

**The determinants of self-employment
relative to being a wage earner in
Ladysmith, KZN**

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Declaration

I, the undersigned, hereby acknowledge that the contents of this thesis is my own work, except where otherwise specified, and have not been submitted, in part or full, to any other University for the purpose of obtaining a degree.

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Abstract

Following the unprecedented increase in the self-employment rates in South Africa, the study probes the determinants of self-employment relative to being a wage earner within the context of black owned businesses in Ladysmith, KZN. A questionnaire was administered to 450 respondents comprising 299 gainfully employed and 151 self-employed blacks, using a combination of convenience and snowball sampling for the self-employed and random methods to identify wage/salary earners. The study employed a logistic regression model to estimate the probability of being self-employed relative to being a wage/salary earner focusing on household income per capita, education, age, marital status, family business background, risk propensity, gender and access to finance as independent variables, gathered from the questionnaire, to shed new light on self-employment determinants. The study used the Hosmer-Lemeshow test to assess goodness of fit and the Wald test to assess the contribution of individual predictors in the model.

Supported by descriptive statistics and chi squared test, the logistic results showed a positive and meaningful relationship between self-employment and age suggesting that as one becomes older each year increases the probability of being self-employed by 3.27%. With regards to gender, the results showed a positive relationship suggesting that being female increases the possibility of being self-employed by 57.35%. On the other hand, marital status results suggested that being single decreases the chances of being self-employed by 55.56% indicating that single people are more likely to be gainfully employed. Furthermore results revealed that an additional year of education increases the possibility of being of self-employed by 13.07%. When a person has a family business background, the possibility of that person being self-employed is higher by 146%, and lastly, increased funding opportunities cause an increase in self-employment by 397%.

Dedication

**To my sister Nozipho and my beloved son Zanecebo
I pray this dissertation constantly reminds you that anything
is possible only if you believe. May the footsteps that I leave
lead you to believe**

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List of Acronyms Used

BEE – Black Economic Empowerment

CBD –Central Business District

CIPC – Companies and Intellectual Property Commission

GEM – Global Enterprise Monitor

HIP – Household Income Per Capita

IDP – Integrated Development Plan

IFC – International Finance Corporation

ILO –International Labour Organisation

KZN –KwaZulu Natal

NYDA – National Youth Development Agency

OECD – Organisation for Economic Co-operation and Development

SA- South Africa

SARS – South African Revenue Services

SEDA – Small Enterprise Development Agency

SEFA – Small Enterprise Financial Agency

SME – Small to Medium Enterprise

SPSS – statistical package for social science

STATS SA- Statistics South Africa

TEA – total early-stage entrepreneurial activity

TVET – Technical Vocational Education and Training

UK – United Kingdom

Chapter one

1.1 Introduction

Faced with the endemic socio-economic diseases of poverty, inequality and unemployment, self-employment seems to be the only way out for unemployed South Africans. Severe global economic crises brought on by the 2008 credit crunch, the slowdown in the Chinese economic growth rate as well as internal problems that South Africa faces has led to a reduction in its growth potential which makes it difficult for one to secure a salaried job in the formal sector. Globally, the number of individuals who became self-employed recently (post 2009) has increased tremendously hence the self-employment phenomenon has received much literature attention especially in the developed countries like the United States and developing countries like China, and Asian countries. However not much of literature has been dedicated to exploring the self-employment phenomenon in African countries specifically in South Africa (Gordon, 2010). This study seeks to investigate the determinants of black self-employment in Ladysmith (KZN) and analyse the individual choices between wages and self-employment.

Ladysmith is a small town surrounded by Drakensberg Mountains in the UThukela district between Johannesburg (365km) and Durban (230km) of KwaZulu Natal province. The town is known of food processing and manufacturing industries but is currently facing increasing unemployment among the youth.

Empirical evidence teaches us that gainful employment in the formal sector alone cannot eradicate unemployment. According to the Global Entrepreneurial Monitor (GEM report, 2012), Sub-Saharan gross domestic product rose to 4.9 percent from 2000 to 2008 due to new opportunities, innovation, and increased employment created by entrepreneurship.

Furthermore, at a regional level, Africa has the smallest proportion of entrepreneurs that do not hire employees (on average 33%) (GEM, 2016). The Sub-Saharan has therefore been rated among the highest in the world in terms of entrepreneurship.

Total early-stage entrepreneurial activity (TEA) which measures the percentage of adults (18-64) who have been running newly established businesses that are under 3 years old, reveals that among the efficiency driven economies (South Africa, Morocco, Brazil, Indonesia, Mexico and Malaysia) TEA rates are typically highest in Africa, Latin America and the Caribbean.

The reports by Companies and Intellectual Property Commission, South African Revenue Services and Statistics South Africa depict an increasing trend in self-employment. The report by the CIPC reveals that in the 2008/2009 period 27 358 companies, 261 065 close corporations, and 6 504 co-operatives were registered. Moreover a total of 289 296 entities were registered in 2009/2010, 215 561 in 2010/2011, 243 661 in 2012/2013, 262 111 in 2013/2014, 257 069 in 2014/2015, and total of 331 354 entities were registered in 2015/2016. What factors contributed to these individuals choosing to be self-employed?

The Organisation for Economic Co-operation and Development OECD, (2000) observed that the effort by national government in introducing simplified business registration processes, training, access to financial capital, and trying to motivate people to start their companies contributed to the increase in self-employment rates. This is because new enterprises create new jobs, reduce unemployment, stimulate competition, efficiency and innovation, and contribute to economic growth [Parker, (2005), Chen *et al* (2004), Allen *et al* (2008), Maas & Herrington (2006) and Bosma&Levie (2010)].

Self-employment and entrepreneurship is regarded as the driving-forces behind economic growth and, to attain long term growth, new small firms are needed in order to introduce new products and production techniques (NUTEK 2005). In spite of these efforts, Malagas, (2002) and Babo, (2005) find that black involvement in entrepreneurship is very low. The black and coloured populations in South Africa are the least active, whereas the whites and Indians are the most active (GEM, 2000).

This study attempts to assess whether the situation of fifteen years ago still persists among blacks residing in the small town of Ladysmith.

Studies by non-economist researchers show that psychological factors such as need for achievement, internal locus of control, above-average risk taking propensity and tolerance of ambiguity are assumed to be the main determinants of self-employment (Joonas and Wadensjö, 2011). Conversely empirical studies suggest that age, education, marital status, gender, place of residence, ethnic background and unemployment experience contribute largely to self-employment, with one major contributing factor being the belief that self-employed individuals are “superstars” who obtain outstanding profits and social influence (Mandelman and Montes-Rojas, 2009).

Contrary to this perspective, Hamilton, (2000) found that self-employment realises lower median earnings growth than paid employment positions. Adding to this view, De Mel *et al* (2010) and Tokman, (2007) suggest that the majority of self-employed people earn very little because they were retrenched in the formal sector or because they prefer employment flexibility.

Mandelman and Montes-Rojas, (2009) and McKenzie, (2004) explain this shift to self-employment as a result of economic recession and declining economic growth which leaves the government with burden of creating employment. They posit that during severe economic recession, workers are out of jobs for long periods which pushes them to seek refuge in the self-employed sector till they can find salaried jobs. The Tequila effect in Brazil in 1994 confirms these propositions, as during the succeeding years of economic expansion (1996-1997) the rate of salaried workers becoming self-employed declined (Mandelman and Montes-Rojas, 2009). This study will explore whether unfavourable economic conditions such as recessions contribute to the shift to self-employment within the context of black self-employed people in Ladysmith.

1.2 Problem statement

Small and medium business development has been an issue in development economics for a long time now. Debates have been staged and studies conducted [Kamoche, (2002), Smith (2014), Burke and Fraser (2011), Woodruff, (2010)] and all suggest that due to the failure of the large formal sector to facilitate economic growth and employment creation, small and medium enterprises are the key to attaining desired economic growth.

Understanding the implications of policies on self-employment, such as the one adopted in 1996 which sought to promote black owned businesses through financing them because they had the potential to eradicate unemployment is of paramount importance. This study will explore the role of access to finance as the determinant of self-employment.

Given the high national unemployment rate of 25% (43.4% in Ladysmith) of which 45% is youth, job creation becomes the central focus of any economic policy. Furthermore, since the formal sector cannot absorb every one, self-employment becomes the next best option.

The self-employment principle supported by a vast amount of empirical evidence (discussed in chapter 3) asserts that due to economic recession and declining economic growth, self-employment rates increase tremendously. However, there are serious gaps in the literature with regard the determinants of self-employment within the South African setting in general and in KwaZulu Natal (including Ladysmith) in particular.

This study seeks to investigate the determinants of self-employment and analyse the individual choices made between wages and self-employment.

1.3 Relevance and justification of the study

Living in a country where unemployment rate is high at 25% (Stats SA 2013), with income inequalities, crime and poverty, employment creation becomes the centre of all domestic economic policies. With politicians, specifically the ruling ANC party, promising

to create about five million jobs in their new term of office, deeper insight into the role of self-employment is of great importance in guiding policy developments.

The GEM report (2016) and TEA rates shows that entrepreneurial activities in South Africa are increasing. With Stats SA and ILO showing an increasing shift from the formal sector, and CIPC (2015/2016) also revealing an increase in new companies registered, understanding the determinants of self-employment becomes vital.

This is because self-employment is becoming prominent and is deemed an ideal vehicle for eradicating unemployment, inequality, and poverty in collaboration with the National Development Plan (2012) and Integrated Development Plan (2013).

With more than a million jobs lost between 2009 to 2015, understanding the role of self-employment in promoting growth that will absorb the labour force is of paramount importance in guiding policies on job creation.

1.4 Aims and Objectives of the study

Given the unprecedented increase in self-employment in South Africa, the aim of this study is to probe the determinants of black self-employment in Ladysmith. Given the literature suggesting that self-employment is the key to achieving high economic growth, this study will investigate the role that self-employment can play in attaining higher economic growth and eradicating unemployment and poverty.

Stemming from the findings of this study, I will propose suitable strategies that can promote self-employment as a viable approach to alleviating poverty, inequality and unemployment.

I will, amongst others:

- Construct a detailed self-employment determinants (education, age, gender, marital status, household income per capita, family business background, risk propensity and access to finance) analysis in the context of Ladysmith black owned businesses.

- Investigate if self-employment performance is affected by the family background and education
- Analyse individual choice between wages and self-employment.

1.5 Intended contribution to the body of knowledge

This research is the first which probes the determinants of self-employment in South Africa focusing on a small town like Ladysmith. Most of the South African studies [Cichello *et al* (2006), Heintz & Posel (2008), Caselet *al* (2004), Deveyet *al* (2006)] done on the determinants of self-employment have focused more specifically on the entry of women into the self-employed sector, while others focus on the psychological determinants of self-employment such as cultural views on self-employment, whilst yet others look at the earnings as determinants.

1.6 Research questions

The research probes the determinants of self-employment in black-owned businesses in Ladysmith in KwaZulu-Natal, SA. For us to get a better understanding of the determinants of self-employment, the study seeks to answer the following research questions:

- 1) Does family business background influence the choice of being self-employed?
- 2) Do educational levels influence the choice of being self-employed?
- 3) Do business funding opportunities lead to self-employment?
- 4) Do age levels influence the choice of being self-employed?
- 5) Does gender influence the choice of being self-employed?
- 6) Does household income per capita influence the choice of being self-employed?
- 7) Does marital status influence the choice of being self-employed?

1.7 Methodology

In order to convincingly identify the determinants of self-employment, the study employed descriptive statistics, the cross tabulation Chi-squared approach, as well as a logistic model to estimate the probability of being self-employed relative to being a wage/salary earner in Ladysmith. Questionnaires, one written in English and the other in IsiZulu, were designed to collect data, since Ladysmith is dominated by isiZulu-speaking people. A combination of convenience and snowball sampling methods was used to collect the data from the self-employed, especially since they were fewer in numbers relative to the gainfully employed. Moreover, the same questionnaire was administered to the wage/salary earners using a random sampling approach because they were a much larger group. Before data was collected, an ethical clearance certificate was obtained from the University of Zululand Ethics Committee as per the research policy guidelines of the institution.

1.8 Ethical and safety issues

As per the research policy guideline of the University of Zululand, any researcher that wants to conduct research must apply for an ethical clearance certificate, which is granted after consideration of the ethical and safety issues of the proposed study. For this study, the researcher was granted the certificate (refer to appendix A) and the field work commenced.

The respondents were not required to fill in their personal details; only their signature was required. The respondents were assured of confidentiality and anonymity and also they were made aware that the filling in of the questionnaire was voluntary. Additionally, in order to avoid the possibility of plagiarism, this dissertation was subjected to the turn-it-in software.

Chapter 2 Theoretical review

2.1 Introduction

Over the past few years, the self-employment phenomenon has been widely investigated and documented because of its proclaimed potential to create employment, uplift standard of living and stimulate economic growth. The purpose of this literature review is to establish the theoretical base from which we can draw a comprehensive understanding of the determinants of self-employment relative to being a wage earner. The determinants emanates from different disciplines, which include but are not limited to, economics, sociology, psychology and management.

This chapter will outline all the relevant theories that will help in making sense of the empirical literature review of the next chapter, the research design, the selection of variables to be modelled and the discussion of the results. The rest of the chapter will discuss the following pertinent theories on: expected utility, role models, non-pecuniary benefits, the procedural utility, occupational choice, socio-cultural theory, work adjustment, traditional low-productivity, general equilibrium self-employment, job satisfaction, and lastly, the insider-outsider theory of employment.

2.2 Expected utility theory

The expected utility theory deals with the analysis of choices among risky projects with particular outcomes. According to the opinion of Lindsay (2013), expected utility theory has remained the standard theory of choice used in economics. This theory can be interpreted in a positive or normative fashion. The expected utility theory was developed by Nicholas Bernouli in 1713 and further expanded by Daniel Bernouli in 1738. The theory asserts that decision makers choose between risky projects by examining their expected utility against the risk. When the project yields lower returns, the decision maker will not engage but when expected returns are high, they will engage.

The theory is built on two components. The first is the idea that people use or should use the expected value of the utility of different possible outcomes of their choices as a guide for decision-making (Lengwiller, 2008). This means that before individuals make a choice, they should first consider the returns or outcomes from the choice they are making and judge from the anticipated outcome whether the choice is worth it. In a nutshell this first component advocates that individual's decision making is based on or influenced by the opportunity cost. This component points out the rationality of individuals.

People make decisions that will not have a negative impact on their future. Take for example if an individual wants to make a career decision. A decision to be employed or be self-employed is motivated by the utility one would get from either career. An individual will consider factors such as personal interests, earnings, workload, working conditions and working hours to decide between being self-employed and being employed. Whichever of the two has the potential to give the desired outcome, a person will, therefore, choose it (Lengwiller, 2008).

The second component is the idea that more of the same creates additional utility, only with a decreasing rate. This basically means that if an individual does something over and over he or she will get satisfaction but the more you do the same, the more the fun of it will decrease. It will not be as much fun or give the same utility as it used to (Lengwiller, 2008). According to Gossen (1854), an individual would optimally allocate their income in such a way that the marginal contribution of money to the utility would be equal for all possible uses of money. Basically, Gossen here asserts that what an individual puts in is what they will expect to get out in terms of outcomes or returns. Take for example a person who is employed; given the hard work and long working hours, they would expect a high salary.

Douglas *et al.*, (1999) posit that people choose to be self-employed as opposed to being employees if the total utility they expect to derive (via income, independence, risk bearing, workload, and perquisites) is greater than from their best employment option. If the income they expect is less than the risk they are prepared to take when formulating the business, then an individual will remain employed.

If the level of independence is satisfying, high expected income, not too much work load and flexible working hours then, an individual will be more than willing to be self-employed. Douglas *et al.*, (1999) further highlights that individuals expect to gain utility from income derived from the goods and services which he can buy with that income and either utility or disutility from work efforts, risk, independence and working conditions.

Rees and Shaw, (1986) and Tamvada, (2009) suggest that individuals venture into business because they expect higher returns compared to salaried jobs. They become self-employed because their current income is lower than the average so they join the informal sector with expectations of making higher returns. This theory also tells us that individuals are forced into self-employment due to the absence of viable economic alternatives consistent with their expected returns.

The utility of an individual can be derived by the following formula which models the individual's choice of career path out to the individual's time horizon by defining a career path as one or more jobs over that same period.

$$U^{iJ} = F(Y_{iJ}, W_{iJ}, R_{iJ}, I_{iJ}, O_{iJ})$$

where: U^{iJ} represents the utility anticipated in the I^{Th} period from the J^{Th} job

Y_{iJ} represents the income anticipated in the I^{Th} period from the J^{Th} job

W_{iJ} represents the work effort anticipated in the I^{Th} period from the J^{Th} job

R_{iJ} represents the risk anticipated in the I^{Th} period from the J^{Th} job

I_{iJ} represents the independence anticipated in the I^{Th} period from the J^{Th} job

O_{iJ} represents the net perquisites anticipated in the I^{Th} period from the J^{Th} job

$I = 1, 2, 3, \dots, n$ represents the different periods out to the time horizon (n)

$J = 1, 2, 3, \dots, n$ represents the different jobs available in any period.

The individual will choose from among the “Z” career paths such that his/her expected utility is maximised. The individual, before making such a choice, will first consider factors such as risk, income, independence, work effort and working conditions. Douglas *et al.*, (1999) assert that the utility expected from career path “K” can be expressed in general terms as a function of the income stream, the total output of work effort, total exposure to risks, total independence provided and net perquisites associated with each job period. The individual scans all occupational opportunities and chooses the most valued job (self-employment or employment) with the maximal total utility according to the above equation.

2.3 The role theory

The role theory is mostly used in sociology and in psychology and considers most the everyday activity to be the acting out of socially defined categories. Bank (1994) posits that what an individual does is the reflection of what they grew up seeing and being motivated by, for example, mothers, teachers, community leaders, celebrities, and managers. During the apartheid regime, for example, because there were no role models for black entrepreneurs, graduates were not motivated to venture into business but rather joined the industrial or civil sector. Role theory draws its founding roots from the theoretical works of Mead, Moreno, and Linton in 1936.

Role can be defined as the expectations about how an individual ought to behave in a given situation. It is a character reflection, the behaviour associated with a social position, a part to be played or a script for social conduct or set rules. The individual responds or reacts to situations in the way the role model would have done. Role theory advocates that in order to change the behaviour, it is imperative to change roles models. Roles influence beliefs and attitudes. Roles specify what goals should be pursued, what tasks must be accomplished, what action should be taken given the scenario or situation. Individuals will change their belief system to correspond with their role models.

Social roles can be classified into four categories: firstly the cultural roles, where we consider roles given by culture like that of Mhlanga where young women are taught how to live by older women whom they will closely follow. Cultural roles also involve religious teachings like that of the pastor to live like Christ and serve the community.

These teachings at a later stage have a great possibility to influence the career choice of an individual. Those who like serving the community will choose to be employed and be teachers, nurses, social workers, and police. Those who are more into self-enrichment will pursue careers like entrepreneurship.

Secondly, there is social differentiation, where a person looks at the role model that best suits their characteristics e.g. teacher, taxi driver, or business person. The preferences of individuals will determine the role model they seek to have and follow closely the behaviour of that role model. If an individual likes teaching, he or she will then search for the best teacher and look up to him/her, or if an individual is passionate about business, he/she will look up to successful entrepreneurs.

Thirdly, there are the situation-specific roles e.g., where one identifies strongly with a particular individual and starts copying their behaviour solely because their current situation relates to their past experience. For example, a girl that grew up in deep rural area with no parents will look up to another previously disadvantaged woman who rose above the situation and became successful or if you know someone who grew up suffering like you did but who is now is successful you will want to emulate them.

Fourthly, and lastly, gender based role model. The role model you choose because of the same gender as you like your dad, mother, and so on. If you have seen a father who treats his children well, you would be inspired to be a great father yourself one day. If you are a boy/girl and you know of a successful man/woman, that boy/girl will follow the footsteps and choose a career of that man/woman. Likewise, family businesses thrive over generations, on the basis of the siblings following in the footsteps of the household head.

From the above explanations, the decision to be employed or self-employed depends largely on the role model the person has. If Role model theory is employed, the individual will want to work in an organisation similar to that one.

2.4 Non-pecuniary benefit theory

The non-pecuniary benefit theory redirects our focus from consumption-based analysis to social based analysis. It shows us that individuals do not only care about monetary benefits that will give them consumption utility but also about social benefits. According to Jahoda, (1988) having a source of income brings happiness to an individual, whether that happiness is derived from the consumption ability or from the social benefits the employment comes with, or both.

According to Jahoda (1988), employment is a centre for people to connect and become involved in communal activities. Through the work they do, people gain experience, self-esteem, self-respect; they create new friends, build a reputation, security, status, and recognition – all of which impact positively on the life of an individual. Individuals consider if the workplace has a child- facility on site, flexible working hours including telecommunication, job courses that seek to enhance their abilities, opportunities to participate and make suggestions on how to improve production processes in the workplace, and social events that contribute to a feeling of worker cohesion and belonging. When making an occupational decision an individual will then look for an alternative that better serves their personal preferences. If all of the above social benefits (or some) are not part of the employment contract the individual will choose to be self-employed so that he/she can get all the benefits.

According to non-pecuniary benefit theory, individuals venture into business because of psychological benefits such as freedom of flexibility in the working schedule and the benefit of being their own boss even if they are expecting lower returns.

Farzin and Akao, (2005) add that people value self-employment not only to earn income to satisfy their consumption needs but also as a means to gain socio-psychological (non-pecuniary) benefits. Besides freedom of having a flexible working schedule as an

incentive for people to start businesses, people venture into business because they like the lifestyle and status of being business owners (Joonas and Wedjo, 2011).

2.5 The procedural utility theory

The procedural utility theory is an economic theory put forward by Benz, Frey and Stutzer, (2004) who advocate that individuals derive their utility not only from the outcomes but also from the processes and conditions leading to the outcomes. According to Benz (2007), people not only care about the “what” but also about the “how”, and they value the “means” beyond the “ends”. The theory asserts that individuals do not only care about the returns they will get but they want to enjoy the process involved in attaining those returns.

The procedural utility theory is an economic and psychological concept. Closely linked to game theory and expected utility theory, the procedural utility theory is a concept which revolves around the maximisation of an individual’s utility. Unlike the expected utility theory which measures utility based on the expected returns, the procedural utility theory measures the utility based on the reported subjective well-being or happiness of an individual. The procedural utility theory is built upon the understanding that enjoyment is a major source of utility. People derive this utility from the act of engaging in an activity, for example being involved in the decision- making of the organisation. The employees may not benefit from the equal share of profits but as long they were involved in making those high profits through brainstorming or decision making, they will be very happy.

From the explanation above we said that an individual derives utility from participation in the decision-making process rather than the outcome. The key to attaining procedural utility lies in two components: the “right” and “participating. The study will first discuss the “right” and then the “participation” will follow. Participation of an individual in the decision-making process enhances that individual’s perception of self-determination.

There are three aspects of self-determination which are identified as crucial elements of human well-being. Firstly, ‘autonomy’, which refers to the freedom to organise their own actions. Secondly, ‘competence’, which refers to the propensity to control one’s

environment and where one may reveal how capable and effective they are and finally, 'relatedness', which refers to the desire to feel connected to others and to be treated as a respected group member within a social group.

Now the study will discuss the concept of the "right". The concept of the "right" asserts that being restricted (or if one's right to participate is infringed) from participating in the decision-making process reduces (or worsens) one's sense of well-being. Knowing that you are endowed with the right to participate in decision-making, even though you may choose not to exercise it, gives total utility.

From the explanation above we see that an individual derives utility from participation in the decision-making process rather than in the outcome. In a political environment, an individual would gain utility from participating in the political decision-making process itself irrespective of the outcome. The right to participate provides more procedural utility in terms of a feeling of self-determination and influence than in actual participation. Individuals assess procedures not only by the results they yield but by the relational information that they convey, such as assessment of impartiality, the trustworthiness of superiors and authorities, and the extent to which individuals feel they are treated with dignity. If they feel they are not treated well or trusted by their authorities, their procedural utility will be lowered.

According to the perspective of Frey *et al.*, (2004), Benz (2007), Benz and Frey (2008), the procedural utility theory emanates from the two most fundamental decision-making mechanisms used by society, namely, market and hierarchy. Market refers to the ability of individuals to take decisions independently in the workplace, while hierarchy means to attain production and employment, there must be an organisational structure where employees will be accountable to. Because of this hierarchy factor, self-employment best provides procedural utility. Self-employed people enjoy the freedom of being actors in the market and not subject to hierarchy.

If an individual is failing to maximise procedural utility in an organisation, they will explore other employment options available to them. The choice between being an employee and self-employed relies heavily on job satisfaction and involvement in the

work environment. Benz and Frey, (2008) and Hundley, (2001) maintain that self-employed people achieve higher job satisfaction than salaried workers. If the authorities fail to give the employee the workload, independence and income expected, he/she will join the self-employed. If the right to participate in decision-making and freedom of expression is not given to the employee, he/she will leave the labour force to join the ranks of the self-employed.

Clark and Oswald (1994) proclaim that the wellbeing and happiness of the individual can be derived from being self-employed. That is because the self-employed make decisions for themselves and they enjoy all the benefits such as flexible working hours, deciding on their own working conditions, setting salaries, and they do not account to anyone but themselves. Because of this, people may venture into self-employment because they want to achieve procedural utility whether the outcomes are bad or good. Hamilton, (2000) avows that self-employment does not give higher earnings, but that self-employed people are willing to forgo income in exchange for independence.

2.6 Occupational choice theory

Occupational choice theory, propounded by Ginzberg, (1972), asserts that an individual seeks to find a balance between his/her interest, capacities, and values in the world of work. Ginzberg, (1972) points out that the decision on which career to pursue starts in the pre-puberty stage and lasts until late 20's; this is where an individual make an occupational choice. He further outlines that the occupational decision can be analysed in terms of three periods: fantasy (before the age of 11); tentative choices (between the ages of 11 and 17); and realistic choices (between 17 and adulthood when a person finally make his/her choices). In the first phase (fantasy choices), the occupational choice of a child is characterised by wishful thinking. The child believes he/she can become anything he/she wants to be. The career choice of a child at this stage lacks reality because they make them without considering their abilities and potential (John, 2013).

He/she makes an arbitrary translation of his/her impulses and needs into an occupational choice. If he/she feels he/she wants to be superman and save the whole world, he/she will dream of being a superman or if he/she likes the idea of being a doctor, then he/she will dream of being a doctor. The career the child would want to pursue at this stage is influenced by the environment, especially the parents and what the child sees around him/her, and which will create likes and dislikes in regard to certain careers (Ginzberg, 1972).

In the second phase (the tentative stage), the child starts to develop an interest in certain careers, based on what is happening around him/her. He/she starts to have values to uphold but he/she is not yet sure of his/her career path. If, for example, a child is more exposed to a politically dominant environment where the inhabitants in that place are active in politics, then a child might be interested in careers that involve politics. This stage is divided into four sub-stages, namely: the interest sub-stage (between 11 and 12) where an individual recognises that he/she needs career direction. At this stage, the career choices are mainly based on his/her interests; secondly, the capacity sub-stage (between 12-14 years old). At this stage, the child starts to realise that in his/her occupational choice he/she needs to be realistic and consider capabilities (John, 2013).

Lastly comes the value sub-stage (between 15-16 years old). In this stage, a child starts to consider the value the career of his choice will have in the market and community. They start considering the status that comes with that particular career, for example, an individual may choose to be a business person because self-employed people are known to be rich and have flexible working conditions set by themselves (Oladele, 1987). He becomes mature and realise that their occupational choices are subjected to change. They grow up and recognise that there are certain things or activities that they enjoy doing more than others (John, 2013).

The last phase is when an individual has made a final choice, taking into consideration their personal interest, capacities, values, opportunities and the limitations of the environment (Ginzberg, 1972).

According to the occupational choice theory, before an individual make occupational choice, they first make historical changes analysis in social and economic conditions (Blauet *al.*, 1985). The analysis inform them whether the career they want to pursue is in demand on the market or not further inform them about the social benefits and earnings of the career before pursuing it.

According to the insight of Becker (1994), Individuals are more likely to choose a profession that offers the highest possible earnings in the future. If an individual sees that the career he wants to pursue has the potential for higher earnings, the individual will choose that career. Tamvada, (2009) points out that given the occupation structure of an individual in an economy, the returns on occupations depend on the relative position of the individual in the welfare distribution. The returns for the self-employed differ according to the occupation one holds in the economy and also on the sector.

As a person grows up, they look at all types of careers available in the market. They then choose whether to work as an employee or be self-employed depending on which meets the individual's personal interests and have highest returns. This theory holds that the most productive individuals are the ones who are more likely to venture into business and become entrepreneurs (Tamvada, 2009). Dabla-Norris *et al.*, (2008) assert that due to low productivity, less productive individuals become workers or subsistence workers rather than entrepreneurs.

2.7 Socio-cultural theory

The socio-cultural theory is a theory developed by Vygotsky, (1986) who believed that parents, caregivers, peers and the culture at large are responsible for the development of a child. This theory basically explains our daily interaction with others, how we communicate, understand, relate to and cope with each other. It further looks at the spiritual, mental, physical and emotional aspects of our daily lives (Vygotsky, 1986).

The term 'socio-cultural' is a psychological concept which is used to explain circumstances surrounding individuals and how their behaviour is affected by their surroundings and social and cultural factors (Vygotsky, 1986). This theory looks at the important contributions by the society which enhance or impede the development of an individual.

The theory further emphasises the interactions between developing people and the culture in which they live in. The behaviour and decisions individuals make as per this theory are largely influenced by their surrounding and cultural background.

According to the opinion of Weber, (1958) and Co, (2003) what an individual is exposed to normally influences the behaviour of that individual. We assimilate these influences from friends, family, school and to a certain extent church and religion. Further, Donato and McCormick, (1994) posit that social interaction and cultural institutions such as schools, classrooms and church, play a significant role in the development of an individual.

Sanderson, (2010) explains socio-cultural theory as a theory that describes people's behaviour and mental processes as being influenced by their social and/or cultural contact including race, gender, and nationality. There is a way that a Zulu- speaking person behaves, which is closely linked to their culture and the same is also true of other racial and ethnic groups.

2.8 Work adjustment theory

The work adjustment theory, also known as the Person-environment correspondence theory, asserts that individuals have needs and expectations in the workplace and also the workplace environment has its own needs and demands which employees are expected to fulfil. The work adjustment theory stresses the interaction between these two sets of needs. Dawis, (1996) points out that the individual's needs are psychological and biological, and are needed for survival, hence individuals behave in a manner that will satisfy their needs.

Dawis and Lofquist, (1984) define work adjustment as a “continuous and dynamic process by which a worker seeks to achieve and maintain correspondence with the work environment”. Eggert, (2008) maintains that there is a direct interaction between the employer and employee as each tries to maximise utility while also taking into account the needs of their counterpart. The satisfaction element plays the key role between the employer and employee. The more the reward the employee gets or the working conditions corresponding to the expectations of the employee the more likely that the person will perceive the job as satisfying.

This theory tries to predict work adjustment by studying the abilities and values of the individual and also takes into account the ability requirements and rewards patterns of the work environment. According to the viewpoint of Shart (2010), the theory was developed to meet the needs of vocational rehabilitation work by providing improved rehabilitation services to challenged workers.

As per the theory, individuals will perceive a job as satisfactory if it meets the six values of individuals. Firstly, the achievement- a condition that encourages accomplishment and progress- Individuals want to see themselves progressing in life, achieving something to boost their self-esteem and being well off. Secondly, comfort – conditions that encourage a lack of stress- where individuals aspire to feel wanted in a work environment that is comfortable and not stressful. Thirdly, status – conditions that provide recognition and prestige- human nature tells us that we all strive to be better, so status gives a person that satisfaction. Fourthly, altruism – conditions that foster harmony and service to others- employees want to be at peace with other employees and have a good relationship with them.

Fifthly, safety – conditions that establish predictability and stability- employees want stable jobs or permanent jobs where they will know they have a future.

Lastly, autonomy – conditions that increase personal control and initiative – employees want to be part of the working team and actually be part of decision making, and contribute to strategic policy development. That creates a sense of importance within the individual (Winter, 2014).

Individuals are expected to perform satisfactorily at their jobs as per the contract of employment and meet all the deadlines. If an individual fails to meet the job requirements he will then be fired from work. Winter (2014), states that the degrees of satisfaction and satisfactoriness are seen as predictors of the likelihood that someone will stay in a job, be successful at it and receive advancement. If an individual is not happy they will then leave the employment to be self-employed because self-employment provides the ability to attain all of these values.

The theory does, however, acknowledge that the interaction between individual and environment may not be perfect maybe because the individual chose the wrong career, therefore, the skills required to perform the satisfactory job are not sufficient or maybe the employer chose the wrong candidate (Winter, 2014). Upon discovering that the employee cannot deliver as expected, the employee may choose to change the environment.

The employer may seek to change the content of the job and therefore its behaviour requirements, to better reflect their abilities. The individual may decide to be independent and be self-employed so that all their expectations can be attained or they may try to change their behaviour to better suit the environment or by changing their personal priorities or work values.

In a nutshell, this theory highlights the interaction between the needs of individuals versus the needs of the workplace environment. If the individual fails to adhere to the needs of the workplace environment, they will be compelled to leave the environment to look for another job or choose to be self-employed.

2.9 Traditional low-productivity theory of self-employment

The traditional low-productivity theory is a career development theory which looks at the abilities of an individual such as verbal ability, spatial ability, form perception, eye/hand coordination, finger dexterity, manual dexterity and the intellectual capacity of an individual relative to the demands of the workplace environment. This theory is closely

linked to that of work adjustment theory which also looks at the correspondence between the needs of individual relative to that of the workplace environment. This looks critically at the productivity of an individual compared to the expectations of the workplace environment.

According to this theory, the career choice decision depends largely on what a person can do. If a person has the necessary skills required in the labour force and is confident enough that they can deliver exceptionally well on the job then an individual will choose to be employed.

According to Tamvada (2009), the theory of traditional low-productivity posits that if a person is not as productive as they are supposed to be, due to the lack of skills (e.g. low level of education) required to accomplish the job, then the individual will choose to venture into self-employment. This may be as a result of fear of being retrenched or thinking ahead about the social responsibility they have.

Tamvada, (2009) further notes that, because of not being productive, individuals venture into business even in the absence of a viable economic alternative. They go into business even if the economic incentive is not there as long as they can make ends meet for them and their families.

2.10 General equilibrium self-employment theory

Among the key theories that explain the proportion of the total work force that decides to be self-employed relative to being employed is the general equilibrium self-employment theory. This theory was developed by Kihlstrom and Laffort, (1979) advocating that the decision of being self-employed or employed depend on the level of risk aversion of an individual.

The theory posits that agents in the labour force have different entrepreneurial capacities. So those individuals with low entrepreneurial capacities will decide to be employed whereas the individual with high entrepreneurial capacity will choose to be self-employed (Jacobs, 2004). This theory appreciates the fact that each individual is endowed differently and their level of education is not the same.

The theory of general equilibrium self-employment does not only focus on the entrepreneurial capacity of the individuals but also on the level of risk the individual is prepared to take. Every agent chooses between being self-employed and working based on the returns and utility they will get from that career decision. According to Kihlstrom and Laffort (1979), individuals differ in their level of risk aversion. The individuals with low risk aversion will be entrepreneurs because of the ability to take calculated risk and those that are afraid to take risk will be workers for wages.

Starting a business requires some degree of collateral. Banerjee and Newman (1993) notes that finance is the key constraint in formulating new businesses especially for the poor.

They note that individuals that are poor are likely to choose working for a wage over self-employment because they do not have enough capital to start a business. The rich individuals however are most likely to be self-employed because they have enough collateral to get their businesses started. Even if the required capital they need is not enough, they can always go to the bank for loans. They will qualify because they have assets they can provide as collateral in banks whereas the poor have nothing to produce.

2.11 Job satisfaction theory

Job satisfaction theory is a social science theory proposed independently by Robert Hoppock in 1934 which basically looks at employees' satisfaction in the workplace. Heslop *et al.*, (2002) define job satisfaction as the discrepancy between people's expectations and wants in relation to the job and what is really offered to them. Spector, (1997) defines job satisfaction as the extent to which employees like their jobs. Beer, (1964) defines job satisfaction as employee's feelings and thoughts about the organisation, work, and co-workers.

And lastly, Schermerhorn *et al.*, (2005) define job satisfaction as a job, salary levels, promotion opportunities, and relationships with co-workers. Locke, (1976) adds a few more factors that contribute to employee satisfaction such as recognition, working conditions and company management.

This theory emanated from social scientists who were concerned with the problems of work in an industrial society which led to poor production by employees. They were interested in finding out what leads to underproduction and not fully utilising the resources at their disposal to maximise output. This theory draws our attention to social and psychological factors that enhance or worsen the performance of an individual in a workplace. Their interest was solely on improving productivity and organisational functioning by improving the quality of work experience of employees. However, we going to use this theory to explain why individuals choose to be self-employed as compared to being employed, looking at the job satisfaction of the employee which may end up pushing the individual to choose self-employment.

The theory is divided into two parts: a psychological part which explains the variations in the job satisfaction produced by the interplay between work values and job rewards, with the emphasis being on the salary the employee is paid versus the workload; the second part, which is the sociological part which relates the variation in job satisfaction to factors that affect one's degree of control over the attainment of the job reward.

The employees seek to maximise returns and utility. The major factor contributing to the satisfaction of the employee in the work environment is the salary received. Given their physical and social needs, employees want to be paid well so that they can satisfy their needs. If the employee is not paid well, they will consider leaving and look for companies that will pay them well or just choose to be self-employed. The relationship with colleagues and supervisor may be good, and the workload may be fair, but if the salary is low the employee will not be satisfied and will therefore choose better options, such as being self-employed.

The second factor contributing to job satisfaction is a promotion. Employees want to see that they succeed in life, and in this regard promotion plays a central role because it motivates employees to work hard, create a sense of belonging, and also create status for themselves. Thirdly, the relationship between the employee and bosses/ supervisors also contributes to the happiness of the employees with their jobs. If the relationship is not good with the supervisor, it creates a bad working environment and can lead to the employee being dissatisfied.

The fourth factor is the relationship with co-workers. The relationship the employee has with other co-workers makes the environment more conducive to work in and more productive. If the workplace pay is low, there are few opportunities for promotion, relationships with co-workers and supervisors and the work itself are too much, then the employee will be unsatisfied with being employed. If the expectations of individuals are not met, like flexible working hours, favourable working conditions and leisure, the employee will have no choice but to be self-employed, depending on the level of risk aversion. In short, job satisfaction theory tells us that if the employee is not happy with the current jobs on offer they will choose to be self-employed.

2.12 The insider-outsider theory of employment

Lindebeck and Snower, (1984) developed the insider-outsider theory. This theory looks at the interaction between the economic agents in the labour market where some participants have more advantages than the other. The insider-outsider theory posits that insiders in the labour market enjoy more favourable employment opportunities than the outsiders.

The theory highlights that the reason the insiders enjoy more favourable employment opportunities as opposed to their counterparts (outsiders) is that there are cost implications involved in the hiring process. As a profit making business, companies seek to minimise their costs as much as possible. Therefore, when companies are hiring, they first consider applications from within their company. This is due to the belief that the insiders have already gone through the training and are familiar with the work environment of the company. Hiring an outsider will involve costs associated with hiring and training (Lindebeck, 1988).

In as much as the insider-outsider theory was developed for the purpose of explaining the existence of unemployment, it has subsequently been used to explain the variations in the formal sector versus informal sector, employees with high versus low seniority, skilled versus unskilled, and permanent workers versus contract workers. In this case, this theory will be used to explain why people choose to be self-employed relative rather than wage earners.

Because of barriers created by labour turnover cost, social exclusion comes into being, meaning that some individuals, families, and other social groups are excluded from getting jobs. This means that the unemployed will remain unemployed whereas the employed (insiders) will be climbing the corporate ladder. It will be difficult for the unemployed (outsiders) to get jobs because of their lack of experience. Now because they are socially excluded and cannot find jobs, the outsiders will seek an alternative to their situation. The best option for the majority of outsiders will be to be self-employed so that they can make ends meet.

2.13 Conclusion

In conclusion, from the theories underpinning the study, one can say that there is indeed a positive and significant relationship between all these disciplines -economics, sociology, psychology, and management- which enhances the insights into the career decision-making choices of individuals. Theoretically, the demographic location influences the upbringing of an individual through life circumstances, role models, and political environment, but sociological factors such as job satisfaction also influence career decision.

The psychological factors such as the need to maximise utility, the locus of control, flexible working conditions and status do influence the career decision and provide useful theoretical insights into an individual's decision to opt for self-employment. Lastly, the theories also maintain that economic factors like long periods of unemployment and severe economic crisis influence the career decision mechanism. These theories will assist us in identifying the appropriate variables to be included in a model that will assess the determinants of self-employment in Ladysmith.

Chapter 3 Empirical evidence

3.1 Introduction

Given the rich literature which probes the determinants and dynamics of self-employment, the answer as to what determines self-employment in less developing countries, and especially in black-owned businesses is not yet clear. South Africa, as one of the countries in the sub-Saharan region which are classified as having a high rate of self-employment still lacks understanding of the determinants of self-employment in black-owned businesses (GEM, 2012). This chapter will, therefore, broaden our scope to understand the motives behind the growing number of self-employed and also help us in identifying relevant determinants for research design purposes and data analysis.

The next section of this chapter outlines the importance of the self-employed sector and its acknowledged contribution to the overall economy. Thereafter, the chapter will describe the background of the self-employed sector and review the literature, domestic and international, on empirical evidence underpinning the study. Moreover, the literature review focuses on variables that are considered to be crucial in explaining self-employment. These include: economic crises, labour force experiences, networks and family background, taxes, family and spouse labour market, education, pecuniary and non-pecuniary benefits, and age. Lastly the chapter will explore the South African perspective on the subject.

3.2 Importance of self-employment in the economy

Studies from the 18th century by Blau, (1985) and recent ones by Rupasinght and Goetz, (2011) that investigated the determinants of self-employment maintain that entrepreneurship is the key to higher economic growth. However, the determinants of self –employment depend on each country's settings.

Investigating self-employment and local economic performance using evidence from the United States obtained from country-level panel data, Rupasinght and Goetz, (2011) state that self-employment is an engine of regional, community, and economic development, due to its potential as an alternative source of employment.

Elam (2008) adds to this view by noting that entrepreneurship is the key to the stimulation of economic growth. Mandelman and Montes-Rojas, (2009), investigating whether self-employment and micro-entrepreneurship lead to desired outcomes in Argentina, assert that self-employment is a key to economic growth because the self-employed are perceived to be innovative, successful and ambitious and they have a growth potential. They are also thought to bring vitality to the economy and make a significant contribution to economic expansion. The empirical evidence suggests that more innovators emanate from small firms as compared to large firms (Parker, 2004 and Elam, 2008).

Hart and Harvey, (1995) explored the importance of the self-employed sector in stimulating economic growth. Using regional data for the United Kingdom, they showed that employment creation was largely due to small and medium enterprises (SMEs). Foelster, (2000), investigating the overall link between the self-employed and the employed in Sweden between 1976-1995, using the Layard-Nickel framework found that self-employment played a key role in creating job opportunities. Thurik, (1999) investigated 23 OECD countries between 1984-1994 and found that self-employment is the key in employment creation. Investigating the effects of start-ups on regional development, Fritch and Muller (2011) found that SMEs can sometimes increase or decrease regional employment. They also noted that in African countries, due to lack of skills and education, the majority make a living out of the informal sector.

There are a number of studies that demonstrate the informal sector as the main source of gainful employment in developing countries. Debrah (2007) pointed out that, the majority of people in African countries make a living out of the informal sector. ILO, (2013) and Koo, (1976) noted that Informal sector comprises self-employed, own-account workers, part-time or temporary jobs without secure contracts, all with no

worker benefits or social protection; these include the street vendors, taxi drivers, barbers, and repairmen (ILO, 2013; Koo, 1976).

3.3 Determinants of Self-employment

Having seen the importance of self-employment especially in promoting economic growth and eradicating unemployment, understanding the dynamics and determinants of self-employment is of paramount importance. In the next few sections, I will thoroughly explore each determinant.

3.3.1 Economic crises

As we explore the determinants of self-employment one cannot help but notice that life circumstances and economic conditions have a massive impact on the career decision of an individual. Reynolds *et al.*, (2002) in their study involving cultural norms and entrepreneurship noted that entrepreneurship is motivated by different life circumstances. Diana, (2009) points out that the self-employed are motivated by a social, economic and political environment that shapes individual behaviours and therefore pushes them into self-employment.

Mandelman and Montes-Rojas (2009) and McKenzie (2004) explain the shift to self-employment as a result of economic recession and declining economic growth which leaves the government with the burden of creating employment. They note that during severe economic recessions, workers are out of jobs for a long period, which pushes them to seek refuge in the self-employed sector till they find salaried jobs. According to Mandelman and Montes-Rojas, (2009) economic recessions are associated with a monotonic increase in the number of individuals (salaried and unemployed) who transition to self-employment.

They further state that in the formal sector, recession improves the performance of workers as they live in fear of being retrenched. Moreover, they noted in the United Kingdom that during economic booms there are very few educated people becoming self-employed; in fact, conversely, more educated self-employed people become

salaried workers. Many of these people are unemployed due to the economic recession, hence they are forced to make a living through venturing into business.

3.3.2 Labour force experience

Past working experience in the labour market has a positive impact on influencing entry into self-employment (Millan *et al.*, 2010). Jovanic (1982) also adds to this conventional view by maintaining that past working experience, both good and bad, have a significant impact on current employment status. On the same issue, Borjas (1986) found a positive and significant association between labour force experience and self-employment for all racial groups.

According to Smith (2004), for one to realise a gap that exists in the market and take advantage of it requires some level of working experience in the field. The self-employed are more likely to succeed if during the years of working the individual acquired sufficient information on the business they want to pursue and have established connections. He further conjectures that labour force experience may also influence the ability to acquire financial resources and social capital. According to the findings of Turker (1988), the average person who becomes self-employed has had approximately seven years of working as an employee.

According to Gindling and Newhouse (2012), the reason most people are self-employed is because they were retrenched from the labour market or because they prefer the autonomy and flexibility of self-employment. They join the labour market with certain expectations such as flexibility, a family= friendly environment, and higher incomes only to find the opposite. They further their argument by maintaining that some were retrenched because they were not competent or due to bad economic conditions. Smith (2004), noted that the unemployed and underemployed pursued self-employment for the betterment of their lives. He argues that this is true due to long periods of unemployment because of lack of job opportunities in the labour market.

3.3.3 Networks and family background

Among the major determinants of self-employment relative to employment are the family background and the contacts the family/individual have. The family background has an enormous impact on one's career decision as we tend to follow in the footsteps of those before us.

Yoon (1997), investigating Korean businesses in America found that networks and contacts in business play an important role in pushing one to be self-employed. If a family has a business background, it will be easy for a family member to venture into business. Secondly, contacts play a huge role when one ventures into business because they open doors without which it would have been difficult to enter. Parker notes that the spillover of skills, knowledge, and networks or clients is greater when a partner is in the labour market.

Empirically, Lee (2001) investigating entrepreneurship and business development among African-Americans, Koreans, and Jews explored some structural differences and found that Jews and Koreans tended to be more entrepreneurial than African-Americans due to their enjoying better access to capital via family and ethnic networks. According to Blanchflower *et al.*, (2001), self-employment is associated with an individual's ability to take advantage where gaps exist in the market due to their possessing an entrepreneurial vision, being proactive, and having the appropriate family background. On the same notion, Saxenian (1998) found that networks and contacts of Chinese and Indians enabled their fellows to start businesses because their contacts provided financial support in Silicon Valley.

Prior researchers (Yoon 1997; Lee; 2001, Blanchflower *et al.*, 2001) are of the opinion that one's family background plays a key role in establishing a lifelong motivation to run one's own business. This can be achieved through the transfer of information/knowledge, capital, and networks the parents have already established in the business sector.

Sikora and Evans (2009), investigating self-employment and reward in 33 countries found that family background does influence the decision to be self-employed. They link their findings with family embeddedness theory which asserts that it is easy for individuals who are from rich families to start businesses because capital is at their disposal through familial transfers across generations or through marriage.

3.3.4 Taxes as the determinant of self-employment

According to Ferede (2011), what relates tax progressivity and self-employment is the tax evasion opportunity. Without the opportunity to evade tax people do not find self-employment attractive. Engskom and Haden, (2009) assert that self-employment enables individuals to underscore their incomes.

Previous studies were of the view that what determines self-employment are tax evasion opportunities, hence without tax evasion the relationship becomes complicated. The individual's choice between a salaried job and self-employment depends on the after-tax returns. Ferede, (2011), investigating tax progressivity and self-employment within the Canadian provinces noted that personal income taxation is based on the voluntary compliance of an individual which then opens the opportunity for tax avoidance and evasion. Since they are not compelled to pay taxes, people prefer to be self-employed as a way of escaping taxes. He further points out that an increase in income tax negatively affects the risk-taking potential of entrepreneurs. This therefore ultimately discourages entrepreneurial activities.

Several studies, like that of Folster (2002), investigating whether lower taxes stimulated self-employment in Sweden found that the relationship between self-employment and taxes was negative. Supporting this view, Torini (2005) investigated the role of institutions in determining self-employment rates in OECD countries and found that taxes affect self-employment negatively. Mooij and Nicodeme (2008) investigated the corporate tax policy and entrepreneurship in Europe; they asserted that high corporate taxes provided an incentive for entrepreneurs to shift from self-employment to become wage earners since high taxes increased the risk of business failure.

Perry *et al* (2007), note that some join self-employment in South Africa because they are trying to avoid the regulations and taxes in the formal sector

Contrary to the view of these scholars, Bruce and Mohsin (2006) investigated tax policy and entrepreneurship and found that taxes actually impacted self-employment positively in the United States. Gentry and Hubbard, (2000) who investigated tax policy and entrepreneurial entry in the United States, maintain that progressive income taxes dents the entrepreneurial spirit. This is because when tax structure becomes progressive, government takes high returns as tax which in turn discourages entrepreneurs as their returns are now much lower.

3.3.5 Family and Spouse labour market

Much research has been dedicated to identifying determinants of self-employment looking specifically at the family's role or influence in one's career decision to become self-employed. Sanders and Nee, (1996) posit that families are key promoters of self-employment because they shape the career decision of an individual to become self-employed.

Other Studies however, such as Lee (2001), Blanchflower *et al* (2001) Saxeman (1998), Yoon (1997), and Sikona and Evans (2009) which have identified the family in general as a major contributor to being self-employed by availing capital, advice and so on, have neglected the role of partners or spouses in promoting self-employment.

Recent studies, however, acknowledge the role spouses have on each other's occupational decisions. Ozcan, (2011) investigated the influence of spouse on the transition to self-employment and found that partners differ in their productivity levels so they can both maximise a joint utility function efficiently if each specialises in the field they are good in. The decision whether to join the market or engage in domestic work was influenced by each partner's capabilities. Capato and Dolinsky (1998) studied women's choice to pursue self-employment through looking at the role of financial and human capital of household members. They suggested that partners can be direct sources of skills, transfer of knowledge, experiential learning, and motivation.

Marsden, (1987) noted that the conjectures of Caputo and Dolinsky (1998) are true because spouses spend most of their time together and share work- related experiences. Spouses are frequently named as discussion partners for important problems.

Even though the above discussion does not take into account gender differences for it is only based on each partners personal capability, the reality is that women and the labour market are negatively related. Women are normally expected to compromise and balance work with family life. Budig, (2006) who considered the intersections on the road to self-employment by looking at gender, family and occupational class, found that men entered self-employment to advance their careers whereas women entered self-employment to balance income needs and family life.

Tuttle and Garr, (2009), researching self-employment, work, family fitness and mental health among female workers, found that parents that cannot find family- friendly working conditions switch to self-employment because it gives them more flexible working conditions and more balance between earning money one family life than being an employee for an organisation. Still on the notion of flexibility, Hildebrand and Williams (2003) focused on self-employment and earning for children in Europe and found that self-employment offered one flexibility and control over timing, place, work load and the effort of work.

Adding to the view above, Mallon and Cohen (2001), who investigated women's accounts of the move from organisational careers to self-employment in British also found that, workers venture into self-employment because it gives them independence, higher earnings, flexibility and choice over the type of work and work load. Bell and La Valle, (2003) further anchored these studies by stating that self-employment allowed one to engage in independent professional practice, e.g. working from home, tele-working, freelancing and subcontracting.

Aldrich and Moody, (2000) and Taniguchi, (2002) advocated that marital status and children more strongly predicted women's self-employment participation than men. Taniguchi, (2002) suggested that marriage and children positively affected the probability of women being self-employed. Budig, (2006) posited that it was rare to find jobs that were family- friendly. He further pointed out that compared to professional occupations, non-professional wage work was more likely to lack employer-sponsored childcare, the wages they get were too low to afford private day care and the job itself was not flexible as they worked long hours so they will then become self-employed to balance earnings and family life.

Investigating self-employment in OECD countries, Blanchflower (2000) asserted that mothers were more likely to use self-employment to balance work and family life. Mothers use self-employment to be there for their children and husband. Of the same view, Bianchi and Milkei (2010) found that mothers, due to their balancing family roles and work demands, are more likely to be self-employed as this allows them to balance the two while earning higher incomes.

Parker, (2005), who looked at entrepreneurship among married couples in the United States using the probit model, found that, due to the knowledge the other partner has, the chances of both of them forming a company together are very high. Sikon and Evans (2009) noted that if a married man is into business, the chances are very high that even the wife will either help her husband in business or start something new through the help of her husband to keep income flowing in.

In the same vein, Greene (2000) studied self-employment as an economic behaviour by analysing self-employment of women's human and social capital endowments. Greene's conclusion was that having a self-employed husband increases the probability of the wife becoming self-employed because the husband will provide capital, pertinent advice and moral support.

In summary, all these scholars suggest that the relationship between marriage and self-employment is positive. They advocate that partners influence each other's occupational decision. They assert that once a woman is married she will join self-employment in order to balance home life and earnings whereas men only become self-employed to advance their career.

3.3.6 Education

Prior studies which probed the determinants of self-employment have produced inconclusive results with regards to the effects of educational attainment on self-employment. Research like that of Arum and Muller, (2004) suggests that education contributes greatly to the likelihood of professional self-employment. They argue that education gives an individual a perspective on what is needed to run a successful business. On the other hand, Smith (2004) argues that education without wealth constrains self-employment.

Joonas and Wadensjö, (2011) add that it is unlikely for an educated person to become self-employed because the market pays competitive rates for skilled individuals or professionals. With these two views in mind, in this section I will explore what other academics have found with regard to the educational effect of self-employment.

According to Garter (1998), education plays a fundamental role in determining self-employment. The European Commission, (2006) also acknowledged that high levels of entrepreneurship can be attained through education. In the analysis of Sikora and Evans (2009), investigating self-employment and rewards in 33 countries, they suggest that self-employment is influenced by educational levels. They however acknowledge this may only be true in some countries, as determinants vary from country to country.

Miles, (1997) investigated the determinants of income and consumption at the household level and pointed out that in occupational choice decisions, the uncertainty, educational levels and location matters. Education as a measure of a group's human capital investment significantly affected self-employment because education attained provided an individual with the skills needed to start a business (Smith, 2004).

Borjas (1986) anchored these findings of Smith by suggesting that there exists a significant and positive relationship between self-employment and education. He maintained that higher levels of education equip an individual with the skills needed to run and manage a successful business.

Koellinger, (2008) acknowledged education as being the key factor in entrepreneurship innovation. He outlined that higher levels of education enabled an individual to establish him/herself under difficult market conditions and therefore to spot gaps that exist within the market. Klandt, (1998) also asserted that education is important in the decision on occupational choice because it increases the supply of well-educated entrepreneurs that have much needed skills to make their businesses successful. He further added that education not only provides technical specialist skills to entrepreneurs but also enhances their interpersonal, management and business skills.

When investigating who China's entrepreneurs are, using data from 2003-2004 to examine the characteristics of entrepreneurs in Russia, Djankov *et al.*, (2006) found when comparing entrepreneurs in China and Russia that entrepreneurs in China and Russia are more willing to take risks and are upwardly mobile. They found that parents in these two countries are highly educated or have family members who are more educated and as a result they are more willing to trade their leisure money for business capital.

Djankov *et al.*, (2006), and De Mel, McKenzie and Woodruff (2010) who investigated who the microenterprise owners are in Sri Lanka, using data from 2005 – 2007, found that the self-employed were older, more educated and had parents who were highly educated and lived in wealthier households.

Among contributing factors, age, level of education, marital status, gender, ethnic background and unemployment experience has been found to impact tremendously. Mandelman and Montes-Rojas, (2009) focused on whether self-employment and micro-entrepreneurship was a desired outcome in Argentina using a probit model. They found that education and age have an impact on determining self-employment.

They point out that the threshold level of education that minimised the probability of a salaried worker becoming an entrepreneur roughly corresponds to 8 years of schooling (incomplete secondary school). Moreover, they found out that the older an educated person got, the more they found self-employment attractive.

According to Parker and Van Praag (2005), additional years of schooling increase the probability of being self-employed due to the fact that additional years of schooling are associated with lower capital constraints. This is true in the sense that highly educated people are well-off and have capital due to their past working experience. Wadhwa *et al.*, (2009) assert that additional years of schooling increase the probability of being self-employed.

Carr, (1996) stated that a university education increased the chances of an individual wanting to be self-employed as opposed to wanting to join their counterparts in being employed by organisations. Adding to his findings, Carr suggested that men and women with more than four years of university education are three times more likely to be self-employed than to be a wage earner.

Contrary to this notion, investigating ethnicity and entrepreneurship in America and trying to explain racial and ethnic group variations in self-employment, Butler and Herring (1999) found that increasing levels of education do not influence the probability of being self-employed for blacks. He says the significant relationship only applies to whites.

African Americans that are highly educated are more likely to work for salaried jobs in big organisations to take advantage of high earnings, stable jobs and retirement benefits. Smith, (2014) argued that blacks with degrees were more likely to be self-employed.

In a study titled: “black wealth/white wealth: a new perspective on racial equality”, Oliver and Shapiro (1997) redirected our minds to the historically disadvantaged blacks. According to their perspective, blacks (as defined by the BEE code) are from poor working class backgrounds and therefore having a social responsibility to care for their families and relatives, which makes it difficult for them to incur the start-up costs.

These social obligations make one seek a secure job not self-employment. They further posit that higher educational attainment does not get rid of their social responsibilities and the problem of lack of wealth.

3.3.7 Pecuniary and non-pecuniary benefits

The theoretical review explored the non-pecuniary benefits of self-employment which propounded that individuals do not only place their interests on monetary benefits alone but also on non-pecuniary benefits. Arum and Muller (2004) argued that individuals become self-employed if the benefits – which include pecuniary and non-pecuniary – are greater than those of being employed. According to the theory reviewed in chapter two, individuals do not care about income alone; other factors such as social benefit and personal wellbeing that come with the job play a crucial role.

The decision to stay employed or be self-employed will rest on those benefits. It is therefore imperative that we investigate if researchers have found empirical evidence in support of the above-mentioned theoretical perspectives.

Evans and Leighton, (1989) posited that a decision to become self-employed is mostly motivated by psychological and social factors. Maslow's hierarchy of needs theory, the theory of job satisfaction, the disadvantage theory and others all concur with empirical findings that suggest self-employment is motivated by psychological and social factors.

Factors that were pointed out in the literature as the cause of self-employment include: dissatisfaction with paid employment, unfavourable working conditions, government incentives, lack of career, happiness, a feeling of security, and pursuit of independence. All of these lead to an increase in self-employment.

Supporting this view, studies by non-economist researchers such as Joonas and Wadensjö, (2011) investigating the best and the brightest or the least successful in Sweden show that psychological factors such as need for achievement, internal locus of control, above average risk-taking propensity and tolerance of ambiguity are assumed to be the main determinants of self-employment. Some are just self-employed because they want to reduce discrimination in the mainstream of the economy.

Investigating self-employment among African-American examining human capital, Smith (2004) found that being self-employed enhances the well-being of an individual and also improves their status. In as much as the conventional notion among scholars is that career decision is influenced by social and psychological factors, it would be naïve to remove the monetary benefits from the equation. According to Hamilton, (2000) earnings are the most important aspect of job satisfaction of an employee. The decision to be self-employed or work for an organisation will depend largely on the earnings each offers.

Burke and Fraser (2011), suggest that the choice of becoming self-employed is motivated more by the earnings the self-employed get. Hamilton (2000) checking the earnings difference, found that even though it is difficult to measure self-employed earnings, they are well represented among the top earners. Further, Shore (1998) asserts that, because of low wages and inadequate family benefits in salaried work, individuals will want to obtain higher earnings in the self-employed sector.

3.3.8 Age

Empirically, the relationship between age and self-employment is not clear as literature available on the subject yield two strands. The first strand suggests that there exist a positive and significant relationship between self-employment and age depicting that self-employment is more likely to be undertaken by older people.

By contrast, the second strand suggests that given the incentives by government to promote self-employment among the youth, self-employment is highly likely to be undertaken by younger people. This section therefore seeks to confirm these findings in the literature by specifically investigating age as a determinant of self-employment.

In regard to the first strand, earlier studies advocated that there existed a positive and significant relationship between self-employment and age. Kidd, (1993) posited that age reflects the wealth of an individual therefore when an individual is older they have

enough wealth to use to start a business. Blanchflower and Meyer, (1994) found in Australia and United States that self-employment probabilities increased with age.

Camasco, (1999) found that people switched to self-employment between the age of 35 and 45 while it decreased for those over 55. Analysing self-employment entry, Bates (1995) asserts that the likelihood of self-employment entry increased with age and peaked at age 40.

The recent studies also depicted this positive relationship between self-employment and age. Blanchflower, (2000) examined self-employment in OECD countries found that the older the person gets, the more likely he/she is to be self-employed. Cowling *et al.*, (2004) in UK concurred with these findings by also establishing a positive relationship between the chances of being self-employed and age. Hochguertel (2005) studied self-employment around retirement age in Europe, found that the chances of self-employment increases with age. This view is supported by Blanchflower and Hochguertel (2005) and Georgollis and Walls (2005) who found that in Germany individuals are more likely to venture into self-employment at 49 years old age because they view self-employment as alternative to retirement.

Zissimopoulos and Karoly, (2005) found that chances of younger people venturing into self-employment are very low. Amaral and Baptista, (2006) in Portugal also found that self-employment entry increases with age. They assert that chances are much higher when an individual is around 50 years of age. Henley, (2007) in Britain found that probability of being self-employed peaked at the age 34. Confirming these findings also, Livanos (2009) also found that as the person grows older he/she is inclined to become self-employed.

Dawson *et al.*, (2009) questioned why individuals chose to be self-employed in United Kingdom and found that, older people, men, the disabled, and immigrants who own a house have high chances of being self-employed. Sikona and Evans, (2009)

investigating self-employment and rewards in 33 countries suggested that, with some people, self-employment peaked later in life when they are about to retire. Self-employment is shown to increase with age for both blacks and whites. Both mid and older aged people are more likely to be self-employed.

According to Holtz-Eakin (1994), the decision to be self-employed is associated with risks. He asserts that attitudes toward risk taking are associated with an individual's age and younger people are risk averse.

This view is contradicted by the findings of Arenius and Minniti (2005) using sample from Mexico and UK, suggested that younger people are more prone to being self-employed as opposed to the older ones. Hence there is mixed findings regarding age as an influence on self-employment.

3.4 South African perspective

The previous sections of this chapter discussed self-employment in a broad context by considering international empirical evidence underpinning the study. This subsection however, considers the determinants of self-employment relative to being a wage earner within the South African economy. It provides a detailed account of the available literature on why South Africans prefer self-employment as opposed to being wage earners.

According to Kinunda-Rutashubya (1999), entrepreneurial activities differ from one country to the next due to a country's history, political environment, law and the regulatory framework, policies, state interference in the economy, socio-cultural sectors and formal and informal socio-economic institutions. Supporting this view, Ahwireng-Obey and Piaray (1999) propounded that in South Africa, history, and the apartheid system in particular have instilled an anti-entrepreneurial culture, especially among blacks.

Preisendörfer and Britz, (2011) found that compared to other ethnic groups, the South African black population's rate of participation in entrepreneurial activity is very low.

The GEM report for South Africa (2002) also showed that blacks and the coloured population are not active in entrepreneurial activities.

Preisendörfer *et al.*, (2011) further showed that whites and Indians/Asians were three to five times more active in self-employment compared to the black and coloured population, due to the fact that the latter were previously disadvantaged. Mitchell, (2007) investigating ethnic entrepreneurs in a developing country noted that black entrepreneurs venture into self-employment solely for money whereas Indian and white self-employed individuals venture into business in order to be independent.

In South Africa, Co (2003) found that during the apartheid regime there were about 500 laws and regulations which prohibited black South Africans from becoming entrepreneurs.

Major laws such as the master and servant act (1911), the mines and works act (1911), the native resettlement act (1945), and regulations governing black business in urban areas (1962) were passed to impede black South Africans who wanted to be self-employed. Godsell (1991), investigating the social networks of South African entrepreneurs found that obtaining a business permit in South Africa was the key hindrance blacks faced.

It is for that reason that Bank (1994) found that spaza shops in townships were probably the only sort of businesses that black South Africans could venture into. These black-owned spaza shops were prone to theft and attacks by white entrepreneurs and policemen. Because there were no role models for blacks entrepreneurs, graduates were not motivated to venture into business. They preferred to join the industrial and civil service sector where there were fewer raids and intimidation by the policemen.

Malagas, (2002) and Babo, (2005) found that involvement in entrepreneurial activities among blacks is still low and even if they start businesses, they start a very small business. The majority of black-owned businesses are “survivalist”, meaning they are

very small and they only exist to serve one family (Klenzie *et al.*, 2000; Woodward *et al.*, 2011). According to Preisendörfer *et al.*, (2011), many start-ups in South Africa are part-time projects run by people who are engaged in full time salaried jobs and have no intention of hiring employees or striving for growth hence most of them are not registered.

According to International Finance Corporation, (2006) since women make up the majority (52%) of the population the government and private sectors should take them into consideration when formulating policies. In the past, women's role was confined to that of being housewives, involved in cooking, cleaning and bearing children. However, recently, the recognition of women as potential entrepreneurs has increased tremendously and has been extensively documented. Over the last twenty years, women have used political gain to participate actively in society, for example, 43 percent of national cabinet ministers and 37 percent of our parliament comprise females and perhaps similar trends might be visible in the private sector (IFC, 2006).

Coming back to the determinants of self-employment in South Africa, Klerman *et al* (1999) show that salaried jobs have negative effects on mothers. Carr (1996), Dunn and Holtz-Eakin (1995) documented that the presence of children in a home increases the likelihood of a female becoming self-employed. The South African equality and human rights commission (2008) argues that self-employment enables women to balance their careers (have flexible working hours) and their family duties.

The trend and culture of long-hours and always being present discourages women (and men) who want to both work and raise a family, hence they decide to venture into business for flexible working hours. Belkin, (2003) suggests that women are exiting the formal sector, seeking to articulate 'competing devotions' in order to better combine the multi-faceted world of home, family and careers.

Stone, (2007) asserts that the reason women opt out of formal employment is because of organisational cultures which are frustrating because they are expected to be present every day and to work long hours in and out of the office. Being frustrated, and

discontentment with working long hours are factors behind the decision to move into self-employment, according to Heilman and Chen (2003).

Among key factors influencing self-employment in South Africa is the idea of being “own boss”. Given the past labour force experience, people who want to stand on their own to better their standard of living, gain autonomy and have status as entrepreneurs are known to be on the higher end of income distribution (Preisendörfer *et al.*, 2011).

He further notes that some become self-employed in South Africa because they like the lifestyle of business people, higher club affiliation and higher earnings. By contrast, Bargain and Kwenda (2011) contend that because of legal formal sector requirements such as minimum wage and greater unionisation which may push up formal sector wages, salaried workers earn more than those in self-employment.

According to Fields (1975), wage earners become self-employed because they want to escape unemployment due to the lack of employment opportunities in the formal sector. Long periods of unemployment lead individuals to coming up with alternative sources of income, one of which will be to be self-employed. He also states that the second reason may too due to being retrenched from the formal sector.

Because of social and economic commitments, one will become self-employed to maintain the same standard of living. Adding to this traditional view, Maloney (1999) suggests that we need to also acknowledge the fact that people may become self-employed due to personal preferences, skills endowment and higher earnings.

The empirical literature also directs our focus to gender, age and networks in South Africa. With reference to black entrepreneurship in South Africa, Preisendörfer *et al.*, (2011) paints a picture that men are the ones that normally venture into business rather than women. They also found that most entrepreneurs are middle aged (30-45 years) and their level of education is above average, demonstrating the positive influence of age in the self-employment career decision.

Singh, (2000) advocates that personal networks are the most important resources for the business. If you are connected in South Africa the chances of your business

becoming successful are very high as connections open doors for you, especially political connections.

3.5 Conclusion

This chapter undertook a detailed discussion of the determinants of self-employment, looking at economic crises, labour force experience, networks and family background, taxes, family and spouse labour market, education, benefits and age as key determinants of self-employment.

Firstly, we learnt that self-employment is the key in any economy that intends to promote economic growth and eradicate unemployment. Secondly, empirical evidence suggested that self-employment is indeed motivated by economic crises, labour force experience, networks and family background, taxes, family and spouse labour market, education, benefits and age - all of which will serve as a guideline in the research design and interpretation of the results

Chapter 4 Research Methodology

4.1 Introduction

The preceding chapters provided an understanding of the determinants of self-employment relative to being a wage earner from both a theoretical and an empirical perspective. This chapter focuses on the research methodologies that were employed to gather the data and analyse the determinants of self-employment.

Section 4.3 of the chapter describes the sampling technique that was employed to collect the data from the black entrepreneurs and wage earners in Ladysmith. In particular, the section elucidates the procedures used in designing the instrument and data collection. Section 4.4 presents data collection and section 4.5 presents survey instruments used in this study.

Thereafter, section 4.6 of this chapter outlines the essential elements of the logistic regression model as well as providing a detailed description of the dichotomous

dependent variable (self-employed vs. wage earner) and the explanatory variables that were collected through the questionnaire-based interviews. Finally, the model's validation and diagnostic tests, which include the Wald statistics and Hosmer-Lemeshow tests, are briefly mentioned in section 4.9 of this chapter.

4.2 Demographic information

Demographic information reveals the quantifiable statistics of the population and the culture of the area. It gives us an indication of characteristics such as gender, age, ethnicity, languages, employment and status of the area. Understanding the demographics of the area gives the researcher an idea of what to expect and gives an insight into the household's structure (Power and Elliott, 2006).

The study probes the determinants of self-employment among black-entrepreneurs in Ladysmith, South Africa. Ladysmith comprises rural, semi-rural, and urban areas within which black businesses are operating.

The researcher chose Ladysmith because he was born and brought up there and also because the town has been declared an economic hub of the northern central part of the KwaZulu-Natal province that is ideally located as a halfway stop between Gauteng and Durban, thus providing essential transport-related and warehousing services.

Ladysmith, also known as Emnambithi, is a town strategically located at the intersection of two major national development corridors and trade routes, namely, the N11 which runs in a north-south direction linking KwaZulu-Natal with Mpumalanga Province, and The N3 which runs in an east-west direction linking Durban (230 KM) and Johannesburg (365 KM) Metropolitan areas. Ladysmith rests on the open flood-planes of the Klip River in the foothills of the mighty Drakensberg, UKhahlamba. The town forms the heart of KwaZulu Natal's "Kingdom of the Zulus" (Ladysmith Chamber of Commerce, 2013).



Figure 1: Ladysmith Map

Ladysmith was proclaimed in June 1850 and officially named Ladysmith later that year. The town is made up of 27 wards with thirteen of those being rural wards, some of which are still under the administration of the traditional authorities. Ladysmith forms part of UThukela district which is one of the ten district municipalities in KwaZulu-Natal.

It serves as the main economic hub of the UThukela district municipality with most of the regional offices and industries located within it. Ladysmith covers an area of 3020 km², of which 70% is classified as rural with limited basic services and infrastructure (IDP; 2014).

The town is known for its tyre manufacturing, processed food, tourism, textile production and was recently classified in the Provincial Growth and Development Strategy as the economic hub for KwaZulu Natal. Ladysmith has several industrial areas such as Dranskral located to the north-east, Acaciavale, Colenso, and the largest, the Ithala Industrial estate, located in Ezakheni.

The town also has colleges such as TVET colleges, ICESA, Boston, and PC Training College. Ladysmith comprises three main sectors, namely, agriculture, manufacturing and service. The service sector in particular is quite diverse and comprises banking, consulting, retail, restaurant, accommodation and transport. There are 124 businesses (owned by all races) in Ladysmith that are registered with the Ladysmith Chamber of

Commerce. These are well-established successful older businesses while most of other types remain unregistered. The town has three official business chambers namely; Ladysmith chamber (white dominated) which is more focussed on well established businesses, Emnambithi Chamber which focuses on black businesses and lastly the Informal Traders' Chamber focusing on informal enterprises.

The town has a total population of 237 437, 34 per cent of whom are not employed, thus pushing many of them to emigrate to other cities like Durban, Pietermaritzburg and Gauteng to look for jobs and to study in tertiary institutions (Statistics SA, 2011).

According to Statistics SA (2011), 43.4% of youth in Ladysmith between the ages of 15-34 years old are unemployed. In terms of education, 8.1 per cent of the total population never attended school, 39.9 per cent completed matric and 9 per cent went to higher education. From the statistics above, one can see that the issue of unemployment and inequality is still a serious challenge in Ladysmith. Therefore, promoting self-employment could eradicate these challenges.

4.3 Sampling Design

To investigate the determinants of self-employment relative to being a wage earner in Ladysmith, the sampling method needs to be carefully selected to ensure that our results give us a true reflection of the relationships between the dependent and independent variables free of bias. The sampling method needs to ensure that the targeted group is reached.

Sampling can be defined as the process of selecting units like people or organizations for example from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen. It is a representation of the general population (William, 2006).

From the definition above, we can see that sampling plays a vital role in data collection process. Instead of assessing the whole population, sampling enables us to select a representation and saves us time and resources.

Sampling methods can either be probability or non-probability and this study used both probability and non-probability sampling method.

The non-probability sampling methods can be divided into two broader types: accidental sampling (which include haphazard and convenience sampling) and purposive sampling (modal instance sampling, expert, quota and snowball sampling). For the purpose of this study, convenience and snow ball sampling method was used in township areas (mentioned below) that were widely spread out and no records were available as to the number and type of businesses in order to assist the researcher to locate all the targeted entrepreneurs, in the CBDs and other business areas where there were a high concentration of businesses every effort was made to target the entire population of black owned businesses. The systematic random sampling method was used to locate the gainfully employed in Ladysmith.

Convenience sampling is a sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher while snowball sampling method is used by researchers to identify potential subjects in studies where subjects are hard to locate.

According to Joseph (1978), snow ball sampling technique works like chain referral where the researcher asks the subject to nominate another person with same traits as the next subject. In this study, a sample of 450 was interviewed through the use of questionnaires. The questionnaires were managed by the researcher and three research assistants. The questionnaires were designed by the researcher in consultation with the supervisor and they were approved by the University Ethic Committee (see appendix B) in August 2014. From the 450 interviewed, 33.6% were self-employed and 66.4% were gainfully employed. For the self-employed, the study focused on both the formal and informal businesses.

Before the actual study, a pilot study was conducted in September 2014 among the Zululand University staff (both academic and non-academic salary earners) with differing education levels - ranging from primary school to Master's Degrees - and owners of small businesses located within the campus grounds, to ensure that the

designed questionnaires were suitable for the study and they will provide meaningful results. The pilot study consisted of ten gainfully employed comprising 3 academics and 7 support staff – including 2 managers, 2 clerks, 3 cleaners, 1 driver and 1 maintenance person – and 5 self-employed stall holders. The respondents in this pilot study were deliberately selected in this manner to serve as a reasonable reflection of society. This pilot study helped the researcher to refine the questions in a manner that ensured that the interpretation of the questions was consistent with the expectations of the researcher so that appropriate responses will be had that is relevant to the study's research objectives.

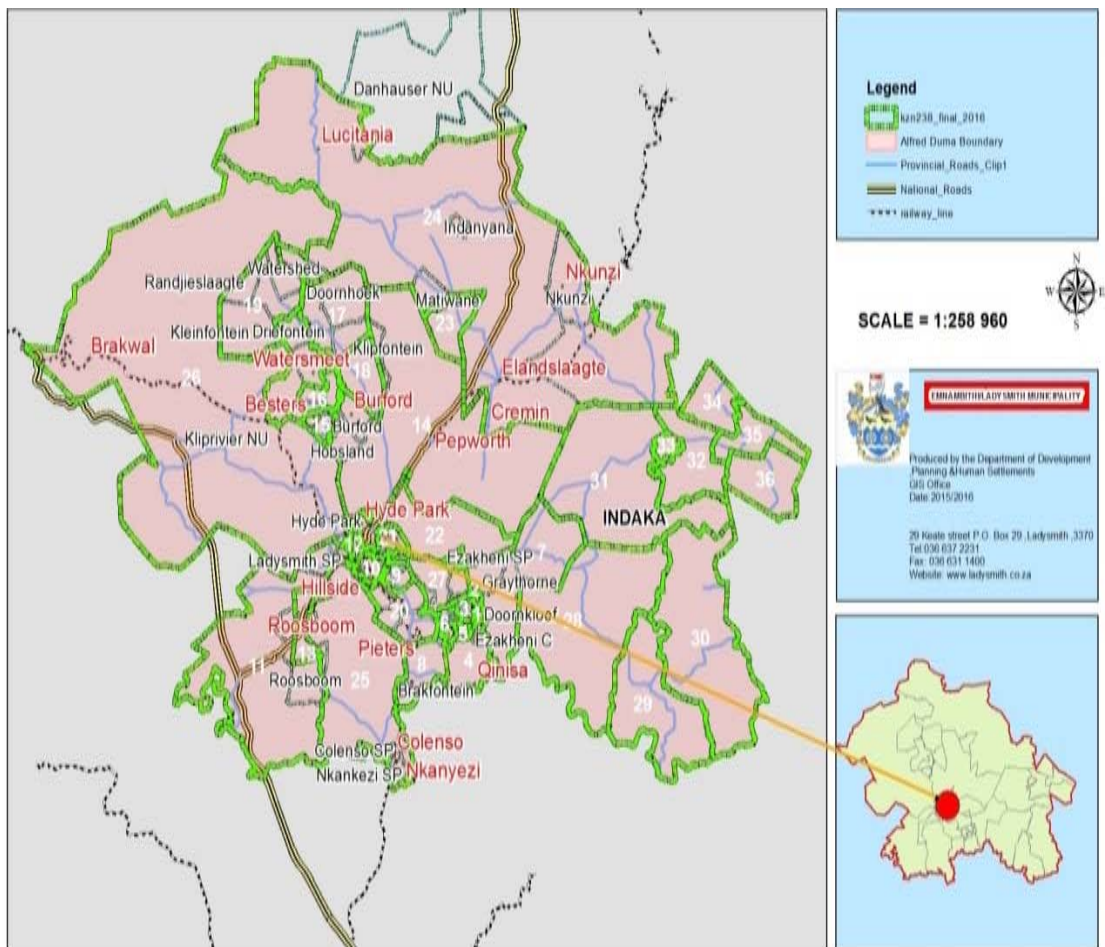


Figure 2: Ladysmith wards map

With reference to the map the study focused on 9 of the 27 wards. The nine wards selected constituted 2 urban, 5 townships and 2 rural areas located within Ladysmith. The selected wards within Ladysmith consisted of mainly low and middle income people. Wards 10 (town) and 4 (Ezakhani D) constitutes the CBD where a mixture of businesses owned by blacks, Indians, whites and foreigners exists. In this sub-area the researcher targeted the entire population of black owned businesses (ie., those businesses where the entrepreneur's mother tongue is one of the South African Nguni languages). Within the CBD, the study targeted all black barbershops, caterers, security, retailers, manufacturing and construction companies owned by blacks. Furthermore black professionals within the CBD (constituting 20% of the self-employed) such as doctors, accountants, lawyers and optometrists were interviewed following both the convenience and snowball sampling techniques. Note that although convenient and snowball sampling techniques were used to identify businesses, every effort was made to target the entire population of black businesses in the CBDs, for example, when a questionnaire was administered the researcher and his three assistants enquired about all the neighbouring businesses in order to seek out and approach the black owned ones.

Additionally ward 3, 9, 12, 13, 20, 22 and 26 contain the residential areas in which all possible businesses were identified and approached. Ward 3 (Ezakhani A) and 9 (Tsakane and Steadville) constitute of townships, ward 26 (Blue Bank and Watersmeet) and 13 (Roosboom) constitute of rural areas and ward 12 (Hospital Park), 20 (Accaicaville), 22 (Mkhamba Gardens and Limit hill) constitute of urban areas. The study used the snowball sampling method where the approached businesses were asked to provide a lead to other entrepreneurs they are aware of in the same locality. Here as well the researcher and his team attempt to target the entire population.

The study targeted spaza shops, salons, chisanyama's, liquor stores and companies in services sector based in all residential areas both rural, township and urban. Since the township and rural areas were quite spread out and businesses were scattered the researcher relied heavily on convenience and snowball sampling approaches, hence it was not possible to target the entire population in these areas.

To locate the gainfully employed, systematic random sampling method was employed. The main roads of these townships were randomly selected and every 5th street was chosen. In each selected street, every third house was selected for interview and in case they were not interested in participating, as highlighted in the instruction of the questionnaires, the next house was selected and the sequence was maintained. If the owner of the household was self-employed, he/she was added to the data of the self-employed while ensuring that such businesses were not double counted when business areas were specifically targeted. This study confined its analysis to the residential areas located in urban, rural and townships Ezakheni, Mkhamba Gardens, Tsakane, Accaicaville, hospital Park, Roosboom, Watersmeet Accaicaville and Blue Bank where the majority of black people live.

From our data, 50% was from urban areas, 30% from townships and 20% rural areas. This was done because people from urban areas are the most active in the economy followed by townships and lastly rural areas as reflected by the statistics on unemployment rates (Kamoche, 2002).

4.4 Data Collection

The data collection process started on the 2nd of October 2014 in Ladysmith. The data was first collected in the urban areas such as Mkhamba Gardens, Hospital Park, Accaicaville and Limit Hill than rolled out to semi-urban areas such as Ezakheni, Tsakane and Steadville. Later, data was collected in rural areas such Blue Bank, Roosboom and Watersmeet.

Face-to-face interviews were conducted through the use of questionnaires where the researcher and three assistants, working independently, asked the questions and indicated relevant section to be answered by the respondent. This was done while ensuring that respondents were not influenced in what responses to provide.

For those that chose to take questionnaires and answer them later, a week timeline was given before field-workers returned to collect the questionnaires.

There were two sets of questionnaires, one written in English and a second written in IsiZulu as Ladysmith is dominated by Zulu speaking people. Those who were comfortable with English even though they were Zulu speaking, were given English questionnaires.

The questionnaires were used because primary quantitative and qualitative data can easily be gathered, they are easy to administer and they allow confidentiality to be assured. Refer to Appendix B1 and B2 for both the English and isiZulu versions of the questionnaires.

It should be further noted that each administered questionnaire lasted approximately 15 to 30 minutes depending on the clarity that was needed. Informed consent was obtained from respondents before questionnaires were administered or left with them for filling in on their own. Respondents were made aware of the purpose of the research, the persons involved in the project, and their anonymity were assured under all circumstances inclusive of written reports and other forms of information dissemination. Furthermore, they were made aware that they could opt out of participating at any time and could desist from answering any question(s) they were not comfortable with. Additionally, they were also made aware there were no direct benefits accruing to them from participating in the research, save for the findings having benefits to society at large. Last, it was explained to them where the data would be stored and the person they could contact should they have any complaints or queries.

Three research assistants were selected to assist the researcher with data collection. The selection of assistants was based on their qualifications. A minimum qualification of an honours degree in Economics was required. Furthermore, prior to the collection of data, the field assistants underwent five days of training where work ethics were inculcated. Remaining neutral and not influencing the results was one of the key emphases during their training.

During the data collection, a total of 200 black entrepreneurs from all sectors were targeted but only 151 were interviewed - both those who were running start-ups and those who have been operating for at least five years.

Businesses that received government assistance were also included to check if maybe the increase in self-employment is caused by government assistance and also those involved in tender processes. Spaza shop owners located especially in rural areas were considered as self-employed and interviewed.

Furthermore, 350 gainfully employed people were targeted of which 299 were interviewed to get a sense as to why they preferred being employed to being self-employed. A person is classified as a wage earner/salaried worker if he/she is gainfully employed for at least one hour per day. Both government employees and private sector employees were interviewed in order to have an equal variation and fair view. The targeted age group was between the ages of 18 and 64 years old.

A self-employed respondent was required to answer section A which comprised background information and section B which was only relevant to self-employed. Gainfully employed respondents were also required to answer section A and Section C as it was relevant to them. It was not compulsory for respondents to fill in their names but, as noted above, they were required to sign and date the questionnaire. The data collection process took two months to complete, ending on the 29th of November 2014.

4.5 Survey Instrument

According to William (2011), a survey instrument is a tool used for obtaining data from respondents. This instrument can take the form of a questionnaire which presents a set of questions that address specific study objectives. The objectives of this study are to get an in-depth knowledge on the determinants of self-employment relative to being a wage earner within the Ladysmith ^^^^.

This study used a questionnaire to investigate the determinants of self-employment looking at age, education, gender, marital status, household income per capita, family business background, access to finance and risk propensity. The survey instrument was divided into three sections (section A,B and C). Section A covered the background information of the respondent.

From question 1- 14 factors such as age of the respondent, risk propensity, education background, aspirations, family income and marital status was asked so as to get as much information as quickly about the respondent. If a respondent was self-employed he/she was given a categorical ranking of (1) and if gainfully employed (0).

The second part (B) covered information about the self-employed respondents: the year of incorporation, the type of business, the current feeling towards being self-employed, reasons for being self-employed and the ownership of the business. The section focussed in on political connectedness and its influence on the issuing of tenders. These were used to measure perceptions around the issue of self-employment. The last section (C) was used to assess the views of the gainfully employed. It covered the information about the level of job satisfaction, income and reasons for not being self-employed.

The survey items (dependent variables) in this study were developed as a result of an analysis of previous studies, further engagement with field experts and a review of the literature. A gap in the knowledge regarding self-employment choices of black people in South Africa was the main motivation for conducting this research.

4.6 Model Specification

The study investigated the determinants of self-employment through the use of the logistic modelling technique as its primary focus. The logistic model has become the standard method of analysis where one describes the relationship between a binary response variable and one or more explanatory variables. The logistic regression is distinguished from the linear regression model in that the outcome (dependent) variable in a logistic regression is binary or dichotomous.

In this study self-employment was modelled as a dichotomous variable, since if the person was self-employed the variable was coded as 1 and if the person was a wage or salary earner the variable was coded as 0. The logistic model assesses what set of factors increases the probability of the dependent variable taking on a value of 1 (i.e., becoming self-employed).

In other words, the logistic regression was employed to determine how a set of independent variables predicts an increase in the probability of a working age black person residing in Ladysmith opting for self-employment.

There are three commonly used methods to analyse binary response data, namely, the probit model, discriminant analysis and logistic regression model. According to Prentice (1976), the probit model is more focussed on integral transformation but its disadvantage is that the model lacks natural interpretations of regression parameters. The discriminant analysis on the other hand assumes that the predictor variables are normally distributed and variables jointly assume a multivariate normal distribution. Since the discriminant analyses assumptions are violated due to the variables of this study being dichotomous, we are left with the logistic regression model as the suitable modelling procedure. This section will describe the logistic model and outline the applicability of logistic modelling to this study.

According to Kleinbaum and Klein (2010), logistic regression model is a statistical technique used to estimate the probability of a binary response based on one or more predictor variables. It is a model commonly used to predict a categorical dependent variable. The logistic regression model measures the relationship between the categorical dependent variable and one or more independent variables by estimating probabilities using a logit function (Kleinbaum and Klein, 2010). The model uses one or more predictor variables that may be either continuous or categorical. In the logit model a dependent variable is categorical.

Prentice, (1976) further defines logistic modelling as a tool used to study the association between dichotomous variables. The method takes into account factors that may confound the association and leads to a quantitative study of the influence of factors which are related to the strength of the association.

A logistic regression can take a binomial, ordinal or multinomial form. This study only focussed on the binary logistic regression where the observed outcomes for the dependent variable had only two possible types, “self-employed and employed”.

As noted above, self-employed is coded as “1” and employed “0” as this leads to the most accurate interpretation and is considered as an appropriate model for dichotomous data (Kleinbaum and Klein, 2010). The logistic regression model is an appropriate technique for evaluating self-employment because of its useful mathematical features which enable one to analyse two categories in terms of probabilistic outcomes.

Furthermore, using the logistic regression model is advantageous because it does not impose the assumption of normality on predictors (Duda and Schmidt, 2010). Since self-employment is dichotomous in nature, logistic regression will identify factors that contribute to being self-employed.

Muchabaiwa (2002) identifies the following as the logistic regression assumptions:

- The error terms have a mean of zero and variance of $\pi(x)[1-\pi(x)]$.
- The conditional mean of the regression equation is greater or equal to 0 and less than or equal to 1.
- The principles of linear regression applies but the difference is only that the equation will be modelling the log odds and not the actual relationship among variables.

What has made this model a popular modelling technique when analysing binary dependent variables is that the logistic function ranges between zero and one, giving us a meaningful prediction. In the case of this study, to estimate the probability of being self-employed relative to being a wage earner, we will compute what is known as the “odds ratio”, the only measure of association directly estimated from the logistic model, regardless of the study design.

Kleinbaum and Klein, (2010) define the “odds ratio” as the ratio of the probability that some event will occur (a person will be self-employed) over the probability that the same event will not occur (they will be gainfully employed). According to Kupper and Kleinbaum (2008), the odds ratio is used to quantify the relationship between the dichotomous dependent variable and the predictor variable.

The odds ratio is a ratio of two odds, written as $odds_1$ divided by $odds_0$, in which the subscripts indicate two individuals or two groups of individuals being compared. The term “individual” in this study does not refer to a human being but rather to a statistical population which measures any set of entities, whether living or inanimate.

The odds ratio is the primary parameter estimated when fitting a logistic regression model (Kleinbalim and Klein, 2010). According to Szumilas (2010), the odds ratio can be used to compare the relative odds of the occurrence outcome of interest given exposure to the variable of interest.

One of the attractive properties of logistic regression is the constancy of the odds ratio (Gould, 2000). In the case of this study, we are comparing the self-employed group versus the gainfully employed. Notationally, the odds ratio of self-employed can be denoted as d_1 and the gainfully employed as d_0 .

Mathematically, odds are the ratio of probability that an event occurs divided by the probability that the event does not occur. The odds can be represented by the following statistical formula:

$$\text{Odds} = \frac{P(\text{Self-employed})}{P(\text{Employed})} = \frac{P_i}{1-P_i} \quad 4.1$$

Where, P_i denotes the probability of the event of interest and $1 - P_i$ denotes the probability of the opposite event of interest. To get the odds of occurrence for example, suppose P_i is equal to 0.50 and $1 - P_i$, which is the probability of the opposite event, is also 0.50, then the odds are 0.50 divided by 0.50 or, simply put, $\frac{1}{2}$. This simply means there is a fifty per cent chance that the event of interest will occur.

To compute the odds ratio we then have to compare two groups, which in this case are the self-employed group (1) and the gainfully employed group (2). The first formula (p_1) represents the first group, the self-employed, and P_2 the group of the gainfully employed. This formula can be expressed mathematically as follows:

$$\text{Odds ratio} = \frac{\frac{P_1}{1-p_1}}{\frac{P_2}{1-p_2}} \quad 4.2$$

An odds ratio is calculated by dividing the odds in the treated group or exposed group by the odds in the control group. We divide the odds (P1) by the second odds (P2). If the odds ratio value is greater than one, it indicates that the odds of the outcome to occur in group one is greater than in group two. Simply put, there is a higher probability that the event might occur in group one than in group two (Kleinbaum and Klein, 2010).

According to Muchabaiwa (2013), the odds ratio has a minimum value of zero but has no upper limit. A value less than one signifies that the case is not likely to happen, given the circumstances, and a value greater than one indicates a high possibility of belonging to that group. The further the odds ratio is from one, the stronger the relationship.

In the case of this study, for example - given the independent variables- if the odds ratio value is greater than one, it means there is a greater possibility that the person will be self-employed than gainfully employed. The opposite is also true. If the odds ratio is less than one, we can expect the opposite to occur; people will choose to be gainfully employed over being self-employed. What is worth noting in this section is that the odds of an event range between zero and positive infinity.

Having explained the relevance and role of the odds ratio in the logistic regression, what remains is to distinguish between the logistic regression and standard linear regression and its applicability to this study. By definition, the standard linear regression is an approach used for modelling the relationship between dependent variable Y and one or more explanatory variables denoted as X (Cohen *et al*, 2003).

The linear regression is applicable if the dependent variable is continuous, independent and identically distributed. In the case where the dependent variable is categorical, the linear regression is not appropriate and we apply logistic regression (Dayton, 1992). The categories are coded as “1” and the other group, also known as a “non-case”, is coded as “0” (Prempeh, 2009).

The reason why we cannot use the linear regression model when the variables are dichotomous is that the dependent variable should be normally distributed, the values should be able to take negative values, and the error term in the linear regression should be independent and identically distributed (Dayton,1992). The logistic regression is used to find the best fitting and most economical and yet sensible model to assess the relationship between a response variable and at least one independent variable (AL-Ghamdi, 2010).

The linear regression as explained above must be continuous whereas in the logistic regression the outcome (dependent variable) has only a limited number of possible values. According to Hellevik (2007), the linear model assumes that the probability P is a linear function of the regressor while the logistic model assumes that the natural log of the odds $P_i/(1-P_i)$ is a linear function of the regressor.

Mathematically, the standard linear regression equation looks similar to the logistic equation. The linear regression can be expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k \tag{4.3}$$

Where Y is the continuous (dependent) variable, β_0 is the coefficient of the constant term, and X_1, X_2, X_3 and X_k are the independent variables, while β_i measures the unit change Y due to the corresponding X_i .

In the logistic regression however, the equation is slightly different as it is designed to accommodate or analyse the dichotomous data. We use a full data set to establish the probability. Since the variables of interest in this study are dichotomous, we will employ the logistic regression model.

The logistic regression model can be expressed mathematically as follows:

$$\ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} \dots, \dots, + \beta_k x_{ki} \tag{4.4}$$

where $(Y_i = 1) = 1 - P(Y_i = 0)$,

$P(Y_i = 1)$, $P(Y_i = 0)$ is the probability of being self-employed and gainfully employed of an observation i ,

respectively.

β_0 = log-odds when all x_{ji} are 0

$\beta_1 x_{1i}$ = increase in log-odds when x_{1i} is increased by one unit, $j=1, \dots, k$

e^{β_j} = increase in odds when x_{ji} is increased by one unit, $j=1, \dots, K$

The objective of this study was to find the determinants of self-employment relative to being a wage earner in the black community of Ladysmith, KwaZulu Natal. To accomplish that, a questionnaire was designed which had three sections (a) focusing on background information of the respondents, (b) questions addressed to the self-employed and (c) questions addressed to the gainfully employed. This questionnaire took a dichotomous approach where Y in the logistic formula represented the categorical (dependent variable) and X the independent variables. The self-employed took the value of one and gainfully employed the value of zero.

This study considered possible factors that may contribute to a career shift between self-employment and being gainfully employed. Among those factors explored is the influence of economic crises, education levels and other relevant factors as described in Table 4.8.

In this study the logistic model considered the log odd $\ln(p_i/1-p_i)$ of a person being self-employed as a function of a set of independent variables. The coefficients in the logistic regression model register the effect on the log odds of a little change in the independent variables (AL-Ghamdi, 2010).

In order to understand the multiple macro and micro factors that contribute to one choosing to be self-employed over being a wage earner, we explored several variables. We explored these factors because of the possibility that they may enhance or decrease the possibility of one choosing to be self-employed over being a wage earner.

In order to analyse the detailed effect of different variables on self-employment a logistic regression model was developed.

The logistic regression model includes all the variables of interest based on the theoretical and empirical evidence underpinning the study. This model mathematically can be expressed as:

$$\ln\left(\frac{p_i}{1-p_i}\right) = \beta^1 + \beta^2 EDU + \beta^3 AGE + \beta^4 GEN + \beta^5 HIP + \beta^6 MS + \beta^7 AR + \beta^8 FBB + \beta^9 AC + U_i \dots \dots \dots \quad 4.5$$

where:

Ln is the natural logarithm

P_i is the probability that event $Y_i = 1$ which is self-employment, occurs as a result of the X_i factors

$1-P_i$ is the probability that event $Y_i = 0$ occurs or alternatively, $Y_i \neq 1$ does not occur which is being gainfully employed

$\beta^1 =$ is the coefficient of the constant term.

EDU refers to the highest level of education achieved by the respondent, while β^2 is interpreted as the log-odds of a person becoming self-employed when their education attainment increases by one year. We expect $\beta^2 > 0$ ie., more- educated people are likely to open their own businesses or professional practices.

AGE Refers to the Individual's age, while β^3 is interpreted as the log-odds of a person becoming self-employed when their age increases by one year. We expect $\beta^3 > 0$ ie., older people are more likely to open their own businesses/practices.

GEN looks at whether the person is male or female, while β^4 is interpreted as the log- the odds of a female person becoming self-employed increases by one percent. We expect $\beta^4 > 0$ ie., females are more likely to be self-employed.

HIP look at the average monthly income for the household, while β^5 is interpreted as the log-odds of a person becoming self-employed when their income increases by one percent. We expect $\beta^5 > 0$ ie., people are more likely to become self-employed when their income per capita increases by one percent.

MS looks at whether the person is married or not, while β^6 is interpreted as the log-odds of a married person becoming self-employed increases by one per cent. We expect $\beta^6 > 0$ ie., people are more likely to become self-employed if they are married.

AR Looks at attitude to risk, while β^7 is interpreted as the log-odds of a risk averse person becoming self-employed increases by one percent. We expect $\beta^7 > 0$ ie., People are more likely to become self-employed when they are not afraid of risks.

FBB Looks at family business background, while β^8 is interpreted as the log-odds of a person with family business background becoming self-employed increases by one per cent. We expect $\beta^8 > 0$ ie., people with a family business background to be self-employed.

AC Looks at access to finance, while β^9 is interpreted as log-odds of a person with access to finance becoming self-employed increases by one per cent. We expect $\beta^9 > 0$ ie., people with access to finance to be self-employed.

Ui Error term.

4.7 Variable Measures

A person is classified as self-employed if he/she is running a profitable business. A business is considered profitable if it is able to sustain a household and has been in operation for at least five years. Employed ($Y=0$) means that a person is gainfully employed for at least one hour per day or five hours per week (statistics SA, 2013).

This study looks at nascent small-micro businesses, both formal and informal. By nascent we mean a business that is new and has been operating for five years or less. As per the national small business amendment act (26 of 2003) small-micro business is defined according to five categories established by original act, namely, standard

industrial sector and subsector, size of class, salaried workers, turnover and asset values. For the purposes of this study, however, we will consider a business with at least two employees and a total turnover of R50 000 per annum across all sectors.

4.8 List of Variables and Descriptive

Variables	Description of variables
Dependent Variable	
Self- Employed	1 if Self-Employed 0 if gainfully employed
Explanatory Variables	
Age	Refers to the Individual's age. The respondent had to write down the number of years they have lived.
Gender	Looks at whether the person is male or female. Gender was be treated as dichotomous (male =0 or female =1)
Education	Refers to the highest level achieved by the respondent. The first question checked the level of basic education and the last checked if the respondent had attended university than add the total number of years spent studying.
Household Income Per Capita	Looks at the average monthly income for the household. Household income per capita. The Household income per capita was coded as follows:

	1	0-800
	2	800-1 500
	3	1 500-3 000
	4	3 000-5 000
	5	5 000-10 000
	6	10 000-20 000
	7	20 000- more
Marital Status	Looks at whether the person is married or not .Marital status was coded 1 if married, 2 separated, 3 widowed, 4 single, and 5 if divorced.	
Family Business Background	Looks at family business background. The intention was to find if the respondent in their family they have any business. This variable was captured by asking a dichotomous question requiring a respondent to answer Yes (0) or No (1).	
Access to Finance	This variable seeks to find if the person who is self-employed had any challenges accessing start-up finances. This variable was coded Yes (0) and No (1).	
Attitude to Risk	This variable looks at the risk propensities of the respondent. There were two sets of questions, the first one was coded Yes (0) and No (1). The second one was coded : I definitely will (1) I might (2) Not sure (3)I might not (4) I definitely will not (5).	

4.9 Model Selection and Validation

The study sought to find the determinants of self-employment relative to being a wage earner in Ladysmith. To achieve that, we needed a model that will estimate the relationship, hence the selection of appropriate model becomes vital. Not only does the selection of the model become important but also the validation of the model. This section therefore discusses the process of model selection and validation of the model.

The key challenge when selecting the model is the selection of variables, as they decide the nature of your model. Since this study has dichotomous variables, the logistic model was selected as it can model the relationship. The motivation for selecting this model also came from previous studies whose point of interest was to find the determinants or factors contributing to one being self-employed. Williams and Horodnic (2015), who investigated self-employment within the European informal economy, and Faridi *et al* (2008) who assessed the determinants of self-employment in Pakistan employed logistic regressions in their respective studies.

Curl *et al* (2014), investigating why women in Pakistan are self-employed used this model as well. Ohlsson *et al* (2010), examining the self-employment of immigrants and natives in Sweden, as well as Beckhusen (2008), who investigated the employment transition among the self-employed during the great recession used the logistic model to model the relationship.

In the study "Are the low income self-employed poor?" by Bradbury in 1996, we also see the use of the logistic model, and ,again, when Curl *et al* (2014) investigated the gender differences in self-employment of older workers in the United States and New Zealand.

Other than the variables being dichotomous, what makes the logistic regression model attractive to use is the growing trend of using this model among scholars and professionals, especially in economics, the social sciences and medicine.

4.9.1 Logistic Regression Diagnostic Models and significant Observation

As alluded to in the previous section on how the study employs the logistic regression modelling technique, the remaining challenge is to explain the diagnostic models and tests that will be employed to cover the shortcomings of the model. The first priority will be to assess the 'goodness of fit', as it is imperative to know how effectively the model describes the response variable. Even though some may argue the importance of measuring the goodness of fit in the logistic regression, there are several reasons why we need to identify a valid model.

Firstly, there might be errors in the data capturing process. It is imperative therefore to assess the 'goodness of fit' as it will give us an indication if there was data error. Secondly, the assessment might reveal significant observations which might present the opportunity for us to study those observations. Lastly, influential data points may be badly skewed, leading to misleading results. For these reasons, several methods have been developed to assess the goodness of fit, such as the Hosmer-Lemeshow test which compares the predicted values against the actual of the depended variable, and the Wald statistic which serves as an F-statistic for the logistic regression model when all coefficients are jointly tested for being insignificant. Moreover, the Wald test is similar to a t-test when each individual β_i is tested for significance. These validity tests will be explained in depth in the following sections.

4.9.2 Hosmer- Lemeshow Test

Having explained the logistic model and its relevance to the overall study, the remaining challenge is to explain how we are going to assess the goodness fit of the logistic model. The goodness of fit helps us decide whether the model is correctly specified or not (Muchabaiwa, 2013).

According to Hosmer and Lemeshow, (2000) the most trusted and reliable measure of goodness of fit and consistency of the model with the data is the Hosmer-Lemeshow test. The Hosmer and Lemeshow test is the statistical test for goodness of fit for the logistic model.

The Hosmer and Lemeshow test was developed by David W Hosmer and Stanley Lemeshow. Similar to Chi-square goodness of fit, the Hosmer-Lemeshow test involves grouping the sample based on the percentiles of estimated probability (Hosmer and Lemeshow, 2000). It compares the predicted values against the actual values of the depended variables. The Hosmer and Lemeshow test follows a Chi-square distribution with 2 degrees of freedom (Muchabaiwa, 2013).

The Hosmer and Lemeshow test can be expressed by the following formula:

$$H = \sum_{g=1}^G ((O_g - E_g)^2) / N_g \pi_g (1 - \pi_g) \quad 4.6$$

where O_g , E_g , N_g , and π_g denote the observed events, expected events, observations, predicted risk for the g^{th} risk decile group, and G is the number of groups. The number of risk groups may be adjusted depending on how many fitted risks are determined by the model. This helps to avoid singular decile (Hosmer and Lemeshow, 2000).

A Hosmer -Lemeshow test rule of thumb suggests that a good fit model will have a small Hosmer - Lemeshow test statistic and a P-value that is greater than 0.05 (the significant level).

4.9.3 Wald statistic

Developed by statistician Abraham Wald, the Wald statistic is a tool used to assess the contribution of individual predictors in a given model. The Wald statistic, similar to the T-test in linear regression, is used to assess the significance of coefficients (Muchabaiwa, 2013) The Wald statistic can be computed by the following formula:

$$W_j = b_j / SE b_j \quad 4.7$$

Where b_j is the estimate of the coefficient of the independent variable X_i , $SE (b_j)$ is the standard error of B_j . The squared value of the Wald statistics as indicated below chi-square distributed with one degree of freedom (Rana, Midi, and Sarkar, 2010). According to Muchabaiwa (2013), the Wald statistic tests the following hypothesis:

$H_0: \beta_1 = 0$, for $l = 1, 2, \dots, P$ and

$H_1: \beta_1 \neq 0$, for $l = 1, 2, \dots, P$

Muchabaiwa, (2013) alludes that in the Wald Statistic, the null hypothesis is rejected if the P-value of the test is less than 0.05 (significant level). Coefficient with a P-value of the Wald statistic less than 0.05 implies that the variable is important in the model. The study which seeks to find the determinants of self-employment relative to being a wage earner will employ this test to assess the significance of coefficients.

The limitation of the study is related to the area of focus, group ethnicity targeted, and the sample size. The study was limited to the area of Ladysmith, KZN since the researcher is from the town and also due to time and budget constraints. The study only focussed on the black community due to the fact that they were previously disadvantaged and they are a majority. Lastly, the sample size was not big enough to draw a more generalised view on the determinants of self-employment.

4.10 Conclusion

This chapter commenced by outlining the methodology and research design employed in this study. It explained the demographics, sampling design, data collection methods, survey instrument and model specification. Since most of the data targeted the entire population in the CBD and other business centres and only in a minority of cases were convenience and snowball sampling designs used, one can conclude that the obtained sample is substantially randomised for the purposes of using parametric methods like logistic regressions.

The chapter further explained in detail the logistic regression modeling technique and gave an account of how logistic regression differs from the ordinary least squares regression. Statistical tools such as the Hosmer-Lemeshow test and Wald statistic were explained.

Chapter 5 Results Interpretation

5.1 Introduction

The theoretical and empirical literature reviews of chapters two and three assisted us in identifying the determinants of self-employment relative to being a wage earner which were then selected and defined in chapter four in order to study the phenomenon in Ladysmith, KwaZulu Natal (KZN). Chapter four also provided an outline of the research hypotheses to be investigated, the sampling design, the instrument used to gather the data and the logistic regression model employed to analyse the data.

The results of this study are presented in this chapter. Section 5.2 of this chapter presents the descriptive analysis results where variables such as gender, age, marital status, education, household income per capita, family business background and access to finance are reported and discussed in detail. Sections 5.3 and 5.4 present the results of the self-employed respondents and section 5.5 presents the findings of the gainfully employed respondents.

Thereafter, section 5.5 presents the interpretation of the logistic regression results and subsection 5.5.2.1 discusses the diagnostic test, the Hosmer-Lemeshow test, and subsection 5.5.2.2 provides the results of the Wald test conducted to test the goodness of fit and, lastly, section 5.5.3 presents the conclusion of the chapter.

We begin our results interpretation by presenting the descriptive statistics analysis followed by the logistic regression results.

5.2 Descriptive Analysis

In order to provide a broad view of the determinants of self-employment relative to being a wage earner in Ladysmith, I begin the descriptive analysis by reporting how the sample was distributed throughout the two different occupations, namely the self-employed and gainfully employed.

For the purpose of this study, a self-employed person is defined as one who is running a profitable registered business, while a gainfully employed person is defined as one who is employed for at least one hour per day or five hours per week. The abbreviation SE will be used to denote the self-employed and E to denote the gainfully employed.

Table 5.2.0 Occupation cross tabulation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Self-employed	151	33.6	33.6	33.6
Valid Employed	299	66.4	66.4	100.0
Total	450	100.0	100.0	

From table 5.2.0 above, the majority of the people from the sample are the gainfully employed, constituting 66.4%, followed by the self-employed constituting 33.4% of the total sample. This sample distribution results give us an indication that even though the South African government have committed itself to the promotion of entrepreneurship within the black community, the majority in Ladysmith are still gainfully employed. Gainful employment is still the preferred choice within the community of blacks in Ladysmith, KZN. Tsitsarams, (2005) attributed being gainfully employed to job security, arguing that people prefer to be gainfully employed because they know they will get a pay cheque unlike in self-employment where it all depends on the performance of the business.

5.2.1 Gender

According to the empirical literature review discussed in chapter three, women are more inclined to be self-employed than men. The justification for this reasoning is that women have more responsibilities at home than men so they venture into business for flexible working hours so that they can balance career and family duties (Budig, 2006). In this sub-section we present the study's descriptive statistics results regarding gender.

The table below (table 5.2.1) depicts the cross tabulation of occupation and gender. This is to give us an idea of how the data was distributed across two genders (male and female).

Table 5.2.1 Relationship between Occupation and Gender Cross tabulation

% within Occupation

		Gender		Total
		Male	Female	
Occupation	Employed	59.6%	40.4%	100.0%
	Self-employed	48.5%	51.5%	100.0%
Total		52.2%	47.8%	100.0%

The results from the table 5.2.1 above reveal that from our total sample of 450, 52.2% of the total sample were males and 47.8% females. This gives us an indication that even though the recruitment policies (such as the BEE policy) of this country are weighted in favour of women, men are still more active in the mainstream economy compared to females.

Our results also show that men prefer to be gainfully employed over being self-employed as in the table 5.2.1 above 59.6% of the employed are men while only 40.4% are females. Lastly our descriptive results show that women are more active or prefer self-employment over salaried work. From table above, in the self-employed category, women are in the majority, constituting 51.5% of the self-employed sample while only 48.5% are men.

Even though the margin is not that significant as there is only about 2% difference, given the history and patriarchal cultural background of the black community in South Africa, these results are worth reporting. These results bring us back to the findings of Budig, (2006) who suggested that women prefer self-employment because of family commitments.

The Cross Tabulation Chi Squared results at the 5% significance level with 1 degree of freedom (see Table A1.0 Appendix C) confirm the above discussed results where the null hypothesis of no difference between occupation type and gender is rejected since χ^2 calculated (4.961335) is greater than χ^2 critical (3.814), therefore concluding that occupation type chosen is dependent on gender.

5.2.2 Age

In order to analyse an individual's age and occupational choice, the age variable was subdivided into three intervals using the SPSS visual binning option. The first interval was all respondents between the ages of 18 to 30, the second 31-38 and lastly, all above the age of 39.

Table 5.2.2 Relationship between Occupation and AGE (Binned) Cross tabulation

% within Occupation

		AGE (Binned)			Total
		<= 30	31 – 38	39+	
Occupation	Self-employed	40.4%	27.8%	31.8%	100.0%
	Employed	30.4%	35.8%	33.8%	100.0%
Total		33.8%	33.1%	33.1%	100.0%

The table above (table 5.2.2) reveals that individuals with ages ranging from 18-30 years exhibit the highest levels (33.8%) of participation among all samples followed by both 31- 38years of age accounting for 33.1% and 39+ recording 33.1% of the total sample.

Supporting the findings of Arenius and Minniti, (2005) which suggested that youth are more likely to be self-employed, the results in this study show that the majority of the self-employed are individuals with ages of 30 years and below accounting for 40.4% of the total sample of the self-employed. This high youth involvement in businesses can be attributed to government youth departments (such as NYDA) and incentives that encourage youth to be self-employed. These incentives make it attractive and easy to start a business. Moreover, since the dawn of the democratic era, the school enrolment rates have increased substantially, implying that the young are better equipped to become self-employed. Additionally, the perceived low wages offered to young people serve as an incentive to choose self-employment.

With regard to the gainfully employed, consistent with expectations, 69.6% of them comprise people aged 35 and over while only 30.4% are younger. There are marginal differences between the 31-38 age group and those older. The lower percentage of younger people in the employed category is consistent with national trends, where a significant number of them are unemployed due to them possessing low levels of skills relative to the available vacancies, while the remainder are engaged in further education and training.

The Cross Tabulation Chi squared test reported in Table B1.0 Appendix C confirms that age plays a crucial role in occupational choice. The null hypothesis of no difference between occupation chosen and age was rejected at the 5% significance level with 2 degree of freedom since χ^2 calculated (40.593) is greater than χ^2 critical (5.991).

5.2.3 Marital status

According to the empirical literature discussed in chapter four, marital status is one of the crucial variables in determining occupational choice. In order to analyse marital status and occupational choice, the marital status was divided into two categories, (1) married - which included married, widowed and separated respondents and (0) which covered single and divorced respondents. This coding technique enabled me to draw the following descriptive statistics from the respondents.

Table 5.2.3 Relationship between occupation and marital status Cross tabulation

% within occupation

		marital status		Total
		Single	Married	
Occupation	Self-employed	47.0%	53.0%	100.0%
	Employed	60.9%	39.1%	100.0%
Total		56.2%	43.8%	100.0%

The table 5.2.3 above shows participation levels in terms of marital status. According to the results obtained, single people exhibit the highest level of participation in the study. They accounted for 56.2% while the married accounted for 43.8% of the overall sample. The above table also shows how marital status was segregated in terms of occupational choices. According to the results obtained from the table above, married participants from the self-employed group exhibited the highest level of participation, accounting for 53% and confirming prior expectations that married people prefer self-employment over salaried work. The singles cohort comprised only 47% of the self-employed group. From among the wage earners, single people exhibited the highest level of participation, accounting for 60.9% and married people accounted for 39.1%. These results confirm that single people prefer being a wage earner over self-employment, given that the sampling method attempted to secure a sample consistent with the population characteristics.

In line with the prior expectations and results discussed above, the Cross Tabulation Chi squared test reported in Table C1.0 Appendix C demonstrates that marital status plays a crucial role in occupational choice; the null hypothesis of no difference between occupation chosen and marital was rejected at the 5% significance level. These results support the findings of Spivey, (2010) and Paiella, (2004) who posited that married people are less risk averse and prefer the certainties of gainful employment.

5.2.4 Household income per capita

The prior expectation with regards to household income per capita, based on the empirical evidence, was that high income earners are self-employed. Tuttle and Garr, (2009) suggested that people move to self-employment because of its high income potential. This subsection presents the descriptive statistics of the household income per capita in this study.

In order to analyse the household income per capita, the variable was divided into seven categories: (1) R0-R800 (2) R800-R1500 (3) R1500-R3000 (4) R3000-R5000 (5) R5000-R10 000 (6) R10 000- R20 000 (7) R20 000- more (see questionnaire in AppendixB1). This coding technique enabled us to draw inferential stats from the respondents.

Table 5.2.4 Household Income Per Capita

	Frequency	Percent	Cumulative Percent
0-800	3	.7	.7
800-1500	11	2.4	3.1
1500-3000	10	2.2	5.3
Valid 3000-5000	89	19.8	25.1
5000-10000	115	25.6	50.7
10000-20000	147	32.7	83.3
20000-more	75	16.7	100.0
Total	450	100.0	

With regards to household income per capita, the descriptive statistics results show that 50.7% of the respondents earned R10 000 or less per month while 32.7% of them earned in the R10 000 to R20 000 range. Only 16.7% of the population earned R20 000 or more. 25.1% of the people sampled earned R5000 or less, which can be termed as people living more or less at the minimum wage level while another 25.6% fell into the R5000-R10 000 category whose upper end is twice the minimum wage.

Only 32.7% of the sampled population can be classified as lower middle income and a mere 16.7% as upper income.

Note that this study only sought out the self-employed and the gainfully employed categories and restricted the sample to a minimum of 5 hours of work per week continuously per year. Had no constraints been set the sample would have included respondents who are engaged in casual labour where they work for less than the stipulated minimum period per year and hence the income distribution would have more accurately captured the skewed income distribution of South Africa.

The table below (table 5.2.5) shows the cross tabulation of occupation and household income per capita.

Table 5.2.5 Relationship between Occupation and Household Income Per Capita Cross tabulation

% within Occupation

		Household Income Per Capita						Total	
		0-800	800-1500	1500-3000	3000-5000	5000-10000	10000-20000		20000-more
Occ	E	1.3%		1.3%	25.2%	19.2%	35.1%	17.9%	100.0%
	SE	0.3%	3.7%	2.7%	17.1%	28.8%	31.4%	16.1%	100.0%
Total		0.7%	2.4%	2.2%	19.8%	25.6%	32.7%	16.7%	100.0%

Contrary to prior expectation, the results from the table above show that the gainfully employed people have higher income potential compared to the self-employed since from the total sample, 35.1% of the gainfully employed earned between R10 000 and R20 000 as compared to only 31.4% in the same category being self-employed. Even when we compare the highest earning category (R20 000 and more), people who are gainfully employed are well represented (17.9%) compared to gainfully employed (16.1%). Hence our results make sense of why the majority of the black people in the South African setting would opt for gainful employment since it not only reduces uncertainty of income but also offers better earnings than the self-employment options open to blacks. The results might be a plausible indication that the majority of black entrepreneurs are involved in survivalist, micro and small businesses where the income levels on average are below that of artisan and white collar salaries.

The literature [Reynolds *et al.*, (2002), McKenzie (2004), Bound *et al.*, (1984); Audretch, (1990)] asserts that two categories of people get involved in self-employment: first, those that have no choice due to lack of opportunities for gainful employment (or the offered wage rate is below their reservation wage rate) and second, those that are efficiency and innovation driven entrepreneurs. The former category comprises those who have low skill levels and very limited wealth or access to credit and hence they run survivalist-type small operations, while the latter categories are likely to be more skilled, and have wealth and credit access.

The Chi Squared Cross Tabulation Result presented in Table D1.0, Appendix C further confirms the above discussed results where the null hypothesis of no difference between occupation type and household income per capita is rejected since χ^2 calculated (15.11522) is greater than χ^2 critical (5.991), therefore concluding that occupation type chosen is dependent on household income per capita.

5.2.5 Family business background

The prior expectations with regards to family business background and occupational choice were that respondents from families with a business background will be self-employed. The reasoning behind this was that they have been exposed to business practises, capital is readily available and family networks will open doors for them.

The descriptive statistics on family business background reveals that family business background has a positive relationship with the possibilities of being self-employed. We draw such a conclusion from the table below (table 5.2.6) which shows that the majority of the people that said they come from families with business background are self-employed.

5.2.6 Relationship between Occupation and Family Business Background Cross tabulation

% within Occupation

		Family Business Background		Total
		Yes	No	
Occupation	Employed	11.9%	88.1%	100.0%
	Self-employed	27.8%	72.2%	100.0%
Total		22.4%	77.6%	100.0%

The results show that out of 450 people that were interviewed, 77.6% came from families with no business background while only 22.4% had a family business background. These results are explained by the findings of Co, (2003) which revealed that in South Africa during the apartheid era black people were not allowed to start their own businesses in areas other than townships or specially demarcated rural areas and no additional government support was given to them, unlike their white counterparts, hence majority are not from families with a business background.

From these results it is apparent that there is a significant relationship between family business background and self-employment. Supporting these findings, the cross tabulation Chi Squared test (see Table E1.0 Appendix C) shows that family business background plays a crucial role in occupational choice selection. These results echo the findings of Saxeman (1998), Yoon (1997), and Sikona and Evans, (2009) who suggested that people that come from families with a business background are more inclined to become self-employed since networks and capital from their parents are readily available to them.

5.2.6 Access to finance

The common understanding is that finance is one of the key challenges facing entrepreneurs or newly formed enterprises. This variable was added to confirm or dispute this generalisation.

Table 5.2.7 Relationship between occupation and ACC Cross tabulation

% within occupation

		ACC		Total
		Yes	No	
Occupation	Self-employed	90.7%	9.3%	100.0%
	Employed	73.6%	26.4%	100.0%
Total		79.3%	20.7%	100.0%

With reference to table 5.2.7 above, access to finance is a huge challenge in Ladysmith for both self-employed and the gainfully employed. Out of the 450 interviewed, 79.3% confirmed that access to finance is still a key challenge while only 20.7% were of the opposite view. Also, 90.7% of the self-employed confirmed that access to finance is a major consideration when one wants to start a business while only 9.3% was of the counter view. Also supporting this notion are the gainfully employed, of whom 73.6% agreed that access to finance is a challenge. Despite the Department of Trade and Industry (DTI) (eg., Ntsika and Khula, Isivande Women’s Fund, and SEDA) having set up various vehicles for the funding of black businesses it remains a serious problem in the Ladysmith area.

The self-employed were also asked if they have ever received government financial support. The results in table 5.2.7(b), below, show that the level of funding opportunities in Ladysmith is still very low as only 16.4% confirmed that they had received financial support from the government, while 83.6% said they have never received financial support from government. These findings are corroborated by those discussed above.

Table 5.2.7 (b) Government funding support

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	16.4	16.6	16.6
	No	126	82.9	83.4	100.0
	Total	151	99.3	100.0	
Missing	System	1	.7		
Total		152	100.0		

The cross tabulation chi squared results at the 5% significance level with 1 degree of freedom (see Table F1.0 Appendix C) confirm this finding where the null hypothesis of no difference between occupation chosen and access to finance was rejected since χ^2 calculated (17.99) is greater than χ^2 critical (3.814), therefore concluding that occupation chosen is dependent on access to finance.

5.2.7 Education

According to the literature discussed in chapter four, education levels play a crucial role in deciding on occupational choice. Prior expectation was that less educated people are mostly involved in businesses while the most educated were expected to be more active in gainful employment. This study also probed the impact of formal education on occupational choice.

To examine the effect of education on occupational choice, the education variable was coded as a numeric covariate. The education variable was defined as the number of years spent in attaining education, for example, number in the table 12 represented grade 12, 13 for higher certificate, 14 for diploma, 15 for degree, 16 for honours degree, 17 for master's degree and lastly 18 for doctorate.

Table 5.2.8 presents the frequencies of educational level while table 5.2.8 (b) presents the cross tabulation between occupation and education.

Table 5.2.8 Education level

	Frequency	Percent	Valid Percent	Cumulative Percent
7	7	1.6	1.6	1.6
8	5	1.1	1.1	2.7
9	2	.4	.4	3.1
10	8	1.8	1.8	4.9
11	13	2.9	2.9	7.8
12	152	33.8	33.8	41.6
Valid 13	25	5.6	5.6	47.1
14	57	12.7	12.7	59.8
15	136	30.2	30.2	90.0
16	41	9.1	9.1	99.1
17	2	.4	.4	99.6
18	2	.4	.4	100.0
Total	450	100.0	100.0	

From the table 5.2.8 above, it is apparent that within the black community of Ladysmith education levels are high. From the 450 interviewed, descriptive stats results show that 0.4% had PHD's, 0.4% had master's degree, while only 9.1% had honours degrees in various fields. Our results also show that 30.2% had junior degrees, 12.7% had diplomas, 5.6% higher certificates and 33.8% had passed matric. Although the results in the table above depicted higher education levels in Ladysmith, we also noted that 1.6% of the respondents only had primary education (grade 7), 1.1% had grade 8, 0.4% grade 9, 1.8% grade 10 and 2.9% had grade 11.

Table 5.2.8 (b) Relationship between Occupation and Education Cross tabulation

% within Occupation	Education level												Total
	7	8	9	10	11	12	13	14	15	16	17	18	
Employed	1.3%	2.6%	0.7%	3.3%	3.3%	29.8%	7.9%	11.3%	28.5%	8.6%	1.3%	1.3%	100.0%
Self Employed	1.7%	0.3%	0.3%	1.0%	2.7%	35.8%	4.3%	13.4%	31.1%	9.4%	-	-	100.0%
Total	1.6%	1.1%	0.4%	1.8%	2.9%	33.8%	5.6%	12.7%	30.2%	9.1%	0.4%	0.4%	100.0%

With reference to the table above (table 5.2.8b), overall the results reveal that the higher the education level (up to Honours level), the more likely that the person will be self-employed. A higher proportion of those with matric certificates, two- year higher certificates and three year degrees (excluding Master’s and PhDs) or diplomas tend to be self-employed relative to their gainfully employed counterparts. The exception is one year after matric, which may include dropouts from tertiary institutions, where a higher proportion of them are gainfully employed. The results make sense since a high level of sophistication is required in order to run modern business enterprises, hence the need for a minimum qualification of matric. Moreover, since South Africa is faced with scarce skills shortages those with Master’s and Doctoral Degrees command high salaries in the public or private sectors, so fewer of them will tend to operate businesses.

As widely expected, the cross tabulation chi squared result presented in Table G1.0, Appendix C, finds a positive and statistically significant relationship between occupation chosen and education. The findings reject the null hypothesis of no difference between occupation type and education.

5.3 Other Factors leading to Choice of Self-Employment

To get more information about the determinants of self-employment, the respondents were asked if they had been unemployed before venturing into business (see question15 (c) contained in questionnaire located in Appendix B1).

Table 5.3.0 Were you employed before you chose to become self-employed

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	75	49.3	49.7	49.7
Valid No	76	50.0	50.3	100.0
Total	151	99.3	100.0	
Missing System	1	.7		
Total	152	100.0		

49.3% answered that they had been unemployed before becoming self-employed but 50.7% said they had never been unemployed. As per the empirical evidence in chapter three, one of the reasons people choose to be self-employed is because of the lack of job opportunities.

These results seem to confirm that notion. Out of 151 of the self-employed, 49.3% of the self-employed said before they chose to be self-employed they had salaried jobs and they left them to be self-employed, while the remaining 50.7% said they were not previously employed. Since close to half the respondents were never employed before one may interpret it as a strong enough evidence that unemployment was the driving force in leading people to choose self-employment, as supported in the literature discussed in chapter 3.

5.3.1 Reasons behind self-employment

Additionally, the self-employed respondents were asked -if they had been unemployed- what was the reason they were unemployed. They were given six choices to agree or disagree with that outlined the reasons for being unemployed. These choice were: no opportunities, laid off, no training, health reasons, addiction problem, and 'other'.

Table 5.3.1 Reasons for being unemployed

Reason	Strongly agree	Agree	Disagree	Strongly disagree
no opportunities	69.54%	20.53%	8.61%	1.32%
Laid off	41.72%	22.52%	29.80%	5.96%
no training	59.60%	21.19%	15.23%	3.97%
health reasons	51.66%	13.91%	27.81%	6.62%
Addiction problem	55.63%	9.27%	25.17%	9.93%
Other	58.94%	6.62%	24.5%	9.93%

In answering the question (see question15 (e) contained in questionnaire located in Appendix B1), 90.07% (combining strongly agree and agree responses) supported the view that there were no job opportunities, hence they ended up unemployed, while only 9.93% (combining disagree and strongly disagree) did not agree that no opportunities existed. 64.24% said they had been laid off from their previous employment, 80.79% said they were unemployed because they had never received any formal training, and 65.57% said health reasons had contributed to their being unemployed. Alarminglly 65% of respondents attributed their being unemployed to addiction- related problems. The first three reasons are objective reasons that require the government and private sectors to come up with appropriate policies and opportunities for employment.

The latter two factors are subjective to the respondent’s personal circumstances; however, they can be addressed by proper health and mental health care. Note that the above responses must be treated as perceptions of respondents as to what may be the likely factors that lead one to choose self-employment over employment³

5.3.2 Preferences for Self-employment

The self-employed were also asked why they prefer self-employment over salaried work (see question 15 (g) contained in the questionnaire located in Appendix B1). They were given five response choices in which they had the option to choose to strongly agree, agree, disagree or strongly disagree. In order to answer the question –using the Likert options – they were given the following choices: income was too low in salaried work; preferred flexible lifestyle; higher income potential; enjoy being in business and they enjoy independence.

Table 5.3.2 Reasons for being self-employed

Reason	Strongly agree	Agree	Disagree	Strongly disagree
Income was too low	77.48%	11.92%	10.60%	0%
Laid off	52.98%	19.20%	24.50%	3.31%
Preferred flexible lifestyle	79.47%	14.57%	5.30%	0.66%
Higher potential income	80.13%	17.22%	2.65%	0%
Enjoy being in business	85.43%	12.58%	0.66%	1.32%
Enjoy being independent	86.09%	12.58%	2.7%	1.32%

In response to the choice that 'income was too low in salaried work, 77.48% strongly agreed, 11.92% agreed and only 10.60% disagreed that income was too low hence they moved to self-employment. In response to whether they were laid off, 52.98% strongly agreed, 19.20% agreed, 24.50% disagree and only 3.31% strongly disagreed.

In response to whether they preferred a flexible lifestyle the descriptive statistics show that 79.47% strongly agreed that they like a flexible lifestyle, 14.57% agreed, 5.30% disagreed and 0.66% strongly disagreed that flexible lifestyle is of paramount importance to them.

Concerning the choice whether self-employment had a higher income potential 80.13% strongly agreed, 17.22% agreed, 2.65% disagreed that high income is of paramount importance to them. The respondents' responses with respect to whether they enjoy the independence of being self-employed, 86.09% strongly agreed and 12.58% confirmed that the reason they are self-employed is because they enjoy being independent while 2.7% disagreed and only 1.32% disagreed.

The overall finding in regard to Question 15 (g) is that higher income potential, flexible working hours and the independence that being self-employed offers, makes it a desirable career choice.

5.3.3 Satisfaction with self-employment

Among the questions that were asked from the self-employed was the level of satisfaction with their work. Only 30.3% said they are unhappy with being self-employed while 15.8% were very happy and the majority (53.3%) also said they are happy. The unhappy attributed their unhappiness to the low income they were receiving and government failure to provide funding opportunities. Addition to this question, they were asked if they were to receive a better paying job would they take it. 51.3% said they would take the salaried job and leave self-employment while 48.7% said that they would remain self-employed. Hence one may conclude that 69.1% of respondents are happy with being self-employed. However, it can be deduced that the 17.8% who are in the combined happy and very happy categories will migrate to a salaried job should the salary be attractive enough.

5.4 Results of Gainfully Employed Respondents

This subsection will present the results to Questions 16 (a) to 16 (m) (refer to Appendix B1) which were specifically addressed to those that were gainfully employed. Concerning the occupational level of satisfaction, the gainfully employed were asked if they are currently looking for better employment. The table below presents the findings.

Table 5.4.1 Occupation cross tabulation

% within Occupation

Is this employment full time or part-time			are you seeking other employment		Total
			Yes	No	
full time	Occupation	Employed	67.6%	32.4%	100.0%
	Total		67.6%	32.4%	100.0%
part-time	Occupation	Employed	78.3%	21.7%	100.0%
	Total		78.3%	21.7%	100.0%
Total	Occupation	Employed	69.2%	30.8%	100.0%
	Total		69.2%	30.8%	100.0%

From the full time gainfully employed, 67.6% said they were looking for better paying jobs while only 32.4% said they were satisfied with their current employment. 78.3% from the part-time employees said they were looking for better employment while only 21.7% said they were not looking for other jobs, meaning that they have a high level of satisfaction from their current employment. The results reveal that in the majority of cases the respondents are dissatisfied with their current employment status.

The gainfully employed were further asked if they were to be granted a chance to be self-employed would they take it. The next table presents the answers to the probe.

Table 5.4.2 Status of employment cross tabulation

	if granted chance to be self-employed would you take it?		Total	
	Yes	No		
Is this employment full time or part- time	full time	81.8%	18.2%	100.0%
	part-time	91.3%	8.7%	100.0%
Total		83.3%	16.7%	100.0%

In answering the question above –with reference to the table above- 81.8% of full time gainfully employed said they would take the opportunity of being self-employed while only 18.2% said they would remain gainfully employed.

From the part- time employees, 91.3% said they would take the opportunity of being self-employed if it were to be granted to them. While this results reveal that there is an overwhelming dissatisfaction with their current employment it also reveals a likelihood that many would choose entrepreneurship should the possibility present itself.

A follow-up question was made as to why they are not self-employed. The following options were given for respondents to either agree or disagree with. The table 5.4.3 below presents the results from the probe.

Table 5.4.3 Reasons for not being self-employed

Reason	Strongly agree	Agree	Disagree	Strongly disagree
No good business ideas	59.5%	7.6%	9%	24%
No savings or assets.	52.2%	16.3%	8.7%	22.8%
Not credit worthy, banks will not provide me a loan.	48.9%	15.2%	13.6%	22.3%
I am afraid to leave a secure job.	58.4%	18.2%	1.9%	21.5%
Business start-up costs are high, I am not willing to risk my savings.	49.2%	23.1%	6.3%	21.5%
Labour costs are high I will not make a good profit.	49.5%	27.4%	2.7%	20.4%
Bank repayment costs are high.	54.9%	22%	2.4%	20.7%
Equipment and operational costs are high.	53.8%	22.3%	4.3%	19.6%
Rental costs are high.	56.3%	22.6%	1.6%	19.6%

According to the results in table 5.4.3 above, the reason why the gainfully employed remain or chose to be gainfully employed (67.1%, combining 'strongly agree' and 'agree' responses) is because they do not have good business ideas Only 33% (combining of disagree and strongly disagree) disputed this view. 68.5% supported the notion that the reason why they don't venture into businesses is because they lack assets and savings; 31.5% disagreed. 64.1% of the gainfully employed said they are not credit worthy hence they are unable to start businesses while 35.9% disputed that the

reason they are not self-employed is because they are not credit worthy. 76.6% said they are not self-employed because they are afraid to leave secure jobs, while 23.4% disputed this notion.

The table above also shows that 72.3% said the reason why they are not self-employed is because the business start-up costs are too high so they cannot risk their savings, whereas the remaining 27.7% said they prefer salaried work. 76.9% said the labour costs are so high they will not make much profit, hence they prefer to be gainfully employed. When asked why they do not take loans from banks to start businesses, 76.9% said bank repayment costs are too high while 23.1% said that that is not true. Added to this, 76.1% said the equipment and operational costs are too high, hence they prefer to be gainfully employed. Lastly, 78.9% of the gainfully employed said they cannot venture into business because the rental costs are too high.

If one combines the 'strongly agree' and 'agree' responses then one can safely conclude that the factors mentioned in Table 5.4.3 are indeed the likely causes of respondents not venturing into business since, on average, approximately 70% of them are in agreement that the mentioned factors have a significant impact.

It is interesting to note that majority of those who are gainfully employed would opt for entrepreneurship should the opportunity arise, however, government policies need to creatively address the aforementioned constraints if they are to attract more individuals into entrepreneurship.

5.5 Logistic regression model

As highlighted in chapter four, this study employs logistic regression to investigate the determinants of self-employment relative to being a wage earner in Ladysmith, KZN. This subsection will begin by giving a detailed analysis of the results obtained from our logistic regression. The logistic regression used gender, age, marital status, education,

household income per capita, family business background and access to finance to predict the probabilities of being self-employed.

After the logistic regression results interpretation, this subsection will outline the tests that were employed to verify the model. The reason for the validation of the model is to ensure that there are no data errors that were incurred when capturing the data and also to identify significant observations.

5.5.0 The logistic model

The use of the logistic model in this study was to predict the probability of being self-employed relative to being a wage earner in Ladysmith, KZN. In this study self-employment was modelled as a dichotomous variable, since if the person was self-employed the variable was coded as 1 and if the person was a wage or salary earner the variable was coded as 0. The variables and their selection have been explained in detail in the preceding chapter. What is now remaining is to discuss the results, hence this section presents the research findings.

Before proceeding to the research findings, it is worth mentioning that to assess the reliability of point estimates, a two-tailed test of significance was used to determine the acceptance or rejection of the null hypothesis. For the purpose of this study, a one percent, five percent and ten percent level of significance have been used. The study estimated the following model as outlined in chapter four:

$$\ln\left(\frac{p_i}{1-p_i}\right) = \beta_1 + \beta_2 edu_i + \beta_3 age_i + \beta_4 gen_i + \beta_5 hip_i + \beta_6 ms_i + \beta_7 ris_i + \beta_8 fbb_i + \beta_9 acc_i + u_i$$

This table presents the results from our main logistic regression.

Table 5.5.1 Logistic regression

Dependent variable	Coefficient	Std. error	z-stat	Prob.	Antilog
AGE	0.032168	0.012453	2.583148***	0.0098	0.0326
GEN	0.453291	0.216600	2.092755**	0.0364	0.5734
MAR	-0.811096	0.257168	-3.153950***	0.0016	-0.5556
EDU	0.122721	0.061441	1.997388**	0.0458	0.1305
HIP	-0.076849	0.100304	-0.766161	0.4436	-0.0739
FBB	0.8991859	0.231980	3.844556***	0.0001	1.4576
AC	1.603572	0.329401	4.868152***	0.0000	3.9707
Ris	-0.169584	0.097975	-1.730902*	0.0835	-0.1559
C	-2.415486	1.026463	-2.353214***	0.0186	-0.9106
McFadden R-squared		0.104899	Mean dependent var		0.664444
S.D. dependent var		0.472710	S.E. of regression		0.446921
Akaike info criterion		1.182227	Sum squared resid		88.08470
Schwarz criterion		1.264412	Log likelihood		-257.0011
Hannan-Quinn criter.		1.214619	Deviance		514.0022
Restr. Deviance		574.2391	Restr. log likelihood		-287.1195
LR statistic		60.23690	Avg. log likelihood		-0.571114
Prob(LR statistic)		0.000000			

Notes: ***, ** and *, indicate the 1%, 5% and 10% levels of significance, respectively.

5.5.1 Interpretation of the results

The table above presents the results we obtained from our regression. In our regression variables such as age, gender, marital status, education levels, household income per capita, access to finance and family business background were included as suggested by the empirical evidence on the subject. All our variables were statistically significant, indicating a meaningful relationship, except the household income per capita which was statistically insignificant indicating that this variable does not have a statistically significant effect on self-employment. The findings of the study are presented below.

Age has a positive coefficient that is statistically significant at 1%. These results show a positive and meaningful relationship between self-employment and age. The coefficient may be loosely interpreted as suggesting that as a person grows older by a year there is an increase in the log-odds in favour of him/her becoming self-employed by 0.03268 to 1.

Alternatively, a stricter interpretation arises when taking the antilog which gives a value of: $\exp(\beta) = \exp(0.032168) \approx 1.0327$ and minus 1 from it gives rise to 0.0327 as depicted in the last column of the above table (see Gujarati and Porter, 2009). This value may be interpreted as becoming older by a year increases the probability of a person remaining in business by 3.27%. According to Kidd, (1993) this is true because older people have enough wealth to use to start their own businesses. Blanchflower (2000), Cowling *et al* (2004) and Hochguertel, (2005) suggest that older people view self-employment as an alternative to retirement.

Gender has a positive coefficient that is statistically significant at 5%. The coefficients show a positive and meaningful relationship between gender and self-employment. The coefficient of gender was 0.453291 which suggests that that $\exp(\beta) = \exp(0.453291) \approx 1.573482$. In other words, being a female increases the possibility of being self-employed by 57.35%. According to these results, females are more likely to be self-employed than men. These findings confirm those of Blanchflower, (2000) who asserted that mothers were more likely to use self-employment to balance work and family life. According to Budig, (2006) who considered the intersections on the road to self-employment by looking at gender, family and occupational class found that men entered self-employment to advance their careers whereas women entered self-employment to balance income needs and family life.

According to the findings of Aldrich and Moody (2000), marital status plays a crucial role in determining occupational choice. As per our research findings, marital status has a negative coefficient that is statistically significant at 1%. The coefficients show a negative relationship between marital status and self-employment. The coefficient of marital status was -0.811096 which simply suggests that $\exp(\beta) = \exp(-0.811096) \approx 0.44437$. In other words, being single decreases the chances of being self-employed by 55.56%. This suggests that single people are more likely to become gainfully employed than to be self-employed.

These results confirm the findings of Taniguchi, (2002) who also found that married people are more inclined to become self-employed than single people. The reasoning for this was that married people have acquired enough assets/capital to start a business and also use self-employment to balance career and family responsibilities.

Education has a positive coefficient that is statistically significant at 10%. The coefficients of education were 0.122721 which suggests that that $\exp(\beta) = \exp(0.122721) \approx 1.1306$. In other words, an additional year of education increases the possibility of being self-employed by 13.07%. These results suggest that, the higher the education levels, the more likely that you are going to be self-employed. According to Arum and Muller (2004), education enhances people's interpersonal, management and business skills. Education provides people with the skills needed to run and manage a successful business (Smith, 2008). Furthermore, Koellinger (2008), asserts that higher education levels enable individuals to spot gaps in the market and, hence, they are able to start viable businesses.

Family business background has a positive coefficient that is statistically significant. This coefficient displays a positive and meaningful relationship between self-employment and family business background. The coefficients of family business background was 0.8991859 which suggests that $\exp(\beta) = \exp(0.8991859) \approx 2.4576$. According to these results, when a person has a family business background the possibility of that person being self-employed is higher by 146%.

This is true because the transfer of the capital, knowledge/information and contacts the parents have already established in the business sector is easy (Lee, 2001). The contacts open doors that it would have been difficult to open otherwise, and capital is easily accessed (Yoon, 1997).

Access to finance has a positive coefficient that is statistically significant. This coefficient reveals a very strong and meaningful relationship between self-employment and access to finance. The coefficients of access to finance was 1.603572 which suggests that $\exp(\beta) = \exp(1.603572) \approx 4.9707$.

These results suggest that increased funding opportunities cause an increase in self-employment by 397%. This may be true because one of the key challenges faced by the self-employed is access to finance. Finance hinders potential entrepreneurs from starting their businesses because finance is needed to buy equipment and cover operational costs, so increased funding opportunities eliminate all the finance challenges.

With regards to risk propensities, the assumed relationship is that people who are not risk averse are more likely to be self-employed. This is because they are not afraid to take risks. By definition, the self-employed are the people that take calculated risks; however the results showed interesting relationship. The coefficients of the risk propensity showed a negative but significant relationship between self-employment and risk propensities.

The coefficients of risk propensities was -0.169584 which suggests that $\exp(\beta) = \exp(-0.169584) \approx 0.844$. These results show that if a person is risk averse, the chances of being self-employed decrease by 15.6%. This simply means that people who are afraid of risk are more likely to become gainfully employed.

5.5.2 Diagnostic Tests

The diagnostic tests that were employed in this study – as explained in detail in the preceding chapter- are the Hosmer-Lemeshow test which assessed the goodness of fit, and the Wald test statistic which serves as a T-statistic for the logistic regression model.

5.6.2.1 Hosmer-Lemeshow Test

To assess the validity of the model, the study employed the Hosmer-Lemeshow (HL) test. By definition, the Hosmer-Lemeshow test is a statistical test used to assess the goodness of fit of the model. The goodness of fit helps us decide whether the model is correctly specified or not. According to Hosmer and Lemeshow (2000), the rule of thumb for the test suggests that a good model will have a small Hosmer and Lemeshow test statistic and a P-value that is greater than 0.05 (the significant level). Furthermore,

if the HL test is significant at 1%, 5% or 10% it suggests that the model does not fit the data and therefore the model cannot be trusted.

Table 5.5.2.1: Hosmer-Lemeshow Test

	Quantile of Risk		Dep=0		Dep=1		Total Obs	H-L Value
	Low	High	Actual	Expect	Actual	Expect		
1	0.2227	0.4052	28	29.6148	17	15.3852	45	0.25755
2	0.4074	0.5158	25	23.9519	20	21.0481	45	0.09806
3	0.5158	0.5895	18	20.1707	27	24.8293	45	0.42339
4	0.5951	0.6364	17	17.3406	28	27.6594	45	0.01088
5	0.6369	0.6905	22	15.0748	23	29.9252	45	4.78395
6	0.6905	0.7191	11	13.2804	34	31.7196	45	0.55550
7	0.7196	0.7690	11	11.4521	34	33.5479	45	0.02394
8	0.7690	0.8154	12	9.47858	33	35.5214	45	0.84970
9	0.8173	0.8769	5	6.89910	40	38.1009	45	0.61742
10	0.8769	0.9643	2	3.73701	43	41.2630	45	0.88051
Total			151	151.000	299	299.000	450	8.50091
H-L Statistic			8.5009		Prob. Chi-Sq(8)		0.3861	
Andrews Statistic			11.9290		Prob. Chi-Sq(10)		0.2898	

The HL test above (Table 5.5.2.1) compared the predicted values against the actual values of the dependent variable. The results of the test showed a Hosmer-Lemeshow value of 8.5009 and a probability of 0.3861, indicating a good model of fit. Simply put, these results confirm that the model employed in this study is correctly specified and it adequately fits the data.

The HL test is supported by the Andrew Statistic which reveals a value of 11.92 and P value of 0.2898, confirming that the model does fit the data. This gives an assurance that the results from this study are reliable and can be trusted for policy consideration. Furthermore the McFadden pseudo R squared test statistic of 10.5 (see, Table 5.5.0) corroborates both the HL and the Andrew statistics that suggest the model has a reasonably good fit.

5.5.2.2 Wald Statistic Test

To assess the contribution of individual predictors in our model, a Wald statistic test was used. Similar to the T-test in linear regression, the Wald statistics test was employed to assess the significance of coefficients in our model.

The rule of thumb with regards to the Wald statistic test is that the null hypothesis is rejected if the P-value of the test is less than 0.05 (significant level).

Furthermore, a coefficient with a P-value of the Wald statistic less than 0.05 implies that the variables are important in the model.

Table 5.5.2.2 Wald Test

Wald Test:
Equation: Untitled

Test Statistic	Value	Df	Probability
F-statistic	6.987872	(7, 442)	0.0000
Chi-square	48.91510	7	0.0000

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0, C(5)=0,
C(6)=0, C(7)=0

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	0.032168	0.012453
C(2)	0.453291	0.216600
C(3)	-0.811096	0.257168
C(4)	0.122721	0.061441
C(5)	-0.076849	0.100304
C(6)	0.891859	0.231980
C(7)	1.603572	0.329401

Restrictions are linear in coefficients.

With reference to the above table (5.5.2.2), the Wald stat test result in this study is 6.987 and the probability is 0.0000, suggesting that our model has predictive capacity. The variables included in the model will be able to predict a meaningful relationship of interest. Since the model is significant we therefore reject the null hypothesis that the variables are equal to zero.

5.7 Conclusion

The intention of this chapter was to present the results obtained from the logistic regression and descriptive statistics. The logistic regression and the descriptive stats analysis was undertaken to investigate the determinants of self-employment relative to being a wage earner in Ladysmith. The descriptive stats revealed that 33.6% of the sample was self-employed and 66.4% was gainfully employed. In terms of gender, 52.2% of the sample was male with females constituting 47.8%.

The results also showed that the youth (18-30) exhibited the highest level of participation, recording 33.8% of the total sample, followed by 31-38 and 39 + year olds accounting for 33.1% each.

Furthermore, the results showed that youth and older people prefer to be self-employed while the middle aged people prefer to be gainfully employed. The youth are perhaps motivated by lack of job opportunities while older people have high skills, knowledge, contacts and capital endowments which, if put to good effect will lead to better earning and lifestyle outcomes relative to gainful employment.

According to our findings, self-employed people have higher income potential compared to the gainfully employed. Also the family business background was reported to make a significant contribution to one choosing self-employment.

In terms of education levels, the results showed that the higher the level of education the more likely the person is to be self-employed. Furthermore, an additional year added to an individual's age increases the possibility of being self-employed by 13.07%. 79.3% confirmed that access to finance is still a key challenge faced by the self-employed and those that want to start businesses. It was also noted that political connectedness and gender play a significant role in the awarding of tenders.

In conclusion, the results of this study showed that age, gender, marital status, educational level, family business background, household income per capita, access to finance and risk propensities increases the likelihood of a person becoming self-employed.

Chapter 6 study summary

6.1 Introduction

The main objective of this study has been to find the determinants of self-employment relative to being a wage/salary earner in Ladysmith. Chapters two and three provided detailed theoretical and empirical evidence underpinning the study which navigated us to the correct selection of the model and variables.

In addition, Chapter four outlined the methodology that was used when conducting the study and which meant I was able to obtain the meaningful results presented in chapter five. This last chapter presents a summary of the methodology employed, results of the study, limitations of the study, implications for future research and policy recommendations.

6.2 Summary of the study

The study had two main objectives amongst others of which was to construct a detailed self-employment determinants analysis in the context of Ladysmith and secondly to analyse individuals' choice between wages and self-employment. The interest in pursuing this study emanated from the increasing trend of self-employment in the country as whole and the contradictory views (as some scholars argue that pecuniary benefits lead to self-employment while others suggest non-pecuniary benefits) held regarding the determinants of self-employment in the recent literature. This has opened a gap in the field of research, especially now, since self-employment is presented as a viable alternative to employment creation among development economists.

To accomplish the objectives of the study, a questionnaire was designed with both an English and isiZulu version for the purposes of data collection. Before the questionnaires were administered an ethical clearance certificate was obtained from the University of Zululand research committee. Thereafter a combination of convenience and snow ball sampling methods were employed in township areas that were widely spread out and where no records were available as to the number and type of businesses existing in these areas in order to assist the researcher in locating all the targeted entrepreneurs.

However, in each of township areas that I covered, I ensured that all surrounding businesses were approached in order to reduce the bias caused by the aforementioned non-probability sampling approaches. In the CBDs and other business areas where there were high concentrations of businesses every effort was made to target the entire population of black-owned businesses. Furthermore, the systematic random sampling method was used to locate the gainfully employed in targeted urban and semi urban areas. The study focussed on Ladysmith, a town located in the UThukela district of KwaZulu-Natal.

The study used both cross tabulation and a logistic regression model since my dependent variable had two categorical variables (self-employed and gainfully employed). Gender, age, marital status, education, household income per capita, family business background, access to finance and risk propensities were used as independent variables in the logistic model.

The study used E-views and SPSS (originally called statistical package for social science and now called statistical product and services) to code and analyse data. In chapter five, a descriptive analysis of the results was presented followed by the logistic regression results.

6.3 Summary of the Findings and Policy Recommendations

From the discussion of the results in chapter five, I noted that men (52.2%) are still more active in the mainstream economy as compared to females (47.8%). Even though it is evident that the current government policies to absorb females into the labour force

and self-employment are effective, a more radical transformation is still needed to balance the gender inequality in the overall participation in the economy. The study also revealed that self-employment can be used to involve women in the mainstream economy as our results show that being female increases the possibility of being self-employed by 57.35%, meaning women are more inclined to be self-employed than men.

With regards to marital status, the results presented in chapter five revealed that being single decreases the chances of being self-employed by 55.56%, therefore suggesting that single people are more likely to become gainfully employed than self-employed. The stated reason for a single people to prefer gainful employment is lack of wealth/savings to start a business whereas married people have financial support from their spouses.

The results portrayed a positive nexus between education and self-employment, suggesting that education enables the self-employed to run sustainable and profitable businesses. According to the findings of this study, education not only enables the self-employed to run successful businesses but also increases their level of innovation and enables them to spot gaps in the market. Policies, programmes and campaigns that seek to promote self-employment should incorporate, or be intertwined, with formal education, as that will endow them with managerial and business skills. According to the logistic regression results, an additional year of education increases the possibility of being self-employed by 13.07%.

The descriptive statistics showed that the youth (18-30) and older people (41+) exhibited the highest level of participation in the self-employed category. This was confirmed by the logistic regression results which suggested that an increment in an individual's age increases the possibility of being self-employed by 3.27%. The policies that seek to promote self-employment therefore should prioritise the youth and older people. The focus of these policies should be to enhance business skills development and provide more funding opportunities.

The results of this study also revealed that access to finance is still a critical hindrance to self-employment. 83.4% of the respondents recognised access to finance as a major consideration, taking into account the historical background of black ethnicity. To address this issue, options such as creating more developmental banks specifically dealing with micro financing, or housing SEDA and SEFA together might be considered so as to centralise and increase the possibilities of funding. Additionally, campaigns and programmes that seek to promote entrepreneurship should be centred on micro financing where less stringent requirements may be required. Likewise, options such as subsidising the purchasing of needed equipment or input might be a relief to the self-employed.

6.4 Limitations of the Study and Implications for Future Research

In order for the logistic regression approach to demonstrate robust results large samples are needed. However given the financial and constraints this study employed a sample size of 450 observations which provided reasonable results, however much more robust results could have been obtained had the sample size been bigger. Future studies ought to use much larger sample sizes.

The study focussed only on the isiZulu- speaking black community as defined by the broad based black economic empowerment act 53 of 2003. Perhaps much richer analysis and comparisons could have been obtained if the study had included the Indian, coloured, white and foreign nationals who owned businesses in the area of study.

Furthermore, the study was confined to the town of Ladysmith only because it would have required more time and financial support to collect data for the whole province or country. Within Ladysmith, the study did not cover the whole of the town but rather a few selected urban, semi- urban and rural areas from which a generalised conclusion could be drawn regarding the determinants of self-employment.

The study was limited to nascent and established small businesses operating in the formal economy. Unregistered businesses or informal traders were excluded from the study. Future studies ought to include these excluded businesses.

In as much as the study provided a detailed analysis of the determinants of self-employment, it also touched on critical issues which future studies could pursue further - in particular, issues such as the relationship between tender awarding, political connectedness and self-employment.

Due to the difficulty in identifying nascent and established small businesses within the townships the study was forced to use non-probability sampling methods; I used a logistic regression which required the use of random samples. However in defence of my approach I did try to capture all businesses in the 5km radius of the localities I was led to by the convenience and snow ball sampling technique. Nonetheless, future studies ought to rigorously stick to random sampling methods.

6.5 Conclusion

The intention of this chapter was to present a summary of the study covering the objectives of the study, the method used to collect the data, the method used by the study, the variables used and the statistical software package used. Secondly this chapter presented summarised findings from both the descriptive statistics and logistic regression and then made policy recommendations for policy developers to consider. Lastly, this chapter provided the limitations of the study and implications for future research.

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ETHICAL CLEARANCE CERTIFICATE

Certificate Number	UZREC 171110-030-RA Level 01 PGM 2014/113						
Project Title	The determinants of self-employment relative to wage earners in Ladysmith						
Principal Researcher/ Investigator	SN Kumalo						
Supervisor and Co-supervisor	Dr. I Kaseeram			Prof E Contogiannis			
Department	Economics						
Nature of Project	Honours/4 th Year		Master's	x	Doctoral		Departmental

Appendices

Appendix A: Ethical clearance certificate

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project proposal and the documents listed on page 2 of this Certificate.

- Special conditions:**
- (1) The Principal Researcher must report to the UZREC in the prescribed format, where applicable, annually and at the end of the project, in respect of ethical compliance.
 - (2) Documents marked "To be submitted" (see page 2) must be presented for ethical clearance before any data collection can commence.

The Researcher may therefore commence with the research as from the date of this Certificate, using the reference number indicated above, but may not conduct any data collection using research instruments that are yet to be approved.

Please note that the UZREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the documents that were presented to the UZREC
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

Appendix B1: English Questionnaire

QUESTIONNAIRE

TOPIC: Determinants of self-employment relative to wage earners in Ladysmith

RESEARCHER : Sboniso Nhlanhla Kumalo
STUDENT NUMBER: 200905262
PROPOSED DEGREE: Mcom(Economics)
FACULTY: Commerce, Administration and Law
DEPARTMENT: Economics
SUPERVISOR: Dr I Kaseeram
CO-SUPERVISOR: Prof contagious

INSTITUTION:

UNIVERSITY OF ZULULAND

INFORMED CONSENT DECLARATION

(Participant)

Project Title: Determinants of self-employment relative to wage earners in Ladysmith, KZN.

(SBONISO Nhlanhla KUMALO) from the Department of Economics, University of Zululand has requested my permission to participate in the above-mentioned research project.

The nature and the purpose of the research project and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

1. The purpose of the research project is to conduct an investigation as to what determines self-employment relative to wage earners in Ladysmith KZN.
2. The University of Zululand has given ethical clearance to this research project and I have seen/ may request to see the clearance certificate.
3. By participating in this research project I will be contributing towards developing policy recommendations that may benefit all stakeholders concerned.
4. I will participate in the project by completing the attached questionnaire without prejudice.
5. My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences.
6. I will not be compensated for participating in the research, but my out-of-pocket expenses will be reimbursed.
7. I understand that the foreseeable risks associated with this study are minimal. These risks are similar to those associated with the disclosure of work related information to others. The researcher has assured me of confidentiality and anonymity in regard to the dissemination of any information to others. However, I am fully aware that I may decline to answer any question (or all the questions) and that I have a right to withdraw from participating at any time during the interview/administration of questionnaire, as noted in point 5, above.
8. The researcher intends publishing the research results in the form of a dissertation, however, confidentiality and anonymity of records will be maintained and that my name and identity will not be revealed to anyone who has not been involved in the conduct of

the research.

9. I will not receive feedback regarding the results obtained during the study.
10. Any further questions that I might have concerning the research or my participation will be answered by Dr I Kaseeram, Faculty of Commerce, Administration and Law, Economics Department.

Telephone no: (035) 9026424

Email: Kaseeraml@unizulu.ac.za

11. By signing this informed consent declaration I am not waiving any legal claims, rights or remedies.
12. A copy of this informed consent declaration will be given to me, and the original will be kept on record.

I,have read the above information / confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurised in any way and I voluntarily agree to participate in the above-mentioned project.

.....
Participant's signature

.....
Date

INSTRUCTIONS:

Respondent Number: _____

1. Please answer all questions.
2. Answer as honestly as possible. **YOUR OPINION IS REQUIRED.**
3. Please do not change any of your responses afterwards (for instance: do not scratch out or tippex any of your responses).
4. Please use a pen to mark your responses by placing a tick (✓), in the appropriate numbered column, or by writing down the appropriate information, wherever required.

SECTION A: Background Information

DEMOGRAPHICS

1. Gender of respondent	Male	1
	Female	2

2. What is your age in years?

3. What is your marital status?	Married	1
	Separated	2
	Widowed	3
	Single	4
	Divorced	5

4. What type of work do you do?	Self-employed	1
	Employed	2

1	0-800
2	800-1 500
3	1 500-3 000
4	3 000-5 000
5	5 000-10 000
6	10 000-20 000

€ 20 000- more

5. In which range does your family income fall?

6. Do you come from a family with a business background?

Yes 1	No 2
-------	------

7. When you had just finished school, what were your aspirations? E.g. Entrepreneur, Doctor, teacher, etc.

Profession	Strongly agree	Agree	Disagree	Strongly disagree
Teacher				
Nurse				
Doctor				
Policemen				
Lawyer				
Entrepreneur				
Other				

8. What grade did you pass?

Grade	1	2	3	4	5	6	7	8	9	10	11	12
-------	---	---	---	---	---	---	---	---	---	----	----	----

YES	NO
-----	----

9. Did you pursue tertiary studies?

10. If "yes" which level?

Certificate	Diploma	Degree	Honours	Masters	PHD
-------------	---------	--------	---------	---------	-----

11. What was your field of study?

12. Do you consider yourself as a gambler?

Yes 1	No 2
-------	------

13. If you invested R1 000 on an investment where there is a 50% chance that it will grow to R10 000 and a 50% chance it will fall in value to R300 will you take the investment?

I definitely will 1	I might 2	Not sure 3	I might not 4	I definitely will not 5
---------------------	-----------	------------	---------------	-------------------------

14. If you invested R100 000 on an investment where there is a 50% chance that it will grow to R1 000 000 and a 50% chance it will fall in value to R30 000 will you take the investment?

I definitely will 1	I might 2	Not sure 3	I might not 4	I definitely will not 5
---------------------	-----------	------------	---------------	-------------------------

SECTION B (SELF-EMPLOYED)

15. a) What date did you start being self-employed? / // /

b) Was Access to finance a major consideration in you becoming self-employed?

Yes 1	No 2
-------	------

c) Have you ever been unemployed?

Yes 1	No 2
-------	------

d) If you answered yes, for how long?

e) Why were you unemployed?

	Strongly agree	Agree	Disagree	Strongly disagree
No opportunities				
Laid off				
No training				
Health reasons				
Addiction problems				
Other				

f) Were you employed before you chose to become self-employed?

Yes 1	No 2
-------	------

g) Why did you choose self-employment?

	Strongly agree	Agree	Disagree	Strongly disagree
Income was too low				
Laid off				
Preferred flexible lifestyle				
Higher potential income				
Enjoy being in business				
Enjoy being independent				

h) How is your company registered? Please tick (✓) the appropriate box.

Partnership	1
Private company	2
Close corporation	3
Sole proprietor	4

Not registered	5
----------------	---

l) Is your company partially owned by a person(s) from other race groups or foreigners?

Yes 1	No 2
-------	------

j) If you answered **YES** to question l, What percentage of your company is owned by such a person(s)?
Please tick (✓) the appropriate box.

100%	1
80%-100%	2
60%-80%	3
40%-60%	4
20%-40%	5
0%-20%	6
0%	7

k) What is the reason for such an ownership arrangement?

l) What type of work do you do? E.G catering, construction, cleaning, etc.

m) Is your business related to your past work experience?

Yes 1	No 2
-------	------

If yes please explain:

n) How many family members work/assist in your business?

o) How many employees do you have in your business (include permanent, part-time and casual employees)

p) Have you ever received any government funding support?

Yes 1	No2
-------	-----

q) How satisfied are you with being self-employed?

Very happy 1	Happy 2	Not happy 3
--------------	---------	-------------

r) How would you rate yourself in terms of political connectedness?

Very Connected 1	Connected 2	Not connected 3
------------------	-------------	-----------------

s) Have you ever received a tender?

Yes 1	No2
-------	-----

t) If you were to receive a better paying job would you take it?

Yes 1	No 2
-------	------

u) If answered yes, why? Please explain

Section C (employed)

16. a)When did you start this employment? / / /

b) Does your employer set the hours you work?

Yes 1	No 2
-------	------

Full time 1	Part time 2
-------------	-------------

c) Is this employment Full-time, Part time?

d) If you answered part-time in question C, then please answer the following question

Would you work full-time in this occupation if full time work was offered to you?

Yes 1	No 2
-------	------

e) If "NO" please explain

--

f) What is your gross earning?

g) Is your present income your main source of

Yes 1	No 2
-------	------

income?

h) Do you have a savings/investment plan?

Yes 1	No 2
-------	------

i) Are you seeking other employment?

Yes 1	No 2
-------	------

j) If you were granted a chance to be self-employed would you take it?

Yes 1	No 2
-------	------

k) Please provide reasons

--

l) If in question j, above you answered yes then please answer the following:

I am unable to choose self-employment because

	Strongly agree	Agree	Disagree	Strongly disagree
No good business ideas				
No savings or assets				
Not credit worthy, banks will not provide me a loan				
I am afraid to leave a secure job				
Business start-up costs are high, I am not willing to risk my savings				
Labour costs are high I will not make a good profit				
Bank repayment costs are high				
Equipment and operational costs are high.				
Rental costs are high				

m) Did you try seeking government assistance start up your business?

Yes 1	No 2
-------	------

THANK YOU FOR YOUR TIME!!!!!!!

Appendix B1: IsiZulu Questionnaire

UHLA LWEMIBUZO (EZAMABHIZINISI NOKUQASHWA)

Isihloko: Imbangela yokuba abantu bakhethe ukuba ngosomabhizinisi abazimele kunokuthi baqashwe endaweni yaseMnambithi

UMCWANINGI :	Sboniso Nhlanhla Kumalo
INOMBOLO YOMFUNDI:	200905262
IZIQU:	Mcom (Economics)
UMKHAKHA:	Commerce, Administration and Law
UMNYANGO:	EZOMNOTHO
UMBHEKELELI:	Dkt I Kaseeram
UMSIZI KAMBHEKELELI:	Prof contagious

Isikhungo:

Inyuvesi Yakwazulu (Ongoye)

IMVUME YOKUBAMBA IQHAZA (UMHLANGANYELI)

ISIHLOKO: Imbangela yokuba abantu bakhethe ukuba ngosomabhizinisi abazimele kunokuthi baqashwe endaweni yasemnambithi.

USiboniso Nhlanhla KUMALO ovela emnyangweni wezifundo zomnotho, eNyuvesi yakwaZulu (oNgoye) uyicele kimi imvume yokubamba iqhaza kulolu cwaningo mayelana nesihloko esibhalwe ngenhla. Inhloso nendlela yokusebenza kwalolu cwaningo ichaziwe kimi ngolimi engiluzwayo futhi ngiyayiqonda.

Ngiyakuqonda ukuthi:

1. Inhloso yalolu cwaningo ukuthola Imbangela yokuba abantu bakhethe ukuba ngosomabhizinisi abazimele kunokuthi baqashwe endaweni yasemnambithi. ukubheka INyuvesi ilikhiphile igunya ngokusemthethweni lokuthi kwenziwe lolucwaningo futhi ngingayicela ukuyibona noma nini.
2. Ngokubamba iqhaza kulolu cwaningo ngizoba yingxenye yokwakhiwa kwemigomo engasiza noma ezosiza abantu abaningi.
3. Ngizobamba iqhaza ngokuphendula le mibuzo enikezelwe kimi ngokuthembeka.
4. Ukubamba kwami iqhaza kungukuzikhethela futhi nginganquma ukuhoxa noma nini futhi ngeke kungibangele izinkinga.
5. Akukho nzuzo noma isinxephezelo engizosithola ngokuba yingxenye yalolu cwaningo, kodwa izindleko zephakethe ziyonxephezela.
6. Ngiyaqonda ukuthi buncane ubucayi obungalindeleka kulolu cwaningo. Umcwaningi ungiqinisekisile ukuthi imininingwane iyogodlwa ukuvikela mina uma kusatshalaliswa ulwazi kwabanye. Ngakho ngiyazi ukuthi nginalo ilungelo lokungayiphenduli eminye noma yonke imibuzo futhi nginalo ilungelo lokuhoxa phakathi nokuphendula le mibuzo.
7. Umcwaningi unenhloso yokubhala nokukhipha imiphumela yalolucwaningo kodwa imininingwane ezeza ubumina okubalwa kuyo negama lami ngeke ivezwe komunye umuntu ongesiyo ingxenye yalo msebenzi.
8. Imiphumela ngeke ithunyelwe kimi kodwa ngingayicela ngiyibone.
9. Imibuzo engingaba nayo noma izinkinga ngingakuqondisa ku Dkt. I Kaseeram, Faculty of Commerce, Administration and Law, Economics Department. Inombolo yocingo: (035) 902 6424
Email: KaseeramI@unizulu.ac.za

10. Ngokusayina leli phepha elingukuzibophezela angimisi amalungelo ami futhi angibheke kubophezeleka ngokomthetho.
11. Leli phepha liyonikezelwa kimi bese elinye ligcinwa emiqulwini yomcwaningi.

Mina ngilufundile lolu lwazi olungenhla futhi ngiyaqinisekisa ukuthi luchaziwe kimi nakho konke okuqokethwe yilawa maphepha. Ngiyibuzile yonke ebenginayo futhi yaphendulwa ngokweneliseka. Ngikuqonda konke okulindeleke kimi ngesikhathi kuqhubeka ucwaningo. Ngiyaqinisekisa ukuthi akunangcindezi engifakwe yona futhi ngingena ngokuzikhethela ekubambeni iqhaza kulolu cwaningo.

.....
Sayina lapha

.....
Usuku

IMIGOMO:

Inombolo yomqulu:

1. Phendula yonke imibuzo
2. Phendula ngokwethembeka. **UMBONO WAKHO UYADINGEKA.**
3. Ungashintshi umqondo kuze kube kaningi (isibonelo: ungacishi noma ususe izimpendulo zakho).
4. Sebenzisa ipeni ukuphendula ngendlela efanele nokufaka izimpawu ezifanele ezikhaleni ezifanele.
5. Izimpendulo zakho ezinobuqotho nokwethembeka ziyosisiza ukuqonda kabanzi okwenzekayo uma sikhuluma ngezemisebenzi kuMasipala waseMhlathuze.
6. Izimpendulo nemibono yakho imele noma iyafana neyabanye abantu endaweni yakini. Ngakho, thatha isikhathi sakho uphendule ngokuqikekela imibuzo eqondene nawe nekuthintayo.
7. Khumbula ukuthi zonke izimpendulo zakho angeke ziqondaniswe negama lakho ukuvikela isithunzi sakho. Uma udinga olunye ulwazi ungabuza umcwaningi noma umsizi womcwaningi akuchazele.

Siyabonga ngokuzinikela kwakho nangesikhathi sakho

ISIGABA A: **Imininingwane**

1. Uwubuphi ubulili

Ngowesilisa	1
owesifazane	2

2. Uneminyaka emingaki?

3. kungabe ukuliphi izinga lezokushada?

Ushadile	1
Uhlala nomlingani wakho	2
Umfelwa/umfelokazi	3
Akakaze ashade	4
udivozile	5
Wehlukanisile noma uhlala kwenye indawo	6

4. Wenza msebenzi muni?

Uyazisebenza	1
Uqashiwe	2

6. Umholo womndeni wakho ulinganiselwa kuphi kuloku?

1	0-800
2	800-1500
3	1500-3000
4	3000-5000
5	5000-20 000
7.	Okuphezu kuka 20 000

7. Engabe emndenini wakho ninawo okanye nike nazibandakanya kwezamabhizinisi ngaphambili kokuthi usungule elakho?

Yebo 1	Cha 2
--------	-------

6. Ngenkathi uqeda matikuletsheni kwakuyini isifiso sakho?

umkakha	Ngiyavuma kakhulu	Ngiyavuma	Ngyaphika	Ngyaphika kakhulu
Uthisa				
Umhlengikazi				
Dokotela				
Iphoyisa				
Ummeli				
Usomabhizinisi				
Okunye				

7. Iliphi ibanga lezemfundo owaliphasa?

Ibanga	1	2	3	4	5	6	7	8	9	10	11	12
--------	---	---	---	---	---	---	---	---	---	----	----	----

8. Engabe waqhubeka nezifundo zemfundo ephakeme?

Yebo 1	Cha 2
--------	-------

9. Uma ukhethe uYebo kumbuzo ongenhla, liphi ibanga?

Isitifiketi	iDiploma	iDigri	I onazi	Imastazi	iPHD
-------------	----------	--------	---------	----------	------

10. Umkhakha owawufundela?

11. Uma kungathiwa luleka ingane yakho phakathi kokuba usomabhizinisi nokuba umqashwa ungakhetha kuphi?

Ukuzisebenza	ukuqashwa
--------------	-----------

kungani?

--

12. Engabe uzithatha ngemuntu ongumgembuli?

Yebo 1	Cha 2
--------	-------

13. Uma kungathiwa uyonga imali engango R1000 bese kuthiwa kunamathuba (50%) okuthi imali yakho ingakhula ibe ngu R10 000 okanye kungenzeka yehle ibe ku R400 kwinani, ungaqhubeka wonge?

Yebo ngingonga 1	Kungenzeka 2	Angiqisekile3	Mancane amathuba4	Angeke 5
------------------	--------------	---------------	-------------------	----------

14. Uma kungathiwa uyonga imali engango R100 000 bese kuthiwa kunamathuba (50%) okuthi imali yakho ingakhula ibe ngu R1 000 000 okanye kungenzeka yehle ibe ku R40 000 kwinani, ungaqhubeka wonge?

Yebo ngingonga 1	Kungenzeka 2	Angiqisekile 3	Mancane amathuba 4	Angeke5
------------------	--------------	----------------	--------------------	---------

ISIGABA B (Osomabhizinisi)

15. a) Engabe ukuthola imali yokuqala ibhizinisi kwaba ingxaki enkulu kuwena?

Yebo 1	Cha 2
--------	-------

b) kwake kwenzeka waswela umsebenzi?

Yebo 1	Cha 2
--------	-------

c) Uma impendulo yakho ngenhla ingu Yebo, isikhathi esingakanani?

d)Kungani wawungasebenzi?

	Ngiyavuma kakhulu	Ngiyavuma	Ngyaphika	Ngyaphika kakhulu
Ayengekho amathuba omsebenzi				
Ngadilizwa emsebenzini				
Angikutholanga ukuqeqeshwa				
Izimo zezempilo				
Inkinga yezidakamizwa				
Okunye				

e) Engabe wawusebenza ngaphambi kokuba ukhethe ukuzimela kwezamabhizinisi?

Yebo 1	Cha 2
--------	-------

f) Yini ekwenze wakhetha ukungena kwezamabhizinisi?

	NGIVUMA KAKHULU	NGIYAVUMA	NGIYAPHIKA	NGIYAPHIKA KAKHULU
Wawumncane umholo				
Ngadilizwa				
Impilo yakanokusho yokhethelo				
Amathuba okwenza imali eningi				
Ngiyakujabulela ukuba usomabhizinisi				
Ngijabulela ukuzimela				

g) Uqale nini ukuzisebenza? / / / /

h) Engabe ibhizinisi lakho libhaliswe ngaluphi uhlobokulena elandelayo?

Partnership	1
Private company	2
Close corporation	3
Sole proprietor	4
alibhalisiwe	5

i) Engabe lebhizinisi ngelakho ngokuphelele okanye kunegxanye ephethwe ngabelungu?

Yebo 1 | cha 2

j) uma uphendule Yebo, ingxanye engakanani khetha kulo okungenzansi

100%	1
80%-100%	2
60%-80%	3
40%-60%	4
20%-40%	5
0%-20%	6
0%	7

k) isiphi isizathu saloluhlelo lokuphathwa kwenkampani?

l) hlobo luni lomsebenzi owenzayo kwibhizinisi lakho?

m) Engabe umsebenzi owenza kwibhizinisi lakho uyafana nalona owawuwenza usasebenza?

Yebo 1 | Cha 2

Umakunjalo chaza:

n) Bangaki abomndeni abakusizayo kwibhizinisi lakho?

--

o) Bangaki abasebenzi onabo kwibhizinisi lakho?

--

p) Uke waluthola usizo lwezimali kuhulumeni?

Yebo1	Cha 2
-------	-------

q) Engabe weneliseke kangakanani ngokuzisebenza kwezamabhizinisi?

Ngejabule kakhulu 1	ngijabule 2	Angijabule3
---------------------	-------------	-------------

r) Ekwazini abantu abaphezulu kwezepolitiki ungathi uxhumane kangakanani nabo?

Ngiyabazi kakhulu 1	Ngiyabazi 2	Cha angibazi 3
---------------------	-------------	----------------

Yebo 1	Cha 2
--------	-------

s) Wake wayithola ithenda?

t) Uma kungaqhamuka umsebenzi okhokhela kancono ungawuthatha??

Yebo 1	Cha 2
--------	-------

u) Uma uphendule uYebo, kungani ungawuthatha? chaza

--

v) Emndenini nike naba nawo amabhizinisi ngaphambilini or asekhona?

Yebo 1	Cha 2
--------	-------

Section C (Abasebenzi)

16.a) Uqale nini ukusebenza lawusebenza khona? / / / /

b) Engabe umqashi wakho nguyena okubekela isikhathi sokusebenza?

Yebo 1	Cha 2
--------	-------

c) Engabe lomsebenzi owenzayo uyitoho okanye ungusebenzi ohlezi ukhona?

umsebenzi 1	Itoho 2
-------------	---------

d) Uma uphendule kuthi ubambe itoho, ungakujabulela uma lomsebenzi ungayeka ukuba itoho kepha ube umsebenzi ohlezi ukhona?

Yebo 1	cha 2
--------	-------

e) Uma uphendule ucha kumbuzo ongenhla kungani? chaza

--

f) Uholo imali engakanani ?

--

g) Engabe umholo owuthola ngokusebenza iyona ndlela yokungeni imali kuphela?

Yebo 1	cha 2
--------	-------

h) Engabe unalo uhlelo lokonga imali?

Yebo 1	Cha 2
--------	-------

i) Engabe njengamanje uyayibheka imisebenzi encono?

Yebo 1	Cha 2
--------	-------

j) Mewunganikezwa ithuba lokuzimela kwezamabhizinisi ungalithatha lelo thuba?

Yebo 1	Cha 2
--------	-------

k) Sicela uchaze kabanzi ngempendulo oyinikeze ngenhla

--

l)Uma embuzweni J ongenhla uphendule uyebo, sicela uphendule lemibuzo elandelayo:

	Ngyavuma kakhulu	Ngyavuma	Ngyaphika	Ngyaphika kakhulu
Icebo elihle lebhizinisi engingaliqala anginalo				
Anginayo imali engiyongile okanye izinto eziphathekayo				
Angikho ezingeni lokuba ibhange lingangiboleka imali				
Ngyasaba ukushiya umsebenzi oyohlezi ukhona				
Imali yokuqala ibhizinisi inkulu kanti angizimisela kusebenzisa imali yami engiyongayo				
Ukuqasha abantu kuyabiza loko kongenza ngibe nenzuzo encane				
Inzalo emabhange inkulu kakhulu				
Imishini nezindleko zokuqhuba ibhizinisi ziyabiza kakhulu				
Imali yokuqasha indawo Ibiza kakhulu				

m)Uke waluzama uncedo kuhulumeni ukuthi akuxhase ngemali yokuqala ibhizinisi lakho?

Yebo 1	Cha 2
--------	-------

Siyabonga ngesikhathi sakho!!!!

Appendix C: Chi Squared Results

Based on the empirical evidence discussed in chapter three, all variables used in this study were expected to have a positive nexus with the independent variable. The chi squared results were generated using Microsoft excel and respectively implied 5 per cent level of significance.

Table A1.0: The relationship between Occupation and Gender Cross Tabulation

Chi Square Stat			
	Fo	Fe	stat
SE (M)	90	78.85556	1.57501314
SE (F)	61	72.14444	1.72152619
E(M)	145	156.1444	0.79540253
E(F)	154	142.8556	0.86939295
			4.96133481

Notes:

P-value	Alpha
0.0259	
2	0.05
4.96	3.8410

Chi Squared Statistic > Chi Squared Crit Reject null hypothesis

Since Chi Squared calculated is greater than critical, therefore we concluded occupation type chosen is dependent on gender

Table B1.0: The relationship between Occupation and Age Cross tabulation

Chi Square Stat			
	Fo	Fe	stat
<30	61	51.00444	1.958873
<30	91	100.9956	0.989271
31-38	42	49.99778	1.279347
31-38	107	99.00222	0.646091
39+	39	49.778	2.333667
39+	39	99.00222	36.36551
			40.593

Notes:

Pv	Alpha
1.53229E-09	0.05
40.59300235	5.991464547

Since Chi Squared calculated is greater than critical, therefore we concluded occupation type chosen is dependent on age

Table C1.0: The relationship between Occupation and Marital status

Chi Square Stat			
	Fo	Fe	stat
SE (S)	71	84.8955556	2.27440014891
SE (M)	80	66.1044444	2.92093014048
E(S)	182	168.104444	1.14861010865
E(M)	117	130.895556	1.47511856593
			7.81905896397

Notes:

P-value	Alpha
0.005169811	0.05
7.81905896397	3.8415

Since Chi Squared calculated is greater than critical, therefore we concluded occupation type chosen is dependent on marital status

Table E1.0: The relationship between occupation and Family Business Background Cross Tabulation

Chi Square Stat			
	Fo	Fe	stat
SE (Y)	66	47.31333	7.380407
SE (N)	85	103.6867	3.367768
E(Y)	75	93.68667	3.727229
E(N)	224	205.3133	1.70078
			16.17618

,= Chi Squared Calculated

Note:

Pv	alpha
5.77E-05	0.05
16.17618	3.84

Since Chi Squared calculated is greater than critical, therefore we concluded occupation type chosen is dependent on family business background

Table F1.0: The relationship between occupation and Access to Finance Cross Tabulation

Chi Square Stat			
	Fo	Fe	stat
SE (Y)	137	119.7933	2.471512
SE (N)	14	31.20667	9.487379
E(Y)	220	237.2067	1.248154
E(N)	79	61.79333	4.791286
			17.99833

,= Chi Squared Calculated

pv	Alpha
2.21099E-05	0.05
17.99832988	3.84

Since Chi Squared calculated is greater than critical, therefore we concluded occupation type chosen is dependent on access to finance

Table G1.0: The relationship between Occupation and Education Cross Tabulation

Chi Squared Statistic

	Fo	Fe	
7	2	2.34888889	0.051821718
7	5	4.65111111	0.026170834
8	4	1.67777778	3.214201619
8	1	3.32222222	1.623225567
9	1	0.67111111	0.161177336
9	1	1.32888889	0.08139725
10	5	2.68444444	1.997358352
10	3	5.31555556	1.008699368
11	5	4.36222222	0.093246165
11	8	8.63777778	0.047090873
12	45	51.0044444	0.706866891
12	107	100.995556	0.356979601
13	12	8.38888889	1.554451803
13	13	16.6111111	0.785024155
14	17	19.1266667	0.23646102
14	40	37.8733333	0.119416769
15	43	45.6355556	0.152209237
15	93	90.3644444	0.07686821
16	13	13.7577778	0.041738366
16	28	27.2422222	0.021078573
17	2	0.67111111	2.631376012
17	0	1.32888889	1.32888889
18	2	0.67111111	2.631376012
18	0	1.32888889	1.32888889
			20.27601351

Notes: