

**AN INVESTIGATION OF THE DETERMINANTS OF CHILD POVERTY IN
BOIPATONG TOWNSHIP**

BY

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To the residents of Boipatong, thank you for opening your doors to us and making this study possible. God bless.

DEDICATION

To my late father Motlatsi Solomon Makhalima who had big dreams for me.

DECLARATION

I declare that the thesis titled:

**AN INVESTIGATION OF THE DETERMINANTS OF CHILD POVERTY IN
BOIPATONG TOWNSHIP**

is my own work and that all the resources used or quoted have been duly acknowledged by means of in-text citations and complete references, and that I have not previously submitted this thesis for degree purposes at any other university.

Jabulile Lindiwe Makhalima

ABSTRACT

The study investigated on the determinants of child poverty in Boipatong Township. The premise of the study was on the fact that children do not have an isolated existence but that they exist in households and hence the household context and the characteristics of the head of the household determine to a greater extent the well being of the child. The main focus of the investigation therefore was on the household and the head of the household characteristics and how they contribute to child poverty. The characteristics of the head of the household included age, gender, marital status, educational level and employment status. Household characteristics such as income and the size of the household were also taken into consideration. A total of 300 questionnaires were collected in the survey.

The study made use of a logistic regression on the determinants of child poverty status. The results found that unemployment, age, and male heads of households increased the probability of a child being poor. The results of the regression also indicated that household income and household size were significant in explaining child poverty. Children living in large households were found to have a higher chance of being poor and higher income was found to reduce the probability of a child falling into poverty.

The study further investigated whether the determinants of child poverty in the logistic regression also contributes to child deprivation measured as a continuous variable in an OLS regression. The dependent variable was the child deprivation index, which was adapted from Barnes' (2009) list of necessities for children. The OLS regression results found household size, employment status, marital status and education level to be significant determinants of child deprivation.

Heads of households were also asked about their perceived consequences of child poverty. The study found that heads of households perceived poor children to be less likely to resort to drugs and prostitution. However, children were perceived to resort to crime due to their poverty situation. The heads of the households, however, had differing views regarding social exclusion and educational outcomes. Non-poor households perceived social exclusion and poor academic outcomes to be consequences of child poverty while poor households felt that a child's poverty status does not determine their educational outcomes or whether they will be socially

excluded or not. The poor disagreed with the perception that poor children are perceived to have poor health outcomes due to their poverty status while the non-poor felt that the poverty status of a child, in fact, will influence their health outcomes.

The study made recommendations based on the understanding that child poverty is a derived position. Therefore, child poverty cannot be addressed directly, but through its causes, hence the recommendations were toward the causes to achieve a reduction in child poverty and child deprivation. The recommendations included the establishment of a community one-stop information centre, where residents can find information pertaining to employment, education opportunities and career guidance among other things. The provision of internet access at a minimal fee would also enable the residents to apply for jobs and bursaries for those who want to pursue their studies further. Linked to the lack of information is the lack of skills among the unemployed, which in turn makes it difficult for them to find employment. Therefore, it was also recommended that there should be government-private sector collaboration in the provision of various skills that will make the residents employable so that they can provide for the needs of their children. The provision of finance facilities by the likes of the IDC and the NEF to emerging small businesses are recommended in order to assist the informal businesses to graduate to formal small and medium enterprises. Self-employment will also enable parents to attend to the needs of their children. Lastly, back-yard farming for household consumption and small-scale farming at community level were pointed out as ways to deal with food insecurity that was found to be a contributor to child deprivation. Starting a small-scale farming co-operative through the support of the local municipality and experienced farmers close to the area could also address the issue of unemployment, which will ultimately lead to the reduction of child poverty and child deprivation in the township.

Key words: Poverty, child, child poverty, child deprivation, head of the households, Boipatong Township.

OPSOMMING

Hierdie studie ondersoek die bepalende faktore van armoede onder kinders in die Boipatong Township. Die uitgangspunt van die studie fokus op die feit dat kinders nie 'n afsonderlike 'n bestaan voer nie, maar binne 'n huishouding leef en daarom bepaal die huishoudingskonteks en die karaktereienskappe van die hoof van die huishouding tot 'n groot mate die welstand van die kind. Die hoof fokus van die ondersoek was daarom die huishouding en die karaktereienskappe van die hoof van die huishouding en hoe dit bydra tot armoede onder kinders. Die karaktereienskappe van die hoof van die huishouding sluit ouderdom, geslag, huwelikstatus, vlak van onderrig en werkstatus in. Huishoudingskaraktereienskappe soos inkomste en die grootte van die huishouding is ook in ag geneem. 'n Totaal van 300 vraelyste is in die opname versamel.

Die studie het van 'n logistieke regressie gebruik gemaak om die bepalende faktore van kinderarmoede te bepaal. Die resultate het gedui dat werkloosheid, ouderdom en manlike hoofde van die huishouding die waarskynlikheid van kinderarmoede verhoog. Die resultate van regressie het ook aangedui dat huishoudelike inkomste en huishoudingsgrootte noemenswaardig is om armoede onder kinders te verklaar. Kinders van groot huishoudings het 'n groter kans om arm te wees terwyl 'n hoër inkomste huishouding die waarskynlikheid van 'n kind om in armoede te verval verminder.

Die studie het ook verder ondersoek of die bepalende faktore van armoede onder kinders in die logistieke regressie ook bydra tot die verwaarlosing van kinders as 'n voortdurende veranderlike in GKK-regressie. Die afhanklike veranderlike was die kinderverwaarlosingsindeks, wat aangepas is uit Barnes (2009) se lys van noodsaaklikhede vir kinders. Die GKK-regressie resultate het gedui dat huishoudingsgrootte, werkstatus, huwelikstatus en vlak van onderrig noemenswaardige bepalende faktore van kinderverwaarlosing is.

Hoofde van huishoudings is ook gevra oor die vermeende gevolge van armoede onder kinders. Die studie vind dat hoofde van huishoudings meen arm kinders is minder geneig om hulself tot dwelms en prostitusie te wend. Alhoewel verneem word dat kinders meer tot misdaad wend as gevolg van hulle armoedige situasie. Die hoofde van huishoudings het wel verskillende sienings aangaande sosiale uitsluiting

en opvoedkundige uitkomst. Welgestelde huishoudings beskou sosiale uitsluiting en swak akademiese uitkomst as 'n gevolg van kinderarmoede terwyl arm huishoudings voel dat 'n kind se armoedestatus nie hulle opvoedkundige uitkomst en of hulle sosiale stand bepaal nie. Die armes het nie saamgestem met die mening dat arm kinders se gesondheid swak is as gevolg van hulle armoedestatus nie, terwyl welgesteldes meen dat die armoedestatus van 'n kind, inderdaad hulle gesondheid beïnvloed.

Die studie het aanbevelings gemaak gebaseer op die uitgangspunt dat armoede onder kinders 'n vorm van verwaarlosings is. Dus kan armoede onder kinders nie direk aangespreek word nie, maar deur die oorsake, daarom is daar aanbevelings gemaak rondom die oorsake om 'n afname in armoede en verwaarlosing onder kinders te bereik. Die aanbevelings sluit die stig van 'n gemeenskaps-eenstop-inligtingsentrum in, waar inwoners onder andere inligting rondom werksgeleenthede, onderriggeleenthede en loopbaanvoorligting kan kry. Die voorsiening van internettoegang teen 'n minimale fooi sal inwoners ook in staat stel om vir werk en beurse aansoek te doen, vir dié wat hulle studies verder wil voortsit. Gekoppel aan die tekort aan inligting is die tekort aan vaardighede onder werkloses, wat op sy beurt dit weer vir hulle moeilik maak om werk te kry. Daarom, word dit aanbeveel dat daar 'n samewerking tussen die staat en die die privaatsektor moet wees om te voorsien aan die verskeie vaardighede wat inwoners indiensneembaar maak sodat hulle kan voorsien aan hulle kinders se behoeftes. Die voorsiening van finansiële fasiliteite deur die IDC en die NEF aan opkomende klein besighede word aanbeveel om sodoende informele besighede te help om formele klein en medium ondernemings te word.

Selfindiensname sal ook ouers in staat stel om aan die behoefte van hulle kinders te voorsien. Laastens, kleinhoewe boerderye vir huishoudelike doeleindes en klein skaalse boerderye op 'n gemeenskaplike vlak is uitgewys as maniere om kos te voorsien wat aangedui is as 'n bepalende faktor van verwaarlosing onder kinders. Die begin van klein skaalse boerderye deur die ondersteuning van die plaaslike munisipaliteit en ervare boere in die omringende omgewing sal ook werkloosheid aanspreek, wat ten einde lei tot die afname van armoede en verwaarlosing onder kinders. Sleutelwoorde: Armoede, armoede onder kinders, verwaarlosing, kind, hoof van huishouding, Boipatong Township.

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LIST OF ABBREVIATIONS

APDP	Automotive Production and Development Plan
AES	Adult Equivalence Scale
AIDS	Acquired Immune Deficiency Syndrome
CHIP	Childhood Poverty Research and Policy Centre
CWP	Community Works Programme
CRC	Convention on the rights of a child
CSG	Child Support Grant
DTI	Department of Trade and Industry
FCG	Foster Care Grant
FGT	Foster-Greer Thorbecke
ECD	Early Childhood Development
EPWP	Expanded Public Works Programme
GDP	Gross Domestic Product
GNP	Gross National Product
HDI	Human Development Index
HIV	Human Immune Deficiency Virus
IDC	International Development Co-operation
IES	Income and Expenditure Survey
INP	Integrated Nutrition Programme
IPAP	Industry Policy Action Plan
LFPR	Labour Force Participation Rate
MDG's	Millennium Development Goals
MPI	Multidimensional Poverty Index
NSFAS	National Student Financial Aid Scheme
MTSF	Medium Term Strategic Framework
NDP	National Development Plan

NEF	National Empowerment Fund
NGP	New Growth Path
NSFAS	National Student Financial Aid Scheme
OECD	Organisation for Economic Cooperation and development
OLS	Ordinary Least Squares
PES	Parametric equivalence scale
RDP	Reconstructive Development Programme
SAHRC	South African Human Rights Council
SASAS	South African Social Attitudes Survey
SETA	Sector Education and Training Authority
SDG'S	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
STATS SA	Statistics South Africa
TVET	Technical Vocational Education and Training
UK	United Kingdom
UNDP	United Nations Development Program
UNESCO	United Nations Education and Cultural Organisation
UNICEF	United Nations Children's Fund
UN	United Nations
USA	United States of America
VIF	Variation Inflation Factor
WHO	World Health Organisation

CHAPTER 1: THE PROBLEM AND ITS SETTING

1.1 INTRODUCTION

The poverty phenomenon is multifaceted in nature and diverse in a sense that it can be linked to starvation, exploitation, unemployment and lack of access to clean water, health care and education. While it is clear that many of these issues are related to not having sufficient money, it may be insensitive to ignore the non-material aspects of the experience of poverty. Poor people are not only concerned with adequate incomes and consumption, obtaining other objectives such as security, independence and self-respect may be equally imperative as the means to buy basic goods and services. Nevertheless, monetary measures of welfare such as income or expenditure may provide the best objective proxy for poverty status (Woolard, 2002:2).

There is a worldwide consensus that children are one of the most vulnerable groups to poverty (McKendrick *et al.*, 2007). The United Nations Children's Fund (UNICEF, 2005) argues that the elements that differentiate child poverty from the general poverty often are overlooked and neglected. Child poverty, as a concept, has certain factors that are attributable to it and should rather be differentiated from the more general attributes of poverty such as lack of income, shelter and the like.

UNICEF (2005) further argues that a child growing in a household where there is no affection, insufficient food and no cognitive development is said to be living in poverty. Child poverty is an unsettling situation whereby a human being experiences poverty at an early age. The situation is particular in a sense that once a child experiences poverty, the likelihood of remaining in poverty is quite high, even living it right through to adulthood. Child poverty may lead to stunting as well as psychological trauma, which may affect a person for the rest of their lives. The main international legal instrument on children's rights is the Convention on the Rights of Children (CRC) where South Africa is a member state. Child poverty, therefore, can be defined as violation of the rights protected by the CRC (UNICEF, 2006:2).

According to Barnes (2009:3), studies on poverty conducted during the apartheid era in South Africa, to a large degree, have been oblivious to child poverty, especially Black child poverty. The Carnegie Inquiry of 1928 had its main focus on White child poverty. Child poverty, which was a White's only study, was limited to only health and educational conditions pertaining to White children. Child poverty studies amongst Black children were never done. The 1980s saw a second Carnegie Inquiry look into poverty dynamics but nothing on inclusive child poverty. The end of the apartheid era allowed researchers and research institutions such as UNICEF and the CRC to conduct research on women and children in South Africa (Barnes, 2009:3).

Mirugi-Mukundi (2009:3) argues that the task of measuring child poverty is cumbersome because the concept itself is not easy to define and that few methodologies exist for measuring child poverty. According to Statistics South Africa (Stats SA, 2011:9), approximately 15 812 268 children formed part of the South African population in the 2011 national census. Whereas the extent of child poverty is a great cause of concern, it is almost impossible to disregard the prevalence of child poverty and its particular impact on children (Mirugi-Mukundi, 2009:3).

The child poverty situation in South Africa and other developing countries may have some economic disadvantages such as poor human capital as well as mediocre levels of productivity in later years. These disadvantages are endured mostly by children who were not privileged to obtain some form of tertiary education and training leading to a cyclical trend of poverty. Therefore, it is important and urgent that South Africa creates opportunities for upward mobility for those born into poor families (Barnes & Wright, 2010:2).

1.2 THE RESEARCH PROBLEM

The effects of child poverty are felt by millions of children globally. This phenomenon affects both wealthy and poor countries and thus requires urgent intervention. General poverty reduction techniques do not take into account the fact that child poverty is a unique phenomenon that should be dealt with differently. This is because the needs of a child differ from those of an adult (Munjini *et al.*, 2005:4).

Governments across the world are seeking ways of dealing with the child poverty phenomenon, as this is an unacceptable situation. The situation of child poverty is considered unacceptable for two main reasons. The first being the hindrance of poverty on a child's growth and development, education, job opportunities and its spill over effect from one generation to the next. The second reason is the urgent need to acknowledge the importance of childhood in its own right and not just as a phase between birth and adulthood (Barnes & Wright, 2010:1).

The causes of child poverty serve as a piece of a puzzle as to what exactly determines the child poverty phenomenon. Child poverty could be due to the struggle faced by low-income parents to be optimal caregivers and to guide their children adequately. Impediments are likely to arise when low-income families go through family structural changes such as separation of parents, depression and substance abuse. The dire impact of childhood poverty may have certain economic shortcomings such as increased chances of failure to thrive in life and a low standard of living in future (Katz *et al.*, 2007:13).

The demographic profile of a household plays a pivotal role in a child's life. The significance of the latter may be such that should the scope of the demographic profile of the family change, then the wellbeing of a child may be compromised. Due to the detriment of the demographical changes, a child may have to adapt and become more aware of their surroundings and will most likely be living with a single parent and fewer siblings than in the past (Corcoran & Chaudry, 1997). On the other hand, children who live in two parent households are known to be far better off as the parents can safeguard them from financial difficulties and any other hindrances that the children are likely to face (McCarthy, 2011:9).

Children coming from households where parents have low levels of education are likely to be much poorer than are those from households with learned parents. Parental education needs more attention as the global economy has become harsher for parents with no formal education. Wages as well as benefits have declined for those workers with low education levels and little work experience. It is even harder for parents, in particular younger ones, to make ends meet for a family struggling in poverty (Corcoran & Chaudry, 1997). Poorer children have to work

twice as hard in school than do children from non-poor households and it can be argued that most of the time, education is the only way to escaping poverty. Thus, parents are responsible for creating the awareness of the importance of education to their children from a young age (Jacob & Ludwig, 2009:56).

A host of factors, which a child has no control over, may cause child poverty. Households have different circumstances that differentiate them from other households. Thus, it is necessary to establish what the possible determinants of child poverty are and if head of household determinants can cause child poverty.

1.3 AIMS OF THE STUDY

Munijin *et al.* (2006:483) argues that child poverty is perceived as poverty endured by children. The child poverty situation is different from that of adults, therefore, it cannot be compared. Orthodox anti-poverty strategies do not address the more urgent needs of child poverty. The causes and effects of child poverty may have a lasting or even permanent effect on a child's future.

The impact of poverty on children can be more severe due to vulnerability, age and dependency. Early childhood poverty, which is poverty experienced by a child during the first year of life, is likely to affect a child's cognitive abilities and physical impairment, whereby a child becomes permanently disadvantaged, and this in turn may have cyclical effects across generations (UNICEF, 2011:1). Reducing child poverty can minimise the agony and deprivation experienced by children (UNICEF, 2005:6). Therefore, it is essential to conduct a study of this nature, bearing in mind the subsequent aims of the study, in order to bring forth the recommendations that can ultimately help in the effort of alleviating child poverty.

This study, therefore, has as the primary aim, to examine the determinants of child poverty in Boipatong Township.

The secondary aims of the study are:

- ❖ To analyse the extent of child deprivation in Boipatong Township

- ❖ To determine the perceptions of the causes and consequences of child poverty in the township
- ❖ To investigate the strategies that can be used to alleviate child poverty and child deprivation in the township.

1.4 RESEARCH METHODOLOGY

This section highlights how the research was conducted for the sole purpose of obtaining the necessary data. A quantitative research methodology was followed due to the empirical and statistical approach of the study. The following studies were conducted and elaborate further on the research design and methodology:

1.4.1 Literature study

For the literature study, the candidate made use of sources such as books, government publications and online publications such as working papers, electronic journals, articles and published reports as well as unpublished reports like theses.

1.4.2 Empirical study

For the purpose of this study, a household survey on child poverty in Boipatong Township was conducted by means of questionnaire-interviews to obtain the necessary data.

1.4.3 Household survey

The household survey was conducted as follows: Maps were obtained for Boipatong Township and a sample stratification was designed according to the geographical distribution and the concentration of people in the township. A questionnaire was designed for attaining the desired information. The area was divided into different segments and questionnaires were distributed evenly among the inhabited sites.

Plots/sites at which the fieldworkers completed the questionnaires were identified individually from the map before the field workers went out. However, where people could not be found, or where it was impossible to trace the house, a next preselected household was interviewed. The sampled population was 300 households.

1.4.4 Measuring child poverty

The study adopted the adult equivalence scale (AES) in order to measure child poverty in Boipatong Township. The AES tool, which serves as an indicator for ranking individuals, is vital but the passage from household data to the individual wellbeing remains cumbersome. One way to deal with such a task is to determine the household size and composition. The AES is a tool, which is designed to work through the differences, and ultimately to make a transformation from household level to individual level welfare (Streak *et al.*, 2008:185).

The general approach for using the AES is to use the form introduced by Cutler and Katz (1992) as follows:

$$AE = (A + \alpha K)\beta \quad (1.1)$$

Where:

AE = refers to the adult equivalence

A = represents the number of adults

K = represents the number of children

α = adjusts for age equivalences

β = adjusts for economies of scale

The household size element that the AES addresses is that bigger households need larger incomes/expenditure, unlike smaller households, in order to obtain the same level of welfare. The AES thus gives allowance to analyse the determinants of child poverty through child poverty measurement (Streak *et al.*, 2008:185).

1.4.5 The microeconomic analysis of child poverty

The equalisation of disposable income modified scale by the Organisation for Economic Cooperation and Development (OECD) was employed for the micro econometric analysis of child poverty in this study. The OECD scale is suitable for the study because it has been tested and validated in other countries. The manner in which the weights are assigned, based on the composition and age of the members of a household, makes it an ideal scale compared to other scales. The study

followed the logistic regression analysis technique. The study employed micro econometric analysis, whereby households are grouped using income equalisation methods. The equalised disposable income is the aggregate income that is received by a household once tax and other deductions have been made. This is the disposable income available for household expenditure or savings purposes, divided by the number of household members converted into equalised adults. This method takes into account the age of each household member using the modified equivalence scale by the OECD, which was developed in the 1990s.

The equalisation income method was used to identify poor children and then the ultimate findings had child poverty status as a dependent variable, which was regressed against household demographic variables.

The child poverty status was coded as follows:

1 for poor

0 for non-poor.

The OECD equalised disposable income is calculated as follows: aggregating all the income earned by the household less all the taxes and social contributions, which have to be deducted from this sum. In order to depict the differences in the household size and composition, the gross income then is divided by the number of equivalent adults using the modified OECD scale, which gives a weight to all the members of a household. The weights are assigned to the different members of the household as follows: 1.0 to the first adult, 0.5 to the second and each ensuing individual aged 19 and above and 0.3 to each child under the age of 18 (Eurostat, 2013).

According to Statistics South Africa (Stats SA, 2013) the income and expenditure survey (IES) 2010/2011 used the absolute lower and upper bound poverty lines of R416 and R577 respectively. In order to calculate the child poverty in this study reference was made to the upper bound poverty line of R577. A study done by Streak *et al.* (2008) in South Africa found that the child poverty head count was

higher (at 65.5%) than that of adults (at 45.2%), which gives a clear indication that more children came from poorer households.

For the purpose of calculating the child poverty line, the following formula was used based on the OECD's equalisation of disposable income weights.

If the poverty line is R577, which is equivalent to per capita per month then:

Child poverty line = poverty line × child equivalent weight

$$= R577 \times 0.3$$

$$= R173$$

Therefore, a child below the age of 18 living below the poverty line of R173 per month can be considered poor.

1.4.6 Ethical considerations

The study is concentrated around children but no children were interviewed at any stage of this study. Parents or guardians of children were interviewed to gather information about the children. Consent of the participants was required and taking part in the study was voluntarily. The parent(s) or guardian(s) were assured of the confidentiality of the information provided during the interview and their anonymity guaranteeing them that their names and that of their children will not be mentioned anywhere in the study.

1.5 OVERVIEW AND ORGANISATION OF THE STUDY

The following is a brief outline of the entire study.

Chapter 1 (*The problem and its setting*) introduces the field of the study. The chapter further introduces the research problem and the aims of the study. Lastly, a clear and brief layout is given to show all the relevant topics and aspects of research relevant to Chapters' two to five. The chapter uses the research proposal as a base.

Chapter 2 (*Theoretical background to child poverty*). The definitions of poverty and child poverty are given in this chapter as well as the measurement of poverty, child

poverty and child deprivation. This chapter is dedicated to a literature study of these concepts and lays a foundation for the concepts that were used in subsequent chapters.

Chapter 3 (*Methodology and research design*) presents the methodology on the model specification for the logistic regression used in the determinants of child poverty analysis and the ordinary least squares for the determinants of child deprivation.

Chapter 4 (*A profile of Boipatong Township*) constructs the profile of the poor child population of Boipatong Township. Here an analysis is done on the gender, the marital status of the sampled population. An analysis on the employment status is also done to determine whether the parents are employed or self-employed as well as the sectors in which they are employed. The educational background and the highest qualifications that members of households possess are also analysed. This is done in terms of household composition: the number of children and adults in the sampled population and households, the demographic profile of the household, the aggregate income that is earned and the expenditure. The child population is also profiled through the level of child deprivation in the township.

Chapter 5 (*Discussion of results and findings*) takes an in-depth look at the determinants of child poverty as well as the prevalence of children living in poverty in Boipatong Township. Child deprivation is also measured using the determinants of child poverty as a benchmark. The chapter addresses the aims of the study, taking into account the perceptions of the consequences of child poverty.

Chapter 6 (*Summary, conclusions and recommendations*) presents a summary of the findings of the study as well as the conclusion. Recommendations are made on the strategies that can be used to alleviate child poverty in Boipatong Township along with the contribution to the field of study, limitations of the study and lastly the areas for further research.

CHAPTER 2: THEORETICAL BACKGROUND TO CHILD POVERTY

2.1 INTRODUCTION

Child poverty is one of the most compelling social and economic problems that most countries in the world are facing. Poverty can be experienced throughout the life cycle affecting an individual from childhood right up to old age but child poverty is distinct in that children deserve and require more protection from hardships. Children are dependent on adults for essential resources, which are vital for survival. When a child experiences deprivation, there can be enduring consequences throughout a child's life, which may lead to adult poverty (Gornick & Jantti, 2008:3).

Child poverty, as a concept on its own, deserves substantial attention due the extensive research already done on the concept of poverty. It is thus necessary to determine how the concept of poverty can be narrowed down to child poverty. Children from not so well off families tend to have lower academic outcomes compared to their well-off counterparts. Some of the poor children often get discouraged and drop out of school; this in turn limits their opportunities for future employment and sufficient income. They are also susceptible to health, emotional and social problems. This trend is common amongst children belonging to families that are chronically poor or those who have been poor for a very long period of time (Petrova & Pancheva, 2007).

The presence of poverty in a child's life contaminates every aspect of their being, their progress at school and their social skills. They are affected economically, materially and emotionally. The effects of poverty infiltrate all the way into a person's adulthood. Therefore, government policies have a role to play in the betterment of children's lives (Ridge, 2011).

Children coming from low-income households are very much aware of their circumstances and do everything to alleviate any financial pressures off their parents by demanding less. The pressures of low income and unstable employment ignite family instability. The reality of parenting on low income is a cause of anxiety coupled

with financial strains and desperation. Children living in families with low incomes often find themselves unable to mix with their peers and unable to take part in social activities due to being stigmatised by their fellow community members. This may have a detrimental effect on children as they have a need to feel accepted (Ridge, 2011).

Poverty and deprivation in a child's life have the potential of threatening their future prospects as an adult in later life. The consequences could have a detrimental effect on many aspects of a person's life whether it is the health and wellbeing domain, education and career prospects, and the social interaction with others. All these important potential aspects of a child's life may be affected negatively by poverty and deprivation. The two phenomena tend to have a spill over effect from one generation to the next and it is thus necessary to counteract the spill over effect (Bárcena *et al.*, 2014).

The most important indicators of a child's welfare in a family are their parents' labour market status and the household income. These two variables can be used to determine whether a child can be deemed deprived and poor or not. Intergenerational spill over of poverty and deprivation can be assumed, but dissociating a child's poverty or deprivation status from that of the entire household has not been widely put to practice in the literature or methodologically. The norm is to consider a household's entire poverty and deprivation (Bárcena *et al.*, 2014).

The aim of the literature review is to provide insight on what poverty is and to also provide a base for the concept of child poverty as it stems from the main concept of poverty. The following section discusses the concept of poverty along with some of the related aspects of poverty.

2.2 POVERTY

Poverty is a universally recognised notion. In September 2000, 189 Heads of States adopted the United Nations Declaration and resolved to "spare no effort to free our fellow men, women and children from abject and dehumanising conditions of extreme poverty" (Gordon, 2006:29). Although the concept is applied widely, it often is contested. The term poverty is rich with a cluster of related meanings pertaining to

various subject areas (Gordon, 2006:29). Poverty is understood more often largely in terms of income. Poswa (2008:4) argues that because of income being a factor in the understanding of poverty, being impoverished to many means that a family cannot afford to sustain itself even for the most basic needs like food and shelter. However, poverty is more than just the lack of income; it can include a variety of multidimensional factors such as the lack of opportunities to sustain oneself or the ability to enjoy recognition by others through respect. The poor often live in overcrowded dwellings; not because they chose to but due to their situation. Lacking the opportunity to improve a lifestyle situation can be referred to as human poverty (Poswa, 2008:4).

Poverty is considered more often than not a complex phenomenon. Poverty in its simplest terms can be considered the inability to possess the necessary resources to meet the daily requirements of the inhabitants in a household. Individuals, households or family's basic needs are subject to change at any point in time due to external changes in the wider economy, tastes and preferences of individuals as the living standards rise along with the pressure of society. Economic growth does not necessarily reduce poverty but rather increases the threshold, which sets the poor further apart from those in the upper end of all the other welfare groups. This in turn will require wealth redistribution by the rich to the poor. With all the competition in the market for the most basic goods and services, redistributing income may not appear to be a very welcomed proposal by the wealthy individuals (Tomlinson & Walker, 2009).

The next subsection reviews the different ways in which poverty can be defined depending on different areas and circumstances. The definitions thus are discussed.

2.2.1 Defining poverty

According to the Council of the European Union (2004:8) "people are said to be living in poverty if their income and resources are so inadequate as to preclude them from having a standard of living considered acceptable in the society in which they live". Because they are poor, they may face considerable difficulties through unemployment, low income, poor housing, inadequate health care and low levels of education. They often are excluded and marginalised from participating in activities

(economic, social and cultural) that are the norm for other people and their access to fundamental rights may be restricted.

Bellu and Liberati (2005:2) define poverty as the lack of, or the inability to achieve, a socially acceptable standard of living. It is worth discussing some keywords contained in this definition.

Lack: The base case situation for the definition of poverty is where individuals lack command over economic resources. For example, an individual may be considered poor if he/she lacks basic food or shelter or, equivalently, if he/she lacks income to buy these basic needs.

Inability: This concept ideally complements “the capability failure to participate in a society”, a concept developed by Sen (1985). Essentially, the idea is that the individual has a space of ‘functionings’, where the latter are either what an individual is capable of doing (realised functionings) or the set of alternatives that he or she may have (real functionings). This space referred to may be very basic such as food, shelter or complex in terms of freedom, self-respect or social inclusion. the inability to achieve these functionings leaves the individual vulnerable and poor. For example, disability not only impedes the ability to earn income, which in turn leads to lack of command over resources but also makes it harder to convert income into functionings (even though, in terms of income, that achievement is potentially feasible). Based on this view, poverty is a state characterised by levels of capabilities that are, in the view of society, unacceptably low (Watts, 1968).

A statement by the UN agencies (1998) deduce that:

“fundamentally, poverty is a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go, not having the land on which to grow one’s food or a job to earn one’s living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living on marginal or fragile environments, without access to clean water or sanitation”.

According to the World Bank (2001), poverty can be defined as insufficient income and income earning opportunities as well as the lack of human development opportunities that can be associated with the lack of education, balanced nutrition that in turn results in poor health outcomes. Poverty is the lack of recreational facilities and the inability to enjoy leisure activities, which may potentially prevent an individual from discovering their talents. Poverty brings about feelings of physical and economic insecurities, which may be referred to as vulnerability. Poverty may prohibit an individual from interacting with others in a family or community environment. An individual may also feel that they do not have control over their fate and these may be referred to as feelings of powerlessness or social exclusion.

Poverty is related closely to vulnerability and inequality. Inequality is more concerned with the unequal distribution of vital needs such as income and consumption items in a country. Vulnerability on the other hand takes into account the risk of falling into poverty in the future and not necessarily at present. Vulnerability is often associated with shocks brought about by natural disasters or a recession. At a micro level, an individual may be exposed to vulnerability at any given time depending on their life circumstances (World Bank, 2005:9-10).

A study by the World Bank (1999:28-29) showed how poverty is defined by different people in different countries based on their background and the realities they face every day. A country like Ghana, for instance, has citizens that not only differentiate between the rich and the poor but they distinguish between different categories of poverty based on wealth and the level of self-sufficiency. The rich or wealthy are said to be individuals who are able to feed their children with nutritious foods and they are able to afford good homes, which they will leave to their grandchildren. On the opposite spectrum are those who have absolutely no food, in other words the chronically hungry and the permanently needy individuals. The latter category was then divided into 'God's poor', comprising of individuals who may not have an immediate solution to their situation for instance the disabled, the elderly, widowhood and barrenness. A second group is those who are 'resource poor', which essentially refers to the landless poor and the hardworking hand-to-mouth poor.

People in Guatemala defined poverty as having insufficient food and shelter and having to rely solely on handouts. The situation in Cameroon is that the poor can be differentiated from the non-poor in various ways: there is persistent hunger, reduced meals per day, the meals are hardly nutritious, the irregular income that is received in a household is likely to be spent on food, there is also a feeling of demoralising powerlessness amongst the poor (World Bank, 1999:28-29).

The people in Vietnam differentiate between the poor and non-poor in the following ways:

Relatively well-off households

- ❖ Possess solid and stable houses that are usually renovated every 15 years
- ❖ Have transportation, either a motorbike or a bicycle or both
- ❖ Own a television
- ❖ Can send their children to school
- ❖ Never lack money even after the harvest has been eaten or sold
- ❖ Are able to save money
- ❖ Have gardens with useful plants and trees.

Average households

- ❖ Have a stable house that usually does not need renovating for ten years
- ❖ Own a TV and/or a radio
- ❖ Have enough food all year round
- ❖ Can send their children to school
- ❖ Have wells or easy access to water.

Poor households

- ❖ Live in unstable houses, often made with mud
- ❖ Have no TV or radio
- ❖ Are not able to save money
- ❖ Some have children who cannot go to school, or have to leave school prematurely
- ❖ Usually have enough food until the next harvest, although sometimes lack food for one to two months per year

- ❖ Are unable to utilise surrounding natural resources to their benefit.

Very poor households

- ❖ Live in very unstable houses that often need to be rebuilt every two to three years
- ❖ Have no wells or easy access to fresh water (World Bank, 1999:28).

The concept of poverty has two sides to it, the relative and absolute concepts of poverty. Absolute poverty refers to those individuals who lack the most basic essentials to sustain life, such as food, shelter clothing (Barth & Gridley, 2008:36). An absolute poverty line can be perceived as a particular standard of living by some benchmark as an 'objective' minimum standard. Relative poverty, on the other hand, which is often adopted by developed countries, focuses more on income and the amount of income that can be considered socially acceptable (Niemiets, 2011:43).

A relative approach of poverty identifies poor people as those whose incomes are lower than average in the economy of a specific country (Heintz & Jardine 1998:6). A relative poverty line is a constant fraction of the central tendency of income distribution. Therefore, households are characterised as poor if their income is way below those of typical income of a particular place and time (Niemiets, 2011:41).

Overall poverty is dynamic in that it includes "the lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion" (Gordon, 2005:3).

Another characteristic of poverty is that of social exclusion by community members. This occurs in many countries; in developing countries, where the poverty rate is high, and in developed countries, where there are lower poverty rates. The poor living in richer countries are likely to feel the scourge of social exclusion, as there may be few of them. Low income poverty and the lack of safety net initiatives for the destitute without family support, are amongst other facets of overall poverty (Gordon, 2005:3).

The concept of poverty as defined by the different authors share key issues in common such as lack of shelter and income, hunger, social exclusion and the like. However, the definition of poverty by the UN (1998) has been identified as the most suitable definition for this study in that it takes into account if not all of the most compelling factors of poverty and deprivation such as unemployment, food insecurity, shelter, lack of security, social exclusion, powerlessness, access to water and sanitation. These will have a significant bearing especially in the results and discussion chapter.

Poverty, as a school of thought, has a history of how the research of poverty has come about. Booth (1888) (cited in Glennerster *et al.*, 2004) describes the poor as “those who have a fairly regular though bare income, such as 18 to 21 pennies per week for a moderate family, and by ‘very poor’ those who fall below this standard, whether from chronic irregularity of work, sickness, or a large number of young children.”

Poverty research like many other schools of thought has a history. The following subsections delve into the history of poverty followed by the various theories of poverty.

2.2.2 The history of poverty research

Newell (1904) (cited in Laderchi, 2000:1-19) explains that poverty can be traced to the creation of mediocre laws in the medieval times of England. Rowntree’s findings, published in 1901, were the first to develop a poverty standard for individual families from nutritional estimates and other requirements. The first survey of York, a city in England, took place in 1899 and was conducted by Rowntree. It is considered the first scientific and methodological study of poverty. This is due to the intensive derivation of a sophisticated poverty line, with special reference to the ability of determining the minimal food requirements based on the accepted nutritional standards. The minimal requirements, along with the money required for buying clothing and paying a bond or rent, had to be summed up in order to derive a poverty line that would differentiate households who are above and below the poverty line. Those below the line were said to be in primary poverty.

Rowntree (1901) used the interview technique to collect data and the sample comprised of two thirds of the working class residents of York. Individuals who were found to be living in rundown filthy houses were classified to be in secondary poverty, which essentially means that although these individuals earn sufficient income to sustain and provide for the minimal requirements, they appear to be living in poverty. It is of great importance to note that Rowntree made a distinct difference between primary and secondary poverty by analysing their determinants separately then ascertained and emphasised the relativeness of the concepts. Rowntree also noted that whether primary poverty is a cause of secondary poverty is a normative statement depending on the individual's standard of living (Laderchi, 2000:1-19).

The focus in the 1960s was only on the level of income such as the gross national product (GNP) per head, which was based on the prominence of growth. Since the beginning of time, poverty has been inevitably associated with income and income has always been thought of as the driver of economic wellbeing, but the latter also has its shortfalls just like poverty. Using income to determine an individual's wellbeing can be a daunting task in a sense that the income equivalent of assets, subsidies from the employer, and free government goods had to be calculated along with the cash remuneration to determine the precise measure of an individual's wellbeing. If an individual is deprived or denied, an income or income-related resources, which include goods in terms of an appropriate diet, tangible goods and providing for a family as a whole can be considered to be in poverty. (Townsend cited in Rio Group, 2006:16). It should be noted that income is not the only measure of poverty or deprivation and that this study also explores the multidimensional measure of poverty in section 2.3.9.

There are various theories of poverty that have been explored by different schools of thought in development and social studies. The following sub-section seeks to discuss some of those theories.

2.2.3 Theories of poverty

The history of poverty in itself was not so much an emotionless search for the adequate resources that can be considered enough to counteract the deprivation but

one of a continuous struggle between “dispassionate investigation and the prejudiced certainties of those who have accumulated valuable fixed interests” (Rio Group, 2006). The lack of sufficient income and the extent of appropriate investigation were considered. Government relief programmes, where bread and money would be given to the poor, were a way of alleviating the poverty experienced particularly for the institutionalised poor. Not every poor person had the privilege of being assisted in their poverty situation, only those who were worthy were attended to. With evolution and modernisation, the urgency to create better relief methods and the extent of the relief became a norm (Rio Group, 2006).

2.2.3.1 The minority group theory

The minority group theory dates back to the ancient times of analytical research on poverty. This notion can be adopted for the sake of illustrating the research work of those who had an interest in the theory and ultimately enable them to detect the distinguishing characteristics of the less privileged minority in the population. An example would be that of Rowntree, in his earliest research contributions, his objective was not to discuss the inevitable causes of poverty but to determine the distinguishing features of the less privileged minority. To make such an attempt would entail raising and addressing the whole social question (Townsend, 1979:64). Rowntree then opted to classify the immediate causes of primary poverty (or earnings “insufficient to obtain the minimum necessary for the maintenance of merely physical efficiency”) as:

- ❖ Death of chief wage earner
- ❖ Incapacity of chief wage earner through accident, illness or old age
- ❖ Chief wage earner out of work
- ❖ Chronic irregularity of work
- ❖ Largeness of family
- ❖ Lowness of wage (Townsend, 1979:64).

2.2.3.2 Theories of the perceptions of the causes of poverty

The perceived causes of poverty give an idea of how a certain society fares in their social standing and how their cultures are influenced. Individuals behave and react differently; therefore, their perceptions of poverty will influence their reaction towards people who are actually poor. The poor themselves also are influenced by their own beliefs about poverty and this in turn has an influence on how they relate to society in general. Recommendations on how to reduce poverty should, therefore, take into consideration the perceived causes of poverty and make these recommendations in the light of the latter. The perceptions of poverty emphasise that poverty is perceived along three attributes namely the individualistic, fatalistic and structural causes of poverty (Niemelä, 2010:5).

The first perspective is described as individualistic, because it pertains to the individuals themselves as the cause of his or her own poverty situation. Poverty is related to characteristics such as low educational qualifications or ill health as well as family dynamics, with specific reference to single parenting. However, the mannerisms and attitudes of people in poverty may be of particular interest and could provide a partial explanation as to why some individuals are living in poverty (Harkne *et al.*, 2012:3).

The individualistic theory depicts poverty as having some form of pathology and that people are poor due to their lack of ability, effort and moral. One distinct pathological explanation of the causes of poverty is that of underclass. The same is conceptualised as a small group of individuals living in a poverty situation and they have their own set of values and morals. These individuals also possess criminal tendencies and other kinds of anti-social behaviour (Davids, 2010:51-52); (Hunt, 2002).

The second perspective is that of the structural cause of poverty. Bullock (2006) (cited in Dunga, 2014:40) concludes that the individual is not to blame but society or certain bodies in society are to blame for the individual's poverty situation. Under this perception, people are assumed to be poor due to lack of opportunities, which are not at everyone's disposal irrespective of the effort that a person puts in the hopes

for a better life. This is particularly a norm in communities where the societal structures tend to benefit a specific group of individuals, or opportunities are at the disposal of a certain group of individuals or income group. These opportunities may be of an educational or employment nature. They are so important that they may affect a person's ability to sustain himself or his household.

The fatalistic cause of poverty is the third cause of poverty where people attribute to fatalistic causes when they associate their poverty with bad luck or fate, for example those who are ill or disabled, those who have been involved in car accidents and see these as obstacles to being well-off (Pereira & Dias, 2013). Lastly, structural causes of poverty vary widely. The causes thereof may be such that they external and beyond control. Economic failures such as insufficient employment, low and unfavourable wages and working environment. Additional causes pertain to a country's political climate and social norms. Racial discrimination and gender related prejudices can also contribute to poverty (Combat Poverty Agency, 2009).

2.2.3.3 The culture of poverty theory

The scholarship of poverty should take interest in culture for three main reasons: first, it is important to determine why people respond to poverty the way they do, how they cope with it and what steps, if any, they intend to take to relieve themselves of the poverty situation.

The question of how individuals cope in the poverty situation has been widely researched and a vast list of mechanisms have been identified: using family ties, exchanging goods within friendship networks, acquiring help from the state, seeking help from non-government associations, relocating and the like (Small & Harding, 2010:10). Apart from the aforementioned possible strategies, individuals have their own ways of dealing with poverty; some of their coping may be influenced and motivated by their cultural backgrounds. One strategy that was identified by studies done on immigration in the United States of America (USA) showed that poor immigrants create rotating credit organisations to generate sufficient funds that can be available to all the group members (Small & Harding, 2010).

The subculture concept of poverty has been derived from other schools of thoughts in the basic sciences of anthropology, sociology and a variety of other sciences. It was then coined by Lewis (1966:19-25), who proposed the recommendation that those who are extremely poor be grouped into a sub-culture that can be identifiable from other groups in society. Those who were part of the sub-culture had remarkable similarities in the composition of the household, interpersonal relations, value and belief systems. They had almost identical expenditures on similar goods and many of them could identify with each other due to the similar lifestyles in the big cities. Among the socioeconomic trends where high unemployment, underemployment, low wages, a pastiche of low skilled employment amongst the locals, children being forced to work at an early age, no culture of saving, insufficient food reserves, the trend of buying of food many times in a day whenever there is a need to do so, trading in personal and household goods, borrowing from micro lenders at exorbitant interest rates and the culture of buying used clothes and household items (Lewis, 1966:19-25).

The sub-culture of poverty was considered a society where the poor had to adapt and accept their poverty situation in a socially demarcated and capitalistic environment. The poor do not have fundamentally different values from the rest of society but they do not have the necessary repertoires of action and mechanisms that will allow them to put these values into practice (Duvoux, 2010:5).

The poor can be found in both rural and urban areas. The causes of their poverty may differ depending on their location and the different circumstances that they encounter. It is thus necessary to determine the difference between the rural and urban poor in order to establish how vastly different is the poverty experienced by those living in rural and urban areas.

2.2.4 Rural and urban poverty

Urban poverty differs from rural poverty in a number of ways. One of the ways is the fact that the poverty line and consumption patterns of rural poor differ markedly from those of the urban poor in most developing countries. Therefore, a single poverty line for both urban and rural poverty may underestimate poverty in urban areas (Mokoena, 2004).

Rural poverty has many of the same negative outcomes as urban poverty, but it also has its unique challenges. In impoverished rural areas, there is less sophisticated medical care, the towns are spread out, further away from intervention services and often there is little or no public transportation. People living in these areas are less likely to have strong academic backgrounds and they may not have graduated from high school. According to the USA federal government definition, all areas that are not urban, suburban or metropolitan by default are classified as rural. Traditionally, rural areas in the USA were agricultural, but this is not always the case. The poverty rate for rural children is slightly elevated compared to that of urban children, and this number is even worse for rural minority children. Those employed in rural areas earn about 20% less than those in the urban work force (Stansell & McLaughlin, 1997:587-593).

2.2.4.1 Characteristics of urban poverty

The poor living in rural and urban areas are likely to experience different circumstances and have different characteristics. The poor living in urban areas can be found in informal settlements. Furthermore, urban poor are likely to be engaged in casual and informal sector work. Policy and regulatory frameworks regarding service provision, housing and land, nor labour rights and safety nets do not address them. The poor in urban areas may have incomplete channels of information: the poor in urban areas may not have substantial information on employment opportunities, their rights to services that can be rendered by the municipalities, state etc. In some developing countries, the poor may run the risk of not being afforded the same rights and privileges as the non-poor that go with being a citizen. Their contributions in society may well go unnoticed. The poor are also likely to have a negative relationship with the authorities in that the goodwill intended by government policies to alleviate poverty, often is mistaken by the poor for oppressive bureaucracy, which obviously controls their activities without considering their needs. This can thus be viewed as structural misfortunes from the poor's perspective. A combination of the structural failures on the part of the system and bad luck. The poor may also be geographically isolated, whereby the urban poor can sometimes be located in areas far from town and the city, making it difficult for them to get access to any potential

job opportunities and essential services. The cost of housing and travelling makes it difficult to assume life in the city (Mokoena, 2004:22).

2.2.4.2 Characteristics of the rural poor

The rural poor are found mostly in remote surroundings in the eastern, southern Africa, tropical rural areas of the west and central Africa, in Asia, the Caribbean Pacific, and the like. The poor can be found also in areas that have low agricultural prospects, but some can be found in predominantly agricultural settings that help them sustain themselves. These rural poor are also characterised by large households, minimum access to running water and they live far for essential facilities such as schools and clinics. They also experience social exclusion, for example being denied access to credit facilities by banks. The poor supplement their income through small-scale farming, rearing and selling livestock. Fishing and selling art crafts are some of the activities the poor do to sustain themselves (Valdés *et al.*, 2011:26).

Thus, it is clear that the poverty experienced by those in rural areas is quite different from that endured by those living in urban areas due to their surroundings and geographical dispensation. The following sub-section discusses the determinants of poverty from a geographical and demographical perspective.

2.2.5 The determinants of poverty

The characteristics of poverty differ at each level. At the regional (or nationwide) level, the majority of the characteristics are more likely to be associated with poverty. The rapport of these determinants of poverty can be said to be influenced by a country's geographical orientation. In general, poverty levels can be assumed to be high in areas typically isolated geographically, areas that lack sufficient or depleted natural resources, low rainfall, and erratic climatic conditions (Haughton & Khandker, 2009:147).

A vast number of community-level characteristics are likely to be associated with poverty for households within that community. The level of infrastructural development is considered an important antecedent of poverty. A variety of

infrastructural development measures applied in econometric exercises comprise of paved roads, the availability and reliability of electricity, access to central market areas, the easy access to educational and health facilities, and lastly, how close are the residents to important centres like the local municipal offices. There are additional significantly important indicators at community-level that include but are not limited to human resource development, employment opportunities, social mobility and representation by local government and the equal distribution of land (Haughton & Khandker, 2009:147).

Widespread empirical development literature can be used to analyse the determinants of poverty by linking measures such as income, expenditure or poverty to a variety of community, individual and household antecedents in a logistic regression model. This analysis will assist researchers in establishing the real effects of each determinant of poverty that was considered in the regression. Once the main determinants have been identified, policy recommendations can be drawn up to reduce poverty. The members of each household normally share all the household resources and this may present some difficulties when one has to determine the consumption of each individual. This presents the need to address other household characteristics such as the number of people in the household, and the number of employed adults in the household considering the number of children in the household (Andersson, Engvall & Kokko, 2006). The main determinants of poverty for each type of characteristic, depending on the level, are discussed below.

Regional level characteristics: isolation or remoteness, including less infrastructure and poorer access to markets and services, resource base, including land availability and quality. Weather conditions for example typhoons or droughts, environmental conditions, for example frequency of earthquakes; regional governance and management inequality (Haughton & Khandker, 2009:153).

Community level characteristics: infrastructure inadequacies, for example, lack of piped water, access to a tarred road, absence of land distribution. Limited access to public goods and services for example the proximity of schools, clinics, adequate social structures as well as social capital (Haughton & Khandker, 2009:153).

Household level characteristics: size of household, the composition of the household, the dependency ratio that is, unemployed, old and young relative to working-age adults. The gender of the head of household is also a determining factor of a household's poverty status and the availability of assets, (typically including land, tools, and other means of production; housing; jewellery). The employment and income structure of the household (proportion of adults employed, type of work, wage, labour or self-employment; remittance inflows), health and education of household members serve to be important determinants of household poverty.

Individual characteristics: include, but are not limited to, the age of the household head and its members, the level of education for each member in the household, employment status, health status, ethnicity (Haughton & Khandker, 2009:153).

2.3 THE MEASUREMENT OF POVERTY

The literature on poverty and poverty measurement often is focused on determining the number of people living below the poverty line. In the same breath, the total number of people who live below the poverty line does not give a true reflection of the intensity of poverty poor people may endure. The main concern of poverty measurement is how poor are the poor? Those considered poor may have an income that is close to the poverty line or not have any means of income. If an individual's suffering and lack of income were taken into account, this may be considered a desirable measure of poverty (Kakwani, 1980).

Sen deduces that the most favourable method that can be adopted to arrive at a suitable measure of poverty is to consider the following two basic axioms:

- ❖ Axiom 1.1 (Monotonicity): given other things, a reduction in income of a person below the poverty line must increase the poverty measure.
- ❖ Axiom 1.2 (Transfer): given other things, a pure transfer of income from a person below the poverty line to anyone who is richer must increase the poverty measure (Kakwani, 1980). The following subsection covers the background to measuring poverty.

2.3.1 Background to measuring poverty

The history of poverty measurement dates back to over one century ago. Many poverty lines were created during the 1880s, including those of the likes of Alexander McDougall, Charles Booth and Seebohm Rowntree. With the years going by and societal norms both locally and internationally evolved, so too has the same comprehension and conceptualisation of poverty (Oosthuizen, 1996).

Poverty has maintained its presence in the history of man but its meaning and causes have relatively changed with time and circumstances. People in predominantly traditional settings mostly experienced poverty during the medieval times and that was not considered unusual and was thus inescapable. With evolution, it became apparent to civil society that poverty was an unacceptable phenomenon. The realisation was based on the notion that “all human beings are equal, and should be entitled not only to civil and political rights, but also to social rights such as food, shelter, education and personal security” (Schwartzman, 1999:1-2).

Poverty is responsible or partly responsible for economic disorder, political instabilities, social injustices, urbanisation, brain drain and ultimately threatens the lives of those who were previously well off to a state of being poor. Poverty has been considered a statistically new concept or one that has been reviewed due to its popularity in the early days of the European statistical office located in England and a few other countries. Poverty came to be known as a factor fuelled by other socioeconomic factors such as the unequal distribution of income and unemployment. It was also associated with an individual's personal circumstances such as physical disabilities. In an ideal setting, every individual in society of a working age should have access to permanent employment with a desirable income. It was then the responsibility of statistical bodies to assess the volatility in the desirable expectation and to identify the possible corrective measures (Schwartzman, 1999:1-2).

One of the most outstanding features of any poverty measurement is that they can be employed essentially to assess the socioeconomic state of affairs and to make the necessary recommendations in terms of progress or failure. Poverty measures

may be used as tools that facilitate the process through which policy results are analysed and they serve to be useful in determining the true effect of an incident and its significance. The measures that are used for monitoring and targeting should possess the quality of trust and require rigorous underpinnings. The measures are likely to produce desired results, provided there is a mutual agreement that statistical results show that poverty levels have indeed increased then the standards of living of the inhabitants would have deteriorated and if the opposite occurs, this will mean that the conditions of the inhabitants have improved (Morduch, 2005:54).

Poverty measures have another essential feature in that they can be descriptive in nature. Poverty statistics play a crucial role with regards to summarising complicated socio economic situations that ignite discussions based on socio economic priorities. Therefore, effective measures are not expected to capture all the essential aspects relating to poverty. It is important to understand that there are limits to the measure of poverty and as well as when and how they will be put in place (Morduch, 2005:54).

The process of measuring poverty can be divided into two distinct stages: the first stage is the identification stage, which involves differentiating the poor from the non-poor. The second stage involves aggregating the data on the poor by establishing the level or percentage of poverty in a particular region. Selecting a method by which the poor can be differentiated from the non-poor may come across as a cumbersome process especially if the measurement of poverty involves a vast number of variables. With the evolution in research, a variety of approaches can be used, namely the unidimensional, the union approach and the intersection approach (Alkire & Foster, 2009:14), (Castro *et al.*, 2012:37-65).

The unidimensional approach is unique in a sense that the multiple variables representing the wellbeing of an individual, a household or a population are put together to create one composite indicator, thereafter the poverty line will be set based on the composite indicator. A person thus may be defined as poor when their achievements are not on par with the composite indicator. The unidimensional approach considers the dimensional deprivations and how they can have a relative

effect on the aggregate indicator. However, the dimensional deprivations will have a bigger effect on the multidimensional approach of poverty (Alkire & Foster, 2009:14).

The third approach, the union approach, considers an individual to be multidimensionally deprived even if they are deprived in only one dimension. This method has been widely applied but it has its shortcomings in that it takes into account variables that may not be considered necessary to the detriment of overly estimated results on poverty. An example could be that of the national family health survey data done in India, where approximately 91% of the population would be considered poor based on 11 dimensions. The intersection method, on the other hand, is more holistic in that an individual has to be lacking in all dimensions before they can be considered poor. The latter approach, along with the multidimensional approach, are considered to be less reliable in that they provide unexpectedly low estimates of poverty and when the intersection method was used, using the Indian data, the results showed that no individual was deprived in all 11 dimensions (Alkire & Foster, 2009:14), (Castro *et al.*, 2012:42).

2.3.2 Poverty lines

A poverty line for an individual may be defined as the money deemed necessary to sustain a minimum level of welfare. Individuals who are precisely at the poverty line are considered in an undesirable situation but those below the poverty line are considered worse off (Ravallion, 2006).

For policy-making purposes the selection of a poverty line within a broad scope is highly debatable and may not necessarily be important as the reality that there is a consensus over the line. Taking into account the original US poverty line and the selection of the then 'dollar-a-day' line it is worth mentioning that the actual procedure used to arrive at a universally accepted poverty line is one which is open to dispute and differentiation (Oosthuizen, 1996).

Poverty lines are by far the most commonly used poverty measurement instruments. Based on this technique, a household is considered poor if the total income earned falls below a specified poverty line. In its essence, a poverty line can be regarded as 'normative concept' as it brings out the true value of a household's expenditure on

essential items to satisfy its immediate needs. This poverty measurement method, therefore, requires to first estimate the poverty line and secondly, gathering information based on the allocation of household resources being income or expenditure. Thereafter, other dimensions of poverty can be considered by using different poverty indices (Rio Group, 2006).

Lanjouw (2001) (cited in Stats SA, 2015:9) and Ravallion (1998) argue that the cost of the basic needs approach assumes that consumption expenditure is an important foundation of the non-food element of a poverty line. The approach further assumes that if a household's expenditure on food items is equivalent to the food poverty line then a household is able to afford its most basic food needs along with other essential needs. An upper bound poverty line is derived by aggregating non-food expenditure and the food poverty line together. Identifying households as points of reference for the upper bound poverty line requires that intervals of 1% to 5% of the food poverty line be created. Thereafter, the average median expenditure on non-food items of reference households depending on the different intervals will be determined using the food poverty line. Calculating the lower bound poverty line is slightly different as it requires another group of reference households. The selection of these households is underpinned on the assumption that these households are at risk of falling into poverty as their aggregate expenditure is very close to the poverty line. These households have to find survival strategies in a way of doing without some of the most essential food needs, which means giving up on food needs for non-food expenditure.

2.3.2.1 Absolute poverty lines

Absolute poverty is defined as the lack of items that are necessary to fulfill the most basic physical needs, such as a balanced diet, which is measured against elements such as caloric intake, proteins, shelter in terms of the type of dwelling and the quality thereof. Other domains of absolute poverty include health, which can be determined by infant deaths, famine, the availability of quality health facilities and their accessibility. Lastly, basic cultural needs, which can be measured against the level of education, safety and security as well as recreation (Sarshar, 2010:10). This type of poverty poses a challenge when it comes to its measurement for the sole

reason that deprivation either can be tolerated or deemed unacceptable. Absolute poverty is not only intergenerational it also tends to be different amongst societies. Absolute poverty, therefore, stands to be an undesirable state of circumstance, which ought to be corrected (Schwartzman, 1999:2-3).

Absolute poverty lines are essentially concerned with the true value of the essential resources that enable an individual to sustain the most primary level of welfare. The absolute poverty line features a basket of necessities in the form of goods and services. The basket is then put in a currency value and those who cannot afford the value of the basket will then be deemed absolutely poor. Results on poverty lines can better reflect economic development of a specific population, for instance if there is a sudden increase in the income of the inhabitants population, the inhabitants will homogenously enjoy the increase in income, which, therefore, means that the proportion of the poor who were found to be absolutely poor will decrease. The most popular absolute poverty lines make use of the US \$2 a day per capita as the minimum value at which an individual can sustain a living. The line can thus be adopted internationally provided that a person is deemed poor if they live on below \$2 a day (Rio Group, 2006:50).

Devising an absolute poverty measure poses a variety of obstacles. The task of converting each tangible or non-tangible item, regardless of what they represent, into a common denominator can be a difficult exercise. The common denominator is normally in a currency value and the task of converting can be a very difficult exercise for the reason that people have different cultural backgrounds and expenditure patterns, which will have a significant effect on how they spend on consumption (Rio Group, 2006:50).

Rowntree (cited in Probeza, 2007) first came up with a line comprising of a basket of the necessities required to maintain an acceptable standard of living. The monetary value of the poverty line is linked to the basket, which also takes into account additional amounts pertaining to the expenditure on rent and fuel. A household that earns an income precisely lower than the monetary value of the basket is considered poor. The Rowntree poverty line was welcomed but also endured criticism that some of the goods included in the basket should have been excluded whereas all the

other goods that were included in the basket were considered acceptable. The criticism is also based on the fact that the products chosen for the basket pertain to a specific society and excludes other cultural backgrounds.

There are other absolute poverty lines, for example, the Mollie Orshanski line (1963-1965), which has been applied in the US with some changes and adaptations. This way of measuring poverty includes the consideration that expenditure on food in households is a constant proportion of total expenditure (Ploeg & Citro, 2008:581–590).

The absolute poverty line has been criticised that it does not meet the criteria of what the philosophy of absolute poverty stands for, as well as the failure to meet the primary requirements of an absolute poverty measure. Engels law states that in order for a country to realise a significant growth in economic development, the amount of money dedicated to the expenditure on consumption will decrease. This has been proven empirically in a few countries. The task of producing a poverty line that accommodates different communities at different moments in time can be cumbersome. With that in mind, one may consider using other measures of absolute poverty lines by fixing the value of household expenditure against aggregate household income. Such a methodology has the ability of showing those who are poor as those who spend more of their income on food than any other expenditure item. Absolute poverty measures are more acceptable in developing and less developed countries and less popular in developed countries (Probeza, 2007).

2.3.2.2 Relative poverty lines

Relative poverty lines differ from absolute poverty lines in that the measure classifies people into two groups; those that are less privileged and those that are not. Should there be a sudden increase in the income of a society, for instance, an assumption that income suddenly increases by 5%, then the results of the poverty line will remain the same irrespective of the increase in income. One of the unique features of this poverty measure is that the prevalence and number of people who are less privileged depends on their position as a household or person in a community. Economic development is not necessarily equally achieved when individuals or

households remain in their relative positions. The only way to realise a decrease in poverty is if there are changes or amendments to the way income is distributed in a society (Ravallion, 2010:3).

Relative poverty has its basis on income and how it is allocated in expenditure. A fixed minimum variable distinguishes those that are classified as poor and those that are not poor. The variable can be assumed to be income, whereby the level will depend on how it is allocated in society. It is in fact fixed at a specific percentage of a distribution measure, which in most instances is the average or the median (Makoka & Kaplan, 2005:2).

2.3.2.3 Subjective poverty lines

The subjective poverty approach differs from the relative and absolute poverty lines in that it takes into account people's ideologies of what a household budget entails and thus is considered the best method for comparing a household's real income and expenditure. This poverty measure is such that a survey is conducted to determine the opinions of people in the population with the ultimate goal of creating a poverty line. The best way to calculate a poverty line for a household using equivalence scales is to use a per capita poverty line, in other words a poverty line based on each household member, depending on their position in the household. When poverty lines are applied in this context it brings to the fore an assumption that each individual in the household has individualistic needs, which can be valued differently in monetary terms from other individuals in the household. In this case, there is no allowance for economies of scale for consumption. This thus creates an impression that consumption by children is less than that of adults and, therefore, they require a smaller budget (Rio Group, 2006:37), (Bellu & Liberati, 2005).

Poverty lines can be constructed with the purpose of reflecting the heterogeneity in the household members, taking into consideration their demographic characteristics along with the economies of scale in their consumption. When such poverty lines are being constructed, the results provide a broader picture on how poverty differs from one family to the next depending on its size and make up. A way of constructing a poverty line for households, while taking into account the size and composition, is to

select a typical household, thereafter the modification can be done with the use of equivalence scales for other household structures (Rio Group, 2006:37).

2.3.3 The Head Count index

According to Deaton (2004:9), the headcount is one of the most popular measures of poverty and it is defined as the fraction of the population in poverty. The headcount index is considered a renowned and straightforward index of measuring poverty. It is also considered the most measured index. Policy makers and those in research find the use of the headcount index relatively convenient as it allows the counting of heads physically in order to determine the immediate prevalence of poverty. The calculation of the headcount entails comparing the household income denoted by y_i to the poverty line denoted by z . The index, which is denoted by: $i = 1, M$ where M is the aggregate number of households in the sample. This can be done practically, whereby indicators are constructed for households to indicate whether a household falls below poverty or not. For example, the value 1 can be assigned when the income is lower than the poverty line and 0 if the income is above the poverty line.

$$I(y, z) = 1 \text{ if } y_i \leq z \quad (2.1)$$

$$I(y, z) = 0 \text{ if } y_i > z \quad (2.2)$$

Therefore, the headcount is the average of the income and the poverty line (y, z). The average being denoted as I , which depends on the household size n_i (Morduch, 2005:58). First, the measure takes into account the number of people that are poor denoted by G :

$$G = \sum_{i=1}^M I(y, z) n_i \quad (2.3)$$

The headcount measure falls short of its inability to illustrate by how much an individual falls below the poverty line (Jha & Sharma, 2003:3). Another disadvantage of the index is that it does not reflect how poor people are and the index thus does not change even when individuals are becoming poorer or getting out of poverty. The index only considers the poverty of the individual but not of the household. A consideration for the index is that it can thus calculate the index for an individual only (World Bank, 2003).

2.3.4 The Foster-Greer-Thorbecke index

The Foster-Greer Thorbecke index (FGT) is considered one of the most important poverty indices. It stands to be one of the most commonly used indices in empirical research due the ease of its application. The FGT definition is therefore:

$$FGT = \frac{1}{n} \sum_{i=1}^q \left(\frac{z - y_i}{z} \right)^\alpha \quad (2.4)$$

Where n is the total population, q represents the total number of poor people z is the poverty line y_i is the lowest income.

The FGT has its foundation in the poverty gap index; this is indicated by the equation in the brackets. In this instance, the poverty gaps are raised to the alpha (α) power. The distinguishing feature of this model is that it considers different forms for different values of α . In the case of $\alpha = 0$ the FGT index expands to the headcount ratio. For the $\alpha = 1$ on the other hand, $FGT = HC \times PG$ where HC is the head count and PG is the poverty gap. The FGT, therefore, incorporates two simple but crucial poverty measures (Bellu & Liberati, 2005:3). The poverty gap index is explained in the following sub-section.

2.3.5 Poverty gap index

The poverty gap index is responsible for determining the depth of poverty. The index, therefore, measures by how much the poor fall below the poverty line, which is denoted as z . The variables for the poverty gap PG are thus: y_i representing the consumption of the poorest and Y_q the consumption of those who are less poor.

$$PG = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{z} \right] \quad (2.5)$$

The poverty gap may also be defined as the Mean Proportionate poverty gap throughout the entire population (zero gap for non-poor). The poverty gap measure has social role to play, as it is able to determine the transfers that are due to the poor, thereby reducing poverty. The manner in which this can be realised is if all the poverty gaps are added up in a population. One of the disadvantages of the poverty gap index is its inability to capture and illustrate the differences in the depth and severity of poverty (Ravallion, 1992). Another disadvantage of this index is that it

fails to take into account the essence of the number of people below the poverty line (Jha & Sharma, 2003:3).

2.3.6 The squared poverty gap index.

The squared poverty gap index is an appealing measure of inequality among individuals that are poor (Haughton & Khandker, 2009). The squared poverty gap is the “weight sum of poverty gaps” (Haughton & Khandker, 2009) which is proportionate to the poverty line. The weights thus are regarded as the proportionate poverty gaps. If, for instance, a poverty gap of 20% of the poverty line is assigned a weight of 20% while a second one of 60% is assigned a weight of 60% this will go against the rule of the poverty gap index, which requests that the gaps have equal weights. Therefore, by squaring the poverty gap index, the measure discreetly places more emphasis on the results that fall well below the poverty line. Formally, the formula is written as:

$$G_i = (z - y_i) \times I(y_i < z) \quad (2.6)$$

Where: G_i is the squared poverty gap, I is the lowest income, y_i is the income and z is the poverty line.

Haughton and Khandker (2009) further argue that the squared poverty gap measure is not instinctively appealing due to the difficulty of adopting and interpreting it. The squared poverty gap may be considered as one of the measures that resembles the measures first introduced by Foster, Greer and Thorbecke (1984). Formally, the formula was written as follows:

$$P_I = \frac{1}{N} \sum_{i=1}^N \frac{G_i}{z} \quad (2.7)$$

2.3.7 Sen Index

According to Sen (1976) (cited in Xu and Osberg (2001:5) and Myles and Picot (2000:161), a poverty rate lacks certain standards and that a poverty index has a number of basic axioms to which it has to adhere. There is the assumption that a focus axiom does not depend on the non-poor section of the population. A monotonicity axiom that is considered weaker, states that with everything else

remaining constant, when a poor individual's income becomes lower, the poverty index should also be reduced. With the impartiality axiom on the other hand, the poverty index may have its definition based on requested income profiles but this is done such that it captures the true essence of the household income of all the households in the population. The weaker transfer axiom on the other hand states that an increase in the poverty index should only be realised if the poorest of either individuals involved in the upward transfer of income is in fact poor and if the proportion of the poor in the population remains constant.

Sen (1976) (cited in Hoover *et al.*, 2004:545) is of the suggestion that besides measuring headcounts of individuals in poverty, an intensely detailed measure of poverty may comprise of the median level of income of the individuals in poverty and by how much their income falls below the poverty threshold. Furthermore, Sen (1976) mentioned that this suggested measure should also measure the unequal distribution of income amongst those experiencing poverty.

The advantage with the Sen index is that it not only includes the official poverty headcount but also acknowledges the income shortfall of the poor. The index would also go on to measuring the poverty gap and the income inequality of the poor.

The Sen Index suggests:

$$S = H[I(1 - I)G_{p(q+1)}] \quad (2.8)$$

H represents the headcount poverty ratio, which illustrates the average income shortfall against the poverty line. This will later result in the poverty gap, G_p , lastly, q represents the number of people below the poverty threshold (Hoover, 2004:545).

2.3.8 The Watts index

The Watts index, which was developed in 1968, is the first measure of its kind to measure distribution sensitive poverty.

$$W = \frac{1}{N} \sum_{i=1}^q [\ln(z) - \ln(y_i)] \quad (2.9)$$

The variable N represents the individuals in the population that are categories according to their income ranging from highest to lowest. The sum is then put to the power of q representing the individuals who have an income or expenditure (y_i) that is below the poverty line represented by z . The Watt index is appealing due to its ability to meet all the theoretical requirements that researchers desire to see in a poverty index. The measure has the disadvantage that it is not the most instinctive measure, therefore, it is not so conducive in empirical research involving fieldwork (World Bank, 2005).

2.3.9 Multidimensional Poverty Index

The Multidimensional Poverty Index (MPI) views poverty from a bird's eye view. The index considers the extent as well as the prevalence of spillover deprivations that are experienced at a household level. The MPI generates meaningful results that can be of use in policymaking and reduce severe poverty. The multidimensional index, which often is restrained by lack of data, is a vital measure due to its ability to reflect on other types of deprivations that do not depend on income only. The index comprises of three different types of dimensions, namely health, education and the standard of living dimension. Each of the dimensions is measured considering 10 variables. First, the poor households are identified apart from the non-poor counterparts, thereafter, a composite model is developed making reference to the methodology by Alkire and Foster (2009). The dimensions are assigned weights along with each indicator being assigned equal weights. Once an analysis is done, the results of the MPI will provide the groupings of deprivation that affect a household. A household thus is said to be multidimensionally poor if some of the weighted variables in the groupings have an aggregated sum that is well above 30%.

Education (each indicator is weighted equally at 1/6):

- ❖ Years of schooling: deprived if no household member has completed five years of schooling.
- ❖ School attendance: deprived if any school-aged child is not attending school in years 1 to 8.

Health (each indicator is weighted equally at 1/6):

- ❖ Child mortality: deprived if any child in the family has died
- ❖ Nutrition: deprived if any adult is unemployed.

Living standards (each indicator is weighted equally at (1/18):

- ❖ Electricity: deprived if the household has no electricity
- ❖ Drinking Water: deprived if the household lacks access to clean drinking water or clean water is more than a 30 minute walk from home, round-trip
- ❖ Sanitation: deprived if the household does not have adequate sanitation or their toilet is shared
- ❖ Flooring: deprived if the household has a dirt, sand or dung floor

Cooking fuel: deprived if the household cooks with wood, charcoal or dung

Assets: deprived if the household does not own more than one of: radio, television, telephone, bike, motorbike, or refrigerator and does not own a car or tractor (Alkire *et al.*, 2014).

The variables above show that a person is perceived to be multidimensionally poor if they are lacking at least 1/3 or more of the weighted variables. The MPI comprises of two focus areas the first being incidence, which is concerned with the percentage of individuals that are poor in other words, the headcount ratio (H). The second focus area being the intensity of people's deprivation is concerned with the proportion of the dimensions in which people were found to be deprived (A). Therefore:

$$MPI = H \times A \quad (2.10)$$

This methodology can thus give results for incidence, intensity as well as the depth of poverty. It can also measure the level of inequality (Alkire *et al.*, 2014).

2.3.10 Multidimensional poverty and how it differs from traditional poverty

Poverty can be measured in two ways. As discussed in the prior section, multidimensional poverty is a non-monetary measure, whereas with the traditional approach, poverty measurement is dependent on income and consumption. The traditional approach defines a poor person as one who has an income much lower than the poverty line. A poverty line normally is created at national level and it takes into account either the food consumption of the residents or the median income

distribution. Using the traditional approach only creates an impression that those who lack financially are equally deprived as those who lack good nutrition, those who are illiterate and those who are discouraged. The disadvantage is that the traditional approach lacks the authority in providing concrete policy recommendations because it fails to take into account non-monetary deprivations that are multidimensional (Alkire, 2009:3).

Using the traditional approach of measuring poverty provides the flexibility of either using income or expenditure to determine the standard of living of a household. Consumption may prove to be a more accurate measure of poverty only if sufficient data exists on consumption itself. The following points highlight why consumption can be a favourable measure of poverty (Alkire, 2009:3-4).

Consumption provides better results than income. Real consumption is considered more interlinked to an individual's wellbeing *inter alia* to ensure that the same has enough resources to meet the immediate needs. Income, however, is the only variable that enables consumption. Other elements comprise of questions of availability (World Bank, 2013).

Consumption may be easier to measure than income: Income for rural households in poor agrarian economies tends to be volatile during the year, depending on the harvest cycle. On the other hand, urban economies tend to experience unpredictable incomes due to the huge informal sector. This makes it almost impossible for households to determine their aggregate household income precisely. This then leads to unreliable data that is collected from household surveys undertaken in urban economies. Another obstacle in calculating the agrarian income is that agricultural production that yields the income of the farmer is excluded. Lastly, a considerable amount of income is not liquid especially if a household would rather consume from their production or barter their goods for other goods making it rather cumbersome to assign a monetary value to these. With all these taken into consideration, consumption maintains the reputation of a reliable measure (World Bank, 2013).

Consumption may better reflect a household's wellbeing and purchasing power to provide for the most primary needs: expenditure on consumption reflects a variety of expenditures and it is not only limited to expenditure on food consumption. It reflects

the household's ability to obtain loans from banks, or the amount of savings by a household especially when there is little income available or none due to seasonal changes or other external factors that affect income (World Bank, 2013).

Income is of value because it is a means to an end. Income in itself has a monetary value but consumption adds value to the wellbeing of a household or individual. The collection of data on the real consumption of private as well as public good serves to be the most relevant measure of wellbeing. Data constraints hinder such research. Consumption more often is referred to as income, which is often used interchangeably with consumption. This can, however, create confusion about income referring to compensation for work done by employees or if it refers to market income earned for self-employment or income in the form of interest earned on investments. Further clarity is also required concerning the amount of disposable income that remains once provisions have been made for taxes and other monthly expenses. Individuals earning very high or very low incomes often do not declare their precise incomes thus making it very difficult to obtain accurate information during surveys. The use of annual income is also not a favourable option due to inaccurate results from the measurement (Corak, 2005).

2.3.11 Advantages of multidimensional poverty measurement

The multidimensional measure of poverty has some advantage over the income measure of poverty. The multidimensional measure can be easily adapted to varying situations and whether at household, individual or country level. Dimensions for measuring poverty can be such that they suit a particular country, thereby encouraging originality and comparing dimensions for other countries with similar development characteristics. Creating the variables along with their weights is a flexible exercise as well as classifying the data into either nominal, ordinal or categorical, all of which depends on the type of data. Once the weights have been assigned to the variables, and classified in the dimensions, the levels of poverty can be identified. Multicollinearity tests and other statistical tests can be done to ascertain that the data are not too sensitive to any alterations. The poor population is easily identifiable and the increase in the weights of the dimensions will give a clearer indication of the extent of poverty in the households or a country (Alkire, 2009:5).

Child poverty derives its concept, measures and other attributes from the more general poverty. The following section discusses the concept of child poverty and how it differs from that of general poverty.

2.4 CHILD POVERTY

Poverty is considered unsettling phenomena especially for the young, with under five mortality at the forefront. Child poverty is there and it is thus necessary to determine what the causes of child poverty are and what appropriate channels can be followed to reduce or eradicate it. Children are the most vulnerable victims of poverty and this is mainly because they experience the repercussions of being poor much more than adults especially if a child is trapped in poverty. The effects of poverty are so damaging that they can extend right through to adulthood (Feeny & Boyden, 2004:6).

Turning the spotlight on the child poverty phenomena does not necessarily mean that other aspects contributing to poverty such as lack of enough employment in the job market, political risks, violence and lack of assets are not important. These issues also affect children as much as they have an effect on the rest of the household. Thus, it is necessary to emphasise the fact that child poverty differs from adult poverty and it is very important to address the differences between child and adult poverty so as to make informed decisions about how to alleviate it. The child poverty concept has to be defined clearly and the causes and consequences identified (Boyden *et al.*, 2004:2).

Children who have been poor over a long period of time will most likely be in a worse-off position than children who recently encountered poverty since parents resources are depleted over time. Also, the poverty history of each child that is analysed over time gives an idea as to whether poverty is concentrated among a small group of children or is it experienced by many more children. Thirdly, poverty has long lasting effects that may infiltrate right through to adulthood. The impact of poverty is determined by the type of poverty experienced (Moore *et al.*, 2009:1).

There is an urgent need to focus on child poverty studies due to the great amount of research that binds poverty with the poor state of child wellbeing. The linkages are likely to be stronger for children coming from families that are trapped in deep

poverty, who experience poverty at a very tender age in their childhood and those who remain in poverty right up to their adult years (Moore *et al.*, 2009:1). Some of the reasons why child poverty studies are important are discussed below.

The need to study child poverty as opposed to other population groups needs very little justification. Children all over the world are considered the future of their countries, which justifies the immediate concern of their well-being, by society. Their vulnerability and blamelessness of the circumstances that they find themselves in bring about emotions of obligation to the children in the situation. It is of great essence to take note of the dynamics of a child moving in and out of poverty and the impact of the duration of the poverty. The severity of a child's poverty situation presently depends on past poverty. Children that have been poor for longer periods are likely to be in a worse-off position than children who recently have experienced being poor. A child's poverty history may provide information as to whether poverty is concentrated amongst a smaller group of children or the greater child population in a particular area. The greater the number of children in poverty, the greater the societal concern (Bradbury *et al.*, 2001:1-2).

2.4.1 Definition of a child

Before defining child poverty, it is necessary to first define what a child is. The South African Children's Act (38 of 2005), defines a child as any human being under the age of 18.

The CRC (2005) defines a child as a person below the age of 18, unless the law of a particular country sets the legal age for adulthood younger. The Committee on the Rights of the Child, the monitoring body for the convention, has encouraged states to review the age limit of what a child is and if the limit is set below 18 years, to increase the level of protection for all children under 18 years (Blanchfield, 2013:3).

2.4.2 Definition of child poverty

Gordon *et al.* (2003:3) states that, "a more independent definition of child poverty would mean that children are treated as objects of knowledge in a number of key respects independently of adults, including their parents."

According to Chirwa (2009:3), “child poverty refers to a situation whereby a person below the age of 18 years lacks access to what is required to fulfill basic human needs”. This definition considers child poverty as something more than simply material deprivation or a lack of income. It is a broad definition, which includes lack of income, hunger, lack of access to education, ill health and lack of access to decision making.

The UN general assembly argues that:

“Children living in poverty are deprived of nutrition, water and sanitation facilities, access to basic healthcare facilities, shelter, education, participation and protection and that while a severe lack of goods and services hurt every human being, it is most threatening and harmful to children leaving them unable to enjoy their rights, to reach their full potential and to participate as full members of society” (UNICEF, 2007).

According to Saidov (2007:25), child poverty is the lack of access to social services. The definition further elaborates that children experience poverty physically, intellectually and emotionally. For instance, lack of good nutrition leads to malnutrition and poor academic performance. Lack of sufficient income may also lead to child labour, as children work in order to provide for their families.

According to Noble *et al.* (2001), child poverty is defined as the headcount of children living in households with resources that are far lower than the minimum subsistence level or an equivalent poverty depth measure.

The Childhood Poverty Research and Policy Centre (CHIP) (2004) (cited in Munjin *et al.*, 2006:13) defines child poverty in the following way:

“Childhood poverty means children and young people growing up without access to different types of resources that are vital for their well-being and for them to fulfill their potential. Resources mean economic, social, cultural, physical, environmental and political resources”

More specifically, the above definition implies that growing up in the absence of any of the factors listed below, which constitutes childhood poverty:

- ❖ An adequate livelihood comprising of the financial and nutritional resources needed for survival and development (economic, physical and environmental resources).
- ❖ Opportunities for human development including access to quality education and life skills, health and water/sanitation (social, cultural and physical resources).
- ❖ Family and community structures that nurture and protect the families, parents/guardians with time to care for the children, an extended family/community that can cope if parents and guardians are not able or a community that cares for and protects its younger generation (social and cultural resources).
- ❖ Opportunities for voice, powerlessness and lack of political mobility also exacerbate poverty (this also applies to adults) (Minujin *et al.*, 2006:487).

With the concept of child poverty defined, it is necessary to determine the characteristics of a poor child from a theoretical perspective to understand what the possible attributes of a poor child are.

2.4.3 The characteristics of a poor child

Poverty that is enduring during the childhood years may very well spill over to adulthood as there exists a link between a child's earnings and the remuneration of their parents from paid employment. Male children that are deprived due to the limited financial resources of their parents are likely to be involved in crime compared to children that are coming from well-off families. Children from poor family are also more likely to drop out of school early in the hopes of finding employment. The children in turn are regarded less important in society since they are less educated and involved in potentially low paid employment. A child's environment may affect their future outcomes. Children growing up in households with unemployed parents may find themselves in the same situation as adults (Mckinney *et al.*, 2006). Good nutrition is considered vital to a child's wellbeing and performance. Children who lack good nutrition are likely to have poor educational outcomes. It is, however, important to note that these characteristics do not necessarily hold for every poor child (Connecticut Commission on Children, 2004:4-

5). Children, like adults, have their own views as to what child poverty means. The next sub-section discusses perceptions from children's point of view.

2.4.4 Children's perception of poverty

The views and perceptions of children concerning child poverty studies have been sidelined. Adult perceptions of children's needs more often than not are given more attention as opposed to what children perceive poverty to be. Children's views of poverty have sparked interest in child poverty studies. The CRC is an important vehicle for mobilising how children and their childhood is viewed or perceived. The CRC, which was established in 1989, argues that children are entitled to taking part in as well as communicating their ideas and suggestions about any policy that may have an effect of their livelihoods. The CRC thus provides a platform for children to be protected and vocal. There has been a movement towards "the new sociology of childhood" (Barnes & Wright, 2010:4) and how it considers the importance of childhood and it also advocates for children to become vocal and proactive in the communities that they live in as children and not having to wait for adulthood. Such advocacies have highlighted the need to do further research on children and their circumstances (Barnes & Wright, 2010:4).

According to research done by Baschieri and Falkingham (2007:8), children in Tajikistan had the following perceptions about poverty:

Poverty is evident by an individual's appearance, behaviour, where they live and how they carry themselves. Poor people are often ashamed of themselves and they always walk around with their heads bowed down. They do not go out frequently because they have old clothes and they are despondent. Poverty occurs when parents have to leave for the big city to seek employment and never come back or even send money. Poverty occurs when women lose their husbands due to violence and children are forced to grow up without their fathers (Baschieri & Falkingham, 2007:8).

According to the research done by Tafere (2012:9) on child poverty in Ethiopia, Ethiopian children had the following responses with regards to their perceptions and indications of child poverty. These are discussed in the Table 2.1.

Table 2.1 Ethiopian children's perceptions of poverty

	Poverty indicators	Causes of poverty	Consequences of poverty
❖ Urban	❖ Not enough food and wearing tattered clothes ❖ Living in very crowded housing ❖ No materials for learning and not going to school at all	❖ Weak work ethic ❖ Poor financial management ❖ Having a large family ❖ Lack of work opportunities	❖ Exclusion and feeling of inferiority ❖ Poor educational outcomes ❖ Behaviour problems
❖ Rural	❖ Not having enough food and clothing ❖ Living in poor housing ❖ Lack of school material ❖ Not having enough land and livestock	❖ Weaker work ethics ❖ Having many children	❖ Exclusion and feeling of inferiority ❖ Poor or no schooling ❖ Early marriage for girls (girls' respondents) ❖ Doing paid work instead of studying (girl respondents)

Source: Tafere, 2012:9

Parents also have their own perceptions of child poverty. A study in the United Kingdom shows that parents in poor households struggle with the economic demands that family life brings. Parents strive to prioritise their children's needs but this is often difficult to attain, especially for single mothers (Ridge, 2009:3). Some of the difficulties faced are discussed below.

The challenge to meet their own needs and meeting their children's needs: some families went from one day to the next without necessities such as food, clothing and fuel. Parents often put their needs last to ensure their children do not lack anything. Working parents often were torn between working long hours and spending time with

their children. Some parents have to work in low-income employment and this had an effect on their family life and having the opportunity to raise their children. Parents are also unable to afford their children the luxury of supervised leisure and children often have to play in unsuitable and potentially dangerous surroundings (Ridge, 2009:4). Parents may experience many hardships, especially if they are also having financial constraints. These financial constraints bring about anxiety in parents when they struggle to provide for all the necessary items to ensure that their children are comfortable. Savings towards securing their children's future may also be difficult, contributing to the anxiety (Mountney & Reid, 2012:3).

Poor parents are said to be demographically different from their more affluent counterparts as they can be found in households where there is no employed adult and some of these households are classified as teenage-headed households. Some of these less affluent households are characterised by children with special needs or those who are terminally ill. The children may be quite young; below the age of five and may require attention from parents or the household may be considerably large (Katz *et al.*, 2007:19).

As was discussed in Section 2.2.3.3 concerning the cultures of poverty, poor parents also have their own culture of poverty that sets them apart from middle class parents. This, just like material deprivation, has significant effects on a child's future and upbringing. Some of these effects include low expectations for the child concerning their future outcomes, physically punishing a child and a culture of conformity rather than individual success. The culture of poverty affirms that this parenting style is intergenerational and, therefore, prevents children from escaping the poverty trap (Katz *et al.*, 2007).

Child deprivation serves to be a crucial factor of child poverty. The concept of deprivation channels attention on the situations that children live and deal with in their daily lives. Poverty acts as an attribute in their surroundings (Delamonica *et al.*, 2008:9). The following section discusses the relationship between child poverty and deprivation and what it means for a child to be deprived.

2.4.5 Child poverty and deprivation

Deprivation can be experienced in numerous ways and not necessarily for financial goods only. Deprivation can be used to better explain the depth of neediness experienced by an individual. Deprivation is defined as “the undesirable and unsatisfactory conditions, emotional, material, behavioural or physical, as documented by means of a fair-minded degree of social consent” (Gordon *et al.*, 2003:6). The term also means the lack of sufficient income leading to a low standard of living (Gordon *et al.*, 2003:6).

As discussed in Section 2.3.10, the traditional way of measuring poverty provides information regarding the financial means of a household in order to supplement its daily needs. Deprivation indicators on the other hand, provide information on the extent to which these needs are actually satisfied. The money metric way of measuring poverty often is viewed as the best alternative to measuring poverty compared to the multidimensional poverty. This is especially true for certain Third world countries where the majority of the economy is non-monetary particularly for poor members of society. When considering child poverty, the situation becomes more complicated since children are not considered to have any means to sustain themselves. Classifying a child as poor or non-poor entirely depends on the household to which they belong (De Nuebourg *et al.*, 2012:1). This will mostly be dependent on a household's financial status.

Deprivation can be experienced in a variety of forms that will have a negative bearing on the child's future. A child that grows up in a household where they do not receive the necessary attention with regards to educating them about their background or even taking note of the child's interests and hobbies is a form of deprivation (Kellmer-Pringle, 2002). A child that lacks affection from his or her parents is likely to be unable to show any affection to those around her, which is emotionally damaging as far as his or her future social prospects are concerned. Lack of good nutrition good health may also be impeding to good outcomes for a child (Van der Ross, 2010).

Children who are exposed to any severe deprivation of basic human needs may be living in households that are experiencing absolute poverty. More often than not

children that live in deprived households are deprived due to lack of sufficient resources that will promote their wellbeing. As with multidimensional poverty, children may experience deprivation based on their gender, whereby female children may suffer educational deprivation because they have to be of service to their households. Diseases can also deprive children from getting an education, such as a child cannot go to school due to ill health (Gordan & Nandy, 2012).

Deprivation may take different forms. These forms, which are linked closely to the types of deprivation, are discussed below.

Economic deprivation: children in poverty often worry about the economic wellbeing of their families, and whether the parents will be able to afford their daily needs. Children can further be economically deprived if their parents are unable to pay for their educational excursions or Internet connection that may help them in completing a project or their homework (Gordan & Nandy, 2012).

Material deprivation: some children lack essential items for everyday living like food, clothing and shelter. Children may also lack crucial items for their development like toys, books and games (UNICEF, 2010:6).

School deprivation: children in poverty may experience deprivation at school such as failing to afford certain resources such as study and exam material and computers. Children may also be deprived of opportunities to go on school excursions due to financial constraints (Ridge, 2009:2).

Social deprivation: social deprivation is not the same as poverty but the latter has a huge effect on the former. For children, the effects of poverty on their social interactions are highly dependent on their parents. Parents who are wealthy and who can afford certain resources that the rest of the society cannot afford will be excluded in society, which will in turn affect their children (Bradbury & Jäntti, 1999:5).

The following table illustrates the definition of the types of deprivation that a child may encounter in life.

Table 2.2 Types of child deprivation

Deprivation	Threshold for less severe deprivation	Thresholds for severe deprivation
Shelter	Children living in dwellings with 4 or more people per room or living in a house with no flooring	Children living in a dwelling with 5 or more people per room or with no flooring material
Sanitation	Children using unimproved sanitation facilities. Unimproved sanitation facilities include: pour flush latrines; covered pit latrines; open pit latrines; and buckets.	Children with no access to toilet facilities of any kind
Water	Children using water from an unimproved source such as open wells, open springs or surface water or where it takes 30 minutes or longer to collect water	Children using surface water such as rivers, ponds, streams and lakes, or where it takes 30 minutes or longer to collect water
Information	Children (aged 3-17 years) with no access to a radio or Television (i.e. broadcast media).	Children (aged 3-17 years) with no access to a radio, television, telephone, newspaper or computer
Food	Children who are more than two standard deviations below the international reference population for stunting (height for age), or wasting or underweight (weight for age).	Children who are more than three standard deviations below the international reference population for stunting (height for age), or wasting or underweight. This is also known as severe anthropometric failure.
Education	Currently attending school or did not complete their primary education.	Children (aged 7-17) of school age who have never been to school and who are not currently attending school.
Health	Children who have not been immunised by 2 years of age. If the child has not received the necessary vaccinations are defined as deprived	Children who did not receive immunisation against any diseases or who did not receive treatment for a recent illness involving an acute respiratory infection or diarrhoea

Source: Gordon and Nandy, 2012

Deprivation differs from one place to the next. What people perceive to be a lack in one place may not necessarily be the case in another place. A child lacking a computer in an urban area of a developing country may not be considered deprived, unlike if the same child lacked school shoes. A study conducted by Barnes (2009) in South Africa illustrated what may be considered necessities for children from an adult's perspective. The necessities are adapted from the South African Social Attitudes Survey (SASAS) 2007 by the South African Human Research Council. (SAHRC) (2007). The items are listed in Table 2.3.

From the items listed in Table 2.3, adults were placed in focus groups and they were asked to identify the items that were important for their wellbeing. Focus groups involve a group discussion amongst a group of people in order to obtain their perceptions or information on a particular topic. The different focus groups were similar in their responses, for instance, the most prominent feature was access to healthcare facilities with special emphasis on the availability of good doctors and adequate medication, a balanced and healthy diet every day and clean water. Good education with experienced and respectful teachers was also considered important. Children should be able to access the necessary study material, stationery and full school uniform. Concerning family life, the children felt that they should be able to have their own room with their own bed. The children generally also mentioned the importance of having fashionable clothing items for the weekend. A television set and other leisure equipment were also considered to be important (Barnes, 2009:12-13).

Table 2.3 A list of necessities to determine a child's wellbeing

- | |
|--|
| <ul style="list-style-type: none">❖ Three meals a day including at least one portion of fruit/vegetables and at least one portion of protein (e.g. meat, fish, eggs, pulses, nuts, seeds)❖ Shoes for different activities (e.g. school shoes, sneakers for sport/play, smart shoes for special occasions)❖ Toiletries (e.g. toothbrush and paste, soap, shampoo, hairbrush/comb) to be able to wash every day❖ Story books❖ Some new clothes (not second hand or handed on/down)❖ Educational toys / games❖ Presents at birthdays, Christmas or other religious festivals❖ Toys or materials for a hobby❖ A visit to the doctor when ill and all the medication prescribed to treat the illness❖ Own bed❖ Leisure / sports equipment❖ Clothing sufficient to keep warm and dry❖ A birthday party each year❖ All fees, uniform and equipment (e.g. books, school bag, lunch/lunch money, stationery) required for school❖ A computer in the home for school aged children❖ A school trip once a term for school aged children❖ A desk and chair for homework for school aged children❖ Pocket money / allowance for school aged children❖ Bus / taxi fare or other transport (e.g. bicycle) to get to school❖ A PlayStation or Xbox (computer games) for school aged children❖ A hi-fi/CD player and some tapes / CDs for school aged children❖ Own room for children over 10❖ Some fashionable clothes for secondary school aged children❖ Own cell phone for secondary school aged children❖ An MP3 player / iPod (portable music player) for secondary school aged children. |
|--|

Adopted from Barnes, 2009

Children in poverty are vulnerable to different types of deprivation, which may worsen their state of poverty. Lack of sufficient food is also another risk factor of

child poverty. The following sub-section discusses the importance of a balanced diet and some of the consequences that a child is likely to face if they are food insecure.

2.4.6 Child poverty and food security

For any successful economy, food security is considered vital in attaining long-term economic growth as well as development. Food secure citizens are in a position where they can be productive and make a substantial contribution to their country's GDP. Food insecurity stems from economically unstable homes, communities and ultimately an unstable country, which cannot realise any development. For many countries, food security has been a cause of concern and the need for action is quite urgent. The need to reduce the number of malnourished children and ensuring that children have access to nutritious food is a goal that most countries wish to reach by the year 2015 (Asian Development Bank, 2012).

To address the issue of food security better, it is important to first define the phenomenon. Du Toit *et al.* (2011:2) defines food insecurity as “physical, social and economic access to sufficient, safe and nutritious food by all South Africans at all times to meet their dietary and food preferences for an active and healthy life”.

Food has to be available at all times for individual households and for the country as a whole. Reliable food supply is primarily dependent on the availability of food inputs as well as the output market. The turn-around time between input and output is important. The agricultural sector, being the most important sector for food production, may also affect food security in a country. The household may not have sufficient purchasing power, coupled with that, the ability of a household to purchase the final goods for consumption will also affect their food security. A household that does not have the financial means stands to be food insecure. The reliability of food depends on the availability. The food that is available for consumption has to be safe and of good quality. Lastly, there should be an even distribution of food across all regions in a country. The distribution of food should be such that it arrives at the right place at the right time. Food security at national level does not necessarily mean that all the regions within the country are food secure (Du Toit *et al.*, 2011:17).

The biggest challenge to achieving food security in Africa is the poor agricultural sector, which is characterised by overdependence on primary farming. The majority of food from sub-Saharan Africa is obtained from rain-fed agriculture. Therefore, food production is dependent on good weather conditions (Mwaniki, 2006:3).

The consequences of food insecurity have detrimental effects, which have the potential of putting all levels of social and economic life under siege. At a macro level, food insecurity leads to job losses due to ill health, high medical expenses or even death in the family. Those mostly affected by food insecurity within the household are women and children. The disadvantage of food insecurity contributes to poor cognitive development and performance with special reference to female children, stunted growth and the like. Du Toit *et al.* (2011:3) deduces that a differentiation of food security can be made between food security for the country as a whole or for a society. From a country's perspective, food security at national level is concerned with ensuring that the country is capable of providing for the food needs of its people with the lowest per capita nutritional standards.

Poverty and food insecurity have dire effects during a child's development, which may lead to chronic iron or vitamin deficiencies. For children, the experience of a household in poverty or food insecurity may have an effect on certain aspects in life such as family interaction and routine. Timmer (2005:2) concludes that food security exists when individuals are physically and financially able to have access to adequate food necessary for survival. Food security is comprised of the following three dimensions:

- ❖ Access to adequate supplies of food of appropriate quality obtained through local markets or imported.
- ❖ The ability of households and families to have the resources that will enable them to access the food necessary for their daily dietary requirements.
- ❖ The use of food through adequate diet, water, sanitation and health care (Timmer, 2005:2).

Bhattacharya *et al.* (2004:3) argues that as poverty and malnutrition are two of the most pressing socio-economic issues, so is the intensity of the relationship between the two concepts. Poverty is said to be a direct cause of malnutrition and no nutritional progress can be made until poverty can be reduced. Hunger may hinder a child's ability to be competent.

Child nutrition and development have been well researched in both developed and developing countries. Child development goes far beyond morbidity and physical growth. It also includes cognitive development that enhances competence. An individual is perceived competent if they are able to interact with the society in which they belong (Voster, 2009:3).

The following traits define a child's competence:

- ❖ Cognitive skills: the ability to think, remember and reason
- ❖ Temperament/personality: characterised by hyperactivity in infancy the ability to control emotions
- ❖ Motivation: reflected in the need for independence during childhood
- ❖ Self-perception: characterised by secure attachment during the early stages of childhood (Voster, 2009:3).

The root cause of food insecurity in developing nations is the difficulties faced by people because of poverty. The developing world at large has made significant improvements with regards to food security and poverty alleviation, but Africa has been lagging behind with special reference to sub-Saharan Africa. Factors such as the Humane Immune Virus / Acquired Immune Deficiency Syndrome (HIV / AIDS), famine, poorly managed states, wars and climate conditions of drought have made the food insecurity issue a matter of great concern (Mwaniki, 2006:1).

Child hunger at any stage of a child's life has repercussions that may not be reversed. Under-nutrition remains an underlying contributor of child mortality and ill health particularly for children under the age of five (Burgess & Danga, 2010).

The following points highlight the most outstanding consequences of child hunger:

❖ Child hunger is a health problem:

Children that live in hunger are more likely to be vulnerable to illnesses and infections compared to healthier children. They visit the doctor or are admitted to hospital more often. The costs are likely to be covered by businesses in their bid to committing to social responsibility. Hungry children have stunted growth and are much smaller than are their age mates. They may have delayed mental growth and may struggle to relate with their peers (Cook & Jeng, 2009:1).

❖ Child hunger is an education problem

Children between the ages of 0-3 years experiencing under-nutrition have difficulties to grasp and learn at school due to the fact that prolonged under-nutrition disturbs the brain processes of development especially during the early years of growth. The central nervous system is also affected in the process.

The educational outcomes of hungry children are jeopardised due to lack of good nutrition. Missing a meal, especially before school, reduces concentration.

Hungry children are likely to experience social problems, which may lead to bullying in school. Hunger can also be a source for crime (Setboonsarng, 2005:4-5).

❖ Child hunger is a workforce and job readiness problem

Child hunger may affect an adult negatively in their prospects for employment. Hunger may have lasting effects in the physical, psychological and emotional preparedness of an individual in the workplace. As workers, these individuals may lack productivity or are less ambitious. They may also lack the interest to enhance their skills further, which may have a negative impact on the company (Setboonsarng, 2005:4-5).

Child malnutrition can make for a good poverty measure and has become increasingly popular in research circles. A child's wellness serves to be an important facet of poverty, which makes it increasingly vital for parents to promote the good health of their children who in turn will become healthy adults. Children, as a very important group of a population in any country, have their wellbeing as a concern to

the policy makers as well as the rest of the population. Poverty is a cause as well as a consequence of malnutrition. In turn, the eradication of poverty will lead to lower levels of child malnutrition (Setboonsarng, 2005:5).

A child may be food insecure, which could lead to malnutrition. Malnutrition, however, is caused by the lack of a healthy diet coupled with diseases caused by the lack of a healthy diet. A family lacking clean drinking water and sanitation is likely to fall ill. Living in an unhygienic society can also lead to diseases, especially for children, coupled with poor nutrition, is likely to contribute to early child deaths. Countries should consider investing more in good health and sanitation because healthy individuals may contribute to the economic growth and sustainability of a country essentially escaping poverty in the process (Setboonsarng, 2005:5).

The measurement of child malnutrition, just as with multidimensional poverty, does not require any adjustments for inflation unlike the income measurement. The measurement of child malnutrition is necessary in projecting the wellbeing of a child in a household along with the household food intake. Instances do occur where a child may have to skip meals due to the lack thereof or a child being denied food at home (Setboonsarng, 2005:5).

Food insecurity, nutritional deprivation and hunger are somewhat interlinked to each other in a sense that hunger is the inevitable cause of nutritional deprivation and both of these phenomena are resultant because of food insecurity. When there is no stable income in the household, both children and adults are likely to suffer from malnutrition. The after-effects of hunger and malnutrition lead to physical and mental changes that can have an effect on an individual's lifelong development and productivity (Bhattacharya *et al.*, 2004:4).

Child poverty can be found in different types of households and the following sub-sections discuss the prevalence of child poverty in vulnerable households.

2.4.7 Child poverty in female and grandmother-headed households

Female-headed households are considered the biggest sub-population group worldwide because of the absence of a male 'provider'. These types of households generally are considered inevitably vulnerable as opposed to male-headed

households. These single mothers' adversities are most likely to affect their children in both the long and short term. With the assumption that females are unable to provide for their families sufficiently, an intergenerational transmission of disadvantage is assumed that will lead to an intergenerational poverty trap. In other words, this essentially could mean that children's deprivation with regards to food, housing and education could lead to a generational trend of deficiency and failure. The material deprivation endured by children living in female-headed households can be coupled with other hardships that a child is likely to face, which may affect their social and psychological wellbeing. Children growing up without fathers irrespective of whether it is death, separation or divorce are prone to feelings of trauma, unhappiness and lack of affection (Chant, 2006).

Sometimes, children are found to be living with grandparents because parents have to work far from home or because parents are not stable due to substance abuse such as alcohol and/or drugs. Some parents may be ill and require additional help from others. Compared to other family structures, children living in grandmother-headed and younger female-headed households may experience economic hardships that nuclear families with both parents do not necessarily face (Snyder *et al.*, 2006:600-601).

Grandmothers who are already retired will support their families with their retirement income or pension money, while other grandmothers will rely on the social grant that they receive from the state. The poverty experienced by younger female-headed households and the grandmother-headed households depends on the amount of income that is received in the households as well the number of people in the household (Snyder *et al.*, 2006:601).

Female-headed households may experience more poverty due to unfavourable financial circumstances, greater vulnerability due to the lack of security and other forms of economic deprivation. Some female-headed households lack a support system from other family members and are sometimes unable to leave their children to find employment elsewhere. Female-headed households in Malawi for example have fewer assets such as land and equipment for farming. Some women are unable to obtain loans from financial institutions or micro lenders. In 2007, women in

Guinea-Bissau were also earning far less than men were and were less literate than men (Tsegaye, 2008).

A study in the USA suggests that child poverty has long been prevalent amongst female-headed households. A child growing up in a female-headed household is exposed to deprivation in that the household has fewer resources irrespective of their country of origin. However, most northern European countries are known to have lower child poverty rates and out of wedlock childbearing rates than the USA. Although American children are seldom born out of wedlock, they are exposed to living in households headed by single mothers for a certain period of time during their childhood. As more children are found to be living with their mothers in the USA, the poverty gap tends to increase between the country and other countries (Heuveline & Weinshenker, 2008:175).

2.4.8 Child poverty in child-headed households

The occurrence of child-headed household may be either short lived or permanent and this depends on the age of the household members as well as the composition. This also is determined further by the changes in the number of people entering or leaving the household. A household is no longer a child-headed household when the head turns 18. The household will be then termed a youth-headed household or a sibling-headed household. Child-headed households are not meant to be permanent because children are meant to grow and become adults and this makes their identification a rather cumbersome task. Children in child-headed households have been known to be a group of sibling where the caregiver is the eldest sibling. This perceived formulation of child-headed households is regarded as debatable (Phillips, 2011:160).

Phillips (2011:161) deduces that child-headed households may be described or defined as:

“A household run by children younger than 18 years of age who have lost both parents or whose parents or primary caregivers are (chronically) ill. The parent, guardian or caregiver of the household is terminally ill, has died or has abandoned the children and no adult family member is available to provide care. This type of

household is a unit constituting siblings who are children, in which the caring role has to be performed by one or more of these siblings. It is a household in which the main caregiver is under the age of 18 therefore the siblings are looked after by an older sibling, who is still a child himself or herself. This type of household can further be described as a household consisting of one or more young people, legal or social minors, of whom one or more have taken on adults' caring tasks for themselves and/or others and who are not eligible for formal support, or lack the means to access support" (Phillips, 2011:161).

Van Breda (2010) argues that with regards to defining child-headed households in South Africa, the Children's Act of 2005 (RSA, 2005a) has fallen short of doing so. Section 137.1 of the draft Children's Amendment Bill (RSA, 2005b), however, deduces that "a provincial head of social development may define a household as a child-headed household if:

The parent, guardian or caregiver of the household is terminally ill, has died or has abandoned the children in the household and there is no adult family member available to provide care for the children in the household. A child over the age of 16 years has assumed the role of care-giver in respect of the children in the household; and it is in the best interest of the children in the household (Van Breda, 2010).

The notion is such that it provides a broader comprehension of why children end up in child-headed households. The definition also considers not only orphans but children who have been left to fend for themselves and those with parents who are too ill to provide for the family. An outstanding feature of this definition is that the head of household is expected to be above the age of 16. The definition, therefore, neglects heads of households below 16 years of age. The reason for this may be to discourage the idea of justifying child-headed households with younger children as these children should rather be staying in foster care homes or in a homeless shelter (Van Breda, 2010).

Rosa (2004:2) explains that children raised by a sibling in child-headed households may experience a variety of obstacles. Some of which can be likened to those experienced by children living with HIV/AIDS and children living in poverty-stricken households. These children may face difficulties in obtaining food and shelter; they

are also likely to face hindrances to their education because of poverty. Children in child-headed households are prone to the possible dangers such as being sexually harassed by individuals living in their community as well as relatives. These children are at risk of falling into prostitution and child labour to sustain their livelihoods while some may end up as street kids. Children born in child-headed households may not have birth certificates or may struggle to obtain such documents due to the absence of the mother. Without these documents, they struggle to obtain proper health care treatment, social grants and other state benefits that can assist them in sustaining a life without parental guidance. Further harsh treatment from relatives can be ascertained when they are relinquished of their rights to the family property, livestock and other assets or valuables when the parents die. The elder child tries to survive and sustain the rest of the family and this leads to anxiety for the older children as they are also going through certain phases in their adolescent lives (Sloth-Nielsen,2004).

Child poverty, just like poverty, is measured in order to determine whether a child is poor or not. The following section discusses the measurement of child poverty relating to the advantages and disadvantages of monetary and non-monetary approaches. The essence of the equivalence scale, which is applied in the study, is also discussed with reference to the Engel and Rothbarth theories. The shortcomings of the equivalence scales are also discussed.

2.5 CHILD POVERTY MEASUREMENT

There are several reasons why it is important to measure poverty. The following points discuss the reasons effectively.

Ravallion (1998) provides a concrete justification that a well-renowned poverty measure has the ability to influence policy makers by bringing to their attention the prevalence of poverty and impoverished living conditions. In other words, it is highly likely that the poor will be forgotten if they are not identified statistically. It is, therefore, important to make use of poverty measurement to ascertain that the needs of the poor are acknowledged on the political and economic agenda (World Bank Institute, 2005:9).

In order to target interventions and solutions worldwide, an additional motive for measuring poverty is for the sake of identifying the poor and seeking possible interventions of alleviating the scourge of poverty. The only way of assisting the poor is to know their location. A profile of the population enables researchers to determine the prevalence, depth as well as extent of poverty and inequality of a particular location. The same also investigates poverty trends in terms of the poor's geographical location, whether they are from rural or urban areas, mountainous and plain regions. The community characteristics and household characteristics relating to the head of the household, the size of the household and qualifications of the members of the household are also taken into account. A well-structured poverty profile thus has the ability to provide invaluable information (World Bank Institute, 2005:10).

To monitor and evaluate projects and policy interventions geared towards the poor, amongst the many reasons why it is important to measure poverty is the need to forecast the possible effects thereafter assess policy recommendations and relief efforts designed to assist the poor. Recommendations, which appear to be convincing on paper, may not address the actual needs of the poor as may have been anticipated. One way of analysing the effects would be to analyse the outcomes of the policies, which can be compared to a control group. Such a rigorous exercise can be considered necessary with the goal of recreating programmes and eliminating the irrelevant ones (World Bank Institute, 2005:10).

Why measure child poverty? Child poverty is a concept that deserves special attention as children in developing countries make up a large proportion of their populations. The measurement of child poverty is important as it gives an indication of future prospects of the children, as adults as well as the future well-being of a country. Children are considered to be relatively vulnerable in that they cannot solely depend on themselves and they require the guidance and economic support of the parents (Harpham, 2002:4).

Measuring child poverty in monetary terms is considered a useful and important measure as it gives an indication as to whether a person is poor or not depending on the income received. The monetary approach to measuring child poverty is

conducive but it tends to neglect the effects of poverty on a child's physical and emotional wellness and other deprivations that a child may encounter (Kurukulasuriya & Engilbertsdorttir, 2012:10).

The disadvantage with the monetary approach is that it fails to emphasise the importance of non-financial goods that contribute to the welfare of a child. An environment conducive for children to interact with other children that is safe depends on the local municipalities or counties and not on the income of the parents. Such facilities cannot be purchased, even if the parents had the means to. Children are naturally playful and the absence of such facilities may have an effect on their happiness and welfare. Children exposed to unclean environments such as areas with sewage waste could lead to children contracting infections and getting diarrheal diseases. Children have the urge to play and that increases their likelihood of falling ill due to unhygienic environments. Children also playing in potentially harmful environments can result in children having accidents that could have been avoided and this pertains more to children that are poor. Households that are overcrowded make for difficult upbringing of children, which leads to them becoming restless. Such living conditions contribute negatively to a child's mental development they are likely to have social problems. Children may also experience delays in the development of their fine motor skills. Environmental and household deprivations may have lasting effects on a child's development (Minujin *et al.*, 2006:483).

Measuring relative income child poverty has its weaknesses. The measure has been known to be a controversial one. Critics often refer to the relative poverty measure as the imperfect of inequality index. This poverty measure fails to take into account any deprivation and disadvantage in any society. Any country with relatively high inequality may not have relative poverty, provided the distributive functions are able to control and maintain the income distribution well below the poverty line (van den Bosch & Marx, 2008:3).

2.5.1 The dimensions of child poverty

A frequently used method of measuring poverty is that of consumption and income, which essentially refers to a person being poor if their consumption or income level falls below a specific minimum benchmark deemed vital to cater for his or her

particular needs. These measures are useful in that they give a broad overview of poverty in society but fail to capture the essence of child deprivation and they also fail to grasp the disparities that persist across countries and the amendments for inequalities often cannot be made in monetary measures. There are, however, indicators that are aimed specifically at providing a more accurate picture of poverty. These indicators are able to capture the essence of poverty experienced by children, for example malnutrition, which may affect health and education (Kurukulasuriya & Engilbertsdottir, 2012:25).

A multidimensional measure of child poverty is one that examines the different elements of a child's experience. This measure goes far beyond the income variable to emphasise the effect of other dimensions such as current poverty and life chances as other measures (UK Government, 2012:15).

According to Biggeri *et al.* (2010:10) poverty is multidimensional, specifically with regards to children, therefore, it is necessary that the situations that children face should be differentiated from those of the adult nexus. It is only then that child poverty can be determined. In order to determine the dimensions of child poverty, it is necessary to broaden the definition of child poverty beyond prior conceptualisations of the phenomenon.

The measure can be used to compare a variety of groups in a community such as children belonging to various ethnic groups or genders. The various dimensions are able to reveal to policy makers the main dimensions that contribute mostly to multidimensional poverty in any given region or community. The levels of poverty are likely to increase if one or more children in the sample become deprived in other dimensions. This measure is thus sensitive to the multiplicity of deprivations. The measure adjusts according to the size of the group for which it is being calculated, which in turn enables meaningful comparisons across different sized regions and countries (Biggeri *et al.*, 2010:10).

The monetary approach of measuring child poverty is deemed an important measure though it has often been criticised because it does not take into account the effects of poverty on a child's physical, emotional and social wellbeing. Therefore, the monetary approach fails to accommodate the multidimensional aspects of poverty,

which will in turn influence the lifelong outcomes of a child. The monetary approach is also considered inadequate because it does not separate the particular needs of the child from those of the adults. Children also have no opinion about family assets, or how the income is spent (Dinbabo, 2011).

There are several other reasons why the monetary approach to measuring child poverty is deemed unfavourable. As explained by Gordon *et al.* (2003), there exists very limited information on children's income/expenditure and consumption needs in many third world countries and their demographic variations by age, gender and location. Thus, should the need arise to develop an income/expenditure or consumption poverty threshold for children, it is essential to set it at a level that allows for flexibility given the limited knowledge about children's needs. The World Bank's \$1.25 per day poverty threshold has often been negatively criticised for not rising to the standard of sufficiently defining adult needs in developing countries. Therefore, it is a risky exercise to set a random child poverty income threshold as it is likely to lead to incorrect policy conclusions (Gordon *et al.*, 2003).

It thus is necessary to consider the \$2 a day instead. A household-based income and expenditure poverty measure normally considers an equitable allocation of resources amongst household members. This assumption may be applicable to poor households but not so for well-off households. For most poor families, the parents always put the financial wellbeing of their children before theirs while the wealthier families would rather spend less on their children and avoid spending too much on them. The prevalence and the intensity of child poverty is not only affected by the income of the family at large but also depends on the availability and the state of infrastructure, the provision of services such as healthcare, education, clean water and sanitation (Gordon *et al.*, 2003).

Multidimensional measure of poverty is considered a comprehensive measure due to its ability to mirror the image of poverty suffered by children as well as their background and the family that they live with. This information is particularly helpful to policy makers in order to identify the most deprived and unprivileged children in countries with the main goal of reaching the Sustainable Development Goals (SDGs). The latter goals have now replaced the previous Millennium Development

Goals (MDGs), which are set to expire in 2015. The SDGs include the following targets:

- ❖ Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than US \$2 a day.
- ❖ Target 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions (UNICEF, 2015).

2.5.2 Equivalence scales as a measure of child poverty

Poverty is a unique concept that pertains to an individual specifically, which means that a household should not be perceived to be poor as a whole. A household may consist of adults and children, where the children only may experience the poverty and not necessarily the adults. Therefore, data collection for the measurement of poverty should collect data for the individual while that data can also be used to determine poverty in the household (UN, 2005). An equivalence scale can be defined as a measure of the cost of living of a household unit determined by the size and demographic composition relative to the cost of living of another household when both households have the same level of utility or lifestyle. Equivalence scales may be used to account for varying needs of different household types for example the equivalence scale of a single mother with a baby will vary from that of a married couple with no children (Lewbel & Pendakur, 2006:1–2).

Household consumption differs for each household. A household with 10 people will obviously consume more than a household with only three people. Equivalence scales, therefore, assist in measuring individual consumption in the household by assigning a weight depending on the position and the age of the household members. The size of the household also affects assigning a weight to each member regardless of the age of the adults or children (Forster, 2013:1). The choice of a welfare measure including an equivalence scale ultimately is based on value judgments about which difference of opinion must be expected.

Households have different needs that vary depending on whether a household becomes bigger or smaller. Once the economies of scale concerning consumption

are considered, the change may not be experienced in a proportional way. Equivalence scales are available in a wide variety, which are analysed by Atkinson *et al.* (1995). Some of the most well-known scales are the OECD equivalence scale, OECD-revised scale and the square root scale (Lanjouw & Ravallion, 1994).

The OECD scale was designed with the intention that it may easily be adopted by other countries. The values are such that the value one is assigned to the head of household and each consecutive adult is assigned a value of 0.7. The children are then assigned a value of 0.5. This scale is considered the old OECD scale (Forster, 2013).

Eurostat previously applied the old OECD scale during the 1980s and 1990s. The statistical company thereafter adopted OECD modified equivalence scale, which replaced the old scale around 1990. The scale initially was introduced by Haagenars *et al.* (1994) who modified the scale by assigning the value 1 to the first household head, then 0.5 to each adult in the household and 0.3 to the children in the household.

The OECD (2013) uses its scales too and they adapt them depending on a country's profile and demographics. For example, a study done by the latter required a comparison across income as well as the level of inequality for selected countries meant that the scale had to accommodate the different areas and the results thus showed that the level of poverty in a larger household was vastly different from the level of poverty within a smaller household.

Table 2.4 depicts influence of the household size on the household consumption. The three scales are depicted as well as how the weights are allocated depending on the composition and position of the household members.

Table 2.4 The different equivalence scales

Household size	Equivalence Scale				Household income
	Per-capita income	Oxford scale (old OECD Scale)	OECD modified scale	Square root scale	
1 adults	1	1	1	1	1
2 adults	2	1.7	1.5	1.4	1
2 adults 1 child	3	2.2	1.8	1.7	1
2 adults 2 children	4	2.7	2.1	2.0	1
2 adults 3 children	5	3.2	2.4	2.2	1
Elasticity	1	0.73	0.53	0.5	1

Adapted from Eurostat, 2013

2.5.3 The use of equivalence scales to determine child costs

Child costs may be defined as “a measure of the actual resources committed to child-raising” (Gray & Stanton, 2010:100). Child costs are considered as costs associated with the expenditure on consumables or other child needs that involve financial resources as well as time. Parents have to consider the additional costs of having an additional child while considering household public good. The parents have to also maintain a certain standard of living for themselves while expanding the family (Gray & Stanton, 2010:100).

2.5.4 The use of Engels and Rothbarth’s theory in estimating equivalence scales

Households with children incur extra financial costs but it is a common consensus that children’s costs are less than those of an additional adult. A universal technique that is often used to define children as a fraction of an adult based on nutritional needs. According to the prescribed caloric requirements developed by the World Health Organisation (WHO), which describes that, for example, a child between the ages of seven and eight will need 64% more calories than an adult male, and this in

turn makes it feasible to calculate the number of equivalent males in a household. One problem with this technique is that the consumption of children involves non-food products and there is no precise way to assume that the expenditure on caloric requirements is in line with that of non-food products. Some individuals with the financial means to buy the prescribed caloric requirements do not necessarily spend their income on food and this makes the connection between consumption and welfare somewhat blurred (Woolard & Leibbrandt, 1999:12). The following subsections discuss the two theories relating to child costs in detail to explain the term child costs.

2.5.4.1 The Engels Theory

The results for Engel's study show that there is a positive relationship between a household's expenditure as well as its expenditure on food consumption. It is worth noting that the increase in food consumption is thus less proportionate. If a household realises a considerable increase in their general expenditure, it is very much likely that food consumption will increase at a slower rate. The expenditure on food thus can be considered as a sign of welfare. The less a household spends on food, the wealthier the household could be. Every household is unique with their own Engel's curve depending on their size. It can be expected as well as assumed that larger households are likely to spend more on food than smaller ones. Irrespective of the household size, households will gain satisfaction from food consumption. The child cost theory, therefore, states that a household should be able to sustain itself based on the same amount of expenditure before and after the child. The household should thus realise the same amount of welfare (Deaton & Muellbauer, 1986:721-722).

2.5.4.2 The Rothbarth theory

Rothbarth created a technique to approximate the child costs by using adult products such as alcohol, tobacco, and adult clothing to determine adult wellbeing. The technique allows for the assumption that when children are added to the household, the amount dedicated to the expenditure on adult goods will ultimately decrease since more of the income should be dedicated to child costs.

The Rothbarth theory assumes that a household will derive an equal level of satisfaction in relation to its consumption of adult goods. Therefore, the Rothbarth theory defines child costs as the amount of expenditure that will lead to a decrease income and in turn lead to a decrease in the amount of income dedicated to adult goods (Gray & Stanton, 2010:106).

The Rothbarth assumption has a further assumption that as soon as parents come to the realisation they share certain goods with children, they react by dedicating a greater portion of the household income on adult goods. Rogers (2005:9) is against this assumption and instead assumes that parents would be more interested in dedicating their spare time on shared goods such as watching television with their children as well as doing common activities that require less spending on adult goods. In view of Roger's assumption, this would mean that Rothbarth's child costs are over-inflated as parents would rather be spending time with their children contributing to their wellbeing (Sarlo, 2013:18).

The Rothbarth theory stands to be more popular and preferred compared to the Engel theory but that does not necessarily qualify the Rothbarth theory as being flawless. Some of the shortcomings are due to its weakness in considering the expenditure on children having a negative outcome on the expenditure on adult goods but this is not necessarily the case for shared or household goods which are the joint goods within a household. The Rothbarth method works perfectly well with the equivalence scales targeted particularly at children. The scale is such that with each additional child, parents should protect their children from the exposure to any adult goods. Parents become satisfied as their children derive satisfaction from consumption, which leads to a decline in the marginal propensity to consume on adult goods with each child. Furthermore, Tsakloglou (1991) concludes that some adult goods often have an inelastic demand in relation to income, making them inefficient in depicting the actual cost brought by another child born into the household.

The equal sharing formula with regards to household consumption has for many years been regarded as an unrealistic fallacy. The fact that there are countless situations, which show that the formula does not hold, prove that it cannot be used in

practice. Naturally, parents are more concerned with protecting their children from any financial difficulties even if it means that a child may have a better lifestyle compared to his or her parents. The opposite may be that a parent or both may place their needs above those of their children, which ultimately leave a child worse off whilst the parents have a better standard of living. Parents in turn may place more emphasis on the needs of one child in the household. This means neglecting the needs of other children leaving the household in a worse off state, especially the children. This in turn would suggest that the level of child poverty would be higher than the level of poverty for the household as a whole (Whiteford *et al.*, 2009).

Thus, it can be deduced that household based measures of child poverty may not be the most conducive way for establishing the level of child wellbeing in a household. For the mere fact that parents are sometimes obliged to go to great lengths to protect their children from scourge of financial instability would already mean that a household is in danger of falling into poverty. This means the household already have limited means making it vulnerable coupled with possible reductions in parental income. A household may be just above the poverty line due to the consumption by children but may still be considered to be poor (Whiteford *et al.*, 2009).

A household that is considered to be well-off but still has poor children would mean that the poverty experienced by children in the well-off households is very much like the poverty endured by children coming from the poor households. The parents from the well-off households are thus considering their needs before those of their children and this may be assumed as a form of child negligence. Such circumstances create confusion as to whether such a situation is regarded as child poverty or neglect (Whiteford *et al.*, 2009).

2.5.5 Shortcomings of equivalence scales

The first criticism is that the equivalence scale is based on what people believe is the minimum cost to achieve a given level of well-being after including either an additional adult or child to the household. Different answers might not be comparable if households have different perceptions of well-being. A better alternative might be that of specifying economic conditions by, for example, bad, good and very good, even though different households may also have different perceptions of these.

Secondly, the answer (and, therefore, the equivalence scale) may depend on the position of the individual in the income distribution. Richer people tend to overstate the true cost, while poor people are likely to reveal a smaller cost. In this sense, unlike the parametric equivalence scales (PES), equivalence scales inferred from questionnaires are dependent of level of income. This may or may not be a desirable feature, but it is something to take into account when using interviews (Bellu & Liberati, 2005:5-6).

Thirdly, to represent the specific social and economic context, questionnaires must be designed with appropriate sampling procedures that are just as sophisticated as those used for either national or farm surveys. This procedure may encounter many problems and it may be very time consuming if the aim is only to estimate equivalence scales (Bellu & Liberati, 2005:6).

It is worthwhile to highlight the importance of parental income and its effects on the outcomes of children. Parental income has a very central role to play in ensuring successful outcomes for children in the household. One may ask them the question at what point in a child's life will parental income be more essential. Early childhood is a period in a child's life where critical development is vital and may require money. On the other hand, adolescent years are a time when the need for money is more urgent to ensure more success for a child; this is also a point where the economic standing of children coming from different households becomes more apparent. Situations, however, differ from one household to the next. A study by Votruba-Drzal (2006) argues that family income has a crucial effect on the outcomes of a child's education during the early stages of their lives as well as how the children behave well into their middle school years. The emphasis lies more on investing in a child's development earlier in life with the exception that child costs will be on the rise, as the child gets older.

2.6 MACRO AND MICROECONOMIC ISSUES AFFECTING CHILD POVERTY

Due to the nature of the study, this section briefly discusses some of the macro as well as microeconomic issues contributing to child poverty from a theoretical

perspective. Results from local and international studies are also discussed to better emphasise the effects of the macro and microeconomic factors.

2.6.1 Unemployment and child poverty

Children may experience parental unemployment at a certain stage of their childhood. A study by Lovell and Isaacs (2010) shows that every ninth child in the US experienced some form of parental unemployment during the recession. Children from unemployed households were five times more likely to be deprived than children from households with working parents. The deprivation may be instigated by a variety of other factors and unemployment becomes a common factor (Mörk *et al.*, 2014).

The difference in gender employment matters because children are more likely to be residing with their mother unlike their fathers and, therefore, it is more likely that unemployment may be higher for women unlike men. Depending on their employment, an employed parent may afford their households benefits such as health insurance than can enhance a child's wellbeing as well as contributing to their children's educational investments (Chennells & Hall, 2011).

Mörk *et al.* (2014) further argues that several studies have examined the relationship between parental unemployment and child wellbeing. A study done in Denmark by Christoffen (2000) revealed that most of the abused children were from unemployed households. Children from these households may also struggle psychologically compared to their age mate counterparts. A study done by Pedersen *et al.* (2005) found that children from Nordic countries belonging to households with only one employed parent were more prone to chronic diseases and being emotional.

2.6.1.1 Effects of unemployment on family life

The initial impact of parental job loss is that families have fewer financial resources available to meet their regular monthly expenses and support their children's development. Reductions in family income are more likely to threaten children's development if the family's income falls below the poverty level, as may occur if

income was low before the job loss, the unemployed parent is the sole breadwinner, or the spell of unemployment lasts for many months (Isaacs, 2013:3).

Households with unemployed workers are affected adversely by joblessness in many ways. For workers who have been displaced through no fault of their own, particularly those who lost or left a job because their plant or company closed or moved, or because there was insufficient work for them to do or as a result of their position or shift was terminated, the drop in earnings associated with losing a job during a recession may continue for many years, even when these workers eventually find a new job. Older workers and those with long tenure in their previous job are especially vulnerable because new jobs for those workers typically pay less and offer less potential for earnings growth. Other types of unemployed workers, for example, people entering the labour market for the first time typically after completing school are also affected adversely by a weak economy. People who start their career in times of high unemployment tend to have persistently lower earnings than their counterparts who begin seeking work under better economic circumstances (Kind & Haisken-Denew, 2012:5).

Joblessness due to retrenchment may put a strain on family dynamics. A family may experience parental anxiety and a regular pattern of family conflict after parental job loss, with spillovers into less affectionate and harsh parenting behaviours. The literature emphasises that there exists links between economic stress and parents' mental wellbeing, and further links to parents' relationship with their children and children's wellbeing. In addition to strained financial resources and changes in family dynamics, parental unemployment may contribute to a negative attitude of young people as they see their parents struggling in the labour market (Isaacs, 2013:2).

2.6.2 Rising prices

The incidence of parental unemployment makes for unsettling circumstances for a child, while rising prices are likely to put an unemployed parent in a situation of desperation. A household already experiencing income poverty is affected further by rising food prices. It is, however, noteworthy that different types of households in a country may differ in their circumstances. A household that is income poor may have an advantage if they are net producers of the food if prices rise then they are

positively affected. The same cannot be accounted for consuming households. It can be assumed that rising food prices are more likely to affect vulnerable households such as female-headed households or those that live on a minimum wage as well as those in the rural areas. At the household level, changes in food prices can directly and indirectly lead to increased monetary poverty by reducing purchasing power and, consequently, real income. Rising food prices also affect the choice that a household has or may not have in food consumption. The variety of food may have to be limited due to financial constraints with no other option but having to consume less healthy or desirable food (Bibi *et al.*, 2009).

A rise in the cost of living can be a significant contributor to child poverty. A study done in the UK by Save the Children (2014) shows that it can cost up to £14.505 per annum for children aged 0-4 to finance the cost of their needs. Low-income parents have been particularly hard hit by the rise in prices as it makes it particularly difficult for them to supplement for their children's needs. Income poor families would rather spend the little that they have on the most immediate needs such as food and electricity which can easily cost almost half of their income while it can cost as little as a fifth of the income for rich households. Low-income families are, therefore, the most affected by rising inflation compared to their well off counterparts. The cost of food in the UK had increased by 19% between the years 2005 and 2014. This is a significant increase considering the fact that this increase is on a larger scale compared to the expenditure on luxury goods. The cost for kindergarten in Scotland has also increased by 31% in the last decade and the increase was estimated to be above the level of inflation. This makes it even more difficult for poorer parents to afford any child care for their children (Save the Children, 2014).

2.6.3 Household size

The number of people in the household serves as a good indicator of poverty. It is widely believed that the larger a household, the greater the chance of it being poor. The dependency ratio, which is the ratio of the number of members below 15 and over 64 to other household members, is a useful factor no matter the household size. Households with fewer dependents are less likely to be experiencing poverty compared to households that have fewer people working in the household. Often it is

perceived that more children are the cause of a household being poor; however, there are other factors such as disabled individuals who are unable to work as well as the elderly. The latter can also increase the dependency ratio. Thus, it can be deduced that households consisting of young children are income poor. Such households comprise of young parents who were unable to obtain sufficient education for employment. Women in particular are more likely not able to find employment because they have been taking care of the household as the children require care and nurturing. Therefore, this hinders any possibilities of finding employment. The moment children are grown, they can become net contributors to the household welfare, which will then enable women to advance themselves to also become contributors to their household (Harper & Marcus, 2000:8; Chaudhry, Malik & Hassan, 2009:48).

A large household living in a small house can affect the outcomes of a child in school. This is particularly so because the environment may not be conducive for studying and this can affect a child's outcomes in school (Boston, 2013). Nutritional outcomes of children with many siblings are also affected in large households. The needs of younger and/or older children sometimes may be placed above those of other children in the household. The lack of private space and having to share with other siblings can be damaging but can also bring togetherness amongst siblings (Bird, 2007:3).

2.6.4 Resource allocation within the household

Often, income is considered the defining cause of child poverty or wellbeing in a household. The resources that are due to the children in the household mainly depend on the characteristics of the family members themselves. The likelihood of adult family members getting employment depends on the labour market conditions as well as their level of skills and education. Once parents or other adult household members have obtained employment, decisions have to be made about how the time will be allocated and dedicated to employment, the parental leisure time, parenting and taking care of the household in general (home production). The income gained from the labour market is then used to satisfy the needs of the

parents, those of the child as well common goods and services in the household (Bradbury, 2003).

Policies are mostly concerned with poverty eradication and the wellbeing of a country's citizens while empirical research is concerned with how poverty and inequality are calculated for a population or a country. Methodologies pertaining to child poverty measurement, particularly those concerned with how much of the family income is dedicated to the child are relatively rare. This realisation contributes to two facts being that the allocation of income to each household member is not accounted for along with the economies of scale that are achieved through joint consumption in the household (Bargain *et al.*, 2011:1). There are a few reasons why it is important to look at children's access to certain goods. First, there may be a portion of inhabitants in a community that are more concerned with children's access to immediate needs such as food, clothing, shelter, rather than all the other resources in general. Secondly, the social inclusion and inequality literature critiques that low income may bring about negative exposure and unwise consumption decisions that may hamper the development of a person's human capital and future prospects and this applies especially to children. If a family's resources can only meet the necessities and nothing is left for the extra expenditure that may enhance a child's development (computers, educational television, music, sports) then children are at a disadvantage compared to their well-off counter parts (Dunbar *et al.*, 2013).

Resources that are assumed equivalent in consumption are equally shared in the household. When emphasis is placed on goods that are of significance to children then one can have a clear idea about intra-household allocation (Crossely & Curtis, 2006:242-243). Hall (2013:1) proposes that one of the ways of determining the number of children that survive on limited resources to meet their daily needs is to employ a poverty line in order to measure how many children live below it. When a household lacks sufficient income a child is more at risk of not attaining the necessary nutrition, good education and optimal health care. In some occasions, researchers have used anthropometric information (e.g. caloric intake) to proxy individual nutrition in very low-income countries. This type of research has revealed a very substantial level of intra-household inequality (Bargain *et al.*, 2011:1).

2.6.5 Intergenerational poverty

A household trapped in poverty may have severe outcomes for a child. Poverty in a household may be such that it becomes a norm, spilling over from one generation to the next. A household's intergenerational spillover of poverty amongst other matters refers to passing on the burden of outstanding debts, and losses of family assets in the long run due to the outstanding debts (Bermant, 2008). The family assets referred to include tangible assets such as cattle, land, buildings, machinery and non-tangible assets, which include human capital (in the case where a family had a business), political affluence as well as environmental capital. In the event of death, the assets will be transferred, which can bring the family continued wealth or intergenerational poverty in the event that the transfer of the assets was not positive. The youngest members of a household are likely to be the hardest hit by intergenerational poverty simply because of the vulnerability of children. Factors that contribute to intergenerational poverty include household composition, adolescent pregnancy, early childcare and development practices, domestic violence, household income and assets amongst other things, poor nutrition and healthcare, low levels of education and a depleting environment (Bird, 2007:4).

Child poverty may be instigated by a variety of situations such as living in vulnerable households whereby due to their nature a child faces the risk of being poor. The primary aim of the study is to investigate the determinants of child poverty and it is, therefore, necessary to review the literature on the determinants of child poverty.

2.7 DETERMINANTS OF CHILD POVERTY

There are varieties of ways as to how one may look at the determinants of child poverty. A study in Nigeria by Adetola and Olufemi (2012) explored the determinants of child poverty but from a multidimensional approach. The dependent variables were the child's age in months, the child's gender, the mother's education, the father's education, the occupations of the head of household, spouse and other employed household members, the gender of the household head, the age of the household head and the poverty status. They found that as a child becomes older, the likelihood of them becoming multidimensionally poor decreases. Children born to

mothers with secondary education were found to be less multidimensionally poor as well as those born to fathers with secondary education. However, the secondary education of males had a higher marginal impact compared to females in that multidimensional poverty for children with fathers was reduced by 0.05 percentage points compared to that of mothers at 0.03 percentage points. Children residing in households where the parents are involved in primary sector occupations, such as farming, are likely to be more multidimensionally poor as opposed to children residing in households where the parents are employed in occupations falling under the secondary sector. From a gender perspective, Adetola and Olufemi (2012) further argued that children from female-headed households are much more likely to become poorer than children from male-headed households. The study found that a female-headed household had a positive correlation with the possibility of experiencing multidimensional poverty at a one percent significance level. Poverty increases with age, older people are more susceptible to poverty because they are less likely to be economically active; the older the head of the household, the greater the probability of children in the household being multidimensionally poor. The aged are considered to be out of work, pensioners or too frail to work.

The discussion on the determinants of child poverty shed some light on the effects of household demographics and the affect on a child's poverty status. Children in poverty are most likely to endure certain consequences. These consequences do not necessary hold for every poor child but it is necessary to review the literature on studies that have discovered some of the likely consequences of child poverty.

2.8 THE CONSEQUENCES OF CHILD POVERTY

The life that a person lives as an adult is determined largely by the childhood they had, whether it be in terms of their upbringing, education levels, socialisation, life experiences and choices. The consequences of child poverty are essentially the consequences of a household, as children do not live in isolation. If a child comes from a family where both parents have little or no education, the child is likely to experience poverty (Ferguson *et al.*, 2007). A study done by Griggs and Walker (2008:5) shows that a child coming from a poor family is at risk of being exposed to criminal activities and other socially unacceptable practices in order to survive. A

child is also likely to lose interest in education or advancing themselves due to their poverty situation or due to the absence of role models in their life. The perceptions on what can be blamed on poverty may vary from society to society.

Magnuson (2013:1) explains that a child that is raised in a household that is struggling to provide for the most basic needs due to financial constraints is very much likely to experience future consequences right through to their adult life. Studies have found that if a child is not able to escape the poverty trap with years passing on is at risk of experiencing development problems. Studies in neurology and child developmental psychology have concluded that the consequences for children living in poverty from infancy right up to the age of five may be detrimental and possibly permanent. A child's development during the first few years is very delicate and anything negative that may happen to the child may be potentially harming. A child's environment thus is considered extremely important during their development. The first stages of life are important and the family dynamics have a significant bearing on a child's outcomes.

One of the consequences ubiquitous in the literature is ill health in children. Hirsch (2008:4) argues that children from poor families *vis-a-vie* those from well-off families tend to have poor health throughout the different stages of the life cycle. Most of the health problems that a child may encounter may have been caused by the ill health of the expectant mother due to stress and unhealthy diet. Such health impediments help to explain why a child may have a low birth weight, which may lead to more health risks in later life. Just as good health is vital for child's development, so is education. A child's background and family plays a vital role in his or her academic achievements. Children coming from low-income families often tend to be less interested in schoolwork and often than not require special attention and remedial assistance as *vis-a-vie* their well off counterparts. Children of white-collar workers are more likely to go to university or any other tertiary institution unlike children of blue-collar workers (Griggs & Walker, 2008:6).

Poor children who are weak in their academic performance tend to have emotional and behavioural problems more frequently as opposed to their non-poor counterparts. The emotional wellbeing of children can be classified under two facets

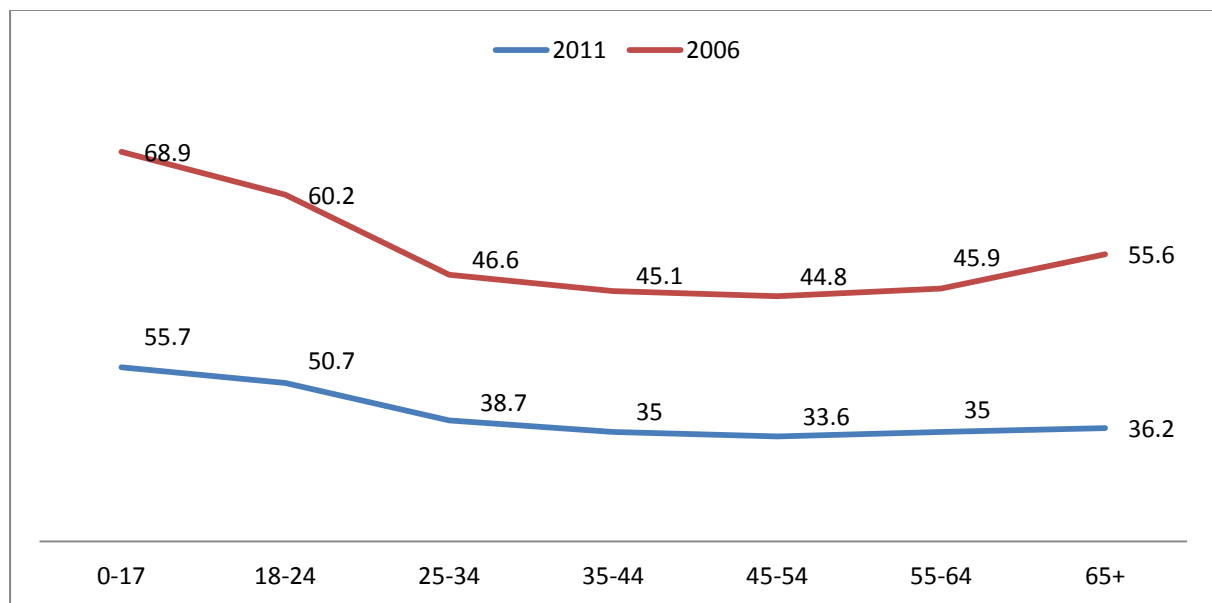
being the externalising and internalising factors. The externalising factors include aggressive behaviour, fighting and bullying. The internalising behaviour includes being withdrawn from peers, unhappiness, anxiety as well as depression. Children from poor households are likely to have both internalising and externalising behaviours at any point in their childhood whether their poverty situation is of a long or short-term nature (Brook-Gunn & Duncan, 1997:62).

The poverty situation at home as well as the relationship between children and their parents plays a vital role in a child's behaviour. Well-off parents are able to afford a comfortable life for their children and they are likely to be more affectionate in raising their children. They are more likely to be more open to communicate and give their children the opportunity to express their opinions. Children in turn experience fewer emotional and behavioural problems as they are receiving the necessary attention at home. Parents who are experiencing financial difficulties are more likely to be depressed and anxious. Due to their circumstances, these parents tend to be harsh, less supportive and more detached from their children (Driscoll & Nagel, 2010). A child's poverty status may be caused by a variety of factors or circumstances of which a child has absolutely no control over. Family factors such as household demographics may have an influence on the child being poor or not.

2.9 POVERTY AND CHILD POVERTY IN SOUTH AFRICA

Figure 2.1 depicts the trends in poverty for the South African population by age. The data is based on the period's 2006-2011. The results show that the level of poverty for children (0-17 age category) has indeed increased between 2006 and 2011 by almost 10 percent. This increase is alarming considering the much lower levels of poverty for middle-aged individuals (aged 45-55). This age group has realised a substantial decline in the level of poverty between 2006 and 2011.

Figure 2.1 Poverty trends in South Africa between 2006 and 2011



Source: Stats SA, 2014

It can be assumed that the results are due to savings over the years; the adults are employed and have a good standard of living. The level of poverty for the elderly was also very high in 2006 but decreased in 2011. This may be due to the likelihood that there could be more senior citizens receiving the old age grant. The level of poverty experienced by those between the ages of 18-34 may be high due to youth unemployment (Stats SA, 2014:28). These results, therefore, show that children in South Africa are the most vulnerable group.

2.10 POLICIES IN PLACE TO REDUCE CHILD POVERTY

Government has made it its responsibility to take care of those who are less able to take care of themselves. There are a number of initiatives and policies put in place to ensure that the wellbeing of those less fortunate are looked after. This section discusses some of the initiatives that government has rolled out in its bid to reduce child poverty in South Africa.

2.10.1 Social grants

Although child poverty remains a problem, there have been efforts/policies put in place to alleviate it, one of which is the Child Support Grant (CSG). The CSG, which

was introduced first in 1998 at an amount of R100, was at the time thought to be a breakthrough in child poverty alleviation in South Africa. The number of recipients has increased since then, with more individuals signing up to receive the grant each year. The introduction of this social scheme has seen a change in the eligibility of the grant recipients. Recipients had to comply based on the age of the child as well as the income of the parents. At the inception of the CSG, only children between the ages of 0-6 qualified. A few years after, the cut-off age then was extended to the age of 14 years. The start of the year saw another amendment to the social grant scheme where the cut-off age was extended to the age of 18 years (Hall, 2013:92; Van der Berg *et al.*, 2010).

With the age eligibility in place, the scheme introduced the income threshold eligibility. The cut-off household income at the inception of the CSG was estimated to be R800 or lower. This was the combined income of the caregivers. The cut-off income for those who reside in rural areas was different with R1100 being the cut-off income. In the year 2013 the income thresholds were revised again whereby parents earning R6000 or less were eligible to apply for a CSG (Hall, 2013:92).

In the event that a child is orphaned, his or her caregiver is eligible to apply for a foster care grant (FCG). According to Section 7 of the Social Assistance Act 13 of 2004, “a foster parent is eligible for the FCG if the child is placed in his or her custody in terms of the Child Care Act of 1983” (repealed by the Children’s Act); that the “child remains in their parents’s custody on condition that the “foster parent is a South African Citizen, a permanent resident or a refugee”. The FCG like other forms of social grants are geared towards poverty alleviation. From the time of its inception, it was only in 2008 that the FCG rose above R40 000. The number of recipients rose from 40 000 in 2004 to 512 005 by March 2014 (Breen, 2002:2).

Mabugu *et al.* (2015) argues that the CSG has an important role to play in poverty alleviation since many households in the country depend on it. Parents are also keen to send their children to school and they also get motivated to find employment in order to supplement the grant income (Woolard *et al.*, 2010).

2.10.2 Other policies to reducing child poverty

Child nutrition also forms part of one of the many responsibilities that government has in order to deal with the child poverty problem. The integrated nutrition programme (INP) by the department of health is one of the initiatives designed to help mothers, infants, and children. The following are some of the strategies of the programme (Hendricks & Bourne, 2010):

- ❖ Vitamins provided to mother during pregnancy (Iron, folic acid and calcium)
- ❖ Vitamin A to infants and young children
- ❖ Educating mothers of the importance of good nutrition for infants and young children by the primary healthcare system
- ❖ The provision of food supplements for children in the form of fortified maize, infant formula nutritional drinks and porridge for young children particularly those who are infected with HIV (Hendricks & Bourne, 2010)

The programme also takes into account the nutritional needs of older children (primary and secondary school going children) through the school feeding scheme initiative along with the Department of Basic Education. Children are given one meal per day at school and this is particularly important for children who do not have a packed lunch from home (Hendricks & Bourne, 2010).

Government has put in place other policies which may lead to poverty alleviation, some of which are yet to be realised (National Development Agency, 2014:44-46).

Education policy: government has since the start of democracy emphasised the importance of education and how it can contribute to an individual's social life as well as the economy of the country. The medium term strategic framework (MTSF) has a number of strategies to promote the development of human resources, which are to enhance learner achievement in school, increase the pass rate by introducing performance-monitoring resources. Early childhood development (ECD) is also at the forefront where government increase the access to ECD centres for children aged 0-4 (National Development Agency, 2014:44).

Another strategy of the MTSF is to enhance and increase the access to secondary schooling as well ensuring that the learners complete their secondary education by

making the 12 years of schooling compulsory as well enforcing the importance of attaining a senior certificate. The government also has to ensure that children have access to good infrastructures and an environment conducive for learning.

Employment policy: amongst the country's largest problems is the insufficient number of skilled employees in some required fields hence the issue of structural unemployment exists. This hinders the prospects of reducing poverty, however, this does not deter government's mission to reducing unemployment. Some government policy interventions entail creating a macroeconomic environment that will enhance economic growth as well as reduced income inequality. Secondly, the industrial policy can also make for a large number of good paying jobs while also addressing the balance of payment problems. The poor can also be afforded the opportunities to exploit the labour market through the creation of inclusive growth. This allows all individuals to enjoy the economic growth of the country in all its sectors, thereby reducing inequality (National Development Agency, 2014).

2.11 SUMMARY AND CONCLUSION

The chapter discussed the concepts relating to poverty, child poverty, deprivation and child deprivation. The theories of poverty were also consulted along with the history of poverty research such as that of Rowntree (1901). The poor and non-poor were classified based on the assets that they have and those that were very poor, lived in unfavourable conditions and barely have any access to water. The poor were also characterised as being rural poor and urban poor for instance, living in poor rural areas, individuals tend to have limited access to certain goods and services compared to those that are living in urban areas.

The determinants of poverty were discussed for establishing what the theoretical determinants of poverty are. These were classified from household right up to regional characteristics to differentiate the poverty experienced at household level with that experienced at community and regional levels. The various measures of poverty were presented and how they can be used to determine the extent of poverty. The background of poverty lines dates back to the 18th century some of which are still being used to today. The likes of the absolute, relative and subjective

poverty lines, which were also revisited in the study, display clear relevance for modern day poverty research. The study also presented the various poverty indices such as the headcount index, the FGT index, the poverty gap index, the squared poverty gap index, the Sen Index, the Watts index and lastly the MPI. These indices were discussed based on their strengths and weakness. The headcount remains one of the most practically and frequently used indices but has the disadvantage in that it cannot illustrate how far individuals fall below the poverty line. This weakness became a strength for the Sen Index, which was able to determine the income shortfall of the poor while also determining the poverty gap and the income inequality of the poor.

Poverty measure goes beyond the income measure alone. The multidimensional measure of poverty was discussed in the study to better demonstrate the importance of non-monetary factors that contribute to poverty. The multidimensional measure also was differentiated from the traditional measure of poverty along with a discussion on the advantages of the multidimensional poverty measure.

The concept of child poverty was explored and how it differs from the main poverty. Children are individuals in their own right and their needs may differ from those of adults. This distinction thus gives a better understanding of some of the struggles faced by children and how poverty affects them in a household. The characteristics of a poor child were discussed based on parental unemployment and how it affects them socially, their educational outcomes, nutritional outcomes and how situations differ from one poor child to the next. The importance of child poverty research was discussed with reference to children's perceptions of poverty and how they view poverty from a rural and urban perspective. Children living in urban areas of Ethiopia felt that their parents had poor financial management and poor work ethic. They also blamed their poverty status on being born into a large family. These are some of the many perceptions that children in developing countries have about the causes of poverty. These circumstances often leave children vulnerable as they are out of their control. The parents' perceptions were explored and how they are affected by poverty as parents along with their children. The increased prevalence of single parent households has exacerbated the poverty situation worldwide. Single parents often have to put the needs of their children ahead of their own considering the fact

that these households live on a single income. Financially stressed parents are often unable to take care of their children properly and this often has an impact on the children's wellbeing.

Child poverty and deprivation were discussed with the aim of illustrating the essence of child deprivation and how it relates to child poverty. Deprivation ultimately leads to poverty which signifies the link between the two conceptions. Children may experience deprivation materially, economically and socially. Lack of essential items such as food and clothing is considered to be the worst form of material deprivation caused by the economic deprivation that a household may face. A household that is economically deprived struggles to buy everyday essentials like food, therefore a child living in such a household is deprived of other activities such as the opportunity to attend a school excursion. Children are also likely to experience social deprivation due to their financial circumstances. Children from wealthier families may have poor social skills while children from poor families may be socially excluded due to their poverty status. Food insecurity is an important factor of deprivation and poverty. A household that is economically deprived stands to be food insecure. Some of the consequences that food insecure children face included stunted growth due to poor nutrition, poor cognitive development and poor nutrition related illness.

The prevalence of child poverty in vulnerable households was discussed with reference to female and grandmother headed households. The presence and prevalence of child poverty in child-headed households was also discussed. These households are considered to be vulnerable and poor due to the absence of a nuclear family structure or even the absence of a males who are normally perceived as the providers in a household.

Child poverty measurement is discussed with reference to the essence of child poverty measurement as well as the monetary and non-monetary measures of child poverty. Equivalence scales as a measure of child poverty were discussed with emphasis on how the weights are assigned to all the household members particularly children. The equivalence scales form part of the methodology of this study. The theories of Engel and Rothbarth are discussed to establish how child

costs are derived in households. The household size and number of children have an important bearing on the welfare of the child.

A child's poverty status is determined largely by macro and microeconomic issues, such as unemployment, inflation, household size and resource allocation to mention but a few. A child living in a household where the parents are unemployed will inevitably be affected by rising prices since the household has to prioritise on general household essentials. Children living in large households are also exposed to poverty due to the unequal distribution of resources in a household.

A literature review on the determinants of child poverty was done with reference to an empirical study done in Nigeria, which looked at the determinants of child poverty from a multidimensional perspective. The possible consequences of child poverty were discussed. The consequences discussed are based on theory and empirical evidence from previous studies. And lastly, a brief overview of government policies that are there to reduce child poverty in South Africa are also discussed.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter presents the research design and methodology of both the data collection process and data analysis. Before looking at the determinants of child poverty and the analysis thereof in Chapter 5, Chapter 4 presents a detailed profile of the households in Boipatong Township. This chapter, therefore, presents an explanation of how the data presented in Chapters 4 and 5 were collected and the models used. The determinants of child poverty can be looked at from different perspectives. In this study, the household level factors were considered as important in explaining child poverty status. The first section of this chapter presents a detailed explanation of the research design and methodology with regards to the data collection process, which includes an explanation of the instrument that was used to collect the household data in Boipatong Township. The second section which further elaborates on the methodology presents the models that are used in the analysis of the determinants of child poverty where the income poverty line is used. Determinants such as age and gender of the head of the household and the household size are explained. The determinants of child deprivation are presented as dummy variables due to the nature of the type of regression. The ordinary least squares (OLS) regression requires that dummy variables are created and categorical variables to be grouped. These dummies, therefore, are created for the child deprivation index, which is used as another measure of child poverty status. In the first model, a logistic regression model is specified since the poverty status of the child is measured as a binary variable. In the second model, an OLS regression is presented as the deprivation index which is measured as a continuous variable.

3.2 DATA COLLECTION

Boipatong is a township that falls under Emfuleni Local Municipality. The township is in close proximity with other townships in the municipality, with similar poverty situations like Bophelong and Sharpeville. The population size of the municipality is estimated to be at 721 663 people; of these, only 25.4% make up the young population comprising of children between the ages of zero and 18, the elderly (65+)

make up 4.9% of the total population. In 2011, the population of Boipatong Township was estimated to be 22 168 people, making the average household size to be at 3.1 (Frith, 2011). It should be noted that each question in the questionnaire was directed at the head of the household or an adult present. No children were interviewed at any point during the survey process.

Determining a sample size depends on a variety of factors. For a more detailed and complex research methodology, e.g. a stratified random sample should take into account the clusters, sub-variance of sub-populations before an estimation in the variability in a population can be made. The type of data analysis also has an effect on the required sample size. If a study entails the use of descriptive statistics such as the mean and frequencies, then the sample size is not a cause for concern but if the study use models such as the multiple regressions then a good sample size of between 200 and 500 is required. The sample size should thus complement the intended analysis (Israel, 2013:4). For this study, a stratified random sampling technique was followed. The sample size was 300 households out of a population of 22 168 people. This size was found to be a good representation of the entire population in line with a similar study done by Dubihlela (2012) in a township with similar characteristics as that of Boipatong Township.

The type of data collected is a significant indication of the type of research a study is intended to follow. For this study, primary (numerical) data was collected through a household survey and the study follows the quantitative research approach due to the statistical and empirical nature of the analysis. The statistical models and techniques are further explained in the subsequent sections. A household questionnaire was developed in such a way that it captures all the required data of the head of the household in terms of their gender, age, marital status, education and employment status. Data about the household size, number of children in the household, their age and whether they are grant recipients were collected. The household income data were also collected along with the expenditure items of the household. Data pertaining to the child deprivation and the consequences of child poverty in Boipatong Township were collected from the head of household.

3.3 MEASURING CHILD POVERTY AND CHILD DEPRIVATION

This section provides an overview of the tools and techniques that were used in order to measure child poverty and child deprivation index in Boipatong Township. As discussed in Sections 1.4.4 and 1.4.5, there are a variety of methods that can be used to determine the wellbeing of a child such as an equivalence scale and the adult equivalised scale. These methods are quite similar in that they seek to determine a child's costs separate from other household members. With the equivalence scale, each member of the household is assigned a weight according to their position and age in the household. The equivalence scale can be defined as a fraction of the income required by a household for it to survive or maintain a particular standard of living. The composition of the household will play a role in how the income is shared. This is calculated by adding up the weights of all the individuals in the household. Thereafter, the total household income is divided by the equivalence value (Anyaeibu, 2010:50).

According to the OECD equivalised income scale, the first adult who can be assumed the head of the household is assigned the highest weight of one, and 0.5 to each person aged 19 years and older. Children under the age of 18 and younger are then allocated a value of 0.3 each (Eurostat, 2014). These methodologies were employed in line with the Engels and Rothbarth theories in order to capture the child costs of children in Boipatong Township and whether any income is devoted to the needs of a child in the household or not.

A child deprivation scale that is used in this study is one that was developed making references to a number of items from a list of essentials for children created by Barnes (2009). The deprivation scale was adapted in such a way that it captures the true essence of child deprivation in a South African township. The scale comprised of 13 items that a child may lack or may not be lacking and the responses ranged from a scale of one to five for never lacked, lacked just once or twice, lacked several times, lacked many times to lacked always. Based on the index, a child that has gone without one of the items several times right up to many times is considered to have been deprived at some point in their life. The purpose of employing the

deprivation scale in this study is to establish the extent to which the children are deprived in the township, financially and otherwise.

This study takes interest in measuring the determinants of child poverty and child deprivation by using household demographics and measuring if a child is poor or not poor. The following section discusses the methods that are used to measure child poverty.

3.4 SPECIFYING THE LOGISTIC MODEL FOR DETERMINANTS OF CHILD POVERTY

When analysing data that contains categorical dependent variables, one may look at a range of regression techniques including the logistic regression and discriminant analysis (DA). The logistical regression often is used more frequently as opposed to the discriminant analysis due to the relative ease when using the Statistical Package for Social Sciences (SPSS), irrespective of whether the data contains continuous or categorical independent variables. The SPSS software has the ability of creating the necessary dummy variables automatically. There are fewer assumptions required and it is more statistically robust. On the other hand, the discriminant analysis only makes use of continuous variables (Burns, 2009:568-569).

Due to the dependent variable being dichotomous, it becomes impossible to categorise numerical values when using logistic regression. The logistic regression, therefore, incorporates the binomial probability theory, whereby there are only two values that can be predicted being probability (p) is equal to 1 as opposed to 0, e.g. when an individual is working for company one rather than company two. Another important feature of the logistic regression is that it makes use of the maximum likelihood method, which increases the likelihood of categorising data in the rightful category depending on the regression coefficients (Burns, 2009:269).

The dependent variable, being categorical, necessitates the use of a conditional probability model. For example, where there is a binary output variable, like y , to model a conditional probability $\Pr(Y = 1|X = x)$ as a function of x any unknown parameters in the function are to be estimated by maximum likelihood. This can be

done easily by modelling a logistic regression. A logistic regression can be presented as follows (Field, 2009):

$$\log \frac{p(x)}{1-p(x)} = \beta_0 + x.\beta \quad (3.1)$$

A logistic regression can also be presented as:

$$P(Y) = \frac{1}{1+e^{-(b_0+b_1 X_1)}} \quad (3.2)$$

The equation above shows $P(Y)$ as the probability of Y occurring, e represents the base of the core of the natural logarithms where the other coefficients create a linear combination just as in a similar manner to a simple regression. Therefore, with the above equation, it is possible to add other coefficients and, therefore, the equation takes the following form:

$$P(Y) = \frac{1}{1+e^{-(b_0+b_1 X_{1i}+b_2 X_{2i}+\dots+b_n X_{ni})}} \quad (3.3)$$

Equation 3.3 is similar to equation 3.2 with only one predictor; the only difference is that the linear combination has been lengthened to include as many predictors as possible. Just as the single predictor equation of the logistic regression comprised of a simple linear regression equation with it, the multiple predictor equations comprises of the multiple regression equation.

3.4.1 The logistic regression model explained

To understand the scenario of poor children in Boipatong Township, the study advances a step further and investigates the characteristic of the head of the household where the poor children come from. A regression analysis, with poverty status of the child as a dependent variable and regressed by the characteristics of the head of the household. The dependent variable, which is the child poverty status, is defined as 1 if the child is poor and 0 if the child is not poor. Adopting from Achia *et al.* (2010), age, household size, level of education of the head of the household, gender of the head of the household and the marital status of the head of the household are used as determinants.

First, a dichotomous variable indicating whether a child is poor or not is defined as follows:

P is the poverty status of the child, which takes the value of one or the representation of the probability of the success event occurring and non-poor children are represented by the value 0 whose probability is the compliment of the success probability.

The regression equation, therefore, is as follows:

$$\text{logit}(P) = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \varepsilon \quad (3.4)$$

Where $X_{1, \dots, 6}$ represents the determinants of child poverty.

3.4.2 Calculation of the child poverty line and poverty status

Each household in Boipatong Township had an individual poverty line. The poverty lines for the households were calculated using an equivalence scale meaning that the individuals in the households had different poverty lines based on the total income received by each household member as well as the weight on the equivalence scale. The household poverty line is, therefore, the sum of the individual poverty lines in the households multiplied by the weights of the OECD scale assigned to each individual in the household. The poverty status of the household was arrived at by comparing the household's aggregate incomes, which would include salaries, child grants and any other income earned in the household to the household poverty lines (sum of poverty lines). The poverty status of the whole household is depicted in Appendix A 3.1, column E. The value 0 had been assigned for the non-poor and one for the poor households. If the sum of income falls below the sum of the poverty line, it means that the household is poor and hence a child in that household can be poor.

3.5 EXPLAINING THE DETERMINANTS OF CHILD POVERTY

The determinants of child poverty were chosen based on the literature and other studies done by the likes of Anyanwu *et al.* (2013), and Majeed and Malik (2014) that

have shown the importance of certain household characteristics. The next subsection explains some of the determinants as well as the frequencies of the dummy variables. Determinants discussed include the age of the head of the household, gender of the head of the household, number of people in the household, employment status of the head of the household, education level of the head of the household and the marital status of the head of the household. The justification of each variable is explained in detail in the subsequent subsections.

3.5.1 Age of the head of household

Ethically it is unacceptable to collect data on children, and the age of the child itself has very little to do with the child's current circumstance. The age of the parent or the head of household, however, is important in explaining the current poverty status of the household and hence of the child as well. In this study, the age of the head of the household is used as one of the determinants to see if age may have any significance on the poverty status of the child. This is also supported by a study by Khalid *et al.* (2012) who used the age of the head of the household in their investigation. The prior expectation is that older parents will have more access to resources and will have a better experience in dealing with difficult circumstances and hence reducing the probability of the child falling into the poor category.

3.5.2 Gender of the head of household

The fact that there are gender inequalities in the access to education and employment makes it important to see how the gender of the head of the household affects child poverty. A study by Enthmacher *et al.* (2013:4) in the US in 2012 indicated that children in female headed households are more likely to fall into poverty. The prior expectation to the results of this study is that there will be a positive relationship between the probability of falling into poverty and the gender of the head of the household dummy if it is defined as one for female and zero for males. This means that the regression coefficient is representing the females.

3.5.3 Marital status of the head of the household

Collecting data on the marital status of the head of the households provides valuable information about a child's wellbeing because marital status can affect a child's poverty status. Studies by Brooks-Gunn and Duncan (1997), Acar and Anil (2015) allude to the fact that the marital status of the head of the household may affect a child's poverty status. The categories for marital status were coded as 1=never married, 2=married, 3=divorced, 4=separated, 5=living together and 6=widow/er.

3.5.4 Size of the household

The number of people in the household has a significant bearing on the economic status of the household (Office for National Statistics, 2012). Studies that also agree with the general rule of bigger households being correlated with poverty are like those of Randall and Coast (2014) and Lanjouw and Ravallion (1994). Poverty studies concerning the economic status of a household are most likely to take the size of the household into consideration when determining the poverty status of the household irrespective of whether based on income poverty or multidimensional poverty.

3.6 EXPLAINING THE DUMMY VARIABLES IN THE OLS REGRESSION

In order to verify the importance of the determinants of child poverty used in the binary logistic regression, the study uses another measure of poverty, a child deprivation index that was calculated based on a set of questions as explained in Section 3.7. Since the deprivation index is measured as a continuous variable, it necessitated the use of ordinary least squares (OLS) regression and hence the categorical variables used in the regression were converted into dummy variables for each category. This section will explain the categories used in the creation of the dummy variables and to justify the importance of combining certain categories. It is noteworthy that this section first provides a description of the dummy variables being the determinants, thereafter the regression results pertaining to the determinants of child deprivation are discussed in Chapter 5.

3.6.1 Gender

The gender of the head of the household is one of the factors that are considered to have an important influence on the child deprivation or wellbeing. In the analysis, gender is defined as a dummy variable with one for males and zero for females hence the regression coefficient pertains to females. There are only two variables and the male variable stands as the reference point while the female dummy variable is the one used in the regression. The number of females reflects the child's deprivation status depending on the value of the beta sign against the constant and how small or large the beta sign is against the deprivation index.

3.6.2 Education level of the head of the household

Education level was collected as a categorical variable with each education level and grade representing a separate category. Education level is a useful household determinant as it may provide information on the literacy rate of the head of the household and it can also shed some light on whether this variable has a bearing on a child's deprivation status. Dummy variables were created based on the number of categories in the grouped education qualification. In creating dummy variables, the number of dummies to be used in the regression is $n-1$ where n is the number of categories. The left out category is used as the reference point and it takes the value of the intercept and also known as constant. In the grouped qualification category, those with no education are taken as a reference point. The first dummy variable for grade 1 to grade 7 is assigned the value of 1 which means that this grouped education level takes the value of the coefficient and 0 for otherwise, which represents the remaining sample that falls under all the other levels of education. The second dummy for the education category grades 8-12 is assigned 1 and 0 for otherwise. The final dummy variable in the grouped education category is for tertiary education, where tertiary education was assigned the value 1 for those with tertiary education and 0 for otherwise. The value of the coefficient for all three dummy variables thus reflects whether a child is deprived or not.

3.6.3 Marital status of the head of the household

With regards to marital status category, the statuses originally are, never married, married, separated, living together and widow/er. The marital statuses were grouped into the divorced/separated dummy and assigned the value of 1. The dummy also takes the value of the coefficient in the regression and 0 for otherwise, which represents all the other marital statuses. The married / living together is assigned the value of 1 and represents the value of the coefficient and the value 0 is assigned for otherwise, which is for those not in this marital status category. The last dummies for the OLS regression is the never married and widow/er categories, who were assigned the value of 1 and 0 for otherwise.

3.6.4 Employment status

The employment status, being a categorical variable, requires that dummy variables be created for each of the categories. The frequency tables show the distribution of the heads of the households in each category.

The first dummy variable created was the unemployed category, where it was defined as, 1 for those not employed, 0 representing those in other employment status categories. The unemployed variable is used as a dummy in order to establish whether children from households with unemployed parents are more likely to be deprived or not.

The second dummy being the informal activities dummy variable is measured against the constant in the regression table to determine whether a child with a parent who is involved in informal activities is likely to be deprived or better off compared to children from other households whose parents are either employed, unemployed or not economically active. The dummy is also assigned the value of 1 for informally employed and 0 for otherwise.

3.7 SPECIFYING THE OLS REGRESSION MODEL FOR DETERMINANTS OF CHILD DEPRIVATION

In order to check the validity of the results in the logistic regression with the income poverty measure, the study uses a deprivation index as a measure of child deprivation. The deprivation index uses the same independent variables namely, age, gender, number of people in the household, household income and employment status. This is done to compare if the results in the logistic regression are the same as those with the deprivation index as a dependent variable.

Since the deprivation index is measured on a continuous scale, it can be treated as a continuous variable hence necessitates the use of an OLS regression. The OLS regression, therefore, is specified as follows:

$$DI = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \varepsilon \quad (3.5)$$

Where *DI* is the deprivation index and all the other variables are as specified in equation 3.3. The variables in equation 3.5 are used to check if their significance remains the same as the dependent variable is changed from the poverty status income measure to the deprivation index.

The deprivation index is derived from a number of questions that are used to measure child deprivation. The scores were tallied with a score of one meaning the child is less deprived and a score of five meaning the child is severely deprived. The index was adapted from a list of essentials for children by Barnes (2009) where a list of other variables was included for children in the United Kingdom (UK) but not suitable for a child in a South African township. It, therefore, was modified to suit the needs of a typical South African child living in a township. The justification for the inclusion of each item in the index is explained below.

Essential items were included in the index such as access to medicine and medical services. Health care is considered an important element in the growth of a child, which should, therefore, be easily accessible. It is a basic human right to have access to medication and, therefore, it is necessary to include the medication item in the deprivation index in order to determine how many children are without medication and what could be the possible causes of the lack thereof.

Another important aspect of child wellbeing that made up the index was access to a balanced diet. The Nutrition Information Centre, University of Stellenbosch (2004:2) deduces that for the good health and wellbeing of a child, it is vital that their nutritional diet is complete with all the necessary foods. The following is a list of all the foods that make up a balanced diet: milk and dairy products, red meat, fish, poultry and legumes, fruits and vegetables, wholegrain bread, cooked or dry cereals, fats and oils. The number of servings will differ depending on the age of a child. A good nutrition contributes to a very important part of a child's life. Measuring a child's deprivation of a balanced diet is necessary in order to determine the extent to which they are deprived. Therefore, including this item in the index assists in determining whether good nutrition is a priority or is the household more concerned with surviving and may not have the means to provide a balanced diet for the children.

Clothing forms part of Maslow's hierarchy of needs as one of the most important basic needs of a human being. With modernity and evolution, man has had a desire for more than just basic clothes but more of fashionable clothing. This has led to those who cannot afford being socially excluded. A study done by Martin and Hart (2011:8) in the UK explains that children often feel socially excluded because they do not have fashionable items that other children have. The extent of the lack of fashionable clothing for children in a South African Township is measured in order to determine the percentage of children who are living without fashionable clothing items.

Cell phones have become an important commodity and it is, therefore, necessary to include this dummy variable in the index. Peer pressure also becomes an issue for such a commodity whereby children who go without a cell phone do not meet the standard of children that have cell phones. Cell phones make life manageable due to the ease of communication. Including this item as part of the index can also shed light as to whether the heads of the households of a township like Boipatong would buy their children a cell phone depending on their purchasing power.

Another essential item in the index includes a packed lunch to school. A packed lunch normally consists of a sandwich, snacks, fruits and a drink (Aurisinkala-Appadoo *et al.*, 2013:1). The South African Department of Basic Education caters for

the nutritional needs of children who do not have a packed lunch from home it is, however, necessary to determine the percentage of children that are deprived of a packed lunch from home.

The last item in the index was a personal computer. A computer is considered a luxury item, especially for poor people without an income, and even those with an income but can only afford necessities. This result is, therefore, not surprising for a township like Boipatong where more than a quarter of the children in the sampled population are poor. According to Barnes (2009), a computer can be considered a necessity in countries like the UK but in a country like South Africa, such an item is still deemed a luxury for most people. Including this item on the index also gives an indication as to how many of the children in the township are lacking a computer of their own.

3.8 SUMMARY AND CONCLUSION

This chapter explored the methodology pertaining to the measurement of child poverty and child deprivation in Boipatong Township. With a sample size of 300 households, the stratified sampling technique served to be useful, which also complemented the use of descriptive statistics in the data analysis. The use of the adult equivalence scale as well as the OECD equivalisation of income scale gave an indication as to how much income is allocated to the children and adults in the household depending on the weights assigned to each household member. The study made use of two logistic modelling techniques, which are the logistic regression, and the ordinary least squares regression techniques. With the logistic regression, the determinants of child poverty were analysed where the independent variables include age of the head of the household, gender of the head of the household, number of people in the household, employment status of the head of the household, education level and marital status. The child poverty status served as the dependent variable.

To explain the variables better, descriptive statistics in the form of frequency tables were used. The second regression technique, which is the ordinary least squares (OLS), was adopted to analyse the determinants of child poverty against the

deprivation index. The index was the dependent variable while the determinants were the independent variables. The variables used in the OLS were also explained by using the descriptive statistics in the form of frequencies. With Chapter 3 having explained the methodology techniques, Chapters 4 and 5 will then discuss the results on the profile of Boipatong Township, the determinants of child poverty and child deprivation and the consequences of child poverty in detail.

CHAPTER 4: A PROFILE OF BOIPATONG TOWNSHIP

4.1 INTRODUCTION

This chapter analyses the profile of Boipatong Township. An exploration is done on household's survival strategies, whether the parents are in formal, informal or self-employment as well as the sectors they are employed in. The educational background and the highest qualifications that members of households possess are also investigated. This is done in terms of household composition, the number of children and adults in the household, the demographic profile of the household and the aggregate income that is earned in the household as well as the household expenditure patterns. Most of these parameters are measured based on the household poverty statuses. The chapter also reports on the results of the child deprivation index to determine how many children are lacking what was considered important aspects based on the different indicators of deprivation.

4.2 PROFILING THE HOUSEHOLDS IN BOIPATONG TOWNSHIP

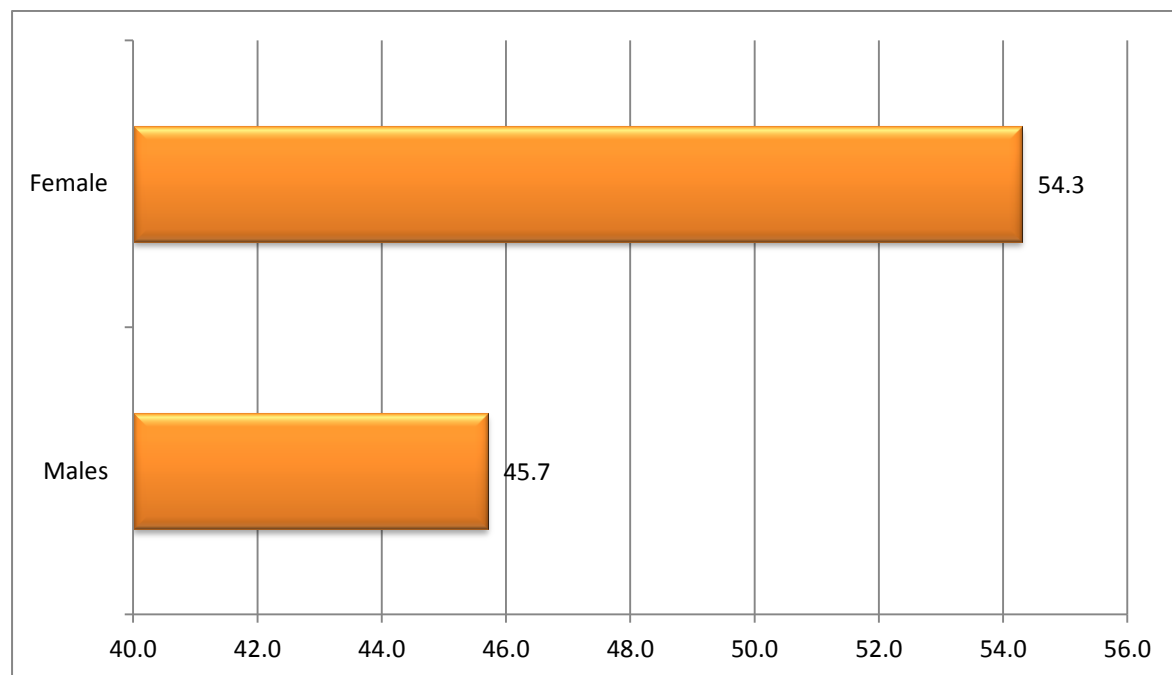
This section discusses the results of the profile of the head of the household in Boipatong Township. The statistics on gender, marital status, employment status as well as the qualifications of the head of household are analysed in order to determine whether a household could be poor or not based on the profile of the head of the household. All these determinants have a bearing on a household's poverty status particularly that of the child. Sub-section 4.2.1 discusses the results on the gender of the head of the household.

4.2.1 Gender of the head of the household

This sub-section discusses the survey results for the gender of the head of the household and how that can potentially affect a child's poverty status. Figure 4.1 shows the results of the heads of the households in Boipatong Township from a gender perspective. The figure shows that the majority of the heads of the households are females at 54.3% and males at only 45.7%. With the majority of the heads of households being female and these households being categorised as

vulnerable, it is highly likely that children living in these households are poor or at risk of falling into poverty. Klasen *et al.* (2011:2) alludes to this assumption and argues that female-headed household are vulnerable to poverty because they have limited financial independence, few assets, and in some instances these households do not have any support from relatives.

Figure 4.1 The gender composition of the heads of the households in Boipatong Township



Survey data, 2013

According to the 2011 Census results, the percentage of female-headed households in Emfuleni Local Municipality showed a 1 percent increase between 2001 and 2011 (from 35.3% to 36.1%) (Emfuleni Local Municipality, 2014). This increase, however, is not as great as that at township level; however, it is still significant considering the fact that the prevalence of such households may be an indication of poverty. The results at national level show that male-headed households are more than female-headed households at 60.6% and 39.4% respectively (Stats SA, 2013).

The prevalence of female-headed households can be considered an international issue. A study done by Snyder *et al.* (2006) in the USA explained that the increased prevalence of female-headed households as well as the increase in the number of

children living in these households have serious and important implications. At least half of the women in the USA would experience the challenges of being a female head of household along with their children at a certain point in life. Nuclear families which are families consisting of two married adults, a child or children are fast disappearing and this realisation has raised more concerns about the place of women in society and how they have to raise children alone. The gender of the head of a household plays a defining role in the welfare of a child in a household. As stated by Snyder *et al.* (2006) the prevalence of female-headed households are a cause of concern and judging from the results in Figure 4.1 it can be deduced that children from female households are at risk of being poor or falling into poverty.

4.2.2 Marital status of the head of the household

The marital status of a parent has a significant bearing on the poverty status of a child. The table below distinguishes between six types of marital statuses, namely widow/er, living together, separated, divorced, married and never married as well as the gender.

The results from Figure 4.1, which showed that the majority of the heads of the households are females, can also be seen in Table 4.1. The difference is that these females have never been married at 87.4% compared to their male counterparts at 12.6%. Children living in the female-headed households make up the greatest proportion as can be seen in Figure 4.2. These results thus show that Boipatong Township is characterised by the prevalence of female-headed households and that these households have the most children (30% of the child distribution in the sampled population) compared to the other types of households. The widow category further emphasises the prevalence of female-headed households with more female widows compared to males, and 26% of children living in female widowed households. The majority of males are married at 85.3% with 26% of the children also found to be living in these households where the parents are married. This is an indication that these children could be less likely to be poor compared to those whose parents are divorced or separated. More females are either divorced or separated with fewer children living in these households.

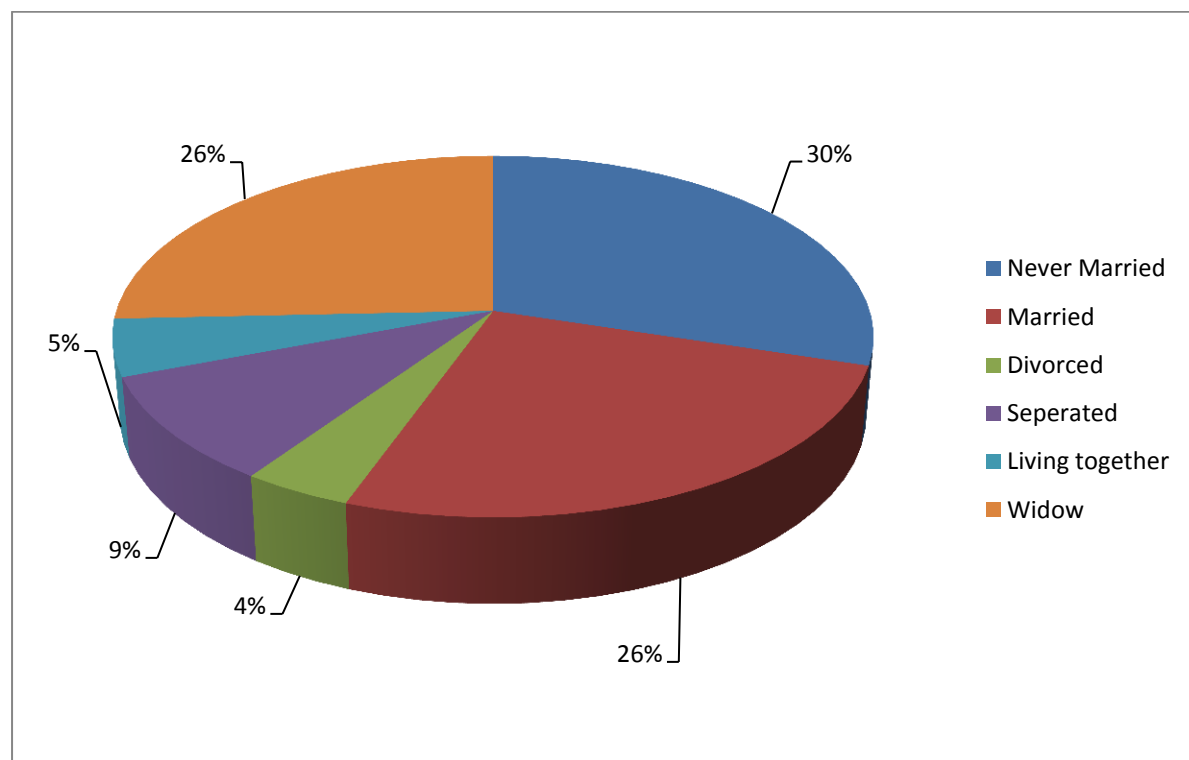
Table 4.1 Marital statuses of the head of the households in Boipatong Township

Marital Status			Gender of the head of the household		Total
			Males	Females	
	Never Married	Count	11	76	87%
		% Within Marital Status	12.6%	87.4%	100.0%
		% Within Gender Head Households	9.5%	43.4%	29.9%
	Married	Count	64	11	75
		% Within Marital Status	85.3%	14.7%	100.0%
		% Within Gender Of Head Of Households	55.2%	6.3%	25.8%
	Divorced	Count	4	8	12
		% Within Marital Status	33.3%	66.7%	100.0%
		% Within Gender of Head Household	3.4%	4.6%	4.1%
	Separated	Count	6	22	28
		% Within Marital Status	21.4%	78.6%	100.0%
		% Within Gender Head of household	5.2%	12.6%	9.6%
	Living Together	Count	14	1	15
		% Within Marital Status	93.3%	6.7%	100.0%
		% Within Gender Head of household	12.1%	0.6%	5.2%
	Widow/er	Count	17	57	74
		% Within Marital Status	23.0%	77.0%	100.0%
		% Within Gender Head of household	14.7%	32.6%	25.4%
Total		Count	116	175	291
		% Within Marital Status	39.9%	60.1%	100.0%
		% Within Gender Head of household	100.0%	100.0%	100.0%

Source: Survey data, 2013

Figure 4.2 below depicts the distribution of children living in households based on the marital status of their parents. The aim of this figure is to give a more refined picture of children and where they live, since marital status has a significant bearing on a child's wellbeing or poverty status.

Figure 4.2 The distribution of children in households based on marital status in Boipatong Township



Source: Survey data, 2013

A link between the gender of the head of the household, their education level and employment status can further reveal the vulnerability of these households and hence the children in those households. A study done in Senegal by United Nations Education Scientific and Cultural Organisation (UNESCO, 2013) found that poverty is not only caused by the deprivation of financial resources but also by the lack of privileges to enhance the livelihood of a family's life. The common victims of poverty are the vulnerable groups such as female-headed households who have been widowed or divorced, and the cause of their poverty can be associated with their low levels of literacy and unemployment compared to male-headed households (UNESCO, 2013). A study by Rajaram (2009) also found that the majority of the poor

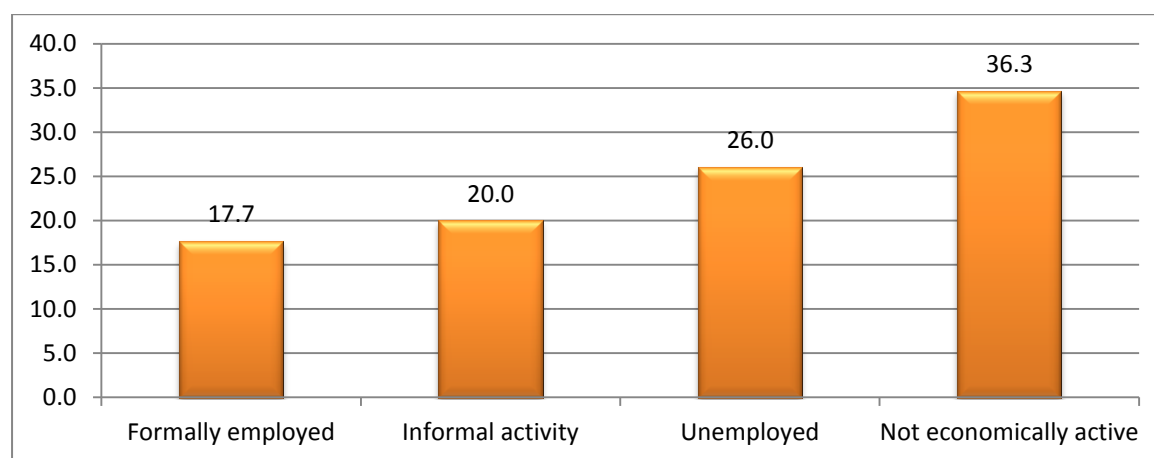
households in rural India were female-headed and unemployed. The following sub-section discusses the results pertaining to the employment status, the levels of qualification as well as the gender of the head of the households in order to determine whether the results agree with theory.

4.2.3 The employment status and level of qualification of the heads of the households in Boipatong Township

This sub-section discusses the results based on the employment status of the heads of the households in Boipatong Township. The employment status of the heads of households is analysed based on their gender and poverty status. The levels of qualification as well as the employment status of the heads of households are also cross tabulated against each other. The aim is to determine whether the employment status and qualification levels of the heads of households have any implication on the poverty status, which will in turn possibly affect the wellbeing of the children living in those households.

The rate of employment plays a vital role in the success or the struggles of an economy, whether it is at a micro or macro-economic level. For most, employment is the only way out of poverty. A household is in a better position economically when there is at least one or two people working in the household. A country's economic development can be enhanced by an increase in employment and poverty alleviation. The need to create jobs and raise income enable individuals to provide for their families and help to reduce the number of people who rely on social welfare. Women in developing countries have for years lagged behind when it comes to accessing job opportunities as opposed to men (Krogh *et al.*, 2009). Figure 4.2 discusses the results of the head of household's employment status.

Figure 4.3 The Employment status of the heads of households in Boipatong Township



Source: Survey data, 2013

Figure 4.3 shows the employment status of the sampled population of Boipatong Township. A total of 36.3% of the population are not economically active while 26% of the residents in the sampled population are unemployed. Only 17.7% of the sampled population is employed formally. The heads of the household who are involved in informal activities make up 20% of the sampled population. Those who are not economically active may be the disabled, the elderly / pensioners or heads of household who chose not to be employed. The implication is that the township has a significantly high rate of unemployment and this has a bearing on the poverty status. Children living in these households are likely to be poor due to the unemployed situation of the head of the household. The high unemployment rate at township level is, however, not unique to Boipatong, Viljoen and Dunga (2014) have also shown high unemployment rate in Bophelong where the employment and poverty status of women was investigated.

Government has various policies and programmes relating to job creation. One of such policies is the National Development Plan (NDP), which aims to create 11 million jobs by the year 2030. Some of the goals of the NDP include but are not limited to:

- ❖ Reducing the rate of unemployment to 6%.
- ❖ Increase the proportion of working adults from 41% to 61%

- ❖ Increase the proportion of the Labour Force Participation Rate (LFPR) to 65%.
- ❖ Create two million jobs in public employment initiatives
- ❖ Creating opportunities for those in rural settlements by creating more jobs in the urban townships
- ❖ Enhancing education training innovation (G20, 2014:3).

The New Growth Path (NGP) and the Industrial Policy Action Plan (IPAP) support the NDP. These programmes have clearly defined short and medium term goals and intentions in their bid to reduce unemployment and poverty. The NGP plans to create five million jobs from 2010-2020 in various sectors such as mining, agriculture and manufacturing sectors. For the mining sector, jobs will be created through increased infrastructural development and the manufacturing of final goods. The NGP also aims to create employment in the agricultural sector by improved processing techniques and export production and marketing. These goals of the NGP are of a medium term nature whereby government intends to create jobs in the export sector where goods and services will be exported to the rest of the African continent. The NGP also intends to invest in a green economy through increased infrastructure to facilitate solar technology. Manufacturing by way of reduced carbon emissions is also expected to create as much as 300 000 jobs by 2020 (The Presidency, 2014:4). The Department of Trade and Industry (DTI) points out that programmes such as the IPAP and the Automotive Production and Development Programme (APDP) have shown significant progress in job creation through increased government investment and an increase in niche areas such as the introduction the heavy vehicle and commercial segments in the motor industry. Increased employment is forecast in this industry (DTI, 2013:6-7).

MTSF for 2014-2019 aims to attain the goals of the NDP through the IPAP and the NGP and has the following key objectives:

- ❖ Increasing economic growth five percent in 2019
- ❖ Increase household income of poor households from 5.6% in 2012 to 10% in 2019
- ❖ To decrease unemployment from 25% in 2013 to 14% in 2020.

Government aims to attain these goals through a more inclusive economy. Stakeholders in government and business will be expected to take part in achieving these goals. The department for small business development has to look into ways of encouraging existing small, medium and micro enterprises as they play a major role in creating jobs and to also encourage more individuals to start their own businesses (The Presidency, 2014:21).

The MTSF has additional goals such as to increase the capacity of the Expanded Public Works Programme (EPWP), with specific focus on the Community Work Programme (CWP) with the intention of creating jobs. Workers will be trained and afforded the opportunity of obtaining skills and experience. The objective of the EPWP is to create as much as six million jobs by the end of 2019 while the expansion on the CWP is expected to create one million jobs by the end of 2019. (The Presidency, 2014:20-21).

Table 4.2 illustrates the household poverty status and employment status cross tabulation results. Out of the households that reported to be formally employed, 94.3% were non poor and only 5.7% were poor. While the unemployed heads of the households made up 78.2% falling in the poor category, only 21.8% were non poor. This indicates that employment status can be associated with the poverty status. Of those who were not economically active, the non-poor heads of the households made up 55.8%, which is greater than the 44.2% of the poor heads of the households. These results further show that the household poverty status and the employment status have a positive relationship whereby poor individuals are found to be poor due to the fact that they are unemployed. Studies by Brooks-Gunn and Duncan (1997) and Hall (2013) conclude that children from such households where the parents are poor and unemployed are likely to be poor themselves because their livelihood is in the hands of their parents.

Table 4.2 A cross tabulation between the household poverty status and the employment status of Boipatong Township

Household poverty status	Employment status			
	Formally employed	Informal activity	Unemployed	Not economically active
Non poor Household	50	55	17	58
	94.3%	91.7%	21.8%	55.8%
Poor Household	3	5	61	46
	5.7%	8.3%	78.2%	44.2%
Total	53	60	78	104
	100.0%	100.0%	100.0%	100.0%

Source: Survey data, 2013

Table 4.3 displays the results of the chi-square test and the results show that there is a significant relationship between the household poverty status of the heads of the households and their employment status. A study by Dunga and Sekatane (2014) indicated a significant relationship between poverty and employment status in Bophelong Township. That study also indicated that although the residents of Bophelong Township were not employed, they were above the poverty line and this was due to the access to government grants.

Table 4.3 A chi-square test for the poverty and unemployment status of the Boipatong residents

	Value	Df	Asymp Sig (2 sided)
Pearson Chi-square	100.088	3	.000
Likelihood ratio	112.462	3	.000
Linear-by -linear association	40.413	1	.000
N of valid cases	295		

Source: Survey data, 2013

Gender differences are often made to distinguish males and females in terms of their economic and social positions in society. The distinctions are made in order to reflect the individual's educational and employment status and their differences in income. These distinctions in turn reflect on their social status in their own households and further comparisons can be made in the society as a whole (Franklin & Menaker, 2012).

Table 4.4 illustrates a cross tabulation between gender of the head of the household, employment and poverty status of the residents of Boipatong Township. The results show that 11% of poor females are formally employed compared to only 2.9% of the poor males. The results for the non-poor heads of the households show that more males (97.1%) are employed formally compared to their female counterparts (88.9%). Non-poor females and poor males are more active in informal activities than poor females and non-poor males. At least 86.4% of the poor males are unemployed, which is much higher than the non-poor males where only 13.6% percent are unemployed. The results clearly show that if a person is unemployed, irrespective of their gender, there is a greater likelihood of them being poor, which will in turn increase the likelihood of the household being poor. From the above results, it can be deduced that children living in the poor female-headed households who are employed are likely to be better off than children who are living in the poor male-headed households because more men are involved in informal employment. On the other hand, the quality of employment needs to be considered as this may have a bearing on the income of the household.

Table 4.4 A cross tabulation of gender, poverty and employment status

Employment Status	Household poverty status		Total
FEMALES	Non-Poor	Poor	
Formally employed	88.9%	11%	100%
Informal activities	93.3%	6.7%	100%
Unemployed	22.1%	77.9%	100%
Not economically active	55.4%	44.6%	100%
MALES	Non-poor	Poor	Total
Formally employed	97.1%	2.9%	100%
Informal activities	89.7%	10.3%	100%
Unemployed	13.6%	86.4%	100%
Not economically active	64%	36%	100%

Source: Survey data, 2013

South Africa is among the countries with the highest unemployment rate in the world. The country faces a great challenge with regards to unequal employment opportunities for both men and women alike irrespective of their race. The employment statistics by Stats SA (2011) reveal that fewer women who are economically active are in paid employment. The percentage of women employed is concentrated around two main industries; 58.4% in retail trade and 19.9% in services. At least 35.4% of the women were mostly employed in unskilled labour such as domestic work compared to their male counterparts at 22.7% (Stats SA, 2011). Women are the most vulnerable with an unemployment rate of 5.3% higher than men are. With regards to the results on youth, the Census 2011 revealed that 32.5% of 15–24 year olds were not economically active, 35.9% of these were women and 29.1% men (Stats SA, 2011). The results of this study are in line with the findings of Stats SA, implying that the situation in Boipatong Township is a reflection of the country's bigger picture.

Figure 4.4 illustrates the highest qualification of the sampled population of Boipatong Township. The population with a grade three education level make up 7.6% of the sampled population and only 4.9% have a grade seven primary school education. Only 6.9% of the sampled population has a grade eight entry level to secondary school, while a total of 26.7% of the residents have a grade 12 qualification. This is a great portion of the sampled population with the highest level of education at secondary school level. Those who managed to get a tertiary diploma and a first degree only make up 3.8% of the sample population and 3.1% respectively. Only 2.1% managed to obtain a postgraduate diploma.

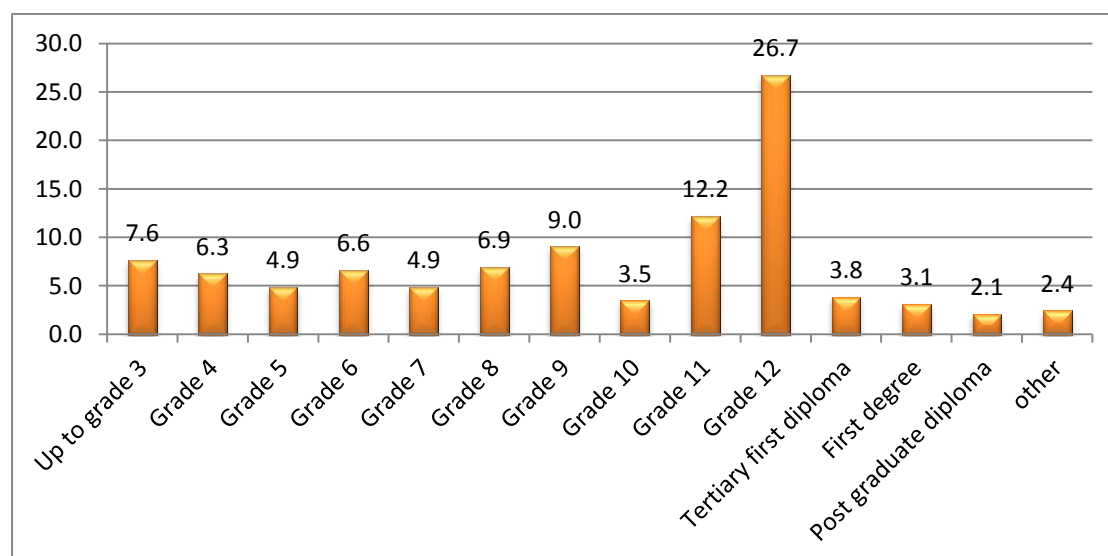
These results show there are only a few members of the population who have had the opportunity to further their education beyond grade 12. This may be due to a variety of reasons. The heads of the households may have dropped out of school, lost interest in furthering their education, and gone to seek employment. For females, it may be that they are homemakers, mothers with children and never went back to secondary school to complete their education. Ahl (2006:8-9) argues that the inability of an individual to progress academically may be triggered by the innate lack of interest to further their studies for example, they do not believe in themselves. Another personal hindrance to further education could be the absence of family support where education was not sufficiently valued. They may also have perceptions that they will not get the expected results during their studies and the lack of faith that they will get employment after completing their studies. A child growing up in a household where education is not considered important, may also find themselves dropping out of school in future. The intergenerational cycle of poverty is also caused by illiteracy of parents in the households (Bermant, 2008; Bird, 2007).

From a policy perspective, government is making plans to ensure that more people get the opportunity to reach their full potential through post-school education and training. Government plans to increase the number of university entrants from 950 000 to 1.07 million by the year 2018 (The Presidency, 2014:22-23). The MTSF also aims to increase the number of students enrolled at technical vocational education and training (TVET) colleges from 670 455 to 1.238 million by 2018 (The Presidency, 2014:22-23). Government believes that it can achieve these objectives if the National

Student Financial Aid Scheme (NSFAS), which is aimed at assisting individuals who are unable to finance their own tuition fees, was reviewed and more funds are allocated. All these efforts will be in vain if quality lecturers are not available to ensure good results. Government also intends to get more skilled lecturers at TVET colleges by sending them to university in order to realise the necessary outcomes by 2019 (The Presidency, 2014:22-23).

With all these plans being in the long term, it is most likely that the current and up and coming youth of Boipatong Township are most likely to benefit from such government initiatives. With more educated and qualified individuals in the township, poverty can be eradicated provided that the labour market is able to absorb the number of skilled workers.

Figure 4.4 Highest qualifications of the heads of the households in Boipatong Township



Source: Survey data, 2013

Table 4.5 illustrates a cross tabulation of the population's employment status and their highest qualification in Boipatong Township. Only 28.9% of the sampled population with a grade 12 qualification is employed formally with an unemployment rate of 38.2%. More heads of households have a grade 12 qualification and their level of unemployment could be decreased if they were more skilled or if they had access to funding in order to finance their studies.

Table 4.5 employment statuses and highest qualifications

Highest qualification	Employment Status				Total
	Formally employed	Informal activity	Unemployed	Not economically active	
Up to Grade 3	4.5%	0.0%	13.6%	81.9%	100%
Grade 4	5.6%	0.0%	0.0%	94.4%	100%
Grade 5	0.0%	0.0%	7.7%	92.3%	100%
Grade 6	0.0%	26.3%	26.3%	47.4%	100%
Grade 7	0.0%	15.4%	30.8%	53.8%	100%
Grade 8	15.8%	15.8%	15.8%	52.6%	100%
Grade 9	15.4%	46.2%	23.1%	15.4%	100%
Grade 10	10%	20%	10%	60%	100%
Grade 11	8.8%	20.6%	50%	20.6%	100%
Grade 12	28.9%	27.6%	38.2%	5.3%	100%
Tertiary first diploma	36.4%	36.4	27.3%	0.0	100%
First degree	33.3%	22.2%	22.2%	22.2%	100%
Post graduate diploma	66.7%	16.7%	0.0%	16.7%	100%

Source: Survey data, 2013

The insufficient allocation of funds by NSFAS could also be a hindrance for those who want to further their studies. Of the individuals who are employed formally and

informally, 36.4% have a first diploma tertiary qualification, which is higher than the basic education levels. Individuals who have a first degree qualification make up 33.3% of the sampled population and are formally employed, while only 22.2% are informally employed. The section of the population with a postgraduate diploma, who are formally employed, make up 66.7% of the sampled population. This is the largest portion compared to those who are employed informally in the township. It can thus be deduced from these results that the more educated an individual is, the greater the chances of finding formal employment. No individuals with a postgraduate diploma are unemployed and only 16.7% are informally employed.

A country that is well endowed with human capital is a great investment for any economy. Government remains in need of individuals who are skilled for infrastructural development, mining, supply chain management, researchers, sufficiently trained health workers and the like, that will close the gap in the various sectors. In order to supplement these needs, government has a projected plan of increasing the number of artisans from 18 110 in 2013 to 24 000 annually by the year 2019. There is a need to increase in the number of PhD graduates by 2 400 per annum until 2019. It also aims to increase the number of engineering graduates and also increase the number of educator graduates to 20 000 per annum by 2019 (The Presidency, 2014:23). If more graduates would come out of a township such as Boipatong, the welfare of the households can be increased. It is thus necessary for people to acquire skills in areas where there are shortages so that they eventually find employment.

The NYP 2020 by the Presidency (2015:23) argues that there is an urgent need for the Department of Higher Education and Training to speed up the implementation of community colleges. These facilities will enable individuals who dropped out of school to complete their primary or high school education in order to allow them to get opportunities to further their education at TVET colleges or universities. This is in accordance with the White Paper for Post School Education and Training. The qualifications offered by the colleges will be such that the youth may benefit from them, for example, skills development programmes by the Sector Education and Training Authority (SETA). The EWP along with the CWP will collaborate with the community colleges in order to provide work experience to the youth. This initiative

may be of great value to the youth of Boipatong Township particularly those who still have the interest and tenacity to go back to school and be afforded such an opportunity to get the skills, training and work experience.

Table 4.6 shows that there is a significant relationship between the employment status and the qualifications of the sampled population of Boipatong Township. The lower the level of education, the lower the probability of finding employment.

Table 4.6 A chi-square test for the employment status and the level of qualification

	Value	Df	Asymp . Sig (2 sided)
Pearson Chi-square	168.823	39	.000
Likelihood ratio	186.921	39	.000
Linear-by -linear association	86.954	1	.000
N of valid cases	283		

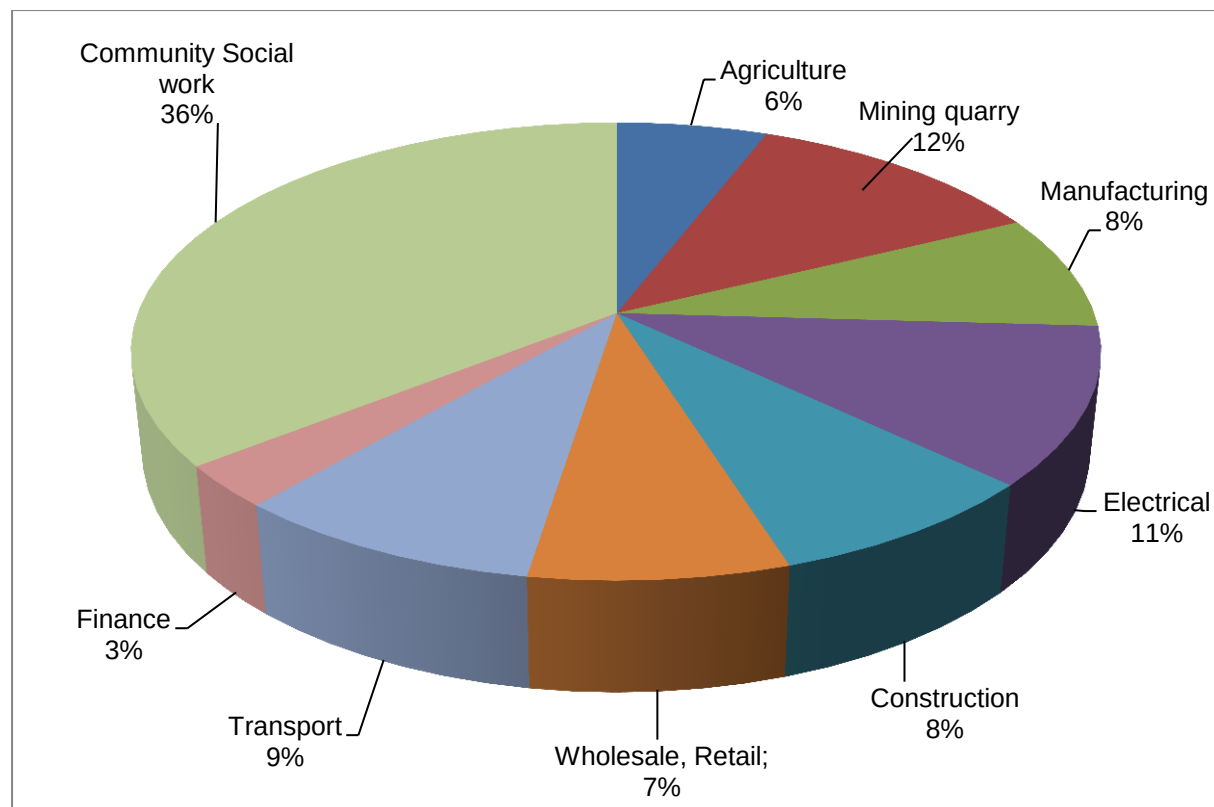
Source: Survey data, 2013

The type of job or sector of employment where those that reported to be employed or engaged in, paints a picture of the quality of jobs available to the population of the township. Figure 4.5 shows the different sectors of employment in which the population of Boipatong Township is employed.

The greatest share of the sampled population are employed in the community, social education and training sector at 35.6%. Mining and quarry is the second highest at 11.9% followed by the electrical, water and gas sector at 11.1%. The least popular sector of employment is the finance, insurance and real estate at 3%. This figure is a reflection of the fact that this sector requires individuals who have tertiary level qualifications. The low percentage of employment in this sector could also imply there are not enough people who have the required skills in those sectors. Lack of skills is a great concern for any economy. The OECD (2012:22) found that a country may very well forfeit 7% growth in GDP due to skills shortages. These are costs

relating to unfilled vacancies, loss of profits. The costs of unemployment and lack of skills far outweigh the costs associated with investing in human capital.

Figure 4.5 Sector of employment



Source: Survey data, 2013

From the country's perspective, South Africa has a very high skills shortage and the causes for this can vary from insufficient investment in skills development to "brain drain" (Mateus & Allen-ile, 2014:63-74). The country has also seen cyclical or seasonal employment for those with low levels of skills and training. The cyclical unemployment is common in agriculture and the hospitality industries. The apartheid system is also to blame for the marginalised Black people who infinitely were denied of the opportunities to gain skills and knowledge in order to get employment in White dominated industries. The skills shortage experienced post-apartheid can be associated with skilled and qualified professionals migrating to other countries while some individuals are unable to get the required skills due to lack of funding (Mateus & Allen-ile, 2014:63-74).

The persisting structural unemployment is also a cause for concern in South Africa. The prevalent skills deficit along with skills mismatch is a problem that continues to persist, leaving particularly the youth in utter despair (G20, 2014:3). This is a national and household pandemic whereby people are trained but not being employed in the sectors where they are particularly skilled.

4.2.4 Activities of the unemployed

Table 4.7 shows the activities of the unemployed in Boipatong Township and their poverty status. A total of 23.1% of the poor population are actively looking for a job while only 11.4% of the non-poor are also actively looking for a job. From the heads of the households that are occupied with household duties, 85.7% come from the poor households and 74% from the non-poor households. When these results are compared with the non-poor households, it is clear that the poor heads of households are more interested in looking for work compared to their non-poor counterparts. Although the children in these households are poor, their parents are taking the initiative to get them out of the poverty situation. The non-poor heads of the households can be assumed complacent because they may not be under so much pressure to look for work compared to their poor counterparts. Of the heads of the households that are idle, 2.9% come from poor and non-poor households respectively.

Table 4.7 Activities of the unemployed based on the poverty status of the residents of Boipatong Township

Activities of the unemployed				
Household poverty status	Actively looking for a job	Helping with household duties	Idle	Total
Non-poor	11.4%	85.7%	2.9%	40.2%
Poor	23.1%	74%	2.9%	59.8%

Source: Survey data, 2013

Table 4.8 is a chi square test, which shows that there is no significant relationship between household poverty status and the activities of the unemployed. This makes

sense since the unemployed may only increase the possibility of the household falling into poverty. However, their activities have little impact on the poverty status.

Table 4.8 A chi-square test for poverty status and the activities of the unemployed

	Value	Df	Asymp. sig (2 sided)
Pearson Chi square	3.811	2	.149
Likelihood ratio	4.002	2	.135
Linear-by-linear association	2.979	1	.084

Source: Survey data, 2013

There is also a need to consider the gender dimension of the employment status as studies show that women are at a greater risk of not being employed compared to men (Stats SA, 2013:30). Data from the US Bureau of Labour Statistics (2014) also confirms this from an international perspective, that the unemployment rate for women was higher than that of men in the USA for the year 2013 (7.1% and 7.6% respectively). Table 4.9 depicts the activities of the unemployed based on their gender in Boipatong Township. A total of 23.1% females in the sampled population were actively seeking employment compared to only 11.6% of their male counterparts. More males (84.1%) than females (75%) were engaged in household duties and more males (4.3%) were idle compared to their female counterparts (1.9%).

Table 4.9 Activities of the unemployed based on gender of the of the head of the households of Boipatong Township

Activities of the unemployed				
Gender	Actively looking for a job	Helping with household duties	Idle	Total
Males	11.6%	84.1%	4.3%	39.9%
Females	23.1%	75%	1.9%	60.1%

Source: Survey data, 2013

4.3 INCOME AND EXPENDITURE BY HOUSEHOLDS IN BOIPATONG TOWNSHIP

This section discusses the income and expenditure patterns of households in Boipatong Township. The levels of expenditure are differentiated between the poor and non-poor to establish the expenditure dynamics from the poverty status perspective. The use of descriptive statistics in the form of cross tabulations and a test such as the chi-square is also used.

Yu (2013:4-5) suggests that one can either use the single estimate or the aggregation approach when collecting income and expenditure information in a survey. The single estimate approach obtains income and expenditure data by requesting the respondents to provide an estimate of the total income or expenditure, for instance “how much income did the household allocate to its expenses in the last 30 days?” or “What was the total amount of income that this household received from all sources last month?” This approach is cost efficient and less time-consuming. This method could however confuse the respondents, in a sense that they may be uncertain about what items should form part of the household expenditure. For instance, some respondents may not account for remittances received such as lottery winnings and interest earned from investment as part of total income. This may hinder the response rate, and lead to under-reporting of total income or expenditure (Deaton, 1997:27); (Yu, 2013:4-5).

Davern *et al.* (2005:1535) (cited in Yu 2013:4-5) argues that the single estimate approach might be more effective when capturing income, as asking respondents to declare exact amounts earned from each income source could prove quite burdensome and “intrusive for the respondents”. Individuals tend to be uncomfortable and may not want to reveal how much money they earn in extensive detail as they may find some of the questions offensive and hindering their privacy. Some respondents may find it particularly disturbing to answer questions regarding their expenditure patterns and the income that they receive.

This study, however, dissects the possible income and expenditure of the sampled population where the respondents were asked precisely how they spend their income in relation to the items listed in the questionnaire (questionnaire attached in Appendix A5).

The subsequent tables and figures depict the mean of the sum of income and different items in the expenditure budget of the residents of Boipatong Township.

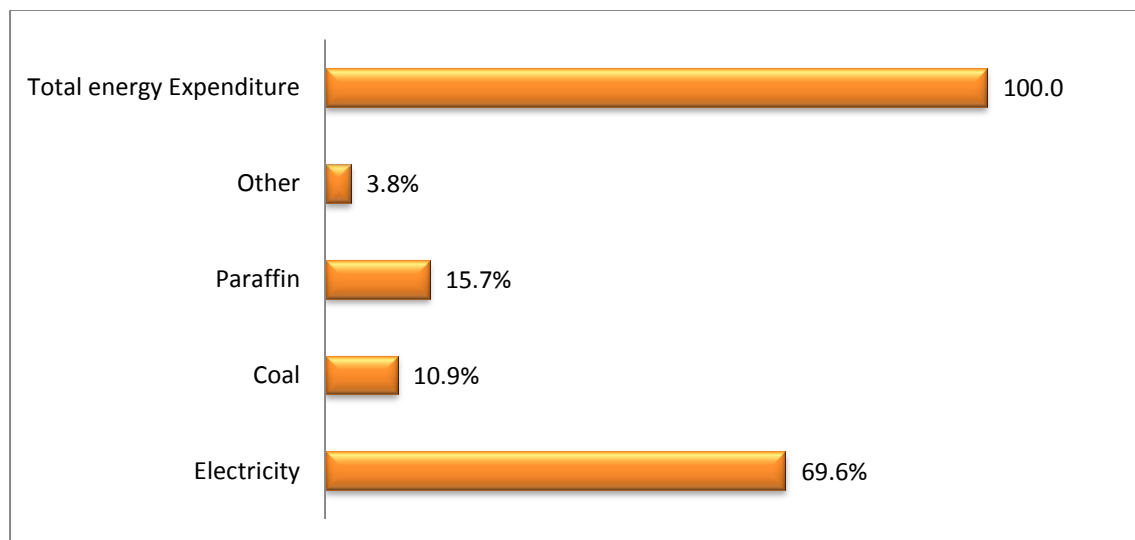
Table 4.10 Descriptive statistics on the sum of income

	N	Minimum	Maximum	Mean	Std. Deviation
Sum of income	300	150.00	23260.00	2806.1967	3677.57913
Valid N (listwise)	300				

Source: Survey data, 2013

Table 4.10 illustrates the mean sum of income of the population of Boipatong Township. The maximum sum of the income of a household was R23 260.00 while the mean sum of income was R2 806.19. The income may be a salary from work, pensioner’s monthly income or government grant for the elderly, child and / or foster-care grants as well as help from relatives. The descriptive statistics on the income are thus necessary for subsequent discussion on the expenditure patterns of the population of Boipatong Township. It should be mentioned, however, that a mean income of R2 806.18 is an indication that most households are poor in this township.

Figure 4.6 The percentage share spent on energy



Source: Survey data, 2013

Figure 4.6 shows the household expenditure on energy. More households spend money on electricity than on any other form of energy at 69.6% of the energy expenditure followed by paraffin at 15.7%, then coal at 10.9%.

Table 4.11 takes a step further in distinguishing the expenditure on energy based on the poverty status of the inhabitants of Boipatong Township.

Table 4.11 A cross tabulation between poverty status and expenditure on energy

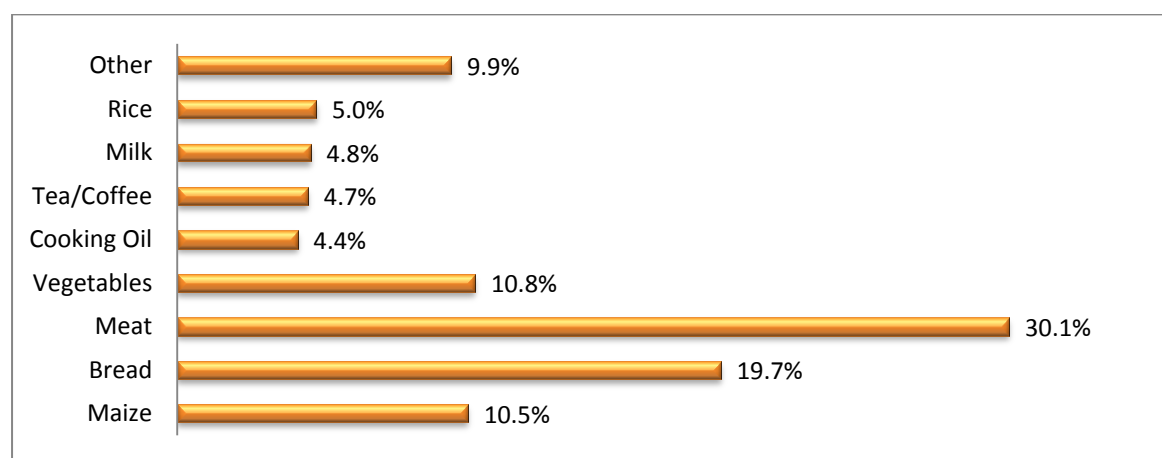
Form of Energy	Poor	Non-poor
Electricity	38.4%	61.6%
Paraffin	42.1	57.9
Coal	43.1	56.9

Source: Survey data, 2013

Table 4.11 illustrates the results of the expenditure patterns of the poor and non-poor households on energy. Based on the results, the non-poor households spend less on all three energy sources, namely electricity, paraffin and coal. Electricity expenditure of the non-poor households being the highest at 61.6% was almost double the expenditure compared to the poor households at 38.4%. The expenditure of the poor

population on paraffin and coal differs by only 1% (42.1% and 43.1% respectively). It may mean that these poor households resort to paraffin and coal because they are cheaper even though they may be living in an area that has electricity. Furthermore, the non-poor household's expenditure on paraffin and coal also differs with only 1% (57.9% and 56.9% respectively). The results, therefore, show that the non-poor households spend a lot more on all the types of energy compared to the poor households particularly on electricity, which can be considered a Giffen good in this context.

Figure 4.7 Share of expenditure on food



Source: Survey data, 2013

Figure 4.7 illustrates the expenditure on food by the population of Boipatong Township. Most of the residents in the township are spending a larger portion of their disposable income on meat at 30.1%, followed by bread at 19.7%. The expenditure on vegetables and maize follow each other at 10.8% and 10.5% respectively. The fifth largest expenditure is on rice at 5% followed by tea/coffee at 4.7% and then cooking oil at 4.4%. The higher expenditure on meat can be speculated to be by the non-poor population since meat can be considered a luxury and thus a Giffen good. The higher the income the more attractive it is to buy non-essentials or foods that were previously too expensive to afford.

Table 4.12 Cross tabulation between the poverty status and expenditure on food items in Boipatong Township

Types of food items	Poverty Status	
	Poor	Non-poor
Maize	39%	61%
Bread	36.4%	63.6
Meat	38.8%	61.2%
Vegetables	38%	62%

Source: Survey data, 2013

Table 4.12 depicts the results for a cross tabulation between poverty status and expenditure of a few food items, namely maize, bread, meat and vegetables. The non-poor households are spending more on the food items compared to the poor households. With the poor households, their expenditure on the three food items is vastly similar with most of the income being spent on maize. The non-poor households are mostly spending their income on bread. The expenditure on meat is almost double for non-poor households at 61.2% whereas with poor households the expenditure on meat is only 38.8% of the household income.

Table 4.13 illustrates the monthly spending patterns on non-food items of the population of Boipatong Township. The non-poor households allocate more of their income on savings compared to the poor households (71.9 and 28.1% respectively). Table A.4.1 further supports this in the appendices where a 94.4% of the non-poor households were saving between R101 and R250 compared to only 5.6% of the poor households in the sample. The types of savings includes savings with banks, savings clubs and stokvels. After making provision for all their expenditure needs the poor households are left with very little income to save.

Table 4.13 Expenditure on non-food items in Boipatong Township

Non-food expenditures	Poverty status	
	Poor	Non-poor
Savings	28.1%	71.9%
Loan repayment	3.8%	96.2%
Medical expenses	31.7%	68.3%
Car repayment	0%	100%
Cell phone	34.4%	65.6%
Entertainment	25.2%	79.4%
Alcohol	32.5%	67.5%
Cigarette	31.3%	68.8%
Gambling	20.6%	79.4%

Source: Survey Data, 2013

The results of the chi-square test in Table A 4.1.1 show that there is a statistically significant relationship between the poverty status and savings with a p-value of 0.001, which means that the poorer a household is, the less likely it will be able to save. The second expenditure item in the table is loan repayment; the results for this item reflect a different picture than what was expected. It could be expected that the poor would have a higher repayment on loans, for example micro lenders, as they may not have enough income and may supplement their income with borrowing. The results show that 96.2% of the non-poor households spend 25% their income on loan repayments compared to the poor households at only 3.8%. This thus reflects the level of household debt for the non-poor households.

The results for medical expenditure item shows that the non-poor households spend twice as much than poor households do. Table A 4.3 shows that 100% of the non-poor households spend between R251 and R500 on medical expenses and poor households spending nothing towards medical expenses. The results of the chi-square test in Table A.4.3.1 show that there is a significant relationship between the

poverty status of the household and the expenditure of the households on medical supplies/services (p-value:0.00). The poorer the households, the higher the likelihood of the households being unable to afford medical treatment offered by private healthcare facilities. The most sensible thing to do in such situations is for the poor to opt for free medical services from government.

The expenditure on cell phone airtime and data, entertainment and alcohol is higher for non-poor households than it is for poor households. These items can be considered non-essentials that can be afforded by the non-poor. Table A 4.4 shows that 56% of the non-poor households spend between R0 and R50 on cell phone airtime while 43.7% of the poor households spend the same amount on airtime. The chi-square test on Table A 4.4.1 shows that there is a significant relationship between the poverty status and the expenditure on cell phone airtime. Table A.4.5 shows that only 7.8% of the non-poor households spend R501 and more on entertainment. Poor households on the other hand may be prioritising their expenditure on other more essential items. Expenditure on alcohol between the prices of R0 and R50 by poor households is more than that of the non-poor households (55.3% and 44.7% respectively) as shown in Table A 4.6. The likelihood is that the poor households are able to afford cheaper alcohol and consume more of it than the non-poor households. Only 10.2% non-poor households are able to spend R501 and more on alcohol. The chi-square test results in Table A 4.6.1 show a p-value of 0.00, which means that there is a significant relationship between the poverty status and the expenditure on alcohol. Thus, it can be deduced that the poor would rather spend more on alcohol than on entertainment.

Household expenditure has an impact on a child or children in the household regardless of the poverty status. Based on the results pertaining to expenditure, it can be deduced that children may experience a certain level of deprivation, especially if the income in the household is spent on goods from which a child does not derive any benefit, for example alcohol. A child may also experience deprivation due to the expenditure on the shared goods in the household, whereby their own needs may have to be put aside for the wellbeing of the household as a whole.

4.4 CHILD DEPRIVATION IN BOIPATONG TOWNSHIP

This section presents the results from the child deprivation index in the Boipatong Township.

Table 4.14 Frequencies on the number of children without clean water in Boipatong Township

		Frequency	Percent	Cumulative percent
Valid	Never	180	62.1	62.1
	Just once or twice	53	18.1	80.3
	Several times	35	12.1	92.4
	Many times	13	4.5	96.9
	Always	9	3.1	100.0
	Total	290	100.0	

Source: Survey data, 2013

Table 4.14 shows the frequency results of the number of children that are without clean water in Boipatong Township. At least 3.1% children are without clean water. This may be a small percentage but still deserves attention considering the fact that clean water is a basic need to which every individual is entitled. At least 37.8% of the children are clean water insecure and this may pose some health issues due to the insufficient clean water.

Results from the Census 2011 show that at least 46.3% of households in South Africa have access to domestic tap water, whilst +/- 85% of households have access to water that is consumable at an acceptable level. This is according to the 1994 Reconstructive Development Programme (RDP), which is still relevant. Despite the fact that Gauteng is an urban province, at least 37.9% households do not have access to domestic clean running water. This means that there are households that still have to find water elsewhere and that can be considered deprivation (SAHRC, 2014:38).

According to the United Nations Development Program (UNDP) (2006), approximately 443 million school days are lost each year worldwide, due to illness caused by lack of access to water or access to a poor water source. According to the

WHO (2002) (cited in SAHRC, 2014:36), surveys from 45 developing countries show that women and children bear the primary responsibility for water collection in the many of the households. This is time not spent working at an income-generating job, caring for family members, or attending school. Furthermore, 115 people in Africa die every hour from diseases linked to poor sanitation, poor hygiene and contaminated water. A lack of access to safe drinking water and sanitation kills children more than malaria, measles and HIV/AIDS combined (SAHRC, 2014:36).

Clean water and sanitation and the access thereof is essential to human survival, health and wellbeing. The access to the latter is as urgent as the rights to education, a safe and clean environment to live in, the right to basic health and other human rights. The lack of access to clean water not only threatens human rights but threatens the lives of those who are the most vulnerable such as people with disabilities, females, particularly those who are pregnant, infants and children. An individual's religion and culture can also be compromised because they cannot practice fully. The UN Special Rapporteur on human right to safe drinking water and sanitation has shown that inadequate water and sanitation facilities' impact on the realisation of other rights such as education, health, work and dignity, amongst others. Water and sanitation are fundamental to the health and well-being of all people (SAHRC, 2014:36).

Table 4.15 Frequencies on the number of children without a balanced diet in Boipatong Township

		Frequency	Percent	Cumulative percent
Valid	Never	42	14.6	14.6
	Just once or twice	114	39.8	54.4
	Several times	66	23.0	77.4
	Many times	53	18.4	95.8
	Always	12	4.2	100.0
	Total	287	100.0	

Source: Survey data, 2013

Table 4.15 depicts the results of the frequencies regarding the number of children without a balanced diet. Only 14.6 percent of the children have never been deprived

of a balanced diet, which essentially means 85% of the children have lacked a balanced diet at some stage in their lives. This is an important observation as a healthy diet is considered a basic need that every growing child needs for physical and cognitive development. Thus, it can be deduced that children in Boipatong are food insecure. As was already discussed in Section 2.4.6, child hunger disturbs a child's ability to learn and leads to stunted growth. Deprived children thus are at a disadvantage because they are deprived of all the vital foods that will improve their quality of life and wellbeing.

Government, in the interest of eradicating food insecurity, has a strategic objective of ascertaining that households have access to fresh and nutritious food. The National Food and Nutritional Security Policy by the Department of Agriculture (2013) has a number of strategies in place to eradicate food insecurity :

- ❖ Allocate more funds to social programmes that are directly concerned with food security
- ❖ Providing more information to communities on the importance of good nutrition
- ❖ Investing more in the agricultural production inputs especially rural communities in the effort of increasing food production that will ensure adequate and frequent supply of food at country level and household level
- ❖ Assisting community level initiatives in their bid to reduce food insecurity
- ❖ Promoting research and development on enhancing food security. Developing and implementing strategies that will assist the agricultural sector to cope with climate change and how food production can continue without being affected by dry spells (Department of Agriculture, 2013:7).

Table 4.16 Frequencies on the number of children without medicine in Boipatong Township

		Frequency	Percent	Cumulative percent
Valid	Never	67	23.2	23.2
	Just once or twice	119	41.2	64.4
	Several times	57	19.7	84.1
	Many times	31	10.7	94.8
	Always	15	5.2	100.0
	Total	289	100.0	

Source: Survey data, 2013

Table 4.16 illustrates the frequencies on the number of children who are without medicine. Only 23.2% of the children have access to medicine when they are ill while more than 76% of them are not so privileged. This is a cause for concern as children should always have access to medical supplies especially from government health facilities because access to health care is also considered a basic necessity, therefore, medication is free. It is probable that healthcare facilities had shortages, supposedly due to logistical delays.

A study done in Mthata in the Eastern Cape in 2013 by Doctors without Borders, (2013:12) alludes to these shortages in medical supplies. Patients were turned away in various areas of Mthata because there were not enough medications at the clinics. Staff shortages as well as mismanagement at the depot facilities have further exacerbated the shortages. The situation is not only unique in Mthata, other provinces in the country suffered similar shortages in 2013 (Doctors without borders, 2013:12).

Despite these hindrances, government has the primary aim of ensuring that the right quantity and quality medication is accessible to all South Africans. The Department of Health (2013:xx), therefore, has the following commitments:

- ❖ To ensure safe dispensation of medication
- ❖ To ensure that there is an adequate distribution of drugs

- ❖ Promoting the rational use of medication by healthcare workers, patients through education and training.

Government is aware that in order to realise these goals, there needs to be an effective supply chain and distribution coupled with skilled workers (Department of Health, 2013:xx).

Table 4.17 Frequencies on the number of children without educational resources in Boipatong Township

	Frequency	Percent	Cumulative Percent
Never	65	23.0	23.0
Just once or twice	66	23.3	46.3
Several times	56	19.8	66.1
Many times	68	24.0	90.1
Always	28	10.0	100.0
Total	283	100.0	

Source: Survey data, 2013

Table 4.17 illustrates the results on the frequencies of the number of children lacking educational resources. The resources could be items like stationery, school textbooks, reading books and other items that can assist a child in learning. About 10% of the children in the sampled population are always lacking the necessary educational resources and 24% of the children have lacked the educational resources many times while they are in school. Only 23% of these children have never lacked educational resources and this is a small percentage considering the number of children who are worse off because they are lacking the resources to aid them in school. The Department of Basic Education is responsible for providing the necessary learning material for children so they are not without any material that will facilitate their learning. The Department of Basic Education (2011:125) confirms that there are learners who do not have their own learning material and some learners are sharing. Some schools have even adopted the culture of retaining the learning material on the schools' premises in order to avoid issues of theft or loss. The department also realises that shortages in learning material may be caused by a host of factors such as supply chain issues on the part of those responsible to

deliver. Negligence on the part of learners who sometimes destroy textbooks also worsens the situation.

Table 4.18 illustrates the number of children without school uniforms in Boipatong Township. About 23.6% of the children in the sample have complete school uniform while 68.7% did not have the complete set of school uniform. A total of 7.7% of the children do not have access to school uniforms and they are left with no option but to go to school in their normal clothes. The results further show that these children are coming from non-poor households and only half of them come from poor households as shown in Table 4.19.

Table 4.18 Frequencies on the number of children without school uniform in Boipatong Township

	Frequency	Percent	Cumulative Percent
Never	67	23.6	23.6
Just once or twice	65	22.9	46.5
Several times	63	22.2	68.7
Many times	67	23.6	92.3
Always	22	7.7	100.0
Total	284	100.0	

Source: Survey data, 2013

It would be expected that the parents of the non-poor children are in a better position to make provisions for school necessities such as school uniforms, but that seems not to be the case. It can thus be assumed that the parents may have had other financial commitments, which bring forth the intra household allocation of resources, which have a negative effect on the child, especially for items that are so important like school uniforms. The Gauteng Department of Social Development has started an initiative whereby they are supporting the Department of Basic Education by providing school uniforms to the most deprived children in schools. Teachers then have to prioritise by identifying the most deprived children because only a certain number of learners are able to receive the full sets of uniforms. The downside of the initiative is that it fails or does not cover all the deprived children.

Table 4.19 A cross tabulation between the poverty status and lack of school uniform in Boipatong Township

		Poverty status		Total
		Non-poor	Poor	
Lack school uniform	Never	39	28	67
	Just once or twice	36	30	66
	Several times	37	26	63
	Many times	39	28	67
	Always	15	7	22
Total		166	119	285

Source: Survey data, 2013

Table 4.20 depicts the results of the number of children who lack transport to school. At least 42.9% of the children in the sampled population do not have transport to school at all. These children have no option but to walk to school and this is a very large proportion, considering the percentage of children who do not lack transport to school (30%). A total of 12.2% have gone without transport to school just once, twice, several and / or many times. According to the policy of the Department of Basic Education, transportation services can only be offered under the following circumstances:

- ❖ Children who will duly benefit from the provision of subsidised transport services are those who are needy.
- ❖ The condition for learner transportation is that children must be transported to the nearest government school. This excludes parental preferences of where they want to enroll their children. Private transport must be arranged for such circumstances.
- ❖ Children with physical disability needs must be accommodated in the learner transport depending on the state of their disability. Young primary school children who may be travelling long distances also need to be accommodated.
- ❖ Learner transport services should only be available in areas where there are no transport services already. There should also be a sufficient number of children in a particular area in order to justify the provision of these services. This is to avoid wasting funds (South African Government gazette, 2014:18).

Based on the policy statement by the Department of Basic Education, there are a few arguments that can be made for the lack of transport to school for children in Boipatong Township. For some children, there is a probability that their parents would rather enroll in schools of their choice, which could lead to problems of accessing transport to school. Although basic education is free, the quality of education in nearby schools may not be satisfactory, hence why some children may have to travel further to get better education.

Table 4.20 Frequencies for the number of children who have no access to transport to school

Scale	Frequency	Percent	Cumulative Percent
Never	86	30.0	30.0
Just once or twice	35	12.2	42.2
Several times	18	6.2	48.4
Many times	25	8.7	57.1
Always	123	42.9	100.0
Total	287	100	

Source: Survey data, 2013

Table 4.21 illustrates the number of children who do not have access to reliable electricity that they need to study. More than half of the children in the sampled population (59.5%) have been without electricity just once, twice or several times a week and about 3.5% of the children do not have any electricity for studying and that leaves them resorting to candle lights. As was illustrated in Table 4.11 poor households spend more on paraffin and coal and less on electricity compared to the non-poor households. This could mean that these children are living in the poor households. Only 24.8% of the children have access to consistent electricity on a daily basis. This is a small percentage considering the percentage of children who go without electricity several times, many times and always. These children could be living in non-poor households where there is a greater expenditure on energy. Electricity shortages due to financial constraints are a great concern but an even bigger concern when the country has been experiencing inconsistent electricity supply since 2012. This can also be associated with the lack of electricity for studying for the children living in Boipatong Township.

Table 4.21 A cross tabulation between the poverty status and lack of Electricity for studying

Scale	Frequency	Percent	Cumulative Percent
Never	71	24.8	24.8
Just once or twice	90	31.5	56.3
Several times	80	28	84.3
Many times	35	12.2	96.5
Always	10	3.5	100.0
Total	286	100.0	

Source Survey data, 2013

Table 4.22 depicts the results of the frequencies on the number of children who go to school without pocket money. A total of 24.1% of the children do not get pocket money at all compared to the 14.5% of the children who get pocket money consistently. About 61.4% of the children go without pocket money once, twice or several times while some go for many times without pocket money. Of the children who go without pocket money, the majority come from non-poor households with a total of 12.3% children, while 10.9% come from poor households. Because the majority of the children come from non-poor households, it may be that the parents choose not to give their children pocket money while for poor children they may not have a choice because they are poor. Another reason could be that parents find it unnecessary to give their children pocket money because there are school feeding schemes where they have food at their disposal.

Table 4.22 Frequencies on the number of children without pocket money

Scale	Frequency	Percent	Cumulative Percent
Never	41	14.5	14.5
Just once or twice	62	22.0	36.5
Several times	55	19.5	56.0
Many times	56	19.9	75.9
Always	68	24.1	100.0
Total	282	100.0	

Source: Survey data, 2013

Table 4.23 illustrates a cross tabulation of the number of children without personal computers of their own. It is clear that only a few of the children in the 6-10 and 11-18 age categories have their own personal computers, while the rest have never had personal computers. Such a lack may not be urgent since a personal computer may be considered a luxury and something that children may be able to live without. This applies to both poor and non-poor children. However, times have changed and although computers may still be considered as luxuries, they can also be considered as necessities to a great extent. Children can start learning how to use a computer from an early age. It is, therefore, a cause for concern that so many children do not have personal computers of their own. These are some of the disadvantages of poverty, a hindrance to children's advancement and knowledge.

Table 4.23 A cross tabulation of the number of children without a computer of their own and age

Age categories		Scale					Total
		Never	Just once or twice	Several times	Many times	Always	
	6-10	10	3			58	71
	11-18	40	13	0	0	128	181
	Total	50	16	0	0	186	252

Source: Survey data, 2013

Table 4.24 illustrates a cross tabulation of the number of children between the ages four and seven without toys.

Table 4.24 A cross tabulation of the number of children without toys and age

		Scale					Total
		Never	Just once or twice	Several times	Many times	Always	
Age of child	4-7	11.9%	16.8%	12.2%	10.0%	49.1%	100

Source: Survey data, 2013

Toys are recreational items that can stimulate a child's brain and keep a child happy. Only 11.9% children always had toys while 49.1% of children have never had toys.

This is a sad reality considering the fact that toys play a vital role in a child's life, development and the opportunity to interact with other children through play. Child interaction improves socialisation and human interaction in preparation for adolescence and adulthood. The deprivation thereof may be due to the parents being unable to provide for their children and maybe sacrificing because they have to provide for other immediate needs of the household.

Table 4.25 illustrates frequencies on the number of children who lack fashionable clothing like their peers.

Table 4.25 Frequencies for the number of children without fashionable clothing like their peers

Scale	Frequency	Percent	Cumulative Percent
Never	44	15.3	15.3
Just once or twice	75	26.0	41.3
Several times	65	22.6	63.9
Many times	74	25.7	89.6
Always	30	10.4	100.0
Total	288	100.0	

Source: Survey data, 2013

About 10.4% of the children do not have clothing like their peers while 74.3% of those children rarely have fashionable clothing like their peers. Only 15.3% of the children have access to fashionable clothing on a full time basis. Fashionable clothing can also be considered a luxury items that cannot be afforded by every household depending on their expenditure priorities. This leaves children feeling deprived because some children from non-poor households are able to afford such luxuries and poorer children end up feeling left out and probably end up being excluded from their peers because they are unable to keep up with the latest fashionable trends. Poor children, therefore, can be exposed to social exclusion due to their poverty situation.

4.5 SUMMARY AND CONCLUSION

The chapter was dedicated to profiling the population of Boipatong Township. Under the section on gender and child poverty, the results showed there are more females than males in the population, which allows for the assumption that more children are residing in female-headed households. With regards to the marital status of household heads, it was found that the majority of the respondents were widows, which further supports the findings that there are more female-headed households in Boipatong Township. The results give more evidence of prevalence of female-headed households where 30% of children in the sampled population live in female-headed households that have never been married and 26% of the children live in households headed by widows. This is a clear indication that nuclear families are fast disappearing and children are now growing up in single parent households particularly those of females.

With regards to the employment status of the heads of the households, the results showed that the majority of the inhabitants are not economically active. These include children who are still in school, the elderly who can no longer take part in the labour force activities as well as former job seekers who are no longer looking for a job. The unemployment rate of the heads of the households was found to be 26% percent, which is worrisome and should be a matter of urgency for the government. However, the NDP, which aims to create 11 million jobs by 2030, may remedy the unemployment situation for townships like Boipatong as it has a specific aim to create employment in urban townships. The NGP and the IPAP aim to reach the objectives of the NDP under the 2014-2019 MTSF. The NGP aims to create jobs in the mining, agriculture and manufacturing sectors. The IPAP has also shown progress in the manufacturing of heavy vehicles and more investment will be made towards job creation in the motor industry. The MTSF aims to expand the capacity of EPWP by creating six million jobs by 2019. With regards to the relationship between the employment status and the poverty status, the results showed that 94.3% of the non-poor households were formally employed and for the poor households, a total of 78% of the households were unemployed. The results further showed that there is a significant relationship between the household poverty status and the employment status with a p-value of 0.00. Unemployment is a clear cause of poverty and it also

shows that those who are unemployed are those with very low education levels and, therefore, were unable to get employment, which further exacerbated the poverty situation.

The results for gender, poverty and the employment status of the heads of the households showed that more poor males (97.1%) are employed compare to their female counterparts (88.9%). The results also show that it is within an individual's personal effort or choice to seek employment and not so much gender or poverty. This is because more non-poor females and poor males were found to be employed in informal activities and that is better than not making effort to find some form of employment. On the flipside, more poor males were unemployed compared to the non-poor counterparts. This may be an indication that poor male households are dependent on social grants.

The results for the highest qualification of the heads of the households show that the majority of the heads of the households have a grade 12 qualification (26.7%) while only 9% have post school qualifications. These results, therefore, show that there is a lack of qualified and trained people, hence the high unemployment rate in the township. The main issue could be lack of funds, which may pose a challenge for those who would like to go to school. Government is making efforts to help those in need of funds through NSFAS but the disadvantage is that demand exceeds the supply for those funds.

The employment status and the highest qualifications of the heads of the households show that 66.7% of those with postgraduate qualifications are employed formally while only 28.9% of those with a grade 12 are formally employed. This is a clear indication that the higher the level of education, the greater the chances of finding employment. The NYP concludes that if community colleges could be implemented then more people can get qualified and get training through SETA. The EWP can also take initiative by providing work experience to the youth in particular once they have obtained the skills and qualifications.

The sector of employment showed that a larger part of the sampled population was employed in the social, education and training sector and the least popular sectors of employment was that of finance, insurance and realty, mining and manufacturing

due to the fact that this sector requires skilled and qualified individuals. The results pertaining to the activities of the unemployed show that a total of 23.1% of the poor were actively seeking employment compared to non-poor households who make up only 11.4% of the job seekers in Boipatong Township. The results thus prove that the poor households are more concerned with finding employment to get out of their state of poverty and for the children living in these households. With regards to the activities of the poor households from a gender perspective, more males were actively looking for a job at 23.1% compared to females at only 11.6%. The females could be homemakers looking after their families.

The expenditure patterns of any household are determined by the sum of income in that household. The mean income of the sampled population amounts to R2 806.19 while the maximum income was found to be R23 260. The results for expenditure on energy shows that the majority of the households are spending more on electricity as their main source of energy followed by paraffin. From a poverty status point of view, the non-poor were found to be the biggest consumers of electricity.

Expenditure on food items showed that more income is being spent buying meat and the second highest food expenditure item was the expenditure on bread. Maize was the third highest expenditure item. The expenditure on cooking oil was found to be the lowest. With regards to the poverty status, the expenditure of the poor population on maize, bread and meat was almost half of that for the non-poor (39%, 36.4% and 38.8% respectively) while the non-poor population were the main consumers of the three food items particularly bread at 63.6%.

The expenditure on the non-food items was analysed from the poverty status perspective. The non-poor population spent most of their income on loan repayment followed by the expenditure on entertainment and gambling. The poor on the other hand spent most of their income on cell phone airtime followed by alcohol and cigarettes. With the poor spending less on food items and more on the non-food items would mean that they are in a way responsible for their poverty because it would make better sense if more money were dedicated to more meaningful items other than alcohol and cigarettes.

Child deprivation in Boipatong Township was measured against a list of essentials for children by Barnes (2009) and the results showed that almost 40% of the children are water insecure, which becomes a cause for concern since water is an essential human need. A total of 85% of the children lack a balanced diet and can be considered food insecure since food is required for the optimal growth of a child. More than 76% of the children lacked medical assistance or medication and this is a huge percentage considering the importance of health care. With certain parts of the country experiencing shortages of medical supplies from depots and delays along the supply chain, this means that children are deprived of these medications, which could worsen their conditions further.

Only 23% of the children have access to educational resources to facilitate their learning compared to the rest of the children who sometimes or always go without. No child should be going without any learning material because the Department of Basic Education makes provisions for such learning materials at no cost to parents. The government department found that the shortage in educational resources might be because of supply chain issues. Negligence by learners is also a cause of these shortages. Only 7.7% of the children have did not have proper school uniforms compared to the 23.6% who have never gone without the full set of school uniform. Despite the initiatives by government, some children are still deprived of school uniforms.

At least 42.9% of the children did not have transport to school. It could be nearby schools were not appealing to the parents of the children, hence the need to travel to other schools that may be further from home. Government is making provisions for transport services but certain conditions have to be met in order for these services to be rendered. For instance, transport is only available to young children walking to school, children with disabilities, and where there are a large number of children to justify the need for transport.

A total of 24.1% of the children go to school without pocket money and this may be because parents may feel it is unnecessary to give children any pocket money because there are school feeding schemes available or they are unable to do so due to financial constraints. At least 186 children between the ages of six and 10 and 11

and 18 lack a computer of their own while 10% of them lacked fashionable clothing like their peers. Although these two items can be considered luxury items from a poverty status perspective, which children can go without but they may have been excluded socially from society since they could not fit in with the rest whose parents can afford. A child's educational advancement could be enhanced with the access to computers of its own but the deprivation thereof is a disadvantage.

CHAPTER 5: DISCUSSION OF RESULTS AND FINDINGS

5.1 INTRODUCTION

This chapter analyses the results from data on child poverty and household characteristics collected in Boipatong Township. As stated in Section 3.4, the study utilises a logistic regression in analysing the determinants of child poverty, where the dependent variable is poverty status that is dichotomously measured. The second regression uses ordinary least square to facilitate the analysis of the determinants of the child deprivation index, which is measured as a continuous variable. The results discussed are based on the investigation that was done on the determinants of child poverty and child deprivation. The chapter has three main sections; the first section discusses the results of the determinants of child poverty. The second section discusses the results of the deprivation index as a measure of child poverty and the third section discusses the results on the perceptions of the consequences of child poverty.

5.2 THE DETERMINANTS OF CHILD POVERTY IN BOIPATONG TOWNSHIP

This section discusses the regression results for the determinants of child poverty. As discussed in Section 3.5, the dependent variable is the child poverty status, which is derived from the household income and the independent variables used include:

- ❖ Number of people in the household
- ❖ Age of the head of the household
- ❖ Marital status of the head of the household
- ❖ Employment status of the head of the household
- ❖ Income of the household

The regression estimated is therefore as follows:

$$\text{logit}(P) = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 \varepsilon \dots \quad (5.1)$$

where $\ln\left(\frac{p}{1-p}\right)$ is the probability of the success event, in this case the child being poor, where: $\beta_0 - \beta_6$ are the coefficients for the independent variables.

5.2.1 Diagnostic test for multicollinearity

Before proceeding with the discussion on the results of the logistic regression, one important test is done in order to make sure that there is no multicollinearity in the independent variables. That is to say, the independent variables are not highly correlated with each other. Allison (2012) points out that the most widely-used diagnostic for multicollinearity is the variance inflation factor (VIF). The VIF may be calculated for each predictor by doing a linear regression of that predictor on all the other predictors, and then obtaining the r-squared (R^2) from that regression. The value of the R^2 indicates the variation in the dependent variable that has been explained by the included independent variables. One can also use the tolerance values obtained in a regression under the collinearity table to decide on the level of correlation between the independent variables. A tolerance value of less than one is considered an indication of the existence of multicollinearity in the variables. In this regression, the results are as shown in Table 5.1.

Table 5.1 Collinearity statistics

Coefficients			
Determinants		Collinearity statistics	
		Tolerance	VIF
1	Number of people in the household	.755	1.325
	Age of the head of the household	.618	1.619
	Marital status of the head of the household	.788	1.269
	Employment status of the head of the household	.596	1.677
	Sum of income in the household	.611	1.636

Source: Survey data, 2013

Based on the results in the table above, multicollinearity is ruled out because the independent variables are not correlated and hence the results of the regression are reported in Table 5.2.

5.3 RESULTS OF BINARY LOGISTIC REGRESSION FOR THE DETERMINANTS OF CHILD POVERTY

This sub-section discusses the results pertaining to the determinants of child poverty. The determinants are based on the head of the households in Boipatong Township. Results for the binary logistic regression are illustrated in Table 5.2.

Table 5.2 Determinants of child poverty binary logistic regression

Household determinants		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Number of people in the household	.649	.155	17.470	1	.000	1.914
	Age of the head of the household	.006	.016	.152	1	.697	1.006
	Sum of income in the household	-.001	.000	44.035	1	.000	.999
	Gender of the head of household	-.083	.531	.024	1	.876	.921
	Marital Status of the head of the household			7.446	5	.190	
	Never married	1.254	.562	4.973	1	.026	3.503
	Married	-.010	.654	.000	1	.987	.990
	Divorced	-.118	.964	.015	1	.903	.889
	Separated	1.327	.896	2.193	1	.139	3.768
	Living together	-.356	1.039	.117	1	.732	.701
	Employment status of the head of the household			14.433	3	.002	
	Formally employed	-.261	.613	.182	1	.670	.770
	Informally employed	-1.429	.560	6.498	1	.011	.240
	Unemployed	.982	.551	3.174	1	.075	2.670
	Constant	.040	1.038	.001	1	.970	1.040

Source: Survey data, 2013

The first variable being the number of people in the household shows that with a positive coefficient of 0.649 there is greater probability of a child being poor when they live in a large household. The p-value (0.00) in this instance further shows that there is a significant relationship between a child's poverty status and the number of

people in the household. The Department for Work and Pensions (UK, 2014:7), a government department in the UK, argues that larger households make for loss of income. Parents often have to forfeit job opportunities due to family demands such as caring for the children in the household. The results also support the arguments made by (Bird, 2007) and Boston (2013) that children may have to forfeit certain material needs due to the size of the households where the needs of the household are put ahead of theirs.

The age of the head of household variable has a positive coefficient ($\beta=0.006$) which implies that a child's poverty status may be affected by the age of the head of the household. The results, however, show that there is no significant relationship between the age of the head of the household and the poverty status of the child (p-value=0.697). The odd ratio is 1.006, which means the odds of a child being poor are much higher if a child lives in a household with older parents.

The sum of income variable can be considered to be an important variable considering the fact that this study is concerned with the income measure of poverty and, therefore, it is expected that the results for the income variable to show a negative coefficient ($\beta=-0.001$). This result also shows that there is a significant relationship between the household income as well as the poverty status of a child (p-value= 0.000), which essentially mean that the higher the income, the lower the probability of a child being poor. The negative coefficient essentially implies that with an increase in income of the head of the household, there is a reduced probability of a child being poor. The odds ratio of 0.999 means that for every extra income earned in the household, the odds of a child being poor are reduced by 0.999 *ceteris paribus*. The results further prove that more of the income is dedicated to the needs of the child apart from the household.

The gender variable has a negative coefficient ($\beta =-0.83$). This result essentially means that children living in female-headed households have a lower probability of being poor than children living in male-headed households. Males are often the bread winners in their households and they often earn more income than females. The results for gender as a determinant of child poverty, however, show that there is no statistically significant relationship between gender and child poverty (p-

value=0.876). This result was unexpected because children living in female-headed households are most likely to be considered poorer than children living in male-headed households. These results can be considered unique to Boipatong Township that irrespective of the gender of the head of the household, a child can be poor. These results pertaining to Boipatong Township essentially rule out the theory by Snyder *et al.* (2006) that children in female-headed households are more likely to be poorer than those living in male-headed households. This could be because more poor females are engaging in informal activities than males and could be earning most of their income from those activities.

The results for the marital status category show that children living in households where the parents have never married or have been separated have a high probability of being poor with positive coefficients ($\beta=1.254$ and $\beta=1.327$ respectively) and the odds ratios above one. These results provide further evidence that children living in single parent households, who in most instances live on one income, are more likely to be poor. Children living in households where the head of the household is married or living together with a partner are less likely to be poor and this is shown by the negative coefficients ($\beta = -0.010$ and $\beta = -0.356$ respectively) and an odds ratio of less than one (0.990 and 0.889 respectively). These results were highly expected to be as such because children living in two parent households are less likely to be poor, particularly those whose parents are both earning an income. The results, therefore, support the assumption made by Rector (2012) that children are less likely to be poor if they are living in two parent households with two income streams.

The final category being that of employment status shows that children living in households where the head of the household is either formally or informally employed have a lower probability of being poor and this is seen by the negative coefficients ($\beta = -0.261$ and $\beta = -1.429$ respectively) and the low odds ratio (0.770 and 0.240 respectively). The opposite can be said for the unemployed category, which has a positive coefficient of $\beta = 0.982$. The p-value is 0.075, which is significant at a 10% significance level essentially means that there is a significant relationship between unemployment and child poverty. The positive coefficient (0.982) also shows that there is a high probability of a child being poor if the parent(s) is / are

unemployed. These results further support the arguments by Chennells and Hall (2011) and Isaacs (2013) that children living in a household where the parents are unemployed are more likely to be poor than those of employed parents.

The p-value (0.002) of the not economically active category, which is the constant for the employment status of the head of the household, proves that there is a significant relationship between child poverty and this employment status category. This result also was anticipated due to the nature of the category of employment where the form of income could be social grants.

As the dummies have been described in Chapter 3, the following section discusses the results of the OLS regression.

5.4 RESULTS OF THE ORDINARY LEAST SQUARES (OLS) REGRESSION FOR THE DETERMINANTS OF CHILD DEPRIVATION

This section discusses the results for the OLS. The dummies that were created in Chapter 3 are now presented in the OLS, Table 5.5. The results also illustrate the continuous independent variables such as the sum of income as well as the age of the heads of the household in Boipatong Township. The value of the constant thus represents all the reference points of all the grouped and ungrouped independent variables added together. Table 5.3 illustrates the results for the R^2 and the adjusted R^2 .

Table 5.3 R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.512 ^a	.262	.223	9.75917	1.471
a. Predictors: (Constant), female, informal activity, Widow/er, Tertiary, number of people in household, divorced/ separated, unemployed, grade 1-7, sum of income, formally employed, married/living together, Age, Grade 8-12					
b. Dependent variable: index					

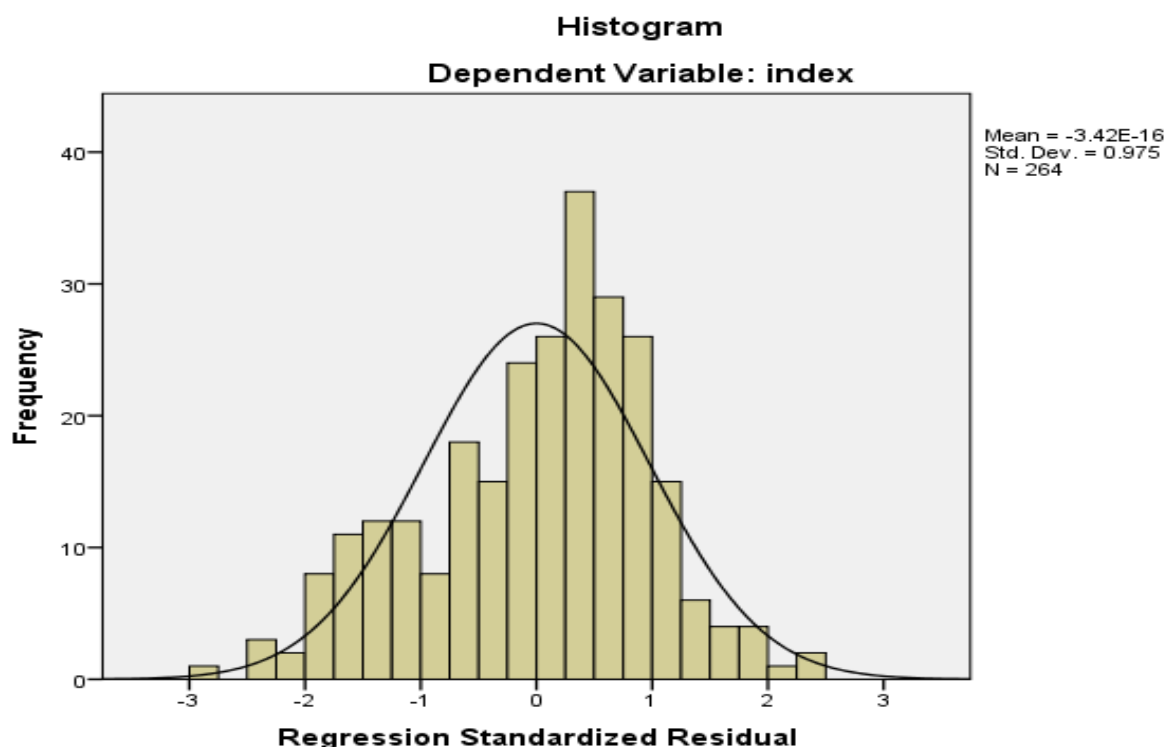
Source: Survey data, 2013

With the R^2 already defined in Section 5.2.1, Lewis-Beck (2000) explains that the R^2 value increases when an independent variable is added to it. Such an increase may be caused by chance because adding independent variables makes use of degrees of freedom. The adjusted R^2 result is the mostly reported for a multiple regression model compounded with the R or by itself. The value of the adjusted R^2 is often smaller than the R^2 . The value of the adjusted R^2 on the other hand decreases as more independent variables are included in the regression equation. The value of the R^2 is 0.223 as shown in Table 5.3. This result indicates that the variations in the dependent variable is too small and will not have an effect on the results that are produced in the OLS regression table.

5.4.1 Diagnostic tests of the OLS regression

One of the important assumptions in the OLS regression is that the residuals are supposed to be normally distributed. In order to check if this assumption is satisfied, a PP plot or a histogram of the residuals can be used. Figure 5.1 shows the histogram and the p-plot. Both figures show that the residuals are normally distributed. This follows the assumptions made by the OLS that the residuals are normally distributed.

Figure 5.1 Residual plot for normality test



Source: Survey data, 2013

An F test is used to check if the regression as a whole is significant. The results of the F-test in Table 5.4 reveal that the regression is significant with a p-value of 0.000 and, therefore, validates the use of a regression to examine the determinants of child poverty using the deprivation index.

Table 5.4 F-test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8444.028	13	649.541	6.820	.000 ^b
	Residual	23810.335	250	95.241		
	Total	32254.364	263			

Source: Survey data, 2013

Table 5.5 illustrates the mean age of the sampled heads of the households in Boipatong Township.

Table 5.5 The mean age of the sampled population

	N	Minimum	Maximum	Mean	Std. Deviation
Age	300	19.00	88.00	49.4500	13.35422
Valid N (listwise)	300				

Source: Survey data, 2013

The age of the head of the household shows that the children in the sample are less deprived when the parents in the household are older. Table 5.5 shows the mean age as 49.45 which means that if the parents were any younger, then the child would be more deprived because the younger a parent is, the more likely to be deprived.

Table 5.6 shows the regression results of the determinants of child poverty against the deprivation index. The determinants are the independent variables while the index is the dependent variable. The results show that the sum of income has a negative coefficient, which means that as the income increases in a household, the less deprived a child becomes. A unit change in the amount of income will be to the detriment of the child being more deprived or less deprived.

The number of people in the household has a positive relationship with the deprivation index ($\beta = 0.462$) meaning that a unit change in the number of people would lead to an increase in the deprivation index. This simply means that the number of people in the household will increase the value of the index because the bigger the household, the more deprived the children are. It can therefore be confirmed that the number of people in a household have an impact on a child being deprived and poor.

The employment status categories show the results of the index for each category. The point of reference is the “not economically active”. The results in the regression table show that the children in the sample are less deprived when the parents are employed. This can be seen by the negative coefficient of the beta at -4.286. The Department for Work and Pensions (UK, 2011) argues that a child with an employed parent or parents has a lower risk of falling into the poverty trap or experiencing any

material deprivation in the household. A child in a workless household has a greater chance of being deprived. About 65% of inhabitants in the UK moved out of poverty after finding employment.

Children coming from families where the parents are involved in informal activities seem to be more deprived with a positive beta value of 2.098. The index is positive and increasing, which shows that irrespective of the parents being involved in informal activities, the children are still deprived and this probably means that parents are not making enough income in this form of employment to provide for their needs. The value of the coefficient is positive and remains smaller than the reference point of 39.3.

Table 5.6 Regression results for the deprivation index and the determinants of child poverty in Boipatong Township

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.300	4.242		9.264	.000
	Sum of income	-.001	.000	-.359	-4.502	.000
	Number of people in the household	.462	.391	.075	1.181	.239
	Age	-.018	.073	-.021	-.249	.804
	Formally employed	-4.286	2.356	-.151	-1.819	.070
	Informal Activity	2.098	1.901	.077	1.104	.271
	Unemployed	-.219	1.757	-.009	-.125	.901
	Married living	-.629	2.008	-.026	-.313	.754
	Divorced separated	.862	2.134	.027	.404	.687
	Widow/er	-.477	2.010	-.019	-.237	.813
	Grade 1-7	3.640	2.868	.149	1.269	.206
	Grade 8-12	1.729	2.546	.078	.679	.498
	Tertiary	-.949	3.074	-.025	-.309	.758
	Female	-.812	1.433	-.037	-.567	.572

Source: Survey data, 2013

The results for the unemployed category show that children coming from households with parents who are unemployed are less deprived ($\beta = -2.19$). This result makes Boipatong Township particularly unique since there is a positive relationship between unemployment and child deprivation. This statement disagrees with the conclusion made by Bárcena *et al.* (2014) that children living with parents that are employed are less deprived than those whose parents are unemployed or employed part time. The reason for such results may be that the family is sustained through government grants as a source of income.

The results in the regression table further shows that children coming from families where the parents are married or living together are less deprived ($\beta = -0.629$) compared to children living in households where the parents are either divorced or separated ($\beta = 0.862$). This may be because of the joint income of the married parents compared to the single source of income for divorced parents. These results contradict those of the divorced category for child poverty ($\beta = -0.118$) which means that a child may be deprived but not necessarily poor when their parent is divorced or separated. Children of divorced or separated parents may be getting financial support from both parents irrespective of them being separated.

Children living with widowed parents are more deprived according to the results of the regression. With a beta value of -0.477 the children in these households are worse off compared to children coming from families with married parents. This can be compounded by a study done by Bárcena *et al.* (2014) who argues that children from households where the parent is widowed are likely to be more deprived than children coming from families where the parents are married or living together.

Looking at the qualifications category, the results show that children coming from households with parents that are less educated tend to be more deprived. This can be seen from the results of the parents with a grade 1-7 level of education. The beta value of the independent variable is considerably high at 3.640 and that for parents with a grade 8-12 is lower at 1.729 . The parents in the second category are better off because the more educated, the less deprived the children will be. This also goes for parents with a tertiary qualification. With a beta value of -0.949 , the children can be considered to be less deprived because the parents are more educated.

The results for the gender category in this case for the female show that children from female-headed households are less likely to be deprived. These results can be considered unusual since female-headed households are considered to be more deprived than male-headed households. Klasen *et al.* (2011) argues that female-headed households do not necessarily need to be always assumed to be poor. Factors that need to be considered when determining if a female-headed household is poor are the profile of the country being surveyed, the type of female-headed household, the equivalence scale to be used and finally the considerations of economies of scale. Klasen *et al.* (2011) found that indeed not all female-headed households can be considered to be poor or deprived, their wellbeing also depends on the country that they live in and the level of welfare available to female-headed households. The children living in female-headed households in Boipatong may be least deprived probably because their needs are prioritised.

The following section discusses the results for the perceptions of the consequences of child poverty. The discussion includes descriptives in the form of cross tabulations, and a chi-square test. A series of perceptions are presented in the tables under Section 5.5 against a Likert scale varying from strongly disagree to do not know. This was done to determine the responses of the heads of the households on what they perceived to be the consequences of child poverty.

5.5 PERCEPTIONS OF THE CONSEQUENCES OF CHILD POVERTY

This section seeks to investigate the perceived consequences of child poverty among gender groups and between the poor and the non-poor. The study employs cross tabulations and chi square test for significance. The responses of the male and female respondents are cross tabulated against each other to illustrate the different responses from a gender perspective.

Table 5.7 depicts the responses of males and females as to what they perceived to be the consequences of child poverty.

Table 5.7 Cross tabulation between perceptions and gender

Perception of the consequences of child poverty		Strongly disagree (%)	Disagree (%)	Agree (%)	Strongly agree (%)	Neither agree/disagree	Do not know
Most girls who resort to prostitution come from poor families	Males	42	47.5	51.6	59.1	47.8	33.3
	Females	58	52.5	48.4	40.9	52.2	66.7
	Total	48.8	13.5	21.5	7.4	7.7	1
Children from poor families are likely to get involved in drugs compared to their well-off counterparts	Males	50	40.9	60	57.1	50.7	25
	Females	50	59.1	40	42.9	49.3	75
	Total	12.8	46.1	8.4	4.7	25.3	2.7
Children from poor families are likely to get involved in crime	Males	38.7	47.5	59.4	50	41.3	37.5
	Females	61.3	52.5	40.6	50	58.8	62.5
	Total	20.9	19.9	21.5	8.1	26.9	2.7
Children from poor families are likely to perform poorly at school compared to their well-off counterparts?	Males	36.8	41	54.7	68	43.6	57.1
	Females	63.2	59	45.3	32	56.4	42.9
	Total	12.9	28.1	21.7	8.5	26.4	2.4
Children from poor families lack ambition?	Males	51.9	35.6	50.6	44.4	44.6	66.7
	Females	48.1	64.4	49.4	55.6	55.4	33.3
	Total	17.5	19.9	28.6	9.1	21.9	3
Children from poor families are unable to socialize and are prone to social exclusion in this community	Males	38.6	40.6	55.6	46.7	49.2	31.3
	Females	61.4	59.4	44.4	53.3	50.8	68.8
	Total	14.9	21.6	27.4	10.1	20.6	5.4
Children from poor families have poor health outcomes compared to children from well-off families	Males	34.3	38.1	53.8	50.7	41.7	45.2
	Females	65.7	61.9	46.2	49.3	58.3	54.8
	Total	11.8	14.1	26.3	25.3	8.1	14.1

Source: Survey data, 2013

From the sample, 48.8% of the heads of the households strongly disagreed with the statement that “girls from poor households resort to prostitution”. Of those that strongly disagreed, 58% were females and 42% were males. This indicates that

even though both males and females disagreed, females are more likely to disagree, as the statement is gender biased. When asked if they perceived children coming from poor families to be involved in drugs, 46.1% of the respondents disagreed with the statement. Of this percentage, the majority were females at 59.1%. On the other hand, 40.9% of the males strongly agreed with the statement. However, the chi square test result with a p-value of 0.95 shows that there is no significant difference in the response of males and females.

According to a study by Griggs and Walker (2008), children from poor households have a greater likelihood of parents reporting their disobedience, such as being involved in crime, compared to their well-off counterparts. The results in this study show that from the sample, 59.4% of males and 40.6% of females agree that poor children are likely to get involved in criminal activities. From the sample, 62.3% of the females strongly disagree with the statement compared to the 38.7% of the male respondents. It is clear that more males agree than disagree, which means that they are convinced that poverty leads to criminal activities by poor children.

A total of 63.2% female heads of households strongly disagreed that children coming from poor households have poor academic performance. On the opposite extreme, 68% of the male household heads strongly agree with the statement. A p-value of 0.95 implies that there is no statistically significant difference between the male and female responses. This is an important observation, as the statement itself is strong. There may be a variety of reasons for these outcomes. Females may have responded in that manner as they feel that poor children want to improve their situation by doing well at school. Males on the other hand may feel that children lack the concentration at school due to their domestic situation and this may undermine their academic achievement.

A total of 28.6% of the heads of the households agree that children from poor households lack ambition. Based on the weight of the statement, this can be considered a large percentage of the sample. More female heads of the households (55.6%) strongly agreed with the statement compared to that of the males (44.4%). More females (61.4%) than males (38.6%) strongly disagreed that children from poor families are unable to socialise and are prone to social exclusion in the community.

This may mean that females feel that a child should not be socially withdrawn or excluded due to their poverty situation. On the other hand, a greater percentage of males (55.6%) than females (44.4%) agreed to the statement. This may be that males feel that poor children find it difficult to fit in with society due to their poverty situation. Conger *et al.* (2002) deduces that poor children have difficulties relating to and interacting with their peers. They often display disobedient behaviour, which influences their social alienation from the rest of society (Moore *et al.*, 2009).

The results from the study shows a clear split between males and females. A greater percentage (53.8%) of males agreed and 50.7% strongly agreed compared to females (46.2% and 49.3% respectively) that children from poor families have poor health outcomes compared to their well-off counterparts. When aggregated, 26.3% of the sample agreed to the statement that being in a poor family poses health hazards to a child. A study done in the USA also showed that poor children are most likely to have poor health outcomes compared to children from wealthier families (Brook-Gunn & Duncan, 1997). The results from the discussion, therefore, show that males and females have different views about the perceptions of the consequences of child poverty based on the responses they gave.

The residents of Boipatong Township also were interviewed based on their household poverty status regarding their perceptions of the consequences of child poverty in the township.

Table 5.8 illustrates the responses of the poor and non-poor households as to what are the perceived consequences of child poverty. A total of 48.7% of the poor and non-poor respondents strongly disagree that most girls from poor families resort to prostitution. Of that total, 60% were non-poor and 40% were poor. A greater percentage of non-poor (67.2%) than poor (32.8%) respondents agreed to the statement. This shows that non-poor households perceive that girls resorting to prostitution are more likely to be poor.

Table 5.8 A Cross tabulation of the perceptions and poverty status

Perception of the consequences of child Poverty		Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Neither agree/ disagree	Do not know
Most girls who resort to prostitution come from poor families	Poor	40	48.2	32.8	27.3	39.1	66.7
	Non-poor	60	51.2	67.2	72.7	60.9	33.3
	Total	48.7	13.8	21.5	7.4	7.7	1
Children from poor families are likely to get involved in drugs compared to their well-off counterparts	Poor	42.1	42.3	28	50	31.6	50
	Non-poor	57.9	57.7	72	50	68.4	50
	Total	12.8	46.6	8.4	4.7	25.5	2.7
Children from poor families are likely to get involved in crime	Poor	41.9	39	36.9	37.5	37.5	50
	Non-poor	58.1	61	63.1	62.5	62.5	50
	Total	20.8	19.8	21.8	8.1	26.8	2.7
Children from poor families are likely to perform poorly at school compared to their well-off counterparts	Poor	55.3	37.3	34.4	36	35.4	42.9
	Non-poor	44.7	62.7	65.6	64	64.6	57.1
	Total	12.8	28	21.6	8.4	26.7	2.4
Children from poor families lack ambition	Poor	46.2	40.7	34.1	40.7	36.9	33.3
	Non-poor	53.8	59.3	65.9	59.3	63.1	66.7
	Total	17.5	19.9	28.6	9.1	21.9	3
Children from poor families are unable to socialize and are prone to social exclusion in this community	Poor	36.4	49.2	32.1	36.7	34.4	56.3
	Non-poor	63.6	50.8	67.9	63.3	65.6	43.8
	Total	14.8	21.8	27.3	10.1	20.5	5.4
Children from poor families have poor health outcomes compared to children from well-off families	Poor	68.6	52.4	29.5	38.2	16.7	33.3
	Non-poor	31.4	47.6	70.5	61.8	83.3	66.7
	Total	11.7	14.1	26.2	25.5	8.1	14.1

Source: Survey data, 2013

Both poor and non-poor households strongly agree (50% concurrently) that children from poor families are likely to get involved in drugs compared to their well-off counterparts. However, 57.9% of the non-poor heads of the households strongly disagree with the statement compared to that of the poor (42.1%). A total of 46.6% of the sample disagreed with the statement. This essentially indicates that a child's poverty status does not necessarily necessitate the use of drugs.

When asked whether they perceived children from poor families are likely to get involved in crime, a total of 62.5% of non-poor households strongly agreed with the statement compared to a smaller percentage of poor (37.5%). A total of 21.8% of the sample agreed to the statement. With regards to the statement, this is a large percentage as this may also imply that non-poor households perceive that poor children may resort to crime to survive.

A larger portion of poor heads of the households at 55.3% compared to the non-poor respondents at 44.7% strongly disagreed that children from poor households have a poor academic performance compared to their well-off counterparts. On the other hand, a larger portion of the non-poor heads of the households (64%) strongly agreed with the statement compared to the non-poor heads of the households (36%). This shows that non-poor perceive poor children to have a poor academic performance due to their poverty situation. A study done by Reardon (2011) concluded that children from low-income households were more likely to have a poor academic performance as opposed to those from high-income families.

Non-poor households strongly agreed (59.3%) that children from poor households lack ambition. Only 40.7% of the poor households agreed with the statement. Non-poor households felt otherwise. A total of 27.3% of the sample agree that children from poor families are unable to socialise and are prone to social exclusion in the community. Of those who strongly agreed, 63.3% were non-poor heads of the households and 36.7% were poor heads of the households. From this observation, it can be assumed that non-poor heads of the households perceive poor children to either be socially side-lined because they are poor or because these children feel as though they do not fit in due to their poverty status.

Non-poor households strongly agreed (61.8%) when asked if they perceived children from poor families to have poor health outcomes compared to their well-off counterparts. Poor households on the opposite extreme, strongly disagreed (68.6%) with the statement. Table 5.9 shows the chi-square test results. A p-value of 0.00 shows that there is a significant difference between what the poor and non-poor respondents perceived about the health outcomes of poor children. The poor

respondents do not agree with the statement for the palpable reason that they too are poor and those children may be coming from their households.

Table 5.9 A chi square test on the health outcomes of poor children

	Value	Df	Asymp. Sig. (2 sided)
Pearson chi square	25.271	6	.000
Likelihood ratio	25.917	6	.000
Linear-by-linear association	10.572	1	.001

Source: Survey data, 2013

The results based on Table 5.9 also show that there is a statistically significant difference in the responses of the poor and the non-poor on the child's poverty status and their perceived health outcomes. The poorer a child, the greater the likelihood of them having poor health outcomes.

5.6 SUMMARY AND CONCLUSION

The main objective of the study was to investigate the determinants of child poverty in Boipatong Township. This was done through an in depth literature review on child poverty as well as through an empirical analysis of the determinants of the same. The results of the study indicate that employment status of the head of the household; the number of people living in a household, total income of a household, gender and marital status of the head of the head of the household are significant determinants of child poverty status in Boipatong Township. The results of the sum of income determinant gave evidence that the probability of a child being poor is less, the higher the sum of income in a household. A child's poverty status is thus dependent on household income since there is a significant relationship between child poverty and household income.

The results for gender of the heads of household showed that there is no significant relationship between child poverty and the gender of the head of the household. The negative coefficient representing females essentially means that the probability of a child being poor in a female-headed household is lower compared to those of male-

headed households. These results are thus unique to Boipatong and, therefore, rule out the assumption of children in female-headed households being poor.

Under marital status, the results showed that children living in households where the head of the household has never been married or is separated from a partner, has a high probability of being poor. This could be because of the loss of joint income that could have been earned if the head of household was married or living with a partner. Under employment status, the study discovered that formal employment was associated with lower levels of poverty and also that the probability of being poor was lower if one was employed formally. This may imply that policies that are aimed at dealing with poverty and child poverty in particular should consider ways of creating formal employment for people in the township. The negative relationship between age and poverty may imply that older people have limited sources of income such as old age grants or from pensions. The incidence of grandmother-headed households in townships such as Boipatong can be considered a social issue that exacerbates the poverty situation experienced by many townships as these households are vulnerable. Children from such households are generally considered poor.

Another important objective was to measure child deprivation based on the determinants of child poverty. The results reflected that there is a negative relationship between the deprivation index and income. As income increases, the size of the index grew smaller. This is an indication that children coming from a household with more income is less likely to be deprived. The results also showed that children living in households with older parents are less likely to be deprived as opposed to those living in households with younger parents. The mean age is 49 years, which shows that on average, children live with parents of this age group.

When the index was measured against the employment status, it was found that children whose parents are formally employed are less deprived compared to those involved in informal activities. Those children whose parents are employed in informal activities were found to be deprived. An interesting observation was that children from families where the parents were unemployed were found to be less deprived. This may have been because the parents have other means of obtaining

the income either from child or old age grants, hand outs from family members or other activities such as gambling. These results also suggest that child deprivation does not rely on a parent's employment status as there can be other ways of making up for the lost income.

The results for the marital status showed that married couples and those who are living together are less deprived and this is highly likely due to the combined income of both the individuals. Children living with parents who are widowed were found to be more deprived than children with both parents. The deceased parents could have been the breadwinner in the household and that income is now forfeited. The same can be said about children from households where the parents are either divorced or separated. The results showed that these children are experiencing deprivation, a clear sign that social circumstances also have a huge bearing on a child's wellbeing.

The results for the level of qualification showed that children living in households where the parents only have a primary school qualification to be more deprived than any other level of education. Children with parents that have a secondary education were also found to be more deprived compared to the children whose parents have a tertiary qualification. This result was highly expected because as theory stated children coming from households where parents are more educated are less deprived. The results on the gender depicted that children from female-headed households in Boipatong Township are not deprived. These results were not expected and, are therefore, unique to Boipatong Township. This may be that children are getting the support of their fathers as well as help from extended family members coupled by government grants.

The closing section of the chapter discussed the results for the perceptions of the consequences of child poverty at household level. Using cross tabulations and a chi square test for group difference, statements on perceived consequences were tested between gender and poverty status. It can thus be concluded that both males and females, and poor and non-poor responses show that poor children are at risk of being exposed to the consequences. The results indicate that there is a general agreement in the perceptions that poor children are likely to resort to prostitution, get involved in drugs and crime, and perform badly at school, lack ambition and struggle

to socialise due to their poverty situation. The agreement is apparent in the results from the chi-square test, which did not show a statistically significant difference. There was however a clear difference between the poor and non-poor in their perception on health outcomes. The non-poor heads of the households felt that poor children are more likely to have poor health outcomes whereas the poor heads of the households disagreed. The poor felt strongly that the health circumstances of their children do not entirely depend on their economic wellbeing.

CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Determinants of child poverty can be examined at from different viewpoints; they could be based on household characteristics or macro level characteristics. This study investigated the determinants of child poverty at a household level with specific emphasis on the characteristics of the head of the household. This chapter presents a summary and conclusion of the entire study where the problem statement, the objectives and the methodology of the study are revisited. The primary aim of the study was to investigate the determinants of child poverty in Boipatong Township. The results can be useful for other regions and countries on how they can alleviate or even stop the cycle of child poverty. The study has the following secondary aims:

- ❖ To analyse the extent of child deprivation in Boipatong Township
- ❖ To determine the perceptions of the causes and consequences of child poverty in the township
- ❖ To investigate the strategies that can be used to alleviate child poverty and child deprivation in the township.

The prevalence of child poverty was sought after thoroughly profiling the population of Boipatong Township. This was done by analysing the head of the household's marital status, education level, employment status and the total income of the household as these variables have an impact on child poverty and child deprivation in the household. The above aims have a theoretical base from which the results can be better understood.

6.2 SUMMARY OF THE THESIS

The theoretical background of the study began with a discussion on the concept of poverty to lay a foundation for subsequent discussions on child poverty and child deprivation. The history of poverty research dates back to the earliest days of the 18th and 19th century and reference was made to the likes of Rowntree (1901) with

regards to how the poor and non-poor households were classified in those days. The determinants of poverty were distinguished from household level right up to regional levels. Areas characterised by low rainfalls, geographical isolation and lack of natural resources usually are assumed poor. Communities with low infrastructural development are at risk of being poor. Various poverty measures and their effectiveness in the measurement of poverty were explored. The headcount index is still one of the most sought after poverty measures worldwide. The Sen Index makes up for some of the weaknesses of other poverty measures, particularly those of the headcount index and the poverty gap. Poverty measures go beyond the income measure alone. The discussion on the multidimensional measure of poverty was done in order to better demonstrate the importance of non-monetary factors that contribute to poverty. The multidimensional measurement of poverty is also important because poverty is not limited to insufficient financial resources alone. The child poverty phenomena can be viewed independently from poverty in general. Munujin *et al.* (2006) stress the importance of making such a distinction because the poverty experienced by children differs from that experienced by adults as children's needs differ from those of adults. Children's perceptions of poverty were discussed from a typically poor country's perspective such as Ethiopia. Ethiopian children believed that poverty is evident from a person's appearance, their dwelling and their demeanor. A poor child can be characterised by their financial background at home and how that impacts on their well-being in general. The financial background of households gives a picture of how resources are allocated in the household, especially towards the needs of the child.

The prevalence of child poverty can also be viewed from a household structure perspective such as female-headed households and child-headed households. Children living in these households are considered to be relatively deprived, especially because there is no father figure to provide for them. Such families are sustained through pension income and social grants. Children in child-headed households are by far worse off due to the absence of any adults to guide and provide for them. The determinants of child poverty can be analysed from a multidimensional point of view. Factors such as a child's age, parents' education level and employment status can contribute to multidimensional child poverty. Child

poverty has consequences, but these consequences do not necessarily hold for every poor child. The consequences of child poverty were based on theory and empirical evidence from studies such as those of Brooks-Gunn and Duncan (1997) and Ferguson *et al.* (2007).

Equivalence scales serve as a useful measure of child poverty and they are employed by assigning weights to each individual in a household depending on the composition of the household. The household size and number of children have an important bearing on the welfare of the child. A household with children is likely to incur child costs and reference can be made to the Engel and Rothbarth theories. According to Engel's theory, a household should be in a position to sustain itself before and after having a child; they should be able to attain the same level of welfare. With the Rothbarth theory, the cost of adult goods is reduced once children are born in a household since more of the household income is dedicated to child costs.

Child poverty has a relationship with child deprivation and food insecurity. Children can be deprived due to a variety of reasons such as parental unemployment, living in larger households and the lack of affection from parents. Food insecurity may be caused by poverty in the household where a child does not develop to his/her full potential because they are deprived of the necessary nutrition for optimal growth.

Micro and macroeconomic issues such as unemployment, inflation, household size, resource allocation and intergenerational poverty are some of the factors that can contribute to a child being poor.

The chapter on methodology explored the methodologies relating to data collection and the measurement of child poverty in Boipatong Township. The study adopted the adult equivalence scale as well as the OECD equivalisation of income scales where weights were assigned to all the household members. This was done in order to determine how much of the household income is assigned to all household members including the children. The study employed the logistic regression and the ordinary least squares (OLS) regression. The logistic regression was used to analyse the determinants of child poverty, which are age, gender, marital status, level of education of the head of the household, household size and the sum of

income of the household against the dependent variable, which was child poverty. The OLS regression was employed to test the determinants of child poverty and to see if they have an effect on child deprivation. The dependent variable was the child deprivation index. The child deprivation index was adapted from Barnes' (2009) list of essentials for children.

Data were collected on the head of the household characteristics and the results showed that there are more females than males in the township and it can thus be assumed that there are more children that live in female-headed households compared to male-headed households. With regards to marital status, the results showed that Boipatong Township is characterised by a large number of widowed households and this alludes to the assumption that Boipatong Township has a high prevalence of female-headed households.

With regards to the employment status it was found that the majority of the population is not economically active, *inter alia* children and the elderly. The unemployment rate was estimated at 26% and can thus be considered to be high, a reflection of South Africa's unemployment rate. South Africa's growth development plan, the National Development Plan (NDP) and its 2014-2019 Medium Term Strategic Framework (MTSF) aim to address issues of unemployment and move towards a more inclusive economy. A total of 94.7% of the non-poor heads of the households were formally employed compared to 78% of the poor heads of the households that were unemployed. These results were substantiated further by a p-value of 0.00, which proves that there is a significant relationship between unemployment and poverty. The results for gender and employment status showed that more poor males and non-poor females were involved in informal activities. These results nullify the gender distinction in that it is about the individual's inherent effort to find ways of generating income as opposed to being complacent with the unemployment situation.

The results for the level of education showed that 26.7% of the heads of the households had a grade 12 qualification while 9% had post-school qualifications. These results thus agree with the fact that Boipatong Township is characterised by low levels of skilled people, hence the high unemployment rate. Lack of funds may

be a cause of skills shortages, as people may not have funds to further their education. The National Student Financial Aid Scheme (NSFAS) aims to assist students in furthering their studies but funds are not enough to support an ever-increasing demand. The results for education level and employment status showed that the heads of the households with postgraduate qualifications had higher rates of employment compared to those with a grade 12. Most of the heads of the households were employed in the social, education and training sector while the least popular sectors were of a more skilled nature such as finance, mining, manufacturing and electrical engineering, another indication of lack of skills in Boipatong Township.

Household expenditure is dependent on income. The mean income for the sampled population in Boipatong Township was R2 806.19 and the maximum income was R23 260 per month. With regards to the expenditure on energy, the results found that the majority of households spent more on electricity, particularly the non-poor households, while the poor households spent more on cheaper energy alternatives such as paraffin and coal. The largest expenditure on food was on meat followed by bread, however, the non-poor households spent more on these compared to the poor households. Expenditure on non-food items showed that the non-poor households spent more on loan repayments, entertainment and gambling while the poor households spent more on cell phone airtime, alcohol and cigarettes.

The results for child deprivation in Boipatong Township showed that 40% of the children in the township are water insecure, 85% lacked a balanced diet, 76% lacked medical assistance and medication, and 76% lacked educational resources. At least 76% lacked school uniform while 42.9% lacked transport to school. About 24.1% did not have pocket money to take to school and 186 children did not have a computer of their own. Only 10% of the children did not have fashionable clothing items like their peers.

The findings of the study regarding the determinants of child poverty found that the probability of a child being poor is less when the level of income is high and that there is a significant relationship between income and child poverty ($p\text{-value}=0.00$). Child poverty also has a significant relationship with household size. Children in

larger households have a higher probability of being poor and this was shown by a positive coefficient and a p-value, which had a significance level of 1%. The age of the head of the household variable showed a positive coefficient and an odds ratio of 1.006 which means that children living in households with older parents have a higher probability of being poor. The gender variable showed that children living in female-headed households have a lower probability of being poor and this was shown by a negative coefficient. With regards to marital status, children living in households where the parents are married and living together were less likely to be found poor compared to children living in households where the parents have never been married or separated. With regards to employment status, children living in households where the parents are unemployed had a higher probability of being poor and this was further substantiated by a p-value of 0.00, which confirms a positive relationship exists between child poverty and unemployment. Children living in households where the parent were formally employed and involved in informal activities were found to be less likely to be poor.

Child deprivation was also measured against the determinants of child poverty through the OLS regression. The child deprivation index was weighed against the determinants and it was found that all the determinants except for household size had a negative relationship with the child deprivation index. A child living in a household where the parents were employed formally, married, had a tertiary education, was female-headed and widowed were found to be less deprived. These results were unexpected since it would have been expected that a child living in a household headed by a widow or a female to be deprived. The results also found that children living in households where the parents had a tertiary education were also less likely to be deprived. On the negative side, the larger the household the larger the size of the index, which means that children that lived in larger households were found to be more deprived.

Lastly, the study sought after the perceptions of the consequences of child poverty in Boipatong Township. The results showed that there is a consensus on the perceptions that poor children are less likely to resort to prostitution and take drugs but they are likely to do crime, perform badly in school and be withdrawn socially due to their poverty situation. There was also a general perception that poor children in

the township also lack ambition. From a poverty status point of view there was a disagreement in terms of the health outcomes of the children in Boipatong Township. Poor households disagreed with the statement that children are likely to have poor health outcomes because they are poor, while non-poor households agreed to the statement.

6.3 CONCLUSIONS

The study was based on the investigation of the determinants of child poverty in Boipatong Township. The following conclusions were drawn from the finding of the study. Household income was found to have a significant bearing on a child's poverty status. Theoretically, this would mean that a child living in a household where the parents are earning a low income is likely to be poor. Another household variable that was found to be significant was the size of the household. The significant relationship between the household size and the child poverty status further emphasised the link between household income and child poverty, especially in cases where there was only one breadwinner. This is the case as a bigger household size entails a lower per capita income *ceteris paribus*.

With regards to the head of the household characteristics, age was found to have a positive relationship with child poverty in Boipatong Township. Children living in households with older parents, therefore, were more likely to be poor. This could be attributed to the fact that the older parents could have been grandparents raising grandchildren. The gender of the head of the household was found to have a negative relationship with child poverty. Children living in male-headed households in the township were more likely to be poor compared to those living in female-headed households. The results for Boipatong Township, therefore, differ with the findings of other studies that found that children from male-headed households are better-off financially compared to female-headed households. These results are thus unique to Boipatong Township and they could be attributed to societal changes in the sense that patriarchal tendencies are disappearing and that women are becoming more independent as breadwinners of their households. This can be substantiated by the higher unemployment rate of poor male heads of the households compared to their female counterparts in the township. The poverty status of a child was also found to

be dependent on the marital status of their parents. Children living in households where the parents were never married or separated were thus poorer than those whose parents were married or living together. From the findings of the study it can thus be concluded that the characteristics (age, gender, marital status, education level and employment status) of the head of the household as well as the household characteristics (sum of income and household size) contribute to a child's poverty status.

The second aim of the study was to explore the extent of child deprivation in Boipatong Township. The following conclusions were made regarding child deprivation. Children in Boipatong Township were found to be food insecure because they lacked a balanced diet. The children were also found to be deprived of educational resources as well as school uniforms. Of those who lacked school uniforms, the majority were children from non-poor households. This gives the impression that a child may live in a non-poor household but may still be deprived of essential items. The results also indicate that some of the children lacked a computer of their own, pocket money and fashionable clothing like their peers and this may indicate that they are at risk of being excluded socially by their peers.

The third aim was to determine the perceived consequences of child poverty from the heads of the households. The results found that both poor and non-poor heads of the households did not perceive prostitution and substance abuse as consequences of poverty. They may have been of the perception that there are forces other than poverty that could lead to such behaviours. However, all the heads of the households agreed with the perception that crime is a consequence of child poverty. The perception of crime may be because most people consider poor children as lacking in certain aspects of life and may be involved in crime just to support themselves.

In contrast, there were areas where the heads of the households disagreed. First, they disagreed on the relationship between health outcomes and child poverty. The poor heads of the households felt that poverty has nothing to do with health outcomes whilst those above the poverty line were of the perception that child poverty may lead to poor health outcomes. Secondly, the heads of the households

had differing perceptions regarding social exclusion and educational outcomes as consequences of child poverty. Non-poor households perceived social exclusion and poor academic performance as consequences of child poverty, while poor households felt that social exclusion and educational outcomes do not entirely depend on one's poverty status. The perceptions of the non-poor households thus agree with the theory that poor children are likely to have poor academic outcomes and are likely to be socially excluded while the poor would not want this to be the case, as this points to them.

6.4 RECOMMENDATIONS

This section of the chapter presents recommendations emanating from the study. These recommendations are also in response to the final aim of the study, which was to investigate strategies that can be employed in the effort of alleviating child poverty and deprivation in Boipatong Township. Based on the results from the study, it was found that child poverty and deprivation are mainly a result of unemployment and low education levels of the heads of the households. The recommendations, thus are made based on the understanding that child poverty is a derived consequence of the head of the household characteristics. Child poverty cannot be addressed directly, but through its causes, hence the recommendations are towards the causes. The recommendations discussed below include the establishment of a community one-stop information centre, government-private sector collaboration, the provision of finance facilities to emerging small businesses and small scale and backyard farming.

6.4.1 The establishment of a community one-stop information centre

Lack of information on the availability of jobs, finance, education opportunities and career guidance among other things are the reasons why people do not make use of such opportunities. For the sake of providing information, it is recommended that local governments should consider establishing one-stop information centres for townships like Boipatong where the residents can have access to information that they may need pertaining to employment opportunities that may be available in the area and surrounding areas. Such a centre could also provide information pertaining

to study loan facilities, bursaries opportunities and information about courses that are available from the universities close to the area. This information can be invaluable to individuals with a grade 12 qualification, and who are interested in furthering their studies (of which 38% of those with a grade 12 qualification in the sampled population were unemployed). A further recommendation would be for the centre to make technology available to the residents in the form of computers and Internet access. Providing the technology could be expensive, therefore, residents can be charged a minimal fee in the use of the facilities. This additional service will enable the residents to apply for jobs, internships and learnership programmes. Current and prospective grade 12 learners can also make use of the Internet facilities to apply for funding to further their studies. This initiative will also enable those children who do not have computers of their own to access information that can assist in their learning and educational outcomes. Parents can also get access to information regarding school transport facilities that are available in and around the area.

An informed community can exploit available opportunities which will ultimately lead to the reduction of child poverty and deprivation.

6.4.2 Government-private sector collaboration

Linked to the lack of information is the lack of skills among the unemployed, which in turn makes it difficult for them to find employment. The study also found that there is a shortage of skills in areas such as finance, electrical engineering and mining. To deal with this shortage there is a need for collaboration between government and the private sector with the purpose of transferring skills to the residents of Boipatong Township. This can be done through in-service training. It is recommended that a community development centre needs to be established where the private sector, as part of their corporate social responsibility, could train the residents and equip them with different skills that will make them employable. This training should be at no cost to the residents. It is also recommended that government could also provide the same opportunities to the residents. Such an initiative will enhance the potential of the residents, create job opportunities and ultimately reduce child poverty with parents being in a better financial position to provide for the immediate needs of their children.

6.4.3 The provision of finance facilities to emerging small businesses

The study also found that of those who are economically active, the majority are involved in informal activities such as selling fruits and vegetables, clothes, fashion accessories, cosmetic products, household items and doing carpentry services. These informal activities could be encouraged and converted into formal small businesses through the availability of funding from finance facilities such as the Industrial Development Co-operation (IDC) and the National Empowerment Fund (NEF) who are keen on providing finance and support to businesses with profit potential. In addition, in an effort to help these informal traders to become formal entrepreneurs, skills development needs to be applied so that they are able to run their businesses effectively. The residents can also approach the Department of Small Business Development in order to get assistance in the development of their businesses, finance and skills development. Self-employment is another avenue that can be taken to reduce the plight of child poverty and deprivation.

6.4.4 Back-yard and small-scale farming

In the measurement of child poverty and child deprivation, one important component was the child food insecurity. One direct way of dealing with the deprivation is to ensure food security at household level. This can be addressed through backyard farming for household consumption. At community level, it is recommended that the residents consider starting small-scale farming. The residents should make a request to the Emfuleni Local Municipality to avail the unused land on the outskirts of the township in order for the farming. Farmers around the local municipality can be approached by the residents to assist in training the community of best practices related to small-scale farming as well as for them to act as mentors to the up-and-coming farmers. Government needs to assist by making sure that there is sufficient water supply as well as resources that are required such as farming equipment and the primary inputs. The local municipality can also make donations in this regard. For the purpose of employment and entrepreneurial development, selling the produce will provide profit to the potential co-operative and in turn income for the residents. Starting such a co-operative can deal directly with the issue of unemployment in the township, as more people will be hired with no education and skills but will gain the

skills on the job. This, in turn, will enable parents to provide for their children, coupled with ensuring that the community is food secure.

6.5 CONTRIBUTION TO THE FIELD OF STUDY

The study contributes to the body of knowledge regarding poverty; an element of the same that is often overlooked which is the determinants of child poverty particularly in a South African Township. A study of this nature has not been widely done in Sub-Saharan Africa let alone in South Africa. Such studies have been commonly conducted in more developed countries such as the US and the UK. The primary aim of the study which was to investigate the determinants of child poverty in Boipatong Township has shed light on the pertinent characteristics of a parent such as their age, gender, employment status and income and how these have an impact on a child's poverty status. This research can thus be used by government and other developing countries to make informed policy decisions relating to reducing poverty and unemployment with the ultimate objective of alleviating the scourge of poverty that is also affecting children.

6.6 LIMITATIONS OF THE STUDY

Due to ethical reasons the questionnaire was limited to the head of the household. Obtaining information from the children themselves especially with regards to their needs and wants as they would prefer would have provided an even better understanding of the struggles that the children face themselves.

6.7 AREAS FOR FURTHER RESEARCH

A study of such a nature can also be conducted in neighbouring townships in and around the Emfuleni Local Municipality in order to get a sense of the prevalence of child poverty in such areas and also for comparative purposes. A regional and national study can also be useful to policy makers locally and internationally.

Another area of child poverty that can be explored is that of the multidimensional measurement of child poverty which was briefly discussed in this thesis. The needs

of a child are not limited to the need for money alone and such a study can broaden the awareness of the plight of child poverty.

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APPENDICES CHAPTER 3

A 3.1 The calculation of the poverty lines using the equivalence scale

A	B	C	D	E	F
Row Labels	Sum of Pov_Line	Sum of Income	Social Grants	Poverty Status	Poverty Gap
1	4295	20 520	1	0	
2	3775	2 420	1	1	1355
3	4575	1 550	1	1	3025
4	3795	870	1	1	2925
5	3420	20 370	1	0	
6	4020	22 290	1	0	
7	3780	5 280	1	0	
8	4500	4 180	1	1	320
9	3750	1 870	1	1	1880
10	3315	23 000	0	0	
11	3550	2 810	1	1	740
12	3925	3 780	1	1	145
13	3640	5 010	1	0	
14	3870	10 000	0	0	
15	3675	580	1	1	3095
16	3850	870	1	1	2980
17	3220	2 820	1	1	400
18	3120	2 070	1	1	1050
19	3055	7 580	1	0	
20	3305	11 260	1	0	
21	3440	5 000	0	0	
22	3220	10 500	0	0	
23	2870	2 840	1	1	30
24	3015	4 300	0	0	
25	3465	3 780	1	0	
26	3350	12 790	1	0	
27	2995	3 100	1	0	
28	2920	13 500	0	0	
29	3290	1 550	1	1	1740
30	2885	1 550	1	1	1335
31	3545	20 620	1	0	
32	3140	1 490	1	1	1650
33	3330	1 550	1	1	1780
34	3215	1 840	1	1	1375
35	3415	23 260	1	0	
36	3510	620	1	1	2890
37	2975	2 240	1	1	735
38	2740	3 390	1	0	

39	3015	10 870	1	0	
40	2745	9 000	0	0	
41	2255	2 520	1	0	
42	2125	1 160	1	1	965
43	2395	2 850	1	0	
44	2655	4 010	1	0	
45	2740	1 840	1	1	900
46	2380	1 580	1	1	800
47	3040	500	0	1	2540
48	2510	2 810	1	0	
49	3440	3 100	1	1	340
50	2405	1 200	1	1	1205
51	2795	1 220	1	1	1575
52	2750	1 280	1	1	1470
53	2575	2 690	1	0	
54	2515	1 160	1	1	1355
55	1990	2 840	1	0	
56	2205	4 810	1	0	
57	2210	3 990	1	0	
58	2190	4 460	1	0	
59	2290	2 390	1	0	
60	2040	1 780	1	1	260
61	2140	2 690	1	0	
62	1845	870	1	1	975
63	1625	5 000	0	0	
64	2410	3 000	0	0	
65	1825	2 300	0	0	
66	2140	9 000	0	0	
67	2235	2 620	1	0	
68	2210	1 790	1	1	420
69	2270	1 830	0	1	440
70	2080	8 760	1	0	
71	2420	5 000	0	0	
72	2100	490	1	1	1610
73	1940	2 490	1	0	
74	1995	1 490	1	1	505
75	1940	1 990	1	0	
76	1995	1 490	1	1	505
77	1980	10 290	1	0	
78	2080	3 580	1	0	
79	2075	3 090	1	0	
80	1945	2 680	1	0	
81	2025	2 810	1	0	

82	3040	1 550	1	1	1490
83	2420	1 260	1	1	1160
84	2100	2 370	1	0	
85	1905	1 780	1	1	125
86	2235	290	1	1	1945
87	2040	580	1	1	1460
88	2290	1 550	1	1	740
89	2290	5 000	0	0	
90	2140	3 780	1	0	
91	2160	580	1	1	1580
92	2005	2 070	1	0	
93	2235	1 260	1	1	975
94	2170	4 580	1	0	
95	1945	4 780	1	0	
96	2075	1 190	1	1	885
97	1310	970	1	1	340
98	2420	1 550	1	1	870
99	2120	1 840	1	1	280
100	2290	3 080	1	0	
101	1945	580	1	1	1365
102	2305	2 780	1	0	
103	2270	870	1	1	1400
104	1905	580	1	1	1325
105	1825	5 500	0	0	
106	1520	590	1	1	930
107	1480	2 590	1	0	
108	1615	1 480	1	1	135
109	1520	2 900	1	0	
110	1520	1 190	1	1	330
111	1470	2 810	1	0	
112	1785	2 690	1	0	
113	1785	4 300	0	0	
114	1345	1 490	1	0	
115	1480	1 200	0	1	280
116	1295	4 000	0	0	
117	1470	1 190	1	1	280
118	1500	1 700	0	0	
119	1500	2 100	0	0	
120	1575	4 000	0	0	
121	1575	3 290	1	0	
122	1575	17 000	0	0	
123	1770	3 200	0	0	
124	1690	1 260	0	1	430

125	1655	1 490	1	1	165
126	1525	2 450	1	0	
127	1280	6 290	1	0	
128	1655	1 990	1	0	
129	1430	2 500	0	0	
130	1555	1 260	1	1	295
131	1480	590	1	1	890
132	1345	1 190	1	1	155
133	1655	3 090	1	0	
134	1770	2 200	0	0	
135	1650	1 530	1	1	120
136	1345	290	1	1	1055
137	1655	300	0	1	1355
138	1600	1 550	1	1	50
139	1465	700	0	1	765
140	1785	690	1	1	1095
141	1440	590	1	1	850
142	1635	1 400	0	1	235
143	1520	1 300	0	1	220
144	1655	690	1	1	965
145	1690	2 820	1	0	
146	1585	740	1	1	845
147	1650	590	1	1	1060
148	1555	1 360	1	1	195
149	1500	600	0	1	900
150	1785	690	1	1	1095
151	1450	1 960	1	0	
152	1520	1 990	1	0	
153	1575	10 290	1	0	
154	1350	580	1	1	770
155	1480	290	1	1	1190
156	1655	2 990	1	0	
157	1720	1 960	1	0	
158	1495	2 810	1	0	
159	1540	1 840	1	0	
160	1585	1 840	1	0	
161	1520	290	1	1	1230
162	1615	290	1	1	1325
163	1500	200	0	1	1300
164	1500	400	0	1	1100
165	1635	250	0	1	1385
166	1365	3 080	1	0	
167	1785	1 490	1	1	295

168	1575	1 490	1	1	85
169	1480	1 490	1	0	
170	1670	560	1	1	1110
171	1905	2 520	1	0	
172	1465	590	1	1	875
173	1525	1 550	1	0	
174	1430	799	1	1	631
175	1905	150	0	1	1755
176	2420	740	1	1	1680
177	1110	1 550	1	0	
178	1575	3 090	1	0	
179	1480	2 290	1	0	
180	1785	290	1	1	1495
181	1785	3 340	1	0	
182	1500	500	0	1	1000
183	1655	490	1	1	1165
184	1505	1 590	1	0	
185	1285	580	1	1	705
186	1460	580	1	1	880
187	1505	2 520	1	0	
188	1480	690	1	1	790
189	1500	1 610	1	0	
190	1540	580	1	1	960
191	1000	1 200	0	0	
192	1135	500	0	1	635
193	1055	2 520	1	0	
194	1000	4 500	0	0	
195	1135	2 400	0	0	
196	1135	2 000	0	0	
197	780	12 000	0	0	
198	1020	590	1	1	430
199	1135	2 520	0	0	
200	1135	1 200	0	0	
201	1000	490	1	1	510
202	1020	1 490	1	0	
203	1000	2 400	0	0	
204	1140	7 000	0	0	
205	1020	690	1	1	330
206	1005	2 520	1	0	
207	1135	2 300	0	0	
208	940	490	1	1	450
209	1135	12 000	0	0	
210	1135	2 000	0	0	

211	1055	2 100	0	0	
212	1150	1 490	1	0	
213	1270	2 000	0	0	
214	950	1 560	1	0	
215	950	1 860	1	0	
216	1000	1 560	1	0	
217	1270	400	0	1	870
218	1190	1 560	1	0	
219	1000	1 260	1	0	
220	1020	290	1	1	730
221	965	250	0	1	715
222	1000	1 760	1	0	
223	1075	1 550	1	0	
224	1000	400	0	1	600
225	1135	700	1	1	435
226	845	290	1	1	555
227	1000	3 160	1	0	
228	890	1 550	1	0	
229	1270	1 860	1	0	
230	845	290	1	1	555
231	1000	300	0	1	700
232	940	290	1	1	650
233	1000	600	0	1	400
234	1000	2 520	1	0	
235	845	690	1	1	155
236	915	1 820	1	0	
237	1020	300	0	1	720
238	1020	290	1	1	730
239	1270	600	0	1	670
240	1150	2 290	1	0	
241	1000	300	0	1	700
242	1135	7 000	0	0	
243	1270	-	0	1	1270
244	1135	400	0	1	735
245	1135	3 000	0	0	
246	1190	1 260	1	0	
247	1135	3 000	0	0	
248	940	290	1	1	650
249	1270	500	0	1	770
250	595	1 550	1	0	
251	1135	1 900	0	0	
252	1150	290	1	1	860
253	940	790	1	1	150

254	635	5 000	0	0	
255	635	6 500	0	0	
256	635	5 000	0	0	
257	500	1 200	0	0	
258	500	2 700	0	0	
259	450	1 260	1	0	
260	500	300	0	1	200
261	555	1 200	1	0	
262	555	1 200	1	0	
263	450	1 260	1	0	
264	635	8 000	0	0	
265	635	-	0	1	635
266	635	3 000	0	0	
267	500	5 000	0	0	
268	450	1 200	1	0	
269	635	1 200	1	0	
270	555	200	0	1	355
271	635	300	0	1	335
272	635	400	0	1	235
273	635	3 500	0	0	
274	500	5 000	0	0	
275	635	7 000	0	0	
276	555	1 260	1	0	
277	500	300	0	1	200
278	635	4 000	0	0	
279	500	2 500	0	0	
280	555	1 260	1	0	
281	635	1 250	0	0	
282	635	1 000	0	0	
283	500	2 000	0	0	
284	555	1 260	1	0	
285	555	1 260	1	0	
286	500	2 200	0	0	
287	500	1 260	1	0	
288	635	3 500	0	0	
289	635	200	0	1	435
290	500	3 500	0	0	
291	635	500	0	1	135
292	555	1 260	1	0	
293	500	2 500	0	0	
294	500	1 000	0	0	
295	635	7 000	0	0	
296	500	4 000	0	0	

297	500	1 000	0	0	
298	635	2 000	0	0	
299	500	1 500	0	0	
300	500	600	0	0	

Source: Survey data, 2013

APPENDICES CHAPTER 4

A.4.1 Saving of the household and poverty status cross tabulation

			Household poverty status		Total
			Non poor Household	Poor Household	
Saving the of the household	R0-50	Count	15	15	30
		% within Saving of household	50.0%	50.0%	100.0%
		% within Household poverty status	15.0%	38.5%	21.6%
	R51-100	Count	48	22	70
		% within Saving of household	68.6%	31.4%	100.0%
		% within Household poverty status	48.0%	56.4%	50.4%
	R101-R250	Count	17	1	18
		% within Saving of household	94.4%	5.6%	100.0%
		% within Household poverty status	17.0%	2.6%	12.9%
	R251-R500	Count	14	1	15
		% within Saving of household	93.3%	6.7%	100.0%
		% within Household poverty status	14.0%	2.6%	10.8%
	R501 to highest	Count	6	0	6
		% within Saving of household	100.0%	0.0%	100.0%
		% within Household poverty status	6.0%	0.0%	4.3%

Source: Survey data, 2013

A4.1.1 Chi-square tests on savings

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.805 ^a	4	.001
Likelihood Ratio	21.183	4	.000
Linear-by-Linear Association	15.735	1	.000
N of Valid Cases	139		

Source: Survey data, 2013

A.4.2 Expenditure on loan repayment household poverty status cross tabulation

			Household poverty status		Total
			Non poor Household	Poor Household	
Loan repayment	R51-R100	Count	2	0	2
		% within Loan repayment	100.0%	0.0%	100.0%
		% within Household poverty status	4.0%	0.0%	3.8%
	R101-250	Count	20	2	22
		% within Loan repayment	90.9%	9.1%	100.0%
		% within Household poverty status	40.0%	100.0%	42.3%
	R251-R500	Count	18	0	18
		% within Loan repayment	100.0%	0.0%	100.0%
		% within Household poverty status	36.0%	0.0%	34.6%
	R501 to highest	Count	10	0	10
		% within Loan repayment	100.0%	0.0%	100.0%
		% within Household poverty status	20.0%	0.0%	19.2%
Total		Count	50	2	52
		% within Loan repayment	96.2%	3.8%	100.0%
		% within Household poverty status	100.0%	100.0%	100.0%

Source: Survey data, 2013

A.4.3 Expenditure on medical expenses and household poverty status cross tabulation

			Household poverty status		Total
			Non poor Household	Poor Household	
Medical expenses	R0-R50	Count	38	35	73
		% within Medical expenses	52.1%	47.9%	100.0%
		% within Household poverty status	29.5%	58.3%	38.6%
	R51-R100	Count	30	20	50
		% within Medical expenses	60.0%	40.0%	100.0%
		% within Household poverty status	23.3%	33.3%	26.5%
	R101-R250	Count	38	4	42
		% within Medical expenses	90.5%	9.5%	100.0%
		% within Household poverty status	29.5%	6.7%	22.2%
	R251-R500	Count	19	0	19
		% within Medical expenses	100.0%	0.0%	100.0%
		% within Household poverty status	14.7%	0.0%	10.1%
	R501 to highest	Count	4	1	5
		% within Medical expenses	80.0%	20.0%	100.0%
		% within Household poverty status	3.1%	1.7%	2.6%
Total		Count	129	60	189
		% within Medical expenses	68.3%	31.7%	100.0%
		% within Household poverty status	100.0%	100.0%	100.0%

Source: Survey data, 2013

A.4.3.1 Chi-square tests for medical expenses

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.141 ^a	4	.000
Likelihood Ratio	36.429	4	.000
Linear-by-Linear Association	24.068	1	.000
N of Valid Cases	189		

Source: Survey data, 2013

A.4.4 Expenditure on cellphone airtime and poverty status cross tabulation

			Household poverty status		Total
			Non poor Household	Poor Household	
Cellphone	R0-R50	Count	85	66	151
		% within cellphone	56.3%	43.7%	100.0%
		% within Household poverty status	50.0%	74.2%	58.3%
	R51-R100	Count	38	20	58
		% within cellphone	65.5%	34.5%	100.0%
		% within Household poverty status	22.4%	22.5%	22.4%
	R101-R250	Count	21	3	24
		% within cellphone	87.5%	12.5%	100.0%
		% within Household poverty status	12.4%	3.4%	9.3%
	R251-R500	Count	19	0	19
		% within cellphone	100.0%	0.0%	100.0%
		% within Household poverty status	11.2%	0.0%	7.3%
	R501 to highest	Count	7	0	7
		% within ex cellphone	100.0%	0.0%	100.0%
		% within Household poverty status	4.1%	0.0%	2.7%

Source: Survey data, 2013

A.4.4.1 Chi-square tests for cellphone airtime

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.546 ^a	4	.000
Likelihood Ratio	33.544	4	.000
Linear-by-Linear Association	23.426	1	.000
N of Valid Cases	259		

Source: Survey data, 2013

A.4.5 Expenditure on entertainment and household poverty status cross tabulation

			Household poverty status		Total
			Non poor Household	Poor Household	
Entertainment	R0-R50	Count	25	17	42
		% within Entertainment	59.5%	40.5%	100.0%
		% within Household poverty status	32.5%	65.4%	40.8%
	R51-R100	Count	16	8	24
		% within Entertainment	66.7%	33.3%	100.0%
		% within Household poverty status	20.8%	30.8%	23.3%
	R101-R250	Count	15	1	16
		% within Entertainment	93.8%	6.3%	100.0%
		% within Household poverty status	19.5%	3.8%	15.5%
	R251-R500	Count	15	0	15
		% within Entertainment	100.0%	0.0%	100.0%
		% within Household poverty status	19.5%	0.0%	14.6%
	R501 to highest	Count	6	0	6
		% within Entertainment	100.0%	0.0%	100.0%
		% within Household poverty status	7.8%	0.0%	5.8%

Total	Count	77	26	103
	% within Entertainment	74.8%	25.2%	100.0%
	% within Household poverty status	100.0%	100.0%	100.0%

Source: Survey data, 2013

A4.5.1 Chi square test for entertainment

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.147 ^a	4	.003
Likelihood Ratio	21.662	4	.000
Linear-by-Linear Association	14.572	1	.000
N of Valid Cases	103		

Source: Survey data, 2013

A.4.6 Expenditure on alcohol and household poverty status cross tabulation

			Household poverty status		Total
			Non poor Household	Poor Household	
Expenditure on Alcohol	R0-R50	Count	17	21	38
		% within Expenditure on Alcohol	44.7%	55.3%	100.0%
		% within Household poverty status	12.4%	31.8%	18.7%
	R51-R100	Count	66	40	106
		% within Expenditure on Alcohol	62.3%	37.7%	100.0%
		% within Household poverty status	48.2%	60.6%	52.2%
	R101-R250	Count	27	5	32
		% within Expenditure on Alcohol	84.4%	15.6%	100.0%
		% within Household poverty status	19.7%	7.6%	15.8%
	R251-500	Count	13	0	13
		% within Expenditure on Alcohol	100.0%	0.0%	100.0%
		% within Household poverty status	9.5%	0.0%	6.4%
	R501 to highest	Count	14	0	14
		% within Expenditure on Alcohol	100.0%	0.0%	100.0%
		% within Household poverty status	10.2%	0.0%	6.9%

Source: Survey data, 2013

A.4.6.1 Chi square test on alcohol expenditure

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.449 ^a	4	.000
Likelihood Ratio	35.553	4	.000
Linear-by-Linear Association	25.884	1	.000
N of Valid Cases	203		

Source: Survey data, 2013

HOUSEHOLD QUESTIONNAIRE AUGUST 2013

NB: The information in this questionnaire will be treated confidentially

Questionnaire #		Date	
House Number		Interviewer	

Please note that the Head of the household should preferably answer the questionnaire

A BACKGROUND INFORMATION											
1	What is the position of the respondent in the Household?						Head (1)	Spouse (2)	Child (3)	Extended family member (4)	Boarder (5)
2	Gender of the head of the household						Male (0)			Female (1)	
3	How many housing units are on the site										
4	Record one main material used for the roof and walls of the dwelling										
	1	Bricks	2	Cement / concrete	3	Corrugated iron / zinc	4	Wood	5	Plastic	
	6	Cardboard	7	Tile	8	Mud	9	Thatching	10	Asbestos	
5	How many people stay permanently on the site										
4	What language do you mostly speak at home?										
	1	Sesotho	2	IsiZulu	3	Sepedi	4	Tshivenda	5	IsiNdebele	
	6	English	7	IsiXhosa	8	Siswati	9	Afrikaans	Other:		
7	How long have you (respondent) stayed in the Boipatong (years)										

B HOUSEHOLD COMPOSITION											
<i>Please provide the following information about your households</i>											
1	Number of people in the household										
2	Composition of members (Code list 2)										
3	Age of each member in years										
4	Sex (Male = 0; female = 1)										
5	Marital Status (code list 5)										
6	Highest qualifications (still at school) (Code list 6)										
7	Qualifications (not at school) (Code list 7)										
8	Employment Status (Code list 8)										
9	Sector of employment (Code list 9)										
10	(10 – 13 for <u>unemployed</u> only) Skills of unemployed (list 10)										
11	Duration of unemployment in years										
12	What is the Unemployed doing presently										
	INCOME (Take home pay per month)										
13	Wages/salaries (Formal)										
14	Old Age Pension										
15	Child Grant from Government										
16	Other Grants from Government										
17	Help (family/relatives/help in kind)										
18	Informal activities										
20	Other (Specify)										

C	HOUSEHOLD EXPENDITURE				
How does your household spend their income per month?					
	ITEM	Weight per week	Weight per month	Rands per week	Rands per month
1	Housing				
2	Water				
3	Energy				
	Electricity				
	Coal				
	Paraffin				
	Other				
4	Food				
	Maize				
	Bread				
	Meat				
	Vegetables				
	Cooking Oil				
	Tea / Coffee				
	Milk				
	Rice				
	<u>Other food Items</u>				
5	Cleaning Material				
	Washing powder				
	Other				
6	Cigarettes & Tobacco				
7	Beer, wine & spirits				
8	Transport				
	Taxi				
	Car				
	Other				
9	Clothing				
10	Furniture				
11	School				
	Daycare fees				
	School related				
	Other				
12	Entertainment (Movies etc)				
13	Medical Expenses				
14	Insurance e.g. funeral scheme				
15	Gambling				
	Lotto / Horseracing				
	Cards / Mshaina				
	Other				
16	Savings				
17	Licenses (e.g. TV, Vehicle)				
18	Housekeeping Services (e.g. Garden)				
19	Communication				
	Telephone				
	Cellphone				

20	Car Repayment				
21	Loan repayments				
22	Other: Specify				

E	CHILD POVERTY PERCEPTIONS: children are poor because [probe for strength of opinion]						
		Strongly Agree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Don't know
1	Their parents lack the ability to manage money.						
2	Their parents waste their money on inappropriate items.						
3	Their parents do not actively seek to improve their lives.						
4	Their parents are exploited by rich people.						
5	The society lacks social justice.						
6	Distribution of wealth in the society is uneven.						
7	Their parents lack opportunities due to the fact that they live in poor families.						
8	They live in places where there are not many opportunities.						
9	They have bad fate. (like father died or mother died or both parents died)						
10	They lack luck.						
11	They have encountered misfortunes.						
12	Their parents are not motivated because of welfare						
13	They are born inferior						
F	PERCEPTIONS OF THE CONSEQUENCES OF CHILD POVERTY						
		Strongly Agree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Don't know
1	Would you say that most girls who resort to prostitution come from poor families?						
2	Would you say that children from poor families are likely to get involved in drugs compared to their well off counterparts?						
3	Would you say that children from poor families are likely to get involved in criminal activities compared to their well off						
4	Would you say that children from poor families are likely to perform poorly at school compared to their well off						
5	Would you say that children from poor families lack ambition?						
6	Would you say that children from poor families are unable to socialize and are prone to/susceptible to social exclusion in this						
7	Would you say that children from poor families have poor health outcomes compared to children from well off						

G	CHILD DEPRIVATION INDEX					
	Does your child lack the following:	Never	Just once or twice	Several times	Many times	Always
1	Enough clean water?					
2	Medicines or medical treatment?					
3	Electricity for studying					
4	A balanced diet					
5	Clothing like their peers					
6	Cell phone					
7	School uniform					
8	Educational resources					
9	Pocket money					
10	Lunch box					
11	Toys					
12	Computer of their own					

