enters the utility function only as part of public good,  $G$ . Many economists believe that people also experience some direct private utility from the act of giving; therefore, an altruistic individual derives his/her utility from the total supply of the public good.

Ledyard (1995) discovers that with a dominant strategy of giving zero, any error or variance in the data could mistakenly be viewed as altruism. Thus, according to Andreoni *et al.* (2007:4) "to determine what drives giving one needs to confirm that subjects understand the dominant strategy but choose to give anyway." Economist, James Andreoni, came up with the warm-glow theory. This theory states that utility comes simply from the act of giving without any concern for the interests of others (Andreoni, 1989 & 1990). Warm-glow giving is part of altruism.

#### **2.4.1.2 Private consumption model**

This model is different to the public good model because a person who volunteers derives directly his/her utility from the attitude of giving. The consumption model treats volunteer

work as an ordinary consumer good. The individual's utility gained for volunteering an hour's time is presumably equal to the opportunity cost; the value of an hour of leisure time plus any monetary cost associated with an alternative activity of equal utility. Under the consumption model, exogenously determined variables are the individual's income, endowment of available time, non-labour income, and probably a proportional tax, which could be paid. In addition, "volunteers get to enjoy the joy of altruism, and they get to enjoy the consumption of social prestige associated with their position" (Roy & Ziemek, 2000:15). Furthermore, as stated above, regarding warm-glow, Andreoni (1989:1448) opines that "people have a taste for giving; perhaps they receive status or acclaim, or they simply experience a 'warm-glow' from having done their bit." Therefore, it is the process of the volunteering and the rewards associated with carrying out volunteer activity that motivates the individual to give. Hence, an increase of the total supply of public good or services does not influence this particular individual under the private consumption model. Therefore, the motivation of an individual who volunteers is called the Eigenvalue (Bedelt, 1985:50).

The utility function of a person who volunteers to win status or acclaim takes the following form, as adapted from Becker (1976:273):

$$U_i = U_i(x_i, \frac{I_j}{p_j}, \frac{h}{p_j}) \quad [2.7]$$

Where still  $\frac{\partial U_i}{\partial h} > 0$

Therefore, an increase in volunteer's contribution would increase his acclaim. However, it can be seen that the sign of  $\frac{\partial U_i}{\partial I_j}$  is not obvious. According to Becker (1976:273) if, the contribution and the income of recipients were much closer substitutes for each other than for the own consumption of the contributor, which is plausible, then the utility functions on public good and private consumption models would have similar implications.

In addition, the private consumption model may be expressed in a similar framework as the public good model (see Equation 2.6):

$$U_i = U_i(x_i, g_i) \quad [2.8]$$

$$\text{Subject to: } x_i + g_i = \omega_i, \quad g_i > 0$$

Where  $x_i$  the private consumption and volunteer contributions towards the public good is  $g_i$  and is measured in monetary unit and  $\omega_i$  is wealth which can be allocated between private good and private contributions to the public good. The difference between the Equation 2.8 and 2.7 is that individual  $i$ 's private contribution,  $g_i$  is considered as a normal consumption good and the total supply of the public good,  $G$  does not form part of the utility function. Therefore, "individual's contributions are treated as a normal utility-bearing goods, the amount volunteered varies directly with the wealth of an individual and should vary inversely with the price of volunteering, typically represented by volunteer's opportunity costs" (Roy & Ziemek, 2001:535).

What should be retained under this model is that volunteering is posited as an ordinary consumer good and; thus, a volunteerism and charitable gift is always meaningful. Most of the time researchers do mistakenly mix the two motivations (of public good and private consumption) to create probably a more realistic view of world, in which contributors are motivated by both what their gifts produce as well as how volunteering makes them feel (Roy & Ziemek, 2000).

#### **2.4.1.3 The investment model**

This model is also called the impure Altruistic model. This model refers to an individual who volunteers with the expectation to gain something in return such as a better opportunity in the future. For example, if a student gets involved in volunteering activities expecting a scholarship or professional qualification in return. For this reason, the model is called the investment model (Sardinha, 2003). Under this model, volunteerism should be regarded as investment behaviour.

This investment could be achieved through human capital accumulation by volunteering to receive training and gain new skills. This will increase chances of getting and performing jobs of higher pay than those jobs, which the volunteer would be able to acquire without his or her volunteer experience (Ziemek, 2006). This model expresses the importance of

reciprocity. In this case, volunteering has an ulterior motive giving in order to receive something back in return, which may not be measured in terms of material. In addition, a person may engage in volunteering due to influence from others' experience through volunteerism. Therefore, Ziemek's (2006:536) investment model has two possible effects derived from private contribution from others:

- ❖ Signalling effect: A person will be enticed to do more of volunteering if many of his/her colleagues at work place also volunteer. In this case, a positive relationship between a person's contributions and the contributions by other volunteers is established (one's contribution being a dependant variable).
- ❖ Job-opportunity effect: This effect is about the relationship, which can be established between public spending levels and volunteer contributions. Assume that government increases spending in the health sector, this will lead to an expansion of job opportunities and labour demand in the sector. Therefore, investment motivated volunteers will increase their number of hours volunteering for a specific sector where government is contributing or paying more attention.

Hence, from the above effects, preferences of the investment-motivated volunteer are represented in the following equation:

$$U_i = U_i(x_i, g_i(G)) \quad [2.9]$$

$$\text{Subject to: } \frac{\partial g_i}{\partial G} > 0 ;$$

$$x_i + g_i = \omega_i,$$

$$g_i > 0$$

Where  $x_i$  is the private consumption,  $g_i$  is the own contribution while  $G$  is the aggregate contribution to the public good. Individual motivation to volunteer is going to depend on how much this particular volunteer wants to maximise his/her utility. In the case of investment model (Equation 2.9), a person will contribute a number of hours volunteering because of his/her expectation regarding the status he/she will get from the supply of the public good  $G$ . In addition, an individual may engage in voluntary activities for developing business connections or forming the basis for future political endeavours.

To conclude regarding the above three models discussed, the following model may be posited:

$$M_i = f(\text{Altruism}_i, \text{investment}_i, \text{Egoism}_i) \quad [2.10]$$

Where  $i$  stands for volunteer and his/her motivation is composed by three core parts, altruism, which represents the public goods motive, investment for the investment motive, and egoism for the private consumption motive.

#### 2.4.1.4 Other potential drivers of volunteering

Freeman (1997:164) identifies two other interesting volunteer motives:

- ❖ People value the particular charitable activity a “conscience good”, a kind of public good for which people are willing to contribute time, even if they would prefer free ride on the provision of that good
- ❖ The request carries some social pressure within it: you are more likely to accede to personal requests than to telephone or written requests: requests from somebody you know rather than a stranger.

There are other motives for volunteering, as identified by Clary *et al.* (1998). Those motives are listed in Table 2.2

**Table 2.2: Volunteer focus and motives**

<b>Focus</b>	<b>Motive</b>
Developing and enhance career	Career
Enhancing and enriching personal development	Esteem
Conforming to the norms of, or establishing norms for others	Social
Escaping from negative feelings	Protective
Learning new skills and practicing underutilized abilities	Understanding
Expressing values related to altruistic beliefs	Value

*Source: Table made by the current author.*

In their study, Burns *et al.* (2006) discover that although altruism was found to be related to each motivation to volunteer, the strengths of the relationships were observed to differ. The relationship between altruism and both career and esteem were statistically insignificant.

This shows that there are different ways of describing what motivates people to volunteer. Even though altruism is the main motivator, in many cases, of volunteering, it should not be ignored that egoistic motivations are also present (Cnaan & Goldberg-Glen, 1991). When it comes to volunteering, there are also other factors that influence their utility (see Equation 2.10). Menchik and Weisboard (1987) identified those factors:

- ❖ Choice of what to contribute: A person who sees a need to help may contribute money instead of labour.
- ❖ Full income: Perceived value of volunteering would be assumed to crowd out labour hours to some extent for the individual who has sufficient income to cover basic expenses
- ❖ Education and religiosity: Through these two, some individuals may believe that it is important to help non-governmental organisations causes.
- ❖ Demographic information: People who have children may volunteer more in school activities and community safety programmes comparing to those without children.
- ❖ The individual's age: People who are retired, and young people with investment motivation, volunteer more.
- ❖ Municipality demographics: Residing in a small town presumably engenders a different level of personal involvement in local volunteer activities.
- ❖ Local and government spending: A higher level of government spending could crowd out personal volunteering through the reduction of the necessity for non-profit activities.

#### **2.4.1.5 An additional point on the crowding - out theory**

From Section 2.4.1.1 above, it is explained how an altruist cares about the consumption levels of the recipient, not about levels of his or her own gift. According to Roberts (1984), government spending on the public good or service will crowd out volunteers' contributions. However, it may be asked if this theory is applicable in developed countries where many volunteers are found, as compared to developing countries. The results provided by Kakoi

and Ziemek (2001) show that in western countries, the share of volunteers in labour force is between 10.5 percent and 44.2 percent, while in South America is between 1.3 percent and 5.6 percent.

Government spending may have some influence on decision of a volunteer, but hours volunteered seem to depend on it (Day & Devlin, 1998). Therefore, the crowding-out theory complex may be seen. This is because reducing government spending in one particular sector, for example health, may result in an increase of number of volunteers. While in the case of certain other activities, decreased spending will result in reduction in number of those who volunteer.

#### **2.4.2 A macroeconomic perspective**

Regarding the macroeconomic perspective of volunteer labour, it is very important to emphasise the relative developmental contribution of three main societal agencies, state, market and social organisation. To understand the amount of volunteer workers, it is a key to understand the supply and demand curves for volunteer labour fully (Handy & Srinivasan, 2005). Hence, to stress the rapid emergence of voluntary work and NGOs in both scale and importance, the following classification is needed:

##### **2.4.2.1 Demand-side theory**

According to Freeman (1997), because a volunteer worker receives zero wages, construction of the demand function should be viewed differently. In his extensive research, Weisbrod (1977) wrote that the existence of non-profit organisations is due to the persistent demand for public goods or services that fails to be met by either the state or the market. For Kakoi and Ziemek (2001), the emphasis is on an expanded role for non-profit organisation (NPO) due to state and market failures. Market failure occurs when the market system is unable to achieve an efficient allocation of resources. For Mohr *et al.* (2008) market failure does not mean that nothing good has happened, but rather that the best available outcome has not been achieved. Therefore, to derive demand for volunteer labour, it is necessary to know the NPOs objective function. “The demand curve for volunteer labour should be derived from the objective function of the organisation, utilising volunteer labour as one of the inputs in production” (Handy & Srinivasan, 2005:3). It is important to note that the market failure will determine the need of voluntary organisations. This theory is in line with Weisbrod (1975) who predicts

that the more diverse a society the greater the diverse demand for public goods and services, and the larger the size of non-profit sector.

#### **2.4.2.2 Supply-side theory**

As discussed in Section 2.4.1, many models are used to show what motivates volunteers to supply their labour, and each model with some predictive value. The supply of volunteer labour is topical issues and many efforts have been made to estimate it (Vaillancourt & Payette, 1986; Meinshik & Weisbrod, 1987; Van Dijk & Boin, 1993; Wolff *et al.*, 1993; Smith, 1994; Vaillancourt, 1994; Freeman, 1997; Proteau & Wolff, 2004). Even though those who supply their volunteer labour have altruistic motives, not all of them do, as confirmed by Kakoi and Ziemek (2001). For example, there are those who have investment motives. If religious organisations provide sponsorship to those who are in need for it, or health care and other basic necessities, they may be expecting to win adherents to their faith in return.

When estimating volunteer labour supply function, four things need to be considered, as advised by Schiff (1985):

- ❖ Attitude towards philanthropy
- ❖ Giving by others
- ❖ Government spending on social services, and
- ❖ The level of need have significant effects on donations of money

Although, some empirical evidence has been provided by Morgan, Dye, and Hybels (1977), in the aggregate and for four disaggregated industry groups, that there is a negative association between net wage rate and hours volunteered, when other things are equal. Another interesting result reveals that contributions of time and money are complements, and not substitutes (Roy & Ziemek, 2000).

#### **2.4.2.3 Non-profit organisations and government partnership theory**

This theory dismisses the first two discussed above. Salamon (1987) posits that the competitive and conflictual relationship between government and non-profit organisations should be disregarded. Under this theory, according to Kakoi and Ziemek (2001:12), non-profit organisation work is not viewed as an alternative to government provision of public goods, “but propounds strong theoretical justification for the state and the ‘third sector’ (Volunteerism sector) to grow in parallel, and in close cooperation with another.” Therefore, this partnership should be encouraged because it is a key in terms of improving lives of

citizens. This can be compared to the public-private partnership (PPP) theory, which gained much attention in recent times. As government recognised the role of private sector, it should be the same with volunteerism sector in promoting the social and development objectives.

## 2.5 A THEORETICAL FRAMEWORK

When writing about volunteering one thing has to be taken into consideration, the complementarities between donating money and time. Therefore, according to Freeman (1997:149) for a better understanding, two type of analysis need to be discussed:

- ❖ Labour supply substitution effects may be difficult to find in cross-section data absent some good control for the scale of charitable activity (see Section 2.5.1)
- ❖ Something more than substitution response to wages underlies the differences in volunteering (see Section 2.5.2).

### 2.5.1 Labour supply behaviour in volunteering

This subsection presents a modified model based on Freeman (1997), and Kakoi and Ziemek (2001), and derives the econometric specification that may be estimated to probe into the manifold motivations behind volunteering, as discussed in Section 2.4.

To maximise utility ( $U$ ), three determinants should be taken in consideration: goods ( $G$ ), leisure ( $L$ ) and charity ( $C$ ), which are produced by two inputs, volunteer time ( $T_v$ ) and donations ( $D$ ). Therefore, it can be written as follow:

$$\max U(G, L, C) \quad [2.11]$$

Subject to

$$C = C(T_v, D) \quad [2.12]$$

Given an income constraint of  $G + D = WT_w + Y$ , and time constraint  $T_w + T_v + L = 1$ , where  $W$  stands for wages,  $T_w$  stands for time worked,  $Y$  stands for other income, which are non-wages, and  $D$  represents charitable donations. Total time and the price of goods are scaled as 1.

In his studies, Ben-Porath (1967:353) added four assumptions on top of the one incorporated in the production function. These four assumptions are:

- ❖ Individual utility is not a function of activities involving time as an input

- ❖ There is a fixed amount of time to be allocated every period to activities that produce earnings and additions to the stock of human capital
- ❖ The stock of human capital is not an argument in the individual's utility function
- ❖ Unlimited borrowing and lending take place at a cost rate of interest.

Therefore, incorporating his model, two specifications have to be taken in consideration:

$$C = C(D, T_w) \quad [2.13]$$

and

$$C = C(D, WT_v) \quad [2.14]$$

According to Freeman (1997), Equation 2.13 is the productivity of volunteer time which is the same for all workers. It predicts less volunteer activity as the wage or opportunity value of time rises; higher-wage workers should volunteer less. It also estimates substitution of monetary donations for time volunteered as wages rise. Equation 2.14 depicts volunteering on human capital indexed by wages, which can offset the increased opportunity cost of time in the supply decision, and thus substitution of monetary donations for time volunteered as wages rise (Kakoi & Ziemek, 2001).

Hence, combination of Equations 2.11 and 2.13 yield a derived function for volunteer time, which is written in the following linear form:

$$T_v = a + bW + cY + v \quad [2.15]$$

Where  $b$  depends on positive income effect and negative substitution effects, while  $c$  is the income effect of a charitable activity,  $v$  stands for an individual specific taste variable, positive for persons who obtain satisfaction by volunteering and for the one who get less utility by volunteering. Therefore, Equation 2.15 is the simplest possible way of showing substitution effect behaviour in volunteering.

### **2.5.2 Substitution effect behaviour in volunteering and charity**

When writing about substitution effect behaviour in volunteering and charity, two things need to be considered, 1) charity should enter the utility function with one objective: higher income increases the amount of charitable activity but does not affect the division of that

activity between volunteering and charity, and 2) there is only one unobserved individual effect in the model, rather than separate effects on volunteering and donating money (Freeman, 1997). Therefore, Equation 2.16 expresses the estimates of no income and no unobserved individual factor  $v$ :

$$T_v - D = A - gW. \quad [2.16]$$

Equation 2.16 is the substitution relation in the charitable production. Freeman (1997) has used it, where variables are in logarithms and it is a standard elasticity of substitution equation linking input ratios to factor price ratios. Freeman (1997) discovered that men who work more hours are more likely to be volunteers, while women who work the lowest hours, volunteer more hours. Several non-economic factors are noticed such as attitude, tastes, ability, and energy.

## 2.6 SUMMARY AND CONCLUSION

The aim of this chapter was to analyse the theoretical literature of volunteerism in order to understand who these Good Samaritans are, and their motivations. This was realised by:

- ❖ Defining and clarifying volunteerism and related concepts
- ❖ Understanding the different types of volunteer work
- ❖ Discussing different economic theories of volunteering
- ❖ Exploring the characteristics of volunteers and how to measure the economic contribution of volunteering
- ❖ Identifying different models explaining the determinants of volunteer time.

Volunteerism is a multidimensional concept. There are numerous definitions of volunteerism and related concepts, many of which are complex or unclear. Even though there is no consensus on a definition of a volunteer that is widely accepted, some conditions need to be met for an activity to be regarded as a volunteer work. The activities should be of a person's free will, the volunteer work must bring benefit to the next individual as well as to the volunteer, and volunteer work is not undertaken primarily for financial gain.

In this chapter a theoretical background of the study, including labour supply behaviour in volunteering, and substitution effect behaviour in volunteering and charity, has also been provided. It was necessary to have the literature on the subject of volunteerism and volunteer

work reviewed to give a clear understanding and clarify some issues related to this topic in question. The next chapter, Chapter three, will deal with the empirical analysis of the characteristics of volunteers in South Africa. The secondary data used in the following chapter are from two labour force surveys (LFS), September 2006 and March 2007, collected by Statistics South Africa, with a sample size of 72469 and 74591 participants, respectively.

## **CHAPTER 3: AN EMPIRICAL ANALYSIS OF THE CHARACTERISTICS OF VOLUNTEERS IN SOUTH AFRICA**

### **3.1 INTRODUCTION**

The act of volunteering is not a new phenomenon; millions of people around the globe have been giving some of their time, energy and knowledge to make difference in the lives of fellow men through volunteer work (Gaston & Alexander, 2001). The activities that volunteers engage in are as varied as the volunteers themselves, and the value that they contribute to the society, as a whole, remains immeasurable. There has been very little research attention in the South African context on volunteer characteristics and motivations (Surujlal, 2010).

At the beginning of the literature review in Chapter two, the meanings of volunteering and related concepts were explained in detail. It was concluded that volunteers always have motives for volunteering, and sometimes these motives are economic. Therefore, before discussing the economic motives, the characteristics, which describe a volunteer, should be considered. Hence, this chapter focuses on the point concerned. The characteristics explored in the chapter are age group, gender, and province of origin, income group, population group, education level, and field of study of volunteers in South Africa.

As mentioned in Chapter one, the data used in this chapter are from two labour force surveys (LFS), September 2006 and March 2007, collected by Statistics South Africa, with a sample size of 72469 and 74591 participants, respectively. This chapter describes both data sets and shows some characteristics of South Africans who do volunteer work. The data allows for the estimation of a limited dependent variable regression model of the probability of volunteering as a function of individual-specific predictors. Statistical analyses are performed using SPSS (Version 20). The purpose of this chapter is to characterise, analyse and interpret the results of the analysis, particularly volunteers for both September 2006 and March 2007 LFSs.

### **3.2 DEMOGRAPHIC BACKGROUND**

This sub-section presents the demographic characteristics of the individuals in the data set used in this chapter. It describes the sample size, gender, age groups and provinces, which respondents come from. Furthermore, it shows other information regarding population

groups, education level, whether people are working or not, and if they are, the type of economic activities that they are involved in. There is also information about their income category, if they are registered as a tax payer, and lastly, if they do volunteer work or not. If they do, which type of volunteer work they do.

### 3.2.1 Gender

Table 3.1 shows that more females (54.3%) formed part of both the September 2006 and March 2007 surveys, compared to males (45.7%). An equal percentage for both surveys will help to compare the result about who takes on volunteer work. Formal volunteering includes such heterogeneous activities that both females and males are equally likely to be involved in volunteering activities. However, Argyle (1991) posits that women may be more engaged due to their helping behaviour. Another argument is that this variable depends on other factors such as education and age (Vaillancourt, 1984). Hence, it is expected that there may be slight gender differences in volunteering work.

**Table 3.1 Gender**

	September 2006		March 2007	
	Frequency	Percent	Frequency	Percent
<b>Male</b>	33145	45.7	34088	45.7
<b>Female</b>	39324	54.3	40503	54.3
<b>Total</b>	72469	100	74591	100

**Source: Author's own calculations**

### 3.2.2 Distribution by province

Table 3.2 is about the respondents' distribution by province. It indicates that the sample is dominated by KwaZulu Natal (26.1%), followed by Eastern Cape (12.6%) and Western Cape (11.3% and 11.8%) with both surveys. One might expect volunteering to differ between provinces, depending on the development challenges that they face. The province with lowest number of participants in both surveys was Northern Cape (6.7% and 6.6%). The expectation from this distribution is dependent on which province may need more community involvement. At the same time, this may cause the question of which type of volunteering is needed. For example, in a province where education is facing many challenges the expectation is that more people will be involved in volunteer activities at schools, than in

other provinces. According to Weisbrod (1975), the homogeneity of the population of the region may also affect the amount of volunteer activity carried out.

**Table 3.2 Distribution by province**

	September 2006		March 2007	
	Frequency	Percent	Frequency	Percent
Western Cape	8210	11.3	8839	11.8
Eastern Cape	9100	12.6	9366	12.6
Northern Cape	4885	6.7	4939	6.6
Free state	5264	7.3	5372	7.2
KwaZulu Natal	18905	26.1	19479	26.1
North West	6190	8.5	6315	8.5
Gauteng	7561	10.4	7755	10.4
Mpumalanga	5337	7.4	5374	7.2
Limpopo	7017	9.7	7152	9.6
<b>Total</b>	72469	100	74591	100

**Source: Author's own calculations**

### 3.2.3 Age group

Table 3.3 is about age groups of respondents. The age group is divided in three groups: Young (from 15 to 29 years), middle age (30 to 59 years) and senior people (60 to 85 and more). It shows that the most respondents (45.3%) fall in the range of 30 to 59 years of age. Respondents in the category of young 15 to 29 years (42.3%) follow it for the March 2007 survey. Clearly, senior people participated in the labour force survey less than young and middle age people, since many people retire at the age of 60 or 65. According to Wilson and Musick (1997) the obligation to participate in volunteer work tends to peak in the middle years when both "one's children and one's parents are likely to make demands." This is expected to be confirmed in the following section, as shown by Table 3.9. For Deller (2004) "parents of young children, for example, are likely to be involved with school or youth-related groups. Older persons, many of whom are in their early years of retirement, are more likely to volunteer than young adults." In addition, in the United States of America students often participate in volunteer work to fulfil community services requirements. However, Amato (1993) and Gallagher (1994) find a negative relationship between volunteer work and age. This may or may not be the case for South Africa.

**Table 3.3 Age group**

<b>Age group</b>	<b>Frequency</b>	<b>Percent</b>
Young (15-29)	30621	42.3
Middle age (30-59)	32862	45.3
Senior (60-85 and more)	8893	12.4
<b>Total</b>	<b>72376</b>	<b>100</b>

**Source: Author's own calculations**

### 3.2.4 Population Group

Table 3.4 is about the different population groups in the sample. It indicates that the majority of the participants are from the Black group, with around (77%) in both surveys. This Coloured group, with more than (13%), follows this, while the White group was around (7%), and Indian group (2.1%), in both September 2006 and March 2007 surveys. It should be mentioned that this distribution is slightly different from the South Africa population distribution, where according to South Africa Info (2012) Whites are in second place in terms of the numbers, after Blacks, followed by Coloured and Indian. It is difficult to predict what may be the outcome in terms of the relationship between volunteer work and population group (race).

According to Wilson and Musick (1997), economic exigencies make informal helping more important among different population groups. It is expected that there may be a difference in volunteering activity among South Africans in terms of race. Table 3.4 is about participants by population group (race).

**Table 3.4 Population group**

<b>Population group</b>	<b>September 2006</b>		<b>March 2007</b>	
	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
<b>African/Black</b>	55812	77	57412	77
<b>Coloured</b>	10054	13.9	10243	13.7
<b>Indian/Asian</b>	1514	2.1	1591	2.1
<b>White</b>	5014	6.9	5234	7
<b>Total</b>	<b>72469</b>	<b>100</b>	<b>74591</b>	<b>100</b>

**Source: Author's own calculations**

### 3.2.5 Level of education

Table 3.5 contains the different qualifications of the respondents. It shows that 10.6 percent of respondents do not have formal education. The respondents with primary school qualifications were 25.6 percent, and those with secondary school qualifications were 61.6 percent. The secondary school qualifications include those with NTC. Respondents with higher education were only 1.9 percent; this includes those with diplomas, bachelor degrees, honour degrees, master and doctorate degrees. From the discussion in Chapter two, Section 2.4.1.3, education increases participation in volunteering activity with different motives. The impact of this variable is complex for two reasons, 1) higher educated individuals have a higher wage rate, which increase the opportunity cost of volunteering, and 2) higher educated individuals access employment opportunities because volunteer work may help their career by bringing experience (Vaillancourt, 1994). Deller (2004) finds that education is one of the strongest predictors of volunteerism. Soldo and Hill (1993) argue that education levels should have less impact on volunteering activity because neither skills nor knowledge gained from schooling are necessarily of benefit. Therefore, the net impact of this variable cannot be predicted at this stage, only empirical results would provide an answer.

**Table 3.5 Level of education**

<b>Level of education</b>	<b>Frequency</b>	<b>Percent</b>
No formal education	7652	10.6
Primary School	18537	25.6
Secondary School	44637	61.6
High education	1349	1.9
Total	72175	99.6
Missing System	294	.4
<b>Total</b>	<b>72469</b>	<b>100</b>

**Source: Author's own calculations**

### 3.2.6 Field of Study

It is possible to examine the field of study of respondents with higher educational qualification further. Table 3.6 illustrates that 93.28 percent of the respondents did not specialise in any field of study because the majority of them do not have higher education qualifications. However, as shown in the Table 3.6, amongst those who have a higher

educational qualification, most of them did training and development (32%). This is followed by those who studied in the field of business, commerce and management studies (20.8%), health science and social service (11.7%), manufacturing, engineering and technology (10.9%), physics, maths, computer and life science (7.3%), law, military science and security (4.7%), agriculture and nature conservation (3.8%), human and social sciences (3.6%), communication studies and language (2.2%), culture and art (2.21%), and those who did physical planning and construction (0.8%).

**Table 3.6 Field of study**

<b>Field of Study</b>	<b>Frequency</b>	<b>Percent</b>	<b>Percent *</b>
Communication studies and language	98	.1	2.2
Education, training and development	1431	2	32
Manufacturing, engineering and technology	489	.7	10.9
Human and social sciences	162	.2	3.6
Law, military science and security	208	.3	4.7
Health science and social service	523	.7	11.7
Agriculture and nature conservation	169	.2	3.9
Culture and art	96	.1	2.2
Business, commerce and management studies	931	1.3	20.8
Physics, maths, computer and life science	327	.5	7.3
Physical planning and construction	34	0	0.8
Total	4468	6.2	100
Unspecified	68001	93.8	-
<b>Total</b>	<b>72469</b>	<b>100</b>	-

\*calculated using 4468 (those who indicated that they have field of study)

**Source: Author's own calculations**

### **3.2.7 Income category**

The results in Table 3.7 show that the majority of participants (64.5%) answered the question about their income category as not applicable to them. Respondents are often reluctant to answer questions about income. It may also be that they are students or unemployed, or simply are still looking for jobs during the time when survey was conducted. For those who revealed their income, 27.1 percent earn less than R3500 per month, followed by those who

earn R3500 to R8000 (5.6%), those who earn R8001 to R16000 (2.1%), while (0.6%) earn between R16 001 to R30 000 and more. Income has a positive relationship with education and work status; hence, the impact of it on volunteer work is uncertain.

**Table 3.7 Income categories**

<b>Income category</b>	Frequency	Percent
Smaller than R3500	19668	27.1
R3501-R8000	4071	5.6
R8001-R16000	1524	2.1
R16001-R30000 and more	449	.6
Total	25712	35.5
Not applicable	46757	64.5
<b>Total</b>	72469	100

**Source: Author's own calculations**

### **3.2.8 Work status**

Table 3.8 indicates that individuals who are employed permanently are about 20 percent for both surveys; while 70 percent answered that the question was not applicable to them. The same table continues showing that about 4.3 percent, 2.5 percent and 1.7 percent are those who were employed on a temporary basis, on casual basis, and fixed-period contract workers, respectively. A minor percentage of them 0.5 percent and 0.6 percent were seasonal workers.

According to Vaillancourt (1994), people who work less have more time for volunteering activities. Therefore, it is expected that those who are not permanently employed participate in volunteer work more than others do.

**Table 3.8: Work status**

	September 2006		March 2007	
	Frequency	Percent	Frequency	Percent
<b>Permanent</b>	14500	20	15037	20.2
<b>A fixed period contract</b>	1206	1.7	1231	1.7
<b>Temporary</b>	3127	4.3	3207	4.3
<b>Casual</b>	1868	2.6	1882	2.5
<b>Seasonal</b>	345	0.5	475	0.6
<b>Don't know</b>	25	0.0	35	0.0
<b>Not applicable</b>	51352	70.9	52651	70.6
<b>Unspecified</b>	46	0.1	73	0.1
<b>Total</b>	72469	100	74591	100

**Source: Author's own calculations**

### 3.2.9 To volunteer or not to volunteer

Table 3.9 shows how many respondents answered yes to the question of whether they volunteer or not. It indicates that for the Labour Force Survey (LFS) of September 2006, 4.9 percent of the participants answered that they volunteer, while 94.9 percent do not. For the LFS of March 2007, 4.7 percent volunteer and 94.8 percent do not volunteer.

**Table 3.9 To volunteer or not to volunteer**

	September 2006		March 2007	
	Frequency	Percent	Frequency	Percent
<b>Yes</b>	3553	4.9	3538	4.7
<b>No</b>	68790	94.9	70704	94.8
<b>Unspecified</b>	126	0.2	349	0.5
<b>Total</b>	72469	100	74591	100

**Source: Author's own calculations**

### 3.2.10 Type of volunteer activities

Like in any other countries, there different types of volunteering work one could be part of in South Africa. Table 3.10 indicates the type of volunteer work in both surveys. Table 3.10

shows that help the sick has 21.7 percent for the LFS of 2006, and 24.8 percent for the LFS of 2007. The assumption is that this dominant activity of volunteers is done for neighbours. Organising cultural events is done at 22.8 percent and 20 percent for both the LFS of 2006 and 2007, consecutively. Volunteers who offer medical care are 17.8 percent while collecting money is about 15.1 percent. In addition, around 10.9 percent and 14.1 percent of volunteers do maintenance of community resources, while about 9.1 percent and 11.6 percent offer their time to volunteer in law and order for both of the LFSs. A total of 16.2 percent and 15.6 percent participate in something else for both surveys; those who volunteer by providing training are 11.4 percent and 9.8 percent, while volunteers who are involved in fundraising are about 8.2 percent and 8.7 percent respectively.

**Table 3.10: Type of volunteer activities**

	September 2006		March 2007	
	Frequency	Percent*	Frequency	Percent**
<b>Help the sick</b>	772	21.7	877	24.8
<b>Medical care</b>	631	17.8	519	14.7
<b>Provision of training</b>	402	11.3	345	9.8
<b>Law and order</b>	324	9.1	409	11.6
<b>Maintenance of community resources</b>	389	10.9	500	14.1
<b>Organise cultural events</b>	810	22.8	709	20
<b>Collect money</b>	536	15.1	557	15.7
<b>Fund raising</b>	292	8.2	309	8.7
<b>Something else</b>	575	16.2	553	15.6

*\*calculated on 3553 and \*\* on 3538 from Table 3.9*

**Source: Author's own calculations**

From the above frequencies, it is very important to conclude that there is a slight difference between the two surveys. For next following sections in this chapter, it was decided to use only one of them (LFS14).

### **3.3 THE CHARACTERISTICS OF A VOLUNTEER**

This section examines the characteristics of the volunteers in labour force survey 14. The question may be how do the people who volunteer and those that do not, differ; however, this thesis is only focusing on those who volunteer.

#### **3.3.1 Age group and volunteer work**

In terms of age group, theoretically, if the characteristics of a volunteer need to be examined, the focus should be on the motives of the particular individual who may be involved in voluntary work. According to Wilson (2000:226), “the rate of volunteering tends to fall during the transition from adolescence to young adulthood, when the structure of school-related activities gives way to the social freedoms of the single and childless life.” For Menchik and Weisbrod (1987) individuals tend to volunteer more when they are in their middle years. Carlin (2001) confirms this and concludes with empirical findings, that people do more volunteer work between the age of 24 to 34 years of age, compared to other age groups. Table 3.11 shows that (23.6%) of volunteers are young people but only 2.7 percent of young people volunteer. Approximately (62.4%) of volunteers in South Africa are in the middle-age group, and only 6.7 percent of this age group volunteer. The table also reveals that 14 percent of volunteers in South Africa are 60 years and older and only 5.6 percent of this senior group do volunteer work. There may be reasons for this, such as these individuals being parents of children who are likely to benefit the most from the outcome of volunteer work.

**Table 3.11: Age group and volunteer work**

			To volunteer or not	
			Yes	No
Age group	Young (15-29)	Count	838	29695
		% within Age	2.7%	97.3%
		% within to volunteer or not	<b>23.6%</b>	43.2%
	Middle Age (30-59)	Count	2213	30626
		% within Age	6.7%	93.3%
		% within to volunteer or not	<b>62.4%</b>	44.6%
	Senior (60-85+)	Count	495	8385
		% within Age	5.6%	94.4%
		% within to volunteer or not	<b>14%</b>	12.2%
Total		Count	3546	68706
		% within Age	4.9%	95.1%
		% within to volunteer or not	100%	100%

**Source: Author's own calculations**

### **3.3.2 Response to volunteer or not by population group**

Population groups have not received much attention in the literature in explaining volunteer work. For example, in USA Hodgkinson and Weitzman (1996) found that Whites do volunteer more than African Americans (51.9% of Whites and 35.3% of African Americans). According to Cutler and Danigelis (1993), the human capital theory explains the difference of why Whites may volunteer more than African/Blacks. For example, lower levels of education, employment status and income among African/Blacks will make an individual less likely to volunteer at a certain level. Table 3.12 illustrates how different population groups volunteer in South Africa. About 18.8 percent of volunteers in South Africa are Whites and 13.3 percent of Whites do volunteer work. Indians/Asians who do volunteer work are 7.3 percent. Table 3.12 also shows that 65.9 percent of the volunteers are Africans, but only 4.2 percent of Africans volunteer, while 12.2 percent of volunteers are Coloured, and only 4.3 percent are involved in doing volunteer work. Hence, one may conclude that in South Africa Whites do volunteer proportionally more, followed by Indians, Coloureds and Blacks in that order.

**Table 3.12: Population group and probability of volunteering**

			To volunteer or not	
			Yes	No
<b>Population group</b>	Africans	Count	2340	53372
		% within race	4.2%	95.8%
		% within to volunteer or not	<b>65.9%</b>	77.7%
	Coloured	Count	434	9605
		% within race	4.3%	95.7%
		% within to volunteer or not	<b>12.2%</b>	14.0%
	Indians/Asian	Count	110	1402
		% within race	7.3%	92.7%
		% within to volunteer or not	<b>3.1%</b>	2.0%
	White	Count	667	4338
		% within race	13.3%	86.7%
		% within	<b>18.8%</b>	6.3%

**Source: Author's own calculations**

### **3.3.3 Gender and volunteer work**

Many researchers discovered that the relationship between gender and volunteer work varies from country to country. For example in North America, as found by Wilson (2000), women are slightly more likely to volunteer than men, but in Europe this is not the case, as confirmed by Hodgkinson & Weitzman (1996), by posing that there is no overall gender difference in giving and volunteering. Table 3.13 shows that in South Africa 41.6 percent of volunteers are male and 58.4 percent are female. The percentages are very small, only 5.3 percent of female answered that they do volunteering, while 4.7 percent of the males said yes to the question of doing volunteer work. Females volunteer proportionally more than males.

**Table 3.13: Gender and volunteer work**

			<b>To volunteer or not</b>	
			<b>Yes</b>	<b>No</b>
<b>Gender</b>	<b>Male</b>	Count	1477	31600
		% within gender	4.5%	95.5%
		% within to volunteer or not	<b>41.6%</b>	45.9%
	<b>Female</b>	Count	2076	37181
		% within gender	5.3%	94.7%
		% within to volunteer or not	<b>58.4%</b>	54.1%
<b>Total</b>	Count		3553	68781
	% within gender		4.9%	95.1%
	% within to volunteer or not		100%	100%

**Source: Author's own calculations**

### **3.3.4 Volunteers by province**

An analysis of the data in Table 3.14 shows that the province with highest percentage (11.4%) of people who do volunteer work is Eastern Cape province. Western Cape province lies in the second spot (6.8%) followed by Northern Cape (5.5%), Free State (4.9%), and Gauteng and Limpopo (both 3.6%). The next province is North West (3.3%) followed by KwaZulu Natal (2.9%) and Mpumalanga (2.7%), in that order. It may be concluded that a province might have more or less people participating in volunteering because of different reason such as homogeneity of the population of a province (Weisbrod, 1975). It can also be due to a particular province being in need of more public participation in some of the activities than the other provinces. Again, it could be added that it may also be influenced by the awareness of the importance of volunteering, and by how it is managed in that particular province, and this could be recommended for further studies.

**Table 3.14: Province and voluntary work**

			To volunteer or not	
			Yes	No
<b>Province</b>	Western Cape	Count	562	7646
		% within province	<b>6.8%</b>	93.2%
	Eastern Cape	Count	1039	8045
		% within province	<b>11.4%</b>	88.6%
	Northern Cape	Count	267	4611
		% within province	<b>5.5%</b>	94.5%
	Free State	Count	256	5002
		% within province	<b>4.9%</b>	95.1%
	KwaZulu-Natal	Count	550	18305
		% within province	<b>2.9%</b>	97.1%
	North West	Count	207	5979
		% within province	<b>3.3%</b>	96.7%
	Gauteng	Count	275	7264
		% within province	<b>3.6%</b>	96.4%
	Mpumalanga	Count	144	5185
		% within province	<b>2.7%</b>	97.3%
	Limpopo	Count	253	6753
		% within province	<b>3.6%</b>	96.4%

**Source: Author's own calculations**

### **3.3.5 Level of education and volunteering**

Table 3.13 shows the distributions of those who do volunteer work according to their level of education. Approximately 6.5 percent of volunteers are people with no formal education and 3 percent of them do volunteer work. About 21.5 percent of volunteers are those with a primary school education, and only 4.1 percent do volunteer work. Table 3.15 continues by showing that 63.6 percent of volunteers are those with secondary school education, and only 5.1 percent of them do volunteer work. Lastly, among volunteers in South Africa 8.3 percent are those with higher education, and a good number (21.9%) of them do volunteer work, compared to other levels of education. From this, it could be concluded that people with a

higher education volunteer proportionally more than those with lower educational levels. Hence, the more educated, the more likely a person is to volunteer.

**Table 3.15: Level of education and doing volunteer work**

			<b>To volunteer or not</b>	
			Yes	No
<b>Education</b>	<b>No formal education</b>	Count	231	7411
		% within education	3%	97%
		% within to volunteer or not	<b>6.5%</b>	10.8%
	<b>Primary education</b>	Count	763	17747
		% within education	4.1%	95.9%
		% within to volunteer or not	<b>21.5%</b>	25.9%
	<b>Secondary education</b>	Count	2255	42301
		% within education	5.1%	94.9%
		% within to volunteer or not	<b>63.6%</b>	61.7%
	<b>Higher education</b>	Count	294	1051
		% within education	21.9%	78.1%
		% within to volunteer or not	<b>8.3%</b>	1.5%

**Source: Author's own calculations**

### **3.3.6 Study field and voluntary work**

Table 3.16 illustrates how the fields of study are distributed with volunteer work. Note that the numbers are small but the table confirms that 37.1 percent of volunteers in this group did education, training and development as a field of study, and 18.4 percent participate in volunteer works. Among volunteers, 16.5 percent studied business, commerce and management studies, and 12.6 percent of them participate in volunteering activities. Again, in considering the study field, the Table 1.16 also shows that among these volunteers, those who did health sciences and social services are 13.8 percent and 18.8 percent do volunteer work. Those who studied manufacturing, engineering and technology are 7.8 percent of the volunteers and 11.3 percent of them do volunteer activities. About 7.1 percent of these volunteers studied human and social studies and 30.9 percent of this group do unpaid work. Among volunteers in the group 5.1 percent of them studied agriculture and nature

conservation, 4.8 percent physical, mathematical, computer and life sciences; 3.9 percent law, military science and security services, 1.4 percent communication studies and language, 0.3 percent and physical planning and construction respectively. At same time, Table 1.16 reveals that the following values, 21.3 percent, 16.7 percent, 10.4 percent, 13.5 percent, 10.2 percent, and 5.9 percent represent those who do volunteer work among graduates from agriculture and nature conservation, culture and art, physical, mathematical, computer and life sciences, law, military science and security services, communication studies and language, and physical planning and construction, respectively. Thus, what can be learnt from this result of the field of study and volunteering work is that those who studied human and social sciences volunteer more than others. This is followed by those in agriculture and nature conservation, health sciences and social services, education, training and development field, culture and art, business, commerce and management studies, law, military science and security services, manufacturing, engineering and technology, physical, mathematical, computer and life sciences, communication studies and language, and physical planning and construction in that order.

**Table 3.16: Field of study and volunteer work**

			To volunteer or not	
			Yes	No
<b>Field of study</b>	<b>Communication studies and language</b>	Count	10	88
		% within field of study	10.2%	89.8%
		% within to volunteer or not	1.4%	2.3%
	<b>Education, training and development</b>	Count	263	1166
		% within field of study	18.4%	81.6%
		% within to volunteer or not	37.1%	31.1%
	<b>Manufacturing, engineering and technology</b>	Count	55	432
		% within field of study	11.3%	88.7%
		% within to volunteer or not	7.8%	11.5%
	<b>Human and social</b>	Count	50	112

	<b>sciences</b>	% within field of study	30.9%	69.1%
		% within to volunteer or not	<b>7.1%</b>	3.0%
	<b>Law, Military science and security</b>	Count	28	180
		% within field of study	13.5%	86.5%
		% within to volunteer or not	<b>3.9%</b>	4.8%
	<b>Health science and social service</b>	Count	98	424
		% within field of study	18.8%	81.2%
		% within to volunteer or not	<b>13.8%</b>	11.3%
	<b>Agriculture and nature conservation</b>	Count	36	133
		% within field of study	21.3%	78.7%
		% within to volunteer or not	<b>5.1%</b>	3.5%
	<b>Culture and art</b>	Count	16	80
		% within field of study	16.7%	83.3%
		% within to volunteer or not	<b>2.3%</b>	2.1%
	<b>Business, commerce and management studies</b>	Count	117	814
		% within field of study	12.6%	87.4%
		% within to volunteer or not	<b>16.5%</b>	21.7%
	<b>Physics, maths, computer and life science</b>	Count	34	292
		% within field of study	10.4%	89.6%
		% within to volunteer or not	<b>4.8%</b>	7.8%
	<b>Physical planning and construction</b>	Count	2	32
		% within field of study	5.9%	94.1%
		% within to volunteer or not	<b>.3%</b>	.9%

Source: Author's own calculations

### **3.3.7 Income categories of respondents and volunteer work**

Table 3.17 illustrates the income distribution of respondents who do volunteer work. It emerged that the income of the respondents ranges between zero R30000 and more per month. This range is divided into four main groups, those who earn <R3500, R3501-R8000; R8001-R16000 and R16001-R30000 and more. Approximately 59.5 percent of volunteers earn <R3500 and only 5.4 percent of those who are in this income range do volunteer work.

The second range is R3501-R8000 and only 9.9 percent of people within that income range do volunteer works. But, 22.5 percent of people who volunteer are within that income range. Around 12.9 percent of volunteers earn between R8001 and R16000 and 15.1 percent of them do volunteering, while 5.1 percent of volunteers fall under the highest paid group and 20.5 percent of them do volunteer work. From the results above, it is shown that those who earn more, participate in volunteering activities, compared to those who earn less. These results are in line with those found by Krugell (2010:188) that, “greater proportions of people from high-income groups work as volunteers.” One may ask the question of why those who earn less are the ones who volunteer less, compared to those who earn a higher income. This question is expected to be answered in Chapter 4, where income and substitution effects will be examined.

**Table 3.17: Income categories of respondents and volunteer work**

			To volunteer or not	
			Yes	No
Income range	<R3500	Count	1065	18596
		% within income range	5.4%	94.6%
		% within to volunteer or not	<b>59.5%</b>	77.8%
	R3501-R8000	Count	402	3669
		% within income range	9.9%	90.1%
		% within to volunteer or not	<b>22.5%</b>	15.3%
	R8001-R16000	Count	230	1294
		% within income range	15.1%	84.9%
		% within to volunteer or not	<b>12.9%</b>	5.4%
	R16001- R30000 and more	Count	92	356
		% within income range	20.5%	79.5%
		% within to volunteer or not	<b>5.1%</b>	1.5%
Total	Count	1789	23915	
	% within income range	7%	93%	
	% within to volunteer or not	100	100%	

Source: Author's own calculations

### 3.3.8 Other characteristics of volunteers

Respondents, who confirm that they volunteer for work, and who have a paying work, are shown in Table 3.18. In other words, 31.6 percent of volunteers are employed, and 68.4 percent of volunteers are unemployed. Again, 6.1 percent of employed and 4.5 percent of unemployed do volunteer work. Those who own their own business and who still go out there and do volunteer work are 11 percent (See Table 3.19). Those who are registered for income taxes and who volunteer were 5.7 percent and 8.7 percent are not registered for income tax, but they volunteer work (see Table 3.20). This section cannot be complete without mentioning that 35.3 percent of those who are in the formal sector participate in volunteer work.

**Table 3.18: Work status and volunteering**

			To volunteer or not	
			Yes	No
<b>Work status</b>	<b>Yes</b>	Count	1121	17174
		% within work status	6.1%	93.9%
		% within to volunteer or not	31.6%	25%
	<b>No</b>	Count	2431	51599
		% within work status	4.5%	95.5%
		% within	68.4%	75%
<b>Total</b>		Count	3552	68773
		% within work status	4.9%	95.1%
		% within to volunteer or not	100%	100%

**Source: Author's own calculations**

**Table 3.19: Own business (self employed or businessmen/women) and volunteering**

			To volunteer or not	
			Yes	No
<b>Business owner</b>	<b>Yes</b>	Count	467	3777
		% within entrepreneurs	11%	89%
		% within to volunteer or not	13.1%	5.5%
	<b>No</b>	Count	3085	64996
		% within entrepreneurs	4.5%	95.5%
		% within to volunteer or not	86.9%	94.5%

**Source: Author's own calculations**

**Table 3.20: Pay tax and do volunteer work**

			To volunteer or not	
			Yes	No
<b>Pay Tax</b>	<b>Yes</b>	Count	834	13747
		% within pay tax	<b>5.7%</b>	94.3%
		% within to volunteer or not	44.5%	55.6%
	<b>No</b>	Count	1042	10974
		% within pay tax	8.7%	91.3%
		% within to volunteer or not	55.5%	44.4%
<b>Total</b>		Count	1876	24721
		% within pay tax	7.1%	92.9%
		% within to volunteer or not	100%	100%

**Source: Author’s own calculations**

### 3.4 Logit REGRESSION

After analysing all possible demographics and characteristics of volunteers, this section uses a Logit regression with volunteer work being an independent variable to examine the correlates of volunteerism. Explanatory variables are gender, age group, population group, highest education level, own business, work status, and income category. The Logit regression model can be explained through the following equation:

$$Y_i = f(X_{1i}, X_{2i}, \dots, X_{ki}) \quad [3.1]$$

Where  $Y_i$  is the dependent variable representing the individual’s choice between volunteering or not and  $X_s$  are the various explanatory variables, as mentioned above, that predict the probability of whether the individuals do volunteer work. On the supposition that the response variable  $y^*$  captures a true status of the individual who either is doing volunteer work or not, the regression equation can be estimated as follows:

$$y_i^* = \sum_{j=0}^k X_{ij} \beta_j + \varepsilon_i \quad [3.2]$$

$y^*$  is not observable and is a latent variable.  $y$  is observed as a dummy variable that takes the value one if  $y^* > 0$  and takes the value zero otherwise. The  $\beta$  is the vector of parameters and

error terms are denoted with  $\epsilon$ . The error terms entail the common assumption of zero mean but the underlying distribution is different. The Logit model assumes that the underlying distribution of the error terms is Logit while probit assumes the distribution to be normal.

Let  $P_i$  denote the probability that the  $i$ th individual would do volunteer and the distribution depends on the vector of predictors  $X$ , so that

$$P_i(X) = \frac{e^{\beta x}}{1 + e^{\beta x}} \quad [3.3]$$

Where  $\beta$  is a row vector. The logit function to be estimated is then written as

$$\ln \frac{P_i}{1 - P_i} = \sum_{j=1}^k \beta_j X_{ij} \quad [3.4]$$

Is the natural log of the odds in favour of doing the volunteer work, whereas  $\beta_j$  is the measure of change in the logarithm of the odds ratio of the chance of doing or not doing volunteer work and can also be written as

$$\frac{\partial \log(\text{oddratio})}{\partial X_j} = -\beta_j \quad [3.5]$$

The results of the Logit regression on the predictors of doing volunteer work are shown in Tables 3.21 and 3.22. The chi-square of 177.89 indicates that the model as a whole fits significantly better than an empty model, and was able to distinguish between those who do volunteer work and those who do not. The model as a whole explained 5.6 percent (Cox & Snell R Squared) and 9.3% (Nagelkerke R Square) of the variance in volunteering status, and correctly classified 90.7 percent of all cases. The overall percentage of 83.3 percent gives the percent of cases for which the dependent variable was correctly predicted, given the model.

**Table 3.21: Omnibus tests of model coefficients**

		chi-square	df	Sig.
Step 1	Step	177.886	22	.000
	Block	177.886	22	.000
	Model	177.886	22	.000

<b>Model Summary</b>			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2636.009 <sup>a</sup>	<b>.056</b>	<b>.093</b>
a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.			

<b>Classification Table<sup>a</sup></b>					
<b>Observed</b>			<b>Predicted</b>		
			<b>To volunteer or Not</b>		<b>Percentage correct</b>
			<b>Yes</b>	<b>No</b>	
Step 1	To volunteer or not	Yes	16	506	3.1
		No	14	2573	99.5
Overall percentage					<b>83.3</b>
a. The cut value is .500					

**Source: Author's own calculations**

With categorical variables, one of each has been chosen to be regarded as a comparator category. The following are comparator categories, female for gender, old age for age categories, higher education (those with honours, master's and doctorate degrees) for education level, income range of R16001-R30000+ is used to compare with others while owning own business is compared with not owning own business. From the results in Table 3.21, the estimated coefficient of male (gender (1) is negative and statistically significant. This implies that the probability of a male volunteering is less than for a female, as expected. This is in line with what Vaillancourt (1994:818) who found and suggested the cause, which might be the "difference between men and women in tastes or in the intra-family allocation of non-market work or leisure time." In same way, Wilson (2000) confirmed this by stating that females are slightly more likely to volunteer than males. However, it should be noted that this

is not always the case because other studies in Europe show that there is no gender difference in some countries (Hodgkinson & Weitzman, 1996; Gaskin & Smith, 1997; Hall *et al.*, 1998). According to Kendall and Knapp (1991) and Gallagher (1994b), human capital plays a big role in volunteer work. Hence, women would volunteer even more if they acquired the same human capital as men.

The estimated coefficients for young and middle age are negative and statistically significant. Therefore, it can be concluded that both young and middle age people are less likely to volunteer than old people are. According to Janoski and Wilson (1995), people move from self-activism and focusing on their careers activism to engage in more community activities when they are in transition from young to middle age. In the exchange theory, Fischer *et al.* (1991) and Midlarsky and Kahana (1994) found that when one retires, s/he will seek for something to occupy her/him, and volunteer work would be a good choice to replace psychic and social benefits formally derived from paid work. Furthermore, it could be assumed that once retired a person could have more time than before; hence, enough time for doing volunteer work. However, in his article on volunteerism and community development in USA, Deller (2004) argues that people aged between 35 and 54 years do more volunteer work than younger and older people.

Regarding education level, the results in Table 3.22 show that all estimated coefficients are negative. This implies that those with no formal education, primary school, secondary school and those with first degrees volunteer for work less than those with honours, masters and doctorates. In other words, education increases participation in volunteer activities. This is in line with Vaillancourt (1994) who indicated that for higher educated people, career and human capital benefits are greater than the wages they may receive if spent their time doing paid work. Another reason given by Brady *et al.* (1999) is that higher educated people may be asked to volunteer by providing more civic skills and other professional activities such as legal, medical services, auditing and board representation. Thus, they mostly belong to more organisations (Herzog & Morgan, 1993). Therefore, as confirmed by Deller (2004), it could be argued and concluded that education is one of the strongest predictors of volunteering.

Results show that estimated coefficients regarding income categories are all negative, implying that those who earn a lower income are more likely to do volunteer work than those who earn a higher income. This result is similar to the one by Menchik and Weisbrod (1987)

who discover that volunteer work has a positive relationship with income. In other words, the higher the income, the more volunteer work an individual will do. However, Freeman (1997) gave a different view by saying that there is a negative relationship between income and volunteer work. Even though there are these mixed views, the results in Table 3.22 show that in South African people with a higher income are more likely to volunteer more than those with a lower income. The last part of the results presented in Table 3.22 shows that when comparing individuals who have their own business and those who do not, the estimated coefficient is positive and significant. This implies that those with their own businesses are more likely to do volunteer work than those who do not have their own business.

**Table 3.22 Logit model results**

<b>Variables in the equation</b>						
	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Gender (female)</b>						
Male	-.391***	.059	43.949	1	.000	.676
<b>Age categories</b>						
Young (15-29)	-.805***	.131	37.612	1	.000	.447
Middle (30-59)	-.420***	.110	14.612	1	.000	.657
<b>Education level</b>						
No formal education	-1.453***	.213	46.408	1	.000	.234
Primary school	-1.321***	.193	46.915	1	.000	.267
Secondary school	-.954***	.181	27.745	1	.000	.385
First degree	-.211	.193	1.201	1	.273	.810
<b>Income ranges</b>						
<R3500	-1.201***	.265	20.586	1	.000	.301
R3501-R8000	-.740***	.265	7.797	1	.005	.477
R8001-R16000	-.487*	.268	3.305	1	.069	.614
R16000-R30000 and more	-.162	.308	.278	1	.598	.850
<b>Owning business or not</b>						
Own your Business	.471***	.071	44.229	1	.000	1.601
Constant	.018	.310	.003	1	.954	1.018
a. Variable(s) entered on step 1: Gender, AgeCat, Ed.Level, Incomeranges, Q21aOwnB.						

\*\*\*  $p < .001$ , \*\*  $p < .01$  and \*  $p < .05$

**Source: Author's own calculations**

### **3.4 SUMMARY AND CONCLUSION**

In this chapter, an attempt has been made to explore the characteristics of volunteers in South Africa. The main aim was to report on what determines who these volunteers are, using the labour force survey by Statistics South Africa. Initially two surveys (September 2006 and March 2007) were used, after finding out that they do give similar results, the decision was taken to continue the analysis with one survey (September 2006). The sample size for the survey was 72469 respondents. The characteristics focused upon were as follows, gender, age group, population group, education level, field of study, income group, work status, and paying tax. The results show that in the survey, females (54.3%) were more than males, the middle age (45.3%) were more than other age groups, African were more than other population groups (77%), secondary education (61.6%) were more than others, and many people who participated in the survey were from KwaZulu Natal province (26.1%). All the categories have a certain percentage that does volunteer work.

The results from logit regression show that all estimated coefficients have expected signs. Females are more likely to do volunteer work more than males, older people are more likely to participate in volunteer activities than middle age and younger ones. Results also reveal that the higher the level of education, the more likely for the person to do volunteer work. This is the same with income, the higher the income individuals earn, the more likely they are to do volunteer work. The analysis presented in this chapter enables policy makers and others who are interested to see the characteristics of volunteers in South African context clearly. Moreover, this chapter provides the factors, which are related strongly to a volunteer. Strategies aimed to improve volunteerism can be directed by the findings of the chapter. Using secondary data of volunteer activities survey (VAS) for South Africa, the next chapter reports and analyses the hours volunteered and predictors thereof, which has never been done before. Hence, the chapter will be showing this thesis's contribution to the field of knowledge on volunteers and volunteerism in South Africa.

## CHAPTER 4: AN ANALYSIS OF VOLUNTEERS IN SOUTH AFRICA

### 4.1 INTRODUCTION

Volunteers play an important role in delivering services to the society across different areas. For the International Labour Organization (ILO, 2011), volunteer work, is a crucial renewable resource for economic, social and environmental problem solving. These Good Samaritans are described by Tagore, the Nobel prize winner in literature in 1913, as flowers which devote themselves to sweeten the lives of others (cited by Joanna, 2009). To show how vital volunteers are, their economic and social contribution was recognised by the United Nations' declaration of 2001 by setting an international day of volunteers. In developed countries such as the USA, Canada, UK and others, volunteerism is regarded as a sector which could help to improve lives, and it has well-established institutions. Because volunteers spend their time helping others and society, they are considered an important human resource. Indeed, gaining an understanding of their characteristics is timely and significant.

Blum (2010) shows how volunteerism in the USA increased dramatically between 2008 and 2009, despite the economic crisis. As she notes, the figures defied expectations since the assumption is that during economic recession people turn inward to focus on their own circumstances. Blum (2010) suggests different possible reasons for this, including increased sympathy for those in need during the crisis. In addition, this was encouraged by President Obama, who called on all American people for their greater volunteering participation. As mentioned above, volunteers give their time for the benefit of others. The question to be asked is why *homo economicus* would do this. This could be explained on the basis of Menchik and Weisbrod's (1987) consumption and investment approaches, as discussed in Chapter two. In this regard, consumption model is linked with the substitution and income effects from theory.

According to Nicholson (2005), the utility maximisation theory suggests that for normal good, a rise in the price of a good would decrease in quantity purchased for two reasons. First, "if utility is held constant, as the price of the good increases, consumers substitute other, now relatively cheaper goods for that one (Perloff, 2007:118)." This is known as substitution effect. On the other hand, the prices could be held constant, but with a change in

the quantity of goods demanded, due to a change in real income. This is known as income effect phenomenon (Mansfield, 1994). In other words, an increase in price decreases a consumer's buying power, which leads to a reduction of the consumer's income, causing him/her to buy less of at least some goods (Perloff, 2007). This theory is also found in labour economics.

In the consumption model, the individual selects the time spent on paid work, leisure and volunteer work. A utility-maximising consumer will decide how much volunteer work he/she would do for his/her taste and income restrictions. If the wage rate changes, there is an income effect and substitution effect on the number of hours the individual volunteer works. According to the substitution effect, an increase in the wage rate leads to a decline in volunteer work; this against the backdrop that the opportunity cost of an hour's volunteering when wages for paid work increase. According to the income effect, the higher wage rate means that the individual can work fewer hours and earn the same income as before. The result is that the supply of volunteer work will increase as the wage rate increases (Hackl *et al.*, 2007). The consumption model of volunteer work states that individuals choose to spend time on paid work, leisure and volunteer work. It is then an empirical question whether volunteers are high-income or low-income individuals. If the substitution effect dominates, an increase in the wage rate will lead to a decrease in volunteer work as the opportunity cost of an hour of volunteering increases as the remuneration of paid work increases. If the income effect dominates, a higher wage rate means that an individual can work fewer hours to earn the same income as before, and this will lead to an increase in volunteer work. It is an empirical question, which effect is the strongest. Therefore, income level and hours of paid work may be important predictors of why some people are volunteers.

According to the investment model, individuals work as volunteers to build human capital. A volunteer's future earnings capacity can be increased through learning job skills and making contacts that may be useful later in his/her paid work. Hackl *et al.* (2007) identify a few investment motives of volunteers, (i) volunteer work provides job training, (ii) volunteer work provides access to networks, (iii) volunteer work can be a way by which prospective employees can signal their skills and performance, (iv) volunteer work can be a way to develop markets that later can be profitable, and (v) volunteer work can be a way to counter decreases in the value of human capital (for example people who are temporarily unemployed). People can work as volunteers to build *curricula vitae*. Human capital variables

such as gender, age, employment status and level of education are predictors of why some people are volunteers. In other words, future earnings may be increased due to the skills and contacts that are developed during volunteer work. Therefore, the human capital gained contributes in the field of paid employment. According to Blocker (2011), it is believed that volunteerism can lead to employment or provide job training; thus, this thesis focuses on predictors of volunteerism from the theoretical models and international empirical literature, and uses them in the South African context.

This study is unique, as no other research in South Africa, to date, has analysed hours volunteered and its possible predictors. To achieve the objectives highlighted in Chapter 1, a review of the literature was discussed in Chapter 2, and Chapter 3 presents an empirical analysis of the probability of volunteering or not. The focus of the literature review was on conceptual clarification, types of voluntary work, and the models and theories of volunteerism. The key theories were explained within a broader framework of microeconomic analysis of consumer behaviour, altruism and behavioural economics. Chapter 3 gave characteristics of South Africans who do voluntary work and estimated the probability of volunteering as a function of individual-specific predictors. Ultimately, if volunteers are understood better, it may be possible to harness their power for the greater good. The contribution of this thesis would be an analysis of findings from estimations of determinants of hours supplied for voluntary work. This chapter uses data from Volunteer Activities Survey (VAS) by Statistic South Africa.

This chapter is organised as follow. Section 4.2 describes the volunteer activities survey report. Section 4.3 demonstrates demographics and characteristics of volunteers in the data set. Section 4.4 is about the relationship between different variables, which determine the hours an individual would volunteer. Section 4.5 focuses on the education level of volunteers in South Africa. Section 4.6 examines economic status of volunteers while Section 4.7 analyses other possible relationships between the predictors used in the model. The chapter continues with results from regression in Section 4.8, and findings and discussion is in Section 4.9. Section 4.10 concludes the chapter, showing how the study contributes to the field of knowledge on volunteering and volunteers in South Africa.

## **4.2 ABOUT THE VOLUNTEER ACTIVITIES SURVEY (VAS)**

The scale of volunteer work is large and the contribution it makes to the quality of life in countries is big. Despite this, however, little sustained effort has gone into its measurement. The data generated by the Johns Hopkins from 37 countries, according to Salamon *et al.* (2004), reveal that volunteers contribute a far more significant share of the workforce of nations than is commonly recognised. In its resolution of 2001, the United Nations General Assembly called on governments to “establish the economic value of volunteering” (UN General Assembly, 2001). In 2005, as a follow-up to the implementation of the International Year of Volunteers, governments were encouraged to support civil society, to bring awareness of the subject of volunteerism, to disseminate data, and to expand research on other volunteer-related issues, including in developing countries (UN General Assembly, 2005b). A group of expert met twice at ILO headquarters in Geneva from 4 to 5 July 2007 and from 11 to 12 October 2010, to come up with a manual that effectively explains the importance of volunteerism in the world.

In the second quarter of 2010, Statistics South Africa (STATS SA) conducted its first Volunteer Activities Survey (VAS). It was a household-based sample survey, which collected data on the volunteer activities of individuals from 15 years and older. The survey collected information on individuals who live in South Africa. All respondents were members of households living in dwellings selected to take part in the quarterly labour force survey (QLFS) (STATS SA, 2011). The volunteer activities survey covers all activities willingly performed for little or no payment to provide assistance or promote a cause in the four weeks preceding the survey interview. These activities could be performed formally or informally; in other words, either through an organisation or directly for someone outside the household.

Volunteer activities performed for immediate family members were not considered as volunteer activities. However, this is in contrast with the ILO manual, which posed that “activities performed for immediate family members should be regarded as volunteer work as long as the recipient is not a member of the household – only activities performed for household members are excluded” (STATS SA, 2011:7). Therefore, VAS defined immediate family members to include parents (including spouse’s parents), grandparents (including spouse’s grandparents), siblings (brothers and sisters, including spouse’s siblings), and children (biological and adopted).

The volunteer activities survey (VAS) had the purpose of collecting reliable data about people who are involved in volunteer activities, identifying organisation-based and direct volunteering, giving a profile of those engaged, and estimating the economic value of giving a profile of those engaged in volunteer activities. In terms of how it was conducted, two phases took place. The first stage was about identifying individuals who were involved in volunteer activities through the QLFS conducted in the second quarter of 2010 (Q2:2010). The second stage involved follow-up interviews with the same individuals who were involved in volunteer activities, to determine the type of activities they were involved in and whether the activities performed, were organisation-based or direct volunteering.

The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In a survey, sampling involving stratified sampling there would be different sample sizes for each population. Some of the respondents did not answer all the questions, and few did not complete the number of hours spent volunteering. Hence, those were not included in the study, which made the sample size 2128. This sample size is large enough to make a good presentation of what determines hours volunteered in South Africa. The next section analyses the demographic profile and characteristics of the sample population of the VAS.

### **4.3 DEMOGRAPHIC PROFILE AND CHARACTERISTICS OF THE SAMPLE OF VOLUNTEERS IN SOUTH AFRICA**

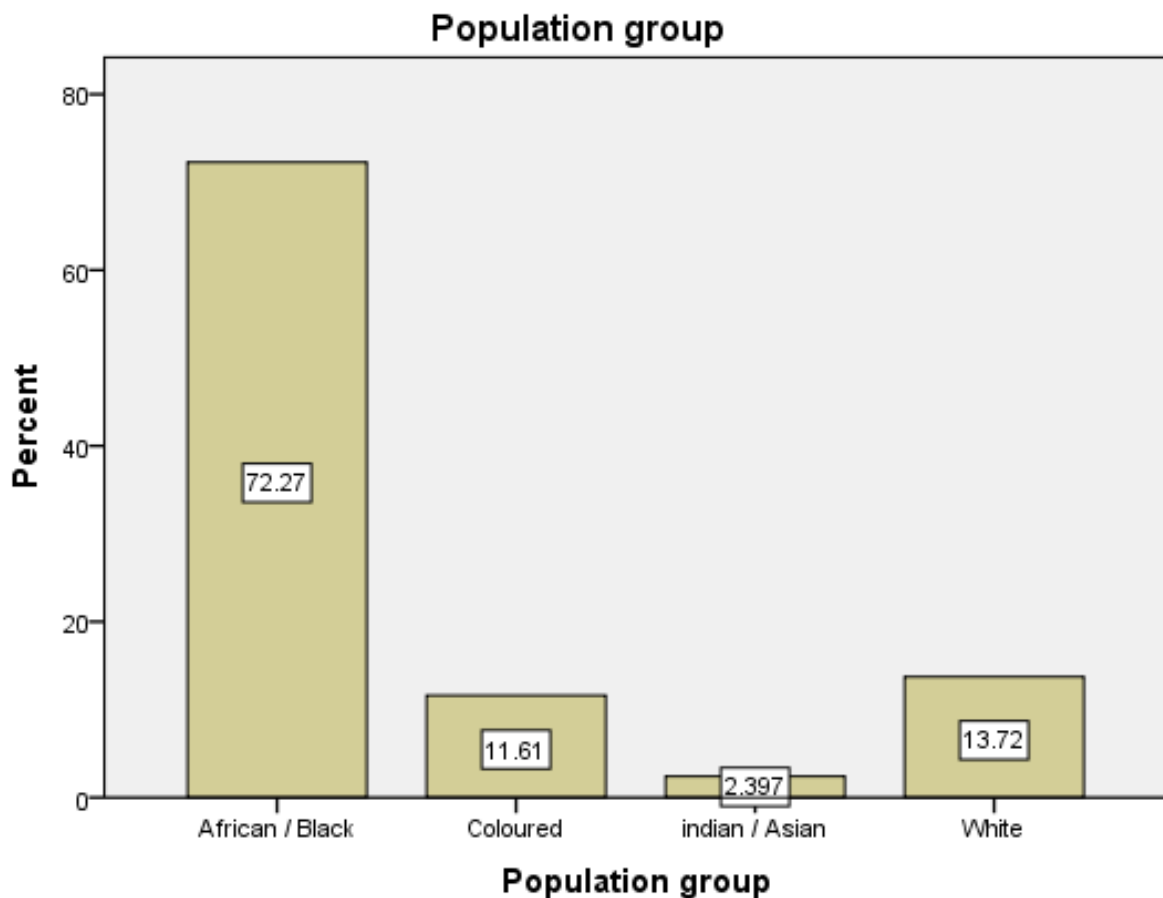
The analysis of the demographic of the data used in this thesis plays an important role in describing and understanding who are volunteers in South Africa, over and above the broader picture presented by the QLFS in Chapter 3. This section presents a demographic profile of the volunteer activity survey from different angles.

#### **4.3.1 Gender**

This sub-section shows the gender of participants of the volunteer activity survey. Approximately 67.1 percent of the respondents to the questionnaire were female, and 32.9 percent were male. This is different from national figures where the Statistics South Africa (2011:3) gives national gender distribution of 48 percent of male and 52 percent of female.

### 4.3.2 Population group

The distribution of population group of the sampled population is shown by Figure 4.1. The figure shows that approximately 72.27 percent were Black African, followed by Whites who were approximately 13.72 percent. Coloureds were 11.61 percent while Indians/Asians were 2.397 percent. This is not far from mid-year national population estimates by Statistics South Africa (2011) where Africans are in the majority (79.2 percent) followed by the Coloured population (8.9%), while Whites are 8.9 percent and the Indian/Asian population are 2.5 percent.



**Figure 4.1: Population group**

### 4.3.3 Marital status of volunteers in South Africa

The marital status of the sample population is shown in the Table 4.1. The table shows that 46.9 percent of the respondents of the VAS, are married. The percentage of the sample with the status of never married is 29.7 percent, with 10.5 percent, 7 percent and 5.9 percent of VAS participants being widow/widower, living together, and divorced or separated, respectively.

**Table 4.1: Marital status of volunteer sample in South Africa**

Marital status	Frequency	Percent
Married	999	46.9
Living together	148	7
Widow / Widower	223	10.5
Divorced / Separated	126	5.9
Never married	632	29.7
<b>Total</b>	<b>2128</b>	<b>100</b>

**Source: Author's own calculations**

#### 4.3.4 Education level

Table 4.2 shows the distribution of the participants by educational level, which was regrouped into seven categories: no schooling, less than primary completed, primary completed, secondary not completed, secondary completed, tertiary and others. The distribution of participants in VAS, as shown in Table 4.2, indicates that the survey was dominated by those who did not complete secondary school, who were 35.2 percent followed by those who did complete secondary school, who were 21.1 percent, those with tertiary education were 20.6 percent, while those who completed primary school were 11.4 percent. In addition, those who participated in the VAS who did not complete primary school were 5.9 percent and those with no schooling were only 5.6 percent.

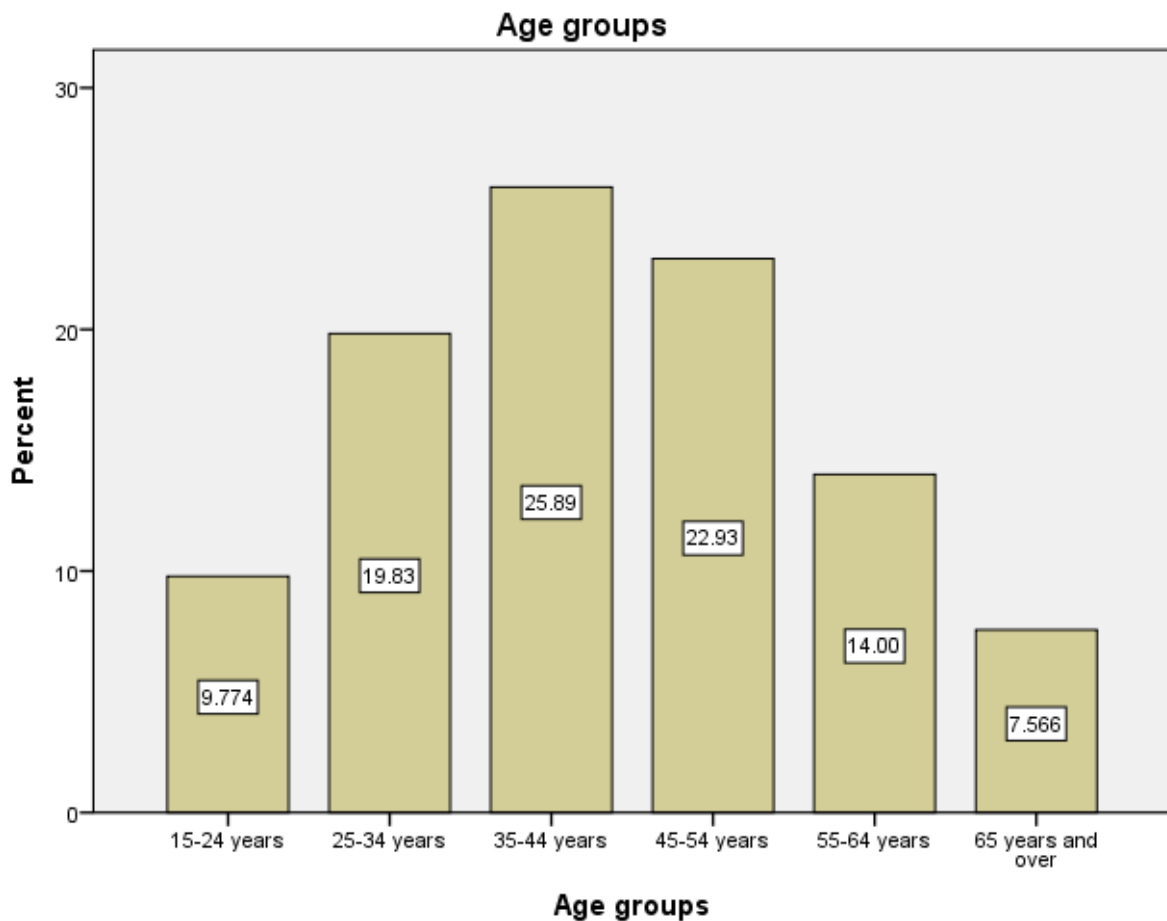
**Table 4.2: Education level**

Education level	Frequency	Percent
No schooling	119	5.6
Less than primary completed	242	11.4
Primary completed	125	5.9
Secondary not completed	750	35.2
Secondary completed	448	21.1
Tertiary	439	20.6
Other	5	.2
<b>Total</b>	<b>2128</b>	<b>100</b>

**Source: Author's own calculations**

### 4.3.5 Age group

Figure 4.2 is about age groups of VAS respondents by indicating the percentage of respondents in a particular age group. The age variable is divided into seven groups that range: from 15 to 24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years and those with 65 years old and more. The figure shows that the dominant group was the one with ages from 35-44 years (25.89%), followed by 45-54 years (22.93%), 25-34 years (19.83%), 55-64 years (14%), 15-24 years (9.8%), and 65 years and over (7.6%), in that order.



**Figure 4.2: Age group of volunteers in South Africa**

### 4.3.6 Profile of work status

Table 4.3 analyses the employment status of the VAS participants. It indicates that the sample is dominated by unemployed respondents (55.5%), followed by those who work for someone else for pay (33.7%), ones who work for their own account (7%), those who are employers (3.4%), while those working without pay in the household business (0.4%), in that order.

**Table 4.3: Profile work status**

Work status	Frequency	Percent
Unemployed	1182	55.5
Working for someone else for pay	718	33.7
An employer	72	3.4
Own account worker	148	7
Working without pay in a household business	8	.4
<b>Total</b>	<b>2128</b>	<b>100</b>

**Source: Author's own calculations**

#### 4.3.7 Types of organisation

Table 4.4 reflects the types of organisations in which volunteers supply their labour. It points to religion being the dominant type of organisation (41.65%), followed by charity, non-profit, NGO (34.20%), other government entities (9.6%), government schools (4.3%), private businesses (4.2%), government hospitals/clinics (2.1%), political organisations (2%), private schools (1.1%), unions (0.6%), and private hospitals/clinics (0.33%), in that order.

**Table 4.4: Types of organisation**

Types of organisation	Frequency	Percent
Charity, non-profit, NGO	728	34.20
Religious	886	41.65
Political	41	1.92
Union	12	0.56
Private business	89	4.18
Private school	24	1.13
Government school	91	4.29
Private hospital / clinic	7	0.34
Government hospital / clinic	46	2.14
Other government entity	204	9.59
<b>Total</b>	<b>2128</b>	<b>100</b>

**Source: Author's own calculations**

#### 4.3.8 Distribution of participants by province

Table 4.5 is about VAS respondents' distribution by province. It indicates that the sample is dominated by Limpopo (21.1%), followed by Free State (16.6%), Western Cape (14.3%), and Gauteng (13.9%), in that order. This is different from population distribution by province as Table 4.5 further continues showing information in the last column from the STATS SA (2012) where Gauteng, known as the South Africa's economic powerhouse, is the most populous of the country's provinces (23.7%). It is followed by KwaZulu-Natal with 19.8 percent, the Eastern Cape with 12.7 percent, the Western Cape with 11.3 percent, Limpopo with 10.4 percent, Mpumalanga with 7.8 percent, North West with 6.8 percent, and Free State 5.3 percent. "Although the Northern Cape is the largest province, at almost a third of South Africa's land area, it is an arid region with the smallest population" (2.2%) (Media Club South Africa, 2013).

**Table 4.5: Distribution of participants by province**

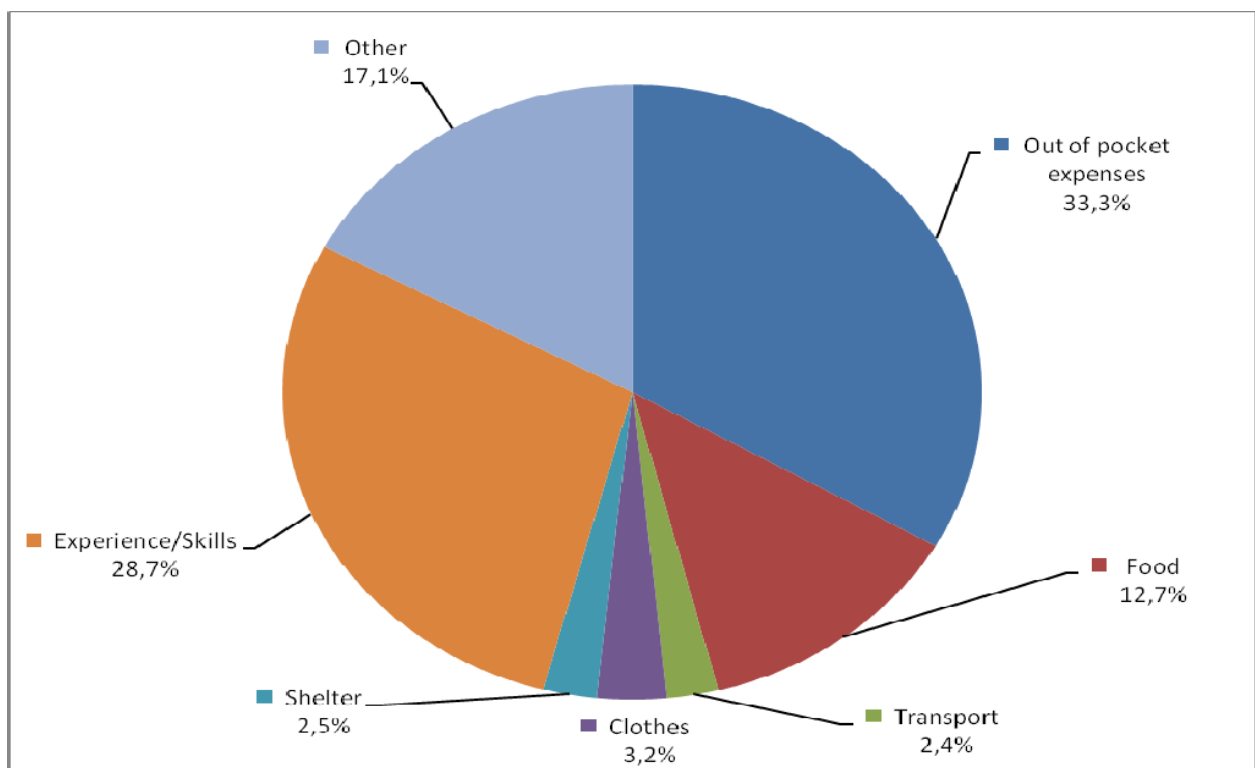
Province	Frequency	Percent	StatsSA Population shares (in %)
Western Cape	304	14.3	11.3
Eastern Cape	186	8.7	12.7
Northern Cape	185	8.7	2.2
Free State	353	16.6	5.3
KwaZulu-Natal	181	8.5	19.8
North West	73	3.4	6.8
Gauteng	295	13.9	23.7
Mpumalanga	102	4.8	7.8
Limpopo	449	21.1	10.4
<b>Total</b>	<b>2128</b>	<b>100</b>	<b>100</b>

**Source: Author's own calculations**

#### 4.3.9 Distribution of what volunteers received/expected to receive

Apart from the satisfaction that comes from helping people, the volunteers were asked whether they received or expected to receive something for their help. The pattern of volunteering varied with the expectations, and what they received in return of their help, according to Figure 4.3. A third (33,3%) of the volunteers received or expected to receive

out-of-pocket expenses, while 28,7 percent received or expected to receive experience or skills, and 12,7 percent received or expected to receive food. A further 2.4 percent, 3.2 percent, and 2.5 percent received or expected to receive transport, clothes and shelter respectively. However, those who indicated that they did receive or expect to receive something were only 11.65 percent of the sample, while those who did not receive or expect anything were 88.35 percent. Therefore, it could be argued that majority of those who supply their volunteer work are doing it due to altruism. In other words, there is some evidence of investment motive among South African volunteers, but the majority of them really are Good Samaritans.



**Figure 4.3: Distribution of what volunteers received/expected to receive**

#### **4.3.10 Beneficiary of volunteer work**

Table 4.6 shows the distribution of beneficiaries of volunteer work. It shows that on one side the majority of beneficiaries (76%) of volunteer work are others, while friends of those who supply volunteer work are 15.3 percent. On the other side, other relatives who benefit from volunteer work are 8.5 percent, and only 0.2 percent of the beneficiaries are made by a member of the household of the individual who does voluntary work. This may describe what

Freeman (1997:141) said that volunteer work is a "conscience good" to which people contribute time or money because they support the moral case for it.

**Table 4.6: Beneficiary of volunteer work**

<b>Beneficiaries</b>	<b>Frequency</b>	<b>Percent</b>
A member of my household	5	.2
Other relatives	185	8.5
Friend	331	15.3
Other	1607	76
<b>Total</b>	<b>2128</b>	<b>100</b>

**Source: Author's own calculations**

#### **4.3.11 Hours volunteered per month**

Hours volunteered were distributed into five categories: from 1 to 50 hours, 51 to 100 hours, 101 to 150 hours, 151 to 200 hours and 201 hour and more. Table 4.7 shows that majority of volunteers in South Africa (90%) offer between 1 and 50 hours, followed by 5.7 percent who supply between 51 and 100 hours. Those who supply their time of 101 to 150 hours for the benefit of others are 2.6 percent, while those who provide 151 to 200 hours are 1.6 percent. Lastly, those who are in the highest category of 201 hours and more are only 0.6 percent of the sample size of the data used in this study.

**Table 4.7: Distribution of hours into categories**

<b>Hour volunteered</b>	<b>Frequency</b>	<b>Percent</b>
<b>1-50 hours</b>	1915	90
<b>51-100 hours</b>	121	5.7
<b>101-150 hours</b>	46	2.2
<b>151-200 hours</b>	33	1.6
<b>201 hours and more</b>	13	.6
<b>Total</b>	<b>2128</b>	<b>100</b>

**Source: Author's own calculations**

#### **4.4 HOURS VOLUNTEERED AND RELATIONSHIP WITH OTHER VARIABLES**

According to the findings from the Data collected by the Johns Hopkins comparing non-profit sector in 37 countries, hours spent doing voluntary work shows that volunteers constitute a far more significant share of the workforce of nations than is commonly recognized (Salamon *et al.*, 2004). The same data reveals that approximately 140 million people, 12 percent of adult population, supply their time for voluntary work in a year in those countries. These represent the “equivalent of 20.8 million full-time paid workers, much larger than those employed by the utilities industry and just slightly less than those employed in the transportation and construction industries in the 37 countries studied” (ILO, 2008:3). Therefore, this shows how crucial hours spent volunteering are. This section examines hours volunteered, looking to all the other characteristics of volunteers in South Africa.

##### **4.4.1 The relationship between gender and hours volunteered in South Africa**

Table 4.8 shows hours volunteered by gender from the sample data. It shows that 92 percent of males and 89 percent of females who do voluntary work spend between 1 to 50 hours. In terms of those who spent between 51 to 100 hours doing voluntary work, females are 6.3 percent and males are 4.4 percent. 1.3 percent of men and 2.6 percent of women spent between 101 and 150 hours volunteering. Again, about 1.3 percent of men supply between 151 to 200 hour, while 1.7 percent of women offer the same range of hours. In terms of those who offer 201 and more hours, only 1 percent of males and 0.6 percent of females give their time for the benefit of others in different activities. Given the information in Table 4.8, it is evident that 90 percent of all hours spent doing voluntary work range from an average of 1 to 50 hours. This category is followed by 5.7 percent in the range of 51 to 100 hours, and 2.2 percent of 101 to 150 hours, 1.6 percent of 151 to 200 hours, and finally 0.6 percent of 201 and more hours, in that order.

**Table 4.8: Gender and hours volunteered**

		Gender		Total
		Male	Female	
<b>1-50 hours</b>	Count	645	1270	1915
	% within hours volunteered	33.7%	66.3%	100%
	% within gender	<b>92%</b>	<b>89%</b>	<b>90%</b>
<b>51-100 hours</b>	Count	31	90	121
	% within hours volunteered	25.6%	74.4%	100%
	% within gender	<b>4.4%</b>	<b>6.3%</b>	<b>5.7%</b>
<b>101-150 hours</b>	Count	9	37	46
	% within hours volunteered	19.6%	80.4%	100%
	% within gender	<b>1.3%</b>	<b>2.6%</b>	<b>2.2%</b>
<b>151-200 hours</b>	Count	9	24	33
	% within hours volunteered	27.3%	72.7%	100%
	% within gender	<b>1.3%</b>	<b>1.7%</b>	<b>1.6%</b>
<b>201 and more hours</b>	Count	7	6	13
	% within hours volunteered	53.8%	46.2%	100%
	% within gender	<b>1%</b>	<b>0.4%</b>	<b>0.6%</b>
<b>Total</b>	Count	701	1427	2128
	% within hours volunteered	32.9%	67.1%	100%
	% within gender	100%	100%	100%

**Source: Author's own calculations**

#### **4.4.2 The relationship between Population groups and hours volunteered in South Africa**

Table 4.9 further analyses the hours volunteered by different population groups by indicating that 87.6 percent of Blacks, 97.2 percent of Coloureds, 96.2 percent of Indians and 95.2 percent of White people offer between one and 50 hours volunteering in South Africa. According to the figure in the same Table 4.9, 6.6 percent of Blacks, 2 percent of Coloured, 3.9 percent of Indians and 4.1 percent of White people spent between 51 and 100 hour doing voluntary work. Only 2.9 percent of Blacks and 0.7 percent of White people in South Africa offer between 101 and 150 hour of voluntary work. Indians and Coloured do not offer their time under this range of hours. For the remaining ranges of hours only 2.1 percent of Blacks

and 0.4 percent of Coloured people offers between 151 and 200, while only 0.8 percent and 0.4 percent of Blacks and Coloured respectively supply 201 and more hours volunteering. Furthermore, Table 4.9 reveals that a greater portion of Black, compared to other groups spend more hours volunteering, for other groups there is strong tapering off after 50 hours.

**Table 4.9: Population group and hours volunteered**

			Population group				Total
			Black	Coloured	Indians	White	
Hours volunteer ed	1-50	Count	1348	240	49	278	1915
		% within hours volunteered	70.4%	12.5%	2.6%	14.5%	100%
		% within population group	<b>87.6%</b>	<b>97.2%</b>	<b>96.1%</b>	<b>95.2%</b>	<b>90%</b>
	51-100	Count	102	5	2	12	121
		% within hours volunteered	84.3%	4.1%	1.7%	9.9%	100%
		% within population group	<b>6.6%</b>	<b>2%</b>	<b>3.9%</b>	<b>4.1%</b>	<b>5.7%</b>
	101-150	Count	44	0	0	2	46
		% within hours volunteered	95.7%	0%	0%	4.3%	100%
		% within population group	<b>2.9%</b>	<b>0%</b>	<b>0%</b>	<b>0.7%</b>	<b>2.2%</b>
	151-200	Count	32	1	0	0	33
		% within hours volunteered	97%	3%	0%	0%	100%
		% within population group	<b>2.1%</b>	<b>0.4%</b>	<b>0%</b>	<b>0%</b>	<b>1.6%</b>
	201 and more	Count	12	1	0	0	13
		% within hours volunteered	92.3%	7.7%	0%	0%	100%
		% within population group	<b>0.8%</b>	<b>0.4%</b>	<b>0%</b>	<b>0%</b>	<b>0.6%</b>
Total	Count	1538	247	51	292	2128	
	% within hours volunteered	72.3%	11.6%	2.4%	13.7%	100%	
	% within Population group	100%	100%	100%	100%	100%	

**Source: Author's own calculations**

#### **4.4.3 The relationship between hours volunteered and marital status in South Africa**

The hours volunteered by marital status is shown in Table 4.10. The table shows that 91.8 percent of married volunteers give their time to benefits others. About 4.6 percent; 1.3 percent; 1.4 percent; and 0.9 percent of those who are married give between 51 and 100 hours; 101 and 150 hours; 151 and 200 hours; and 201 and more hours respectively doing voluntary work. Those who fall under category of living together do give their hours volunteering as follow: 85.8 percent offer between 1 to 50 hours, 7.4 percent of them give between 51 and 100 hour, 5.4 percent give from 101 to 150 hours and 1.4 percent of them offer between 151 and 200 hours. Regarding widow/widower, 92.8 percent give between one and 50 hours, 3.1 percent supply from 51 to 100 hours, 3.6 percent between 101 and 150 hour while 0.4 percent of them supply from 150 to 200 hours of voluntary work. In terms of those who are divorced or separated, 86.5 percent of them contribute between one and 50 hours, 11.9 percent give from 51 to 100 hours, and 1.6 percent between 101 to 150 hours doing volunteer activity. On other side, those who never married, 87.8 percent contribute between one and 50 hours, 6.6 percent of them give from 51 to 100 hours and 2.4 percent of them offer between 101 and 150 hour in voluntary activities. Furthermore, 2.5 percent of those who never married contribute between 151 and 200 hours while 0.6 percent gives 201 and more hours volunteering. In addition, Table 4.10 reveals that if compared to others, living together and divorced/separated show some persistence to greater numbers of hours where 7.4 percent and 11.9 percent spend 51 to 100 hours volunteering.

**Table 4.10: Hours volunteered and marital status**

			Hours volunteered					Total
			1-50	51-100	101-150	151-200	201+	
Marital status	Married	Count	917	46	13	14	9	999
		% within marital status	<b>91.8%</b>	<b>4.6%</b>	<b>1.3%</b>	<b>1.4%</b>	<b>0.9%</b>	<b>100%</b>
		% within hours volunteered	47.9%	38%	28.3%	42.4%	69.2%	46.9%
	Living together	Count	127	11	8	2	0	148
		% within marital status	<b>85.8%</b>	<b>7.4%</b>	<b>5.4%</b>	<b>1.4%</b>	<b>0%</b>	100%
		% within hours volunteered	6.6%	9.1%	17.4%	6.1%	0%	7.0%
	Widow / Widower	Count	207	7	8	1	0	223
		% within marital status	<b>92.8%</b>	<b>3.1%</b>	<b>3.6%</b>	<b>0.4%</b>	<b>0%</b>	100%
		% within hours volunteered	10.8%	5.8%	17.4%	3.0%	0%	10.5%
	Divorced/ Separated	Count	109	15	2	0	0	126
		% within marital status	<b>86.5%</b>	<b>11.9%</b>	<b>1.6%</b>	<b>0%</b>	<b>0%</b>	100%
		% within hours volunteered	5.7%	12.4%	4.3%	0%	0%	5.9%
	Never married	Count	555	42	15	16	4	632
		% within marital status	<b>87.8%</b>	<b>6.6%</b>	<b>2.4%</b>	<b>2.5%</b>	<b>0.6%</b>	<b>100%</b>
		% within hours volunteered	29%	34.7%	32.6%	48.5%	30.8%	29.7%
Total	Count	<b>1915</b>	<b>121</b>	<b>46</b>	<b>33</b>	<b>13</b>	<b>2128</b>	
	% within Marital status	<b>90.0%</b>	<b>5.7%</b>	<b>2.2%</b>	<b>1.6%</b>	<b>0.6%</b>	<b>100%</b>	
	% within hours volunteered	<b>100.0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

Source: Author's own calculations

#### 4.4.5 The relationship between hours volunteered and age group in South Africa

Table 4.11 shows the distribution of hours volunteered by age group. It shows that 89.4 percent of those who are between 15 and 24 years old offer from 1 to 50 hours of

volunteering. Interestingly, this age group volunteers between 51 and 100 hour; from 101 to 150, and 151 and 200 hours are offered by 3.4 percent of this age group each. For age group 25 to 34 years old 88.6 percent of them contribute between one and 50 hours. This is not different from the rest of the age groups (34-44 years; 45-54 years; 55-64 years and 65 years and over) where majority of them contribute between one and 50 hours. Furthermore, the percentage of all age groups tend to decrease as the hours category increases. In addition, it seems that age groups do not explain much of the long hours, but it seems that within the younger group a greater share of spending or giving longer hours is found.

**Table 4.11: Hours volunteered and age group**

			Hours volunteered					Total
			1-50	51-100	101-150	151-200	201+	
Age groups	15-24 years	Count	186	7	7	7	1	208
		% within age groups	<b>89.4%</b>	<b>3.4%</b>	<b>3.4%</b>	<b>3.4%</b>	<b>0.5%</b>	100%
		% within hours volunteered	9.7%	5.8%	15.2%	21.2%	7.7%	9.8%
	25-34 years	Count	374	24	10	11	3	422
		% within age groups	<b>88.6%</b>	<b>5.7%</b>	<b>2.4%</b>	<b>2.6%</b>	<b>0.7%</b>	<b>100%</b>
		% within hours volunteered	19.5%	19.8%	21.7%	33.3%	23.1%	19.8%
	35-44 years	Count	489	40	12	9	1	551
		% within age groups	<b>88.7%</b>	<b>7.3%</b>	<b>2.2%</b>	<b>1.6%</b>	<b>0.2%</b>	100%
		% within hours volunteered	25.5%	33.1%	26.1%	27.3%	7.7%	25.9%
	45-54 years	Count	447	26	9	4	2	488
		% within age groups	<b>91.6%</b>	<b>5.3%</b>	<b>1.8%</b>	<b>0.8%</b>	<b>0.4%</b>	100%
		% within hours volunteered	23.3%	21.5%	19.6%	12.1%	15.4%	22.9%
	55-64 years	Count	274	13	5	1	5	298
		% within age groups	<b>91.9%</b>	<b>4.4%</b>	<b>1.7%</b>	<b>0.3%</b>	<b>1.7%</b>	100%
		% within hours volunteered	14.3%	10.7%	10.9%	3%	38.5%	14%

	<b>65 years and over</b>	Count	145	11	3	1	1	161
		% within age groups	<b>90.1%</b>	<b>6.8%</b>	<b>1.9%</b>	<b>0.6%</b>	<b>0.6%</b>	100%
		% within hours volunteered	7.6%	9.1%	6.5%	3%	7.7%	7.6%
<b>Total</b>		<b>Count</b>	<b>1915</b>	<b>121</b>	<b>46</b>	<b>33</b>	<b>13</b>	<b>2128</b>
		% within age groups	<b>90%</b>	<b>5.7%</b>	<b>2.2%</b>	<b>1.6%</b>	<b>0.6%</b>	<b>100%</b>
		% within hours volunteered	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: Author's own calculations**

#### **4.4.6 The relationship between hours volunteered and education**

Table 4.12 shows the education level and hours volunteered from the sample data. It reveals that majority (from 80% to 95%) of all education levels contribute between one and 50 hours volunteering; where highest percentage (95%) is of those with tertiary education level. For the other category of hours volunteered, show that less than 2 percent of all education levels give their valuable time from 101 hour and more doing volunteering, except for secondary completed (3.8%). Furthermore, between three and 20 percent of all education levels contribute between 51 and 100 hours. Within the 0-50 hours category the education groups that give their time are secondary not completed (34.6%), Tertiary (21.8%), Secondary completed (20.3), and less than primary completed (11.4%). Tertiary educated people make a disproportionate contribution compared to other shares of the population but it tapers off strongly for more hours. Secondary not completed and secondary completed categories contribute the high number of hours compared to other categories.

**Table 4.12: Hours volunteered and education level**

			Hours volunteered					Total
			1-50	51-100	101-150	151-200	201+	
	<b>No schooling</b>	Count	110	5	2	1	1	119
		% within Education level	<b>92.4%</b>	<b>4.2%</b>	<b>1.7%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>100%</b>
		% within hours volunteered	5.7%	4.1%	4.3%	3.0%	7.7%	5.6%
	<b>Less than</b>	Count	219	16	4	1	2	242

<b>Education level</b>	<b>primary completed</b>	% within Education level	<b>90.5</b> %	<b>6.6%</b>	<b>1.7</b> %	<b>0.4</b> %	<b>0.8</b> %	<b>100%</b>
		% within hours volunteered	11.4 %	13.2 %	8.7 %	3.0 %	15.4 %	11.4 %
	<b>Primary completed</b>	Count	115	4	5	0	1	125
		% within Education level	<b>92.0</b> %	<b>3.2%</b>	<b>4.0</b> %	<b>0%</b>	<b>0.8</b> %	<b>100%</b>
		% within hours volunteered	6.0%	3.3%	10.9 %	0%	7.7 %	5.9%
	<b>Secondary not completed</b>	Count	662	55	16	12	5	750
		% within Education level	<b>88.3</b> %	<b>7.3%</b>	<b>2.1</b> %	<b>1.6</b> %	<b>0.7</b> %	<b>100%</b>
		% within hours volunteered	34.6 %	<b>45.5</b> %	<b>34.8</b> %	<b>36.4</b> %	<b>38.5</b> %	35.2 %
	<b>Secondary completed</b>	Count	388	24	16	17	3	448
		% within Education level	<b>86.6</b> %	<b>5.4%</b>	<b>3.6</b> %	<b>3.8</b> %	<b>0.7</b> %	<b>100%</b>
		% within hours volunteered	20.3 %	<b>19.8</b> %	<b>34.8</b> %	<b>51.5</b> %	<b>23.1</b> %	21.1 %
	<b>Tertiary</b>	Count	417	16	3	2	1	439
		% within Education level	<b>95%</b>	<b>3.6%</b>	<b>0.7</b> %	<b>0.5</b> %	<b>0.2</b> %	<b>100%</b>
		% within hours volunteered	21.8 %	13.2 %	6.5 %	6.1 %	7.7 %	20.6 %
	<b>Other</b>	Count	4	1	0	0	0	5
% within education level		<b>80%</b>	<b>20%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	
% within hours volunteered		0.2%	0.8%	0%	0%	0%	0.2%	
<b>Total</b>	Count	1915	121	46	33	13	2128	
	% within education level	<b>90.0</b> %	<b>5.7%</b>	<b>2.2</b> %	<b>1.6</b> %	<b>0.6</b> %	<b>100%</b>	
	% within hours volunteered	100%	100%	100 %	100 %	100 %	100%	

**Source: Author's own calculations**

#### 4.4.7 The relationship between hours volunteered and work status in South Africa

According to Taborda (2013), South African labour force increased by 144000 persons between the last quarter of 2012 and the first quarter of 2013, and South Africa has an unemployment rate of 25.2 percent. Therefore, it is important to know the relationship between hours volunteered and the work status of South African people. Table 4.13 analyses this relationship, where 86 percent of those who are unemployed who do voluntary work contribute between one and 50 hours, 7.9 percent of volunteers who are unemployed offer between 51 and 100 hours, 3 percent of unemployed people spend more than 100 hours doing voluntary work. About 96.5 percent of those who are working for someone else for pay contribute between one and 50 hours volunteering. The sample data shows that employers are few (3.4 %) and 93.1 percent of them supply from 1 to 50 hours, 4.2 percent from 51 to 100 and 2.8 percent from 101 to 150 hours doing voluntary work for the benefits of others. Approximately 88.5 percent of those who are own account workers contribute from 1 to 50 hours, 6.4 percent of them offer from 51 to 100 hours, 2.7 percent offer between 101 and 150 hours on voluntary activity. For those working without pay in a household business, 87.5 percent of them supply from 1 to 50 hours volunteering, while 12.5 percent of them give 101 to 150 hours. It seems that volunteer work may be a sensible way to engage some of the unemployed, particularly in terms of the investment model.

**Table 4.13: Hours volunteered and work status**

			Hours volunteered					Total
			1-50	51-100	101-150	151-200	201+	
Work status	Unemployed	Count	1017	93	35	28	9	1182
		% within work for whom	86%	7.9%	3%	2.4%	0.8%	100%
		% within hours volunteered	53.1%	76.9%	76.1%	84.8%	69.2%	55.5%
	Working for someone else for pay	Count	693	16	4	3	2	718
		% within work for whom	96.5%	2.2%	0.6%	0.4%	0.3%	100%
		% within hours volunteered	36.2%	13.2%	8.7%	9.1%	15.4%	33.7%
	An employee	Count	67	3	2	0	0	72
		% within work	93.1%	4.2%	2.8%	0%	0%	100%

	<b>r</b>	for whom	%					
		% within hours volunteered	3.5%	2.5%	4.3%	0%	0%	3.4%
	<b>Own account worker</b>	Count	131	9	4	2	2	148
		% within work for whom	<b>88.5%</b>	<b>6.1%</b>	<b>2.7%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>100%</b>
		% within hours volunteered	6.8%	7.4%	8.7%	6.1%	15.4%	7.0%
	<b>Working without pay in a household business</b>	Count	7	0	1	0	0	8
		% within work for whom	<b>87.5%</b>	<b>0%</b>	<b>12.5%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
		% within hours volunteered	0.4%	0%	2.2%	0%	0%	0.4%
	<b>Total</b>	Count	1915	121	46	33	13	2128
% within work for whom		<b>90.0%</b>	<b>5.7%</b>	<b>2.2%</b>	<b>1.6%</b>	<b>0.6%</b>	<b>100%</b>	
% within hours volunteered		100%	100%	100%	100%	100%	100%	

**Source: Author's own calculations**

#### **4.4.7 The relationship between hours volunteered and type of organisation**

This section is an analysis of the relationship between hours volunteered and types of organisation. Table 4.14 shows that with the category of 1-50 volunteer hours, unions and private hospital/clinic have a greater share of volunteers (100%). Followed by religion (94.6%), private business (86.5%), government schools (84.2%), private schools (80%), politics (76.5%), charity, non-profit, NGOs (74.9%), other government entities (69.4%) and government hospitals/clinics (47.4%), in that order. Furthermore, Table 4.14 shows that the categories of charity, non-profit, NGOs, religion, other government entities have more people giving more hours. Moreover, Table 4.14 indicates that unions, private schools, private businesses, private hospitals/clinics and government schools do not receive from 151 to 201 and more hours.

**Table 4.14: Hours volunteered and type of organisation**

			Hours volunteered					Total
			1-50	51-100	101-150	151-200	201+	
Type of organization	Charity, non-profit, NGO	Count	227	43	17	11	5	303
		% within Type of organization	<b>74.9</b> %	<b>14.2</b> %	<b>5.6%</b>	<b>3.6%</b>	<b>1.7%</b>	<b>100%</b>
		% within hours volunteered	30.8 %	49.4 %	53.1 %	55%	50%	34.2 %
	Religiou s	Count	349	15	1	1	3	369
		% within type of organization	<b>94.6</b> %	<b>4.1</b> %	<b>0.3%</b>	<b>0.3%</b>	<b>0.8%</b>	<b>100%</b>
		% within hours volunteered	47.4 %	17.2 %	3.1%	5%	30%	41.6 %
	Political	Count	13	1	2	0	1	17
		% within type of organization	<b>76.5</b> %	<b>5.9</b> %	<b>11.8</b> %	<b>0%</b>	<b>5.9%</b>	<b>100%</b>
		% within hours volunteered	1.8%	1.1 %	6.3%	0%	10%	1.9%
	Union	Count	5	0	0	0	0	5
		% within type of organization	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
		% within hours volunteered	0.7%	0%	0%	0%	0%	0.6%
	Private busines s	Count	32	3	2	0	0	37
		% within type of organization	<b>86.5</b> %	<b>8.1</b> %	<b>5.4%</b>	<b>0%</b>	<b>0%</b>	100%
		% within hours volunteered	4.3%	3.4 %	6.3%	0%	0%	4.2%
	Private school	Count	8	1	1	0	0	10
		% within type of organization	<b>80%</b>	<b>10</b> %	<b>10%</b>	<b>0%</b>	<b>0%</b>	100%
		% within hours volunteered	1.1%	1.1 %	3.1%	0%	0%	1.1%
	Govern ment school	Count	32	5	1	0	0	38
		% within type of organization	<b>84.2</b> %	<b>13.2</b> %	<b>2.6%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
		% within hours	4.3%	5.7	3.1%	0%	0%	4.3%

		volunteered		%				
	<b>Private hospital / clinic</b>	Count	3	0	0	0	0	3
		% within type of organization	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
		% within hours volunteered	0.4%	0%	0%	0%	0%	0.3%
	<b>Govern ment hospital / clinic</b>	Count	9	7	0	3	0	19
		% within type of organization	<b>47.4 %</b>	<b>36.8 %</b>	<b>0%</b>	<b>15.8 %</b>	<b>0%</b>	<b>100%</b>
		% within hours volunteered	1.2%	8%	0%	15%	0%	2.1%
	<b>Other govern ment entity</b>	Count	59	12	8	5	1	85
		% within type of organisation	<b>69.4 %</b>	<b>14.1 %</b>	<b>9.4%</b>	<b>5.9%</b>	<b>1.2%</b>	<b>100%</b>
		% within hours volunteered	8%	13.8 %	25%	25%	10%	9.6%
<b>Total</b>	Count	737	87	32	20	10	886	
	% within type of organisation	<b>83.2 %</b>	<b>9.8 %</b>	<b>3.6%</b>	<b>2.3%</b>	<b>1.1%</b>	<b>100%</b>	
	% within hours volunteered	100%	100 %	100%	100%	100%	100%	

**Source: Author's own calculations**

#### **4.4.8 The relationship between hours volunteered and Income**

One of the important influences on doing voluntary work is income. Therefore, it is vital to discuss the relationship between hours volunteered and income. Table 4.15 shows within the group that does 1-50 hours of volunteer work, 48.2 percent of the respondents earn between R0 and R3500 per month, 22.1 percent earn from R3501 to R8000, 20.7 percent of earn from R8001 to R16000 and 9 percent earn more than R16000. In addition, Table 4.15 indicates that 96.5 percent of all hours volunteered are within 1-50 hours category. Furthermore, the table continues showing that within 201 hours and more category, both R8001-R16000 and R16000+ categories give 50 percent each. The logit regression model later in this chapter would reconfirm this relationship.

**Table 4.15: Hours volunteered and income**

			Monthly Earnings				Total
			R0-R3500	R3501-R8000	R8001-R1600	R16000 and more	
Hours volunteered	1-50	Count	333	153	143	62	691
		% within hours volunteered	48.2%	22.1%	20.7%	9%	100%
		% within monthly earnings	95.4%	96.2%	98.6%	98.4%	96.5%
	51-100	Count	11	4	1	0	16
		% within hours volunteered	68.8%	25.0%	6.3%	0%	100%
		% within monthly earnings	3.2%	2.5%	0.7%	0%	2.2%
	101-150	Count	3	0	0	1	4
		% within hours volunteered	75%	0%	0%	25%	100%
		% within monthly earnings	0.9%	0%	0%	1.6%	0.6%
	151-200	Count	2	1	0	0	3
		% within hours volunteered	66.7%	33.3%	0%	0%	100%
		% within monthly earnings	0.6%	0.6%	0%	0%	0.4%
	201+	Count	0	1	1	0	2
		% within hours volunteered	0%	50%	50%	0%	100%
		% within monthly earnings	0%	0.6%	0.7%	0%	0.3%
Total		Count	349	159	145	63	716
		% within hours volunteered	48.7%	22.2%	20.3%	8.8%	100%
		% within monthly earnings	100%	100%	100%	100%	100%

**Source: Author's own calculations**

## **4.5 EDUCATION AND VOLUNTEERISM**

As mentioned in Chapter three, Section 3.2.5 the level of education may play an important role in doing voluntary work. This is also confirmed in this chapter, Section 4.4.6. However, education will also be closely related to other correlates of volunteerism, and these interrelationships should be examined with a view to the regression model presented at the end of this chapter.

### **4.5.1 The relationship between education level and gender**

Table 4.16 depicts education level by gender using South African VAS. Among South African volunteers, refer to Table 4.16 specifically shows that only 3.9 percent of men against 6.45 of women do not have a formal education at all. Approximately 5.3 percent of men versus 6.2 percent of women completed primary school. The sample population is dominated by volunteers who did not complete secondary school (35.2%) made up by 31 percent men and 37.4 percent of women who do voluntary work. Those who completed secondary school are 22.1 percent of men and 20.5 percent of female. As mentioned previously that education is one of the determinants of volunteering, so it is also important to look at those who are highly educated. Those volunteers with tertiary education, 43.1 percent are men and 27 percent of all men have tertiary education; 56.9 percent of those with that education level are women but only 17.5 percent of women in the sample have tertiary education. The caveat to keep in mind here is that though the literature has found the women spend more time volunteering than men, this relationship may be confounded when men have disproportionate higher levels of education.

**Table 4.16: Education level and gender**

			Gender		Total
			Male	Female	
Education level	No schooling	Count	27	92	119
		% within education level	22.7%	77.3%	100%
		% within gender	<b>3.9%</b>	<b>6.4%</b>	<b>5.6%</b>
	Less than primary completed	Count	73	169	242
		% within education level	30.2%	69.8%	100%
		% within gender	<b>10.4%</b>	<b>11.8%</b>	11.4%
	Primary completed	Count	37	88	125
		% within education level	29.6%	70.4%	100%
		% within gender	<b>5.3%</b>	<b>6.2%</b>	5.9%
	Secondary not completed	Count	217	533	750
		% within education level	28.9%	71.1%	100%
		% within gender	<b>31%</b>	<b>37.4%</b>	35.2%
	Secondary completed	Count	155	293	448
		% within education level	34.6%	65.4%	100%
		% within gender	<b>22.1%</b>	<b>20.5%</b>	21.1%
	Tertiary	Count	189	250	439
		% within education level	43.1%	56.9%	100%
		% within gender	<b>27%</b>	<b>17.5%</b>	20.6%
	Other	Count	3	2	5
		% within education level	60%	40%	100%
		% within gender	<b>0.4%</b>	<b>0.1%</b>	0.2%
Total		Count	701	1427	2128
		% within education level	32.9%	67.1%	100%
		% within gender	<b>100%</b>	<b>100%</b>	100%

**Source: Author's own calculations**

#### 4.5.2 The relationship between education level and Population group

Table 4.17 indicates the relationship between education level and population group of volunteers in South Africa. It shows that 38.8 percent of Blacks, 41.7 percent of Coloured, 29.4 percent of Indian/Asian and 12 percent of White of volunteers in South Africa form the dominant group (secondary not completed). Those who completed secondary school and volunteer work are 29.4 percent Indian/Asian; 25.7 percent White; 20.2 percent Blacks and 19.4 percent Coloureds. Furthermore, the Table 4.17 reveals that majority of White (57.9%) who voluntary work have tertiary education, versus 31.4 percent of Indian/Asian; 21.1 percent of Coloureds and 13.1 percent of Blacks.

**Table 4.17: Education level and population group**

			Population group				Total
			African / Black	Coloured	Indian / Asian	White	
Education level	No schooling	Count	97	10	1	11	119
		% within education level	81.5%	8.4%	0.8%	9.2%	100%
		% within population group	<b>6.3%</b>	<b>4%</b>	<b>2%</b>	<b>3.8%</b>	<b>5.6%</b>
	Less than primary completed	Count	222	17	2	1	242
		% within education level	91.7%	7%	0.8%	0.4%	100%
		% within population group	<b>14.4%</b>	<b>6.9%</b>	<b>3.9%</b>	<b>0.3%</b>	11.4%
	Primary completed	Count	107	16	2	0	125
		% within education level	85.6%	12.8%	1.6%	0%	100%
		% within population group	<b>7%</b>	<b>6.5%</b>	<b>3.9%</b>	<b>0%</b>	5.9%

	<b>Secondary not completed</b>	Count	597	103	15	35	750
		% within education level	79.6%	13.7%	2%	4.7%	100%
		% within population group	<b>38.8%</b>	<b>41.7%</b>	<b>29.4%</b>	<b>12%</b>	<b>35.2%</b>
	<b>Secondary completed</b>	Count	310	48	15	75	448
		% within education level	69.2%	10.7%	3.3%	16.7%	100%
		% within education level	<b>20.2%</b>	<b>19.4%</b>	<b>29.4%</b>	<b>25.7%</b>	<b>21.1%</b>
	<b>Tertiary</b>	Count	202	52	16	169	439
		% within education level	46%	11.8%	3.6%	38.5%	100%
		% within population group	<b>13.1%</b>	<b>21.1%</b>	<b>31.4%</b>	<b>57.9%</b>	<b>20.6%</b>
	<b>Other</b>	Count	3	1	0	1	5
		% within education level	60.0%	20%	0%	20%	100%
		% within population group	<b>0.2%</b>	<b>0.4%</b>	<b>0%</b>	<b>0.3%</b>	<b>0.2%</b>

**Source: Author's own calculations**

#### **4.5.3 The relationship between education level and age group**

It is vital to know the interaction between education level and age group of volunteers in South Africa. These two variables determine hours volunteered and there may be a correlation between them. Hence, Table 4.18 shows the relationship between them. It indicates that the volunteers who are between 15 and 24 years old have completed primary

school, except for four (1.9%) who have less than primary completed. Approximately 46.6 percent of 15 to 24 years old volunteers, 36.5 percent of 25-34 years; 40.3 percent of 35-44 years; 30.1 percent of 45-54 years; 27.2 percent of 55-64 years and 30.4 percent of 65 years and more did not complete secondary school. Volunteers who completed secondary school are made by 43.3 percent (15-24), 31 percent (25-34), 22 percent (35-44); 11.3 percent (45-54); 10.4 percent (55-64) and 12.4 percent (65+). Those who do voluntary work with tertiary education are 2.3 percent, aged between 15 and 24 years; 23.2 percent aged between 25 to 34 years; 29.8 percent aged between 35 to 44 years; 24.4 percent aged between 45 to 54 years; 13.2 percent aged between 55 to 64 years, and 7.1 percent of those older than 65 years.

**Table 4.18: Education level and age group**

			Age groups					
			15-24	25-34	35-44	45-54	55-64	65 +
<b>Education level</b>	<b>No schooling</b>	Count	0	2	14	41	30	32
		% within education level	0%	1.7%	11.8%	34.5%	25.2%	26.9%
		% within age groups	0%	0.5%	2.5%	8.4%	10.1%	19.9%
	<b>&lt; primary completed</b>	Count	4	16	35	88	80	19
		% within education level	1.7%	6.6%	14.5%	36.4%	33.1%	7.9%
		% within age groups	1.9%	3.8%	6.4%	18%	26.8%	11.8%
	<b>Primary completed</b>	Count	7	15	28	49	16	10
		% within education level	5.6%	12%	22.4%	39.2%	12.8%	8%
		% within age groups	3.4%	3.6%	5.1%	10.0%	5.4%	6.2%
	<b>Secondary not completed</b>	Count	97	154	222	147	81	49
		% within education level	12.9%	20.5%	29.6%	19.6%	10.8%	6.5%
		% within age groups	46.6%	36.5%	40.3%	30.1%	27.2%	30.4%
	<b>Secondary completed</b>	Count	90	131	121	55	31	20
		% within education level	20.1%	29.2%	27%	12.3%	6.9%	4.5%

		% within age groups	43.3 %	31%	22.0%	11.3%	10.4%	12.4 %
	<b>Tertiary</b>	Count	10	102	131	107	58	31
		% within education level	2.3%	23.2 %	29.8%	24.4%	13.2%	7.1%
		% within education level	4.8%	24.2 %	23.8%	21.9%	19.5%	19.3 %
	<b>Other</b>	Count	0	2	0	1	2	0
		% within education level	0%	40%	0%	20%	40%	0%
		% within education level	0%	0.5%	0%	0.2%	0.7%	0%
<b>Total</b>		Count	208	422	551	488	298	161
		% within education level	9.8%	19.8 %	25.9%	22.9%	14%	7.6%
		% within education level	100%	100%	100%	100%	100%	100%

**Source: Author's own calculations**

#### **4.5.4 The relationship between education level and Marital Status**

Table 4.19 shows the relationship between education level and marital status of volunteers in this sample. It indicates that 4.5 percent of those who do voluntary work are married and do not have any formal education and 3.5 percent never married. Approximately 30.7 percent of married, 42.6 percent of those who live together, 32.7 percent of widow/widowers, 31 percent of divorcees or separated and 42.4 percent of those who never married did not complete secondary school. About 29.1 percent of never married volunteers, 15.1 percent of divorcees or separated, 19.2 percent of married, 18.9 percent of living together and 11.2 percent of widow/widowers did complete secondary school. Table 4.19 reveals also that 28.8 percent of married volunteers, 7.4 of those who are living together, 7.6 percent of widow/widower, 26.2 percent of divorcees or separated and 14.2 percent of never married do have tertiary qualification level. Thus, the caveat to keep in mind is that there is a substantial overlap between being married and having tertiary education (28.8%) and even more so where 65.6 percent of those that have tertiary education are married.

**Table 4.19: Education level and marital status**

			Marital status				
			Married	Living together	Widow / Widower	Divorced or Separated	Never married
Education level	No schooling	Count	45	12	34	6	22
		% within education level	37.8%	10.1%	28.6%	5%	18.5%
		% within marital status	<b>4.5%</b>	<b>8.1%</b>	<b>15.2%</b>	<b>4.8%</b>	<b>3.5%</b>
	< primary completed	Count	108	24	51	19	40
		% within education level	44.6%	9.9%	21.1%	7.9%	16.5%
		% within marital status	10.8%	16.2%	22.9%	15.1%	6.3%
	Primary completed	Count	57	10	22	9	27
		% within education level	45.6%	8%	17.6%	7.2%	21.6%
		% within marital status	5.7%	6.8%	9.9%	7.1%	4.3%
	Secondary not completed	Count	307	63	73	39	268
		% within education level	40.9%	8.4%	9.7%	5.2%	35.7%
		% within marital status	<b>30.7%</b>	<b>42.6%</b>	<b>32.7%</b>	<b>31%</b>	<b>42.4%</b>
	Secondary completed	Count	192	28	25	19	184
		% within education level	42.9%	6.3%	5.6%	4.2%	41.1%
		% within marital status	<b>19.2%</b>	<b>18.9%</b>	<b>11.2%</b>	<b>15.1%</b>	<b>29.1%</b>
	Tertiary	Count	288	11	17	33	90
% within education level		65.6%	2.5%	3.9%	7.5%	20.5%	
% within marital status		<b>28.8%</b>	<b>7.4%</b>	<b>7.6%</b>	<b>26.2%</b>	<b>14.2%</b>	
	Count	2	0	1	1	1	

	<b>Other</b>	% within education level	40.0%	0%	20%	20%	20.0%
		% within marital status	0.2%	0%	0.4%	0.8%	0.2%
<b>Total</b>		Count	999	148	223	126	632
		% within education level	46.9%	7%	10.5%	5.9%	29.7%
		% within marital status	100%	100%	100%	100%	100%

**Source: Author's own calculations**

#### **4.5.5 The relationship between education level and work status**

According to the Telegraph (2013), unemployed individuals might be asked to do unpaid work for them to be able to receive a government grant in UK. If this happens, it will increase the number of hours volunteered in the UK and to other countries that apply that policy. Hence, work status becomes a more important determinant of voluntary work. In most countries, education has a strong link with work status of an individual, therefore, it is vital to analyse the relationship between education level and the work status of volunteers. Table 4.20 shows this relationship. It shows that 8.5 percent of the unemployed, 40.4 percent of those work for someone else for pay, 31.9 percent of employers, 15.5 percent of own account workers, and 25 percent of working without pay in a household business have a tertiary education level. Approximately 22.2 percent of unemployed volunteers, 18.7 percent of those working for someone else for pay, 31.9 percent of employers, 18.9 percent of own account workers, and 12.5 percent of those working without pay in household businesses completed secondary school. For those volunteers who did not complete secondary school, 62.8 percent are unemployed, 26.7 percent are working for someone else for pay, 2 percent are employers, 8.1 percent are on own account workers, and 0.4 percent are working without pay in a household business. About 72.7 of those volunteers who did not complete primary school are unemployed, 17.4 percent are working for someone else for pay, 1.2 percent are employers, 7.9 percent own account workers, and 0.8 percent do work without pay in household businesses.

**Table 4.20: Education level and work status**

			Work status				
			Unemployed	Working for someone else for pay	An employer	Own account worker	Working without pay in a household business
Education Level	No schooling	Count	93	17	4	5	0
		% within education level	78.2%	14.3%	3.4%	4.2%	0%
		% within work for whom	<b>7.9%</b>	<b>2.4%</b>	<b>5.6%</b>	<b>3.4%</b>	0%
	Less than primary completed	Count	176	42	3	19	2
		% within education level	72.7%	17.4%	1.2%	7.9%	0.8%
		% within work for whom	<b>14.9%</b>	<b>5.8%</b>	<b>4.2%</b>	<b>12.8%</b>	<b>25.0%</b>
	Primary completed	Count	77	33	3	12	0
		% within education level	61.6%	26.4%	2.4%	9.6%	0%
		% within work for whom	<b>6.5%</b>	<b>4.6%</b>	<b>4.2%</b>	<b>8.1%</b>	<b>0%</b>
	Secondary not completed	Count	471	200	15	61	3
		% within education level	<b>62.8%</b>	<b>26.7%</b>	<b>2%</b>	<b>8.1%</b>	<b>0.4%</b>
		% within work for whom	<b>39.8%</b>	<b>27.9%</b>	<b>20.8%</b>	<b>41.2%</b>	<b>37.5%</b>
	Secondary completed	Count	262	134	23	28	1
		% within education level	58.5%	29.9%	5.1%	6.3%	0.2%
		% within work for whom	<b>22.2%</b>	<b>18.7%</b>	<b>31.9%</b>	<b>18.9%</b>	<b>12.5%</b>
	Tertiary	Count	101	290	23	23	2
		% within education level	23.0%	66.1%	5.2%	5.2%	0.5%

		% within work for whom	<b>8.5%</b>	<b>40.4%</b>	<b>31.9%</b>	<b>15.5%</b>	<b>25.0%</b>
	<b>Other</b>	Count	2	2	1	0	0
		% within education level	40%	40%	20%	0%	0%
		% within work for whom	0.2%	0.3%	1.4%	0%	0%
<b>Total</b>		Count	1182	718	72	148	8
		% within education level	55.5%	33.7%	3.4%	7%	0.4%
		% within work for whom	100%	100%	100%	100%	100%

**Source: Author's own calculations**

## 4.6 ECONOMIC STATUS OF VOLUNTEERS

This section discusses income of the sample population, as income is one of the key predictors of volunteer work. It will discuss all possible relationships with other explanatory variables such as age, gender, population group, education level and marital status without leaving out employment status.

### 4.6.1 Income by gender

Table 4.21 shows that 37.5 percent of men and 56.5 percent of women who do voluntary work earn between zero and R3500. About 25.3 percent of men and 20.1 percent of women earn R3501-R8000, compared to 22.5 percent of men and 18.7 percent of women who earn R8001-R16000. Approximately 14.7 percent of men and 4.7 percent of women earn more than R16000. In addition, Table 4.21 shows that majority (68.3%) of those who earn more than R16000 are men, contrary to (68.5%) of those who earn R0-R3500 who are women.

**Table 4.21: Income by gender**

			Gender		Total
			Male	Female	
Monthly Earnings	0-3500	Count	110	239	349
		% within monthly earnings	31.5%	68.5%	100%
		% within gender	<b>37.5%</b>	<b>56.5%</b>	48.7%
	3501-8000	Count	74	85	159
		% within monthly earnings	46.5%	53.5%	100%
		% within gender	<b>25.3%</b>	<b>20.1%</b>	<b>22.2%</b>
	8001-16000	Count	66	79	145
		% within monthly earnings	45.5%	54.5%	100%
		% within gender	<b>22.5%</b>	<b>18.7%</b>	<b>20.3%</b>
	16000 and more	Count	43	20	63
		% within monthly earnings	68.3%	31.7%	100%
		% within gender	<b>14.7%</b>	<b>4.7%</b>	<b>8.8%</b>
Total	Count	293	423	716	
	% within monthly earnings	40.9%	59.1%	100%	
	% within gender	100%	100%	100%	

Source: Author's own calculations

It is clear that there is a gender gap in income. Any interpretation of the link between gender and volunteerism should keep the confounding effect of income in mind.

#### 4.6.2 Income by age group

This section analyses the relationship between income (monthly earnings) and age. Table 4.22 shows that 46.5 percent of those 25-34 years of age earn R0-R3500, 29.2 percent earn R3501-R8000, 20.1 percent earn R8001-R16000 and 4.2 percent earn more than R16000. For those volunteers who are between 15 and 24 years old, 65.6 percent of them earn R0-R3500, 21.9 percent earn R3501-R8000 and the remainder of this category (12.5%) earn R8001-R16000. The monthly earnings of these young volunteers could be explained by their level of experience and education. Most of them are still studying and those who are working do not have a high education level, which explains why no one in the sample earns more than R16000. More than a half (51.2%) of 35-44 years old volunteers earn R0-R3500, 19.4 percent earn R3501-R8000, and 20.7 percent earn R8001-R16000, while 8.7 percent of them earn R16000+. Regarding the 45-54 years old group, nearly a half of them (48.4%) earn R0-R3500. Table 4.22 shows that there is no big gap in terms of percentage share of those who are between 55 and 64 years old and what they earn: approximately 38 percent earn R0-R3500; 26.8 percent of them earn R3501-R8000; 21.1 percent earn R8001-R16000 and 14.1 percent of them earn the highest income category (R16000+). For those of 65 years and above half of them (50%) earn R0-R3500; R3501-R8000 and R8001-R16000 is earned by 21.4 percent each while 7.1 percent earn R16000+.

**Table 4.22: Income by age group**

			Monthly Earnings				Total
			0-3500	3501-8000	8001-1600	16000 +	
Age groups	15-24 years	Count	21	7	4	0	32
		% within age groups	65.6%	21.9%	12.5%	0%	100%
		% within monthly earnings	6%	4.4%	2.8%	0%	4.5%
	25-34 years	Count	67	42	29	6	144
		% within age groups	46.5%	29.2%	20.1%	4.2%	100%
		% within monthly earnings	19.2%	26.4%	20%	9.5%	20.1%
	35-44	Count	124	47	50	21	242

	<b>years</b>	% within age groups	<b>51.2%</b>	<b>19.4%</b>	<b>20.7%</b>	<b>8.7%</b>	<b>100%</b>
		% within monthly earnings	35.5%	29.6%	34.5%	33.3%	33.8%
	<b>45-54 years</b>	Count	103	41	44	25	213
		% within age groups	<b>48.4%</b>	<b>19.2%</b>	<b>20.7%</b>	<b>11.7%</b>	<b>100%</b>
		% within monthly earnings	29.5%	25.8%	30.3%	39.7%	29.7%
	<b>55-64 years</b>	Count	27	19	15	10	71
		% within age groups	<b>38%</b>	<b>26.8%</b>	<b>21.1%</b>	<b>14.1%</b>	<b>100%</b>
		% within monthly earnings	7.7%	11.9%	10.3%	15.9%	9.9%
	<b>65 years and over</b>	Count	7	3	3	1	14
		<b>% within age groups</b>	<b>50%</b>	<b>21.4%</b>	<b>21.4%</b>	<b>7.1%</b>	<b>100%</b>
		% within monthly earnings	2%	1.9%	2.1%	1.6%	2%
	<b>Total</b>	<b>Count</b>	<b>349</b>	<b>159</b>	<b>145</b>	<b>63</b>	<b>716</b>
<b>% within age groups</b>		<b>48.7%</b>	<b>22.2%</b>	<b>20.3%</b>	<b>8.8%</b>	<b>100%</b>	
<b>% within monthly earnings</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

**Source: Author's own calculations**

Considering the row of percentages, Table 4.22 shows that in the older age groups there are a greater proportion of people earning high incomes. Thus, interpreting the link between age and volunteerism is not only an issue of time but it may also be influenced by income.

#### **4.6.3 Income by population group**

Table 4.23 demonstrates that majority (60.4%) of Black, volunteers earn R0-R3500 versus 5.3 percent of them earning R16000+. Around 45.2 percent of Coloureds earn R0-R3500; 29 percent earn R3500-R8000; 19.4 percent earn R8001-R16000 and 6.5 percent of them earn R16000+. In Table 4.23 below, 39.1 percent of Indians/Asians earn R8001-R16000; both R0-R3500 and R16000+ earned by 17.4 percent of Coloured each. About 18.9 percent of Whites who do voluntary work earn between R0 and R3500; 31.1 percent earn R3501-R8000; 28.8 percent earn R8001-R16000 while 21.2 percent earn R16000+. Furthermore, 75.6 percent of those who earn between R0 and R3500 are Blacks, 51 percent of those who earn between R3501 and R8000 are also Black while 44.4 percent of those who earn R16000+ are White.

This clearly shows South African's infamously skew income distribution between different racial groups and may confound interpretation of the volunteerism and population group/culture link.

**Table 4.23: Income by population group**

		Monthly Earnings				Total
		0-3500	3501-8000	8001-1600	16000 +	
<b>African / Black</b>	Count	264	76	74	23	437
	% within population group	<b>60.4%</b>	<b>17.4%</b>	<b>16.9%</b>	<b>5.3%</b>	<b>100%</b>
	% within monthly earnings	<b>75.6%</b>	47.8%	<b>51%</b>	36.5%	61%
<b>Coloured</b>	Count	56	36	24	8	124
	% within population group	<b>45.2%</b>	<b>29%</b>	<b>19.4%</b>	<b>6.5%</b>	<b>100%</b>
	% within monthly earnings	16.0%	22.6%	16.6%	12.7%	17.3%
<b>Indian / Asian</b>	Count	4	6	9	4	23
	% within population group	<b>17.4%</b>	<b>26.1%</b>	<b>39.1%</b>	<b>17.4%</b>	<b>100%</b>
	% within monthly earnings	1.1%	3.8%	6.2%	6.3%	3.2%
<b>White</b>	Count	25	41	38	28	132
	% within population group	<b>18.9%</b>	<b>31.1%</b>	<b>28.8%</b>	<b>21.2%</b>	100%
	% within monthly earnings	7.2%	25.8%	26.2%	<b>44.4%</b>	18.4%
<b>Total</b>	Count	349	159	145	63	716
	% within population group	48.7%	22.2%	20.3%	8.8%	100%
	% within monthly earnings	100%	100%	100%	100%	100%

**Source: Author's own calculations**

#### **4.6.4 Income by education level**

It is empirically confirmed that there is a significant positive relationship between income levels and educational level. This theory, fundamentally implies that the higher the education level, the higher the income (Strauss, 2013). Therefore, it is in the interest of this study to discuss this relationship among volunteers in South Africa. Table 4.24 shows the obvious: all (100%) volunteers with no schooling earn R0-R3500. Similarly, income between R0 and R3500 is earned by 77.5 percent of those who did not complete secondary school; 87.9 percent of those who completed primary school and 90.5 percent of those who did not complete it. For those who completed secondary school, approximately 48.5 percent earn R0-R3500; 30.6 percent earn R3501-R8000; 15.7 percent earn R8001-R16000 and 5.2 percent earn R16000 and more. It is assumed that volunteers who have tertiary education earn higher income than those without high levels of education. Table 4.24 shows only 14.9 percent of

volunteers with tertiary education earn between R0 and R3500, 26.7 percent of them earn between R3501 and R8000. Approximately 39.9 percent of them earn between R8001 and R16000 while 18.4 percent earn R16000 and more.

**Table 4.24: Income by education level**

		Monthly Earnings				Total
		0-3500	3501-8000	8001-1600	16000 +	
<b>No schooling</b>	Count	17	0	0	0	17
	% within education level	<b>100%</b>	0%	0%	0%	100%
	% within monthly earnings	4.9%	0%	0%	0%	2.4%
<b>Less than primary completed</b>	Count	38	3	1	0	42
	% within education level	<b>90.5%</b>	7.1%	2.4%	0%	100%
	% within monthly earnings	10.9%	1.9%	0.7%	0%	5.9%
<b>Primary completed</b>	Count	29	4	0	0	33
	% within education level	<b>87.9%</b>	12.1%	0%	0%	100%
	% within monthly earnings	8.3%	2.5%	0%	0%	4.6%
<b>Secondary not completed</b>	Count	155	34	8	3	200
	% within education level	<b>77.5%</b>	17.0%	4.0%	1.5%	100%
	% within monthly earnings	44.4%	21.4%	5.5%	4.8%	27.9%
<b>Secondary completed</b>	Count	65	41	21	7	134
	% within education level	<b>48.5%</b>	<b>30.6%</b>	<b>15.7%</b>	<b>5.2%</b>	<b>100%</b>
	% within monthly earnings	18.6%	25.8%	14.5%	11.1%	18.7%
<b>Tertiary</b>	Count	43	77	115	53	288
	% within education level	<b>14.9%</b>	<b>26.7%</b>	<b>39.9%</b>	<b>18.4%</b>	<b>100%</b>
	% within monthly earnings	12.3%	48.4%	79.3%	84.1%	40.2%
<b>Other</b>	Count	2	0	0	0	2
	% within education level	100%	0%	0%	0%	100%
	% within monthly earnings	0.6%	0%	0%	0%	0.3%
<b>Total</b>	<b>Count</b>	<b>349</b>	<b>159</b>	<b>145</b>	<b>63</b>	<b>716</b>
	<b>% within education level</b>	<b>48.7%</b>	<b>22.2%</b>	<b>20.3%</b>	<b>8.8%</b>	<b>100%</b>
	<b>% within monthly earnings</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: Author's own calculations**

There is a link between education and earnings, which should be kept in mind when both variables are added to a regression model of volunteerism.

#### 4.6.5 Income by marital status

A further look at volunteers' marital status and income is undertaken in Table 4.25. The table shows that 36.8 percent of married volunteers earn between zero and R3500, 24.4 percent of them earn between R3501 and R8000, 25.1 percent earn R8001-R16000 and 13.7 of them earn R16000 and more. It also shows that no volunteer among those living together earn R16000 and more, contrary to 75 percent of them who earn between R0 and R3500. More than a half (58.9 percent) of those who never married earn between R0 and R3500 versus only 2.7 percent of them earn R16000 and more. This could be caused by the experience and education level of these young individuals. Approximately 77.4 percent of widows/widowers earn between R0-R3500, contrary to 45 percent of those who are divorced or separated earn between R0 and R3500. In addition, Table 4.25 demonstrates that 40.7 percent of those who earn between R0-R3500, 59.1 percent of those who earn between R3501 and R8000, 66.9 percent of earners of R8001-R16000 and 84.1 percent of earners of R16000 and more are married. Thus, the caveat to keep in mind is that there is a substantial overlap between being married and earning higher incomes.

**Table 4.25: Income by marital Status**

		Monthly Earnings				Total
		0-3500	3501-8000	8001-1600	16000 and more	
<b>Married</b>	Count	142	94	97	53	386
	% within marital status	36.8%	24.4%	25.1%	13.7%	100%
	% within monthly earnings	40.7%	59.1%	66.9%	84.1%	53.9%
<b>Living together</b>	Count	39	9	4	0	52
	% within marital status	75%	17.3%	7.7%	0%	100%
	% within monthly earnings	11.2%	5.7%	2.8%	0%	7.3%
<b>Widow / Widower</b>	Count	41	7	4	1	53
	% within marital status	77.4%	13.2%	7.5%	1.9%	100%
	% within monthly earnings	11.7%	4.4%	2.8%	1.6%	7.4%
<b>Divorced /</b>	Count	18	5	13	4	40

<b>Separated</b>	% within marital status	<b>45%</b>	<b>12.5%</b>	<b>32.5%</b>	<b>10%</b>	<b>100%</b>
	% within monthly earnings	5.2%	3.1%	9%	6.3%	5.6%
<b>Never married</b>	Count	109	44	27	5	185
	% within marital status	<b>58.9%</b>	<b>23.8%</b>	<b>14.6%</b>	<b>2.7%</b>	<b>100%</b>
	% within monthly earnings	31.2%	27.7%	18.6%	7.9%	25.8%
<b>Total</b>	<b>Count</b>	<b>349</b>	<b>159</b>	<b>145</b>	<b>63</b>	<b>716</b>
	<b>% within marital status</b>	<b>48.7%</b>	<b>22.2%</b>	<b>20.3%</b>	<b>8.8%</b>	<b>100%</b>
	<b>% within monthly earnings</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: Author's own calculations**

## **4.7 AN ANALYSIS OF OTHER RELATIONSHIPS OF VOLUNTEERS IN SOUTH AFRICA**

### **4.7.1 Age group and gender**

Table 4.26 discuss age group and gender of volunteers in South Africa. It shows that 11.4 percent of all males and 9 percent of females are between 15 and 24 years old. Approximately 66.8 percent and 33.2 percent of volunteers who are between 25 and 34 are female and male respectively. Nearly the same percentage (24.3%) and (26.7%) of males and females correspondingly are between 35 and 44 years old. About 24.7 percent of females and 19.4 percent of males are between 45 and 54 years. This sample of volunteers has 15.3 percent male and 13.4 percent female respondents that are between 55 and 64, while 9.6 percent of males and 6.5 percent of females are 65 years old and above.

**Table 4.26: Age group and gender**

		<b>Gender</b>		<b>Total</b>
		<b>Male</b>	<b>Female</b>	
15-24 years	Count	80	128	208
	% within age groups	38.5%	61.5%	100%
	% within gender	11.4%	9%	9.8%
25-34 years	Count	140	282	422
	% within age groups	33.2%	66.8%	100%
	% within gender	20.0%	19.8%	19.8%
35-44 years	Count	170	381	551
	% within age groups	30.9%	69.1%	100%
	% within gender	24.3%	26.7%	25.9%

45-54 years	Count	136	352	488
	% within age groups	27.9%	72.1%	100%
	% within gender	19.4%	24.7%	22.9%
55-64 years	Count	107	191	298
	% within age groups	35.9%	64.1%	100%
	% within gender	15.3%	13.4%	14.0%
65 years and over	Count	68	93	161
	% within age groups	42.2%	57.8%	100%
	% within gender	9.7%	6.5%	7.6%
<b>Total</b>	<b>Count</b>	<b>701</b>	<b>1427</b>	<b>2128</b>
	<b>% within age groups</b>	<b>32.9%</b>	<b>67.1%</b>	<b>100%</b>
	<b>% within gender</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: Author's own calculations**

#### **4.7.2 Work status and population group**

This section examines the relationship between work status and population group. Around 61.4 percent of Black; 44.9 percent of Coloured; 35.3 percent of Indians and 37 percent of White volunteers are unemployed. For volunteers who work for someone else for pay 60.9 percent are Blacks, 17.3 percent are Coloureds, 3.2 percent are Indians and 18.7 percent are Whites. About 11.3 percent of Whites, 13.7 percent of Indians, 1.2 percent of Coloured and 1.9 percent of Blacks are employers. Table 4.27 proceeds showing that 7.9 percent of Blacks, 5.1 percent of Whites, 3.9 percent of Indians and 3.6 percent of Coloured are volunteers working for their own account. In addition, the Table 4.27 shows that small percentage (0.7 percent of Blacks, 2 percent of Indians and 0.7 percent of Whites) of volunteers work in household business without pay.

**Table 4.27: Work status and population group**

		Population group				Total
		African / Black	Coloured	Indian / Asian	White	
<b>Unemployed</b>	Count	945	111	18	108	1182
	% within work for whom	79.9%	9.4%	1.5%	9.1%	100%
	% within population group	61.4%	44.9%	35.3%	37%	55.5 %

<b>Working for someone else for pay</b>	Count	437	124	23	134	718
	% within work for whom	60.9%	17.3%	3.2%	18.7%	100%
	% within population group	28.4%	50.2%	45.1%	45.9%	33.7%
<b>An employer</b>	Count	29	3	7	33	72
	% within work for whom	40.3%	4.2%	9.7%	45.8%	100%
	% within population group	1.9%	1.2%	13.7%	11.3%	3.4%
<b>Own account worker</b>	Count	122	9	2	15	148
	% within work for whom	82.4%	6.1%	1.4%	10.1%	100%
	% within population group	7.9%	3.6%	3.9%	5.1%	7%
<b>Working without pay in a household business</b>	Count	5	0	1	2	8
	% within work for whom	62.5%	0%	12.5%	25.0%	100%
	% within population group	0.3%	0%	2%	0.7%	0.4%
<b>Total</b>	Count	1538	247	51	292	2128
	% within work for whom	72.3%	11.6%	2.4%	13.7%	100%
	% within population group	100%	100%	100%	100%	100%

**Source: Author's own calculations**

### **4.7.3 Age group and population group**

Although literature supports population group effect on volunteering compared to age (Wilson, 2000), it is vital for this thesis to analyse the relationship between these two explanatory variables. Table 4.28 show the descriptive results of age and population group. It shows that 12 percent of Blacks, 3.6 percent of Coloureds, 3.9 percent of Indians and 4.1 percent of Whites volunteers are between 15 and 24 years old. Approximately 21.7 percent of Blacks, 17.4 percent of Coloureds, 13.7 percent and 13 percent of Whites volunteers are between 25 and 34 years. The table continues showing that 75.5 percent of volunteers who are between 35 and 44 years are Black African, 12.5 percent are Coloured, 1.8 percent are

Indians and 10.2 percent are Whites. The number increases slightly for next age group where volunteers who are between 45 and 55 years of age are formed by 22.4 percent of Black African, 22.7 percent of Coloureds, 33.3 percent of Indians and 24.3 percent of Whites. For age category of 55-64 years, 62.4 percent are Black African, 20.5 percent are Whites, 13.8 percent are Coloureds and 3.4 percent are Indians. Yet again Table 4.28 shows that volunteers who are 65 years old, 45.3 percent are Black African, 33.5 percent are Whites, 18 percent are Coloureds and 3.1 percent are Indians.

**Table 4.28: Age group and population group**

		Population group				Total
		African / Black	Coloured	Indian / Asian	White	
15-24 years	Count	185	9	2	12	208
	% within age groups	88.9%	4.3%	1%	5.8%	100%
	% within population group	12%	3.6%	3.9%	4.1%	9.8%
25-34 years	Count	334	43	7	38	422
	% within age groups	79.1%	10.2%	1.7%	9.0%	100%
	% within population group	21.7%	17.4%	13.7%	13%	19.8%
35-44 years	Count	416	69	10	56	551
	% within age groups	75.5%	12.5%	1.8%	10.2%	100%
	% within population group	27.0%	27.9%	19.6%	19.2%	25.9%
45-54 years	Count	344	56	17	71	488
	% within age groups	70.5%	11.5%	3.5%	14.5%	100%
	% within population group	22.4%	22.7%	33.3%	24.3%	22.9%
55-64 years	Count	186	41	10	61	298
	% within age groups	62.4%	13.8%	3.4%	20.5%	100%
	% within population group	12.1%	16.6%	19.6%	20.9%	14%
65 years and over	Count	73	29	5	54	161
	% within age groups	45.3%	18.0%	3.1%	33.5%	100%
	% within population group	4.7%	11.7%	9.8%	18.5%	7.6%
Total	<b>Count</b>	<b>1538</b>	<b>247</b>	<b>51</b>	<b>292</b>	<b>2128</b>
	<b>% within age groups</b>	<b>72.3%</b>	<b>11.6%</b>	<b>2.4%</b>	<b>13.7%</b>	<b>100%</b>
	<b>% within population group</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: Author's own calculations**

#### **4.7.4 Marital status and population group**

According to Wilson (2000) the impact of marital status on volunteering is mixed and seems to differ depending on other predictors such as gender and population group or race. Table 4.29 demonstrates that 80.4 percent of Indians, 69.5 percent of Whites, 61.5 percent of Coloured and 39.2 percent of Black African who do voluntary work are married. Compared 35.8 percent of Black African, 17.4 percent of Coloureds, 12 percent of Whites and 5.9 percent of Indians who were never married. Approximately 11.3 percent of Coloureds, 10.5

percent of Black African, 9.9 percent of Whites and 9.8 percent of Indians are widow/widowers. About 6.5 percent of Coloureds, 6.2 percent of Whites, 5.9 percent of Black African and 3.9 percent of Indians are divorced or separated. In addition Table 4.29 shows that 8.6 percent of Blacks African, 3.2 percent of Coloureds and 2.4 percent of Whites live together and there are no Indians under this category in this sample.

**Table 4.29: Marital status and population group**

		Population group				Total
		African / Black	Coloured	Indian / Asian	White	
<b>Married</b>	Count	603	152	41	203	999
	% within marital status	60.4%	15.2%	4.1%	20.3%	100%
	% within population group	39.2%	61.5%	80.4%	69.5%	46.9%
<b>Living together</b>	Count	133	8	0	7	148
	% within marital status	89.9%	5.4%	0%	4.7%	100%
	% within population group	8.6%	3.2%	0%	2.4%	7.0%
<b>Widow / Widower</b>	Count	161	28	5	29	223
	% within marital status	72.2%	12.6%	2.2%	13.0%	100%
	% within population group	10.5%	11.3%	9.8%	9.9%	10.5%
<b>Divorced / Separated</b>	Count	90	16	2	18	126
	% within marital status	71.4%	12.7%	1.6%	14.3%	100%
	% within population group	5.9%	6.5%	3.9%	6.2%	5.9%
<b>Never married</b>	Count	551	43	3	35	632
	% within marital status	87.2%	6.8%	0.5%	5.5%	100%
	% within population group	35.8%	17.4%	5.9%	12%	29.7%
<b>Total</b>	Count	1538	247	51	292	2128
	% within marital status	72.3%	11.6%	2.4%	13.7%	100%
	% within population group	100%	100%	100%	100%	100%

**Source: Author's own calculations**

#### **4.7.4 Work status and marital status**

The results contained in Table 4.30 display the relationship between work status and marital status. More than half (65.5%) of widow/widower, 64.2 percent of never married, 52.7 percent of those who live together, 52.4 percent of divorcees/separated and 48.6 percent of married volunteers are unemployed. Approximately 38.8 percent of married, 35.1 percent of living together, 31.7 percent of divorced/separated, 29.3 percent of never married and 23.8 percent of widow/widower work for someone else for pay. About 5.6 percent of divorced/separated, 4.7 percent of living together, 4.4 percent of married, 1.8 percent of widow/widower and 1.6 percent of never married volunteers are employers. Table 4.30 reveals also that 52 percent of volunteers with own account are married, 18.9 percent are never married, 12.8 percent are widow/widower, 8.8 percent are divorced or separated and 7.4 percent live together. In addition it shows a small percentage of married (0.4%), widow/widower (0.4%) and never married (0.5%) of volunteers who work without pay in household businesses.

**Table 4.30: Work status and marital status**

		Marital status					Total
		Married	Living together	Widow / Widower	Divorced / Separated	Never married	
Unemployed	Count	486	78	146	66	406	1182
	% within work for whom	41.1%	6.6%	12.4%	5.6%	34.3%	100%
	% within marital status	48.6%	52.7%	65.5%	52.4%	64.2%	55.5%
Working for someone else for pay	Count	388	52	53	40	185	718
	% within work for whom	54%	7.2%	7.4%	5.6%	25.8%	100%
	% within marital status	38.8%	35.1%	23.8%	31.7%	29.3%	33.7%
An employer	Count	44	7	4	7	10	72
	% within work for whom	61.1%	9.7%	5.6%	9.7%	13.9%	100%
	% within marital status	4.4%	4.7%	1.8%	5.6%	1.6%	3.4%
Own account worker	Count	77	11	19	13	28	148
	% within work for whom	52%	7.4%	12.8%	8.8%	18.9%	100%
	% within marital status	7.7%	7.4%	8.5%	10.3%	4.4%	7%
Working without pay in a household business	Count	4	0	1	0	3	8
	% within work for whom	50.0%	0%	12.5%	0%	37.5%	100%
	% within marital status	0.4%	0%	0.4%	0%	0.5%	0.4%
Total	Count	999	148	223	126	632	2128
	% within work for whom	46.9%	7%	10.5%	5.9%	29.7%	100%
	% within marital status	100%	100%	100%	100%	100%	100%

Source: Author's own calculations

#### **4.7.5 Age group and marital status**

Two important explanatory variables of volunteering are age and marital status. Li (2007) presented empirical evidence showing that during midlife, married people are more likely to volunteer than singles, but in later life, widowed women were more likely to volunteer than married women. Table 4.31 demonstrates the relationship between age and marital status of the sample of volunteers in South Africa. Approximately 85.6 percent of volunteers who are between 15 and 24 have never been married. About 51.7 percent of those who are between 25 and 34 years old have never been married compared to 34.8 percent who are married, 10.7 percent living together, 0.7 percent widow/widower and 2.1 percent who are divorced or separated. For those who are 35-44 years old, 57.2 percent are married, 9.3 percent are living together, 6 percent are widow/widower, 7.3 percent are divorced or separated and 22.1 percent never married. Table 4.31 shows also that majority 57.2 percent; 56.4 and 54 percent of the age groups 45-54; 55-64, and 65 and more respectively are married.

**Table 4.31: Age group and marital status**

		Age groups						Total
		15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	
<b>Married</b>	Count	13	147	305	279	168	87	999
	% within marital status	1.3%	14.7%	30.5%	27.9%	16.8%	8.7%	100%
	% within age groups	6.3%	34.8%	55.4%	57.2%	56.4%	54%	46.9%
<b>Living together</b>	Count	15	45	51	30	5	2	148
	% within marital status	10.1%	30.4%	34.5%	20.3%	3.4%	1.4%	100%
	% within age groups	7.2%	10.7%	9.3%	6.1%	1.7%	1.2%	7.0%
<b>Widow / Widower</b>	Count	0	3	33	53	73	61	223
	% within marital status	0%	1.3%	14.8%	23.8%	32.7%	27.4%	100%
	% within age groups	0%	0.7%	6%	10.9%	24.5%	37.9%	10.5%
<b>Divorced / Separated</b>	Count	2	9	40	46	22	7	126
	% within marital status	1.6%	7.1%	31.7%	36.5%	17.5%	5.6%	100%
	% within age groups	1%	2.1%	7.3%	9.4%	7.4%	4.3%	5.9%
<b>Never married</b>	Count	178	218	122	80	30	4	632
	% within marital status	28.2%	34.5%	19.3%	12.7%	4.7%	0.6%	100%

			%					
	% within age groups	85.6%	51.7 %	22.1%	16.4%	10.1%	2.5%	29.7 %
<b>Total</b>	Count	208	422	551	488	298	161	2128
	% within marital status	9.8%	19.8 %	25.9%	22.9%	14%	7.6%	100%
	% within age groups	100%	100%	100%	100%	100%	100%	100%

**Source: Author's own calculations**

#### **4.7.6 Work status and expectations**

Table 4.32 indicates that 86 percent of unemployed individuals, 93.5 percent of people who work for someone else for pay, 88.9 percent of those who are employer, 83.1 percent of those who work for their own account and 75 percent of those who working without pay in a household business do volunteer without expecting anything in return. This shows that the consumption model still hold in this thesis. Few individuals do volunteer work expecting or receive other things in return such as food, transport, clothes and shelter among others. Only 12.5 percent of those who work without pay in a household business, 6.1 percent of those who work for their own account, 4.2 percent of unemployed, 2.8 percent of those who are employers and 1.8 percent of working do volunteer work and expected or received experience/skills.

**Table 4.32: Work status and expectations**

		Work Status					Total
		Unemployed	Working for someone else for pay	An employer	Own account worker	Working without pay in a household business	
<b>Nothing</b>	Count	1017	671	64	123	6	1881
	% within What did you receive?	54.1%	35.7%	3.4%	6.5%	0.3%	100.0%
	% within work for whom	<b>86%</b>	<b>93.5%</b>	<b>88.9%</b>	<b>83.1%</b>	<b>75%</b>	88.4%
<b>Out of pocket expenses</b>	Count	60	12	2	9	0	83
	% within What did you receive?	72.3%	14.5%	2.4%	10.8%	0.0%	100.0%
	% within work for whom	<b>5.1%</b>	<b>1.7%</b>	<b>2.8%</b>	<b>6.1%</b>	<b>0.0%</b>	3.9%
<b>Food</b>	Count	16	8	0	2	0	26
	% within What did you receive?	61.5%	30.8%	0.0%	7.7%	0.0%	100.0%
	% within work for whom	<b>1.4%</b>	<b>1.1%</b>	<b>0.0%</b>	<b>1.4%</b>	<b>0.0%</b>	1.2%
<b>Transport</b>	Count	6	1	0	1	0	8
	% within What did you receive?	75.0%	12.5%	0.0%	12.5%	0.0%	100.0%
	% within work for whom	<b>0.5%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.7%</b>	<b>0.0%</b>	0.4%

<b>Clothes</b>	Count	3	1	0	0	0	4
	% within What did you receive?	75.0%	25.0%	0.0%	0.0%	0.0%	100.0%
	% within work for whom	<b>0.3%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	0.2%
<b>Shelter</b>	Count	1	0	0	1	0	2
	% within What did you receive?	50.0%	0.0%	0.0%	50.0%	0.0%	100.0%
	% within work for whom	0.1%	0.0%	0.0%	0.7%	0.0%	0.1%
<b>Experience / skills</b>	Count	50	13	2	9	1	75
	% within What did you receive?	66.7%	17.3%	2.7%	12.0%	1.3%	100.0%
	% within work for whom	<b>4.2%</b>	<b>1.8%</b>	<b>2.8%</b>	<b>6.1%</b>	<b>12.5%</b>	3.5%
<b>Other</b>	Count	29	12	4	3	1	49
	% within What did you receive?	59.2%	24.5%	8.2%	6.1%	2.0%	100.0%
	% within work for whom	2.5%	1.7%	5.6%	2.0%	12.5%	2.3%
<b>Total</b>	Count	1182	718	72	148	8	2128
	% within What did you receive?	55.5%	33.7%	3.4%	7.0%	0.4%	100.0%
	% within work for whom	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Source: Author's own calculations**

#### **4.7.7 Expectations and monthly earnings**

The Table 4.33 indicates 100 percent of those who earn the highest income (R16000+) do volunteer work without expecting or receiving anything. Furthermore, 96.2 percent of those who earn R3501-R8000, 95.2 percent of those who earn R8001-R16000 and 90.3 percent of those who earn R0-R3500 volunteering without expecting or receiving anything in return. In addition, the table shows that only 3.2 percent of those who earn R0-R3500 did receive out of pocket expenses from volunteering. Furthermore, shelter is expected or received by 2.3 percent of those who earn R0-R3500, 2.1 percent of those who earn R8001-R16000 and 1.3 percent of those who earn R3501-R8000 in return of doing volunteer work. Again, experience/skills are expected or received by 2.3 percent of those who earn R0-R3500, 1.4 percent of those who earn R8001-R16000 and 1.3 percent of those who earn R3501-R8000. Finally, Table 4.33 shows that every small percentage (2 percent) of those who earn R0-R3500 expected or received food from volunteering.

**Table 4.33: Expectations and monthly earnings**

		Monthly Earnings (in Rand)				Total
		R0-R3500	R3501-R8000	R8001-R1600	R16000 and more	
<b>Nothing</b>	Count	315	153	138	63	669
	% within What did you receive?	47.1%	22.9%	20.6%	9.4%	100.0%
	% within work for whom	<b>90.3%</b>	<b>96.2%</b>	<b>95.2%</b>	<b>100.0%</b>	<b>93.4%</b>
<b>Out of pocket expenses</b>	Count	11	0	1	0	12
	% within What did you receive?	91.7%	0.0%	8.3%	0.0%	100.0%
	% within work for whom	<b>3.2%</b>	<b>0.0%</b>	<b>0.7%</b>	<b>0.0%</b>	<b>1.7%</b>
<b>Food</b>	Count	7	1	0	0	8
	% within What did you receive?	87.5%	12.5%	0.0%	0.0%	100.0%
	% within work for whom	<b>2.0%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1.1%</b>
<b>Transport</b>	Count	0	0	1	0	1
	% within What did you receive?	0.0%	0.0%	100.0%	0.0%	100.0%
	% within work for whom	0.0%	0.0%	0.7%	0.0%	0.1%
<b>Clothes</b>	Count	0	1	0	0	1
	% within What did you receive?	0.0%	100.0%	0.0%	0.0%	100.0%
	% within work for whom	0.0%	0.6%	0.0%	0.0%	0.1%
<b>Shelter</b>	Count	8	2	3	0	13
	% within What did you receive?	61.5%	15.4%	23.1%	0.0%	100.0%
	% within work for whom	<b>2.3%</b>	<b>1.3%</b>	<b>2.1%</b>	<b>0.0%</b>	<b>1.8%</b>
<b>Experience / skills</b>	Count	8	2	2	0	12

	% within What did you receive?	66.7%	16.7%	16.7%	0.0%	100.0%
	% within work for whom	<b>2.3%</b>	<b>1.3%</b>	<b>1.4%</b>	<b>0.0%</b>	<b>1.7%</b>
<b>Total</b>	Count	349	159	145	63	716
	% within What did you receive?	48.7%	22.2%	20.3%	8.8%	100.0%
	% within work for whom	100.0%	100.0%	100.0%	100.0%	100.0%

**Source: Author's own calculations**

#### **4.7.8 The expectations and education level of volunteers**

It was indicated previously in Chapter 2, Section 2.4.1.3 and Chapter 3, Section 3.2.5 that education might be one of the predictors of volunteering. This section analyses the relationship between education levels and expectations of volunteers in South Africa. The Table 4.34 shows that many volunteers do not expect or receive anything from volunteering. This is shown by 95 percent of those with no schooling, 94.5 percent of those who have tertiary education, and 89.6 percent of those with primary completed, 87.6 percent of those with secondary not completed, 87.2 percent of those with less than primary completed and 82.6 percent of those with secondary completed volunteering without expecting or receiving something in return. In addition, Table 4.34 shows that 7.8 percent of those with secondary completed and 3.1 percent of those with secondary not completed do volunteer work and expect or receive experience/skills in return.

**Table 4.34: The expectations and education level**

		Education level							Total
		No schooling	Less than prim. compl.	Prim. Compl	Sec. not compl.	Sec. compl.	Tertiary	Others	
<b>Nothing</b>	Count	113	211	112	657	370	415	3	1881
	% within What did you receive?	6%	11.2%	6%	34.9%	19.7%	22.1%	0.2%	100%
	% within education level	<b>95%</b>	<b>87.2%</b>	<b>89.6%</b>	<b>87.6%</b>	<b>82.6%</b>	<b>94.5%</b>	<b>60%</b>	<b>88.4%</b>
<b>Out of pocket expenses</b>	Count	3	11	4	31	27	5	2	83
	% within What did you receive?	3.6%	13.3%	4.8%	37.3%	32.5%	6.0%	2.4%	100.0%
	% within education level	<b>2.5%</b>	<b>4.5%</b>	<b>3.2%</b>	<b>4.1%</b>	<b>6%</b>	<b>1.1%</b>	<b>40%</b>	<b>3.9%</b>
<b>Food</b>	Count	0	5	4	12	4	1	0	26
	% within What did you receive?	0.0%	19.2%	15.4%	46.2%	15.4%	3.8%	0.0%	100.0%
	% within education level	<b>0.0%</b>	<b>2.1%</b>	<b>3.2%</b>	<b>1.6%</b>	<b>0.9%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>1.2%</b>
<b>Transport</b>	Count	0	1	0	4	1	2	0	8
	% within What did you receive?	0.0%	12.5%	0.0%	50.0%	12.5%	25.0%	0.0%	100.0%

	% within education level	0.0%	0.4%	0.0%	0.5%	0.2%	0.5%	0.0%	0.4%
<b>Clothes</b>	Count	0	0	0	2	2	0	0	4
	% within What did you receive?	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	100.0%
	% within education level	0.0%	0.0%	0.0%	0.3%	0.4%	0.0%	0.0%	0.2%
<b>Shelter</b>	Count	0	0	1	0	1	0	0	2
	% within What did you receive?	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	100.0%
	% within education level	0.0%	0.0%	0.8%	0.0%	0.2%	0.0%	0.0%	0.1%
<b>Experience / skills</b>	Count	1	9	1	23	35	6	0	75
	% within What did you receive?	1.3%	12.0%	1.3%	30.7%	46.7%	8.0%	0.0%	100.0%
	% within education level	<b>0.8%</b>	<b>3.7%</b>	<b>0.8%</b>	<b>3.1%</b>	<b>7.8%</b>	<b>1.4%</b>	<b>0.0%</b>	<b>3.5%</b>
<b>Other</b>	Count	2	5	3	21	8	10	0	49
	% within What did you receive?	4.1%	10.2%	6.1%	42.9%	16.3%	20.4%	0.0%	100.0%
	% within education level	1.7%	2.1%	2.4%	2.8%	1.8%	2.3%	0.0%	2.3%
<b>Total</b>	Count	119	242	125	750	448	439	5	2128

	% within What did you receive?	5.6%	11.4%	5.9%	35.2%	21.1%	20.6%	0.2%	100.0%
	% within education level	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Source: Author's own calculations**

#### **4.7.9 Age groups and expectations**

Table 4.35 shows that more than 82 percent across all age groups do not expect or receive anything from giving their time volunteering. One may expect young people to be involved in volunteer work with expectations to receive experience/skills as one of the benefits. However the Table 4.35 below shows that only 7.1 percent of those with 25-34 years, 6.7 percent of those with 15-24 years, 4.4 percent of those with 45-54 years and 1.2 percent of those within category of 55-64 years old expected or received experience/skills as gain to do volunteer work. Furthermore, 5.8 percent of 15-24 age group individuals, 5.2 percent of 25-34 age group individuals, 3.7 percent 45-54 age group, 3.4 percent 35-44 age category and 3 percent of those who are between 55 to 64 years old do expect or receive out of pocket expenses. Lastly, the table shows that 1.9 percent, 1.2 percent and 1.2 percent of 65 years older and more expected or received Out of pocket expenses, Food and others benefits by doing volunteer work.

**Table 4.35: Age groups and expectations**

		Age groups					
		15-24 years	25-34 years	35-44 years	45-54 years	55- 64 year s	65 years and over
<b>Nothing</b>	Count	172	349	486	446	276	152
	% within What did you receive?	9.1%	18.6%	25.8%	23.7%	14.7%	8.1%
	% within age groups	<b>82.7%</b>	<b>82.7%</b>	<b>88.2%</b>	<b>91.4%</b>	<b>92.6%</b>	<b>94.4%</b>
<b>Out of pocket expenses</b>	Count	12	22	19	18	9	3
	% within What did you receive?	14.5%	26.5%	22.9%	21.7%	10.8%	3.6%
	% within age groups	<b>5.8%</b>	<b>5.2%</b>	<b>3.4%</b>	<b>3.7%</b>	<b>3.0%</b>	<b>1.9%</b>
<b>Food</b>	Count	2	8	6	5	3	2
	% within What did you receive?	7.7%	30.8%	23.1%	19.2%	11.5%	7.7%
	% within age groups	<b>1%</b>	<b>1.9%</b>	<b>1.1%</b>	<b>1%</b>	<b>1%</b>	<b>1.2%</b>
<b>Transport</b>	Count	0	1	3	2	0	2
	% within What did you receive?	0.0%	12.5%	37.5%	25.0%	0.0%	25.0%
	% within age groups	0.0%	0.2%	0.5%	0.4%	0.0%	1.2%
<b>Clothes</b>	Count	3	1	0	0	0	0
	% within What did you receive?	75.0%	25.0%	0.0%	0.0%	0.0%	0.0%
	% within age groups	<b>1.4%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Shelter</b>	Count	1	0	0	1	0	0
	% within What did you receive?	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%
	% within age groups	<b>0.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Experience / skills</b>	Count	14	30	24	6	1	0
	% within What did you receive?	18.7%	40.0%	32.0%	8.0%	1.3%	0.0%
	% within age groups	<b>6.7%</b>	<b>7.1%</b>	<b>4.4%</b>	<b>1.2%</b>	<b>0.3%</b>	<b>0.0%</b>
<b>Other</b>	Count	4	11	13	10	9	2

	% within What did you receive?	8.2%	22.4%	26.5%	20.4%	18.4%	4.1%
	% within age groups	1.9%	2.6%	2.4%	2.0%	3.0%	1.2%
<b>Total</b>	Count	208	422	551	488	298	161
	% within What did you receive?	9.8%	19.8%	25.9%	22.9%	14%	7.6%
	% within age groups	100%	100%	100%	100%	100%	100%

**Source: Author's own calculations**

The exploratory results on demographic profile and all possible descriptives of volunteers in South Africa are discussed in this section, most of them are in line with the literature and other studies conducted on volunteers and volunteerism in different countries. The section to follow will provide comprehensive results from regression.

#### **4.8 RESULTS FROM REGRESSION**

As opposed to Chapter 3, where a logit regression model was used, this chapter applies a linear regression with hours volunteered as the dependant variable. Nolan and Heinzen (2011:367) define “simple linear regression as a statistical tool that let us predict an individual’s score on the dependant variable from his or her score on one independent variable.” While a multiple linear regression examines the relationship between two or more explanatory variables and a response variable by fitting a linear equations to observed data. Every value of the independent variable  $x$  is associated with a value of the dependent variable  $y$ .

##### **4.8.1 Dependant variable**

In the VAS, volunteers were asked “How many hours did you spend on this activity in the last four weeks?” the importance of this question was that the hours spent volunteering were to be used to determine the full-time equivalent (FTE) number of workers, and in calculating the economic value of volunteer work; that is, however, not the focus here. The number of hours spent on the activity was recorded in whole numbers. If the person spent 6.4 hours volunteering, it was rounded down to six hours, and if an individual spent 6.5 hours, it was rounded up to seven hours. This thesis uses the same hours as the dependant variable. As

mentioned in Chapter 1, the contribution of the empirical analysis is explicitly to test the consumption model of volunteering by estimating a regression model with income/earnings as a predictor of hours volunteered.

#### 4.8.2 Primary explanatory variables

The VAS provides a number of factors, which could be predictors of how much time a person volunteers. These include gender, age, educational level, and monthly earnings for model 1 (4.1) below. For model two (4.2), beneficiaries were included, while in the model three (4.3) expectations were incorporated. Regarding the question of beneficiaries, participants in the VAS were asked “Did you do this activity for....” and four options were given: 1) a member of your household or immediate family member 2) other relatives 3) Friend(s) and 4) others. The question asked to respondents was: “Apart from the satisfaction that comes from helping people, did you receive or do you expect to receive anything for your help?” For model four (4.4), the study includes what the person who does volunteer work received afterward. Furthermore, this thesis included FIFA in the model five as the VAS was conducted in the same year that the World cup was took place in South Africa. The question asked was “Was this activity linked to the FIFA World Cup?” Some people are obliged by others to perform these activities: Was this activity mandatory, done under court order or required by employer? This question was design to check if volunteer work was done willingly. Hence, both variables FIFA and mandatory are included in the model five of independent variables.

Therefore, to assess what determine hours volunteered, a linear model with the following five regression equation is specified:

$$HR_t = \alpha + \beta_1 Gender_t + \beta_2 Age_t + \beta_3 Ed_t + \beta_4 Y_t + \varepsilon_t \quad [4.1]$$

Where the dependant variable HR stands for hours volunteered by a person, Ed represents level of education and Y the income of the participant.  $\alpha$  is the intercept and  $\varepsilon$  stands for error term while  $t$  is time. The following is model two:

$$HR_t = \alpha + \beta_1 Gender_t + \beta_2 Age_t + \beta_3 Ed_t + \beta_4 Y_t + \beta_5 Benef_t + \varepsilon_t \quad [4.2]$$

Where *Benef* represents the type of beneficiaries of volunteer hours spent. Next is the model three where expectation is included in the equation. The question posed to participants in the sample was: “Apart from the satisfaction that comes from helping people, did you receive or do you expect to receive anything for your help?” and answer was coded as 1 = Yes and 2 = No. Thus, equation three is as follow:

$$HR_t = \alpha + \beta_1 Gender_t + \beta_2 Age_t + \beta_3 Ed_t + \beta_4 Y_t + \beta_5 Benef_t + \beta_6 Expectations_t + \varepsilon_t \quad [4.3]$$

Model four expectations variable is removed and what was expected to be received or what was received by the respondent is included in the model. Where the following question was asked: What did you receive or do you expect to receive for your help? Below is how it was coded:

- 1 = out of pocket expenses
- 2 = Food
- 3 = Transport
- 4 = Cloths
- 5 = Shelter
- 6 = Experiences/Skills
- 7 = Other, specify

Hence, model four is as follow:

$$HR_t = \alpha + \beta_1 Gender_t + \beta_2 Age_t + \beta_3 Ed_t + \beta_4 Y_t + \beta_5 Benef_t + \beta_6 Received_t + \varepsilon_t \quad [4.4]$$

Lastly, Equations 4.4 Equations 4.5 includes FIFA and Mandatory (Mand). These two variables were coded 1 = Yes and 2 = No, derived from the following two questions: 1) Was this activity linked to the FIFA World Cup? 2) Some people are obliged by others to perform these activities. Was this activity mandatory, done under court order or required by employer? Therefore, model five is:

$$HR_t = \alpha + \beta_1 Gender_t + \beta_2 Age_t + \beta_3 Ed_t + \beta_4 Y_t + \beta_5 Benef_t + \beta_6 Expectations_t + \beta_7 FIFA + \beta_8 Mand_t + \varepsilon_t \quad [4.5]$$

It is important to emphasise that this is an OLS regression using cross-sectional data. Although the terms predictors or determinants are used for independent variables, it is not possible to claim causation. The results that follow only show relationship between the dependent and independent variables. The standard specification tests were applied.

#### **4.8.1 Result from model 1**

The results should be interpreted taking into account the nature of the sample volunteers in South Africa, drawing on the demographic analysis of the data and descriptive statistics explaining the variables related to hours spent volunteering. The results are shown in Table 4.36; 4.37; 4.38; 4.39 and 4.40. These tables show coefficients, standard error, *t* test and *p* value of each explanatory variable. As presented in Table 4.36, the results from the VAS show that gender and age do not significantly explain hours volunteered by individuals. The sign of the coefficients show that women volunteer more than men and the more older one gets, more he/she may volunteer. Regarding level of education, all categories are statistically significant at 5 percent. Again, the more educated the person, the more he/she does volunteer work. In other words, there is positive relationship between education and time spent volunteering. In addition, the results from Table 4.36 show that volunteers with high education (tertiary) volunteer more than those with no formal education. All education levels are significant at 5 percent, except tertiary, which is statistically significant at 10 percent. Results from model 1 suggest that income (monthly earnings) is positively related to the time spent doing volunteer work. In other words, an increase in income would lead to an increase of hours volunteered. The coefficient of income is statistically significant at 10 percent, but very small.

**Table 4.36: Model 1 results**

<b>Variable</b>	<b>Coef.</b>	<b>Std.err.</b>	<b>t</b>	<b>P&gt; t </b>
Constant	9.374164	22.7548	-0.41	0.680
Gender	3.823237	7.465148	0.51	0.609
Age	0.2642592	0.2677665	0.99	0.324
<b>Education</b>				
<i>Prim. not compl.</i>	37.79934**	18.01037	2.10	0.036
<i>Prim. compl.</i>	63.64998**	20.73735	3.07	0.002
<i>Sec. not compl.</i>	41.75981**	16.39443	2.55	0.011
<i>Sec. compl.</i>	37.94891**	17.37354	2.18	0.029
<i>Tertiary</i>	29.83008*	17.38508	1.72	0.086
<i>Others</i>	18.25502	73.27755	0.25	0.803
Monthly Earnings	0.0000159*	8.93e-06	1.78	0.075
<b><i>F = 1.83 (Prob. = 0.00589)</i></b>				
<b><i>R-squared = 0.0077 Adj. R-squared = 0.0035</i></b>				

\*\*\*  $p < .001$ , \*\*  $p < .01$  and \*  $p < .05$

**Source: Author's own calculations**

#### **4.8.2 Result from model 2**

For this model, education level, monthly earnings and beneficiaries (friends) are significant predictors of hours volunteered. Some education levels (primary completed, secondary not completed) are significant at 1 percent, and others (secondary not completed and tertiary) are significant at 5 percent. Again monthly earning is significant at 10 percent while beneficiaries (for whom-friends) at 5 percent. Furthermore, on beneficiaries, the comparison is between immediate family member and other beneficiaries (other relatives and friends), with positive signs for the coefficients. This means that volunteers supply more of their time to benefit other relatives and friends than when the beneficiaries are members of their household or immediate family. The gender and age of a volunteer are still not found significant in explaining the variation in hours spent volunteering. The statistical significance of these coefficients suggests that these variables are not important factors with regard to explaining time spent volunteering.

**Table 4.37: Model 2 results**

<b>Variable</b>	<b>Coef.</b>	<b>Std.err.</b>	<b>t</b>	<b>P&gt; t </b>
Constant	-21.29818	23.34626	-0.91	0.362
Gender	2.192	7.51033	0.3	0.770
Age	0.322	0.268774	1.2	0.231
Education				
<i>Prim. not compl.</i>	41.5024**	18.07237	2.30	0.022
<i>Prim. compl.</i>	67.7383***	20.80461	3.3	0.001
<i>Sec. not compl.</i>	47.07137***	16.57254	2.8	0.005
<i>Sec. compl.</i>	44.82521**	17.64407	2.5	0.011
<i>Tertiary</i>	37.73675**	17.74647	2.1	0.034
<i>Others</i>	27.90524	73.35059	0.4	0.704
Monthly Earnings	0.00002*	8.93e-06	1.9	0.064
For whom				
<i>Other relatives</i>	13.8429	12.7156	1.09	0.276
<i>Friends</i>	21.6218**	9.89374	2.19	0.029
<b><i>F = 1.98 (Prob. = 0.0266)</i></b>				
<b><i>R-squared = 0.0102 Adj. R-squared = 0.005)</i></b>				

\*\*\*  $p < .001$ , \*\*  $p < .01$  and \*  $p < .05$

**Source: Author's own calculations**

### 4.8.3 Result from model 3

Table 4.38 shows that age is positive and statistically significant at 10 percent. This is what was expected. As mentioned earlier, in selecting a good model for hours volunteered, a number of explanatory variables for adequacy are chosen. Model 3 incorporates expectations. This was a filter question with aims to get information on issues of compensation, for example, whether the respondent received or expected to receive any form of compensation for their help (STATS SA, 2011). The question asked is: "Apart from the satisfaction that comes from helping people, did you receive or do you expect to receive anything for your help?" and answer options given was Yes or No. This predictor is statistically significant with a positive sign of its coefficient. This sign shows a positive relationship between hours volunteering and expecting something in return. Which show that some volunteers might do

volunteer work with expectations of receiving something in return and this may be about the investment model explained in Chapter 2 and in Section 4.1 of this chapter. The question to be asked is what are the benefits volunteers in South Africa expect to gain? This is going to be answered in model 4.

**Table 4.38: Model 3 results**

<i>Variable</i>	<i>Coef.</i>	<i>Std.err.</i>	<i>t</i>	<i>P&gt; t </i>
Constant	-31.14674	23.33679	-1.33	0.182
Gender	1.68258	7.469139	0.23	0.822
Age	0.4705519*	0.2694806	1.75	0.081
Education				
<i>Prim. not compl.</i>	39.0427**	17.99611	2.17	0.030
<i>Prim. compl.</i>	66.9491***	20.7083	3.23	0.001
<i>Sec. not compl.</i>	46.1924***	16.49637	2.80	0.005
<i>Sec. compl.</i>	42.1507**	17.57151	2.40	0.017
<i>Tertiary</i>	39.2719**	17.66689	2.22	0.026
<i>Others</i>	13.0381	73.08073	0.18	0.858
Monthly Earnings	0.00001	8.92e-06	1.44	0.149
For whom				
<i>Other relatives</i>	17.06896	12.676	1.35	-7.7896
<i>Friends</i>	26.05688	9.900	2.65	6.8379
Expectations	50.4716***	11.0279	4.58	0.0000
<b><i>F = 3.58 (Prob. = 0.0000)</i></b>				
<b><i>R-squared = 0.0198 Adj. R-squared = 0.0198</i></b>				

\*\*\*  $p < .001$ , \*\*  $p < .01$  and \*  $p < .05$

**Source: Author's own calculations**

#### **4.8.4 Result from model 4**

Given the above results from model 3, this study had to go beyond the relationship between expectations and hours spent, and find out about what had been received or what was expected to be received. The comparators category is nothing. Table 4.39 shows that out of pocket expenses and experience/skills are significant at 1 percent, while food and others are significant at 5 percent significance level. In addition, results from model 4 indicate that age

became statistically significant at 5 percent significance level. However, unlike other explanatory variables, the expectation of receiving shelter is negatively related to hours spent volunteering. Furthermore, Table 4.34 shows that model 4 is not different from the previous model because it is still showing that gender and income have the expected sign but are insignificant.

**Table 4.39: Model 4 results**

<i>Variable</i>	<i>Coef.</i>	<i>Std.err.</i>	<i>t</i>	<i>P&gt; t </i>
Constant	-31.47182	23.4025	-1.34	0.179
Gender	1.63432	7.485431	0.22	0.827
Age	0.47514**	0.270964	1.75	0.080
Education				
<i>Prim. not compl.</i>	38.8119**	18.02296	2.15	0.031
<i>Prim. compl.</i>	67.3518***	20.77274	3.24	0.001
<i>Sec. not compl.</i>	46.2413***	16.52334	2.80	0.005
<i>Sec. compl.</i>	42.0973**	17.59494	2.39	0.017
<i>Tertiary</i>	39.5602**	17.69198	2.24	0.025
<i>Others</i>	11.7662	73.37748	0.16	0.873
Monthly Earnings	0.00001	8.94e-06	1.47	0.142
For whom				
<i>Other relatives</i>	16.64004	12.70642	1.31	0.190
<i>Friends</i>	26.05688***	9.923787	2.63	0.009
Receive				
<i>Out of pocket exp</i>	53.62191***	17.93339	2.99	0.003
<i>Food</i>	62.23886**	31.60718	1.97	0.049
<i>Transport</i>	3.649542	56.60329	0.06	0.949
<i>Clothes</i>	29.38457	80.06212	0.37	0.714
<i>Shelter</i>	-43.14885	113.1611	-0.38	0.703
<i>Experience/skills</i>	54.34932***	19.20766	2.83	0.005
<i>Others</i>	46.07667**	23.16279	1.99	0.047
<i>F = 2.48 (Prob. = 0.0206)</i>				
<i>R squared = 0.0206 Adj. R-squared = 0.0123</i>				

\*\*\*  $p < .001$ , \*\*  $p < .01$  and \*  $p < .05$

**Source: Author's own calculations**

#### 4.8.5 Result from model 5

Lastly, the FIFA and mandatory variables are included in the model (5) to see if volunteer work was done willingly, and also if it was somehow linked with FIFA World Cup. Table 4.40 shows that both FIFA and mandatory variables are statistically significant. Again, inclusion of these two variables changes the results slightly: Age is still positively related to hours spent volunteering but statistically significant at 1 percent level. This is the same with the expectation of the food variable. The next section discusses findings and links the results with other empirical works and literature.

**Table 4.40: Model 5 results**

Variable	Coef.	Std.err.	t	P> t
Constant	-31.5	23.4025	-1.3	0.179
Gender	2.08	7.5	0.3	0.782
Age	0.48*	0.3	1.8	0.075
Education				
<i>Prim. not compl.</i>	38.89**	18.025	2.2	0.031
<i>Prim. compl.</i>	67.54***	20.775	3.3	0.001
<i>Sec. not compl.</i>	45.97***	16.526	2.8	0.005
<i>Sec. compl.</i>	41.78**	17.598	2.37	0.018
<i>Tertiary</i>	39.09**	17.698	2.2	0.027
<i>Others</i>	12.9	73.389	0.2	0.861
Monthly Earnings	0.000013	8.95e-06	1.5	0.145
For whom				
<i>Other relatives</i>	16.87	12.709	1.3	0.185
<i>Friends</i>	26.27***	9.9269	2.7	0.008
Receive				
<i>Out of pocket exp</i>	51.50***	18.011	2.9	0.004
<i>Food</i>	61.09*	31.625	1.9	0.054
<i>Transport</i>	4.139	56.609	0.0	0.942
<i>Clothes</i>	20.15	80.406	0.5	0.800
<i>Shelter</i>	-42.7	113.17	-0.4	0.706
<i>Experience/skills</i>	52.29051***	19.28696	2.7	0.007

<i>Others</i>	46.46**	23.1668	2.0	0.045
FIFA	38.58	31.46	1.2	0.2
Mandatory	18.29	60.7481	0.3	0.763
<i>F = 2.31 (Prob. = 0.0008)</i>				
<i>R-squared = 0.0214 Adj. R-squared = 0.0121</i>				

\*\*\*  $p < .001$ , \*\*  $p < .01$  and \*  $p < .05$

**Source: Author's own calculations**

In the research, F-test is used to examine if a group of variables are statistically significant together; contrary to the t-test, which is used to find out if a single variable is statistically significant or not. Overall, the results show that F statistic values are significant in all five models. This is shown by Prob on each result table. R-Square and adjusted R-square also in all five models show that all five models fit. It should be noted here that even though R-squared and adjusted R-squared are small, it does not mean that models used by this thesis do not have a goodness of fit; they show that there are highly significant variables with low effect sizes that are extremely relevant for determining hours volunteered. R-squared shows how much the behaviour of dependent variables (hours volunteered in this case) is explained by the behaviour of independent variables. Therefore, all R-squared show how much percentage independent variables used are represented in the model. In other words, for example, R-squared of 19.8 percent in the model 3, 20.6 percent in the model 4 and 21.4 percent in the model 5 are the percentage of all the possible explanatory variables, which could predict hours volunteered. The next section is about findings and discussion.

#### **4.9 FINDINGS AND DISCUSSION**

The aim of this thesis is to analyse volunteers and volunteerism in South Africa. The results yield some intriguing findings. First, from the four models this thesis used, even though gender variable is not statistically significant the results indicate that women volunteer work more than men do. This is in line with Deller (2004) who found that women volunteer at higher rate of 31.1 percent, compared to men who volunteer at a rate of 23.8 percent. Similarly, this was found by Vaillancourt (1994:818) who assumed that these findings are “due to differences in tastes or in the intra-family allocation of non-market work or leisure.” This thesis suggests that this may be due to the fact that women are more involved in more

care than are involved in work force. In other words, this study argues that helping behaviour is found more among women than men, having controlled for education and income.

Results show that age is positively related to hours spent doing volunteer work. This means that as a person ages, he/she tend to volunteer more. This is probably because people accumulate more obligations including a sense of responsibility towards their community. Perhaps this might be because parents get involved in their children's school activities, politicians or those who are interested in it may join or participate in the activities organised by political parties or unions. Many researchers give mixed results, for example Deller (2004) reveal that people who are between 35 and 54 years old volunteer more than younger or older ones. Similarly, Wilson and Musick (1997) found a curvilinear relationship between age and volunteering.

Education is one of the strongest predictors of volunteerism. The results indicate that the more a person gets educated, the more he/she will participate in voluntary work. This is proven by the positive relationship of all education categories, which are found statistically significant, compared to having no form of education. In other words, education increases participation in volunteer work. Linking with this is expectations, which is shown to be one of the determinants of volunteer work; human capital (experience and skills) would lead someone to be involved more in volunteer work. For example, the person would get a chance to get a job via a network created during volunteer work or gain more experience, which might be needed for future employment. Another possible reason for education to be a consistent predictor for volunteer work is that educated people are more likely to be asked to participate in volunteering (Brady *et al.*, 1999). Furthermore, educated individuals become more aware of problem surrounding their community, which might raise empathy (Wilson, 2000).

When it comes to income (monthly earnings in this case), the evidence indicates that there is a positive relationship between income and hours of volunteering. Looking at hours volunteered among those who do volunteer work, Freeman (1997:S152) found a negative relationship between wage income and volunteering. However, the current study's findings are similar to Menchik and Weisbrod (1987) who find that hours of volunteering work are related positively to income from all sources, even though their data excluded married women. However, it may be argued that a positive influence on egoism motivation is

expected as volunteering is seen as a normal consumption activity in the consumption model (Ziemek, 2003:20). Therefore, the positive sign of monthly earnings found in all four models of the current study explain that volunteering can be seen as a consumption activity of which consumption is increased with increases in income. The statistical insignificance of income in model three, four and five is probably due to the interrelationship with of education level and work status. Moreover, the number of respondents on the question asked might influence the results on monthly earnings (income). Nearly two-thirds of participants did not answer the question. These results differ from Govekar and Govekar (2002) who argued that wage-earning opportunity matters, and the greater they are the less amount of time individuals volunteer.

In the investment model, volunteers do not receive direct utility but they expect to gain something from volunteering such as experience, skills, and making new contacts; all of these may provide them with a better job in the future. Empirical findings of this study show that expectations increase voluntary work labour supply, because volunteers are motivated to invest in human skills, which are believed to increase future income once they get a better job. It is understandable that this type of volunteer might be found among the unemployed and students. However, results from cross tabulation seem to differ with this assumption. Although, this study finds expectations statistically significant, meaning that voluntary work might be regarded as a more instrumental activity than a pure leisure one.

The results indicate that friends have an influence on volunteer labour supply when compared to immediate family member or other relatives. Therefore, this study suggests that volunteers in South Africa are more altruistically motivated to offer their time doing volunteer work. In other words, volunteers are willing to reduce their own consumption to increase the consumption of others. Badelt (1999:445) concurs and states that the “preferences of the altruistic are not therefore not only defined by his consumption level but also by the other people’s consumption levels.”

#### **4.10. SUMMARY AND CONCLUSION**

Volunteering is regarded as a social and economical activity. Therefore, policy makers are concerned with better understanding it, and how to improve it by identifying characteristics of volunteers. This would help on how to stimulate more voluntary activities. Again,

understanding dynamics of volunteers is essential due to social welfare consequences volunteerism brings to the communities and society at large. This chapter illuminates a better understanding of volunteers in South Africa.

This chapter provided demographic profiles of volunteers in South Africa from different angles. It continued with relationship between variables, which characterise volunteers in general and South Africa in particular. As an alternative way to uncover substitution between work time and volunteer time, the relationship between number of hours volunteered and its determinants is examined in five different models. The results indicated that more women volunteer than men, while age is positively related to hours volunteered.

In addition, the more a person is educated, the more chance that he/she would volunteer; this is shown by the statistical significance of all educational levels, when compared to the no schooling group. All levels of education had positive signs showing that education has an influence on volunteering. In other words, there is a positive relationship between education and volunteering; meaning that both variables move in the same direction. Surprisingly, income was found to be non-significant; meaning that it does not have an influence on the time an individual spent volunteering. Furthermore, individuals who do volunteer work are motivated by what they might get in return, such as experience and skills. Overall, this chapter has brought to light that volunteering is a substantial input into any economy and South Africa in particular; and a detailed illumination on characteristics of volunteers is given. Next is Chapter five, which presents a summary, conclusion and recommendations of this study.

## **CHAPTER 5: SUMMARY AND CONCLUSION**

### **5.1 INTRODUCTION**

Volunteering is a widespread economic phenomenon, which is highly relevant for society as it contains a sizeable labour force (Hackl *et al.*, 2009). This is confirmed by Salamon *et al.* (2011:229) who said that more than

“1 billion people throughout the world volunteer their time through public, nonprofit, or for-profit organizations, or directly for friends or neighbors, in a typical year, making ‘Volunteerland’ (if it were a country), the second most populous country in the world, behind only China.”

Volunteering should be and is regarded as an important source of resource allocation in many countries, particularly in South Africa. Volunteerism is becoming a topic for academic research in developing countries as it has been in many developed countries. Many studies, such as Van Dijk and Boin (1993), Wolff *et al.* (1993), Smith (1994), Vaillancourt (1994), Freeman (1997), Carlin (2001), Deller (2004), Proteau and Wolff (2004), Li (2007) and Pho (2008), to mention few, have focused only on developed countries. Although there is much research on volunteerism, there is a paucity of literature and empirical evidence on volunteering in South Africa. This thesis, therefore, addresses this gap on volunteers and volunteerism in South Africa and seeks to delineate the characteristics of these Good Samaritans.

This chapter concludes by summarising and concluding the major arguments and findings, while also providing some recommendations regarding volunteers and volunteerism in South Africa.

### **5.2 SUMMARY**

The economic literature has focused on determinants on an individual level in order to explain the motivation to volunteer. There are two basic explanations for volunteering, as recommended by Menchik and Weisbrod (1987), that volunteering can either be treated as ordinary consumption goods, which could be tested using a consumption model, or as a way of increasing an individual’s income on the paid labor market, over time, that can be

estimated using an investment model. Freeman (1997) disagrees that organisations who are looking for productive volunteers address people with high human capital. This strategy is successful since volunteering is something that people feel morally obligated to do when asked; this is known as the public good model. Three motives are given, according to Hackl *et al.* (2007) that explain the strong relationship between certain economic and socio-demographic characteristics, and volunteer work. Among those socio-demographic characteristics are the employment status, the level of education, marital status and the income. Hence, this thesis has explored this vigorous debate with information about volunteers and volunteerism in South Africa.

The research conducted by Gaskin (2003) in Canada, found that every dollar invested into a volunteer programme brings a return of between \$1.30 and \$13.50, which would be observed. The variance of this figure encourages the notion that effective management plays a vital role in the productivity of volunteer work. This means that through effective volunteer management, an organisation can see a return of utility that far surpasses the investment and leaves a lasting imprint on the quality of living of those affected by the volunteerism. A better understanding of volunteers, therefore, would cover the gap which exists on the topic in question. Chapter one introduced this study of who are Good Samaritans; an analysis of volunteers and volunteerism in South Africa, by giving the background, problem statement, motivation, objectives and the explanation of the method.

Chapter two looked at a theoretical literature and provided a literature review on volunteering. Definitions of central concepts of the study were provided and analysed. The chapter gives criteria/conditions for an activity to be regarded as volunteer work. This chapter proceeded with a discussion of types of volunteer work. It asked, under the problem statement, what theories explain the behaviour of the volunteer, and what is the scope and importance of volunteering in South Africa. Furthermore, it examined these theories from microeconomic and macroeconomic perspectives.

On the microeconomic perspective, the public good, private consumption, investment models and other potential drivers of volunteering are discussed in detail. For the public good model, individuals who volunteer obtain an increase in their happiness from increasing the utility of others who benefit from the consumption of the public good or service. For the private consumption model, it treats volunteer work as ordinary consumer goods. The individual's

utility gained for volunteering an hour's time is presumably equal to the opportunity cost – the value of an hour of leisure time, plus any monetary cost associated with an alternative activity of equal utility. The investment model is about volunteers who expect to gain something in return; such as a better opportunity in the future. This could be achieved through human capital accumulation by volunteering, where the volunteer may receive training and gain new skills. On the macroeconomic perspective, the demand- and supply-side theories are discussed in Section 2.4.2. In addition, the substitution effect on behaviour and charity were two points focused on. First, that charity should enter the utility function with one objective; a higher income increases the amount of charitable activity but does not affect the division of that activity between volunteering and charity. Secondly, there is only one unobserved individual effect in the model, rather than observing separate effects on volunteering and donating money.

Chapter three provided a broad picture of volunteers in South Africa, using the labour force survey (LFS). The main aim was to report on what determines who volunteers, or who does not volunteer. The data from the survey allows the estimation of a limited dependent variable regression model of the probability of volunteering as a function of individual-specific predictors. A logit model was estimated, and all estimated coefficients have expected signs and were in line with theories. Furthermore, the results show that females volunteer more than males; and a young age group and middle age group volunteer less than a senior age group. Regarding the level of education, volunteers with no formal education, primary school, secondary school, and those with a first degree, volunteer less than those with honours, masters and doctorates. Chapter three revealed that the higher the income the less a person volunteers. However, it may be argued that those who earn higher income probably do less volunteering but give monetary and skills to charity for the benefits of others.

Chapter four showed the uniqueness of this study and brought a contribution to the field of knowledge on volunteers and volunteerism in South Africa. It examined the characteristics of volunteers in South Africa using data from Statistics South Africa's Volunteer Activities Survey. A thorough description of the data and estimation of the OLS model of the predictors of hours volunteered was carried out.

After drawing a demographic profile of data used in Chapter four, the descriptions of volunteers were analysed in detail for the first time in South Africa. The results from the

chapter indicated a robust relationships between different hours volunteered by determinants, such as gender, age group, population group, level of education, income category, marital status and employment status, to mention few. A negative association between hours of paid and volunteered work was predicted by Markham and Bonjean (1996); although Freeman (1997) differs with them where a U-shaped relationship between work hours and volunteer hours were found. This shows how volunteers may differ in term of hours volunteered due to their characteristics and volunteering motives. The chapter proceeded by analysing the relation between education and other explanatory variables of volunteering. Under Chapter four, the study went further to investigate the income status of volunteers, and other possible relationships between their different characteristics. Before concluding the chapter, the results from different regression models are presented. Results show that age is related positively to hours spent doing volunteer work. This means that as a person ages, he/she tends to volunteer more. Even though the gender variable was not statistically significant, the results indicated that women do volunteer work more than men. The more a person is educated the more he/she will participate in voluntary work. The evidence indicated that there is a positive relationship between income and hours of volunteering. The next section is on the overall conclusion of the study.

### **5.3 CONCLUSION**

Numerous models and theories have been used to explain volunteerism. Most models of volunteer motivation assume the truth of the functional motivation theory. From previous research as well as this study's findings, there are many different characteristics of volunteers. These differences appear to vary by a range of other factors specific to volunteers. This study provides valuable information about volunteers and volunteerism in South Africa. It examines the status of the individual volunteer through characteristics such as gender, age, marital status, population group, education level, income and work status.

This research is unique as there is no other study in South Africa to date that has analysed volunteers and volunteerism and provides a means of an understanding of the characteristics of volunteers in South Africa. The results provide a number of findings that are important to policymakers, non-profit organisations and all other stakeholders in volunteerism, as it is a productive activity that brings several benefits for the individual volunteers, the non-government sector, government, and society at large. This study could be used to devise more efficient and effective plans of how volunteers could be increased and retained. This can be

done by promoting and clarifying policies regarding volunteer service among government employees and help employees understand policies and programs relating to volunteer service within government agencies, such as opportunities for paid leave or flexible scheduling options, or agency sponsored service events or activities. Partnering with community institutions (including businesses, schools, churches and not-for-profit organisations) to help identify areas within the community and establish volunteer programs to bring about positive change. Community service and volunteerism are an investment in the community and the people who live in it. Therefore, it is important that government provides links to organisations involving volunteers and assist individuals to identify volunteering opportunities.

This thesis has reasoned that volunteers are the lifeblood of the non-profit organisation sector, despite the fact that research on volunteering in South Africa is limited. It has shown that volunteers work for organisations in the fields of health and social services, education, law and order, maintenance of community resources, fund raising, the environment, politics and religion. Volunteering contributes to community economic development and society in general. This study investigated an activity of some importance for South African society and added to the knowledge of a relatively understudied area of economics. As volunteers are better understood it may be possible to mobilise their strength and increase their number. This is the conclusion reached from this empirical study, the first of its kind, that estimates the characteristics of volunteers in South Africa. It further promotes volunteering in government and other stakeholders for the development of social capital and economic well-being of society.

It was the intention that this study establishes and provides up-to-date analysis of volunteers and volunteerism in South Africa. Therefore, it reveals that volunteering is a productive activity and underlines the importance of knowing the characteristics of volunteers in an economic and social context. It would enable government and the non-profit organisation sector to gain much from its findings.

## 5.4 RECOMMENDATIONS

Arising from the findings, several recommendations are made. The following could influence policy and programmes on volunteerism, which also make suggestions for future research:

- ❖ Because volunteering benefits youth volunteers by giving them valuable and motivating experiences, life and livelihood skills, and imparting pro-social values, this study suggests that all stakeholders in the volunteerism sector should consider forming a platform where civic engagement is promoted.
- ❖ Because the senior age group volunteers more than younger groups, volunteerism should be introduced to people at a young age by including different programmes into the education curriculum. A strong partnership between community and educational institutions and the non-profit organisation sector for future development of volunteerism should be formed.
- ❖ More work needs to be done by all stakeholders in formalising volunteerism in South Africa. It would be to the good if volunteering is formed on the understanding that the individual contributes to the wellbeing of society and is central to its practice. This would bring an increase of the number of people who want to volunteer.
- ❖ Research on how much is invested by the public sector on volunteerism and how much it yields from it would be another area of study.
- ❖ The unemployment rate in South Africa is high and it is known that when an individual is not working there is loss of human capital. This thesis, therefore, recommends that unemployed people should be encouraged to participate in volunteer activities to avoid the loss of experience.
- ❖ A better questionnaire should be designed for collecting more accurate information on a regular basis for a database of volunteers. As nobody knows the job better than the person doing it, it would be better if this information is collected from those who are working as volunteers in the registered non-profit organisation. Data on organisational demand for volunteers is not readily available from the published statistics. This study recommends that collection of this data should be made available, which would facilitate other research on this topic.

- ❖ Also, data collected from individuals should ask about their personalities, personal experience and motivations for volunteering. Beliefs and attitudes may be important correlates of volunteering.
- ❖ Finally, the need is for panel data. It will only be possible to examine the predictors of volunteerism and draw conclusions about causality, once a person is able to econometrically control for unobserved heterogeneity.

To conclude, this study supports the notion that effective community development efforts require high levels of volunteerism among business leaders and concerned citizens. Therefore, an understanding and analysis of characteristics of these Good Samaritans/volunteers in South Africa is answered by this study. However, continued research of the determinants of volunteering is warranted using different and better samples.

## BIBLIOGRAPHY

Abrams, P., Abrams, S., Humphreys, R. & Snaith, K. 1989. Neighborhood care and social policy. London: HMSO.

Akintola, O. 2011. What motivates people to volunteer? The case of volunteer AIDS Caregivers in faith-based organisations in KwaZulu-Natal, South Africa. *Health Policy and Planning*, 26:53-62.

Amato, P. 1990. Personality and social network involvement as predictors of helping behaviour in everyday life. *Social Psychology Quarterly*, 53:31-43.

Amato, P. 1993. Urban-rural differences in helping friends and family members. *Social Psychology Quarterly*, 56:249-262.

Andreoni, J. 1989. Giving with impure altruism: application to charity and ricardian equivalence. *Journal of Political Economy*, 97(6):1447-1458.

Andreoni, J. 1990. Impure altruism and donations to public goods: a theory of warm-glow giving. *The Economic Journal*, 100(6):464-477.

Andreoni, J., Harbaugh, W.T. & Vesterlund, L. 2007. Altruism in experiments: prepared for the New Palgrave Dictionary of Economics, 2nd Ed. <http://econ.ucsd.edu/~jandreon/Publications/PalgraveAltruism.pdf>. Date of access 29 July 2011.

Anheier, H.K. & Salamon, L.M. 1999. Volunteering in cross-national perspective: initial comparisons. *Law and Contemporary Problems*, 62(4):43-65.

Argyle, M. 1991. Cooperation: the basic of sociality. London: Routledge.

Ascoli, U. & Cnaan, R.A. 1997. Volunteering for human service provisions: lessons from Italy and the USA. *Social Indicators Research*, 40:299-327.

- Ashenfelter, O. & Heckman, J. 1974. The estimation of income and substitution effects in a model of family labour supply. *Econometrica*, 42(1):73-85.
- Badelt, C. 1999. Handbuch der nonprofit organisation: struktur und management. 2nd ed. Stuttgart: Schaffer-Poeschel.
- Becker, G.S. 1976. Altruism, egoism, and genetic fitness: economics and sociobiology. *Journal of Economic Literature*, 14(3):817-826.
- Ben-Porath, Y. 1967. The production of human capital and the life cycle of earning. *Journal of Political Economy*, 75:352-65.
- Beth, S. & Hill, M. 1993. Intergenerational transfer: economic, demographic and social perspectives. *Annual Review of Gerontology and Geriatrics*, 13:187-218.
- Blocker, S.V. 2011. Volunteerism in the university culture. Georgia State University. (Thesis – Masters, Anthropology, Paper 49).
- Bojar, K. 1989. Broadening community Service to Include Low-Income *students' Change (September/October): 22–23.*
- Blum, D. 2010. Volunteerism Increases at highest rate in six years. The Chronicle of Philanthropy, November 9. <http://philanthropy.com/article/Volunteerism-Increases-at/65949/> Date of access: 24 September 2012.
- Boraas, S. 2003. Volunteerism in the United States. *Monthly Labour Review*, Aug.
- Bourdieu, P. 1986. The forms of capital. In Handbook of theory and research for the sociology of education. New York: Greenwood. pp. 241-258.
- Brady, H., Verba, S. & Schlozman, K. L. 1995. Beyond SES: a resource model of political participation. *American Political Science Review*, 89:269-295.

Brady, H., Schlozman, K.L. & Verba, S. 1999. Prospecting for participants: rational expectations and the recruitment of political activists. *American Political Science Review* 93:153-169.

Brown, E. 1999. The scope of volunteer activity and public service. *Law and Contemporary Problems*, 62(4):17-42.

Brudney, J.L. 1990. Fostering volunteer programs in the public sector. San Francisco: Jossey-Bass.

Brudney, J.L. 1993. Volunteer involvement in the delivery of public services: advantages and disadvantages. *Public Productivity & Management Review*, 16(3):283-297.

Brudney, J.L. 1999. The effective use of volunteers: best practices for the public sector. *Law and Contemporary Problems*, 62:219-255.

Brudney, J.L. 2005. Designing and managing volunteer programs. In Herman, R.D., ed. *The Jossey-Bass handbook of nonprofit leadership and management*. 2nd ed. San Francisco: Jossey-Bass. pp. 310-344. .

Brudney, J.L. & Duncombe, W.D. 1992. An evaluation of paid, volunteers, and mixed staffing options of public services. *Public Administration Review*, 52(5):474-481.

Bureau of Labour Statistics. 2008. Volunteering in the United States. Washington DC. <http://www.bls.gov/news.release/volun.nr0.htm> Date of access: 26 Jun. 2011.

Burns, D.J., Reid, J.S., Toncar, M., Faweett, J. & Anderson, C. 2006. Motivations to volunteer: the role of altruism. *International Review on Public and Non Profit Marketing*, 3(2):79-91.

Carlin, P.S. 2001. Evidence on the volunteer labour supply of married women. *Southern Economic Journal*, 67(4): 801-824.

- Cemalcilar, Z. 2009. Understanding individual characteristics of adolescents who volunteer. *Personality and Individual Differences*, 46:432-436.
- Chambre, S.M. 1987. Good deeds in old age: volunteering by the new leisure class. Lexington: Lexington Books.
- Chou, K.L. 1996. The rushton, chrisjohn and fekken self-report altruism scale. *Personality and Individual Differences*, 21:297-298.
- Clary, E.G., Snyder, M., Ridge, R.D., Copeland, J., Stukas, A.A. & Haugen, J. 1998. Understanding and assessing the motivations of volunteers: a functional approach. *Journal of Personality and Social Psychology*, 74:1516–1530.
- Cnaan, R.A. & Amroffell, L.M. 1994. Mapping volunteer activity. *Nonprofit and Voluntary Sector Quarterly*, 23:335-351.
- Cnaan, R.A. & Goldberg-Glen, R.S. 1991. Measuring motivation to volunteer in human services. *Journal of Applied Behavioural Sciences*, 27(3):269–284.
- Cnaan, R.A., Handy, F. & Wadsworth, M. 1996. Defining who is a volunteer: conceptual and empirical considerations. *Nonprofit and Voluntary Sector Quarterly*, 25:364-383.
- Collins, R. & Hickman, N. 1991. Altruism and culture as social products. *Voluntas*, 2(2):1-15.
- Cooley, E.A., Singer, G.H & Irvin, L.K. 1989. Volunteers as part of family support services for families of developmentally disabled members. *Education and Training in Mental Retardation*, 24:207–218.
- Cutler, S. & Danigelis, N. 1993. Organizational contexts of activity. In Kelly, J., ed. *Activity and Aging*. California: Sage. pp. 146–163.
- Daniel, A.K. 1988. Invisible careers: women civic leaders from the volunteer world. Chicago: Chicago University Press.

Day, K.M. & Devlin R.A. 1998. The payoff to work without pay: volunteer work as an investment in human capital. *Canadian Journal of Economics*, 31:1179-1191.

Deller, S.C. 2004. Volunteerism and community development. *Community Economics*, 334.

Dickhudt, K. 2001. Volunteer and Service Enquiry Southern Africa. Youth participation in service and volunteering: exploring economic benefit in the Southern Africa Context- a youth perspective. Paper presented at The Southern African Conference on Volunteer Action for Development, 17-19 December.

Dingle, A. 2001. Measuring volunteering: a practical toolkit. New York: Independent Sector.

Duncombe, S. 1985. Volunteers in city government: advantages, disadvantages, and uses. *National Civic Review*, 79:356–364.

Einolf, C.J. 2009. Will the boomers volunteer during retirement? Comparing the baby, boom, silent, and long civic cohorts. *Nonprofit and Voluntary Sector Quarterly*, 38(2):181-199.

Einolf, C.J. 2011. Gender differences in the correlates of volunteering and charitable giving. *Nonprofit and Voluntary Sector Quarterly*, 40(6) 1092–1112.

Ellis, S.J. & Noyes, K.H. 1990. *By the people*. San Francisco: Jossey-Bass.

Emmanuelle, R. 1996. Is there a downward sloping demand curve for volunteer labour? *Annual of Public and Cooperative Economics*, 67(2):193-208.

Fischer, K, Rapkin, B. & Rappaport, J. 1991. Gender and work history in the placement and perception of elder community volunteers. *Psychology Women Quarterly*, 15:261-279.

Freeman, R.B. 1997. Working for nothing: the supply of volunteer labor. *Journal of Labor Economics*, 15(1):S140–S166.

Gallegher, S. 1994. Doing their shares: comparing patterns of help given by older and young adults. *Journal of Marriage and the Family*, 56:567-578.

Gallegher, S. 1994b. Older people giving care: helping people and community. Westport, CT: Auburn House.

Gaskin, K. & Smith, J. 1997. A new civic Europe? A study of the extent and role of volunteering. London: National Centre for Volunteers.

Gaskin, K. 2003. Valuing volunteers in Europe: a comparative study of the volunteer investment and value audit. London: Institute for Volunteering Research.

Gaston, K. & Alexander, J.A. 2001. Effective organisation and management of public sector volunteer workers. *The International Journal of Public Sector Management*, 14(1):59-74.

Govekar, P.L. & Govekar, M.A. 2002. Using economic theory and research to better understand volunteer behavior. *Non-Profit Management and Leadership*, 13(1):33-48.

Hackl, F., Halla, M. & Pruckner, G.J. 2007. Volunteering and income – the fallacy of the Good Samaritan? *Kyklos*, 60(1):77-104.

Hackl, F., Halla, M. & Pruckner, G.J. 2009. Volunteering and the state. *IZA Discussion Paper, No 4016*.

Hall, M., Lasby, D., Gumulka, G. & Tryon, C. 2006. Caring Canadians, Involved Canadians: Highlights from the 2004 Canada Survey of Giving, Volunteering and Participating. Ottawa, Statistics Canada.

Halla, M., Knighton, T., Reed, P., Bussiere, P., Macrae, D. & Bowen, P. 1998. Caring Canadians, involved Canadians. Ottawa: Statistics Canada.

Haltiwanger, J. & Waldman, M. 1993. Role of altruism in economic interaction. *JEBAO*, 21:1-15.

Handy, F. & Srinivasan, N. 2005. The demand for volunteer labour: a study of hospital volunteers. *NonProfit and Voluntary Sector Quarterly*, 34(4):491-509.

Hayghe, H.V. 1991. Volunteers in the U.S.: Who donates the time? *Monthly Labour Review*, Feb.

Hodgkinson, V. & Weitzman, M. 1996. Giving and volunteering in the United States. Washington, D.C: Independent Sector.

ILO. 2008. Manual on the measurement of volunteer work. Prepared for the 18th International Conference of Labour Statisticians to accompany Chapter 5 of Report I, General Report to the ICLS.

ILO. 2011. Manual on the Measurement of volunteer Work. International Labour Office, Geneva, Switzerland. [http://ccss.jhu.edu/wp-content/uploads/downloads/2011/09/ILO\\_Manual\\_FINAL\\_8.29.2011.pdf](http://ccss.jhu.edu/wp-content/uploads/downloads/2011/09/ILO_Manual_FINAL_8.29.2011.pdf) Date of access: 20 Oct. 2013.

Institute for Volunteering Research. 2008. Volunteers Stats. <http://www.ivr.org.uk/ivr-volunteering-stats>. Date accessed 22 March 2011.

Ironmonger, D. 2008. The economic value of volunteering in Queensland. A report commissioned by the Department of Communities. Queensland: Department of Communities.

James, E. 1989. The nonprofit sector in international perspective: studies in comparative culture and policy. New York: Oxford University Press.

Janoski, T & Wilson, J. 1995. Pathways to volunteerism. *Social Forces*, 74:271-292.

Joanna, C.C.H. 2009. Determinants of sustained volunteerism in Hong Kong. The University of Hong Kong. (Unpublished Thesis – PhD)

Jones, F. 1995. Human capital and the use of time. Research Paper Series No.79, Analytical Studies Branch, Statistics Canada.

Kakoi, R. & Ziemek, S. 2001. On the economics of volunteer. ZEF Bonn: Center for Development Research.

Katz, E. & Rosenberg, J. 2005. An economic interpretation of institutional volunteering. *European Journal of Political Economy*, 21(2):429-443.

Kendall, J. & Knapp, M. 1991. Defining nonprofit sector: United Kingdom. Working Papers of the Johns Hopkins Comparative Nonprofit Sector Project.

Krugell, W.F. 2010. Wie is die goeie samaritane? Eienskappe van vrywilligers in Suid Afrika. *Tydskrif vir Geesteswetenskappe*, 50(2):187-196.

Ledyard, J.O. 1995. Public goods: a survey of experimental research. Princeton: Princeton University Press.

Li, Y. 2007. Recovering from spousal bereavement in later life: Does volunteer participation play a role? *Journal of Gerontology: Social Sciences*, 62B:S257–S266.

Mansfield, E. 1994. Microeconomics: theory and application. 8th ed. New York: Norton & Company.

Markham, W.T., & Bonjean, C.M. 1996. Employment status and the attitudes and behaviour of higher status women volunteers, 1975 and 1992: a case study. *Sex Roles*, 34:695-716.

Media Club South Africa. 2013. South Africa's population. <http://www.mediaclubsouthafrica.com> Date of access: 13 Sept. 2013.

Menchik, P.L. & Weisbrod, B.A. 1987. Volunteer labour supply. *Journal of Public Economics*, 32:159-183.

Midlarsky, E. & Kahana, E. 1994. Altruism in Later Life. Thousand Oaks, CA: Sage.

- Mizenko, W.M. & Smith, L.A. 1991. *The significance of volunteering*. Philadelphia: Energize.
- Mohr, P., Fourie, L. & Associates. 2008. *Economics for South African students*. 4th ed. Pretoria: Van Schaik.
- Monroe, K.R. 2002. Explicating altruism. *In* Post, S.G, Underwood, L.G, Schloss, J.P. & Hurlbut, W.B., *eds*. *Altruism and altruistic love: science, philosophy, and religion in dialogue*. New York: Oxford University Press. pp. 106-122.
- Monroe, K.R. 2001. Altruism and self-interest. *In International Encyclopedia of the Social and Behavioral Sciences*. Oxford: Elsevier. pp. 415–418.
- Mueller, M.W. 1975. Economic determinants of volunteer work by women. *Chicago Journals*, 1(2):325-338.
- Nicholson, W. 2005. *Microeconomic theory: basic principles and extensions*. 9th ed. Ohio: Thomson, South-Western.
- Niyimbanira, F. & Krugell, W. 2013. More about the good Samaritans: characteristics of volunteers in South Africa. Paper presented at the Biennial Conference of the Economic Society of Southern Africa, Bloemfontein, 25-27 September.
- Nolan, S.A. & Heinzen, T.E. 2011. *Essentials of statistics for the behavioral sciences*. New York: Worth Publishers.
- Osborne, S.P. 1998. *Voluntary organizations and innovation in public services*. London: Routledge.
- Pearce, J. 1993. *Volunteers: the organizational behaviour of unpaid workers*. New York: Routledge.

Penner, L.A. 2004. Volunteerism and social problems: making things better or worse. *Journal of Social Issues*, 60:645-666.

Perloff, J.M. 2007. *Microeconomics*. 4th ed. Boston: Pearson Education.

Philanthropy. 2010. Volunteerism Increases at Highest Rate in 6 Years. Online: <http://philanthropy.com/article/Volunteerism-Increases-at/65949/> Retrieved from October 6, 2013.

Pho, Y.H. 2008. The value of volunteer labour and the factors influencing participation: evidence for the United States from 2002 through 2005. *Review of Income and Wealth*, 54(2):220-236.

Proteau, L. & Wolff, F.C. 2004. Volunteer work and labor supply. Unpublished paper, Faculté des Sciences Economiques, Université de Nantes, France.

Redfering, D.L. & Biasco, F. 1982. Volunteering for college credit. *College Student Journal*, 16:121-123.

Roberts, R.D. 1984. A positive model of private charity and public transfers. *Journal of Political Economy*, 92:136-148.

Robinson, M. & White, G. 1997. The role of civic organizations in the provision of social services. Towards synergy. Helsinki: UNU/WIDER.

Rose-Ackerman, S. 1996. Altruism, nonprofits, and economic theory. *Journal of Economic Literature*, 34(2):701-728.

Roy, K. & Ziemek, S. 2000. On the Economics of volunteering. ZEF Discussion Papers on Development Policy no 31.

Roy, K. & Ziemek, S. 2001. On the Economics of volunteering. <http://www.iyv2001.org/infobase/research/DEU0100.pdf> Date of access: 2 Aug 2011.

Salamon, L.M. 1987. Partners in Public Service: The Scope and Theory of Government-Nonprofit Relations. In: W.W. Powell: *The Nonprofit Sector: A Research Handbook*. Yale University Press, New Haven: 99-177.

Salamon, L.C., Sokolowski, S.W. & Haddock, M.A. 2011. Measuring the economic value of volunteer work globally: concepts, estimates, and a roadmap to the future. *Annals of Public and Cooperative Economics*, 82(3):217-252.

Salamon, L.M.; Sokolowski, S.W. & Associates. 2004. Global civil society: dimensions of the nonprofit sector. Volume II. Bloomfield, CT: Kumarian Press.

Salamon, L.M., 2010. Putting civil Society on the economic map of the world. *Annals of Public and Cooperative Economics*, 81(2):167–210.

Sardinha, B.M.B. 2003. To volunteer- application of the utility function. Paper presented at 15<sup>th</sup> Annual Meeting on Socio-Economics, Knowledge, Education and Future Societies. <http://www.docstoc.com/docs/40958500/To-be-a-volunteer---application-of-the-utility-function> Date of access: 17 Jul. 2011.

Schiff, J. 1985. Charitable giving and government policy: an economic analysis. *National Tax Journal*, 38:535-546.

Schütz, A. 1972. The phenomenology of the social world. London: Heinemann Educational Books. Translation from the original (1932) *Der sinnhafte Aufbau der sozialen Welt*, Wien: Springer Verlag.

Sen, A.K. 1977. Rational fools: a critique of the behavioral foundations of economic theory. *Philosophy and Public Affairs* 6(4):317-344.

Segal, L.M. & Weisbrod. 2002. Volunteer Labour Sorting across Industries. *Journal of Policy Analysis and Management*, 21(3):427-447.

Smith, A. 2005. An enquiry into the nature and causes of wealth of nation: an electronic classics series publication. Pennsylvania: The Pennsylvania State University.

Smith, D.H. 1982. Altruism, volunteers, and volunteerism. In Harmann, J.D., ed. Volunteerism in the Eighties. Lanham, MD: University Press of America. pp. 23–44.

Smith, D.H. 1994. Determinants of voluntary association participation and volunteering: a literature review. *Nonprofit and Voluntary Sector Quarterly*, 23:243-263.

Smith, J.D. 1999. Volunteering and social development: a background paper for discussion at an expert group meeting. New York, November 29-30, 1999. United Nations Volunteers.

Soldo, B. & Hill. B. 1993. Intergenerational transfers: economic, demographic and social perspectives. *Annual Review of Gerontology and Geriatrics*, 13:187–218.

South Africa Info. 2012. South Africa: fast facts. <http://www.southafrica.info/about/facts.htm#UoN4H3A6JBk> Date of access: 15 Jul. 2013.

Stark, O. 1995. Altruism and beyond: an economic analysis of transfers and exchanges within families and groups. Cambridge: Cambridge University Press.

Statistics South Africa. 2007. Labour force survey 16 September 2007. <http://interactive.statssa.gov.za:8282/webview> Date of access: 26 Aug. 2012

Statistics South Africa. 2011. December quarterly bulletins. <http://www.statssa.gov.za> Date of access: 12 Sept. 2013.

Statistics South Africa. 2011. Volunteer activities survey. Pretoria. <http://www.statssa.gov.za> Date of access: 17 Sept. 2012.

Statistics South Africa. 2011. Census. <http://www.statssa.gov.za/P03014/P030142011.pdf> Date of access: 13 Sept. 2013.

Strauss, S. 2013. The connection between education, income inequality, and unemployment. <http://www.huffingtonpost.com> Date of access: 11 Oct. 2013.

Surujilal, J. 2010. Volunteer motivation in special events for people with disabilities. *African Journal for Physical Health Education, Recreation and Dance (AJPHERD)*, 16(3):447-461.

Taborda, J. 2013. South Africa unemployment rate up to 25.2% in Q1 2013. <http://www.tradingeconomics.com/articles/05062013103725.htm> Date of access: 22 Sept. 2013.

The Telegraph. 2013. Unemployed to do unpaid work or lose benefits. <http://www.telegraph.co.uk/news/politics/conservative/10338385/Unemployed-to-do-unpaid-work-or-lose-benefits.html> Date of access: 9 Oct.

Til, J.V. 1988. Mapping the third sector: voluntarism in a changing social economy. New York: The Foundation Center.

Thomson III A.M. & Bono, B.A. 1993. Work without wages: the motivation for volunteer firefighters. *The American Journal of Economics and Sociology*, 52(3):323-343.

UN General Assembly. 2001. Resolution on recommendations on support for volunteering, A/RES/56/38. Fifty-sixth session, New York, 2001.

UN General Assembly. 2005a. Report of the Secretary General: Follow-up to the implementation of the International Year of the Volunteers, document A/60/128. New York, 18 July 2005.

UN General Assembly. 2005b. Resolution on the Follow-up to the implementation of the International Year of Volunteers, A/RES/60/134. Sixtieth session, New York, 2005.

Vaillancourt, F. 1994. To volunteer or not: Canada, 1987. *Canadian Journal of Economics*, XXVI (4):813-826.

Vaillancourt, F., & Payette, M. 1986. The supply of volunteer work: the case of Canada. *Journal of Voluntary Action Research*, 15(4):45-56.

Van Dijk, J., & Boin, R. 1993. Volunteer labor supply in the Netherlands. *De Economist*, 141:402- 418.

Weisbrod, B. 1975. Toward a theory of the voluntary non-profit sector in a three sector economy. In Phelps, E.S., ed. *Altruism morality and economic theory*. Russel Sage Foundation.

Weisbrod, B. 1977. *The voluntary nonprofit system*. Lexington: D.C. Health.

Wilson, J. & Musick, M. 1997. Who cares? Towards an integrated theory of volunteer work. *American Sociological Review*, 62(5): 694-713.

Wilson, J. 2000. Volunteering. *Annual Review of Sociology*, 26:215-240.

Winniford J.C., Carpenter, D.S. & Grider, C. 1995. An analysis of the traits and motivations of college students involved in service organizations. *Journal of College Student Development*, 36:27-38.

Winniford J.C., Carpenter, D.S. & Grider, C. 1997. Motivations of college student volunteers: a review. *NASPA Journal*, 34(2):134-146.

Wolff, N., Weisbrod, B. & Bird, E. J. 1993. The supply of volunteer labor: the case of hospitals. *Nonprofit Management and Leadership*, 4(1):23-45.

Ziemek, S. 2003. Economic theories on motivations for volunteering- a cross-country analysis. *A paper presented at the 5<sup>th</sup> International Conference of the International Society for Third-Sector Research, July*.

Ziemek, S. 2006. Economic analysis of volunteers' motivations- a cross-country study. *Journal of Socio-Economics*, 35(3):532-555.