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UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL HUMAN AND MATHEMATICAL SCIENCES

Southampton Education School

**Developing a multi-dimensional well-being framework for Higher Education:
evidence from South Africa**

by

Faslie Miller

Thesis for the degree of Doctor of Philosophy

March 2018

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SOCIAL HUMAN AND MATHEMATICAL SCIENCES

Southampton Education School

Doctor of Philosophy

DEVELOPING A MULTI-DIMENSIONAL WELL-BEING FRAMEWORK FOR HIGHER EDUCATION: EVIDENCE FROM SOUTH AFRICA

Faslie Miller

Apartheid in South Africa ended over 20 years ago, yet poverty and access to and participation in higher education remain challenges for most South Africans. The 2012 General Household Survey shows less than 4.3% of individuals aged 18 – 29 were enrolled in higher educational institutions, indicating limited access to higher education for most and suggesting few South Africans have opportunities to improve their well-being. Multidimensional poverty, which defines poverty beyond income or consumption by including several non-monetary dimensions of poverty, is adopted in this study and is based on Amartya Sen's Capability Approach. Using a list of four dimensions, each with various indicators, this study measured the overall well-being of respondents by using a multidimensional deprivation scale. This study adopted a mixed method sequential explanatory approach. First, an online survey was administered. Data were collected from 427 participants. Descriptive and inferential statistics were used to analyse the quantitative data. Second, semi-structured interviews were undertaken with 30 participants. The qualitative data were analysed using a thematic analysis approach to deepen understanding. In both phases, the participants had graduated from one of the seven universities located in the three poorest provinces of South Africa. The findings show that higher educational attainment impacts employment opportunities and health awareness, but has a low impact on living standards and social justice. Findings show that only 16% of the participants are multidimensionally deprived in at least 36% of the weighted indicators, while none of them are vulnerable to poverty or in severe poverty. Respondents are generally satisfied with their living standards; their socio-economic status increased, and their education enabled them to acquire new capabilities and opportunities. Higher educational attainment impacted respondents' well-being positively in most dimensions and marginally in the dimension of social justice. The study adds to the body of knowledge on multidimensional poverty and the impact HEA has on it, specifically in relation to South Africa.

Key words: multidimensional poverty, South Africa, higher educational attainment, capability approach.

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DECLARATION OF AUTHORSHIP

I, Mogamat Faslie Miller, declare that the thesis entitled:

DEVELOPING A MULTI-DIMENSIONAL WELL-BEING FRAMEWORK FOR HIGHER EDUCATION: EVIDENCE FROM SOUTH AFRICA

and the work presented in it are my own and have been generated by me as the result of my own original research.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this university;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this university or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission.

Signed:

Date: 22 April 2018

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Definitions and Abbreviations

ANC	African National Congress
BEE	Black Economic Empowerment
CA	capability approach
EU	European Union
FEG	Further Education Certificate
FET	Further Education Training College
FGT	Foster-Greer-Thorbecke poverty measure
HCT	Human Capital Theory
HBIs	historically black institutions
HSRC	Human Sciences Research Council
HWIs	historically white institutions
GDP	gross domestic product
GNI	gross national income
HDI	Human Development Index
HE	higher education
HEA	higher educational attainment
HEI	higher education institution
HEQF	higher education qualifications framework
HIV	human immunodeficiency virus
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
MDGs	Millennium Development Goals

MMR	mixed methods research
MPI	Multidimensional poverty index
NP	National Party
NQF	National Qualifications Framework
OECD	Organization for Economic Co-operation and Development
OPHI	Oxford Poverty and Human Development Initiative
SA	South Africa
SES	socioeconomic status
SETA	Skills Education Training Authorities
SSA	Sub-Saharan Africa
StatsSA	Statistics South Africa
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNISA	University of South Africa
USA	United States of America
WEP	World Employment Programme

Chapter 1: Introduction

1.1 Research objectives and research questions

I begin this chapter by stating the thesis objective, main research question and its three sub-questions. The main aim of this study is to explore how higher educational attainment (HEA) contributes to – if at all – multidimensional well-being of individuals in South Africa (SA). To achieve this objective, the main research question which guided this research is as follows: What are the multidimensional poverty characteristics of individuals with HEA in SA, if they are multidimensionally poor? In addition, the following sub-questions were used to fully explore all the dimensions of the main research question: (i) What is the socio-economic status of those who obtained a university undergraduate degree? (ii) What is the economic well-being of those who obtained a university undergraduate degree? (iii) Do university graduates experience a reasonable level of social justice in terms of security and opportunities?

This study investigates to what extent higher educational attainment impacts multidimensional poverty in SA, which is one of the world's most unequal societies in terms of income and standard of living (Lilenstein, Woolard, & Leibbrandt, 2016). In recent years, there has been an increasing interest in both HEA as an anti-poverty measure as well as multidimensional poverty as a main-stream poverty measure globally. Although a considerable amount of literature has been published on multidimensional poverty and the impact education has on it in the past 30 years, empirical studies examining the causal link between HEA and multidimensional poverty are limited (Tilak, 2002). Unfortunately, of the limited number of empirical studies focusing on education and poverty, only a few looks at poverty from a multidimensional perspective and education is mainly looked at from either the primary or secondary levels. For example, Niazi & Khan (2012) investigated the impact of education on multidimensional poverty by correlating the achievement or lack of education with the incidence of multidimensional poverty at the household level in a specific region in Pakistan. Their study concluded that education plays a key role in reducing poverty in the Punjab region of Pakistan. In a different study, Ezebuilo & Emmanuel (2014) examined the impact higher education has on income poverty among youths in Nigeria by using data from the Living Standards Household Survey. Their study concluded that higher education has a statistically significant impact in some regions of Nigeria, but not in others. Another study by

Njong (2010) concluded that all levels of educational attainment impacts income poverty in Cameroon. However, the study also concluded that the effect of education on reducing poverty is more prominent in males than in females. These are a few example empirical studies indicating that although the link between education and poverty is being investigated in several countries, rarely is the link between higher education and multidimensional poverty investigated at the individual level. In fact, I have found no empirical study in the literature which investigates the impact of higher education on multidimensional poverty at the household or individual level. Returning to the discussion on SA, access and widening participation of previously disadvantaged communities in higher education (HE) is a priority of SA's National Development Plan (NDP), which aims to eradicate poverty and inequality by 2030 (GovernmentSA, 2010). Therefore, the aim of the present study is to develop a more rigorous understanding regarding the effects of HEA on reducing multidimensional poverty in SA. This will be discussed in this thesis.

In the next section I outline some background information of SA as a way of introducing the research study, and to help the reader build a contextual understanding of HE and multidimensional poverty in SA.

1.2 Background information

SA, the 25th largest country in the world, is the southernmost country on the African continent. It shares borders with Botswana, Namibia and Zimbabwe in the north; Mozambique and Swaziland in the northeast; the Atlantic ocean in the west and southwest; and the Indian ocean in the east and southeast. Lesotho is completely surrounded by SA (see fig. 1-1). SA has a population of 54.9 million, of which 80.6% is African, 8.7% coloured, 2.6% Asian/Indian and 8.2% white (StatsSA, 2015b). These four racial groupings were used by the then government during the apartheid era to group the nation into different racial groupings and these terms are still used for statistical purposes in post-apartheid SA. I define them in section 1.2.1 below. As shown in figure 1-2, SA consists of nine provinces, each with varying poverty headcount rates and incidences of poverty (StatsSA, 2016a). The poverty headcount rate is based on the South African Multidimensional Poverty Index (SAMPI). The latter is constructed using eleven indicators across four dimensions, namely health, education, living standards and economic

activity. The poverty headcount shows the proportion of households that are considered to be "multidimensional poor" in each province. The intensity of poverty is the average proportion of indicators in which multidimensional poor households are deprived (StatsSA, 2016a). The Eastern Cape, Limpopo and North-West provinces have the highest poverty rates at 12.7%, 11.5% and 8.8%, respectively. The intensity of poverty is over 40% for all the provinces.

Figure 1-1: Geographical location of South Africa

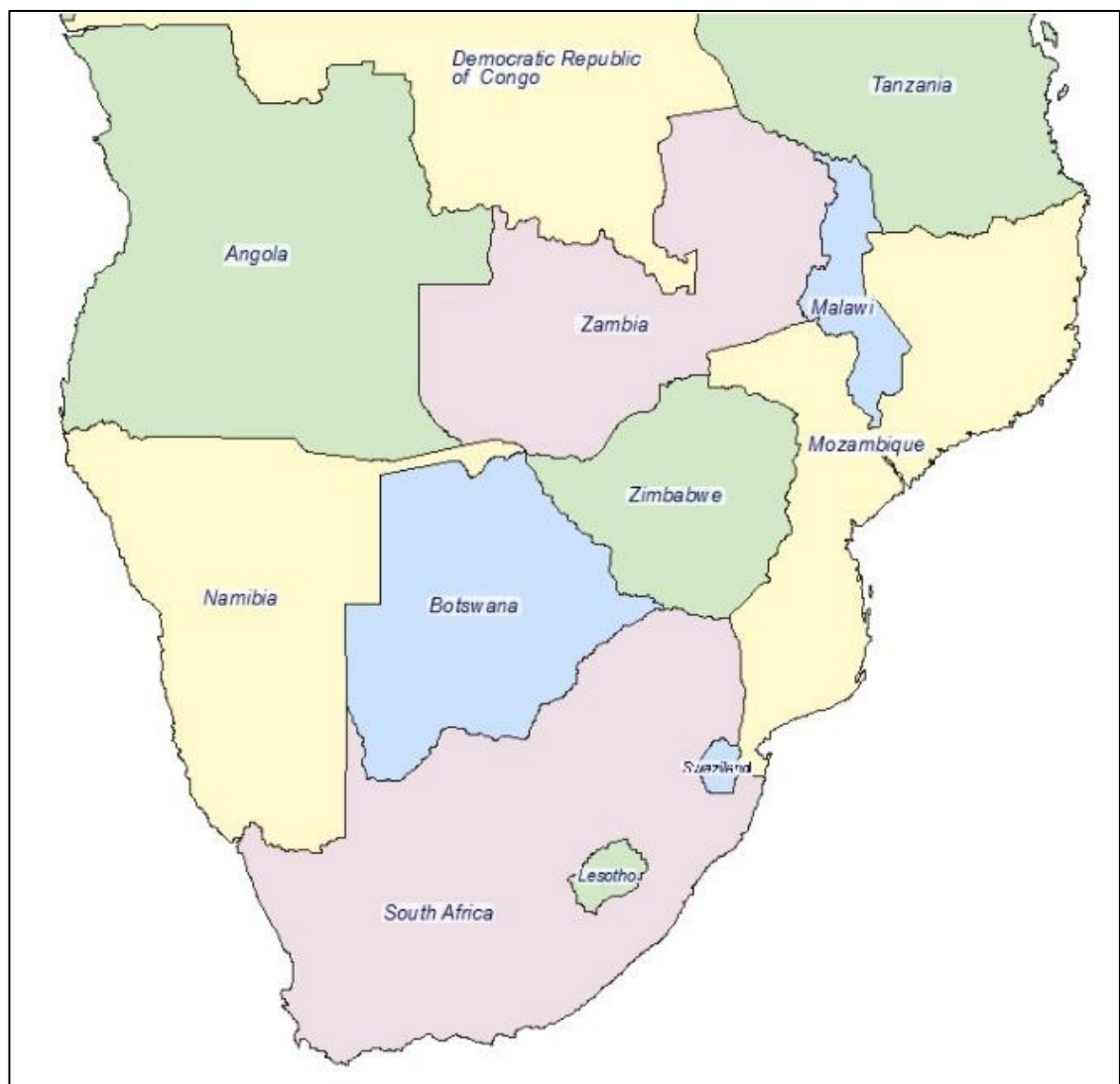


Figure 1-2: Provinces with poverty rates of SA

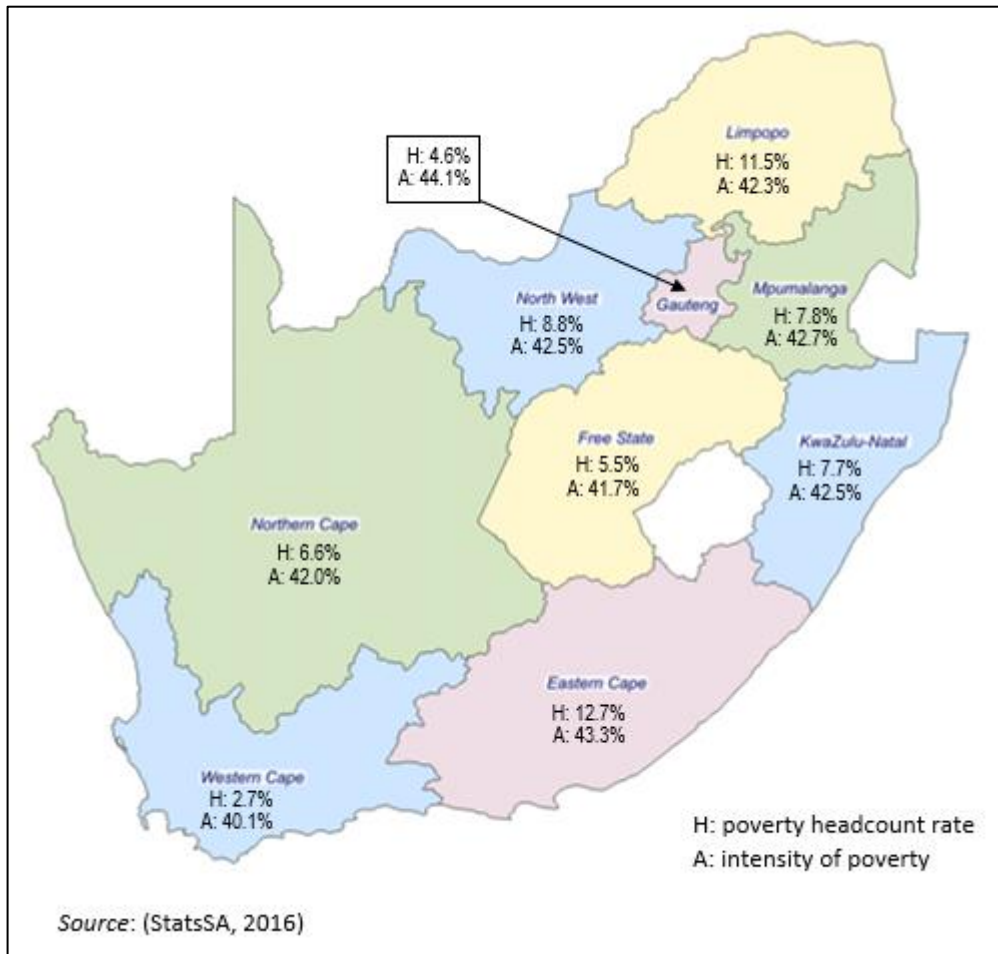


Table 1-1: Key selected statistics of South Africa

Demographics		
Population	54.9 million	
	Male	51.3%
	Female	48.7%
Economy		
GDP		2.2%
Unemployment rate		25%
Poverty & inequality		
Poverty headcount		56.8%
Poverty gap		27.9%
Gini coefficient		70%
HEA rates of the employed (by population group)		
	Black African	5.3%
	Coloured	4.8%
	Indian/Asian	22.7%
	White	26.9%

Source: (StatsSA, 2015b)

According to the latest census statistics (StatsSA, 2015b), SA has a population of over 50 million with more than 50% living in poverty, 25% unemployed and its Gini coefficient is 70 (see table 1-1). The Gini coefficient is a commonly used measure of inequality, where 0 represents perfect equality and 1 represents perfect inequality. It is also often expressed as percentages from 0% (perfect equality) to 100% (perfect inequality).

SA has a unique political past and a brief knowledge of it is essential in grasping the subject of education, poverty and inequality in SA. The next sub-section discusses this.

1.2.1 South Africa: from apartheid to post-apartheid

From 1948 to 1994, SA was governed by the National Party (NP) which employed a systematic set of racially discriminating policies - called Apartheid (separateness) - designed to segregate the nation based on skin colour (UNESCO, 1967). The white minority (11.3%) (Khalfani & Zuberi, 2001) subjected the majority non-white population to racially motivated laws designed to keep Black Africans, coloureds and Indians impoverished, uneducated, poor and excluded from all mainstream socio-economic and political institutions (Fiske & Ladd, 2004). The NP's 1947 election manifesto outlined the apartheid ideology as follows (UNESCO, 1967, p. 14):

In general terms our policy envisages segregating the most important ethnic groups and sub-groups in their own areas where every group will be enabled to develop into a self-sufficient unit. We endorse the general principles of territorial segregation of the Bantu and the Whites ... the Bantu in the urban areas should be regarded as migratory citizens not entitled to political or social rights equal to those of the Whites.

The population Registration Act of 1950 mandated all new-born South Africans to be registered according to one of four racial groups: (i) Asian, (ii) black, (iii) coloured and (iv) white. 'Asians' referred to those from an indigenous Asian background, while 'black' referred to individuals of an indigenous African background. Similarly, 'white' refers to individuals of an indigenous European background, while 'coloured' referred to individuals with a mixed race background (O'Malley, 1980). From the above discussion, we can see that apartheid was designed to deliberately exclude the majority of South Africans from the freedom and a standard of living equal to the minority white population of the country. This deliberate racial segregation was also implemented in the country's education system. Formal education under the apartheid system was developed along racial lines. The *Bantu Education Act of 1953* ensured that black children received 'gutter education' (an informal term used to define segregated education for Black Africans, coloureds and Indians under Apartheid) and remained sufficiently educated to be employed as domestic workers, factory workers and any other form of lowly-paid demeaning jobs. In 1975, the then South African government spent 15 times more on the average white student than on the average black student (Thomas, 1996). Similarly, exclusion to HE was built into the apartheid system and several legislative acts were passed to ensure Black Africans, coloureds and Indians received inferior education than white students. For example, the Extension of University Education Act of 1959 prohibited black Africans from attending English universities and at the same time, established a new system of

black higher educational institutions (Fiske, 2004). For example, Fort Hare University was for black students, the University of the Western Cape was for coloured students and the University of Durban-Westville was for Indian students. Alongside universities, the government also established several 'technikons' or technical colleges, (seven for white students and seven for non-white students) with the main function of providing vocational training programmes (Fiske & Ladd, 2004). Again the number of technical colleges established highlights the inherent discrimination in the education system. At the time, the white population stood at 1 million, while the non-white population was about 40 million. Yet, 7 technical colleges were set-up for whites, while Black Africans, coloureds and Indians had to be content with just 7 colleges. This system created a natural process of exclusion for the majority of Black Africans, coloureds and Indians and many were denied access to higher education institutions (HEIs). On the other hand, whites received superior education which meant whites automatically received access to high-income jobs (Fiske & Ladd, 2004). The apartheid system deliberately created social and income inequality which is still prevalent in SA today (May, 1998). Also, through the availability of limited HEIs, the then-apartheid government deliberately created a social engineering mechanism to keep Black Africans, coloureds and Indians uneducated and excluded from professional jobs by offering Black Africans, coloureds and Indians inferior standards of education at school and through separate universities for each racial group. The consequence of this was massive inequality in employment, educational attainment, income and access to education (Ali, 2003). The Bantu Education Act effectively denied people of colour access to equal educational opportunities like their fellow white citizens. Moreover, this formal exclusion of people of colour from mainstream educational institutions denied the majority of people access to fundamental capabilities and real opportunities to live the life they desired, to use Sen's words. Consequently, this led to the creation of two separate and unequal societies and economies within one country where there was no place for Black Africans, coloureds and Indians within the mainstream South African society (Hartshorne, 1992).

Apart from education, the NP also enacted other similar acts such as the Bantu Labour Act of 1953, the Wage Act of 1955 and the Industrial Council Act of 1956, which promoted an apartheid labour market in which Black Africans, coloureds and Indians were prevented from reaching their full socioeconomic potential. Through these legislative acts they were restricted in the types of jobs they were to do, where they could work, how much they could earn and in their access to the industrial relations system which ensured fair treatment and justice for the

workforce (Van der Berg & Bhorat, 1999). These discriminatory education and labour acts resulted in a large pool of uneducated, unskilled and unemployable Black Africans, coloureds and Indians (May, 1998). For example, between 1976 and 1990, the percentage of South Africans not employed in formal sector jobs increased by 32% and by 1994, the year when apartheid ended, about 50% of the country's economically active population was unable to find meaningful employment in the formal sector (Van der Berg & Bhorat, 1999). As a result, democratic SA is now struggling to redress the legacies of poverty, inequality and uneducated adults inherited from the apartheid-era. There is a large volume of published studies describing how incidences of unemployment and a generally unskilled and uneducated labour force lead to increased incidences of poverty and general social deprivation and exclusion (see for example Gallie, Paugam, & Jacobs, 2003). So, in April 1994, when apartheid ended, absolute poverty, inequalities and unemployment were deeply entrenched in almost 50% of the South African society. Here, I use the term inequalities, as opposed to inequality because due to apartheid, a large percentage of Black Africans, coloureds and Indians were unequal to whites in terms of educational attainment levels, wealth, property ownership, the proportion of Black Africans, coloureds and Indians holding managerial and professional jobs, living standards and access to opportunities for self-development. A study conducted by May (1998) on poverty and inequality, commissioned by the South African government, soon after apartheid ended, showed alarming inequalities in poverty rates and educational attainment rates between the country's four main population groups (see table 1-2). According to the findings of the study, whites experienced almost no incidence of poverty, while all the other population groups, notably Black Africans and coloureds, experienced high levels of poverty. Moreover, almost 70% of those with no education were poor and over half of those with primary education were also poor. As table 1-2 shows, there is a significant difference between incidences of poverty between whites and Black Africans, coloureds and Indians. Secondly, it is apparent from this table that poverty is concentrated amongst Black Africans, while the poor has very little or almost no post-secondary schooling education. Thirdly, unemployment was concentrated in over half of poor households.

Given the above discussion, and with reference to table 1-2 and considering the various discriminatory policies enacted by the apartheid government, as mentioned above, I think it is not inaccurate to conclude that the concentration of poverty, unemployment and low-levels of educational attainment is largely amongst Black Africans, coloureds and Indians. These levels of poverty and inequality are still prevalent in post-apartheid SA and are mainly concentrated

amongst Black Africans, as is evident from the poverty rates given in table 1-2. The provinces with the highest incidences of poverty are also where the majority of Black Africans reside.

Table 1-2: Poverty, educational attainment and unemployment rates of the poor just after apartheid

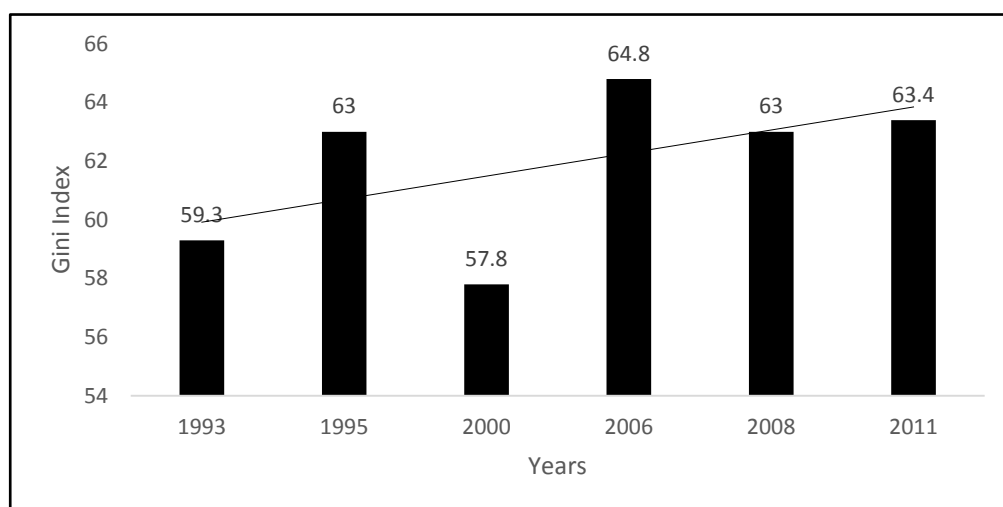
	Black African	Coloured	Indian/Asian	Whites
Poverty rate	60.7%	38.2%	5.4%	1%
Educational attainment levels of the poor				
Tertiary	2.5%			
Secondary	23.7%			
Primary	54.2%			
No education	69.1%			
Unemployment rates				
Poor households	55%			
Non-poor households	14%			

Source: (May, 1998)

However, since 1995, a rich body of literature on poverty in SA is slowly emerging as researchers are grappling to understand the enormous scale and depth of poverty and inequality in the country (see for example Van Der Berg, Burger, Burger, Louw, & Yu, 2005; Leibbrandt, Woolard, McEwen, & Koep, 2010; May, 2010; Woolard & Leibbrandt, 1999). Since, 1993 SA's inequality has worsened as is evident from the Gini index¹ (see figure 1-3), which was 59.3% in 1993 but in 2011 it was 63.4% (World Bank, 2016). Looking at the trend line in the graph, SA's Gini index steadily increased over the period in question, which means that inequality has deteriorated consistently. Although incidences of poverty have declined in SA, inequality has increased to the level where it is one of the highest in the world (StatsSA, 2014b). Inequality generally refers to variations in the living standards across a country's entire population. For the purpose of this research, (economic) equality refers to the fundamental differences present in a society which allows certain individuals to obtain material choices, while denying others the very same material choices (Ray, 2007).

¹Gini index is a statistical measure of inequality among the population of a country. An index of 0 implies perfect equality while an index of 1 (or often expressed as 100%) implies perfect inequality.

Figure 1-3: Gini index for South Africa (1993 - 2011)



Source: (World Bank, 2014)

A major cause of and obstacle to reducing poverty in SA is the low levels of higher education (HE) participation in the country despite an adult literacy rate of about 92% (StatsSA, 2014b). The average HE enrolment rates for Sub-Saharan Africa (SSA) and SA are 5% and 15%, respectively, while the world average is 25% (Schwab, 2010). A 2001 study conducted by SA's Department of Education shows that the country has a university graduation completion rate of only 15% (Letseka and Maile, 2008). Comparing this figure to other countries' rates shows how dismal SA's tertiary graduation rate really is. According to a report by the OECD (2012), the tertiary enrolment and graduation rates of the United Kingdom are 74% and 72%, USA 81% and 53%, Poland 93% and 62%, Japan 76% and 66% - to mention only a few. Comparatively speaking, these enrolment rates indicate how far SA has to go with regards to widening access of the masses to HEIs. As Barro and Lee (1993) indicated in their multi-country longitudinal study, greater HE participation rates are important for economic growth, well-being and reducing inequality. However, the correlation between HEA and poverty-alleviation is not a clearly linear or well-defined one. For most of the 1900s there was a general belief amongst the international community that the rate of returns of HE is insufficient to stimulate economic growth and hence reduce poverty, because several empirical studies at the time suggested primary and basic education are more important for economic growth (Mincer, 1974b; Psacharopoulos, 1989, 1992). It is only since the late 1990s that research findings showed HE is a very sustainable poverty intervention method. Some recent studies (Ansari, 2016; Hanif & Arshed, 2016; Hanushek, 2016; Li-li, He, Gao, & Yang, 2016; Pinheiro & Pillay, 2016) have yielded sufficient evidence showing a strong correlation between HE and economic growth,

increased income and reduced poverty - especially in developing countries. Unfortunately, few studies, if any, have been conducted to investigate the correlation between HEA and well-being in SA. This study will attempt to make a meaningful contribution in this area.

Although this study looks at the correlation between HEA and well-being in SA, it should be of interest to anyone interested in studying social justice, human and economic development, because the theoretical underpinning of multidimensional poverty is Sen's capability approach (CA) which has considerable influence on human development and poverty reduction strategies and policies, such as the Millennium Development Goals (MDGs)

1.3 Statement of the problem

By April 1994, when the newly elected African National Congress (ANC) came to power, the South African economy was characterised by high unemployment rates, vast unskilled labour, chronic poverty on a massive scale, very limited access to education for the masses and poor access to health-care services (Nowak & Ricci, 2005). In 1995, the World Bank published the first official post-apartheid poverty study, which revealed a dismal picture of poverty, at the time, with the majority of the population trapped in poverty, and the poor were characterised by high levels of social exclusion, malnourished children, living in crowded homes, unemployed, no access to electricity, and coming from broken households (May & Norton, 1997).

SA has an adult literacy rate of 92.9% (StatsSA, 2014b), HE participation is minimal and no data is available on the tertiary enrolment and attainment rates between 2001 and 2009 (Klugman, 2010). However, statistical data for 2012 shows that 19.0% of individuals aged 18 – 29 were enrolled in HEIs (CHE, 2017). Table 1-3 shows the HE participation rates and enrolment by racial groups. The participation rate for whites is the highest, followed by Indians/Asians, while for the majority of the population it is relatively high in comparison to the African continent, but low in relation to other countries. Putting these rates into perspective, in the UK, for example, the HE participation rate for 2013/2014 was 47 % (British Government, 2013).

Table 1-3: HE participation rates by race in SA (2015)

Racial group	Participation rates (%)
Black African	16.0%
Coloured	15.0%
Indian/Asian	49%
White	53.0%
Overall	19.2%

The undesirable levels of HE participation, together with high levels of the population living in poverty, and the persistent high levels of chronic unemployment (Nowak & Ricci, 2005), poverty and inequality reduction remains a major challenge for SA. As stated earlier, SA also has one of the world's highest levels of inequalities due to its political past, as well as due to bad post-apartheid policies since inequality has deepened since the end of apartheid (Kate Philip, Tsedu, & Zwane, 2014). As stated earlier, several studies have conclusively demonstrated that the objective of the apartheid ideology was to socially and economically exclude the masses; to achieve this objective 'an adjunct of apartheid has been the absence of credible and comprehensive social indicator data which could assist in policy formulation' (May & Norton, 1997, p. 118). Moreover, since 1994, and in spite of various poverty intervention measures initiated by the government, SA's poverty and inequality measures have deteriorated. For example, in 1995, the poverty headcount index² was 0.32 and the poverty gap index³ was 0.12 but in 2000 they fell to 0.49 and 0.22, respectively (Nowak & Ricci, 2005). Therefore, there is a need for more research evidence to assist in better evidence-informed policy-making. Moreover, poverty measurements in SA, like in most other countries, have traditionally focused on income poverty and it is only recently that multidimensional poverty began to be featured in studies. Multidimensional poverty – as opposed to unidimensional poverty which measures poverty in either a minimum income or consumption level required to live a basic life (Wagle, 2002) – defines and measures poverty beyond income or consumption by including dimensions such as education, health, sanitation, access to drinking water, access to shelter, access to employment, lack of freedom, lack of opportunities for self-development

²Poverty Headcount index measures the proportion of the population whose consumption is less than a certain poverty line.

³Poverty gap index measures the average percentage shortfall in income for the population, from the poverty line.

and empowerment, lack of representation and lack of opportunities to reach one's full potential in life (Conlon, 2003; Wagle, 2005; World Bank, 2010). In other words, multidimensional poverty looks at poverty from an overall well-being perspective, and not just from an income perspective. For example, SA's census 2011 (conducted every 10 or more years) measured poverty in terms of income although deprivation indicators such as basic goods, health, lack of education, access to safe drinking water and electricity were included in the survey items, poverty is still interpreted unidimensionally. In terms of HEA, SA has also made little progress in widening access and participation for the masses. In response to these persistent high levels of poverty, inequality and lack of HE participation, a 'social indicators movement' emerged in academia in SA in order to better understand and combat these apartheid legacies (Woolard & Leibbrandt, 1999). This led to the emergence of a number of studies on poverty and inequality in SA. For example, Statistics South Africa examined absolute poverty trends between 2006 and 2011 in SA (StatsSA, 2014b). An earlier study by Van der Berg et al. (2006) explored trends in poverty and income for the period from 1995 to 2004 and concluded that poverty started to decline only after 2000. Another interesting study conducted by Botha (2010), investigated the relationship between educational attainment of household heads and household income poverty. The results indicated a negative correlation between education and poverty. Meaning, as the level of education increases, incidences of poverty decreases, and vice versa. These are only some of the poverty studies conducted in SA after the end of apartheid in order to better understand poverty and inequality in the country.

This study aims to contribute to this knowledge firstly through studying poverty multidimensionally, and secondly by investigating how HEA improved the well-being of those who obtained a university education, because it is now common knowledge that having a job and having income does not mean an individual is not poor. In other words, many other factors determine an individual's well-being – not just money. Sen (1985, p. 3) describes this situation most succinctly:

You could be well off, without being well. You could be well, without being able to lead the life you wanted. You could have got the life you wanted, without being happy. You could be happy, without having much freedom. You could have a good deal of freedom, without achieving much.

Another deficiency in SA's poverty measurements is the use of poverty lines. Due to the high levels of inequality between population groups, there is an on-going debate in SA as to which poverty line is correct and, as a result, different researchers use different poverty lines to estimate income poverty (Woolard & Leibbrandt, 1999). Furthermore, the study by Woolard & Leibbrandt concluded that due to the intensity of poverty in SA, the choice of poverty line is likely to have a noticeable impact on poverty measurements. The aforementioned conclusions are consistent with findings of past studies by the Human Sciences Research Council (2004) and the Poverty and Inequality Report (1998), which measured poverty in SA using different poverty lines, resulting in different poverty rates. The former study used eight poverty lines for different household sizes, while the latter used two poverty lines, one for 'poor' and another for 'ultra-poor.' The absence of a 'right' poverty line and the rigid nature of a poverty line could lead to incorrect poverty measurements and proper identification of the poor. For example, let us consider a poverty study using a poverty line of say, ZAR 2,500, where a per capita income under the poverty line means poor and a per capita income above the poverty line means non-poor. In such a study, a person earning ZAR 2,498 would be classified as poor while a person earning ZAR 2,502 would be non-poor. This shows an obvious flaw with using poverty lines and one of the reasons why a poverty line measurement is imperfect. For this reason and previously mentioned ones, there is now an increasing awareness that multidimensional poverty is a far better poverty measurement (Alkire & Santos, 2010). Chapter 2 fully addresses multidimensional poverty as a poverty measurement.

With the above discussion in mind, the principal research problem investigated in this study is to investigate to what extent HEA alleviates poverty from a multidimensional perspective in the context of SA. Personally, I am motivated to investigate this problem because of my own background. As a coloured person, I grew up in extreme poverty in Cape Town. I lived in a small house with no electricity, no running water, an outside toilet and went to bed many nights hungry. In spite of these challenges, I was able to escape the poverty trap through HEA because it afforded me skills and opportunities to improve my socio-economic well-being. In 1990, I was awarded a scholarship to pursue undergraduate studies at a university in Malaysia, which was a major achievement for me. After I graduated, I became an English teacher and this gave me the opportunity to teach English at various universities in different countries such as Malaysia, Oman and Saudi Arabia. During my discussions with numerous students in these countries, I came to realise that university education is truly opening doors for many poor people because the majority of the students I taught were first-generation (i.e. their parents

did not attend university) university students, just like me. Most of these students regarded HE as a way out of economic hardships or better economic and employment prospects to enhance their well-being. This really kindled my interest in the topic. Therefore, it is my goal to investigate this problem to understand why some people with a university education are able to escape poverty and others are not able to do so. In addressing this problem, I look at poverty from a multidimensional perspective and based on the poverty measurement methodology developed by Alkire et al. (2015). This methodology is discussed in chapters 2 and 4.

Recently, and mainly through the efforts of the OPHI (Oxford Poverty & Human Development Initiative), many multidimensional poverty studies have been undertaken. Since 2010, the OPHI has conducted over 100 multidimensional poverty studies mainly in developing countries and with the purpose to measure and construct an MPI for these countries (Alkire, Jindra, Robles, & Vaz, 2016). However, other multidimensional poverty studies have been conducted in other countries by other researchers. For example, Dhongde & Haveman (2015) measured multidimensional poverty in the United States in order to construct an MPI for that country. Nawar (2013) used survey data of 13 Arab countries to construct a regional MPI of the Arab region.

The correlation between education and well-being is well documented in the literature. However, as chapter two will illustrate, there is disagreement in the literature with regards to which educational level effectively contributes to well-being. One of the most notable studies on the impact of HEA on economic development in Sub-Saharan Africa (SSA) conducted by Bloom, Canning, & Chan (2006) acknowledged that past studies on education and economic growth focused on primary and secondary education. Furthermore, the report concluded that HE is a much more effective vehicle for economic growth in SSA because it will speed up the region's technological catch-up, close the knowledge gap faster and reduce poverty. The report also highlighted the cases of Korea and Taiwan – two developing countries – which experienced sustained economic growth due to an emphasis on HE. A few other studies, investigating the impact of HEA on poverty, were conducted in Tanzania, Senegal and Cameroon (Mkenda, 2005; Njong, 2010). These studies showed similar conclusions that HEA is best in reducing poverty because it leads to better and increased employment opportunities, higher income, better socio-economic conditions and less vulnerability to falling into poverty.

The next section looks at the purpose and significance of this study.

1.4 Purpose and significance of the study

The purpose of this study is to examine the relationship between HEA and well-being from a multidimensional perspective in SA. This study will look at multidimensional poverty through four dimensions and a number of indicators, and how individuals with a university degree fare in each of the dimensions. Then, the multidimensional poverty of the respondents will be examined in order to draw conclusions about the impact HEA has on their multidimensional well-being in terms of achievements and opportunities. The four dimensions are: (i) income and employment, (ii) living standards, (iii) health, and (iv) social justice. Each dimension has a set of indicators, which will be described and explained in chapter 3. It is hoped that this study will provide a better understanding of how university graduates' education impacts their overall socio-economic status and well-being. As mentioned earlier on, poverty and deprivation is much more than a lack of income. During the past 30 years our understanding of what is poverty has deepened and a considerable amount of literature has been published on multidimensional poverty and the many dimensions of it (Thorbecke, 2007). The overall purpose of this research, therefore, is to explore to what extent HEA impacts the well-being of university graduates by using the above-mentioned dimensions of multidimensional poverty.

Overall, this study firstly will contribute to the small body of literature on multidimensional poverty and well-being in SA. Secondly, it will hopefully contribute to improved and better informed policy-making with regard to the importance of HE as an effective poverty intervention measure to expand human well-being. At the time of writing this thesis, HE students across SA were protesting against the government's plan to increase HE study fees by 10-12% (Laccino, 2015). This is an example of misinformed policy-making by the government because in a country where the majority of people cannot afford to attend university, research has shown that high tuition fees perpetuate inequality of access to HE between racial groups - just like during apartheid. Almost all universities in SA are public and although subsidised by the government, the tuition fees is very expensive and beyond the reach of those coming from poor families. According to a study by Letseka & Maile (2008), in 1995, 37% of all university students were white and in 2005, it was 30%, while many black students are still excluded from access to HE due to a lack of money. According to the Department of Education statistics, 30% of students entering HE drop out in the first year of study, while a further 20% drop out in the second or third year; 70% of the students who drop out are from poor families (Moeketsi Letseka & Maile, 2008). Therefore, this study is significant in the sense that more research is

needed to gather evidence about the returns of higher education and its causal effect on well-being. This study contributes to this growing body of evidence and is significant in a number of ways. Firstly, it contributes to a better understanding of the correlation between HEA and multidimensional well-being in SA. In addition, it contributes to the small but growing body of literature on this topic in SA and in other developing countries. Also, it deepens our understanding of the extent to which HE is a sustainable measure of improving the overall socio-economic status of individuals and a buffer against the vulnerability of falling into poverty. Moreover, with the increasing interest in multidimensional poverty, researchers are now beginning to understand, albeit not fully, that the dimensions of well-being are not merely confined to income and employment, but rather extend to other dimensions, such as how individuals function in society, lack of opportunities, having fundamental capabilities, social justice, equality, equity and empowerment (Clark, 2005a; Comim, 2001; Comim, Qizilbash, & Alkire, 2010; Fukuda-Parr, 2003; Nussbaum, 2003; Nussbaum, Sen, & Sugden, 1993; Pettit, 2014; Sen, 1985c; Sen, 2001; Wells, 2013).

All in all, this study contributes to our empirical knowledge about multidimensional well-being and the role HEA plays in enhancing it. Finally, this study is significant because, to the best of my knowledge, no previous study has investigated the impact HEA has on expanding well-being in SA.

The definition of what constitutes poverty (multidimensional and unidimensional) as well as well-being is highly contested and very little agreement exists on several concepts relating to poverty. The next section provides operational definitions for several concepts used in this study in order to remove any ambiguity.

1.5 Clarification of key concepts

The conceptualization of a number of key concepts is essential in order to remove any vagueness in the usage of abstract terms (such as multidimensional poverty, educational attainment and alleviation) and to clarify specific terms which may have multiple meanings. Certain terms will also need to be operationalized by clearly defining them and stating their meanings and usage in the context of this research. This will be done for each term, where necessary.

1.5.1 Post-apartheid South Africa

This refers to the period after the first democratic elections held on 27th April 1994. Apartheid (separateness) refers to the political ideology implemented by the minority 'white' government which ruled the country from 1948 until the eve before the elections. Hence, post-apartheid covers the period from 27th April 1994 to the present.

1.5.2 Higher educational attainment (HEA)

Educational attainment may be defined as the successful completion of the highest grade within the most advanced level in an educational system (United Nations, 2008). For example, in SA the highest grade at primary school level is grade 7 (Government of SA [GovSA], 2015). So, primary educational attainment means the completion of primary school. Similarly, HEA means the successful completion of the highest level of education at university, with an undergraduate degree being the minimum level of HEA. Stated differently, HEA refers to having been enrolled at a tertiary institution for the full duration leading up to obtaining a degree as a result of attending and completing a university study programme. In other words, a person who attended two years of study at university but then dropped-out before completing the programme would be considered as not having HEA status. Conversely, an individual who satisfied all requirements of the tertiary institution and is awarded a degree at the end of the study period is considered as having HEA status.

1.5.3 Higher educational attainment vs. enrolment

The previous section defined HEA. Another important educational statistic is enrolment rates. Enrolment, as defined by The World Bank (Tilak, 1989) and adopted by the government of SA (GovSA, 2015), refers to the total number of learners in a specific level of education (e.g. primary school or higher education), regardless of age, expressed as a percentage of a country's official school-age population and corresponding to the same level of education. Enrolment ratio shows the general level of participation in a certain level of education. Two types of enrolment data are used in poverty studies: (i) Gross Enrolment Ratio (GER) and (ii) Net Enrolment Ratio (NER). GER is a statistical measure, expressed as a percentage, and is defined as the number of students enrolled in an education level (primary, secondary or

higher), regardless of age, divided by the population of the age group that officially corresponds to the same level. NER is a statistical measure, expressed as a percentage, and is defined as the number of students enrolled in an education level (primary, secondary or higher) who belong to the age group that officially corresponds to that education level, divided by the total population of the same age group (UNESCO, 1997). However, several studies investigating the measurement of education and its impact on society, have found enrolment statistics as an unreliable measure because many students, especially in developing countries, drop out of HE before completing their studies and obtaining a qualification (Moore, Sanders, & Higham, 2013; Pillay, 2011).

1.5.4 Deprivation

Townsend (1979, p. 31) first pioneered the idea of deprivation when he defined poverty as follows:

Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities.

Deprivation than simply means experiencing a lack of some form of essential resource or amenity. From a capability perspective, deprivation means a lack of basic capabilities such as having adequate shelter, being nourished and adequately clothed (Sen, 1999).

1.5.5 Multidimensional poverty

The theoretical underpinnings of multidimensional poverty are based on the capability approach (CA), a normative theory, proposed by Amartya Sen, winner of the 1998 Nobel Prize for Welfare Economics. According to Sen (1985b, p. 43) the CA 'sees human life as a set of 'doings and beings'—we may call them 'functionings'—and it relates the evaluation of the quality of life to the assessment of the capability to function.' Sen (2005, p. 153) defines capability as 'the opportunity to achieve valuable combinations of human functionings—what

a person is able to do or be.’ Stated differently, capabilities mean having the freedom to achieve well-being and having real opportunities to do and be what an individual has reason to value in life, while ‘functionings’ refer to the various living conditions an individual can or cannot achieve (Sen, 1985). Therefore, Sen’s CA is a normative theory in which he argues for a different approach – he regarded the income-centred view of poverty as being misleading in the identification and evaluation of the poor – to define and measure poverty. In doing so, Sen only proposed a basic set of capabilities because he believed, firstly, that capabilities vary between communities and between different people in the same community, and secondly, that the suggestion of basic capabilities will allow for a better way of diagnosing and measuring poverty (A. Sen, 2007). Consequently, Sen did not propose a fixed set of capabilities but advocated for researchers to adopt capabilities which are appropriate in their research context. This implies that there is no fixed set of capabilities which must be used in a multidimensional poverty study. Here, I must point out that the CA is only a framework which aids in the conceptualization and evaluation of social phenomena (Robeyns, 2006a) such as multidimensional poverty. Alkire (2005) succinctly describes Sen’s CA as a proposition (wherein capability is a combination of functioning and freedom) which could be used to evaluate ‘social arrangements according to the extent of freedom people have to promote or achieve functionings they value’ (p. 122) and therefore, poverty reduction occurs in societies where people have greater freedom. In essence, the afore-mentioned outlines the underlying theory of multidimensional poverty, which is thoroughly discussed in chapter 2. Here, I am merely presenting a brief introduction of the concept of multidimensional poverty.

Poverty is a complex social phenomenon with deep and pervasive consequences on the one hand, and complex technical terms on the other. No single meaning of poverty exists and it means different things to different people in different countries as illustrated in *Voices of the poor: Can anyone hear us?* (Narayan, 2000). Traditionally, researchers, governments, the World Bank and UNESCO have defined poverty from a unidimensional approach by either using income or consumption as an indicator (Addison, Hulme, & Kanbur, 2008; Thorbecke, 2007). However, over the years it has become apparent that human well-being is not only determined by monetary aspects such as money and employment. Other aspects such as health, standard of living, nutrition and social justice are equally important to ensure overall well-being. To this end, multidimensional poverty defines poverty as multiple deprivations such as lack of money, nutrition, education and health, and not merely lack of income (Unterhalter, 2004). According to the World Bank (World Bank, 2010):

Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. Poverty is powerlessness, lack of representation and freedom.

The operational definition used in this research is a multidimensional definition consisting of four dimensions: income and employment, health, living standards and social justice, and each dimension has a number of indicators. As mentioned earlier, the selection of which dimensions to use is dependent on the researcher, and I have selected these dimensions for a number of reasons. I discuss the rationale for the selection of these dimensions in chapter two and therefore will not elaborate on it here.

1.5.6 Capability and its core concepts

As will be mentioned throughout this thesis, the capability approach is a normative framework, proposed by Amartya Sen through a series of writings since the 1980s. According to Robeyns (2006a, p. 352) , “the capability approach is a broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies, and proposals about societal change.” According to Sen (1985, p. 43) , the capability approach “sees human life as a set of “doings and beings”—we may call them “functionings”—and it relates the evaluation of the quality of life to the assessment of the capability to function.” Therefore, Sen argues that if life is a set of valuable “beings” and “doings”, the quality of an individual’s life should be assessed by evaluating these functionings and the capability to function. Stated differently, *functionings* are the beings and doings, while *capability* is the set of valuable functionings an individual has access to. So, capability refers to the substantive freedom a person has to choose between different functionings.

Being a normative framework, the capability approach has been interpreted and defined in various ways by several scholars.

According to Gasper (2007, p. 336):

'Capability' is the full set of attainable alternative lives that face a person; it is a counterpart to the conventional microeconomics notion of an opportunity set defined in commodities space, but is instead defined in the space of *functionings*.

In other words, "*capability* refers to our freedom to promote or achieve valuable *functionings*" (Walker, 2005, p. 105), while *functionings* are those aspects a person succeeds in doing.

Therefore, a *functioning* is an actual achievement, which is directly related to a person's living conditions (Saith, 2001). Central to the capability approach is the notion that individuals should have the freedom to choose the kind of lifestyle they value, and this notion is called *agency*.

According to Sen, *agency* is "someone who acts and brings about change, and whose achievements are to be judged in terms of her own values and objectives, whether or not we assess them in terms of some external criteria as well" (cited in Walker, 2005, p. 106).

1.6 Overview of research methodology

The research methodology used in this study was mixed methods research (MMR), which requires the collection and analysis of both quantitative and qualitative data in one study (Creswell, 2003). Based on Creswell's work, I adopted a sequential explanatory MMR; in the first phase I collected quantitative data and the qualitative data in the second phase.

Triangulation, or the integration of the two data types (Creswell, 2003), will be done in the findings chapter. The quantitative phase consisted of online surveys, while the qualitative data was collected through semi-structured interviews. The sample size for phase one was 427 and 30 for phase two. I used the IBM SPSS 21 software to compute descriptive and inferential statistics for the quantitative data (Downie & Starry, 1977) and NVivo 10 to code, sort, group and reduce the qualitative data (Bazeley, 2006). A theoretical framework guided the analysis of the quantitative data, while thematic analysis was used to analyse the qualitative data (Creswell, Plano Clark, Gutmann, & Hanson, 2003; Mason, 2006).

1.7 Scope of the study

This study only covers the post-apartheid period in SA, starting in 1994. Also, although poverty often affects students' participation in education, this research is concerned with the effect of higher educational attainment on well-being. Van der Berg (2002, p. 3) describes the link between education and well-being as follows:

There is substantial evidence that education can reduce poverty. This connection between education and poverty works through three mechanisms: firstly, more educated people earn more; secondly, more (and especially better quality) education improves economic growth and thereby economic opportunities and incomes; thirdly, education brings wider social benefits that improve economic development and especially the situation of the poor, such as lower fertility rates, improved health care of children, and greater participation of women in the labour force.

This study is confined to the three poorest provinces of SA (StatsSA, 2014b) and therefore, strictly speaking, its results cannot be generalized. However, I believe many plausible arguments exist for this study to be illustrative of the impact of HEA on individuals' overall socio-economic status in other parts of the world. Several multi-country studies investigating the impact of educational attainment on societies have shown that findings could be generalised to a certain extent (Barro & Lee, 1993; Bloom et al., 2006; Psacharopoulos & Patrinos, 2004). The findings of these studies have shown similar characteristics among university graduates in different countries. For example, a study on HEA in Sub-Saharan Africa (SSA) conducted by Bloom et al. (2006) found that in both Tanzania and Mauritius enrolment in HEIs was 1% while economic growth in both countries were almost similar with 4.8% in the former and 5.2% in the latter, in spite of the fact that both countries are remarkably different. Tanzania has a gross domestic product (GDP) of \$700 while Mauritius has a GDP of \$12,800. Similarly, another 129-country study on HEA and completion ratios⁴ conducted by Barro and Lee (1993) found that average HEA ratios were very similar in almost all the regions surveyed, with the exception of the OECD (0.57%): Middle East and North Africa – 0.67%, SSA – 0.78%, East Asia and Pacific – 0.68%, South Asia – 0.70%. While these examples are obviously not conclusive, it presents us with some sort of idea that similarities exist in different countries in

⁴ HEA completion ratio means the ratio of the attainment percentage for completing tertiary schooling.

terms of HEA ratios. From a research methodological standpoint, although contentious, the above examples seem to suggest that it is possible to make broad generalizations from data obtained in one particular study (Yin, 2003).

Chapter 2: Literature review

2.1 Introduction

The previous chapter set out the research objectives and gave relevant background of SA in order to build a contextual view of the relevance of this study. This chapter reviews the literature relevant to this study. This study resides at the intersection of two topics: multidimensional well-being and higher educational attainment. Therefore, the goal of this chapter is to discuss some of the relevant literature related to both multidimensional poverty, well-being and the role of higher educational attainment in human development, specifically well-being. In doing so, this chapter establishes the context of this study. First I review the literature on poverty (one-dimensional and multi-dimensional). After that I examine the literature relating to the various approaches to measuring and selecting well-being dimensions. Then, I discuss the causal relationships between education and well-being, as well as the debate surrounding the role of higher educational attainment in expanding well-being. In doing so, I review the relevant literature on the human capital theory and the capability approach and their relevance to measuring well-being. Finally, I review the literature on higher educational attainment and well-being and the various opinions found in the literature.

The next section presents a brief review the origins of poverty as a concept of measurement.

2.2 The origins of poverty as a concept of measurement

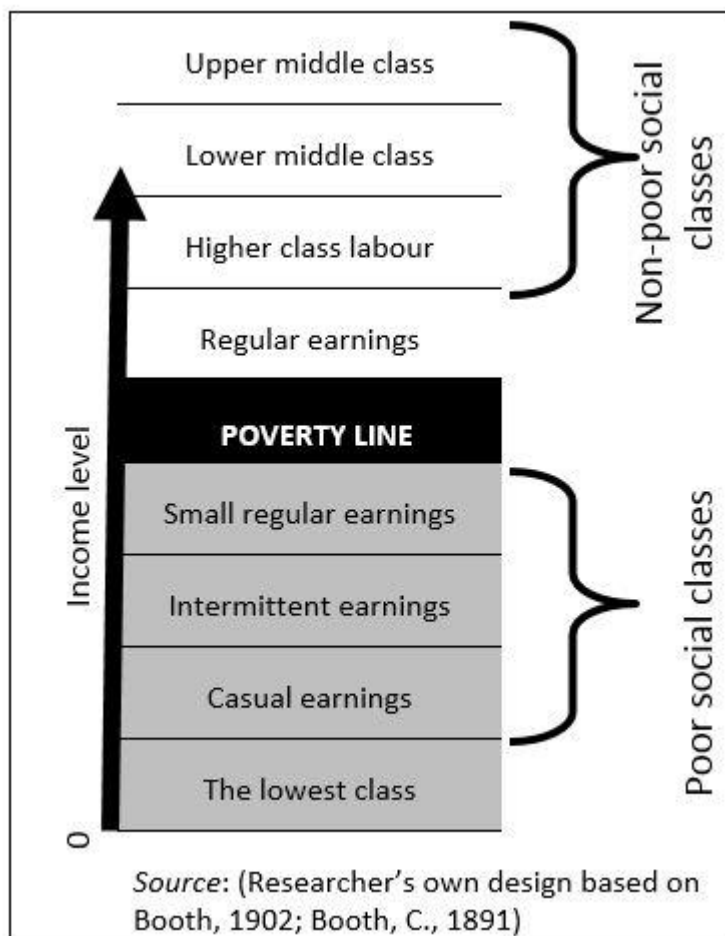
Although poverty is not a new concept, this section intends to show how the definition and measurement of poverty has changed over time since its first formal measurement in the UK in the late 1800s. Poverty has existed for centuries, as Massey (1996, p. 96) explains:

Poverty is old news. For thousands of years the great majority of human beings have lived and laboured at a low material standard of living.

However, the first formal studies of poverty were undertaken by Charles Booth (in 1889) and later by Seebohm Rowntree (in 1901) in England (Johnson, 1996). Booth's poverty study was the first scientific study which grouped the poor into social classes based on income (Fraser,

2009). Booth's *Labour and Life of the People in London*, vol. 1 (1891) and *Labour and Love of the People*, vol. 2 (1903) identified and classified the poor based on income (see fig. 2-1 on the next page). In his classification, Booth used a poverty line, which was a level of income a family needed to prevent starvation. The below figure illustrates that the earliest poverty study classified the poor based on income.

Figure 2-1: Booth's classification of the poor



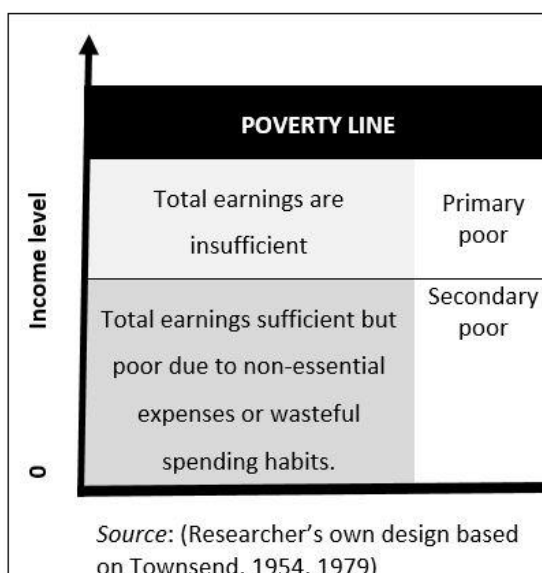
Similarly, Seebohm Rowntree's (1901) *Poverty, A Study of Town Life* defined absolute poverty in York based on a minimum income which is 'insufficient to obtain the minimum necessities for the maintenance of merely physical efficiency' (Rowntree, 1902, p. 86). In explaining the concept of poverty line, Rowntree described it as 'a standard of bare subsistence rather than living' (Rowntree, 1901, p. 1941). Rowntree's minimum subsistence income was calculated on a basket of goods which included fuel and light, rent, food, clothing and household and personal items (Fraser, 2009). Rowntree devised a diet sheet which he used to calculate the

necessities basket of goods the poor had to follow (Townsend, 1954). Like Booth, Rowntree divided the poor into two groups (see fig. 2-2). He wrote (quoted in Townsend, 1954, p. 130):

The families living in poverty may be divided into two sections:

- i. Families whose total earnings are insufficient to obtain the minimum necessities for the maintenance of merely physical efficiency. Poverty falling under this heading may be described as 'primary' poverty.
- ii. Families whose total earnings would be sufficient for the maintenance of merely physical efficiency were it not that some portion of it is absorbed by other expenditure, either useful or wasteful. Poverty falling under this heading may be described as 'secondary' poverty.

Figure 2-2: Rowntree's classification of the poor



The studies of Booth and Rowntree were very similar, although Booth conducted his study in London (Booth, 1903), while Rowntree conducted his studies in York in 1901, 1936 and 1950 (Rowntree, 1901). Moreover, the poverty measures and poverty definition of Booth and Rowntree made extensive use of statistical data which they analysed in an orderly and scientific manner and as such their poverty studies were pioneering in advancing a method of identifying the poor in a scientific and quantifiable manner (Laderchi, 2000). Their way of defining poverty came to be known as absolute poverty (Joseph & Sumption, 1979). Although their studies were pioneering in terms of using a scientific method to identify the poor, their definition of absolute poverty was not without criticism. According to Bradshaw (1987), the

prescribed subsistence basket for the poor used by Booth and Rowntree was harsh; the prescribed food items had no or little nutritional value; they presumed no wasting of food and required the poor to have considerable self-control in only purchasing the cheapest items. In addition, according to Townsend (1954), people's diet and lifestyle are linked to prevailing social norms and it is not merely a matter of prescribing a diet and expecting people to follow it. Moreover, Rowntree's diet sheet was based on the research of American nutritionists Atwater and Dunlop, who researched the diets of prisoners in Scotland (Townsend, 1979) which were therefore not appropriate for poor households in England. For the next 40 years after Booth and Rowntree published the findings of their studies, absolute poverty and its methodology were widely used (Townsend, 1954). For example, in the U.S., Mollie Orshansky (1965) popularised absolute poverty and poverty lines in that country. Orshansky's *Children of the Poor* (1963) developed the first poverty thresholds which significantly influenced policy-making in the USA. She developed her absolute poverty line based on income data collected from national census data and the '*economy food plan*' which was similar to Rowntree's diet sheet (Townsend, 1979). Orshansky's food plan was based on the cheapest of four hypothetical food budgets designed by the United States Department of Agriculture to provide nutritious diets to the poor (Orshansky 1963). She developed a set of poverty thresholds, or poverty lines, which she used in defining and categorizing the poor (Fisher, 1992). These poverty thresholds were based on a normative assumption and not empirical assumption patterns of lower-income groups (Fisher, 1992; Gordon, 2000). Orshansky described her poverty thresholds as a 'relatively absolute measure of poverty' (Fisher, 1992, p. 5). Orshansky's work in defining and measuring poverty is important to mention because it is still used in the U.S. today (Fisher, 1992; INE, 2009).

Peter Townsend, in response to his dissatisfaction with the methods Booth, Rowntree and Orshansky used, set out to measure poverty in the whole of England in a different way (Townsend, 1954). The next few paragraphs outline Townsend's response to absolute (subsistence) poverty. His response is important because he proposed an alternative way to define and measure poverty. Townsend (1979) argued that Rowntree's definition and measurement of absolute (subsistence) poverty was flawed in many ways:

- i. Rowntree used a too narrow concept of income and physical efficiency which led to a too narrow definition of subsistence.

- ii. Rowntree's estimates of the cost of necessities were either based on his own or other's opinions but not on what the poor needed.
- iii. Nutritional requirements were selected arbitrarily to ensure minimal nutrition at the lowest possible cost, rather than on diets that are conventional among the poor.
- iv. The cost allocated for food was much higher than was the standard expenditure among the poor.

Therefore, Townsend concluded that the composition of the subsistence budget proposed by Rowntree was unbalanced and did not reflect the reality of the poor working class people. He further argued that these flaws were similar in the poverty measurement devised by Orshansky and adopted in the U.S. In addition, Townsend continued, the poverty measurement used by Orshansky did not take into consideration changes in customs and needs of the poor in the U.S. Orshansky's poverty measurement, like Rowntree's, also defined nutritional needs too narrowly. Therefore, he concluded that in the U.S. too, the definition of dietary adequacy was insufficient and was not actually related to the needs of the poor. In summary, Townsend concluded that both Rowntree's and Orshansky's poverty measurements inaccurately calculated the distribution of a poverty budget between food, fuel and other necessities.

In proposing an alternative definition and poverty measurement, Townsend (1979, p. 29) wrote: 'poverty can be defined objectively and applied consistently only in terms of the concept of relative deprivation.' He then defines relative poverty as follows:

Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities.

In defence of his definition of poverty as a relative concept, Townsend argued firstly that any poverty definition based on absolute deprivation should be abandoned because it cannot stand up to any rigorous or sustained examination, and secondly, although 'the principal

definitions put forward historically have invoked some 'absolute' level of minimum needs, they have in practice represented rather narrow conceptions of relative deprivation and deserve to be clarified as such' (Townsend, 1979, p. 38). In his book, *Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living*, Townsend (1979) made several suggestions on what is relative deprivation, but the two most pertinent ones are:

- i. Relative deprivation defines poverty in relation to existing standards within a given society.
- ii. The identification and measurement of relative poverty is both time-bound and location-specific.

Defining relative poverty in relation to existing standards means that poverty should not be measured in isolation, but any poverty study should consider the prevailing customs of the society in order to determine what necessities the poor need so that they are not socially excluded from society. For example, Booth, Rowntree and Orshansky prescribed a way of life to the poor that was inconsistent with the prevailing norms and customs of the societies the poor lived in. Therefore, this could potentially lead to the poor being socially excluded. In fact, this point was made by Adam Smith almost two hundred years before Townsend conducted his poverty studies. In 1776, Adam Smith (p. 715), in explaining poverty and social exclusion in society, wrote:

By necessities I understand, not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without. A linen shirt, for example, is, strictly speaking, not a necessary of life. The Greeks and Romans lived, I suppose, very comfortably, though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty, which, it is presumed, nobody can well fall into without extreme bad conduct. Custom, in the same manner, has rendered leather shoes a necessary of life in England. The poorest creditable person, of either sex, would be ashamed to appear in public without them.

Hence, according to Smith, relative poverty could lead to social exclusion because a relatively poor individual 'would be ashamed to appear in public' without possessions deemed necessary by society. Moreover, every society has normative social expectations and when an individual does not conform to those expectations, he/she will be stigmatized in society, and this leads to social exclusion (Goffman, 2009) because that individual's identity will become spoiled. More importantly, Townsend argued that relative poverty creates social inequality, and therefore the poor will experience social exclusion since they will not possess the necessary resources to participate in mainstream society. For example, in SA the majority of Black Africans, coloureds and Indians are excluded from participating in higher education because they cannot afford it due to poverty. Sen (2000), in agreeing with Smith's viewpoint, also pointed out that increased relative poverty in a society could lead to social exclusion, thereby intensifying social deprivation. However, relative poverty is often regarded as only relevant in theory because most developing countries measure poverty in terms of absolute (income/expenditure) poverty (Maxwell, 1999). On the other hand, as mentioned previously, absolute poverty fails to capture poverty in full due to its narrow measure as expressed by Noble, Wright, & Cluver (2007, p. 54):

The concept of 'absolute' poverty refers to impoverishment which is defined independently of any reference group. It does not change according to prevailing living standards of a society, or over time, or according to the needs of different groups in society.

Townsend's second observation that relative poverty is both time-bound and location-specific implies that an existing measurement of relative poverty is fixed over a specific time and fixed over a society. In other words, according to Townsend, relative poverty is unique to a particular society in a specific geographical area over a given time. By defining poverty in this way, Townsend therefore rejects the idea that absolute poverty is detached from the social context in which it occurs. However, Sen (1985a, p. 673) has criticised the notion that relative poverty is time-bound and location-specific, by arguing that 'the characteristic feature of absoluteness is neither constancy over time nor invariance between societies nor concentration on food and nutrition.'

Based on the discussion so far, both absolute and relative poverty measures - on their own - are inadequate poverty measures. As discussed above, absolute poverty is largely prescriptive, while relative poverty is mainly comparative in the sense of comparing an

individual's well-being with that of the society in which he lives. In addition, in both poverty measures, those who determine when an individual is poor and what 'basic needs' a person requires or lacks are usually not poor themselves; moreover their interpretation of what is poverty may well be a reflection of their own social backgrounds (Goedhart, Halberstadt, Kapteyn, & Van Praag, 1977). Thirdly, both measures rely on income as the main indicator to determine poverty levels and as I will explain later, a large body of literature has now emerged which indicates income is an inadequate measure of poverty, because the poor suffer multiple deprivations, not only income deprivation. I think at this point, we could all agree that absolute poverty ignores the social context of the poor and is largely prescriptive as to what ought to be the minimum income required for basic subsistence, as another definition of absolute poverty illustrates: 'A family is poor if it cannot afford to eat' (Joseph & Sumption, 1979, p. 27). Similarly, Ravallion, Datt, & Walle (1991, p. 346) defines absolute poverty as 'the inability to attain consumption levels which would be deemed adequate.' As explained above, absolute poverty focuses on an individual's physiological needs and does not take into consideration social contexts or norms. Moreover, according to Narayan (2000), absolute poverty fails to take into consideration the socio-economic differences between individuals or societies. For the reasons mentioned so far, both absolute and relative poverty have failed to accurately explain poverty in poor countries, and a large body of literature exists on the debate on whether to use absolute or relative poverty. Several scholars (Sen 1983; Alcock 1993; Becker 1997) generally agree that the absolutist concept of poverty, as was defined by Booth, Rowntree and Orshansky, is at odds with the real meaning of poverty, and have argued for a more relativist concept of poverty. Hagenaars & Praag (1985, p.215) too assert that relative poverty is inadequate since 'the choice of the poverty threshold is rather arbitrary.' Sen (1985, p. 669) criticizes relative poverty on the grounds that poverty is much more than merely 'being relatively poorer than others in the society' and sees 'capabilities' as having relative characteristics which are part of an individual's standard of living. Putting the discussion so far into perspective, it is important to recognise that although the conceptual methodology of defining who is poor differs in absolute and relative poverty (and multidimensional poverty), the fundamental conception of poverty deals with the minimum living standards of people (Callander, Schofield, & Shrestha, 2012). Booth's concept of absolute poverty measured minimum living standards based on a lack of basic needs, while Townsend's concept of relative poverty measured minimum living standards based on a lack of income required to maintain the average standard of living of a society.

The above-mentioned approaches to defining and measuring poverty are called unidimensional poverty and it usually defines and measures poverty in terms of either income or expenditure, even though no single dimension can accurately measure poverty (Chambers, 2006; Sodha & Bradley, 2010; von Maltzahn & Durrheim, 2007). Although Sen (1976) acknowledged the contributions Rowntree, Townsend and others have made in defining and measuring poverty unidimensionally, he criticised them for failing to construct an index of poverty based on information of the poor. In spite of these shortcomings, poverty is still widely measured unidimensionally in most countries due to its ease of measurement and ease of comparison between countries (Gordon *et al.* 2000). However, in the late 1980s, Amartya Sen proposed a set of theories which called for a wider interpretation of poverty beyond monetary terms. This new idea of development as freedom, and not merely economic growth, came to be known as the capability approach (CA) and built onto the earlier ideas of Mahbub Ul Haq who defined development as the process of enlarging people's choices by creating an enabling environment in which individuals can live healthy and prosperous lives (Haq, 1999).

The next section presents the concept of multidimensional poverty, which is based on the theoretical concept of Amartya Sen's CA. The latter is presented in chapter 3, together with Mincer's Human Capital Approach (HCA), since these two theories informed the theoretical framework used in this study.

2.3 Multidimensional poverty

Multidimensional poverty stems from the seminal works of Amartya Sen in which he argued for a different approach to defining and measuring poverty and well-being. Sen called this the 'capability approach.' This section explores the concept of multidimensional poverty by looking at some of its various definitions and measurements found in the literature.

2.3.1 Definitions of multidimensional poverty

Sen (1999, p. 87) defines multidimensional poverty⁵ as ‘the deprivation of basic capabilities rather than merely as lowness of incomes, which is the standard criterion of identification of poverty.’ In expounding on the definition of poverty as capability deprivation, Sen (1999, p. 87) defines capabilities as the “substantive freedoms he or she (a person) enjoys to lead the kind of life he or she has reason to value. Furthermore, in arguing the superiority of conceptualising poverty as capability deprivation Sen (1999, pp. 87-88) wrote:

- (i) Poverty can be sensibly identified in terms of capability deprivation; the approach concentrates on deprivations that are intrinsically important (unlike low income, which is only instrumentally significant).
- (ii) There are influences on capability deprivation – and thus on real poverty – other than lowness of income (income is not the only instrument in generating capabilities).
- (iii) The instrumental relation between low income and low capability is variable between different communities and even between different families and different individuals (the impact of income on capabilities is contingent and conditional).

Therefore, poverty in the capability approach is much more than just a lack of income. It is a combination of several factors. Hence, poverty is multi-dimensional.

Since Sen’s seminal work on the CA was published, there has been an increasing interest in the CA and multidimensional poverty. As a result, a large and growing body of literature has emerged on the subject and other definitions of multidimensional poverty have been formulated and adopted by others. Over the next couple of paragraphs I present a number of definitions of multidimensional poverty, and while these may seem a mere repetition, I believe stating them are important for a couple of reasons. Firstly, by defining poverty multidimensionally, where it has always been defined unidimensionally prior to this, indicates an acknowledgement by the various international development community that onedimensional poverty is flawed. Secondly, it simultaneously shows that an acceptance of

⁵ Amartya Sen never refers to poverty as multidimensional poverty in his writings. I use the term here to distinguish multidimensional from unidimensional poverty.

Sen's CA and argument that poverty is multidimensional. I think it would be superficial to assume that the rejection of unidimensional poverty means an automatic acceptance of multidimensional poverty. Furthermore, the acceptance of the latter leans towards an acknowledgement that it is superior to onedimensional measures. The UNDP's (United Nations Development Programme) Human Development report adopted Sen's CA in its definitions of human development and defined poverty multidimensionally. The 1990 report (UNDP, 1990, p. 1) defined human development and poverty multidimensionally in terms of the CA for the first time by stating:

This report is about people - and about how development enlarges their choices. It is about more than GNP growth, more than income and wealth and more than producing commodities and accumulating capital. A person's access to income may be one of the choices, but it is not the sum total of human endeavour. Human development is a process of enlarging people's choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect. Starting with this perspective, human development is measured in this report not by the yardstick of income alone but by a more comprehensive index - called the human development index (HDI) - reflecting life expectancy, literacy and command over the resources to enjoy a decent standard of living.

In 1997, the UNDP's *Human Development Report* (UNDP, 1997, p. 5) once again defined poverty from a multidimensional perspective when it described as follows:

It is in the deprivation of the lives people lead that poverty manifests itself. Poverty can mean more than a lack of what is necessary for material well-being. It can also mean the denial of opportunities and choices most basic to human development - to lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity, self-esteem and the respect of others.

Three years later, the report again reiterated the importance of regarding human well-being in terms of functionings and capabilities, and not merely monetary aspects. The 2000 *Human Development Report* (UNDP, 2000, p. 17) fully adopted Sen's CA and defined human development as follows:

Human development is the process of enlarging people's choices, by expanding human functionings and capabilities. Human development thus also reflects human outcomes in these functionings and capabilities. It represents a process as well as an end.

The above definitions have incorporated both elements of UI Haq's original definition of human development as well as those of Sen's CA, like 'enlarges their choices' and 'more than income.' Additionally, the above definition mentions health, education, access to commodities and several other non-monetary choices people should be given under development. More importantly, the HDI explicitly indicated that income alone is not the only indicator to measure human well-being. Since then, the HDI report has been released annually. The HDI is a composite index which measures three basic dimensions of human development: health, knowledge and standard of living. Furthermore, it contains three variables: life expectancy at birth, educational attainment (adult literacy and the combined gross primary, secondary and tertiary enrolment ratio) and Gross Domestic product (GDP) per capita (UNDP, 2000). Although the HDI was one of the first major steps towards defining poverty from a multidimensional perspective, I think it is not a fully adequate measure of multidimensional poverty simply because each dimension only has one indicator. For example, the dimension of health is only measured by life expectancy at birth and a household's health status is much more than just about life expectancy. So many other factors may impact a household's health. According to Kanbur (2016), the HDI relies too much on outcome variables and not capability functionings and therefore, it is not an adequate measure of multidimensional poverty. However, Kanbur believes that the OPHI MPI truly measures multidimensional poverty.

Following the first publication of the HDI report in 1990, more attention was paid to multidimensional poverty. In 1995, world leaders gathered at the United Nations World Summit for Social Development in Copenhagen and released the *Copenhagen Declaration* (UN, 1995, p. 7) which also defined poverty multidimensionally as follows:

Poverty has various manifestations, including lack of income and productive resources sufficient 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. It is also characterized by a lack of participation in decision-making in civil, social and cultural life.

This version of the definition of multidimensional poverty states that the causes of poverty is complex and may range from a lack of income, to hunger and a lack of access to education. Moreover, a lack of access to shelter, unsafe environments and social exclusion are also regarded as causes of poverty. In the context of SA, this definition mirrors the situation of a large proportion of the country who largely lives in unsafe residential areas where crime is the norm; over one-third of the population have no access to employment opportunities; a large proportion of the population have no access to education or formal shelter. According to the *Victims of Crime Survey 2015/2016* (StatsSA, 2017), 58.8% of South Africans have experienced house burglary, 41.5% street robbery, 38.5% home robbery and 19.4% assault. In 2016, 35.6% of adults were unemployed (StatsSA, 2016b). Furthermore, in 2016, 30% of youth aged 15-24 years were not in employment, education or training, and for those aged 20-24, the percentage corresponds to 47% (StatsSA, 2016b).

The World Bank (2010, p. 1) later defined multidimensional poverty as follows:

Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not being able to go to school and not knowing how to read. Poverty is not having a job, is fear of the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. Poverty is powerlessness, lack of presentation and freedom.

Looking at the aforementioned definitions, I observe that the definition evolved from 1990 to 2010 to reflect more multiple dimensions of deprivation – as Sen calls for in his writings on the need for a CA to define and measure poverty. While the HDR's definition acknowledges poverty is more than a lack of income, the World Bank's 2010 definition states that poverty includes several dimensions. The shift from a focus on income or absolute poverty to multidimensional poverty is also evident in the World Bank Development Reports (WBDR). For example, WBDR 1978, WBDR 1980 and WBDR 1990 refers to poverty as absolute poverty (World Bank, 1978, 1980, 1993), while later reports refer to poverty from a multidimensional perspective. For example, in the 1993 WBDR, poverty is expressed in terms of minimum income, while the 2016 WBDR does not speak of poverty in absolute monetary terms but rather makes reference to other indicators of poverty such as thatched roofs of houses and

child mortality. Furthermore, while the above definitions show the evolution of the definition of multidimensional poverty within the global development community, it also is a reflection of an increased acceptance that poverty is multidimensional. This is also evident in the increased number of poverty studies focussing on the multidimensional aspects of poverty. During the past 30 years several empirical studies have focused on multidimensional poverty.

So far, this section illustrated that onedimensional poverty focuses on either income or consumption to define poverty, and therefore, it is not a suitable measure of well-being. On the other hand, multidimensional poverty argues that numerous factors contribute to poverty. This means that the measurement of multidimensional poverty is more complex and often requires the aggregation of several indicators to arrive at a single quantifiable measurement. This makes multidimensional poverty measures ideal for measuring well-being. Before exploring various approaches to measuring well-being, the next section discusses various aspects related to measuring multidimensional poverty.

2.3.2 Measuring multidimensional poverty

Although there is now a general consensus in the literature and among the international development community that poverty is multidimensional, how to measure it remains debatable. Moreover, since Amartya Sen deliberately omitted or prescribed a set list of dimensions to measure multidimensional poverty, the debate on which dimensions to include and how to select them remains open to debate. Therefore, it is no surprise that different approaches to measuring multidimensional poverty exist in the literature. Walker (2015) identifies four different broad approaches to measuring multidimensional poverty and deciding what dimensions are important: pragmatic approach, theoretical approach, engaging the general public approach, and asking the poor themselves about what is poverty.

2.3.2.1 Pragmatic approach

According to this approach, dimensions should be selected based on the following three questions:

- (i) What dimensions are readily available?

- (ii) What dimensions, if chosen, can be successfully influenced by anti-poverty policies?
- (iii) What data is readily available?

Walker (2015) cites the adoption of the Human Poverty Index (HPI), first adopted in 1997 by the UNDP to measure living standards in countries. The HPI ranked countries according to the dimensions of mortality rate (health), literacy rate (education) and living standards (based on access to safe water, health care and incidences of child malnourishment). Secondly, he also noted that the MPI, which replaced the HPI is based on this approach. The MPI measures the same three dimensions and 10 indicators. However, a multidimensional poverty study conducted by Hull & Guedes (2013), in Thailand, found that not all readily available data are quantifiable, nor can they all be measured by the same standard, which makes aggregation of the various dimensions difficult. Having said that, the Oxford Poverty and Human Development Initiative's (OPHI) Multidimensional Poverty Index (MPI), has conducted several multidimensional poverty studies using the MPI in sub-Saharan Africa, South Africa, India, the United States and other countries (Alkire & Foster, 2011; Alkire, Seth, & Roche, 2013; Alkire & Santos, 2010). Another multidimensional poverty measures based on the CA and using this approach is the UNDP's Human Development Index (HDI) which has published annual reports since 1990 (Desai, 1991; Sagar & Najam, 1998). The HDI has now become a major alternative to unidimensional poverty measures (Sagar & Najam, 1998).

2.3.2.2 Theoretical approach

This approach is similar to Amartya Sen's CA and Walker (2015) names it the theoretical approach probably because Sen himself stated that his CA is only a theoretical framework. As mentioned previously, the CA argues that poverty is not just lack of income, but encompasses the failure of people to achieve a minimum level of capabilities necessary to live the lives they wish to have. Walker further asserts that although capabilities are essentially universal, their attainment are achieved through context-specific and culturally determined factors. This view is in accordance with the literature on the CA and multidimensional poverty and I agree with this. To support this view, Walker mentions the study conducted by Noble, Wright & Cluver (2006) which attempted to develop a multidimensional model of child poverty for SA. Based on the theoretical definitions and measurements of absolute and relative poverty stated in the Copenhagen Declaration, Noble et al. constructed a multidimensional poverty framework to measure child poverty in SA that is 'relevant to the particular social, political and economic context' of SA (Noble et al., 2006, p. 40). To this end, their model contains 8 dimensions

specific to child poverty in SA. These are: material deprivation, health deprivation, human capital deprivation, social capital deprivation, living environment deprivation, adequate care deprivation, physical safety deprivation, and abuse (Noble et al., 2006; Walker, 2015). While the model is certainly interesting, the authors acknowledged that their conceptualization of multidimensional poverty is merely defined theoretically and secondly, the model presents difficulties for measurement (Noble et al., 2006).

2.3.2.3 Engaging the general public approach

According to this approach, the selection of the dimensions of multidimensional poverty is selected by engaging with the general public to gather their views (Walker, 2015). Mtapuri (2008) conducted a study in which he engaged with the community to determine what dimensions are important for measuring multidimensional poverty in the Mashonaland West Province of Zimbabwe, which is largely an agricultural society. He concluded that the following dimensions are relevant for measuring poverty in that community: farming equipment, livestock, food, marriage, dwelling and daily necessities (Mtapuri, 2008). Interestingly, the general public did not mention dimensions such as income, material assets, empowerment and education as important dimensions of poverty. Perhaps this is due to the fact that his research was conducted in an agricultural society. Another example of this approach to determine the dimensions of multidimensional poverty is a study carried by (Barnes & Wright, 2012) in SA. Their study first consulted the general public on what indicators they regard as important for an 'acceptable' standard of living before they measured the incidence of multidimensional poverty based on the dimensions given. Apart from the usual indicators of employment, food, clothing, flush toilet and fridge, a number of interesting indicators emerged from the study. These include, *inter alia*, indicators such as someone to look after you if you are ill, separate bedrooms for adults and children, someone to talk to if you are feeling upset or depressed, street lighting and tarred roads (Barnes & Wright, 2012, p. 8). The above two examples using this approach highlights not only the complexities of poverty, but also the many 'faces' of poverty. Moreover, the array of dimensions which emerged from the studies suggest that often researchers do not fully understand the true meaning of poverty, neither can researchers cling onto a set list of dimensions, since they vary from society to society. Most importantly, in my mind, this approach reaffirms that Amartya Sen was right and a true visionary when he omitted a fixed list of capabilities, even when prompted to do so. Sen persistently argued that a fixed list of capabilities would only deny public participation on what

abilities or achievements are essential for human well-being (Sen, 2004). The existence of so many variations of the causes of poverty in different communities has spurred a debate in the literature that perhaps a better approach to knowing and measuring poverty would be to ask the poor directly what poverty is (Walker, 2015).

2.3.2.4 Asking the poor themselves what is poverty

The final approach to defining and measuring multidimensional poverty is to ask people who are directly experiencing poverty. Perhaps the largest study ever undertaken using this approach is the World Bank's '*Voices of the Poor*' study which asked over 60,000 poor people in 60 developing countries what poverty is (Narayan & Petesch, 2002). The study concluded that the poor regard well-being as more important than wealth. Although this study did not measure multidimensional poverty, it accentuates the case for defining and measuring poverty multidimensionally. A much more recent study by Wisor et al. (2016) also used this approach to define and measure multidimensional poverty in 18 developing countries using participatory methods. Based on the dimensions identified by the poor, this study used 15 dimensions to construct the International Deprivation Measure (IDM), which measures multidimensional deprivation and gender inequality at the individual level. Unlike the studies by Mtapuri (2008) and Barnes & Wright (2012) the participants largely identified dimensions common to most studies, except for two new dimensions: voice (ability to participate in public decision-making) and family relationships (control of decision-making in the household) (Wisor et al., 2016, p. 33).

Different definitions measure different dimensions of multidimensional poverty and there is no fixed set of dimensions since the factors contributing to poverty differs from country to country. For example, while the United Nations (UN) has the widest range of dimensions as to what constitutes multidimensional poverty, the UNDP's (United Nations Development Programme) Multidimensional Poverty Index (MPI) only has three dimensions (UNDP, 2013), the World Bank's definition includes nine dimensions. In accordance with Sen's view, it is generally agreed in the literature that no prescribed set of dimensions and indicators exists and the selection of dimensions and indicators is largely dependent on the researcher and in consideration of local circumstances where a poverty study is to be carried out (Alkire & Foster, 2011). Although the chosen definition (and selected dimensions) has implications for

how poverty will be measured, what determinants of poverty will be used and ultimately will affect the incidences and extent of measuring poverty (Hagenaars and de Vos 1988), it is largely up to the researcher to select the dimensions and indicators to include in measuring multidimensional poverty. The selection of dimensions and indicators depends on the research objective and local context, and often it requires the researcher to make some sort of value judgement of which dimensions and indicators to include (Alkire, 2007; Bérenger & Verdier-Chouchane, 2007; Coromaldi & Zoli, 2012; Deutsch & Silber, 2005).

Hence, while traditional poverty measures are generally regarded as a too-narrow measure of poverty, multidimensional poverty measures could be broad or narrow, depending on the researcher's selection of dimensions and on the prevailing living conditions of a particular society. The ability of multidimensional poverty measures to either have broad dimensions or narrow dimensions is in line with Sen's perspective and that of other scholars (see for example Clark, 2006; Pogge, 2002; Nussbaum, 2000; Sen, 1999), because multidimensional poverty seeks to capture the multiple deprivations experienced by the poor, as well as focusing on the positive kind of life individuals wish to live and the ability to achieve personal well-being related to their own life (Sen, 1985). Therefore, dimensions may vary between different multidimensional poverty studies and may include income and other social indicators such as health, education, freedom, etc. For example, the UN's HDI only measures education, health and standard of living, while the Alkire and Foster multidimensional poverty index uses 10 indicators such as health, living standards and education (Alkire & Foster, 2011). In both these two multidimensional poverty measures income is not included, but many other dimensions of deprivation are used.

2.3.2.5 Foster-Greer-Thorbecke poverty measure

One of the first major attempts at suggesting a comprehensive multidimensional poverty measure is in the form of the well-known Foster-Greer-Thorbecke poverty measure – commonly known as FGT (Foster, Greer, & Thorbecke, 1984). The FGT proposes a multidimensional poverty measure based on the following criteria (ibid., p. 761):

- (i) The measure is additively decomposable with population-share weights.
- (ii) It satisfies the basic properties of Sen's CA.
- (iii) It is justified by a relative deprivation concept of poverty.

In the above set of criteria, the first and third criteria particularly warrant further explanation. Additively decomposable implies that any multidimensional poverty measure has to be an indexed measure in which the total population's index is an aggregate of its subgroups. Moreover, any change in the poverty level of a subgroup will result in a change of the poverty index of the total population in proportion to the subgroup's percentage of the total population. In other words, a population's total multidimensional poverty rate is a weighted aggregate of all its subgroups' poverty rate. Relative deprivation implies that an individual who is multidimensionally poor could be deprived in one dimension but not in another. This means a person could be deprived of access to adequate health services, while not being deprived of having freedom or employment opportunities. In contributing to the debate on multidimensional poverty measures, Ravallion (1996, p. 8) proposes four sets of indicators to be included in a robust multidimensional poverty measurement:

- (i) A sensible poverty measure based on the distribution of real expenditure per single adult, covering all market goods and services.
- (ii) Indicators of access to non-market goods for which meaningful prices cannot be assigned, such as access to non-market education and health services.
- (iii) Indicators of distribution within households; measures of gender disparities and child nutritional status.
- (iv) Indicators of personal characteristics which entail unusual constraints on the ability of escape poverty, such as physical handicaps or impairments due to past chronic undernutrition.

2.3.2.6 HDR-MPI

The 1990 HDR marked a significant shift from income poverty to multidimensional poverty, when the report, for the first time, used the term 'human development' instead of income poverty (UNDP, 1990). Moreover, the report states (1990, p. 1):

Human development is a process of enlarging people's choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect. Human development thus concerns more than the formation of human capabilities, such as improved health or knowledge. It also concerns the use of these capabilities, be it for work, leisure or political and cultural activities.

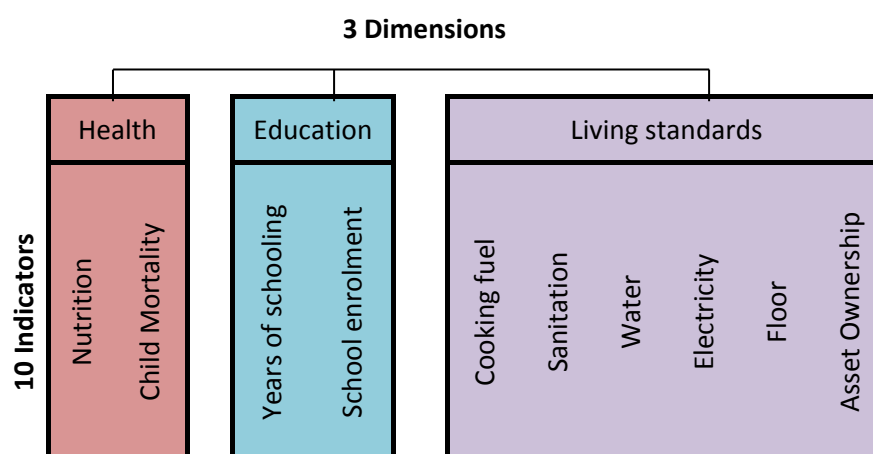
In the 1990 report, national human development was measured in terms of income, life expectancy and literacy and was expressed as the Human Development Index (HDI) (UNDP, 1990). However, in the HDR 2010 and onwards, the UNDP explicitly adopted the MPI to define and measure poverty multidimensionally, because ‘deprivation is fundamental human development’ (UNDP, 2010, p. 94). To this end, the main objective of the HDR-MPI is to identify overlapping deprivations suffered by households in the areas of health, education and living standards (UNDP, 2010). The HDR-MPI has three dimensions (health, education and living standards) and ten indicators spread across the three dimensions (see fig. 1-1). Each indicator within each dimension carries an equal weight. Figure 1-1 illustrates the theoretical framework of the HDR-MPI. The HDR 2010 recognises the importance of income in poverty measures and therefore, the HDR-MPI complements income poverty by looking at the MPI alongside income poverty measures for the purpose of identifying overlapping deprivations suffered simultaneously (UNDP, 2010). In other words, the MPI is used as a measure of deprivation and income poverty is utilised as a measure of the income poverty rate for the countries in the report. This is a very important point to note here because the HDR-MPI measures multidimensional poverty alongside income poverty. Therefore, in the below framework, the poverty measures are both multidimensional and the MPI is the outcome of the framework. Therefore, the MPI reveals the scale of deprivations beyond income by capturing overlapping deprivations within households. In this context, the framework regards a household as multidimensionally poor if it is deprived in two to six of the ten indicators.

2.3.2.7 OPHI-MPI

Another important and widely used multidimensional poverty measure is the Oxford Poverty and Human Development Initiative (OPHI). In 2010, the OPHI, based at the University of Oxford, developed a new poverty measure based on the Alkire-Foster method, called the Multidimensional Poverty Index (MPI). Like the Alkire-Foster method and other multidimensional poverty measures, the MPI measures multiple deprivations. The MPI assesses non-income poverty at the individual level and the poor are defined as being multiply deprived. Table 2-1 below shows the dimensions and indicators of the OPHI-MPI. Although the OPHI-MPI uses a certain set of indicators, these dimensions and indicators can be adapted according to local situations, which is in keeping with Sen’s theoretical framework. At this point it is important to understand that Sen’s CA is a normative approach which resulted in the emergence of multidimensional poverty (Alkire, 2006; Clark, 2005a; Saith, 2001). Furthermore,

the selection of capabilities translates into the selection of dimensions. However, Sen never proposed a specific list of capabilities. Nevertheless, a large body of literature exists on what capabilities are and what they should be. These may include, but not be limited to, being healthy, being employed, being educated, having freedom, having friends and family and being part of a social arrangement (Anand, Hunter, & Smith, 2005; Saith, 2001). Martha Nussbaum (2000), in particular, argued for a specific list of capabilities and proposed 10 basic human capabilities. However, as mentioned previously in section 2.3.2.2, Sen rejected a fixed list of basic human capabilities, stating that “to have such a fixed list, emanating entirely from pure theory, is to deny the possibility of fruitful public participation on what should be included and why” (Sen, 2005, p. 158). This means the researcher can decide on the appropriate dimensions and indicators to use.

Table 2-1: The OPHI-MPI dimensions and indicators



Source: (Alkire & Santos, 2010)

This section briefly presented the main aspects of multidimensional poverty. It briefly highlighted the failures of unidimensional poverty to capture the true essence of the intensity and meaning of the poor, which led Sen to propose his normative CA. This, in turn, led to the emergence of a shift from unidimensional poverty to multidimensional poverty. Several measures have been proposed over the last 30 years, but the Alkire-Foster methodology has received widespread acceptance in various forms, with the most recent being the OPHI-MPI. The latter is increasingly being used in poverty studies in many countries (Alkire, Conconi, & Roche, 2013).

2.3.3 Empirical studies examining multidimensional poverty

In one study, Wagle (2009) conducted two multidimensional poverty studies using survey data from Nepal and the U.S. to investigate how the dimensions of economic well-being, capability and social exclusion applied to poverty. In both Nepal and the U.S., Wagle reported mixed correlations between the different dimensions. Secondly, the findings of the study showed the incidence of multidimensional poverty to be nearly the same as absolute poverty in Nepal, while in the U.S. the incidence of multidimensional poverty was much higher than traditional poverty measures. Overall, Wagle concluded that the empirical data showed that poverty is essentially multidimensional since the overall quality of life is influenced by both material as well as non-material dimensions. However, Wagle, due to the absence of certain empirical data, estimated some indicators used in his study. In another study, Asselin (2009) carried out multidimensional poverty studies in Senegal and Vietnam using panel data from official national household surveys. The author reported that, in Senegal, the incidence of multidimensional poverty was 60%, while for monetary poverty it was 48%, and concluded that monetary poverty gives an inaccurate view of poverty. However, in the case of Vietnam, Asselin concluded that for the period 1993 – 2002, poverty was reduced almost equally for multidimensional poverty (-27%) and monetary poverty (-30%). Therefore, the findings show mixed results. In the case of Senegal there appears to be a strong and positive correlation between monetary poverty and multidimensional poverty. However, in the case of Vietnam, the findings show disparities between income poverty and multidimensional poverty between different regions in Vietnam. Overall, the results of both case studies show that there are mixed results when comparing income poverty with multidimensional poverty.

In the above two studies - one conducted by Wagle and another conducted by Asselin - the results are mixed. The OPHI, which developed the MPI for the HDRs, has conducted several multidimensional poverty studies in a number of countries and generally these studies present a variety of applications of multidimensional poverty. In 2010, OPHI carried out a study to measure multiple poverty in 104 countries using the MPI (Alkire & Santos, 2010). The study used education, health and living standards as dimensions, which are measured using 10 indicators. The MPI is measured at the household level and a household is only identified as multidimensionally poor if it is deprived in more than 30% of the deprivations. According to Alkire & Santos (2010), the MPI is a robust and simple methodology to measure multidimensional poverty at the household level because the different dimensions can be

measured directly. I think this poverty measurement is very structured and I have adopted this methodology in my study. However, I have adapted it to measure poverty at the individual level. Since 2010, the OPHI has conducted several country studies to measure multidimensional poverty.

The above three multidimensional studies are only a small selection of the studies found in the literature. However, I have mentioned these three as they were large-scale studies. According to Deutsch & Silber (2005) multidimensional poverty cannot be practically measured because of the absence of readily available information about capabilities and functions. However, these studies and the many others found in the literature show that it is possible to measure multidimensional poverty successfully, albeit data may be limited at times. Therefore, several researchers (Alkire & Foster, 2009; Alkire & Santos, 2010b; Battiston, Cruces, Lopez-Calva, Lugo, & Santos, 2013) have called for more multidimensional poverty studies to be conducted in order to expand the available data internationally. Through the efforts of the OPHI, a number of multidimensional poverty studies based on the Alkire-Foster Method (AFM) have recently emerged in the literature. For example, Wang, Feng & Alkire (2016) investigated the relationship between income poverty and multidimensional poverty in China and their findings show that one, income plays a crucial role in poverty measurement, and two, the results of income poverty and multidimensional poverty measurement are largely consistent up to a certain point. However, their study reported that 75% of the extreme multidimensionally poor are not income poor, thus supporting the notion that income poverty alone is unable to capture a comprehensive picture of poverty. Research findings by Suppa (2016) also point towards discrepancies between income poverty and multidimensional poverty. Suppa conducted a study in Germany with the objective of comparing Germany's official income-based poverty measure with multidimensional poverty based on the AFM and found a significant discrepancy in the identification of the poor. The author concluded that the mismatch of identifying the poor accurately is due to inherent conceptual flaws in the income poverty measure. Furthermore, the author concluded that no clear correlation exists between income poverty and multidimensional poverty. The findings of the aforementioned two studies are consistent with findings of a past study (Levine, Muwonge, & Batana, 2011) which investigated multidimensional poverty in Uganda. Levine, Muwonge and Batana showed that multidimensional poverty in Uganda was 73%, while an income poverty measure only indicated 31% of the population is poor. In all of the above previously mentioned studies, there is a common theme that emerges from them: income poverty alone does not fully

capture a complete picture of poverty and it appears that multidimensional poverty is superior in capturing its complexities. Sen argues that the capability approach is a better way of conceptualizing poverty than income poverty because 'doings and beings' are essential to human life (Alkire, 2002). Moreover, Sen argues that a one-dimensional approach to measuring poverty is an inadequate measure of well-being. Therefore, Sen's CA, states that the goal of human development is the expansion of human capabilities, not economic growth. According to Alkire (2002), development aimed at economic growth often contributes, among other things, to increased inequality, conflict, unemployment, corruption, uncontrolled expansion of urbanization and environmental degradation. A more recent study by Cosgrove and Curtis (2017) similarly argues that poverty, capabilities and well-being are negatively affected by aspects such as conflict, corruption, environmental degradation and unemployment.

So far, I have looked at the evolution of the concept of poverty from a one-dimensional to a multidimensional perspective and briefly presented a few multidimensional poverty studies which have been conducted previously. The following section discusses some of the prominent approaches to measuring well-being found in the literature.

2.4 Approaches to measuring well-being

Unfortunately, there is no agreed method of measuring well-being and the literature is abound with well-being measurements used in various countries and situations. In reviewing the literature on measuring well-being, Hawkins (2014) found four general approaches to measuring well-being. These are: one measure based on an adjusted GDP (gross domestic product) with a focus on income, another measure using a suite of alternative indicators without aggregating them into a single indicator, a third measure based on individuals' own assessment of their well-being, and a fourth measure based on a set of indicators which are aggregated to create a composite indicator.

2.4.1 Measuring well-being based on an adjusted GDP

According to Hawkins, one approach to measuring well-being is to adjust a country's GDP to arrive at a true measure of well-being. GDP measures the total output generated by everyone

– individuals, businesses and the government – in a country. In this regard, GDP indicates a nation's standard of living. This approach calls for the adjusting of a country's GDP by subtracting the value of production not related to the well-being of individuals (Hawkins, 2014). For example, advertising expenditure is an item not related to individual well-being and therefore, should be subtracted from the published GDP to arrive at an adjusted GDP value which could be used in constructing a well-being measure.

Several criticisms have been levelled against this approach to measuring well-being. Firstly, it is very difficult to deduct all aspects not related to the well-being of individuals/households because only produced capital such as equipment and buildings are quantifiable, while many other forms of capital such as environmental capital (e.g. biodiversity) and human capital (e.g. education and health) are very difficult to measure and subtract from the published GDP (Hawkins, 2014; Stiglitz, Sen, & Fitoussi, 2009). In addition, according to Ivković (Ivković, 2016) GDP is an inaccurate measure of well-being in a society because well-being is much more than just income and GDP is just an economic measure of productivity; it does not directly measure what makes for a valuable life. Although GDP is a common measure of well-being, it is essentially an inaccurate measure of well-being because it does not encompass all aspects related to well-being (Hawkins, 2014; Stiglitz et al., 2009).

2.4.2 Well-being based on a dashboard of alternative indicators

Another approach to measuring well-being is to use a dashboard of indicators without aggregating them into a single composite indicator. This approach was first proposed by Hans Rosling (2006). The rationale for this approach, according to Hawkins (2014) is that subjective and objective data cannot be combined into a single value and a 'dashboard' of indicators is a good alternative approach to measuring well-being. In this approach separate values are reported for indicators such as health, education, economic well-being, etc. Although this approach has been used in measuring well-being in Australia, Vietnam and a few other countries, it is not widely used. One possible explanation for the lack of interest in this approach could be that Rosling's 'dashboard' was more a statistical way of presenting indicators of well-being and presenting a wide range of indicators individually makes it difficult for policy-making to gather an overall picture of a society's well-being. In essence, Rosling's 'dashboard' of indicators is largely an exercise in documenting well-being indicators, and, as Patrizzii, Pettini, &

Resce (2017) argues, well-being measures need to be more than just the documentation of indicators, but needs to be able to inform policies and national priorities.

2.4.3 Individuals' own assessment of well-being

A third approach is to ask individuals themselves to assess their state of well-being. This approach is also often referred to as subjective well-being.

While some economists, notably Dolan, Layard and Metcalfe (2011), argue that subjective well-being cannot be measured accurately, the OECD concluded that it is possible to gather valid data from surveys to measure subjective well-being. However, according to Stiglitz, Sen and Fitoussi (2009), although subjective well-being is an appealing approach to measuring well-being, it has no objective indicators which could be translated into quantifiable measures. Therefore, they concluded that subjective well-being indicators could be misleading for policy-making. Perhaps one of the most notable subjective well-being studies is Nayaran's *Voices of the Poor* (2000) three-volume study in which he surveyed 47 countries to determine the poor's own experiences about being poor and the meaning of poverty according to them. Although elaborate in recording the poor's own experiences of well-being or poverty, this study illustrates how a subjective approach to well-being fails to capture poverty objectively. Therefore, subjective well-being is not an adequate measure of well-being, especially if used on its own because it is difficult to quantify the well-being indicators. In this regard, the Fitoussi Commission report (Stiglitz et al., 2009, p. 15) states that "the information relevant to valuing quality of life goes beyond people's self-reports and perceptions to include measures of their "functionings" and freedoms." In other words, although subjective well-being provides essential information and data about the well-being of individuals, it is an insufficient approach to measure well-being because it does not adequately measure the capabilities individuals choose to live the kind of life they value.

2.4.4 Well-being measured using a composite indicator

A final approach to measuring well-being is to use a weighted average composite index of several indicators to measure well-being. This approach is based on Sen's CA and is adopted in this study. Although several examples are in use today, the UN's HDI is perhaps the most prominent example of this approach. Other examples are The Canadian Index of Well-Being,

The Australian National Development Index and OECD Better Life Index (Hawkins, 2014; Patrizii et al., 2017). The theoretical underpinning of this approach is that well-being is a multi-dimensional phenomenon that goes beyond monetary causes. This approach therefore calls for the measuring of several indicators across various dimensions affecting well-being, as explained in section 2.3.2 of this chapter.

A major criticism of this approach has been the choice of dimensions and indicators to use when measuring multi-dimensional well-being because Sen deliberately does not provide a specific list of capabilities, nor dimensions to use in the CA (Alkire, 2002). This has led to a wide range of dimensions and indicators emerging in the literature. The next section discusses the various well-being dimensions found in the literature.

2.4.5 Approaches to selecting well-being dimensions

In her book, *Valuing Freedom*, Alkire (2002) does a thorough review of the role and usefulness of selecting a 'list' of well-being dimensions. Alkire argues that although a 'list' of dimensions is a useful start to identifying capabilities, arriving at one preferred list is less important than having a broad list which could be modified as required. She bases her argument on the writings of Sen, who advocates for the adoption of multiple lists of dimensions as a practical way for measuring and analysing well-being. Furthermore, Alkire argues that dimensions should be non-hierarchical and their selection should not diminish essential cultural terms and values. She also acknowledges that most lists proposed by different authors are based on philosophical standpoints and their intended operational needs and therefore no list is more superior than another. Consequently, different authors have proposed and used different different lists of dimensions, as illustrated in table 2.2 below. Although the table highlights the many approaches and wide range of dimensions that are found in the literature, Alkire states that it is not possible to evaluate these for appropriateness without knowing the research context and without empirical testing. Moreover, Alkire argues that as long as the authors do not claim the dimensions to be universal, but rather effective for their research, the lists are useful.

Table 2-2: Approaches to selecting well-being dimensions

Author(s)	Approach	Dimensions
Grisez et al.(1987)	Basic human values	bodily life—health vigour and safety, knowledge, skilful performance in work and play, friendship, practical reasonableness, self-integration, harmony with ultimate source of reality
Martha Nussbaum (2000)	Central human capabilities	life, bodily health, bodily integrity; senses, thought, and imagination; emotions, practical reason, affiliation, other species, play, control over one's environment
Max-Neef (1993)	Axiological categories	subsistence, protection, affection, understanding, participation, leisure, creation, identity, freedom
Narayan et al.(2000 a)	Dimensions of wellbeing	material well-being, bodily well-being, social well-being, security, psychological well-being, freedom of choice and action
Schwartz (1994)	Human values	power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, security
Cummins (1996)	Domains of life satisfaction	material well-being, health, productivity, intimacy/ friendship, safety, community, emotional well-being
Ramsay (1992)	Human needs	physical survival, sexual needs, security, love and relatedness, esteem and identity, self-realization
Doyal and Gough (1993)	Intermediate needs	nutritional food/water, protective housing, work, physical environment, health care, security in childhood, significant primary relationships, physical security, economic security, safe birth control/childbearing, basic education
Qizilbash (1996 a)	Prudential values for development	health/nutrition/sanitation/rest/shelter/ security, literacy/basic intellectual and physical capacities, self-respect and aspiration, positive freedom, autonomy or self - determination, negative freedom or liberty, enjoyment, understanding or knowledge, significant relations with others and some participation in social life, accomplishment (the sort that gives life point/weight)

Source: (Alkire, 2002, pp. 99–100)

After surveying the literature, she found 39 different lists of dimensions proposed by different authors. After careful scrutiny of the lists, Alkire (2002, p. 103) observed that:

1. different instantiations of different dimensions are resource-dependent to different degrees;
2. the data available on aspects of the dimensions, and their comparability, varies dramatically, and
3. individuals and cultures pursue these dimensions in radically different ways, and
4. that in order for poverty reduction to become an operational objective in the sense of a feasible goal for which planning, monitoring, and evaluation frameworks can be designed, heroic specification is required. In the spirit of the capability approach, the assumptions on the basis of which this specification takes place should be collaborative, visible, defensible, and revisable. If the process of public discussion and the emergence of consensus is important, then a given fixed list cannot have some irresistible or definitive status.

In the light of these wide differences in lists of dimensions, Alkire (2002, p. 97) recommends the adoption of Finniss's criteria for selecting dimensions:

1. *The dimension must be such that it could count as a reason for action* (not e.g. a fact about what I am thinking). Food is not precisely a reason for action so could not be a dimension.
2. *The dimension must be irreducible*—dimensions are reasons for action which need no further reason. The dimensions must not include items which are a subset of some other valuable and basic reason for acting.
3. *The dimension must represent complete reasons for acting*—i.e. it cannot be a basic motive (pleasure, pain) which is valuable only when its pursuit coheres with the pursuit of a valuable reason. Also, the dimension must be intrinsically rather than only instrumentally valuable ('only' is an important qualification because some basic items—like life or knowledge—will also have an instrumental dimension).
4. *The dimensions are not virtues*: dimensions of human flourishing represent the basic values people are seeking when they 'be and do and have and interact'—morally or immorally. They are neither virtues nor personal qualities (gentleness, self-respect).

This section provided a brief overview of the many lists of dimensions and the various approaches to selecting dimensions found in the literature. In the end, it is important to remember that these different lists are in line with Sen's writings which steer clear of a definitive list of dimensions and capabilities for the interest of 'incompleteness.' Sen (1993) argues that the CA is unlike the utility-based approach and the other non-utilitarian approaches which insist on specific value objects to measure well-being. Instead, Sen argues that an acceptance of the importance of capabilities and functionings does not need to be based on an agreement of values. Instead, the lack of a specific list of dimensions allows for flexibility of accepting a range of values, depending on the research study.

While this section dealt with the various approaches to selecting well-being dimensions for measuring well-being, it is equally important to consider what capabilities university entrants should possess to ensure readiness for university, particularly in the context of SA's unequal higher education participation landscape. Although it was not one of the research objectives of this study to measure capabilities for university readiness, its consideration is important for presenting a wider picture and more complete picture of HEA and well-being. This is presented in the next section.

2.4.6 Capabilities for university readiness in SA

In a recent study, Wilson-Strydom (2015b) argues that school performance and admission tests are inaccurate measures of HE readiness due to the past educational inequalities in SA. Moreover, she asserts that equality of access and participation in HE should not only be measured in terms of statistics, because meeting university criteria does not mean students are ready for their successful participation in HE. Instead, she argues that the question of 'equality of what?' in terms of access and success in HE needs to be answered beyond statistical numbers. Therefore, she calls for the adoption of a more social justice approach to redress the educational inequalities in HE in SA. According to Wilson-Strydom (2015b, p. 151), "when we consider issues of justice or injustice, we cannot merely ask whether different people have achieved the same outcome, but rather, whether different people have had the same opportunities to achieve this outcome." Therefore, she proposes a list of capabilities students require to participate successfully in higher education (see table 2-3). Collectively, these seven capabilities conceptualises readiness for university.

Table 2-3: Capabilities for university readiness in SA

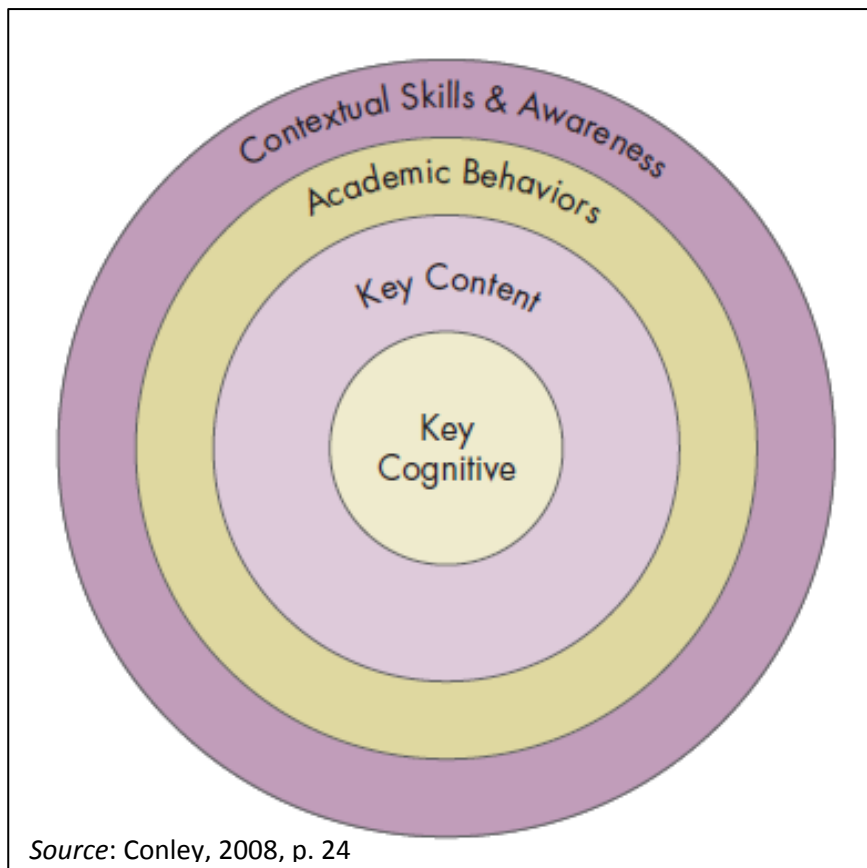
Capabilities	Description
1. Practical reason	Being able to make well-reasoned, informed, critical, independent and reflective choices about post-school study
2. Knowledge and imagination	Having the academic grounding for chosen university subjects, being able to develop and apply methods of critical thinking and imagination to identify and comprehend multiple perspectives and complex problems.
3. Learning disposition	Having curiosity and a desire for learning, having the learning skills required for university study and being an active inquirer (questioning disposition).
4. Social relations and social networks	Being able to participate in groups for learning, working with diverse others to solve problems or complete tasks. Being able to form networks of friendships for learning support and leisure.
5. Respect, dignity and recognition	Having respect for oneself and for others, and receiving respect from others, being treated with dignity. Not being devalued, or devaluing others because of one's gender, social class, religion or race. Valuing diversity and being able to show empathy (understand and respect others' points of view). Having a voice to participate in learning.
6. Emotional health	Not being subject to anxiety or fear that diminishes learning. Having confidence in one's ability to learn.
7. Language competence and confidence	Being able to understand, read, write and speak confidently in the language of instruction.

Source: (Wilson-Strydom, 2015b, p. 131)

Wilson-Strydom put forth this normative list of capabilities for university access and readiness as a starting point for redressing the current educational inequalities that exist in SA's education system.

Wilson-Strydom's argument is consistent with findings of past studies by Conley (2008), which argues for the adoption of a multi-dimensional approach to measuring college readiness. Although Conley uses the term 'college,' he is referring to post secondary education, which by definition includes university education (see chapter 1). While Wilson-Strydom only defined "readiness" in terms of seven capabilities, Conley conceptualised "readiness" both in terms of capabilities and a clear definition of the term. According to Conley (2008, p. 24), "readiness can be defined as the level of preparation a student needs in order to enroll and succeed—without remediation—in a credit-bearing general education course at a post secondary institution that offers a baccalaureate degree or transfer to a baccalaureate program." To this end, Conley proposes a multi-dimensional model for measuring university readiness (see figure 2-6 below).

Figure 2-6: Multi-dimensional model for measuring college readiness



In order to be ready for tertiary education, a student needs to have all four capabilities contained in the model. Table 2-4 presents the key features of each capability, as outlined by Conley (2008). In comparing Wilson-Strydom's list of capabilities with that of Conley, both emphasise similar capabilities for university readiness to ensure success in higher education. Both researchers also note that, firstly, these capabilities are distributed inequitably in society, and secondly, it is common for first-generation university to lack these capabilities, which affects their success at university. However, in the case of SA, this inequitable distribution is generally aligned according to race due to SA's past (Wilson-Strydom, 2015b). In order to redress this inequality, Wilson-Strydom argues for the adoption of a capabilities-based social justice framework to help students' transition from high school to university, which will enhance success at university - as mentioned above.

Table 2-4: Multi-dimensional capabilities for university readiness

Capabilities	Description
1. Key Cognitive Strategies	Having cognitive and metacognitive capabilities such as analysis, interpretation, precision and accuracy, problem solving, and reasoning. This means being able to learn content from a range of disciplines.
2. Content Knowledge	Being able to critically engage with texts, produce well-written work, build vocabulary and word analysis skills to produce both written and oral work, and being able to read and understand a variety of non-fiction and technical texts. Being able to understand the basic concepts, principles, and techniques of algebra for mathematics courses. Having scientific thinking skills such as understanding scientific communication conventions, knowing how to draw conclusions from empirical evidence, and how such conclusions are then subject to challenge and interpretation. Being able to critically use analytical techniques and conventions common in the social sciences. These analytical methods require having the skills to interpret sources, evaluate evidence and competing claims, and understand themes and events within larger frameworks or organizing structures. Being able to understand certain “big ideas” (theories and concepts) that are used to order and structure knowledge in the social sciences.
3. Academic Behaviors	Having a set of academic self-management behaviors. Among these are time management, strategic study skills, and awareness of one’s true performance, persistence and the ability to utilize study groups. All require students to have high degrees of self-awareness, self-control self-monitoring and intentionality.
4. Contextual Skills and Knowledge	Being able to understand how college operates as a system and culture. This means having the knowledge and skills that enable students to interact with a diverse cross-section of academicians and peers. These include: the ability to collaborate and work in a team, knowledge of the norms of the “academic” culture and how one interacts with professors, administrators and others in that environment, the ability to be comfortable around people from different backgrounds and cultures, the ability to take advantage of academic and personal support resources available on most campuses, and the ability to demonstrate leadership skills in a variety of settings.

Source: (Conley, 2008, pp. 24–26)

However, implementing these capabilities as measures of readiness for success at university is complex and many other factors such as quality of instruction and ability to pay tuition fees may affect success at university. Although a large percentage of students drop-out from HEIs in SA due to financial problems, Wilson-Strydom’s list of capabilities make no mention of this. Moreover, Wilson-Strydom’s list of capabilities concerns itself with the capabilities university

entrants should possess in order to ensure equatable access and success at HEIs. While these may affect the success of students' performance at university and possibly their post-tertiary performance, this is beyond the scope of this study since my research deals with students' well-being after HE and the possible ways it may affect their well-being. Nevertheless, perhaps it is important to make mention here that deprivation of capabilities prior to entering HE, may possibly affect performance at university, as well as well-being after graduation. Having said that, this study included only participants who have successfully completed their university education. This implies that they had the necessary capabilities to achieve success at university.

The next section reviews the role of education in well-being, and the possible correlation between the two.

2.5 Education and well-being

So far, this chapter reviewed the literature on multidimensional poverty and the various approaches to measuring well-being. This section reviews the relevant literature on the causal link between higher educational attainment and well-being. On the one hand, it is generally agreed that the causal link between education and poverty and well-being is bi-directional (Van Der Berg, 2008): poverty affects educational attainment and educational attainment affects well-being. On the other hand, and in a much broader sense, no conclusive evidence exists on whether educational attainment leads to economic growth or vice versa (Krueger & Lindahl, 2000). The causal link between education and well-being is bi-directional because it is possible for each variable to have an impact on the other. Very often the poor cannot get access to education due to a lack of money, and on the other hand, because of being uneducated, the poor cannot get access to employment opportunities, which affects their well-being. Due to limited income resources, poor people are unable to get access to quality education, or they are forced to drop out before graduating because they are unable to pay tuition fees (Wangenge-Ouma, 2012). SA's undergraduate drop-out rate is alarming, with some HEIs reporting an 80% drop-out rate, and more alarming is the evidence showing about 70% of students quitting university are from poor families earning incomes as low as R 1,600 per month (Letseka & Maile, 2008). On the other hand, a large body of empirical evidence exists indicating those with less education earn less money and those with higher educational

attainment experience increased levels of income (Blaug, 1970, Ahmed, 2010). Ultimately, the more educated an individual is, the more likely he/she is able to earn a higher income (Witmer, 1970). However, this is a debatable topic and not everyone agrees that a correlation exists between educational attainment and economic growth (Atkinson, 1975, Psacharopoulos, 1994). However, the link between educational attainment and economic growth and well-being is only half the story, because, as I will explain shortly, the value of educational attainment goes beyond income or economic growth. In this regard, Flores-Crespo (2007) questions the notion that education can enhance economic growth and development. Although he acknowledges that education has some positive impact on economic growth, he argues that this is marginal and that the link between education, human development and well-being can be better understood through Sen's CA. Similarly, Cockerill (2014) argues that Sen's CA is a much better approach to evaluating the role of education in well-being than the human capital theory. Although Cockerill, also acknowledges that education as human capital promotes instrumental skills important for development or increases GDP, it also causes inequality and often leaves behind the most vulnerable and disadvantaged individuals in a society. I will return to this argument later on in the chapter, but for now it suffices to observe that there is a link between education and human development, although the nature of this link is debatable. Sen (1985) refers to education as a direct determinant of human capability.

In an attempt to unpack the link between education and economic growth and development, Robeyns (2006b) analyses three normative theories of the role education plays in development. These are: (i) human capital theory, (ii) rights discourses, and (iii) the capability approach. However, I will only focus on the first and last approaches since they are directly relevant to my thesis. The human capital approach is one of the earliest models attempting to explain the role of education in promoting economic growth and development, while the capability approach is a more recent one. According to Robeyns (2006b, p. 2), "the human capital approach is problematic because it is economistic, fragmentised, and exclusively instrumentalistic" while the capability approach is a multidimensional and comprehensive model which can "account for the intrinsic and non-economic roles that education plays." According to Robeyns (2006b), education can play five different roles in society (see table 2-4 below).

Table 2-5: Roles of education

Role	Explanation
1. intrinsic important	An individual may pursue education for the value of knowing something such as learning a foreign language, even if the individual may never use it. Learning something new may be intrinsically satisfying to a person.
2. instrumental personal economic role	Education can assist a person in finding employment, make a person less vulnerable to the labour market, become a more informed consumer, and provide information to gain access to economic opportunities. This role of education is important for people's standard of living and acts as a buffer against poverty and deprivation.
3. instrumental collective economic role	A lack of education could cause a significant proportion of a society to be illiterate, which may limit the availability of books and newspapers. This suggests limited access to knowledge. Also, in a country where economic growth requires the introduction of new technologies that need to be taught, or a country needs to shift from an agrarian to an industry- and services-based economy, an educated workforce will be required for economic growth.
4. non-economic instrumental personal role	Education affords individuals the abilities of having access to information by reading newspapers, being able to read important medical instruction leaflets, being knowledgeable about issues of health, reproduction, and contraception, being able to speak with strangers in their languages, being able to work with a computer and communicate with people worldwide through the internet, and many other abilities. In essence, education can enlighten people so that they can recognise that they do not necessarily need to live similar lives as their parents, or realise that they have other options to live different lives.
5. non-economic instrumental collective role	Education may help children learn to live in a society where people have different views of the good life, which could contribute to a more tolerant society. Also, education may help women realize they do not have to subscribe to submissive female roles and help them to fight against oppressive interpretations of women's roles in their religion. Similarly, men may realize that they could also care for infants and small children and it is not a universally shared idea; other men's lives are greatly enriched by fully participating in the care and upbringing of their children. If enough men gain this knowledge, this may change norms of masculinity and femininity in society, which may widen the opportunities of both men and women to lead the lives they truly value, rather than follow uncritically some (unspoken) scripts that are dominant in their communities.

Source: (Robeyns, 2006b, pp. 2–4)

Table 2-4 shows that the roles of education could be economic or non-economic, as well as personal or societal. In explaining the roles of education in society, Robeyns argues, rightly, that education plays both a human capital role, as well as a capabilities role. Moreover, it is evident from her discussion that the roles attributed to these two approaches are not mutually exclusive. In other words, the role of education may be conceptualized in terms of both the human capital theory and the capability approach. However, Robeyns (2006b, p. 7) argues that

“understanding education exclusively as human capital is severely limiting and damaging, as it does not recognise the intrinsic importance of education, nor the personal and collective instrumental social roles of education.” She then concludes that we should not discard the idea of education as human capital, but rather we should recognise that education is much more than human capital. In the last few decades, Amartya Sen’s capability approach has increasingly gain prominence as a more robust and alternative approach to the human capital theory to evaluate the benefits of education to human well-being beyond human capital. Therefore, to fully understand the role education plays in human well-being, it is necessary to review the literature on both the human capital theory and the capability approach to fully appreciate the value of HEA to well-being.

So far I have pointed out briefly that a bi-directional causal link exists between education and well-being or poverty on the one hand, and the fact that this causal link is inconclusive on the other. My study focuses on the impact HEA has on well-being. Hence, much of the remainder of this chapter will be directed towards reviewing the literature relevant to the impact of HEA on well-being, in general, and specifically with reference to SA.

2.6 Higher education and well-being

In recent years, there has been an increasing amount of literature on higher education and development, including higher education and capabilities and well-being (see for example: Boni & Walker, 2016; Cockerill, 2014; Flores-Crespo, 2007). This is primarily due to an increased awareness about the key role HE could potentially play in economic development (Bloom et al., 2006) and human development (Peercy & Svenson, 2016). However, this was not always the case. For most of the 1950s and 1960s, little attention was paid to higher education (HE) in debates on economic development and well-being. Attempts at improving human capital in poor societies mainly focused on primary education and health, as these were deemed more important in poverty and well-being studies (Kapur & Crowley, 2008). However, with the advent of the ‘knowledge economy’ - in the last decade or two – there has been an increase in the focus on HE as a means of improving well-being, and now HE is regarded as a vital component of sustainable human development. In their paper, Kapur and Crowley (2008) successfully demonstrate a steady increase in HE enrolment rates, especially starting from the

year 2000. For example, their data shows HE enrolment at around 92 million in 1980 and in 2010 it swelled to 210 million. Similarly, in less developed countries and globally, HE enrolment rates increased by almost 300 percent from 1950 to 2010. This growth in HE enrolment points to an increasing awareness of the value of HE. However, several scholars argue that the benefits of HE as human capital is limited, while HE as capability expansion is much more promising (Cockerill, 2014; Flores-Crespo, 2007; Robeyns, 2006b). A World Bank study conducted in 1995 noted a rapid growth in tertiary enrolment rates in developing countries (Task Force, 2000). According to the study, HE enrolment rates in developing countries increased by nearly 67% between 1975 and 1990. However, the study also concluded that in spite of the rapid growth rates in HE enrolment in developing countries, in developed countries this rate is about six times higher. Thus, the developing world is still lagging far behind developed countries in terms of HE enrolment. Similarly, HE enrolment disparities also exist within countries between urban and rural areas, rich and poor, and men and women. While HE enrolment is expanding, there remains a debate on which approach is better for human development and improving well-being. The main goal of this section and the next then is to present a coherent and convincing case in support that HEA leads to well-being. First I will discuss the role of education on well-being from a human capital approach, and then I will present a review of the role of education on well-being from the capability approach. Then, I synthesize the various aspects related to HEA, capabilities and development to explore whether HEA has an impact on well-being, and if it does, what is the nature of this link.

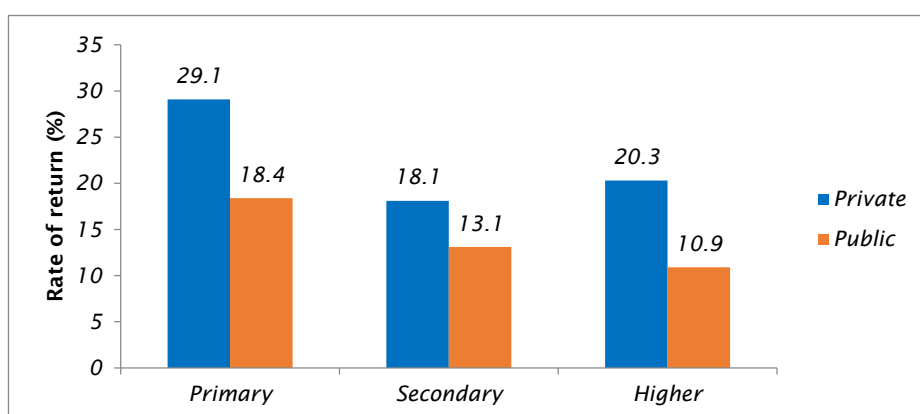
2.6.1 Higher education and the human capital theory

One of the earliest works investigating the correlation between education and income is Mincer's (1974) seminal work, *Schooling, Experience and Earnings*, in which he measured the rate of return on education. His study focused on the correlation between years of education and earnings. According to Mincer, earnings - not age – are determined by years of education and work experience. In other words, Mincer suggested that the rate of return to education increases with additional years of education and work experience. Simply stated, Mincer's proposition is this: wages = education + experience. This approach of evaluating returns on investments in education in terms of employment or economic benefits is known as the human capital theory, as proposed by Gary Becker (1975). With regards to higher education, the human capital approach calls for the prioritization of the economic returns of higher

education and therefore, the value of higher education lies in its ability to increase economic productivity and incomes of individuals and society (Walker & Fongwa, 2017).

Another important study, conducted by Psacharopoulos and Patrinos (2004), surveyed the rates of return to education in 78 countries based on the human capital theory. Their study shows primary education as having the highest rate of return, while HE has the lowest rate of return (see figure 2-3).

Figure 2-4: Returns to investment in education by level



Source: (Psacharopoulos & Patrinos, 2004)

Although primary education has a higher return, the rate of return for HE is still good at 10.9% to society and 20.3% to the individual. However, the researchers noted that the rate of return for primary education declines over time, while the rate of return to HE increases over time. Therefore, the rate of return of HE is more sustainable than any other level of education. Furthermore, their research indicates that the rate of return for HE is the highest in developing countries (see table 2-5) and countries with low to low-middle incomes (see table 2-6), which is where the world's poor are mainly concentrated. For example, in Sub-Saharan Africa, public higher educational institutions (HEIs) recorded a return of 11.2 percent, but only 8 percent in the OECD⁶ region. Interestingly, their study also shows that the impact of education increases in regions with lower per capita income, as table 2-6 shows. Low income countries reported a

⁶ OECD stands for Organisation for Economic Co-operation and Development and currently includes 40 countries which account for 80% of the world's trade and investment.

rate of return for HE at 10.6 percent for those attending public HEIs and 23.5 percent for those attending private HEIs, while high income countries reported rates of 8.2 and 7.7 percent, respectively. In other words, their findings indicate that the rate of return for HE is higher in lower income countries than in high income countries, irrespective of whether an individual attends a public or private HEI.

Table 2-6: Returns to HE by region

Countries	Public HEIs	Private HEIs
Sub-Saharan Africa	11.2	27.8
Asia	11.7	19.9
Non-OECD	10.6	21.7
Latin America/Caribbean	12.3	19.7
OECD	8.7	12.3
World	10.9	20.3

Source: (Psacharopoulos & Patrinos, 2004)

Table 2-7: Returns to HE by country income group

Countries	Public HEIs	Private HEIs
Low income	10.6	23.5
Lower middle income	11.4	18.9
Upper middle income	9.5	14.8
High income	8.2	7.7
World	10.7	19.0

Source: (Psacharopoulos & Patrinos, 2004)

Contrary to the above study of Psacharopoulos & Patrinos, Pencavel's (1993) study on the contribution of HE to economic growth in the United States shows HE is a bigger contributor to economic growth than primary and secondary schooling. Unfortunately, Pencavel's study did not distinguish between public and private HEIs. A cross-country study conducted by Tilak (1989) found education at all levels, from primary to HE, has a significant effect on poverty in rural areas. However, his results show HE has the highest effect on increasing well-being, while basic literacy skills have the least impact. More interestingly, his study shows education level is not strongly linked to urban poverty. However, in the urban areas, literacy and primary education are relatively more important. In terms of income, Tilak's study also shows a positive correlation between education level of the labour force and income distribution: as

levels of education rise, the income shares of both the bottom 40 percent population and the middle 40 percent population increases, which means an increase in well-being. In both groups, he found the income shares to be significantly influenced by enrolments in secondary education, while enrolments in higher education had no effect. Also, his results show all levels of education have an adverse effect on the income share of the top 20 percent population. Secondary education has the highest negative influence, while HE has a negative and statistically insignificant effect. In other words, all levels of education contribute to redistributing income from the top 20 percent of the population to the lowest and middle 40 percent of the population. Therefore, educational attainment levels positively influences human well-being. Although Tilak did not explain this observation, one possible explanation for this finding could be that as individuals in the lowest and middle income groups obtain higher education levels, they may have access to better employment opportunities and other aspects of well-being which positively impacts their income levels. Tilak's study draws a number of important conclusions on the relationship between education, poverty and income distribution:

- (i) As enrolments in education increase, the proportion of the population below the poverty line decreases. While this is especially true with regard to rural poverty, education does not have a significant effect on urban poverty.
- (ii) Education has a positive and significant impact on reducing income inequalities. However, the effect of secondary education is more significant than primary education, while HE has very little or no effect.
- (iii) Increased public subsidization of HE leads to increased income inequalities in less developed countries but not in developed countries. However, he readily acknowledges other studies indicating an inverse relationship between public subsidization of HE and income inequalities in poor countries but not so in rich countries.

However, a more recent study observed that although HE was not high a priority in global development efforts in the past mainly because both the education for all goals and millennium development goals mainly focused on primary education, this focused has now changed with more governments and development efforts recognizing the centrality of HEA in development (Kruss, McGrath, Petersen, & Gastrow, 2015). In spite of the importance of HE in development, a recent systematic review of the literature on the impact of HE on development

in developing countries shows that there is insufficient research on the relationship between HEA and development (Oketch, McCowan, & Schendel, 2014). Nevertheless, Kruss et al. (2015) observes that the HCT's claim that HEA is only reflected in terms of productivity is problematic because HEA has other benefits beyond productivity. As mentioned earlier on in this section the HCT perceives education as essential simply because it turns individuals into productive workers, which allows them to earn a higher income and, in return increases the national wealth of a country (Robeyns, 2006b). This approach has been criticised by many as being too narrow for a broad-based human development approach. The next section highlights some of the key criticisms of the human capital theory found in the literature.

2.6.1.1 Human capital theory and well-being

Although the human capital theory has been widely used in studies on the economics of education in developing countries in order to formulate and influence national economic and education policies for improving socioeconomic development (Glewwe, 2001), it is generally regarded in the literature as an unworkable theory for measuring human well-being for several reasons.

According to Robeyns (2006b), the human capital theory makes an important contribution to development in terms of having brought attention to the value of skills and knowledge acquired through education as important income generating abilities. Moreover, Robeyns argues that the human capital theory successfully made people as a central component of economic development, whereas economists only focused on technical and macro-economic development previously. However, that is where the advantages of the human capital theory ends and she points out several problems with this approach. Firstly, Robeyns argues that the human capital theory is too 'economistic.' In other words, the theory claims that the only benefit of education is increased productivity and higher income. The human capital theory conceptualises the world in economic terms and ignores the cultural, social and non-material aspects of life. For this reason, the human capital theory cannot account for the behaviour of people motivated by social, religious, moral, emotional, or other non-economic reasons. Secondly, Robeyns claims that the human capital theory is merely instrumental. Meaning, it only sees value in education as long as it contributes, directly or indirectly, to economic productivity or output, and disregards the noninstrumental values of education such as

learning to read. By looking at education purely as an investment vehicle, the human capital theory implies that investments in education should only be made if it has the highest returns and ignored when the return is low or nil (Robeyns, 2006b). In other words, it does not consider human well-being as an outcome. Furthermore, Alkire (2002) in *Valuing Freedom* demonstrates with the Oxfam literacy class project in Pakistan, that economic returns may be absent in an education project. However, the latter has other essential transformative benefits for participants such as empowerment, self-esteem, confidence and a feeling of accomplishment, which goes beyond mere economic returns. Therefore, the HCT's assertion that education only has an economic role in development is questionable, at best.

Another failure of the human capital theory with regards to measuring well-being is that it does not consider an individual's ability in the sense that a student with greater abilities is more likely to receive more education and earn a higher income (Harmon, Oosterbeck, & Walker, 2003). In such a case, there is no correlation between years of education and income but rather between abilities and income. From a multidimensional well-being perspective, I think the human capital model also ignores several important variables which may influence education and income, such as (i) access to education, (ii) availability of equal opportunities, (iii) freedom, and (iv) urban-rural disparities. In searching the relevant literature, I found no tangible definition of access to education, and so I propose this synthesized definition: Access to education exists when the right to education is guaranteed to all individuals regardless of gender and race (UNESCO, 2002), no cultural, social and political barriers exist and where poverty, conflict, crime and discrimination do not hamper the opportunities of individuals to attend educational institutions (Tulder, Goel, & Winarno, 2007).

The HCT also falls short in considering the freedom, or lack of freedom, individuals may have to choose where they want to work or attend university, which is an important factor, especially in the developing world. For example, during SA's apartheid era, different universities were established for different population groups, so that a white student could only attend a white-only university and the same for other racial groups. The University of Cape Town and University of Stellenbosch were white-only universities, while the University of the Western Cape was a coloured-only university, University of Fort Hare a black-only university and the University of Durban-Westville was an Indian-only university. In Afghanistan, during the rule of

the Taliban, women lacked the freedom to attend school or university due to war and violence against women (Povey, 2003).

Lastly, existing disparities in the availability of infrastructure, educational and employment opportunities in rural and urban areas may impact individual well-being, which has nothing to do with economic returns derived from educational achievement. These disparities often discourage or prevent access to individuals in rural areas, while those in urban areas have better access to universities and better-paying employment opportunities (Ersado, 2005; Todaro, 1969).

According to Flores-Crespo (2007), almost half a decade of large amounts of government funding did not prevent educated people from experiencing inequality, unemployment and despair. Therefore, he argues that education from the HCT perspective is an ineffective approach for social and economic change. This finding is consistent with findings of a later literature review study conducted by Oketch et al. (2014). Their study concluded that after a long period of focus on primary education, the international community is now refocusing its attention on the role of HEA in development. However, they also concluded that the degree and nature of HEA's impact on human development is still not clear. For this reason, Flores-Crespo (2007) and others (see for example Alkire, 2002; Saito, 2003; Unterhalter, Vaughan, & Walker, 2007; Walker & Fongwa, 2017) argue that Sen's CA is better situated to explain the link between education, employment and development. It is therefore no surprise that in recent years, there has been an increasing amount of literature on understanding human development and well-being from the CA perspective. This is largely due the failure of development policies based on the HCT to adequately explain the occurrences of rising unemployment rates among educated individuals, increased income disparities and low economic growth in both developed and developing countries (Flores-Crespo, 2007).

According to Sen, the goal of development should be the expansion of individuals' capabilities so that they can do and be what they value and therefore, individuals as mere instruments of economic development is insufficient (Sen, 2001). In other words, the CA is concerned with what people are able to do and be, rather than what they can buy, or not buy, with their money (Saito, 2003). In the CA, well-being is not about how rich or poor a person is, but rather about having the freedom to achieve capabilities and functionings (Saito, 2003). Capability

refers to the various combinations of functionings from which an individual can choose from, while functioning is an achievement, as Sen (1985, p. 48) states:

A functioning is an achievement, whereas a capability is the ability to achieve. Functionings are, in a sense, more directly related to living conditions, since they are different aspects of living conditions. Capabilities, in contrast, are notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead.

Consequently, in the context of the role of HE in development, the CA goes beyond the HCT by focusing on what individuals are able to do and be. It concerns itself with the real freedoms people have to do and be what they value, so that they can achieve a state of well-being in which they have the freedom to choose from the various options and opportunities available to them. Therefore, the centrality of HE in development, from the CA perspective, is about what capabilities HEA imparted to graduates so that they can be and do the things they value without being multi-dimensionally deprived. In other words, well-being in the CA is about the capability to achieve functionings. This means that a well-being framework for HEA needs to measure what capabilities university graduates obtain from their HE experience. In explaining Sen's CA's relevance to education, Saito (2003) argues that these capabilities consist of both intrinsic value and instrumental value. Similarly, others (see for example Robeyns, 2006b; Walker, 2018) also argue that education has both instrumental and intrinsic dimensions. Therefore, HEA is about expanding human capabilities such as being able to find opportunities or find employment and so on. In this regard, Flores-Crespo (2007, p. 54) offers seven functionings to evaluate university graduates' obtained functionings from HEA:

- (i) Being able to ask and search for better opportunities.
- (ii) Being able to acquire relevant knowledge.
- (iii) Being able to choose the desired job.
- (iv) Being able to visualise a life plan.
- (v) Being able to have social and labour opportunities in the region.
- (vi) Being able to feel confidence and self-reliance.
- (vii) Being able to transform commodities into functionings.

Research findings by Prowse and Vargas (2016) also assert that the purpose then of HEA in expanding graduates' capabilities and functionings is to enable students to develop the necessary reasoning skills to help them make the necessary choices to live the kind of lives they wish. Therefore, education is the foundation for acquiring other capabilities. Moreover, in the context of HEA, they argue that capabilities from HEA may include the capability to participate in discussions, thinking critically about society, being knowledgeable, and having the ability to form and maintain friendships. They then conclude that, from a CA perspective, the role of HEA is to ensure equity of the necessary resources for the formation of capabilities and to equip students with the ability to formulate the required choices to achieve their desired functionings.

The above findings are consistent with the findings by Cockerill (2014, p. 13) who argues that the utilitarian approach to education, which focuses solely on economic productivity as an end, is inadequate and that education from the capability approach is better situated to help individuals "flourish as engaged actors in society capable of making good judgments individually and with others." To this end, Cockerill asserts that higher education, and other levels of education, based on the CA could foster the development of essential capabilities such as practical reason and affiliation, which means having the capability to be a meaningful member of society who engages in various social interactions and having empathy for others in society.

Following on the discussion so far, it is reasonable to argue that HEA is regarded as fundamental or instrumental in promoting capabilities and functionings. Moreover, Walker & Unterhalter (2007, p. 3) assert that the capability approach is a "broad normative framework to conceptualize and evaluate individual well-being and social arrangements in any particular context or society." Therefore, from a capability approach perspective, it would be reasonable to assert that HEA has the potential to deliver broad-based well-being to university graduates, as well as to society in general.

This section reviewed the literature on human capital theory and its failure to consider other factors related to human well-being. From this, it is noted that the human capital theory has a very limited scope (Robeyns, 2006b) and does not take into account all aspects of society and

individual well-being (Chiappero-Martinetti & Sabadash, 2014). In spite of these limitations of the HCT, Robeyns (2006b) argues that it still has value, but there is more to education than human capital.

2.6.2 Can higher educational attainment improve well-being?

Although it is the contention of this research study that HEA makes a valuable contribution to both individual and societal well-being, not all agree on this. This is an on-going debate in the literature, which is further complicated by conflicting data and actions in the arena of international development. For example, a recent study on the role of higher education in economic development shows that the priority of HE in international development became less important in the past 25 years due to the Education for All goals and the Millennium Development Goals which focused mainly on primary education as a vehicle for development, especially in the developing world (Kruss et al., 2015). A comprehensive review of the literature on the impact of HEA on development by Oketch (2014) shows that while HEA has a strong impact on the earnings of graduates and a positive impact on graduates' capabilities, it has a lesser impact on income equality and an inconclusive impact on productivity in the workplace, particularly in low-income countries.

Due to these inconclusive findings on the role of HEA in development and its effect on the well-being and flourishing of graduates, a considerable amount of literature has been published on the value of HEA. A recent study by Finley (2017) shows that HEA does much more than enhancing students' skills and capacity to be productive members of societies workforce. His study concludes that HEA instills confidence, self-esteem and a sense of purpose in graduates which enable them to live both meaningful lives and productive careers. Moreover, his study shows that HEA makes students realise the scope and depth of their capabilities and gave them a sense of consciousness that they can positively affect their lives and that of their societies. Overall, Finley's study shows that HEA has a deep and far-reaching impact on the well-being of graduates. This is consistent with the views of Prowse & Vargas (2016), which argues that HEA is a pre-requisite to acquiring other capabilities. Therefore, Prowse & Vargas argue that the goal of HE, from a capability perspective, is to enable students to nurture good reasoning skills so that they can make the necessary choices regarding particular functions they value. While the findings of Finley points to a straight-forward

correlation between HEA and success, Wilson-Strydom (2011) argues that this is not the case, at least in the case of SA. According to Wilson-Strydom, unequal preparedness of students entering HEIs could potentially affect students' success in achieving educational outcomes and equal capabilities. Moreover, Wilson-Strydom argues that initiatives in widening access to HE are primarily focused on functionings, or outcomes, and little attention is paid to students' capabilities and whether or not they have the necessary freedoms to optimise the opportunity of gaining access to HE. In other words, Wilson-Strydom asserts that social and environmental factors should be taken into consideration to assess whether or not students possess the necessary resources to achieve success at university. If these are not taken into consideration, she asserts that widening access to HE, instead of leading to the success and flourishing of students, rather lead to new forms of social injustices because unprepared students drop out from HE with accumulated debt, self-doubt and without obtaining any qualification to enhance their well-being and lives. To this end, she calls for the adoption of a capabilities approach framework which could assist in formulating better informed guidelines for access and intervention. This will deepen our understanding of the many complexities related to redressing the inequalities associated with access and success in HEIs. Interestingly, a recent study conducted in Australia also concluded that school performance is an inadequate measure to assess students' preparedness for success at university and this traditional pathway to HE leads to inequalities in access and participation in HE (Burke, Bennett, Burgess, Gray, & Southgate, 2016). As a result, Burke et al. concluded that graduates' capability sets may be affected by their performance at university. The study further concluded that capabilities are closely tied to different social contexts and therefore, the development of capabilities are not fixed, but rather are dependent to the self-esteem of students. Meaning, a student who performs academically well at university may have a high self-esteem and consequently, will develop a set of capabilities. On the other hand, a student who performs poorly academically, will have low self-esteem, which will have a negative impact on his/her capabilities set. For this reason, Wilson-Strydom argues that a capability approach is a better measure to assess students' readiness to enter university.

Following on Wilson-Strydom's argument that widening access and participation could lead to inequalities, if students lack the necessary capabilities to enter university, it can therefore be further argued that capabilities are essential for furthering equality in society, as well as improving social justice (Walker & Fongwa, 2017; Wilson-Strydom, 2015). Moreover, Sen (1999) believes that having access to education is essential for human flourishing, while

Robeyns (2006b) argues that educational attainment is essential for the enlargement of other capabilities. This implies that a lack of broad-based educational attainment in a society hinders well-being, equality, social justice and social mobility (Walker & Fongwa, 2017). According to Cunninghame (2017), social mobility is an individual's ability to move up the social ladder – independently from his/her parents – in terms of social, occupational and/or economic status. Moreover, Cunninghame asserts that HEA is an equitable opportunity for all to achieve social mobility due to increased living standards, increased income and increased employment opportunities. Based on the discussion so far, although HEA has value in terms of enhancing human development, this may not be always the case, as Wilson-Strydom argues. While HEA is instrumental in expanding enhancing graduates' capabilities, which allows for better employment opportunities, living standards and social mobility, students who enter university with a lack of capabilities to cope with the demands of HE, are less likely to benefit from promise of HEA. In the context of SA, Walker & Fongwa (2017) argue that an unequal distribution of capabilities and agency exist among students and across universities, and therefore, universities in SA cause systematic inequalities among university graduates. They argue that students from middle-class families are able to afford to attend advantaged universities, while those from poor families attend less-privileged universities and struggle through HE. Consequently, middle-class students have access to better employment opportunities, while lower-class students have less employment opportunities. In this way, HEIs perpetuates inequality, instead of advancing equality and social justice.

In the context of SA, access to HE - especially for those from previously disadvantaged communities - is primarily understood in terms of human capital terms and therefore, is seen as an opportunity for both social mobility and employability is important considerations for well-being (Walker & Fongwa, 2017). According to Hillage & Pollard (1998, p. 1), "employability is about having the capability to gain initial employment, maintain employment and obtain new employment if required." Therefore, if we are to follow Walker & Fongwa's assertion that HE is mainly seen in human capital terms, and Wilson-Strydom's claim that access to HE, in SA, leads to inequalities due to disparities in capabilities when students enter university, we should be able to conclude that HEA fails to expand the capabilities, social mobility and employability of graduates in SA. This is particularly so since the majority of university students in SA are from previously disadvantaged communities. However, the issue is unfortunately not so straight-forward, as illustrated by a report on HE and employment in SA by the South African Council on Higher Education (CHE, 2002). The report draws several interesting

conclusions about HE and employment in SA. In the first instance, the report reaffirms the notion that access to HE does not necessarily translate into improved or equal opportunities, especially amongst Africans with HEA. However, the report concludes that the problem is not due to the unavailability of employment opportunities, but rather due to the fact that African graduates mainly have qualifications in fields of teaching and nursing, which are public service sectors jobs. Unfortunately, due to a broad government restructuring programme, jobs in these two sectors are in short supply. More importantly, the report also highlights that inequality in schooling has an impact on educational outcomes and access to employment opportunities. Those from rural and disadvantaged communities are from schools with lower quality, which affects their performance in HE, and consequently affect their access to employment opportunities. Interestingly, the report argues that the lack of graduates' absorption into the labour market is a reflection of the 'irrelevant' programmes offered at HEIs, as well as due to the dysfunctional nature of some HEIs. With these points in mind, I believe that it is reasonable to conclude that HEA has the potential to expand well-being. However, this is not always the case because educational attainment is dependent on many capabilities and functionings: some are due to the level of readiness (e.g. low-quality schooling) for HE, while others are beyond the scope (e.g. socio-economic status of students) of HEIs, or the failure (e.g. ignoring the existing capabilities of new students) of HEIs.

Although HEA has the potential for expanding individual well-being, there is a large established body of literature questioning the value of HE, which is discussed next.

2.7 The value of higher education

While this study is about the wider benefits of HEA - beyond employment or income benefits – the outcomes of HEA, in SA particularly, remains measured in terms of graduate employment/unemployment and this has given rise to a lively discussion on the value of university education in SA (Maharasa & Hay, 2010; Pauw, Oosthuizen, & Van der Westhuizen, 2006). Allais (2017) points out that HE is generally regarded as a public good that has widespread benefits on society as a whole. These benefits may include, but not limited to, education, health, social tolerance and law and order. However, in SA, the value of HE is often seen in terms of graduate employment/unemployment and how well university programmes

are aligned with the labour market (Rogan & Reynolds, 2016). Due to SA's high unemployment rate, several studies have focused on this. There appears to be a general consensus in the literature that SA's unemployment is largely due to a disparity between the types of workers supplied and those demanded by the economy, with most of the unemployed individuals being poorly educated and having limited skills (Pauw et al., 2006). However, recent research has investigated and debated whether race, gender, chosen field of study and HEI type (historically white institutions (HWIs) vs. historically black institutions (HBIs)) are significant determinants of employment success after graduating from university (Bhorat, Mayet, & Visser, 2012; Oluwajodu, Blaauw, Greyling, & Kleynhans, 2015; Rogan & Reynolds, 2016).

A graduate tracer study conducted in the Eastern Cape, SA, concluded that while schooling background, race and gender influence study choices and unemployment, the study also concluded that their empirical evidence does not indicate that students studying Humanities are significantly more likely to be unemployed (Rogan & Reynolds, 2016). Moreover, their study observed that graduate unemployment in SA is comparatively small and the findings of their study do not support the notion that black African students are more likely to select study fields at university with poor employment prospects.

Another graduate tracer study investigated the labour market destinations of graduates from seven universities in SA (Bhorat et al., 2012). The study concluded that race is a significant determinant of both graduation (success at university) and employment, while a graduate's chosen field of study and institution type are lesser determinants of success and employment. Furthermore, the study concluded that there is no apparent difference in salary on the basis of race once individuals have been hired into employment. Finally, the study observed that although graduates' socio-economic aspects play a role in determining success at university in the labour market, they are not crucial.

A third graduate tracer study (CHEC, 2013), conducted by the Cape Higher Education Consortium (CHEC), traced the 2010 cohort of graduates from all four universities in the Western Cape. These four HEIs are: the Cape Peninsula University of Technology (CPUT), University of Cape Town (UCT), Stellenbosch University (SU) and the University of the Western Cape (UWC). Like the previous two tracer studies, this study too offers a number of findings

important to understanding the value of HE. Firstly, the findings showed that 84% of the graduates were in full-time employment, while only 10% were unemployed. However, the findings show that employment patterns are heavily influenced by race. For example, while 61% of white and 58% of Indian graduates are employed in the private sector, only 35% of Africans and 44% of coloureds are employed in the private sector. In addition, the data shows that 61% of graduates are employed as professionals. Interestingly, the data of the CHEC study show that 89% of graduates who studied education are working as professionals, while 63.4% of graduates from the Science, Engineering and Technology (SET) field were employed as professionals, while 26.2% of graduates from the Business and Commerce field are employed at the clerical level. However, only 4.7% of humanities graduates were employed at managerial level, 8.2% at clerical level and 14.9% at para-professional level. While the CHEC study refers to the statistics of humanities graduates as problematic, I think the low proportion of managerial level humanities graduates has to do with the nature of the fields of studies and type of work in humanities area, such as teaching, nursing, counselling, communication and other types of work. This study also concluded that race is the most significant determinant of employment, with about 96% of white and Indian undergraduates found employment, while about 91% of coloured and about 77% of African graduates also found employment (CHEC, 2013). The study also concluded that 'field of study' is a statistically significant predictor of undergraduate employment: from 'education' about 95% are employed, from 'science, engineering and technology' about 87% and 'humanities' or 'business and commerce' only 83% are employed. This data shows that majority of graduates are employed and hence, confirms the previous findings by Bhorat et al. that graduate unemployment is relatively small.

Another study conducted by Baldry (2016) investigated which factors influence the employment/unemployment status of 1,175 graduates from all 23 universities in SA. Baldry concluded that the strongest determinants of unemployment were the graduates' race, socio-economic status and year of their graduation, while the graduates' field of study and level of study did not significantly influence their employment/unemployment status.

This section shows that, in the context of SA, HEA is essential for employment and race is a significant determinant of gaining access to employment. However, there appears to be discrepancies in whether or not 'field of study' and type of institution has any significant impact on graduates' employment/unemployment status.

2.8 South Africa's emerging middle class

During SA's apartheid era, the society was segregated along racial lines, which had implications for creating social classes along racial lines. However, in spite of apartheid's end in 1994, race and class remain two key factors which define social cohesion in society. In spite of this, SA's middle class has seen rapid growth, particularly due to the expansion of the black middle class (Burger, Steenekamp, van der Berg, & Zoch, 2015). Between 1993 and 2008, 3.1 million black people joined SA's growing middle class (Burger, Louw, de Oliveira Pegado, & van der Berg, 2015). Consequently, since 1994, most attempts at describing and studying SA's emerging black middle class have mainly been done in terms of changing income and consumption patterns (Southall, 2016). However, Southall argues that this is an incorrect approach. Burger et al. argues that SA's black middle class is distinctly different from SA's white middle class in terms of consumption and spending patterns. Moreover, they identify this emerging new middle class as vulnerable members of SA's middle class, which have different spending priorities. They further argue that these different spending patterns are due to their vulnerable circumstances and lack of asset ownership, rather than their own personal preferences. Therefore, they assert that the gap in consumption and spending patterns between white and emerging middle class members will remain, but if they are due to the vulnerable new entrant position of the emergent black middle class, the gaps will weaken and collapse over time.

In exploring the consumption patterns of the new middle class, Burger et al. relied on two theories: conspicuous consumption theory and expenditure pattern theory. The former states that individuals' consumption is intended to be visible because they want to signal their wealth for the purpose of seeking social status (or acceptance). The latter states that expenditure patterns within less affluent social groups are driven by historical asset deficits. In the case of SA, black, coloured and Indian households – the less affluent groups – are trying to 'catch up' with white middle class households who have higher asset levels. According to Kaus (as cited in Burger, Louw, et al., 2015), conspicuous consumption is 35 to 50% greater amongst coloured and black households as compared to white households, which indicates visible consumption is related to social status. The empirical findings of the study by Burger et al. concluded that black middle-class groups have high levels of conspicuous consumption levels which is due to new or possibly insecure membership of the group. Therefore, conspicuous consumption

appears to be socially dependent and increases in groups with lower average incomes and higher inequality higher. Furthermore, they concluded that conspicuous consumption is negatively related to asset ownership: as asset ownership rises, conspicuous consumption. A possible explanation - offered by Burger et al. - for this negative correlation could be because the need to signal economic status declines proportionately with a rise in asset ownership. Secondly, their study also concluded that spending patterns amongst black middle-class consumers differ from white middle-class consumers due to their vulnerability as new entrants to the middle class, and their associated asset deficit.

Nieftagodien & Van der Berg (2007) performed numerical analysis of black consumption patterns by analysing data from the 2004 All Media and Products Survey (AMPS).

Their analysis revealed that differences in consumption patterns between black and white middle class members are not driven by cultural differences. Instead, their study shows that income levels and asset deficits are the two most important drivers of consumption and spending patterns. Moreover, they concluded that black middle class consumer behaviour is also affected by other factors such as recent urbanisation, recent access to water and electricity in the home. Therefore, asset deficit is an important factor driving the consumption and spending patterns of the black middle class. Furthermore, the emerging black middle class implies upward social mobility as well as changes in the lifestyle of members. Therefore, asset accumulation is a natural outcome of their upward social mobility and lifestyle changes, either because they need to 'catch up' with asset ownership (expenditure pattern), or for the purpose of seeking social acceptance (conspicuous consumption).

Conversely to the approach adopted by Burger et al. and Nieftagodien & Van Der Berg, Southall (2016) proposes a productionist approach to profiling the black middle class. Although Southall recognises that the consumptionist approach provides valuable information about the growth, living standards, spending power and lifestyles of the black middle class, he criticises it for being merely descriptive. He asserts that the productionist approach is better suited to explain the dynamics of class behaviour since it is based on the idea that income, consumption

and affluence are outcomes of a combination of work, occupation, education and/or wealth. In spite of viewing the productionist approach as superior to the consumptionist approach, Southall asserts that class behaviour can only be fully understood if the aspect of power (economic and/or political) is regarded as an important factor in shaping class behaviour. However, Southall's work primarily deals with the relationship between SA's emerging black middle class and its role in fostering democracy in SA and its relationship with the ANC ruling party – a perspective beyond the scope of this study. However, most literature on the subject of SA's black middle class use the conspicuous consumption approach to study this emerging class. However, Khunou (2015) argues that the tendency to link conspicuous consumption with the black middle class is incorrect because it assumes that members consume merely for the sake of consumption. Based on the previous discussion, there is differences of opinion on who and how to define middle class.

In defining who and what is middle class in SA, Statistics South Africa (StatsSA) defines middle class standard of living in terms of material aspects. StatsSA regards a household as having a middle class standard of living if a household resides in formal housing, has tap water inside the residence, has a flush toilet inside the residence, has electricity as the main lighting source, has electricity or gas as the main cooking source, has a landline or at least one household member has a cell phone. For the period 2004 – 2006, 26.2% of all South Africans experienced a middle class standard of living, while 74.6% Asian households, 12.8% black households, 47.6% coloured households, and 85.3% white households had a middle class standard of living (StatsSA, 2009). With regards to HEA, The report shows that the percentage of adults with HEA differs between the racial middle class groups: 21% for Asian households, 24.8% for black households, 12.9% for coloured households, and 26.8% for white households. Interestingly, the data shows a small gap between adults with HEA in black and white middle class groups.

This section shows that while there are differences in defining who and what is a middle class in post-apartheid SA, black middle class members have different consumption and spending patterns. While it is not a research objective of this study to investigate class behaviour, it is an important consideration for a contextual understanding of the responses and characteristics of the participants in this study, since all the participants of this study falls into the category of emerging middle class.

2.9 Chapter summary

Overall, the review of the literature highlights a number of important points. Firstly, since the emergence of the CA, unidimensional poverty is now largely regarded as an inadequate poverty measure because its criteria for defining and measuring poverty is too narrow. Sen's CA challenges the concept of unidimensional poverty by arguing that poverty is the result of a number of cumulative factors, which extend beyond mere income or consumption alone. Therefore, several factors play an important role in improving human well-being, not just income. Although many have criticised the CA as a too vague normative theory (Alkire, 2008; Nussbaum, 2003), a consistent flow of empirical studies is emerging in the literature supporting the application of the CA in the form of multidimensional poverty and well-being. The chapter also reviewed some key multidimensional poverty studies. Although multidimensional poverty measures are still not a mainstream poverty measure due to their cumbersome measuring methods, more multidimensional poverty studies are needed (Alkire & Sarwar, 2009) to better understand human development and well-being, particularly in Africa where incidences of poverty remain stubbornly high. Secondly, the review of the literature on the linkage between HEA and well-being shows there is a big gap in the literature as far as the existence of sufficient data showing a conclusive correlation between HEA levels and well-being is concerned (Bloom et al., 2006; Psacharopoulos, 2010). Moreover, there is little empirical research investigating the correlation between HEA and individual well-being in SA. In addition, the review showed that during the 1950s and 60s basic literacy skills, primary and secondary education were regarded as effective for economic growth and poverty alleviation, while tertiary education was regarded as less effective (see for example: Barro, 2003; Kapur & Crowley, 2008). From the late 1990s, however, the focus shifted to HEA as a more effective instrument of improving well-being (Bloom et al., 2006; Declaration, 2005). Moreover, the review of the literature also shows that there is value in HEA for improving well-being, but this is not true for everyone, due to a number of factors. To this end, this study seeks to contribute to the emerging importance of higher education as a sustainable instrument in improving human well-being.

Chapter 3: Theoretical Framework

3.1 Introduction

This chapter presents the theoretical framework used to guide this study. In reviewing the literature on theoretical framework, there appear to be conflicting viewpoints on the concept of 'theoretical framework' and 'conceptual framework.' Some scholars are of the opinion that the two concepts are one and the same, while others regard them as different. Therefore, I will first address this divergent viewpoint before presenting the theoretical framework used in this study.

While some scholars regard a theoretical framework and a conceptual framework as two distinct constructs, others are of the opinion there is no difference between the two concepts. According to Miles and Huberman (1994), there is no difference between a theoretical and conceptual framework. Similarly, Maxwell (2009) uses the two terms interchangeably, as though they are one and the same. However, others are of the viewpoint there is a difference between the two concepts. For example, according to Rocco and Plakhotnik (2009), a theoretical framework is used when a study seeks to investigate a specific theory, while a conceptual framework is used in a study that is either not investigating a specific theory or in a study guided by various concepts, not theory. In explaining further, they suggest two distinct purposes of a theoretical and conceptual framework.

What then is a theoretical framework and what is a conceptual framework? A theoretical framework synthesises existing theories, related concepts and empirical research in order to develop a foundation for new theory development. A conceptual framework, on the other hand, connects various related concepts, empirical research and relevant theories with the intention of enhancing existing knowledge about related concepts and ideas. Similarly, Imenda (2014) suggests that a theoretical framework is based on the theory/theories that a researcher selected to guide his/her research, while a conceptual framework is a synthesis of existing views (theoretical and empirical) found in the literature on a particular situation. In other words, a theoretical framework is the application of theory in a study, while a conceptual

framework is a synthesis of several related concepts to explain or predict a given research problem.

Since this study explores the social phenomenon of well-being through the application of the capability approach and human capital theories, I used a theoretical framework to guide my study. Having said that, I think both play a crucial role in any study, irrespective of the distinctions between the two definitions found in the literature. Moreover, both a conceptual and a theoretical framework is a constructed framework, incorporating borrowed ideas and concepts from various sources, so that the overall framework is the researcher's own design and, more importantly, it presents the researcher with an important opportunity 'to see the literature not as an authority but as a useful but fallible source of ideas about what's going on, and (an) attempt to see alternative ways of framing the issues' (Maxwell, 2009, p. 35).

Based on the discussion in the previous paragraphs, the theoretical framework of this study seeks an alternative way of looking at how the constructs of multidimensional well-being and HEA relate to one another. In doing so, the framework seeks to bring together Amartya Sen's capability approach theory and Gary Becker's (and Jacob Mincer's) Human Capital Theory to enhance our understanding and knowledge about the social phenomenon of multidimensional well-being. In this regard, this chapter presents the theoretical framework used to measure the impact HEA has on well-being in South Africa (SA). In other words, the theoretical framework is based on the concept of multidimensional well-being derived from the capability approach theory and on the concept of educational attainment, which flows from the Human Capital Theory.

The capability approach (CA), proposed by Sen (1980, 2001) forms the theoretical underpinnings of the concept of multidimensional poverty – a key concept in this study. The CA argues that well-being, or poverty, should be defined and measured in terms of what people are able to do and be, instead of defining and measuring well-being merely in terms of minimal income or consumption (Clark, 2005a). However, the research objective of this study essentially investigates the impact HEA has on well-being. The theoretical foundation of this assumed correlation is Mincer's (1974a) Human Capital Theory. According to the latter, education is regarded as a form of capital because increased levels of education lead to

increased earnings for individuals, wider economic benefits to society and acts as an important instrument of well-being (Tilak, 2002).

3.1.1 Sen's Capability Approach

At the outset, it's important to note that Sen's CA is not a subject or field of study but rather a theoretical framework for defining, understanding and measuring well-being and its operationalization can be done in any way a researcher sees fit (Alkire, 2005; Hick, 2012; Nussbaum & Sen, 1993).

In chapter 2 we have seen how one dimensional poverty measures focus on basic needs (income or consumption) in one form or the other to identify the poor and measure well-being. In expounding his CA, Amartya Sen criticises the over-reliance on income and consumption indicators to define and measure poverty and well-being and instead argues for the adoption of a capability approach in which capability is a crucial factor in assessing an individual's living standard (Sen, 1985). The CA advocates a focus on what people are able to do and be, instead of concentrating on people's minimum income, expenditure or consumption (Shubhabrata & Ramsundar, 2012). Furthermore, according to Sen (1984, p. 23) 'ultimately, the focus has to be on what life we lead and what we can or cannot do, can or cannot be.' These different living conditions people can or cannot achieve are called 'functionings' and people's abilities to achieve them are called 'capabilities.' Therefore, the core concepts of the CA are functionings and capabilities. He continues by defining the standard of living as being 'really a matter of functionings and capabilities, and not a matter directly of opulence, commodities, or utilities.' Moreover, Sen's (1990, p. 44) capability approach is a normative framework that can be used to evaluate individual well-being, social arrangements and social change in society in terms of functionings and capabilities:

The claim is that the functionings are constitutive of a person's being, and an evaluation of a person's well-being has to take the form of an assessment of these constituent elements. A functioning is an achievement of a person: what he or she manages to do or to be, and any such functioning reflects, as it were, a part of the state of that person. The capability of a person is a derived notion. It reflects the various combinations of functionings (doings and beings) he or she can achieve. It

takes a certain view of living as combinations of various 'doings and beings'.

Capability reflects a person's freedom to choose between different ways of living.

In other words, the CA asserts the notion that functionings and capabilities play a larger role in poverty and personal well-being and not merely wealth, material goods and utilities alone.

Functionings refer to the achievements, or beings and doings, of an individual, while capabilities mean the various combinations of functions of an individual. In essence, Sen stated that the CA is an evaluative or normative framework in which capabilities reflect an individual person's freedom to choose the kind of life he wishes to have (Sen, 1990). In other words, the CA is a theoretical proposal and Sen explicitly stated that it is up to researchers and others to interpret it the way they see necessary (Sen, 2001). As a result, this led to the emergence of a sizeable body of literature attempting to contribute to the theory of the CA and operationalizing it in understanding and measuring human well-being.

Sen (1999) further observed that there are four dimensions of well-being which interfere with functioning in society, and these are: (1) lack of opportunity, (2) capability, (3) security, and (4) empowerment.

The dimension of lack of opportunity is the fundamental principle of the CA. According to Sen, individuals are unable to achieve a decent standard of living when insufficient opportunities are available for that person to do the things necessary to accomplish the achievements he or she desires. Stated differently, individuals who lack opportunities are unable to achieve a decent standard of living because they lack the capacity to fully participate in society. Sen (1980) emphasizes that the ability to achieve is related to the real opportunities people have with regard to the kind of life they wish to live. Therefore, a lack of opportunities may potentially interfere with functionings.

The second dimension, capability refers to what people are able to do and be and not how they feel or what they have. In other words, capability refers to the things an individual is able to accomplish and do. So, the lack of this in society means that a person's well-being will be limited in terms of his substantive freedoms and functioning in society, which is the same as being deprived (Alexander, 2008). Stated differently, capability allows individuals to self-

consciously choose the life they have reason to value without societal limitations, which will indirectly increase economic freedom by increasing an individual's income (Sen, 2001).

The third dimension identified by Sen is human security but he did not elaborate on what it is or should entail (Walker, 2005), which led to several authors interpreting it differently. Cossie et al. (2000) refers to security against assault, Chambers (2006) writes of economic, physical and political security, Alkire and Hick (2008; 2012) propose legal and physical security and Saith (2001) proposes economic security. Cossie et al. (2000), in their survey of poverty and social exclusion in Britain, used physical security such as feeling safe to measure social exclusion. I also adopted this approach in this study.

The final dimension which interferes with functioning in society is perhaps the most important in my mind. In *Development as Freedom*, Sen writes of empowerment as a means of closing the gender-disparity gap in society and regards the empowerment of women as a key role in development. More importantly, Sen (1999, p. 185) correlates women's empowerment with education: 'women's education strengthens women's agency and also tends to make it more informed.' To Sen, the unequal treatment of women in their societies harms the well-being of women and the only way to correct this is through their empowerment. Sen (1999) proposed that women could be empowered through 'women's ability to earn an independent income, to work outside the home, to be educated, (and) to own property.' Through these measures, Sen argued the empowerment of women will improve the economic well-being of families, reduce persistent poverty and reduce women's deprivation. In other words, the empowerment of women will lead to 'enhancing freedom from hunger, illness and relative deprivation' (Sen, 2001, p. 194). However, Chambers (2006) uses empowerment as a dimension of human development for all, not for women alone. This is consistent with the view of Page & Czuba (1999), who define empowerment as a multidimensional social process, which promotes capacity-building in individuals so that they can live the kind of life they value as important. More recently, Page (2015) argued that empowerment - in terms of both individual capacities and collective action - are essential to eradicate inequalities and poverty emanating from social exclusion, and a lack of access to power, voice and security. Empowerment is therefore important to improve well-being because it provides individuals with the necessary capabilities and freedoms to achieve what they desire.

These dimensions are therefore essential aspects of the capabilities of individuals and are incorporated in the thematic analysis of the qualitative data of this study. Although the ideas of Sen contributed significantly to our understanding of the concept of well-being and poverty, some criticism of the CA is found in the literature. This is discussed next.

3.1.1.1 Criticism of the capability approach

Although Amartya Sen's CA has become the leading theoretical framework for understanding well-being, inequality and human development in the last decade (Clark, 2006), his CA has also received a lot of criticism for several reasons. Sen's CA is essentially a normative - or evaluative - framework, and therefore it has been criticised for being limited in the sense that it makes value judgements about the degree of freedom people have to achieve the functionings they value, and hence the chosen freedoms will be incomplete (Alkire, 2008). Another important criticism of the CA is that many researchers have questioned whether Sen's CA is actually an operational framework. Nussbaum (2000) criticised Sen for failing to present a clear and specific list of fundamental capabilities and functionings because Sen only proposed a number of vague capabilities. Another author, Sugden (1993), also questioned the operationability of the CA because Sen's list of capabilities is too vague. However, according to Sen (2005), he deliberately did not provide a specific list of capabilities and functionings because in his view these cannot be fixed, but rather should be chosen depending on their context of use, and a vague list allows for variations in the application of the CA. In other words, the absence of a specific list of functionings and capabilities means the CA can be applied to a variety of circumstances. A third criticism of Sen's CA lies in its practical implementation because information about capabilities and functionings is not readily available (Deutsch & Silber, 2005). However, Alkire (2005) contests the criticism that information of capabilities and functionings is unavailable by arguing that the primary objective of the CA is to expand the freedoms of individuals through justice and poverty reduction, which goes beyond mere income or consumption measures. Also, she explains, the CA is a proposition of which capabilities and functionings are its basic components and she refers to the last 20 years in which several studies based on the CA emerged in the literature. This brings me to the next point: the CA is a theoretical framework seeking to inform empirical studies on defining and measuring well-being and poverty multidimensionally, rather than unidimensionally. Consequently, several definitions of multidimensional well-being are found in the literature.

The following section presents some of the notable definitions of multidimensional poverty and well-being.

Although there are several theories relating to poverty and well-being in the literature, Sen's CA appeals to me for a number of reasons. Yes, some have criticised the CA as being vague and too normative, but I tend to agree with the notion that well-being is more related to capabilities and freedom than money. It is the denial of opportunities or lack of freedom that creates a lack of money. During the apartheid era in SA, numerous racially discriminated laws prevented most Black Africans, coloureds and Indians from having access to an array of opportunities to enhance their lives and live the lives they wish to have. For example, the Group Areas Act prohibited different races from living in the same neighbourhoods, the Mixed Marriages Act disallowed marriages between whites and Black Africans, coloureds and Indians, the Bantu Investment Act prohibited the establishment of financial, commercial and industrial projects in Black African, coloured and Indian areas and the Bantu Education Act prevented them from aspiring to positions they would not be allowed to hold in society by restricting what careers they could study at university (Clark & Worger, 2016). In essence, apartheid laws in SA prevented Black Africans, coloureds and Indians to access skilled employment opportunities, own land and live where they desired to live, married who they wanted to marry and receive the education they desired to have. I believe the denial of the many opportunities is one of the main reasons why Black Africans, coloureds and Indians in South Africa are generally poor, uneducated and unemployed. Therefore, Sen's CA appeals to me and I think it is an appropriate theory for studying well-being in SA.

A second theory important to this study is the Human Capital Theory (HCT), popularized by Gary Becker (1975) and Jacob Mincer (1974a). This is discussed next.

3.1.2 Human Capital Theory

According to Bourdieu "it is in fact impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in the one form recognized by economic theory" (Bourdieu, 1986, p. 241). In the latter, capital is either defined as financial capital (money) or capital goods (equipment or products) (Ahmad, 1991). However, in the HCT, capital refers to education or health because these improve an individual's

earnings or health over his lifetime (Becker, 1993). The notion of education as a form of capital was first proposed by Mincer (1974a, p. 71), who described education 'as an investment in the stock of human skills or the formation of human capital.' In explaining how education could be regarded as a form of capital, Mincer (1974a, p. 71) stated:

Education can affect earnings rates or earnings per unit period of time worked; it can affect labor force participation, especially at different stages of the life cycle; and it can affect the amounts of time worked as reflected by the frequency and duration of unemployment and part-time employment.

In other words, education has the potential to impact an individual's earnings and participation in the workforce, which implies an effect on economic productivity. Thus, an investment in education can either have a rate of return on the individual (private returns) or on the society (social returns) (Psacharopoulos, 1995). The OECD (2007, p. 725) defines social returns as follows:

The social internal rate of return refers to the costs and benefits to society of investment in education, which includes the opportunity cost of having people not participating in the production of output and the full cost of the provision of education rather than only the cost borne by the individual. The social benefit includes the increased productivity associated with the investment in education and a host of possible non-economic benefits, such as lower crime, better health, more social cohesion and more informed and effective citizens.

Stated differently, the rate of return to education is therefore a measure of the future net economic compensation (income) to an individual or society in correspondence with the number of years spent in education (Nonneman & Cortens, 1997).

According to Becker (1994), education and health produce human capital – not physical or financial capital – because it is not possible to separate an individual from his/her knowledge, skills, health or values. The HCT, in simple terms, implies that increased education leads to increased earnings. The theory, proposed by Theodore Schultz (1961), and built on by Gary Becker (1964, 1993), in an article entitled *Investment in Human Capital* argues that (i) the return to education is relatively more attractive than the return to nonhuman capital to the extent that it could be a key component of economic growth, and (ii) education creates a kind

of 'consumer capital' which has the ability to improve people's quality of consumption throughout their lives. Furthermore, Schultz argues that educational attainment produces human capabilities within people that affect their wages and earnings. However, the basic principle of human capital has its origins in the *magnum opus* of Adam Smith, *The Wealth of Nations* (1776), in which he likened the extraordinary work performed by an expensive machine to that of an educated man:

When any expensive machine is erected, the extraordinary work to be performed by it before it is worn out, it must be expected, will replace the capital laid out upon it, with at least the ordinary profits. A man educated at the expense of much labour and time to any of those employments which require extraordinary dexterity and skill, may be compared to one of those expensive machines. The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital. It must do this too in a reasonable time, regard being had to the very uncertain duration of human life, in the same manner as to the more certain duration of the machine. The difference between the wages of skilled labour and those of common labour, is founded upon this principle. (p. 88)

So, according to Smith, educational attainment are the basic principle upon which differences in income is based. With this fundamental principle in mind, the HCT is founded on the principle that investment in education leads to the formation of human capital, which is essential for economic growth. Moreover, education leads to the acquisition of new skills and knowledge which will lead to employment, and employment, in turn, leads to higher productivity which leads to higher earnings (Tilak, 2010). In other words, the HCT assumes that human capital, through education, generates economic growth which facilitates the creation of economic, social and personal well-being. Schultz (1961) viewed education as a key component of economic growth. It is important to note here that the relationship between education and economic growth is a two-way relationship and a vast collection of literature surfaced on this, especially in the early days of debates on education and economic growth. Although education has an effect on economic growth and poverty, economic growth also has an effect on education. Perhaps Harbison and Myers (1965, p. xi) stated it most eloquently when they said: "education is both the seed and the flower of economic development." However, this research focuses on the first scenario, i.e. the focus of education on poverty.

In his book, *Human Capital*, Gary Becker (1993) built extensively on both the theoretical and empirical literature related to human capital. Becker's study – focusing on data between 1900 and 1940 in the United States of America – concluded that secondary and post-secondary education greatly increases an individual's income, and he also concluded that college graduates experience greater gains. This view is supported by Kruger and Lindahl (2000) which concluded post-secondary education matters more for economic growth than primary education. According to Becker, the HCT helps to explain the differences in interpersonal and inter-area differences in earnings and the relation between age and earnings. Becker's study also concluded that the rate of return on post-secondary education is between 10 – 12 percent per annum and college graduates are more 'able' than high school graduates. Moreover, he noted, there are significant differences in the gains from college education between men and women, as well as between different population groups such as whites and blacks, or rural and urban. Becker then correctly predicted that human capital will become a key factor in issues such as development, income distribution and other social issues. To recapitulate, the HCT essentially refers to the abilities and skills people acquire as a result of their educational attainment and it is these abilities or skills which make people productive workers and ultimately lead to economic growth. This, in essence, is the theoretical basis of the HCT. While, on the one hand, there is a general agreement in the literature that education affects economic growth, the way it affects growth is not yet fully understood (Johnes, 2006). On the other hand, in spite of the vast theoretical and empirical body of literature on the HCT, several criticisms have been levelled against it.

3.1.2.1 Criticism of the Human Capital Theory

Let us now look at some of these criticisms. The HCT has been criticised in several ways. Some have criticised it for its over-simplicity in assuming that all people are free to make choices about the available opportunities to them (Fitzsimons, 1999). We know from countless studies (see for example *Voices of the Poor*, Narayan, 2000) that the poor are often restricted in the choices available to them and most of the time their choices are involuntary. For example, a young man in a remote rural location in SA may have a desire to enter university but due to lack of money, opportunities and unavailability of a university nearby, he may most likely end up in a lowly-paid job and never get an opportunity to enrol in a university. My late father wanted to be a medical doctor and although he was intelligent, he worked all his life as a bus driver because of a lack of money, opportunity and access to higher education. Another

criticism of the HCT is its simplistic view of a complex world in which human behaviour is largely shaped by traditional values, social pressures and existing institutions (Fitzsimons, 1999). To simply state that education leads to increased income and that, in turn, results in economic growth is seen as a too narrow interpretation of how societies function. Often, an individual's economic success is determined by race, gender and social background. For example, Schultz (1961) himself acknowledged that men and women experience different opportunities in the labour market, with white urban males being more successful than black rural women. Also, due to workplace discrimination, two equally qualified individuals may be treated differently. Hence, the presence of such discrimination may discourage an individual to accumulate human capital (Fitzsimons, 1999). Moreover, according to Acemoglu (2009), the HCT ignores the fact that workers may earn different incomes because some earnings are sometimes paid in non-cash compensation form such as a company car or housing; and two people with the same human capital (education) may earn different incomes because the job of one may require much higher productivity than the other person. These are some of the salient criticisms of the HCT. However, an overwhelming consensus exists in the literature that its general principle is a good starting point to explain societal inequalities and income differences among individuals (see for example Barro, 2001; Acemoglu, 2009; Marginson, 1989).

Due to some of the shortcomings of the HCT, other theories emerged in the literature in an attempt to deepen our understanding of concepts of human capital and development and poverty reduction. In the 1970s, through the efforts of the International Labour Organisation (ILO), a new approach emerged. The basic needs approach was the result of the ILO's World Employment Program (WEP) of the 1970s. The WEP aimed at making employment, people and human needs central considerations in the development strategy of developing countries. The basic needs approach was consistent with prevailing development approaches of emphasizing "growth from below" and "employment-oriented" strategies (ILO, 1977). The basic needs approach was based on Abraham Maslow's theory of hierarchy of five needs in which he explained that people are motivated to achieve based on their needs which can be hierarchically categorized into five types: physiological, safety, love, esteem and self-actualization (Maslow, 1943). In essence, the ILO's basic needs approach advocated labour intensive development programs with the aim of meeting the most essential basic needs in all societies. The ILO's World Employment Conference of August 1976, called for the "eradication of unemployment and poverty" through development programs which could satisfy "the basic

human needs of the population” (ILO, 1977, p. viii). This approach was adopted by many countries. However, it fell out of favour in the late 1980s due to several reasons (Ghai, 1999), which will not be discussed here since it does not fall within the scope of this research. For a complete discussion on these reasons see *The Rise and Fall of the Basic Needs Approach* (Hoadley, 1981). Later on in the early 1990s, as a result of the seminal work of Amartya Sen, the basic needs approach was replaced with the CA. Sen’s CA marks an important turning point in international development and the role of education, especially HE. Similarly, Becker (1995) regarded HCT as an important factor in poverty alleviation. Together, I believe, the CA and HCT are two good theories to increase our understanding of poverty experienced by individuals.

3.1.3 Human Capital Theory, Capability Approach and well-being

Over the last decade, the CA has become the leading alternative theoretical framework for studying poverty and inequality (Clark, 2005a, 2005b; McGillivray & Clarke, 2010; Pogge, 2002). While some have criticized the CA as too vague and impractical, multidimensional poverty is now regarded as being the most all-rounded poverty measure (Comim, Qizilbash, & Alkire, 2008). According to Sen (1999), education can significantly influence both income poverty and capability poverty because human development is a process which, according to him, expands individual’s capabilities. While Sen recognises the importance of the human capital theory, he asserts that it is not sufficient because it only focuses on the instrumental economic outcomes of education because there is more to education than just human capital. Therefore, Sen argues that the human capital theory must not be discarded, but that the capability approach is additional and cumulative in order to explain human well-being comprehensively. Capability poverty refers to the deprivation of opportunities, choices and entitlements as a result of poverty (Sen, 1999). Furthermore, Sen argues that education deprivation is itself capability poverty. While being poor was traditionally regarded as having a lack of income, it is now acknowledged that the poor suffer multiple types of deprivations. These deprivations may include a lack of income, gender discrimination, denial of access to education, social exclusion, lack of access to health facilities and political restrictions (Asselin, 2009; Lustig, 2011; Tomaszewski, 2009; Vijaya, Lahoti, & Swaminathan, 2014). Therefore, individuals or households can be poor at multiple levels due to a lack of capabilities. This ‘lack of capabilities’ can be rectified by education.

Similarly, in his work on the relation between human capital and poverty alleviation, Becker (1995) observes that human capital and poverty alleviation only became closely linked in the nineteenth century because education, knowledge and skills became crucial determinants of an individual's and nation's productivity. He refers to the twentieth century as the "Age of Human Capital" because "the primary determinant of a country's standard of living is how well it succeeds in developing and utilizing the skills, knowledge, health, and habits of its population" (p. 1).

In reviewing the link between human capital, economic well-being and poverty alleviation, Becker looked at the data of more than 100 countries and arrived at a number of important findings. All in all, he observed a close link between economic performances, life expectancy, and other measures of human capital. More importantly, he concluded that poorer countries with more educated and healthier populations achieve faster economic growth than average (Becker, 1994). In support of these general deductions, Becker made several observations based on his research. He observed that more educated parents not only have fewer children, but they invest more extensively in the education and health of each child (Becker, 1994). For example, Becker (1994) observed that during rapid economic growth in Mexico and Taiwan a decrease in birth-rate was accompanied by a rapid increase in school enrolments. In his opinion, this is an important contribution to growth in per capita incomes since studies have shown rapid increases in a population diminish the potential for growth in living standards.

Secondly, he observed more educated parents - especially mothers - tend to treat daughters better than uneducated parents, thus leading to better gender equalities in society. Unfortunately, Becker gave no evidence or examples to support this observation. However the *World Development Report 2012* (World Bank, 2012) recognised gender equality as a core principle of human development and called for the adoption of policies to eradicate gender disparities. Becker also observed better educated men and women tend to invest more in their own health and that of their children. According to him, education is the single most important personal determinant of a person's health and life expectancy. In supporting this view, he noted educated people in developed countries are the least likely to smoke and they tend to make healthier choices in terms of their diet. Furthermore, his study showed educated people are less likely to get HIV infections. In reviewing data of 1900 – 1950, Becker noted large reductions in adult mortality rates in less developed nations with increased rates of education

participation. In addition, Becker identified large disparities in the income levels between college graduates, high school graduates and high school drop-outs. For example, in the United States, he noted, college graduates earned on average about 40 to 50 percent more than high school graduates, while the latter earned approximately 30 percent more than high school drop-outs.

With regard to income inequality, he noted income inequalities appear to be greater in nations with large inequalities in education. For example, Becker pointed out Mexico and Brazil have large areas of poverty in the same regions with disparities in educational opportunities. Based on these observations, Becker demonstrates human capital has important implications for economic prosperity, economic growth, economic inequality and poverty alleviation. Most notably, he identifies investment in human capital as one of the most effective measures to raise the poor to decent levels of income and health. However, he thinks highly under-developed countries should direct education policies toward improving high school attainment levels.

All in all, it appears that while the positive impact of education on economic well-being and poverty is well documented in the literature, there is a debate in the literature about which educational level contributes the best to well-being. Some studies show primary education has better rates of returns, while other studies show tertiary education to be better.

Together, Sen's CA and Becker's HCT provides a better understanding of the role of education in human development and well-being and these two theories formed the theoretical framework of this study.

3.2 Theoretical framework used in this study

As mentioned previously, the theoretical foundation of this research is the CA theory and the HCT. Therefore, both these theories are reflected in the adopted dimensions and indicators.

The dimension of income and employment reflects the HCT, while the dimensions of living standards, health and social justice reflect the CA theory.

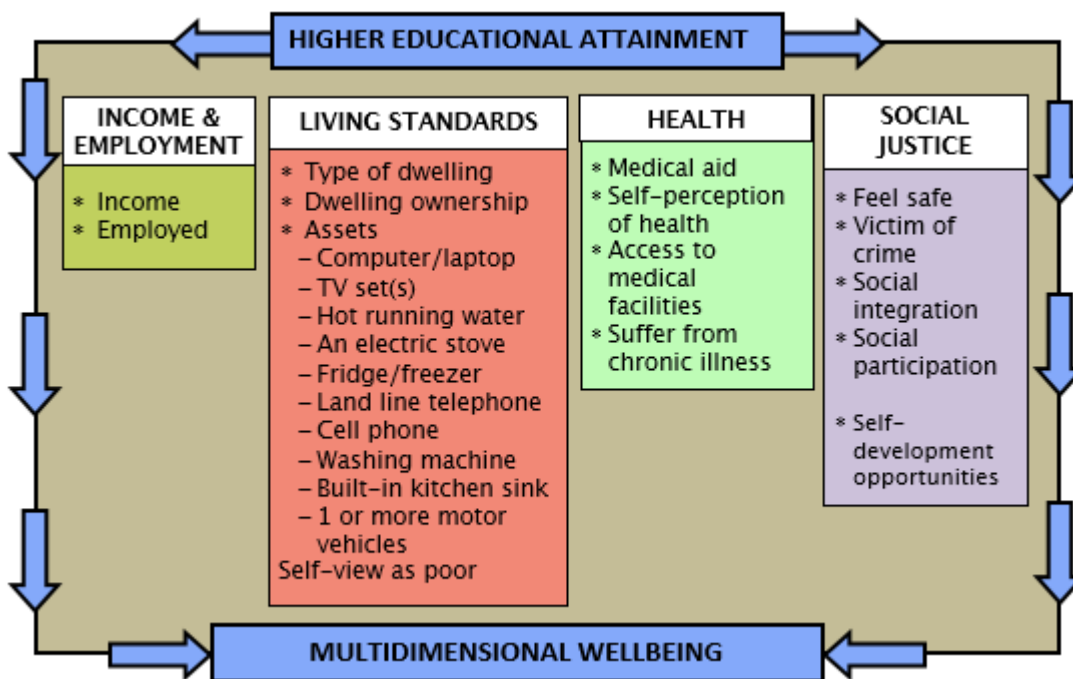
Secondly, the research goal of this study is to develop an HEA multidimensional well-being framework. Therefore, education is not a dimension in the framework (see fig. 3-2), but rather an intrinsic aspect of this research.

Thirdly, an important goal of my research is that I am not measuring acute multidimensional poverty, but rather seeking to understand how HEA contributes to multidimensional well-being of university graduates in SA.

Fourthly, in the review of the literature in chapter two, we have seen that there is a general consensus among social scientists and economists that the returns to education have both individual and societal benefits in terms of income, employment and other non-monetary benefits such as improved health and nutrition. Therefore, income and employment are included in the framework. Also, for the living standards dimension, I chose the indicators used in the national census surveys in SA because these are contextual indicators which have been used regularly in national surveys in SA. Furthermore, I selected the living standards indicators relevant to my target population who are all university graduates and would most likely not live in a house using dirt, dung or sand flooring, for example. Next, the indicators for the health and social justice dimensions were selected based on a review of the literature, as well as due to a similarity of indicators being used in the census survey in SA. More importantly, crime is a major factor of social justice in SA as shown by the alarmingly high crime statistics. It therefore seemed appropriate to include those indicators of social justice, as I discussed in chapter two. Access to health and health care facilities are important indicators of health in SA and these have been included in the health dimension.

The framework used in his study was adapted from the framework proposed and used by the OPHI. However, the adapted study has a number of significant differences which are absent in the OPHI-MPI framework. The changes adopted reflect the purpose and context of this research. Consequently, I selected a contextual set of dimensions and indicators relevant to my overall research goal and these are discussed next.

Figure 3-1: Theoretical framework



In measuring the dimensions and indicators, I generally followed the same procedures discussed in appendix G. However, some indicators were measured using multiple survey items. For the purpose of clarity, the next section presents the conceptualization of the indicators used in the framework.

3.2.1 Meaning of framework dimensions and indicators used in this study

Income & employment explores how the income of graduates affected their well-being due to their HEA. Respondents were asked to indicate how the degree of improvement (significantly better to significantly worse) of their financial situation changed and they were also asked to

indicate their current income. The employment indicator includes survey items asking about the time it took graduates to find full-time employment and whether their current employment was related to their university education.

Health measures the health status, access to health care facilities (proximity), ability to afford health care and the quality of health care facilities offered by government. The dimension also measures individuals' own perception about their health condition.

Living standards measures the type of dwelling respondents live in. This includes living in a house, flat, outbuilding or with family. In the context of SA, these are important measures of living standards in several ways. One, a house is significantly more expensive than a flat in terms of both purchase price and rental. Two, living in an outbuilding means living on the plot of another house and paying reduced market-rate rent. Three, living with family also implies paying reduced or no rent. Dwelling ownership measures if individuals live in rented or own accommodation. The indicator of self-view as poor measures how individuals feel about their own situation and whether they regard themselves as poor. Another survey item required respondents to indicate how much money they require to stay out of poverty. The asset indicator measures if a household owns assets that (i) allow access to information (computer/laptop, TV, land line telephone and mobile phone), (ii) support mobility (car) and (iii) support livelihood (fridge/freezer and electric stove) and other essential assets (hot running water, built-in kitchen sink and washing machine).

Social justice measures aspects related to personal safety and security, social inclusion, access to self-development opportunities and access to socio-political opportunities.

The next chapter presents the research methodology used in this study.

Chapter 4: Research methodology

4.1 Introduction

The main purpose of this chapter is to describe the overall research design used in this study. First, I outline the paradigm that guided the research. Next, I present the research design used. Then I provide information about the participants in the study and describe the data collection procedures, research methods and data analysis. Next I discuss ethical considerations and research validation aspects related to this study. After that I present details about the pilot studies carried out at the initial stages of the research. The last section summarises the chapter.

4.2 Research paradigm

All research must be conducted within the framework of some sort of research philosophy, or paradigm, because it plays the central role in the way the research is conducted (Teddle & Han, 2010). Therefore, a considerable amount of literature exists on the different types of research paradigms available to researchers with no one paradigm more superior to the other, but it is rather a matter of which paradigm is a 'good fit' for a particular set of research objectives (Guba & Lincoln, 1994; Saunders, Lewis, & Thornhill, 2012). According to Bryman and Bell (2011), the two most dominant research paradigms in the literature are positivism and interpretivism. However, the debate on which paradigm is superior led to the emergence of an alternative third paradigm called pragmatism. As a result, the three dominant paradigms found in the literature are: positivism, interpretivism and pragmatism (Creswell, 2009; Guba & Lincoln, 1994; Neuman, 2014).

Different paradigms are associated with different types of research. Therefore, the selection of an appropriate research paradigm is important in any research study. In this study I adopted a pragmatic research philosophy based on the research objectives and research topic. Before discussing the rationale for selecting a pragmatic research philosophy, it is appropriate to present a discussion on the dominant paradigms and their meanings found in the literature. According to Mason (2006), a researcher's choice of method should reflect his overall research

paradigm. Similarly, Creswell (2014) asserts that every research study has a research approach which consists of three interacting components: research paradigm, research design and specific research methods. This means the choice of research paradigm influences the overall research of any study. Sandelowski (Sandelowski, 2000) defines paradigms as:

Worldviews that signal distinctive ontological (view of reality), epistemological (view of knowing and the relationship between knower and to-be-known), methodological (view of mode of inquiry), and axiological (view of what is valuable) positions.

It appears that Sandelowski's definition is in accordance with an earlier study by Guba and Lincoln (1994, p. 108) who suggested that all paradigms are "basic belief systems" which can be defined based on three fundamental questions:

1. **The ontological question.** What is the form and nature of reality and, therefore, what is there that can be known about it?
2. **The epistemological question.** What is the nature of the relationship between the knower or would-be knower and what can be known?
3. **The methodological question.** How can the inquirer (would-be knower) go about finding out whatever he or she believes can be known?

Stated differently, ontology is concerned with what we mean when we say something exists or the nature of what exists (Blaikie, 2007), while epistemology is concerned with the meaning of what we know or the theory of knowledge (Crotty, 1998). However, Crotty asserts that ontological and epistemological questions overlap. In other words, any considerations of ontological assumptions should also include assumptions about epistemological assumptions and *vice versa*.

Furthermore, Guba and Lincoln (1994, p. 107), in defining a paradigm, wrote:

A paradigm may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the "world," the individual's place in it, and the range of possible relationships to that world and its parts, as, for example, cosmologies and theologies do. The beliefs are basic in the sense that they must be accepted simply on faith (however well argued); there is no way to establish their ultimate truthfulness. If there were, the philosophical debates reflected in these pages would have been resolved millennia ago.

This similar view of what a paradigm is was later echoed by Weaver and Olson (2006, p. 459) who also defined paradigms as "patterns of beliefs and practices that regulate inquiry within a

discipline by providing lenses, frames and processes through investigation.” More recently, Neuman (2014, p. 96) explained that a paradigm is “a general organizing framework for theory and research that includes basic assumptions, key issues, models of quality research, and methods for seeking answers.” Therefore, a researcher’s choice of research methodology is based on the ontological and epistemological assumptions (Neuman, 2014). In other words, the selection of a paradigm is dependent upon a researcher’s view of what is reality and how can this reality be known. Therefore, the answers to these two questions inform the researcher on what methodology to use. However, within the literature, there has been, and still is, a fierce debate on which paradigm is correct or better. The next three subsections review these three paradigms.

4.2.1 Positivism

Positivism, an epistemological position, advocates the view that researchers can measure social behaviour independently of the social context and, furthermore, social phenomena can be studied scientifically and objectively (Bryman & Bell, 2011; Hughes & Sharrock, 1997). Positivism favours quantitative research methods (Bryman & Bell, 2011). To put it in another way, positivism advocates the application of scientific research methods to the study of social phenomena.

Ontologically, positivism views the researcher and reality as separate, because only a single reality exists and the researcher cannot influence or change this reality (Guba & Lincoln, 1994). Personally, I am at odds with this view of positivism for two reasons. Firstly, as a poor, South African who grew up during the apartheid era in SA, I do not think I can separate myself from the phenomenon under study. Intrinsically and subconsciously, I am attached to the reality of poverty in SA. Secondly, the goal of my study is to understand the causal relationship between HEA and multidimensional poverty, not to change it. Although I used a positivist research method – survey – in the quantitative phase of my research, I did so because it is the most appropriate method to use according to my research questions. I did not use it because I am a die-hard positivist. Furthermore, the goal of positivism is to find precise measures and conduct objective research in order to investigate and confirm causal hypotheses of general patterns of human behaviour (Neuman, 2014). In other words, the aim of positivism is to test hypothesis and explain causal relationships. Therefore, positivism advocates objectivity and usually the

research methodologies used by positivists tend to be experiments and surveys in order to collect large amounts of empirical data to be analysed statistically (Creswell, 2009).

According to Creswell (2009, p. 7) the term 'positivist research' is synonymous with 'scientific method' and 'quantitative research.' This is consistent with the view of Neuman (2014) who characterises positivism as a philosophical assumption that uses 'precise empirical observations' and 'value-free research' to study individual behaviour. In sum, positivism advocates a scientific and objective approach in the study of the variables of social phenomena in order to quantify these through statistical analysis.

However, some criticism has been directed at positivism. Since positivism emphasizes the use of quantitative methods, Denzin & Lincoln argued that this could lead to a failure to truly understand social phenomenon as well as lead to an incorrect understanding of the process people attach to their actions. In other words, in terms of social research positivism may lead to drawing conclusions which do not reflect the true understanding of people's actions. Most importantly, positivism seeks to quantify the various variables of a social phenomenon (Kura, 2012), which in this case is multidimensional well-being. However, to only measure well-being statistically would be inconsistent with the research methodology of this study which employs a mixed methods research (MMR) design. Therefore, I opted not to use positivism as a research paradigm in this study.

4.2.2 Interpretivism

On the other hand, interpretivism is a contrasting paradigm to positivism. According to Bryman and Bell, (2011, p. 16), interpretivism is of the view that:

The subject matter of the social sciences – people and their institutions – is fundamentally different from that of the natural sciences. The study of the social world therefore requires a different logic of research procedure, one that reflects the distinctiveness of humans as against the natural order.

Interpretivism assumes there is no single reality and therefore, interpretivists try to understand social phenomena through the meanings that individuals assign to them. With regards to poverty and well-being studies, this is an important point. As I discussed in chapter

2, a common problem with poverty and well-being studies is the definition of poverty and whether or not how we define poverty is how the poor experience it.

A landmark study on finding out how the poor experience poverty is the World Bank's multi-country study called *Voices of the Poor: From Many Lands* (Narayan & Petesch, 2002). This is an excellent example of the validity of interpretivism as a research paradigm and how it helped to understand well-being from the perspective of the poor. According to Creswell (2009) individuals develop subjective meanings – based on their cultural norms, social and historical interactions – of their experiences and therefore, these experiences are varied and multiple. Therefore, the findings of Narayan et al. presented us with a wide spectrum of poverty and well-being experiences from the meanings of individuals who are poor themselves – some of these not previously thought of.

Similarly, Cohen et al. (2007) suggest that the aim of interpretivists is to understand, explain and make sense of social reality through the varied perspectives of participants. Consequently, interpretivism assumes that knowledge is socially constructed and, therefore, the researcher and reality are inseparable. In other words, interpretivism assumes that reality is constructed through the interactions of individuals, including interaction between the researcher and subjects (Creswell, 2003; Guba & Lincoln, 1994; Neuman, 2014).

Interpretivism favours qualitative research methods (Bryman & Bell, 2011) and according to Anderson (2010), interpretivists make more use of case studies and ethnographic studies as research methods. According to Kanbur (2001), qualitative research methods in poverty studies usually refers to semi-structured or structured interviews to collect data mainly about people's preferences, attitudes or perceptions about a certain subject. In this study I used semi-structured interviews to collect data about respondents' views on how HEA affected their well-being. However, this data collection method was chosen because it fits my research questions and not because I am an interpretivist. In sum, interpretivism assumes that scientific methods cannot be applied to social research because there is no single reality and meanings are created by individuals.

4.2.3 Pragmatism

Pragmatism is a research paradigm which avoids the debate about reality and truths and instead focuses on the research problems (Creswell & Plano Clark, 2007). Similarly, Feilzer (2010) describes pragmatism as a worldview which does not seek to accurately present reality, but rather one in which research is conducted in ways which make it useful. This implies that researchers are not constraint to adopt one of the two paradigms, but are rather free to choose appropriate methods required to measure and research a social phenomenon (Creswell & Plano Clark, 2007; Feilzer, 2010).

While positivism is generally associated with quantitative research and interpretivism with qualitative research, pragmatism is associated with MMR (Teddlie & Tashakkori, 2010).

According to Johnson and Onwuegbuzie (2004), pragmatism is an ideal paradigm for research requiring the mixing of qualitative and quantitative research methods. Addison, Hulme and Kanbur (2008) assert that MMR results in a better understanding of poverty and well-being. This is consistent with the study by Carvalho and White (Carvalho & White, 1997), which concluded that combining qualitative and quantitative approaches in well-being studies yields better results than using either a qualitative or quantitative approach on its own, since a combination of approaches can better capture the various dimensions of deprivations which constitutes human well-being.

However, MMR in poverty and well-being studies is limited (Ravi Kanbur, 2003). In relation to these studies, Carvalho and White (Carvalho & White, 1997) provide several characteristics of qualitative and quantitative approaches, as shown in table 4-1. Based on the definition of multidimensional well-being, discussed in chapter two, the characteristics in the table show that neither one of the approaches on its own is suitable for multidimensional well-being. The latter is based on the theoretical underpinning that human well-being is defined by multiple deprivations or achievements and not merely a lack of income/ consumption.

Table 4-1: Features of quantitative and qualitative approaches in poverty/well-being studies

Characteristics	Quantitative Approach	Qualitative Approach
Definition of poverty	People are considered poor if their standard of living falls below the poverty line (i.e. the amount of income or consumption associated with the minimum acceptable level of nutrition and other necessities of everyday life.	Poor people define what poverty means; broader definition of deprivation resulting from a range of factors (not simply lack of income/consumption) adopted.
Philosophical underpinnings	Positivism: existence of one reality	Rejection of positivism: assumes there are multiple forms of reality and, therefore, it is senseless to try to identify one [Interpretivism]
Nature of variables for which data is collected	Quantifiable, e.g. household or (individual) expenditure on food, unemployment rate	Perception variables reflecting attitudes, preferences and priorities; the number of similar responses with respect to each variable can be added-up, but the variables themselves cannot be quantified.
Data collection format	Structured or formal interview; questionnaire	Open-ended or semi-structured interview
Sampling	Probability sampling (any sampling method which uses a form of random sampling)	Purposive sampling (non-probability sampling; researcher relies on his/her own judgement to select suitable participants)
Sample size	2000 – 8000 households	1 – 1000 individuals

Source: (Carvalho & White, 1997)

In clarifying the connection between pragmatism and MMR, Sandelowski (2000) states that pragmatism is not the mixing of paradigms. Instead, paradigms reflect what techniques researchers choose to combine and in which manner these will be combined. According to Creswell (2009) pragmatism as a research philosophy has several advantages over others:

- (i) Pragmatism is not committed to one philosophy, so it is ideal for MMR because researchers can use both qualitative and quantitative assumptions in their research.
- (ii) Pragmatism gives researchers the freedom of choice ‘to choose the methods, techniques and procedures of research that best meet their needs’ (p. 12).
- (iii) Pragmatism allows for the adoption of many approaches to collect and analyse data.
- (iv) Pragmatists seek to offer the most optimal knowledge of a problem and they are not restricted by limitations of one approach.

As mentioned previously, I adopted pragmatism as the research philosophy for this study because it is all about what works for my research questions and not what is the truth or reality (Teddle & Tashakkori, 2010), and my main interest is in the 'what' and 'how' (Creswell, 2003b) of the impact HEA has on multidimensional well-being. Moreover, since I am not using only quantitative (positivists) or only qualitative (interpretivists) methods, but MMR, pragmatism is an ideal philosophy (Creswell, 2013). In essence, MMR implies the mixing of methods (quantitative and qualitative) and according to Denzin, Lincoln and Guba (1994), the mixing of methods is acceptable as long as two or more paradigms are not mixed in a study.

In reviewing the debate between qualitative and quantitative approaches in poverty studies, Kanbur (2003) recognised that both approaches have their own strengths and weaknesses. Accordingly, he concluded that while quantitative data is easy to aggregate, it cannot capture the contextual information necessary to understand well-being. On the other hand, qualitative data provides a better way to define poverty and understand causal connections, but it is difficult to quantify for the purpose of comparison.

Another important reason for selecting pragmatism was my research topic: multidimensional well-being and its corresponding research questions. As discussed previously, multidimensional well-being is a complex phenomenon and consists of several dimensions, each with a number of indicators. Therefore, in my view, researching multidimensional well-being requires the use of MMR in order to capture a full picture of the multiple deprivations individuals may experience and pragmatism is the most appropriate philosophical worldview for MMR. In sum, pragmatism – an alternative paradigm to positivism and interpretivism – asserts that research should focus on the research problem in order to be useful and it can only do so by not being committed to a single research approach.

4.3 Research Design

The previous section outlined the philosophical assumptions underlying this study. It also reviewed the dominant research paradigms found in the literature and concluded that

pragmatism is the appropriate paradigm for this study. As discussed, pragmatism is ideal for a MMR design. Therefore, the aim of this section is to present the rationale for adopting a MMR approach and describe the overall research design adopted in this study, which was a deductive sequential explanatory MMR design.

Traditionally, research is divided into two broad categories: deductive and inductive. In general, qualitative research utilises an inductive approach, while quantitative research uses a deductive approach (Bryman & Bell, 2011; Castellan, 2010; Teddlie & Tashakkori, 2010).

According to Teddlie & Tashakkori (2010), MMR includes both deductive and inductive approaches in the same study. Neuman (2014) asserts that the inductive approach begins with detailed observations and ends with generalisations. This means that a researcher begins with some specific details and based on the research observations, arrives at a general conclusion from the observations. Similarly, Castellan (2010) explains that in the inductive process, a researcher uses observations to develop theory.

According to Feilzer (2010) both deductive and inductive processes can be used in pragmatism. Furthermore, these two general approaches to reasoning exist in order to generate new knowledge (Hyde, 2000). To restate these differently, inductive reasoning begins with specific observations in order to generate generalisations or theory, while deductive reasoning begins with generalisations and seeks to investigate how these apply to specific situations (Bryman & Bell, 2011; Creswell, 2009; Hyde, 2000; Morse, 2003). Saunders & Lewis (2012, p. 72) identified four main characteristics of a deductive approach in research. These:

- i. Explain causal relationships between specific variables
- ii. Operationalise all relevant concepts
- iii. Collect and analyse appropriate data to answer the research questions
- iv. Use a structured and replicable methodology for reliability

For example, in this study, the impact educational attainment has on well-being is the generalisation, while the impact HEA has on multidimensional well-being in SA is the specific situation. As mentioned in chapter 1, the relationship between education and well-being is bi-directional, meaning w could impact education, while education has the potential to improve

multidimensional well-being. However, in this study, the focus is on education impacting well-being, which is a general theory and both education and well-being are general constructs. However, in this research, the focus is on two specific constructs derived from the general constructs and applicable to a specific country, SA. Higher education, derived from education, and multidimensional well-being which is a specific definition of well-being. Therefore, I applied a deductive approach in this research because the research objective is to evaluate how HEA affects multidimensional well-being in SA.

A quantitative research study is either cross-sectional or longitudinal. The former is best for exploring a phenomenon, problem, attitude or issue, while the latter is best suited for research studies collecting factual information over a period of time or on a continual basis (Kumar, 2014). This research was a cross-sectional study. According to Saunders & Tosey (2012), a cross-sectional study usually makes use of research strategies such as surveys.

A key aspect of this research is multidimensional well-being, a complex social phenomenon, which requires measuring well-being based on various dimensions. Therefore, Alkire (Alkire, 2006) suggests a mixed methods research (MMR) approach in studying multidimensional poverty and well-being. Another study conducted by Bamberger, Rao, & Woolcock (2010) on the use of MMR in poverty studies, concluded that MMR is the most suitable research method for poverty studies due to its complex nature. Interestingly, their study also recognised that although most poverty studies employing MMR have been done in the US and other industrialised countries, these studies are steadily growing in the developing world. Although most poverty studies in the past were either qualitative or quantitative in nature (Ravi Kanbur, 2003), in recent years the use of MMR has increased due to increasing acceptance and adoption of poverty as a multidimensional concept (Mitra et al., 2013). According to Kanbur (2003), using mixed methods is an improvement over either qualitative or quantitative methods in poverty studies and yields better results.

A review of the literature reveals a wide range of definitions of what is mixed methods research. Creswell & Plano Clark (2011, p. 5) defines MMR as follows:

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone.

In a review of the literature on definitions of MMR, Johnson et al. (2007, p. 123) proposed a definition of MMR based on the synthesis of the 19 definitions they found in the literature:

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration.

Another widely cited definition of MMR is offered by Johnson & Onwuegbuzie (2004, p. 17) who define MMR as:

The class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study.

However, in an earlier publication, Creswell et al. (2003) defined MMR as follows:

A mixed methods study involves the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given priority, and involve the integration of the data at one or more stages in the process of research.

I have extracted four definitions of MMR from the literature because, I think, these four collectively present a well-rounded definition of MMR. While in all four definitions the mixing of qualitative and quantitative methods is acknowledged, there are some differences in each one. Creswell & Plano Clark's definition mentions the importance of philosophical assumptions and it recognises that the mixing of two approaches results in a better understanding of the research problem. The definition by Johnson et al. acknowledges that the mixing of two

approaches provides “breadth and depth of understanding” and validation. Creswell et al. highlights that the two approaches can be done concurrently and the integration of the data has to be done at some stage of the research. From the above definitions, I have selected the definition given by Creswell et al. (2003) to guide this research. I chose Creswell’s definition simply because it is more detailed, precise and complete. Building on the discussion so far, the next paragraph outlines the rationale for an MMR study.

Most research on poverty and well-being focuses on a quantitative approach to study the phenomenon of poverty/well-being because in these studies poverty/well-being is measured either in terms of income or expenditure, meaning unidimensionally. However, as mentioned earlier, in recent years there has been an increasing interest in studying poverty/well-being from a multidimensional perspective and, consequently several scholars (Alkire & Foster, 2011; Bamberger et al., 2010; Kanbur, 2003; Mitra et al., 2013) have called for an increase in the adoption of MMR in studies.

Although there is a growing body of literature on multidimensional poverty/well-being using MMR, it is still small and there is a need for more MMR on poverty/well-being (Ravi Kanbur, 2003), since these will help governments to formulate more evidence-based and informed policies (Addison et al., 2008). In spite of the recognition that MMR is obviously superior over quantitative or qualitative studies on its own (Ravi Kanbur, 2003), poverty studies using MMR are still limited. This motivated me to use a mixed methods approach to develop a multidimensional well-being framework for HEA in SA.

Another reason why I selected MMR is that it allows for integrating quantitative and qualitative data because “neither quantitative nor qualitative methods are sufficient, by themselves, to capture the trends and details” (Ivankova, 2006) of the impact HEA has on multidimensional well-being. In addition, the two types of data complement each other, resulting in a more robust analysis when doing an MMR (Tashakkori & Teddlie, 1998). The two methods can either be conducted simultaneously or sequentially (Feilzer, 2010; Morse, 2003; Tashakkori & Teddlie, 2003; Creswell et al., 2003). In MMR, there is no prescribed sequence of which strategy should be conducted first and it depends on the researcher (Terrell, 2012). However, Creswell offered a useful matrix (see table 4-2 below) to assist researchers in the

decision-making process of designing an MMR strategy. In the below matrix, the column 'theoretical perspective' is explained by Creswell (p. 176) as follows:

All inquiry is theoretically driven by assumptions that researchers bring to their studies. At an informal level, the theoretical perspective reflects researchers' personal stances toward the topic they are studying, a stance based on personal experience, culture, gender, and class perspective. At a more formal level, social science researchers bring to their inquiries a formal lens by which they view their topics.

As depicted in the matrix, the theoretical perspective can be explicit or informal. According to Creswell, when the theoretical perspective seeks to bring about transformation it is explicit and when the theoretical perspective only informs the purpose and questions being asked, it is implicit. In this study the theoretical lens is implicit for several reasons. Firstly, I grew up during the apartheid era in SA in extreme poverty and I only improved my life through education. Secondly, the goal of my research is not to bring about explicit transformation of the participants and topic under the study. However, my personal experience motivated me to undertake this study and, therefore, the theoretical lens of this study is implicit. In the same publication, Creswell also outlined six major generic designs of MMR which a researcher could adopt. These are:

- (i) Sequential explanatory
- (ii) Sequential exploratory
- (iii) Sequential transformative
- (iv) Concurrent triangulation
- (v) Concurrent nested
- (vi) Concurrent transformative

Table 4-2: Decision Matrix for Determining a Mixed Methods Design

Implementation	Priority	Integration	Theoretical perspective
No sequence Concurrent	Equal	At data collection	Explicit
Sequential – qualitative first	Qualitative	At data analysis	
Sequential – quantitative first	Quantitative	At data interpretation	Implicit
		With some combination	

Source: (Creswell et al., 2003, p. 171)

According to Creswell, the steps in a sequential explanatory design are to first collect and analyse the quantitative data and then the qualitative data, with integration at the interpretation phase of the study. In addition, Creswell states that this type of design is best for explaining and interpreting relationships. However, he pointed out that this type of design has one major weakness: data collection is time-consuming due to the two separate data collection phases. Nevertheless, I chose a sequential explanatory design because it was the most suited for my research objectives and topic, since the main objective of my research is to develop a multidimensional well-being framework for HEA in SA. Therefore, in this study the first phase was quantitative (surveys) and the second phase was qualitative (semi-structured interviews).

To reiterate and summarise, my research strategy is a sequential explanatory research strategy with quantitative methods first, followed by the qualitative phase, and the integration is done at the interpretation stage. In the quantitative phase, I collected and analysed 427 surveys and in the qualitative phase I interviewed 30 respondents in SA who have graduated from one of the 7 universities in three provinces in SA. To sum up, the overall research design of this study was a mixed methods research design using a deductive sequential explanatory case study approach.

4.4 Sampling design

The participants in this study were adults who obtained an undergraduate degree at one of 7 selected universities in 3 out of 9 provinces in SA. This section describes the sampling design used in this study.

Many different forms of sampling procedures are found in the literature. Onwuegbuzie and Leech (cited in Teddlie & Yu, 2007) conducted a comprehensive review of the literature on sampling and found 24 different types of sampling procedures. Some are specific to certain research approaches, while sampling procedures in MMR are often complex and consist of a combination of many sampling types (Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007).

According to Carvalho and White (Carvalho & White, 1997), purposive sampling is ideal for the qualitative phase of a MMR study, in which semi-structured interviews are used for data collection. Teddlie and Yu (2007) define purposive sampling “as selecting units (e.g. individuals, groups of individuals and institutions) based on specific purposes associated with answering a research study’s questions (p. 77),” while convenience sampling “involves drawing samples that are both easily accessible and willing to participate in a study (p. 79).” They characterised purposive sampling as a technique where a researcher selects a sample that will be able to address the research questions, the sample size is usually small (30 or less), participants are selected to address specific aspects of the research questions, it is a nonprobability sample, appropriate for qualitative research, and where the focus is on narrative data and depth of data.

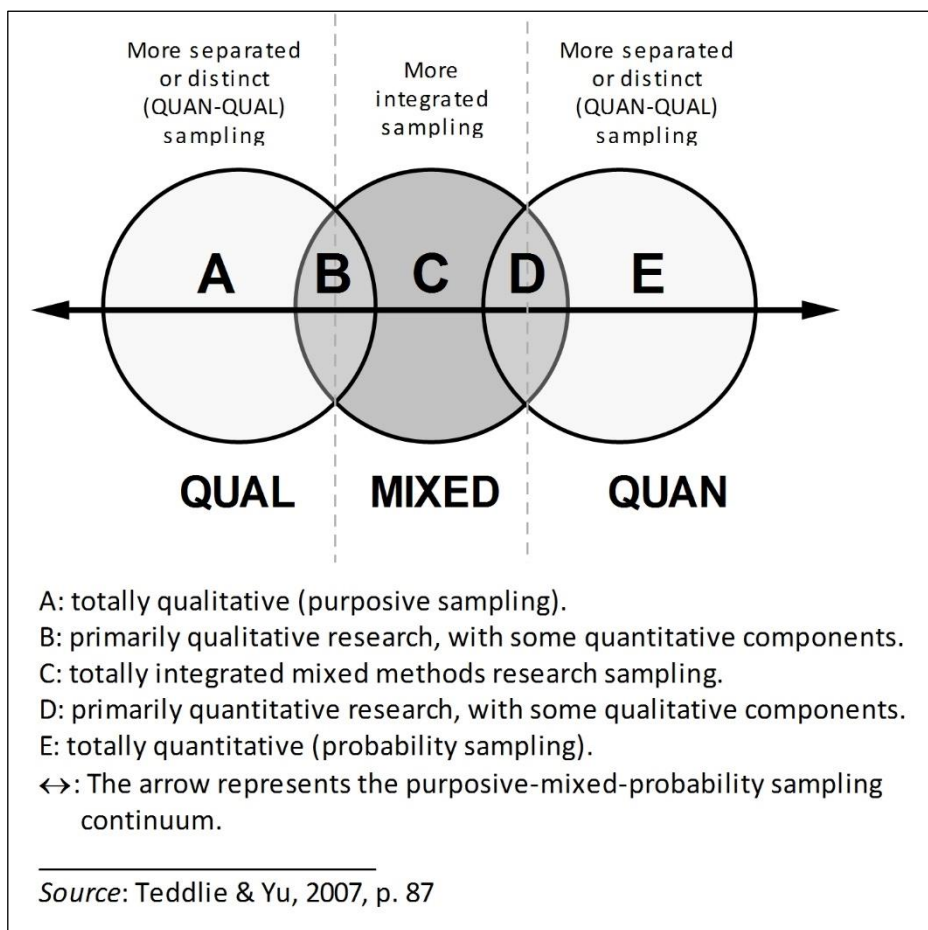
According to Onwuegbuzie & Collins (2007), convenience sampling refers to a sampling procedure in which participants are chosen because they are conveniently available and willing to participate in the study.

Creswell (2009) identifies two types of sampling design: single-stage and multi-stage, or cluster sampling. Single-stage sampling means that the researcher has access to a list of names in the population and can draw a sample from that list. Multi-stage sampling is when it is not possible

or impractical to obtain a sample from a list of names. Also, multi-stage requires that sampling takes place over a number of stages.

Having mentioned these different sampling designs, none is superior to another and often in MMR they are used overlappingly. According to Teddlie and Yu (2007), in MMR, sampling does not have to be confined to one of the specific sampling types, but rather lie on a sampling continuum in which the specificity between the different types of sampling overlap. They labelled this the purposive-mixed-probability sampling continuum (see fig. 4-1). In other words, in MMR, sampling does not have to conform to one specific type of sampling, but could be a combination of two or more.

Figure 4-1: Purposive-mixed-probability sampling continuum



Since this study adopted a MMR design, two types of sampling were carried out: quantitative (priority) and qualitative (QUAN-Qual). Teddlie and Yu (2007) characterise sampling in MMR as having more than one sample with variations in size, a focus on depth and breadth of information, generating both numerical and narrative data. First I describe the quantitative phase sampling and then the qualitative phase sampling.

The sampling process for this study was carried out in several stages. In the first stage I narrowed the study to include only HEIs in only three out of the nine provinces of SA. I looked at the overall poverty rates of the provinces and focused on the provinces with poverty rates of more than 50% (seven provinces have poverty rates above 50%). Then, I selected the two provinces with the highest incidences of poverty (Limpopo: 78.9% and Eastern Cape: 70.6%) and one province with the lowest poverty rate above 50% (North-West: 61.4%). My rationale for selecting only three provinces was to make the study manageable and not overly large. Also, I selected the three provinces in the way I did, because one of the research variables is multidimensional poverty and I wanted to draw participants from regions where the poverty rates are representative of the general situation in the country. As discussed in chapter 1, it is only in the Western Cape and Gauteng provinces that the poverty rates are 35.4% and 33.0%, respectively. In all the other provinces the poverty rates are above 50%, as discussed previously. I also wanted a broader spectrum of participants who experience poverty and therefore, I chose the two poorest provinces and one of the least poorest above the 50% cut-off level. In this way, I think, I was able to draw a range of participants who experience poverty at different levels. At the time of designing the research study, I used the then published 2011 national census statistics on higher education to decide on which provinces to focus. According to the 2011 national census statistics, the national HEA rate in SA for individuals aged 20 years and older was 11.8%, while all three provinces had rates lower than that: Eastern Cape: 8.5%, Limpopo: 9.2% and North-West: 7.5% (StatsSA, 2011a). Another criterion I used in stage one of the sampling process was the unemployment provincial rates. The Eastern Cape and Limpopo had unemployment rates of 37.4% and 38.9%, respectively, while Gauteng had the second lowest unemployment rate of 26.3% (StatsSA, 2011a). A final criterion I used was the average annual household income (AHI). In 2011, the AHI for the country was ZAR 103,195, while the AHI for Limpopo was ZAR 56,841 (the lowest), Eastern Cape ZAR 64,550 (the second lowest) and North-West ZAR 69,914 (third lowest) (StatsSA, 2011a). For these reasons I selected the three provinces.

In stage two, I narrowed the institutions from which I wanted to include participants. In SA, like in most countries, HEIs consist of colleges, public and private universities. I only selected public universities, meaning universities predominantly funded by the government. I focused on public universities because SA has very few private universities and the majority of those attending university go to public universities. According to a recent report published by the government of SA (Department of Education, 2013), SA has 23 public universities and no private universities. I also excluded any distance learning or online HEIs. Next, I selected all the public universities located in the above-mentioned three provinces in SA to draw respondents from. They are:

- i. Nelson Mandela Metropolitan University (Eastern Cape)
- ii. University of Fort Hare (Eastern Cape)
- iii. Rhodes University (Eastern Cape)
- iv. Walter Sisulu University (Eastern Cape)
- v. University of Limpopo (Limpopo)
- vi. North-West University (North-West)
- vii. University of Venda (Limpopo)

Stage three involved the selection of participants. I used the following exclusion and inclusion criteria for selecting participants:

- i. Respondents had to have graduated with an undergraduate degree from one of the seven universities listed above.
- ii. They had to be South African nationals and reside there.
- iii. Participants had to agree to willingly participate in the study.

These were the stages I used in selecting the sample of this study. I used the same sampling procedure for the quantitative and qualitative phases. I used convenience sampling in the quantitative phase to select potential participants. According to Onwuegbuzie and Collins (2007), convenient sampling refers to a sampling procedure in which individuals are chosen because they are conveniently available and willing to participate in the study. Purposive sampling was used in the qualitative phase because individuals were only selected if they obtained an undergraduate degree from one of the three universities and they were willing and wanted to contribute to the research topic (Creswell, 2009). The quantitative phase had a

sample size of 427, while the qualitative phase's sample size was 30. To sum up this section, I used a multi-stage sampling procedure for this study's sampling design, convenience sampling for the quantitative phase and purposive sampling for the qualitative phase.

4.5 Data collection

In a MMR, data collection is driven by 'what works' and not dictated by a specific paradigm (Creswell & Plano Clark, 2007). Crotty (1998) defines data collection as the tools, techniques and procedures used to generate data. As mentioned earlier, this study adopted a sequential mixed methods approach. Therefore, the data were collected in separate phases. The first phase was the quantitative phase, followed by the qualitative phase. In phase one, data were collected through an online survey, while the qualitative data were collected through semi-structured interviews. The online survey consisted of 38 questions of which 6 were demographic questions. Invitations to participate in the survey were sent to alumni groups of the 7 universities I decided to focus on. These 7 universities were selected because they are located in the three poorest provinces in SA, out of a total of nine provinces. The second phase consisted of semi-structured interviews. The interviews were based on 18 questions to guide the interviewees. I interviewed a total of 30 participants. The interviews were conducted by telephone and video calls. Similarly to phase one, I sent invitations to the alumni groups of the universities and interviewed the ones who responded. The data analysis was done independently. I used descriptive and inferential statistics to analyse the quantitative data. All statistical analysis was done using SPSS. The qualitative data were analysed using coding and thematic analysis. I used NVivo 10 for the analysis.

4.5.1 Surveys

Online surveys were conducted using the University of Southampton iSurvey web-based platform. The aim of the survey was to gather first-hand data about the impact of HE on respondents' socio-economic status. Invitations to participate in the online survey were sent through various alumni associations and were also posted on social media networks like LinkedIn. I posted the requirements to participate, details of the study, ethical clearance details and a link to the survey on LinkedIn, which has many alumni groups of the seven universities. In most cases, it was a challenge to get respondents to commit to completing the online surveys. In fact, it took me almost six months to complete the online surveys but I

eventually ended with a sample size of 427. I also requested the alumni offices of the seven universities to broadcast my email invitation to their alumni mailing list. This was a very effective strategy because a very large portion of the respondents came through this method. However, it required numerous follow-up emails to the alumni offices of the universities.

4.5.2 Semi-structured interviews

As a follow-up to the quantitative online surveys, I conducted a series of semi-structured interviews with 30 South Africans, who had graduated from one of the seven universities located in the three poorest provinces of the country, to collect the qualitative data. The interviews were conducted through the use of web-based communication applications such as Skype and Google Talk from February 2014 to June 2014. Semi-structured interviews were preferable as it allowed for the inclusion of open-ended questions and for the collection of uniform information which allowed comparability of the collected data (Kumar, 1996); (Krathwohl, 1998).

Initially, I planned to interview 40 respondents but it was a major challenge even to get 30 interviews and so I stopped at 30 for two reasons. One, finding potential interviewees was a very difficult and long process and therefore, I opted for the minimum sample size of 30 (Cohen et al., 2007). Two, according to Patton (1990), in qualitative research, the sample size is dependent on available resources and what data is required for the research and at 30 I felt the data reached saturation (Neuman, 2014) (no new data emerged from interviewee responses) and was sufficient to inform the quantitative data. The online survey requested respondents to participate in a follow-up interview and some, though only a few, indicated their willingness. However, finding people willing to be interviewed was a challenge and a long process. I eventually resorted to asking those who completed the interview to forward an invitation email (which I drafted) to some of their friends or ex-university classmates. This was a successful strategy as I was able to gain voluntary access to alumni members from the seven universities who fulfilled the exclusion and inclusion criteria mentioned earlier.

All interviewees received full information about my research objectives and questions, and had to sign the ethics clearance form prior to the interview. Only once I received the signed ethics clearance form did I schedule the interview date with the interviewee. Scheduling an interview

day and time usually required 3 – 5 emails before the actual interview took place. Most interviews lasted between 30 – 45 minutes. Prior to every interview, I wrote down what I was going to say and read almost everything from a prepared script. In this way, I did not need to think or hesitate about what I needed to say. Also, at the start of every interview I introduced myself, provided an overview of the research and explained my intended use of the interview data. This served a dual purpose: firstly, it provided the interviewee with necessary information and secondly, it was an opportunity to ‘warm-up’ the interviewee as it often led to a short exchange of what I was doing and what the interviewee was doing. To ensure accuracy and avoid bias, I recorded all the interviews and transcribed them afterwards. Immediately after the interview, I emailed the respondents with a thank you email. Several criteria were applied to the respondents to qualify for inclusion in the qualitative phase:

- i. They must have graduated from one of the seven universities.
- ii. They must be South African nationals and living in the country.
- iii. Only undergraduate alumni were included.

Before explaining the research instrument design adopted in this study, I will first provide the rationale for how poverty measures are useful for a well-being methodology.

4.5.3 Why multidimensional poverty measures for a well-being methodology?

In sections 2.2 and 2.3 of chapter 1, I explained how and why traditional poverty measures – i.e. monetary poverty measures - fail to present an accurate and complete picture of poverty and well-being. Conversely, a multi-dimensional approach regards well-being in a much broader sense and therefore it generates more and better data. For example, the qualitative work *Voices of the Poor* by Narayan (2000) illustrated the range of multiple deprivations the poor experience. An income poverty measure, although important, would not have been able to capture the deep and pervasive deprivations of the poor, which Narayan and his team studied across the world. In other words, a multi-dimensional approach – which consists of several indicators – allows for the inclusion of a variety of indicators relevant to a particular society or study group. Therefore a better measure of well-being is a multidimensional approach.

While well-being is much more than having adequate income, the poor are more likely to experience ill-being. The poor are more prone to experiencing low life expectancy rates, exposed to diseases, being malnourished, living in inadequate shelter, have limited access to development opportunities, have poor sanitation and is more likely to be unemployed (Cosgrove & Curtis, 2017). Since all of these negative experiences affect the well-being of the poor in multiple ways, the use of poverty measures provide a better understanding of well-being. Moreover, increased income or wealth is not an accurate outcome of well-being for several reasons. First of all, the poor may be deprived across several dimensions and an improvement in one dimension does not mean an improvement across all dimensions of well-being (Sen, 2001). Secondly, a traditional onedimensional approach to measuring poverty considers the quality of life of an individual in terms of income or consumption and we know that well-being goes beyond income or consumption. By adopting a multidimensional poverty measure, we take a step closer to understanding well-being and are moving away from the notion that income poverty is a proxy of well-being (Alkire & Sarwar, 2009). A third motivation for using multidimensional poverty measures for a well-being methodology lies in the use of multiple social indicators such as access to health care, housing, social participation and employment. In measuring these indicators, a researcher is better able to build a picture of the well-being of individuals. Moreover, multidimensional poverty measures these indicators as 'ends' of development. In *Development as Freedom* (2001) Sen argues that the main goal of human development should be to 'expand' people's capabilities so that they can achieve valuable beings and doings. According to Alkire & Sarwar (2009) these capabilities make up the 'ends' of development. Therefore, in order for people to achieve these 'ends' they need valuable capabilities, which can only be accomplished if they have access to the necessary resources and freedom to make choices about what matters they value as important (Alkire, 2002). In this regard multidimensional poverty measures are useful for a well-being methodology because it allows us to conceptualize well-being beyond the constraints of onedimensional poverty measures.

Multidimensional poverty measures provide an opportunity to measure what really matters. As a researcher, I do not know what are valuable beings and doings for individuals with HEA in SA. While it is possible to guess that indicators such as income is important, the importance of less obvious indicators such as empowerment or access to opportunities are not always apparent. For example, it is not immediately apparent whether empowerment or knowledge are equally or less important than housing for well-being. Although the literature is rich with

research on well-being, we still do not know the full story. Therefore, multidimensional poverty measures assist in adding to our understanding of building a well-being framework for HE in SA.

Therefore, by using multi-dimensional poverty measures, I was able to use a mixed methods approach to collect data for a well-being framework. Secondly, I believe that human well-being is a function of multi-dimensional poverty measures. In other words, by measuring multi-dimensional poverty measures, a researcher is able to understand the nature of an individual's well-being. For example, multi-dimensional poverty indicators such as access to adequate health care facilities, affordability of health care and knowledge about how to make healthy decisions about lifestyle provides an insight to the capability of being able to live a healthy life, which in turn provides an insight to an individual's well-being in terms of his/her health condition. Thirdly, multi-dimensional poverty measures generate a rich pool of data which allows a researcher to pick and choose which aspects are a 'good fit' to answer the research questions used in a study. In other words, multi-dimensional poverty measures include both monetary and non-monetary complimentary indicators such as access to health, quality of health, access to housing, access to opportunities, to mention a few, which collectively provide a rich analysis of an individual's well-being. In this way, multi-dimensional poverty measures are useful for a well-being methodology. The next section explains the research instrument design used in this study.

4.6 Research instruments design

This study consisted of two research instruments: a quantitative questionnaire and a qualitative semi-structured interview. As mentioned previously, the questionnaire was administered prior to conducting the interviews. Both instruments were designed around Amartya Sen's capability approach theory, as expressed in the theoretical framework (see chapter 3). Although the survey questions were based on the dimensions and indicators adopted from the OPHI-MPI framework, the questions were formulated by myself. Afterwards, I cross-referenced the survey questions with the census survey questions used in SA to ensure similar wording as far as possible. Please refer to appendix A for the questionnaire and appendix B for the semi-structured interview questions. This section describes how the research instruments were designed. Both the questionnaire and the interview questions

consisted of distinct and labelled parts because questions covering a similar topic were grouped together, so the respondents could respond to them with ease.

The questionnaire consisted of 5 parts: part 1 asked demographic questions, while parts 2 -5 corresponded to one of the four dimensions of the theoretical framework of this study. Each part consisted of two types of questions. One type was those that are specific to the research objectives and research questions of this study. Another type of question was generic multidimensional poverty/well-being questions found in similar surveys. However, with regards to this type, I modelled them all according to the national 2011 census questionnaire of SA. I did this to ensure contextual relevance of the research questions. Also, since the target respondents were adults, they would have most likely previously participated in a national census in SA. Therefore, these question formats would most likely be familiar to them, if they had done so. For these reasons I opted to follow the format of relevant survey questions according to what was contained in the census questionnaire. For example, in the section on demographics (part 1), the question (number 3) in which respondents had to indicate their demographic groups, was modelled according to a similar question contained in the national census questionnaire of SA (StatsSA, 2011b). In designing the survey questions, I paid particular attention to ensuring that the questions were relevant to the target participants. This meant I had to word the questions in a neutral manner and exclude response choices which were irrelevant. For example, in census 2011, some of the items measuring standard of living ask respondents whether or not they have access to piped drinking water, access to piped water for washing, flush or pit toilet, own livestock, and other items. I excluded these in the living standards section and focused on asking questions I thought were the most important ones to measure living standards. Overall, the selection of what items to include in the survey was mainly informed and guided by a review of the literature. One particular survey section which was almost completely worded by myself after a review of the literature was the section on social justice. As discussed in the literature review chapter, social justice is a very subjective and difficult variable to measure. In spite of this, I included it as a component of my theoretical framework and as a section in the survey because I believed it will make an important contribution to the literature.

Similar to the questionnaire, the interview questions consisted of 4 parts; one for each dimension of the theoretical framework. The interview questions were based on the analysis

of the qualitative data. The main goal of the interview was to probe respondents' perceptions and opinions of the impact HEA had on their lives. The interview format was semi-structured, which means that the interview was conducted based on a pre-determined set of open-ended questions. Overall, the interview items were designed to complement the questionnaire data. To conclude, both research instruments were designed based on the theoretical framework, with the quantitative data informing and guiding the design of the interview questions.

4.7 Research methods

To answer the research questions and achieve the research objectives, I adopted a MMR approach in this study by combining quantitative and qualitative methods (Johnson, Onwuegbuzie, & Turner, 2007; Sandelowski, 2000) in two sequential phases. The first phase was quantitative and the second qualitative. In phase one, I used online structured questionnaires to collect data from respondents who have graduated from one of seven universities in SA. In phase two I employed face-to-face semi-structured interviews, which were conducted through Skype. The combination of these two data collection instruments to generate confirmatory results is common in MMR (Harris & Brown, 2010). The online questionnaire gave me an opportunity to reach a large sample size and get an overall picture of how HEA affects the various dimensions of the participants' well-being, while the interviews allowed me to gather more in-depth information on the attitudes, actions and perceptions of participants (Kendall, 2008) on the nature of deprivations experienced by them. Although different, I selected questionnaire and interview as the research instruments because they are often referred to in the literature as having complementary strengths and weaknesses (Harris & Brown, 2010). In phase one, respondents were recruited from alumni members of the seven universities located in three provinces in SA and yielded 427 respondents. The data were analysed using IBM SPSS (version 21). The quantitative findings are presented in chapter 5. Phase two was the qualitative phase and respondents were largely drawn from those who have indicated their willingness to participate in an interview. Thirty individuals participated in the online interviews and the data were analysed using NVivo 10. Chapter 6 represents the qualitative findings.

4.8 Data analysis

This section describes the data analysis procedures and techniques used in this study. Since this was a sequential explanatory mixed methods design, the data were analysed sequentially first, and integrated afterwards. The quantitative data were analysed first, followed by the qualitative data analysis. Importantly, the quantitative data were analysed using quantitative techniques, while the qualitative data were analysed using qualitative techniques.

4.8.1 Quantitative survey

Quantitative data from the surveys were first cleaned up, coded and entered into SPSS. All statistical analysis was done using IBM SPSS Statistics 21. The numerical data were described using statistical means and standard deviations. Frequencies and percentages were utilized to describe the socio-economic status of university graduates. These were also used to determine: (i) the perceptions of university graduates toward the impact of their university education on their life; (ii) to evaluate the impact HEA has on living standards and personal well-being; (iii) to determine the most important indicators of economic well-being by graduates; and (iv) to what extent HEA empowers graduates. Inferential statistics such as chi-square tests, independent samples tests and cross tabulation were used to analyze the survey data in SPSS. I also used multiple response frequencies where a survey item required respondents to give more than one answer. In calculating the multidimensional well-being index, I followed the Alkire-Foster method (OPHI, 2016a). Appendix G provides a complete description on how to apply the Alkire-Foster Method. Factor analysis was used to determine which dimension has the highest correlation with HEA. The quantitative data were analysed according to the survey items.

4.8.2 Semi-structured interviews

According to Keats (2009), qualitative interviewing is an effective data collection tool for studies wanting to determine participants' viewpoints.

The qualitative data were analysed using thematic analysis. Several major and sub-themes were identified in the literature on Sen's CA and these were used in the thematic analysis. According to Braun and Clarke (2006) the aim of thematic analysis is to identify, analyse and report themes in the data. The transcripts of each participant were entered into NVivo 10, a widely used qualitative data analysis (QDA) software package, and used to recognise patterns

in the responses. I created several tree nodes for the various themes and then coded and categorized the data since it is an important part of data analysis (Dey, 1993). These nodes were then used to compare the different responses of the participants. Secondly, the tree nodes or emerging patterns were checked against the themes previously identified in the literature. NVivo was very useful in managing the data, managing similar and opposing ideas, conducting comparative analysis using matrices and querying the data. However, NVivo is only a tool to help in organising, searching and grouping similar codes. The actual analysis still had to be done by the researcher. Prior to conducting the analysis, I spent a great deal of time reading the responses in order to get a 'feel' for 'what is there' in the responses. This presented me with an opportunity to relate and engage with the responses in an attempt to better understand the qualitative data. I used thematic analysis to analyse the qualitative data. I first created themes and then coded the data against the themes by running various queries in NVivo. After that, I analysed the data and looked for emerging themes not covered in my other themes. I then ran reports on the analysed data in order to write-up the qualitative chapter. After both the quantitative and qualitative data were analysed, the analysis was compared and integrated for reliability and validity. The integration of the data is discussed in chapter 7 of the thesis.

4.9 Ethical considerations

This study conformed to the ethics standards of the University of Southampton. Prior to conducting the data collection, ethics clearance was sought and received from the university's Research Ethics Committee under study reference number 2013Q1-2.

4.9.1 Informed consent

Informed consent is a very important aspect of data collection as it enhances the validity of data analysis (Fox & Randell, 2002). According to Diener and Crandall informed consent may be defined as "the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decisions" (quoted in Cohen et al., 2007, p. 52). Informed consent was obtained from all participants prior to conducting the interviews. Participants had to read and sign the consent form and return it to me prior to the interview. To facilitate informed consent, participants were provided with clear objectives of the study and its purpose. Participants were also informed of their right to

withdraw or stop the interview at any time, since informed consent infers informed refusal (Cohen et al., 2007).

4.9.2 Confidentiality

Prior to conducting the research interviews, participants were given adequate information about the research and were assured of confidentiality, anonymity, non-identifiability and non-traceability. In addition, access to the research data was restricted to the researcher and his immediate supervisor. Also, no intrusive or sensitive questions were asked during the interviews. As a form of introduction, I told the respondents briefly about my background and that I was from Cape Town, SA. I found this helped with the interview because the respondents somehow felt they didn't need to explain all aspects of SA to a complete stranger. Although most of the respondents were Black African, while I am regarded as coloured, in the context of SA's racial classification, I did not find this to be any problem either on my side or the respondents' side.

4.10 Research validation

4.10.1 Validity, reliability and triangulation

Research validity can be external or internal and can be addressed in both quantitative and qualitative methods (Cohen et al., 2007). Internal validity means that the research findings must "describe accurately the phenomenon being researched" and external validity "refers to the degree to which the results can be generalized to the wider population, cases or situations" (Cohen et al., 2007, p. 136). Validity, reliability and triangulation are three key aspects of both quantitative and qualitative research.

According to Cohen et al. (2007), all research has some form of inherent inaccuracy and therefore the researcher's goals should be to minimize invalidity and maximize validity. To increase the validity and reliability of the study, triangulation was used (Creswell & Plano Clark, 2007). Validity of research implies that the interpretation of the results is an accurate reflection of the truth, while reliability refers to the extent a research study can be duplicated (Hoadley, 2004). However, in a mixed methods study, the quantitative data and the qualitative

data have different criteria for measuring reliability and validity (Cohen et al., 2007). According to Joppe (quoted in Golafshani, 2003, p. 599) validity in quantitative research means “the research truly measures that which it intended to measure” and “how truthful the research results are.” In order to ensure reliability and validity of my research, I used triangulation in the data collection and analysis phases. One way of ensuring reliability and validity is by using triangulation through combining methods, such as quantitative and qualitative methods, in a single study (Patton, 2002). Golafshani (2003) defines triangulation as the use of more than one method to collect and analyse data. Olsen (2004) suggests that triangulation is much more than validation in the sense that it helps to deepen and widen our understanding of the research topic. Therefore, triangulation helps to better understand the main research objective and question because it enhances and deepens our understanding and knowledge of the research problem.

Another method of validating qualitative data is participant validation, which is a technique in which interview analysed data are returned to participants to verify the accuracy of the results (Doyle, 2007). However, not all researchers agree on the need to use participant validation in qualitative research. Lincoln & Guba (1985) recommends the use of participant validation to improve reliability of qualitative data and a large body of literature exist on the value and importance of participant validation. However, Sandelowski (1986) argues that participant validation is a restraining factor on the researcher. Similarly, Horsburg (2003) writes that participant validation is problematic because the researcher and participants most likely have different viewpoints. More recently, Morse (2015) also questioned the usefulness of participant validation in qualitative research. While there appears to be a solid case for the use of participant validation in qualitative research, there also seems to be several pointers against using it. Nevertheless, I did not apply it in this study largely due to the difficulties in finding enough participants willing to participate in the study and therefore, I decided not to use it.

4.11 Pilot studies

According to Tuckman and Harper (2012), pilot studies are substantially beneficial in research because they help to achieve quality of research instruments. Moreover, they state that the main goal of pilot studies is to discover any failings in the questions and to refine the

survey/interview instrument. Therefore, it is not necessary to do data analysis of pilot studies. They further assert that pilot studies are useful in identifying poorly written instructions, poorly written questions and questions requiring sensitive responses. Tuckman and Harper (2012, p. 258) concluded that “pilot tests enable researchers to debug their questionnaires by diagnosing and correcting these failings.” Two pilot studies were carried out consequentially. In phase one, I conducted a pilot study of the questionnaire and in stage two I conducted a pilot study of the semi-structured interviews.

The quantitative pilot study was carried out after an initial review of the literature. The aim of the pilot study was to check for any problematic issues in the survey instrument and whether respondents could understand the survey questions. In early October 2012, I conducted a pre-pilot of the questionnaire with fellow PhD students within the Southampton Education School. In the pre-pilot, emails were sent to seven colleagues inviting them to complete an online survey by clicking on a link contained in the email. The link placed in the email was not tied to any specific email address or individual to ensure complete anonymity. Five colleagues responded and all thought that the pilot questionnaire was well designed and required no major revisions. I then went ahead and conducted the pilot study from 15 October to 30 October 2012. The pilot questionnaire was hosted on the iSurvey website of the University of Southampton. I recruited potential participants for the pilot study in two ways. I randomly selected university graduates from SA, whom I found on the social media website LinkedIn and Facebook and invited them to participate. I did this by sending them messages which explained my research and a link to the online questionnaire. I also posted an invitation to participate in the pilot study on social media website LinkedIn (see appendix). All the respondents thought the questionnaire was clear, except for the question on income (Please indicate your annual income: ____). The respondents commented that the question was difficult to answer and it would be difficult to write down an exact number. Some suggested I changed the response options to income brackets. This suggestion was included in the final survey.

The semi-structured interview pilot study was conducted after the initial quantitative data analysis. I first conducted a pre-pilot interview with some of my colleagues to test for validity, appropriateness and completeness of the interview content. During the pre-pilot interview, I discussed the exclusion and inclusion of interview questions and the appropriate wording of some of the questions. The interview questions were amended accordingly. In November

2013, I conducted pilot interviews with respondents. The quantitative questionnaire gave respondents an option to indicate if they were willing to participate in a follow-up interview. The respondents who participated in the pilot interviews were drawn from this list. A total of 46 survey respondents indicated their willingness to participate in a follow-up interview, but when I emailed them, very few were available to participate or their email addresses were non-functional. Eventually, I managed to interview five people for the pilot interview. The interviews were recorded digitally and transcribed manually. All five pilot interviews went smoothly and all the interviewees had no comments with regard to content or the interview questions. However, the pilot interviews were particularly beneficial to the researcher because it helped to familiarise myself with ways to conduct a research interview. Since there were no issues with the pilot interviews, these were included as part of the final interview data analysis. In sum, the pilot studies helped to improve the final survey and semi-structured interview instruments.

4.12 Chapter summary

This chapter presented the research methodology of this study. The importance of research paradigms was discussed and the rationale for choosing pragmatism as this study's paradigm. The discussion of the research design presented the various research approaches found in the literature and highlighted why MMR was the appropriate research approach for this study. The chapter also explained this study's sampling design, data collection and analysis techniques, research instrument designs, how the pilot studies were conducted and the ethical considerations relevant to this research. The chapter presented an overall picture of the research methodology used in this study.

Chapter 5: Quantitative findings

This chapter presents the findings from the quantitative data collected through a questionnaire. It is divided into six sub-sections. Section one presents summary statistics to characterise the respondents. Sections two to five are organized according to the dimensions of the theoretical framework (income and employment, living standards, health, and finally, social justice) and the research questions of this study. Section 6 presents the MPI calculation according to the AFM. The last section 6 summarises the chapter.

For convenience, I restate the research questions here:

- (i) What are the multidimensional well-being characteristics of individuals with HEA in SA?
- (ii) What is the socio-economic status of those who obtained a university undergraduate degree?
- (iii) What is the economic well-being of those who obtained a university undergraduate degree?
- (iv) Do university graduates experience a reasonable level of social justice in terms of security and opportunities?

The data presented in this section were collected through an online survey, conducted from December 2012 through July 2013. The population of this study was adults who obtained an undergraduate degree in SA and the sample was drawn from undergraduate alumni members from one of the seven public universities located in three of SA's poorest provinces: Eastern Cape, Limpopo Province and North-West Province. After completion of the online survey, all data were imported into Microsoft Excel and entered into SPSS for analysis. SPSS is one of the most widely used statistical software applications for analysing quantitative data (Meyers, Gamst, & Guarino, 2013). All columns labelled 'percent' represent the 'valid percent' column in SPSS outputs.

5.1 Characteristics of respondents

A total of 427 respondents completed the online survey, of which 49% were female and 51% were male (see table 5-1). Statistically, therefore, male and female respondents are essentially evenly distributed.

Table 5-1: Frequency distribution

<i>Gender (N=427)</i>		
	Frequency	Percent
Female	211	49.40
Male	216	50.60
Total	427	100.00

The variable age was recorded into a new variable (agegroups), which computed respondents' age into five groups, as shown in table 5-2. From the latter it is noted that 70% of the respondents are 30 years old and younger.

Table 5-2: Variable age groups

	Frequency	Percent	Cumulative Percent
20 – 24	91	21.3	21.3
25 – 30	208	48.7	70.0
31 – 39	72	16.9	86.9
40 – 50	28	6.6	93.4
51 and older	28	6.6	100.0
Total	427	100.0	

Respondents were from all the different demographic groups in SA, as shown in table 5-3. The majority of participants were Black African (68%) and 32% of the respondents belong to the other demographic groups. In terms of Section 217 of the South African Constitution (Act 108/96), 77% of respondents are classified as historically disadvantaged individuals (Government of South Africa, 1996). Section 217 of the South African Constitution (Act 108/96) (Government of South Africa, 1996, p. 27) defines a historically disadvantaged individual (HDI) as:

A South African citizen who, due to the apartheid policy that had been in place, had no franchise in national elections prior to the introduction of the Constitution of the Republic of South Africa, 1983 (Act 110 of 1983) or the Constitution of the Republic of South Africa, 1993 (Act 200 of 1993).

Table 5-3: Population groups of respondents

	<i>Frequency</i>	<i>Percent</i>
<i>Black African</i>	<i>291</i>	<i>68.1</i>
<i>Coloured</i>	<i>10</i>	<i>2.3</i>
<i>Indian or Asian</i>	<i>29</i>	<i>6.8</i>
<i>White</i>	<i>88</i>	<i>20.6</i>
<i>Other</i>	<i>9</i>	<i>2.1</i>
<i>Total</i>	<i>427</i>	<i>100.0</i>

At the time of the study, almost 27% of respondents indicated they were married, while 67% were single (see table 5-4). Of those married, 57% were male and 44% female.

Table 5-4: Marital status and gender of respondents

(N=427)

Marital status (MarStat)		Gender		Total
		Female	Male	
Married	Count	50	65	115
	% within MarStat	43.5%	56.5%	100.0%
Single	Count	148	138	286
	% within MarStat	51.7%	48.3%	100.0%
Divorced / separated	Count	12	13	25
	% within MarStat	48.0%	52.0%	100.0%
Widowed	Count	1	0	1
	% within MarStat	100.0%	0.0%	100.0%
Total	Count	211	216	427
	% within MarStat	49.4%	50.6%	100.0%

Respondents came from diverse academic disciplines. Economics and Management made up 24% of respondents' majors, while the second and third largest groups of respondents came from Social Science (20%) and Science (19%) respectively. Only 2% (n=7) of the respondents indicated medicine as their major (see table 5-5).

Table 5-5: Academic disciplines of respondents

	Frequency	Percent
<i>Degree major</i>		
Economics & Management	101	23.7
Engineering	29	6.8
Social Science	85	19.9
Science	79	18.5
Law	46	10.8
IT	30	7.0
Education	19	4.4
Health Sciences	31	7.3
Medicine	7	1.6
Total	427	100.0

Based on the sample selection criteria, as discussed earlier, respondents had to have graduated from one of the seven public universities located in three of SA's poorest provinces: Eastern Cape, Limpopo Province and North-West Province. However, five respondents were classified as 'other' because they graduated from higher education institutions within the three provinces which no longer exist, and were merged with one of the seven universities in 2001 as a result of a national transformation plan of higher education in SA (Department of Education, 2001). Table 5-6 shows the distribution of respondents' graduating university. The majority graduated from the University of Venda (27%) and the Nelson Mandela Metropolitan University (19%). The former is located in Limpopo province and the latter in the Eastern Cape. Limpopo is the poorest province and the Eastern Cape the second poorest province.

Table 5-6: University attended

	Frequency	Percent
Nelson Mandela Metropolitan University	82	19.2
North-West University	37	8.7
Rhodes University	66	15.5
University of Fort Hare	62	14.5
University of Limpopo	35	8.2
University of Venda	117	27.4
Walter Sisulu University	23	5.4
Other	5	1.2
Total	427	100.0

Table 5-7 below shows respondents' educational descriptive statistics by population groups. The majority of Black Africans graduated during the periods 1990 – 1999 and 2007 – 2013, while the highest percentage of coloureds (8%) and whites (43%) graduated during the period 1955 – 1980. The percentage of white and coloured graduates steadily declined from 1955 to 2013, while Indian/Asian graduates remained fairly constant, except for the period 1990 – 1999. Except for North-West University and Rhodes University, where 60% and 47% respectively were white graduates, the majority graduates of the other universities were Black Africans. Very few coloureds and Indians graduated from the universities included in this study.

Individuals from the different population groups have different study preferences. For Black Africans, the three most popular majors are IT (87%), Health Sciences (77%) and Education (74%). However, for coloureds they are Science (4%), Engineering, Health Sciences and IT, all at 3%, and Social Sciences and Law at 2%. The percentages for coloureds are very small due to the small number of coloured participants in the survey. Medicine (14%), Law (11%) and Social Sciences (8%) are the three most popular majors for Indians, whereas Medicine (43%), Social Science (29%) and Engineering (24%) are the most popular for whites. The least popular major for Black Africans is medicine (43%). For coloureds they are Education and Medicine - both at 0%. On the other hand, for Indians they are IT and Education - both at 0%, while for whites it is IT (7%).

Table 5-7: Educational characteristics of respondents by population group

		Population groups in South Africa				
		Black African	Coloured	Indian or Asian	White	Other
		%	%	%	%	%
Year	1955 – 1980	39	8	8	46	0
	1981 – 1989	60	0	5	35	0
	1990 – 1999	73	0	2	26	0
	2000 – 2006	63	5	9	18	4
	2007 – 2013	73	2	7	16	2
University	NMMU***	66	4	10	17	4
	NWU	30	3	8	60	0
	RU	44	3	6	47	0
	UFH	94	0	5	2	0
	UL	94	0	3	0	3
	Univen	71	3	9	14	4
	WSU	87	4	0	9	0
	Other	60	0	0	40	0
Major	Economics & Management	72	1	7	18	2
	Engineering	66	3	7	24	0
	Social Science	57	2	8	29	4
	Science	66	4	6	23	1
	Law	70	2	11	17	0
	IT	87	3	0	7	3
	Education	74	0	0	21	5
	Health Sciences	77	3	7	10	3
	Medicine	43	0	14	43	0

*** NMMU = Nelson Mandela Metropolitan University, NWU = North-West University,

RU = Rhodes University, UFH = University of Fort Hare, UL = University of Limpopo, UNIVEN = University of Venda, WSU = Walter Sisulu University

The data in Table 5-8 below, show that the majority of respondents - from all population groups – comes from household sizes of 1-2 individuals. What is interesting in this data is that only Black African households fall in the category of households with nine or more individuals. This indicates that Black Africans have large household sizes compared to other demographic groups in the study. The average household size in SA was 4 in 2011 (StatsSA, 2014b). Numerous studies (Lipton & Ravallion, 1993; Sundrum, 1990; Visaria, 1980) have suggested there is a strong negative correlation between larger household sizes and income or consumption in developing countries; meaning the larger the household size the more poor the family. However, a study conducted by Meyer & Nishimwe-niyimbanira (2016) in the

Northern Free State province of SA, found there is a positive correlation between household size and lack of well-being. Their study indicated that those below the poverty line have larger households, while those above the poverty line had smaller households. This finding is inconsistent with the findings of a study conducted by Lanjouw & Ravallion (1995), who argued that a conclusion on this topic cannot be drawn arbitrarily because their findings showed an inconclusive correlation between household size and poverty, or a lack of well-being, in Pakistan. In all fairness, Meyer & Nishimwe-niyimbanira did concede their finding is contrary to findings in other African countries where a negative correlation exists between household size and lack of well-being. This, they explained, is due to the fact that most African countries rely on subsistence-farming (meaning self-sufficiency farming), while SA has high levels of modernisation and few households have access to land for subsistence-farming.

Table 5-8: Household size compared with population group

		Black African	Coloured	Indian or Asian	White	Other	Total
1-2	Count	179	6	17	49	4	255
	%	70	2	7	19	2	100
3-4	Count	75	1	8	31	5	120
	%	63	1	7	26	4	100
5-6	Count	19	2	4	7	0	32
	%	59	6	13	22	0	100
7-8	Count	11	1	0	1	0	13
	%	85	8	0	8	0	100
9 & more	Count	7	0	0	0	0	7
	%	100	0	0	0	0	100
Total	Count	291	10	29	88	9	427
	%	68	2	7	21	2	100

As illustrated in table 5-9, the majority of respondents (93%) reported there are between one and two breadwinners in their households, and only 7% had more than three breadwinners.

Table 5-9: Number of breadwinners in household

	Frequency	Percent
1-2	395	93
3 & more	32	7
Total	427	100

With regards to the accommodation of the respondents, a total of 57% respondents said they lived in houses they owned, while 43% lived in rented houses. Just over 80% of respondents living in flats were renting and 93% of those living in outbuildings⁷ also paid rent. In total, 61% of respondents lived in rented accommodation, while 34% owned their own accommodation; only 5% of respondents had no financial obligations in respect of accommodation payments (see table 5-10). The percentage of respondents owning their own homes is slightly above SA's national average home ownership rate (53%), but except for the North-West (52%), it is slightly below the home ownership rate in the Eastern Cape (60%) and Limpopo (58%) (StatsSA, 2011a, p. 36). Although during the qualitative interviews, 20 out of the 30 interviewees regarded owning a home as an important possession for an acceptable standard of living, only just over half owns their own home. One possible explanation could be that most of the respondents are still relatively young since they graduated from university not so long ago. Another possible explanation could be the high cost of home ownership in SA. In general, houses prices are very expensive in SA. Recent reports by SA's major banks show that house prices increased by over 11% from 1995 to 2015 and the average age of first-time house buyers has risen from 39 years old in 1995 to over 43 years old in 2015 (Businessstech, 2016).

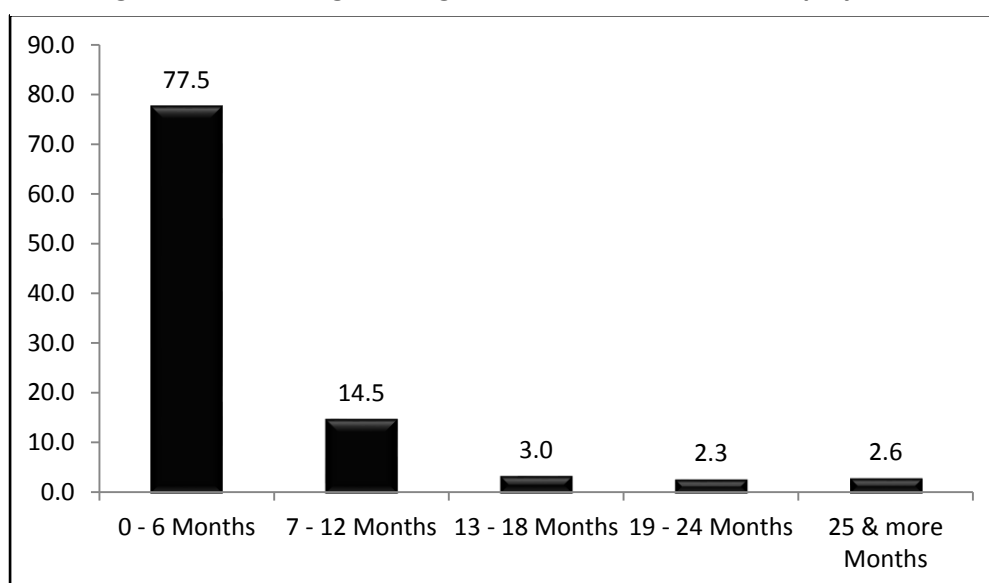
Table 5-10: House types and dwelling expense types

Dwelling		Dwelling expense type			Total
		Owned	Rented	Free	
House	% within House Type	57	43		100
	% within Dwelling	72	31		43
	% of Total	25	19		43
Outbuilding	% within House Type		93	7	100
	% within Dwelling		5	5	3
	% of Total		3	0	3
Flat	% within House Type	20	80		100
	% within Dwelling	20	46		35
	% of Total	7	28		35
Living with family	% within House Type	15	61	24	100
	% within Dwelling	8	19	95	19
	% of Total	3	11	4	19
Total	% within House Type	34	34	61	5
	% within Dwelling	100	100	100	100
	% of Total	34	34	61	5

⁷ Outbuilding is a structure (usually built from either wood, brick or zinc plates), whether attached or separate from the main house and on the same land. Due to the high cost of houses in SA, it is common practice to find 1 or more outbuildings on the plot of a main house.

Only 3% of respondents required more than 25 months to find employment and 2% found employment within 24 months after graduating from university. Interestingly, 78% of respondents indicated they found full-time employment within six months after graduating, and a further 15% found employment within 12 months (see figure 5-1).

Figure 5-1: How long it took graduates to find full-time employment



At the time of the survey, 84% of the respondents indicated they were currently employed, while only 16% were unemployed. Although respondents indicated different sources of income, 74% stated salaries and wages as their main or only source of income (see table 5-11).

Table 5-11: Sources of income

	Frequency	Percent
Interest payments received from savings	29	6.8
Regular Allowances received	14	3.3
Salaries and Wages	316	74.0
Profit from business/professional practice	30	7.0
Income from lettings of fixed property	21	4.9
Alimony from divorced spouse	2	0.5
Social welfare grant	6	1.4

Furthermore, 84% indicated salaries and wages as their main income, while a further 8% of respondents selected social welfare grants as their main income, and another 4% chose profit from business or professional practice (see table 15-12).

Table 5-12: Main income of respondents

Main income	Frequency	Percent
Interest payments received from savings	1	0.2
Regular allowances received	12	2.8
Salaries and wages	357	83.6
Profit from business/professional practice	19	4.4
Income from lettings of fixed property	3	0.7
Alimony from divorced spouse	2	0.5
Social welfare grant	33	7.7

In comparing table 5-11 and table 5-12, it is observed that most of the respondents rely on salaries and wages, which means they have a clear source of income. This is an important point because according to the census 2011 survey, 37% of the poor in the poorest provinces do not have a clear source of income (HSRC, 2014). As shown in table 5-13, 29% reported a monthly income of over R 30,000 and 58% of respondents have a monthly income less than R 30,000. A further 13.6% selected 'not applicable' as their answer to this question. However, table 5-14 shows the frequency table for when the 'not applicable' cases are omitted in calculating the household income frequencies. Only a slight change is noted in the percentages: 33% of respondents earn more than ZAR 30,000 (US\$ 2,284⁸), while 19% earn between ZAR 18,000 (US\$ 1,370) and ZAR 24,000 (US\$ 1,827) per month. For those earning ZAR 30,000 and more per month, it means earning 39 times more than the upper international daily poverty line of US\$ 2.50. However, a respondent earning ZAR 6,000 (US\$ 456) per month, only earns 8 times more than the upper international poverty line. In terms of the official poverty line of ZAR 577 used in SA, and as expected, the data of table 5-14 suggest that over 90% of respondents earn an income far above the acute poverty line (HSRC, 2014). In comparing the respondents' monthly incomes against SA's national and provincial poverty lines, their incomes are far above these poverty lines (see table 5-13). This suggests that few, if any, of the respondents

⁸ US dollar figures are based on USD/ZAR exchange rate (1 USD = 13.1345 ZAR) as on 14 March 2017, taken from <http://www.xe.com>.

are experiencing extreme poverty or extreme vulnerability to poverty. In other words, most of the respondents experienced a reasonable level of well-being.

Table 5-13: Official poverty lines of SA

(ZAR)

	LBPL*	UBPL**
National Poverty Lines	501	779
<i>Provincial</i>		
Eastern Cape	477	678
Limpopo	485	627
North-West	525	767

Source: (StatsSA, 2015a, p. 13)

* Lower Base Poverty Line

** Upper Base Poverty Line

Table 5-14: Monthly household income

(ZAR, N=427)

	Frequency	Percent
0-6,000	44	10.3
6,001-12,000	40	9.4
12,001-18,000	50	11.7
18,001-24,000	72	16.9
24,001-30,000	40	9.4
30,000 & above	123	28.8
Not applicable	58	13.6
Total	427	100.0

Table 5-15: Monthly household income

(ZAR, N=369)

	Frequency	Percent	Valid Percent	Cumulative Percent
0-6,000	44	11.9	11.9	11.9
6,001-12,000	40	10.8	10.8	22.8
12,001-18,000	50	13.6	13.6	36.3
18,001-24,000	72	19.5	19.5	55.8
24,001-30,000	40	10.8	10.8	66.7
30,000 & above	123	33.3	33.3	100.0
Total	369	100.0	100.0	

This section presented the key descriptive statistics of the respondents. The next four sections will look at inferential statistics and these are presented according to the multidimensional poverty dimensions in the theoretical framework (see chapter 3) of this thesis.

5.2 Income and employment

Household income, employment and educational attainment are important factors in poverty alleviation (Julius, 2004). As discussed in chapter 2, human capital in the form of educational attainment impacts income and employment. One of the inclusion criteria to participate in this study was that all respondents had to have obtained at least an undergraduate degree. This section presents statistical data related to the income and employment of respondents.

5.2.1 To what degree has your financial situation improved as a result of your university degree?

Respondents were asked to rate this item on a five-point Likert scale (1= Significantly worse, 2= Slightly worse, 3= Slightly worse, 4= Slightly better, 5=Significantly better). The university graduates perceived that because of their degree, their financial situation became slightly (30%) to significantly (34%) better. This indicates their financial situation improved because of their HEA. However, there are some who perceived that their financial situation worsened significantly (7%) and became slightly (8%) worse, while 22% of respondents perceived their financial situation did not change at all (see table 5-18).

A chi-square test was conducted to examine whether there was a significant difference between female and male respondents' opinions (Downie & Starry, 1977) of whether their financial situation improved as a result of obtaining a university degree. The test shows there is no statistically significant difference between males and females ($X^2 = 3.105$, $df = 4$, $p = 0.540$). In other words, the chi-square test shows that both male and female respondents perceived that because of their university degree their financial situation became slightly to significantly better than before. Descriptively, male respondents have a higher perception on this than female respondents (see table 5-18).

Table 5-16: Independent Samples test: University degree improved financial situation

<i>Independent Samples Test: University degree improved financial situation</i>				
		Gender		Overall
		Female	Male	rating
Significantly worse	Count	16	14	30
	% within Gender	7.6%	6.5%	7.0%
Slightly worse	Count	18	14	32
	% within Gender	8.5%	6.5%	7.5%
About the same	Count	51	43	94
	% within Gender	24.2%	19.9%	22.0%
Slightly better	Count	62	65	127
	% within Gender	29.4%	30.1%	29.7%
Significantly better	Count	64	80	144
	% within Gender	30.3%	37.0%	33.7%
Total	Count	211	216	427
	% within Gender	100.0%	100.0%	100.0%

5.2.2 Is there a relationship between income level and degree major?

A Pearson chi-square test was conducted to examine whether there was a relationship between income level and degree major (Downie & Starry, 1977). The results revealed there was no significant relationship between the two variables (Chi square value = 44.11, df = 48, $p = .633$), (see Table 5-20). The contingency coefficient shows that the two variables have a low degree of association ($CC = 0.306$, $p = 0.633$). However, table 5-20 indicates that the majority of respondents earning ZAR 30,000 and more have degrees in Economics and Management, Social Science and Science. Ironically, the majority of respondents earning less than ZAR 6,000 are also from respondents with degrees in Economics and Management, Social Science and Science, therefore confirming that no statistically significant relationship exists between household income and degree major.

Table 5-17: Cross tabulation: Relationship between income levels and degree majors

Is there a relationship between income level and degree major?

Income	Degree Major									Total
	Economics & Management	Engineering	Social Science	Science	Law	IT	Educ.	Health Sciences	Medicine	
0-6,000	10	3	11	10	5	0	1	4	0	44
6,001-12,000	11	1	9	5	4	2	3	5	0	40
12,001-18,000	11	3	10	10	3	8	0	5	0	50
18,001-24,000	19	5	14	12	8	4	5	4	1	72
24,001-30,000	10	2	4	8	9	3	0	3	1	40
30,000 & above	26	11	26	27	11	9	4	6	3	123
Not applicable	14	4	11	7	6	4	6	4	2	58
	101	29	85	79	46	30	19	31	7	427

Another measure closely related to income and employment is the socio-economic status of individuals (Stronks, van de Mheen, & Van Den Bos, Mackenbach, 1997). The below section describes that status.

5.2.3 What is the socio-economic status (SES) of graduates?

SES is typically defined in terms of an individual's educational achievements, income and occupation (White, 1982). In order to measure the socio-economic status of respondents, a SES composite score was computed using the following questionnaire items:

1. Do you have an undergraduate degree?
2. Are you currently employed full-time?
3. Is this employment or business related to your undergraduate degree?

4. Which sources of income do you have? (select as many as needed)
 - a. Interest received on deposits/loans/savings/shares
 - b. Regular allowances received from individuals not living with you
 - c. Salaries/wages
 - d. Profit from business or professional practice
 - e. Income from letting of fixed property
 - f. Alimony/maintenance from divorced spouse or family members.
 - g. Social welfare grants
5. Which of the following items do you own? (Please select all that apply).
 - a. Computer/laptop
 - b. TV set(s)
 - c. Hot running water
 - d. Electric stove
 - e. Fridge/freezer
 - f. Landline telephone
 - g. Cell phone
 - h. Washing machine
 - i. Built-in kitchen sink
 - j. One or more motor vehicles

The data in table 5-22 indicates that, on average, the majority of the participants owned a TV set/s (78%), hot running water (87%), an electric stove (93%), fridge/freezer (95%), cell phone (93%), washing machine (85%) and built-in kitchen sink (88%). The data therefore inform us that the majority of the university graduates owned a high number of assets and most of these assets were personal and home appliances. In comparing the data of table 5-21 with that of table 5-10, the data show that 61% of all respondents pay rent instead of owning property. It is therefore expected that they have higher purchasing power or disposable income to purchase assets, since home ownership constrains purchasing of assets (Cauley, Pavlov, & Schwartz, 2007). However, according to Sen (2007), the importance of specific asset ownership depends on how commonly owned those specific assets are in the society.

In the case of SA, the below assets are commonly used in the society, and therefore it is an important indicator of material well-being. In comparing the asset ownership of respondents

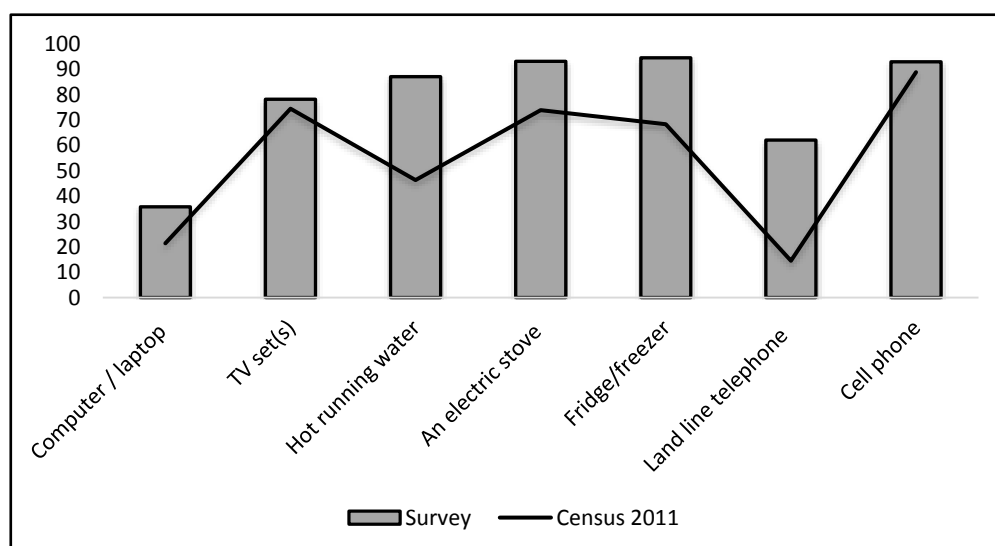
with that of the 2011 census data (see table 5-22 and fig. 5-3 below), the survey respondents' ownership is overall higher than the national ownership ratio. As a measure of well-being, this is in accordance with the general arguments found in the literature that HEA leads to improved economic well-being (Bloom et al., 2006; Psacharopoulos & Patrinos, 2004). Although asset ownership in itself does not directly reflect an individual's standard of living, it is an important determinant of living standards and it shows that respondents are not experiencing material deprivation, since their level of ownership is generally higher than the average individual in the society (Vijaya et al., 2014).

Table 5-18: Asset ownership of respondents vs Census 2011 data

	Frequency	Percent	Census 2011 **
Assets			
• Computer / laptop	153	35.8	21.4
• TV set(s)	334	78.2	74.5
• Hot running water	372	87.1	46.3
• Electric stove	398	93.2	73.9
• Fridge/freezer	404	94.6	68.4
• Land line telephone	265	62.1	14.5
• Cell phone	397	93.0	88.9
• Washing machine	361	84.5	N/A *
• Built-in kitchen sink	375	87.8	N/A
• One or more motor vehicles	246	57.6	N/A
• Blank	181	42.4	N/A
Total	427	100.0	

*N/A = not available

** Source: (StatsSA, 2013a)



The SES composite score is therefore a composite of 21 item responses taken from the survey. Each of the above items required a 'yes' or 'no' response. All of the above items were used to compute a composite score for a new variable - socio-economic status – using SPSS. Each 'yes' answer had a score of 1 and each 'no' answer a score of 2. The score ranking has a minimum score of 21 and a maximum score of 42. The lower the score, the higher the respondent's SES and vice versa. The average SES score of respondents is 30 (M=30.03). However, the highest percentages are less than 30. The majority (72%) of respondents recorded an SES score between 28–32 (see tables 5-22 and 5-23). Table 5-19 shows that the data are normally distributed (Std. Dev. = 2.548).

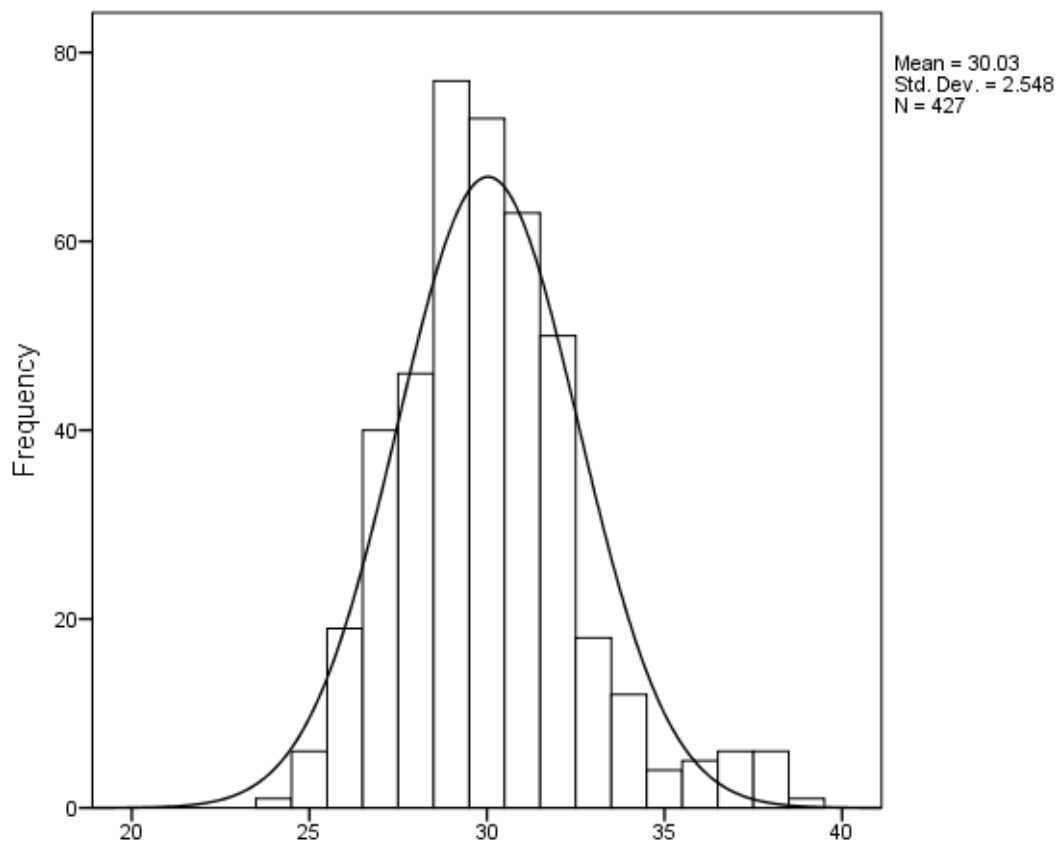
Table 5-19: SES statistics

Socio-economic status (SES)		
N	Valid	427
	Missing	0
Mean		30.03
Std. Error of Mean		.123
Std. Deviation		2.548

Table 5-20: Socio-economic status (SES)

	Frequency	Percent	Valid Percent	Cumulative Percent
<i>High SES</i>				
24	1	.2	.2	.2
25	6	1.4	1.4	1.6
26	19	4.4	4.4	6.1
27	40	9.4	9.4	15.5
28	46	10.8	10.8	26.2
29	77	18.0	18.0	44.3
30	73	17.1	17.1	61.4
31	63	14.8	14.8	76.1
32	50	11.7	11.7	87.8
33	18	4.2	4.2	92.0
34	12	2.8	2.8	94.8
35	4	.9	.9	95.8
36	5	1.2	1.2	97.0
37	6	1.4	1.4	98.4
38	6	1.4	1.4	99.8
39	1	.2	.2	100.0
<i>Low SES</i>				
Total	427	100.0	100.0	

Figure 5-3: SES composite score



Different living standards matter to different people, and therefore no single indicator can accurately capture deprivations of respondents. Individuals, particularly the poor, are often multiply deprived (Vijaya et al., 2014). They may lack education, access to services, experience crime and a host of other factors (Barder, 2009).

The next section examines the living standards of respondents through the analysis of certain survey items.

5.3 Living standards

An individual's living standard is a holistic expression of that individual's life and the two are intrinsically inseparable (Sen, 1988). Measurements of living standards are often composed of indirect indicators and therefore no specific or standardized variables and statistical methods exist. Considering the complexity and multidimensionality of measuring living standards, the following survey items were used to look at respondents' living standards in order to have a multi-dimensional perspective of respondents' living standard conditions:

1. Afford private medical care
2. Assets owned
3. Economic and political opportunities
4. Employment status
5. Household income
6. Medical insurance
7. Number of breadwinners in household
8. Payment type of dwelling
9. Satisfied with living standard
10. Self-development opportunities
11. Self-view of poverty
12. Sources of income
13. Type of dwelling
14. Vulnerability to poverty

5.3.1 How satisfied are graduates with their current standard of living?

In the survey, respondents were asked a direct question on how satisfied they were with their current standard of living. Respondents were given the following response options: 1=very dissatisfied, 2=dissatisfied, 3=unsure, 4=satisfied and 5=very satisfied. This 5-point Likert scale was recoded in SPSS into a 3-point Likert scale: 1=dissatisfied, 2=unsure and 3=satisfied.

5.3.1.1 Gender and standard of living satisfaction

An independent samples t-test was conducted to compare standard of living satisfaction for male and female participants. There was a non-significant difference in the scores for females ($M=3.61$, $SD=0.957$) and males ($M=3.45$, $SD=1.086$); $t(425) = 1.543$, $p=0.124$. Therefore, this result suggests that gender does not have an effect on standard of living satisfaction.

5.3.1.2 Income and standard of living satisfaction

It is generally agreed in the literature that income has an effect on standard of living satisfaction, and this was tested in the survey. Table 5-25 shows a possible trend with regard to monthly household income and living standards satisfaction. The data show that those having a higher monthly household income are more satisfied than those who earn less and it is a significant relationship.

Table 5-21: Satisfied with living standard with monthly household income

(N=427)

			Satisfied with living standard			Total
			Dissatisfied	Unsure	Satisfied	
Monthly household Income (MHHI)	0-6,000	Count	8	9	27	44
		% within MHHI	18.2%	20.5%	61.4%	100.0%
	6,001-12,000	Count	14	11	15	40
		% within MHHI	35.0%	27.5%	37.5%	100.0%
	12,001-18,000	Count	9	14	27	50
		% within MHHI	18.0%	28.0%	54.0%	100.0%
	18,001-24,000	Count	12	16	44	72
		% within MHHI	16.7%	22.2%	61.1%	100.0%
	24,001-30,000	Count	4	10	26	40
		% within MHHI	10.0%	25.0%	65.0%	100.0%
	30,000 & more	Count	10	29	84	123
		% within MHHI	8.1%	23.6%	68.3%	100.0%
	Not applicable	Count	8	22	28	58
		% within MHHI	13.8%	37.9%	48.3%	100.0%
Total		Count	65	111	251	427
		% within MHHI	15.2%	26.0%	58.8%	100.0%

A Pearson chi-square test was conducted to examine whether there was a relationship between monthly household incomes and the level of satisfaction of living standards. The results revealed that there was a highly significant relationship between the two variables (Chi square value = 26.877, df =12, p=.008). As observed, there is a significant, positive relationship between income and satisfaction, moderate in size. However, this result does not show which income bracket has the most effect and which has the least effect. For this, a One-way Analysis of Variance (ANOVA) was used to compare the effect of household income on standard of living satisfaction. Table 5-26 below shows the means (ranked from high to low) and standard deviations for each of the seven groups.

Table 5-22: Means and SD of Standard of living satisfaction by income groups

Household Income brackets	N	Mean	SD
30,000 & above	123	3.78	.919
24,001-30,000	40	3.68	.829
18,001-24,000	72	3.56	.991
Not applicable	58	3.52	.941
0-6,000	44	3.45	1.109
12,001-18,000	50	3.32	1.058
6,001-12,000	40	2.93	1.289
Total	427	3.53	1.026

The test for normality, examining the Shapiro-Wilks test, indicated the data were statistically normal. However, the Levene's F test revealed that the homogeneity of variance assumption was not met ($p = .029$). As such, the Welch's F test was used. An alpha level of .05 was used for all subsequent analyses. The one-way ANOVA of monthly household income on the measure of standard of living satisfaction showed a statistically significant main effect, Welch's $F(6, 152.494) = 3.355$, $p < .05$, indicating that not all household income brackets had the same average score on the measure standard of living satisfaction. The estimated omega squared ($\omega^2 = .68$) indicated that approximately 68% of the total variation in standard of living satisfaction is attributable to differences between monthly household income levels of respondents.

Post hoc comparisons, using the Games-Howell post hoc procedure, were conducted to determine which income bracket means differed significantly. These results are given in Table

5-22 and indicate that respondents earning 30,000 and above ($M = 3.78$, $SD = .919$) had a higher average score on the measure of standard of living satisfaction than those in the income bracket 24,001-30,000 ($M = 3.68$, $SD = .829$) as well as those in the income bracket 18,001-24,000 ($M = 3.56$, $SD = .991$). The effect sizes for these two effects were almost equal at 0.0263 and 0.0292, respectively. Additionally, those earning between 0-6,000 ($M = 3.45$, $SD = 1.109$) had a higher average score on the measure of standard of living satisfaction than those in the income bracket 12,001-18,000 ($M = 3.32$, $SD = 1.1058$), with an effect size of 0.03. Although monthly household income had a significant overall effect ($M = 3.53$, $SD = 1.026$) on standard of living satisfaction, the post hoc results show that there is very little difference between the effect sizes of the different income brackets on standard of living satisfaction. However, the monthly household income mean scores show that as income increases, standard of living satisfaction increases.

Table 5-23: Post hoc results for standard of living satisfaction by monthly household income

	Monthly Household Income	Mean	Effect sizes						
			1	2	3	4	5	6	7
1.	30,000 & above	3.78	--						
2.	24,001-30,000	3.68	0.0263	--					
3.	18,001-24,000	3.56	0.0711	0.0292	--				
4.	Not applicable	3.52	0.0782	0.0373	0.0109	--			
5.	0-6,000	3.45	0.0900	0.0505	0.0276	0.0168	--		
6.	12,001-18,000	3.32	0.1315	0.0813	0.0625	0.0497	0.0301	--	--
7.	6,001-12,000	2.93	0.2238	0.1608	0.1531	0.1376	0.1141	0.0881	
The overall effect size: $f = 0.2422$									

5.3.1.3 Self-view of well-being and living standard satisfaction

Another important aspect related to living standard satisfaction is how an individual perceives his/her own condition as being poor or non-poor. This is also referred to in the literature as subjective poverty – how an individual self-assesses his/her own economic situation.

In responding to the survey item on poverty line, the participants had different opinions on their self-view of poverty. Although 17% said they were a lot above the poverty line, more than a quarter of respondents perceived themselves as only a little above the poverty line (27%) while 24% perceived they were a little below the poverty line and 17% said they were a lot

below the poverty line (see table 5-26). This is consistent with the national poverty lines of ZAR 501 (LBPL) and ZAR 779 (UPBL) in SA (HSRC, 2014) and the average income brackets mentioned earlier. Interestingly, nearly 60% of respondents viewed themselves as wealthy, while nearly 30 % said they have a very comfortable living standard and 13% viewed themselves as poor (see table 5-24).

Table 5-24: Composite living standards satisfaction

	Frequency	Percent
Self-View of Poverty		
• Wealthy	250	58.5
• Very comfortable	118	27.6
• Reasonably comfortable	3	.7
• Poor	55	12.9
• Very poor	1	.2
Satisfaction on living these days		
• Very dissatisfied	22	5.2
• Dissatisfied	43	10.1
• Unsure	111	26.0
• Satisfied	189	44.3
• Very Satisfied	62	14.5
Self-View of Poverty Line		
• A lot above that level of income	74	17.3
• A little above	115	26.9
• About the same	34	8.0
• A little below	103	24.1
• A lot below that level of income	74	17.3
• Not sure	27	6.3
Total	427	100.0

However, I find the result of 24% who indicated they were below the poverty line inconsistent with data on living standard satisfaction and self-view of poverty, because only 15% of respondents indicated they were dissatisfied with their standard of living, while only 13% regarded themselves as poor. Another consideration could be that most of the participants were first-generation university graduates and they most likely come from poor family backgrounds. This factor would impact their own disposable income because they most likely also have to provide some support to their family members. Drawing from my own personal experience, in addition to supporting my own wife and children I also support my mother and sister on a monthly basis since they have no means of income. Having said that, to me, this inconsistency highlights the possibility that individuals may experience different forms of

deprivation, but they are unable to recognize it or lack sufficient knowledge to identify it. However, at this point this is inconclusive and only a preliminary observation which I explore further in the discussion chapter.

The above discussion indicates some sort of connection between income, living standard satisfaction and respondents' perception of being poor.

To test these relationships, I conducted first an ANOVA to compare the mean ratings given by the different income groups for living standard satisfaction, then another ANOVA to compare respondents' ratings of their perceptions of being poor with living standard satisfaction, in order to compare the mean ratings between these two relationships. A One-way ANOVA was conducted to compare the effect of household income on standard of living satisfaction. An analysis of variance showed that the effect of household income on standard of living satisfaction was significant, $F(6,420) = 4.258$, $p = .000$. Another ANOVA was conducted to compare the effect of self-view of poverty on standard of living satisfaction. The analysis of variance showed that the effect of self-view of poverty on standard of living satisfaction was also significant, $F(4,422) = 118.498$, $p = .000$. Taken together, these results suggest that both self-view of poverty and monthly household income have a significant effect on standard of living satisfaction.

5.4 Health

In multidimensional well-being, several studies have shown that a strong correlation exists between health and economic growth at the national level, as well as household incomes (Bloom & Canning, 2003). This section examines the survey items related to the health of the respondents.

5.4.1 Are higher income earners more satisfied with their health than those with a lower income?

A Pearson correlation analysis was conducted to examine whether there is a relationship between household income and respondents' perception of their own health condition. The

results revealed a significant and positive relationship ($r = .132$, $N = 427$, $p = .006$). However, the correlation was weak in strength.

Although the data show there is a significant relationship between household income and health condition, the correlation is weak. Therefore, further analysis is needed to explore respondents' health condition. For this purpose, an independent samples t-test was conducted to examine whether there was a significant difference between respondents' perception of their own health condition and those who were able to afford private medical care. The test revealed a statistically significant difference between the two groups ($t = 6.509$, $df = 425$, $p < .001$). Respondents who could afford private medical care ($M = 4.35$, $SD = .797$) reported significantly higher levels of satisfaction with their own health condition than respondents who could not afford private medical care ($M = 3.82$, $SD = .814$).

Public and private health care systems in SA have many inequalities; public health care is characterised by long waiting times, sub-standard equipment, out-dated facilities and poor medical care practices, while private health care often short waiting times, better facilities and proper medical care practices (Department of Health of South Africa, 2015).

Access to health care is also determined by how close health care facilities are located to residential areas. The next sub-section explains the chi-square test to answer the question: Do respondents receive adequate health care based on the distance between the nearest clinic and their homes?

5.4.2 Do respondents receive adequate health care based on the distance between the nearest clinic and their homes?

A Chi-square test was conducted to examine whether there were statistically significant differences among respondents' answers as to whether they received adequate health care in relation to the distance of the nearest health care centre closest to their homes. The results revealed statistically significant differences among the different groups ($p < .0005$). Therefore, there is a strong relationship between the two variables (Chi-Square = 40.08, $df = 8$, $p < .0005$).

Table 5-25 shows that respondents received adequate health care at clinics which were near or within reasonable distance from their homes. On the other hand, those who did not experience adequate health care were those whose houses were located far from health clinics.

Table 5-25: Cross-tabulation of adequate health care and house near clinic

		Adequate Health care			Total
		Yes	No	Don't Know	
Very nearby	Count	129	18	20	167
	% within AdqHlthcre	43.7%	25.0%	34.5%	39.3%
Within reasonable distance	Count	134	28	23	185
	% within AdqHlthcre	45.4%	38.9%	39.7%	43.5%
No health centre in my area	Count	8	2	4	14
	% within AdqHlthcre	2.7%	2.8%	6.9%	3.3%
Health centre is too far	Count	17	21	10	48
	% within AdqHlthcre	5.8%	29.2%	17.2%	11.3%
Don't know	Count	7	3	1	11
	% within AdqHlthcre	2.4%	4.2%	1.7%	2.6%
Total	Count	295	72	58	425
	% within AdqHlthcre	100.0%	100.0%	100.0%	100.0%

The next section considers the dimension of social justice through a number of research items from the survey.

5.5 Social justice

Social justice refers to the equitable distribution of goods and services, benefits and burdens in a society (Miller, 1999). Fraser (2008) sees social justice as 'parity of participation.' According to Fraser (2008, p. 16), "overcoming injustice means dismantling institutionalized obstacles that prevent some people from participating on a par with others as full partners in social interaction." Institutionalized obstacles, according to Fraser, refers to redistribution of resources, recognition of marginalised communities and participation in the political and

decision-making processes of society. This means that participation is an important aspect of social justice, and therefore being isolated can be regarded as an indicator of the absence of social justice. An overwhelming 73% of respondents indicated they had never felt isolated from society, while 27% said they had felt isolated at some point (see table 5-26). This means that just over a quarter of respondents experienced some form of social exclusion.

Table 5-26: Feeling isolated from society

	Frequency	Percent
Yes	114	26.7
No	313	73.3
Total	427	100.0

5.5.1 In the past year, have you ever felt isolated and cut off from society?

A multiple response frequency (see table 5-27) for this question was used to find out the various reasons why participants felt isolated from society. This means that a participant could provide more than one reason. The results indicate that 45% of respondents never felt isolated, while the rest indicated different reasons for their isolation. The two biggest reasons for feeling isolated were lack of money (25%) and lack of transport (28%). In the below multiple response frequency table, the total does not add up to the total number of respondents (N=427) since respondents could provide more than one response for the reasons they felt isolated.

Table 5-27: Feeling isolated from society - multiple response frequency

		Responses		Percent of
		N	Percent	Cases
Reasons for isolation ^a	Lack of money	63	19.1%	25.0%
	Lack of transport	70	21.3%	27.8%
	No friends/family	47	14.3%	18.7%
	Irregular/expensive transport	35	10.6%	13.9%
	Never felt isolated	114	34.7%	45.2%
Total		329	100.0%	130.6%

a. Dichotomy group tabulated at value 1.

5.5.2 How safe do respondents feel in their environment?

Safety is an important aspect of social justice, particularly in SA which has high crime rates. Respondents were asked to indicate how safe they felt inside their homes over the past two years. Table 5-41 shows that the majority in each demographic group indicated they felt safer than before or no change in their level of safety.

Table 5-28: Feeling safe at home by population group

			Feeling safe at home			Total
			More safe	The same	Less safe	
Population Group PopGroup	Black African	Count	81	148	62	291
		% within PopGroup	27.8	50.9	21.3	100
	Coloured	Count	6	3	1	10
		% within PopGroup	60.0	30.0	10.0	100
	Indian or Asian	Count	13	10	6	29
		% within PopGroup	44.8	34.5	20.7	100
	White	Count	20	38	30	88
		% within PopGroup	22.7	43.2	34.1	100
	Other	Count	4	4	1	9
		% within PopGroup	44.4	44.4	11.1	100
Total	Count		124	203	100	427
	% within PopGroup		29.0	47.5	23.4	100

The next section investigates respondents' perception of self-development opportunities in their society.

5.5.3 Do you think there are adequate self-development opportunities available to you?

Sen (1999) identifies five distinct types of freedom which are necessary for human development, and each type of freedom is important to improve the general capacity of individuals. These are (i) political freedom, (ii) economic facilities, (iii) social opportunities, (iv)

transparency guarantees and (v) protective security. Freedom of social opportunities means that individuals have available opportunities to develop themselves, either through acquiring new skills or knowledge. Self-development opportunities, or empowerment in the context of this research, mean respondents have available opportunities to learn a new skill or acquire new knowledge. Self-development also leads to empowerment (Foster, 2001). The 2000 *World Bank Development Report* identified (i) opportunities, (ii) security and (iii) empowerment as three crucial components of multidimensional poverty reduction.

A total of 41% of respondents indicated there were self-development opportunities available to them, while a further 33% said there were not and 25% indicated they did not know (table 5-29).

Table 5-28: Self-development opportunities

	Frequency	Percent
Yes	176	41.2
No	143	33.5
Don't Know	108	25.3
Total	427	100.0

On the topic of distributive justice, the next survey item asked respondents about economic and political opportunities.

5.5.4 Do you think you have fewer economic or political opportunities than others?

In answering this item, only 39% of respondents indicated they had fewer economic or political opportunities than others, while 50% said they had equal opportunities (see table 5-30).

Table 5-29: Available economic or political opportunities

	Frequency	Percent
Yes	168	39.3
No	213	49.9
Don't Know	46	10.8
Total	427	100.0

Of the respondents who indicated they had fewer economic or political opportunities, 29% selected education as the cause, while 24% selected ethnicity and 18% thought their residential area limited their opportunities. In line with the previous findings, poverty level played a lesser role with only 16% indicating it as a cause (see table 5-30).

Table 5-30: Reasons for fewer economic or political opportunities

		Responses	
		N	Percent
Factors impacting on available economic or political opportunities ^a	Religion	19	7.3%
	Ethnicity	62	23.7%
	Belonging to minority group	35	13.4%
	Level of poverty	23	8.8%
	Residential area	48	18.3%
	Education	75	28.6%
Total		262	100.0%

a. Dichotomy group tabulated at value 1.

5.6 The Multidimensional Well-being Index

The MWI measures an individual's level of deprivation based on a set number of dimensions, each with a number of indicators, and an individual is either defined as deprived or non-deprived based on his/her individual score compiled across all dimensions (Alkire & Foster,

2011). In this study, the MWI was measured using 4 dimensions: income and employment, living standards, health and social justice. Each dimension consisted of several indicators as shown in table 6-35 below. The MWI and dimensions of multidimensional poverty were calculated using the Alkire-Foster method (AFM) (Alkire, 2015; Sabina Alkire et al., 2011; OPHI, 2016c). The AFM is based on the Foster-Greer-Thorbecke (FGT) (J. Foster, Greer, & Thorbecke, 1984) poverty measure. The FGT method is a poverty measure that is in accordance with Sen's CA because it measures the total poverty as a weighted average of the various subgroup poverty levels. The FTG method achieves this by proposing a poverty measure that (Foster et al., 1984, p. 761):

- i. is additively decomposable with population-share weights.
- ii. satisfies the basic properties proposed by Sen.
- iii. is justified by a relative deprivation concept of poverty.

Therefore, I have selected the AFM to measure multidimensional well-being because it satisfies the basic requirements of Sen's CA (Alkire & Foster, 2011). The AFM is typically implemented in a 12-step process (OPHI, 2016a), as outlined in appendix G. I followed the same 12-step process in calculating the MWI for the individuals in this study. Although the AFM is a very technical process of calculating the MWI, I refrained from presenting the technical calculations used because my goal, from the outset, has been to develop a multidimensional well-being framework for HEA in SA in a non-technical manner. However, in the interest of transparency, I included the technical formulae in appendix G.

The AFM identifies multidimensionally deprived individuals by considering a range of deprivations, and defines an individual as multidimensionally poor when an individual's achievements, or well-being, falls short from a predetermined threshold in each dimension (Bourguignon & Chakravarty, 2003). Moreover, the method relies on the aggregation of data to reflect an overall deprivation score in each dimension for each individual. The MWI of this study measures multidimensional well-being of individuals according to an individual's deprivation status, or achievements, in four dimensions – income and employment, health, living standards and social justice. The four dimensions have a total of 14 indicators (see table 5-32).

Table 5-31: MWI dimensions, indicators, deprivation thresholds and relative weights

Dimension of poverty	Indicator	Deprived if ...	Relative Weight
Income & Employment	Income	Monthly income is less than R12,000 and financial situation since graduation is 'significantly worse' or 'worse' or 'no change'	1/8
	Employed	Unemployed or took over a year to find employment	1/8
Health	Medical aid	Cannot afford or has no medical aid	1/16
	Self-perception of health	Health is rated as 'very poor' and 'poor'	1/16
	Access to medical facilities	No access to medical facilities and distance is too far and health suffers due to no access	1/16
	Suffer from chronic illness	Suffering from chronic illness	1/16
Living Standards	Type of dwelling	Living in an 'outbuilding' or 'with family'	1/16
	Dwelling ownership	Accommodation is 'rented' or 'free'	1/16
	Assets	Individual does not own 5 of 10 assets	1/16
Social Justice	Self-view as poor	Individual is 'poor' or 'very poor'	1/16
	Feel safe	Feeling 'less safe' or 'very unsafe' and 'unsafe'	1/16
	Victim of crime	Negative response	1/16
	Social exclusion	Feeling excluded from society due to a number of reasons	1/14
	Social opportunities	Having less economic and political opportunities or no self-development opportunities	1/14

Source: Adapted from Alkire & Foster, 2010

As stated earlier, in the MWI calculation method, an individual is identified as deprived if that individual's weighted score falls short of the predetermined threshold. Table 5-35 shows the poverty cut-off criteria for each of the indicators in each dimension, which allows for each respondent to be identified as deprived or non-deprived with respect to each indicator. In keeping with the AFM, the indicators are equally weighted among dimensions. Since the theoretical framework has four dimensions, each dimension carries a weight of 0.25, or 1/4. Similarly, the indicators within each dimension are also equally weighted, which results in relative weights for indicators within dimensions, as shown in table 5-35. For example, the

income and employment dimension has two indicators, so each indicator carries a weight of 1/2, while each indicator in the health dimension has a weight of 1/6 because the dimension has six indicators. The relative weight is calculated as follows:

$$\text{Relative weight} = (\text{dimension weight}) \times (\text{indicator within dimension weight})$$

A major consideration in calculating the MWI, is the use of the dual cut off method which first distinguishes the poor from the non-poor and secondly, measures the intensity of deprivation. The first cut off identification is called the deprivation cut off, z , while the second cut off identification is called the poverty cut off, k . In stage one, each individual is assigned a deprivation score which ranges between 0 and 1, where 0 implies non-deprived (ND) and 1 implies deprived (D). The deprivation score is assigned based on an individual's achievement in the individual indicators. In other words, a person with a score of 0 is ND in that indicator. Only 4 (1%) out of 427 individuals were ND at stage one. In other words, only four individuals were ND in all the indicators across the four dimensions. At this stage, a process called censoring is applied, which involves omitting individuals with a weighted score of 0 because those individuals are ND. I highlighted the 4 individuals who are ND in all the indicators, but did not delete them from the table in appendix H. This leaves us to focus only on the deprived individuals.

In the second stage the choice of identification cut off threshold, k , (poverty cut off) is entirely arbitrary (Sabina Alkire & Foster, 2011). Both the HDI-MPI and the OPHI-MPI use a poverty cut off threshold of 1/3, or 33%. This means that an individual is defined as multidimensionally poor, if he/she is deprived in at least one third, or 33% of the weighted indicators as shown in table 6-44. In conformity with the AFM, this study also used a poverty cut off value of 1/3 (33.33%). Since I used a weighted score, as explained earlier, the poverty cut off value translates to 0.33. This means that in this study a person would be regarded as multidimensionally poor if his/her weighted deprivation score is equal to or greater than 0.33.

Thus far, I have explained how to calculate the cut off values in order to measure the number of poor persons. In order to calculate the MPI of the poor, the next step in the AFM calls for the calculation of the multidimensional poverty Headcount, H , and the Average Poverty Gap,

A. By definition, H is the proportion of respondents who experience multidimensional deprivation, while A is the average number of deprivations a poor person suffers. Stated differently, A is the intensity of an individual's deprivation, while H is the incidence of individuals experiencing deprivation. The MWI is calculated as follows: $MWI = H \times A$. The results of the calculations are shown in table 5-36. The poverty cut off value ($k = 33.3\%$) is the international benchmark multidimensional poverty cut off value used in all OPHI studies as well as in the HDI.

Since 2011, the UNDP *Human Development Report* added two additional measures to its multidimensional poverty reports: 'population vulnerable to poverty' and 'population in severe poverty.' Vulnerable to poverty is the percentage of individuals who are at risk of suffering multiple deprivations and have a deprivation score of 20%–33.3%, while individuals in severe poverty refers to the percentage of individuals in severe multidimensional poverty and with a deprivation score of 50% or more. Similarly, the AFM also defines a multidimensionally poor person as 'vulnerable to poverty' if he/she is deprived in 20% - 33.3% of the weighted indicators, while a person deprived in 50% of the weighted indicators is regarded as experiencing 'severe poverty' (OPHI, 2016b). I chose the same classification scheme in this study to develop the MWI for this study, as table 5-32 shows.

Table 5-32: Multidimensional well-being characteristics of respondents

<i>k</i>	Multidimensional Poverty Index (MPI = $H \times A$)	Percentage of poor people (H)	Intensity across the poor (A)
K=33.33%	0.028	16.6%	36.0%
Percentage of respondents:			
		Vulnerable to poverty K=20%-33.3%	In severe poverty K≥50%
		0%	0%

Source: Author's own calculations

At the poverty cut off $k = 33.3\%$, the MWI of the respondents is 0.028; only 16% of the respondents are multidimensionally poor and the poor experience deprivation in 36% of the indicators on average. This is very interesting when we compare it with the findings of an OPHI study to measure the national MPI of SA (OPHI, 2016b), as shown in table 5-34. The OPHI study

reported a national MPI of 0.044, while the MWI of the respondents is 0.028. This means that just over 4% of South Africans were deprived in at least one third of the indicators used in the OPHI study, while just under 3% of respondents were deprived in at least one third of the indicators used in this study. Therefore, the respondents have a lower incidence of poverty and the respondents' intensity of poverty is also lower than the national average. Most interestingly, the OPHI study shows that nearly 18% of South Africans are vulnerable to poverty ($k = 20\% - 33.3\%$) and 1.3% of South Africans are in severe poverty ($K \geq 50\%$), while the corresponding data for the respondents is zero. This implies that the sample used in this study is better off than the general population of SA.

At this point I need to give a word of caution: although I am comparing the MWI data of this study with that of the OPHI study, there are major differences between the two studies. Firstly, the set of indicators used is different in terms of what were included in the different dimensions. For example, the OPHI study used the indicators of access to drinking water, type of fuel used for cooking, type of flooring used in dwelling, sanitation and assets to measure living standards. However, in my study I used type of dwelling, dwelling ownership, assets and self-view as poor as indicators. Secondly, the OPHI study relied on national panel data which gathers data at the household level. This study gathered data at the individual level. Thirdly, the OPHI study is based on a large national sample size, while this study is based on a much smaller sample size. Therefore, I am not entirely sure if the comparison is meaningful. Nevertheless, I present it because I do think it is an interesting comparison and could become the basis of a future study.

Table 5-33: Multidimensional poverty index of SA

	Multidimensional Poverty Index (MPI = HxA)	Percentage of poor people (H)	Intensity across the poor (A)
K=3.33%	0.044	11.1%	39.5%
	Vulnerable to poverty K=20%-33.3%	In severe poverty K≥50%	
	17.9%	1.3%	

Source: (OPHI, 2016b)

5.6.1 Deprivation

In Sen's CA, multidimensional poverty is defined as deprivation of capabilities, as discussed in chapter 2. This means that an individual might be deprived in one dimension, for example access to health facilities, but not in another dimension, say employment opportunities. Tables 5-34 and figure 5-35 present the distribution of deprivation among the respondents. The data from the table and figure are revealing in several ways. First, the majority of the participants are non-deprived and least deprived, as was expected. Based on this, the findings of this study suggest that HEA positively impacted the well-being of the respondents, since 220 fell in the non-deprived scale. On the other hand, some respondents are identified as deprived, vulnerable, most deprived and only 21 respondents fell in the poor category.

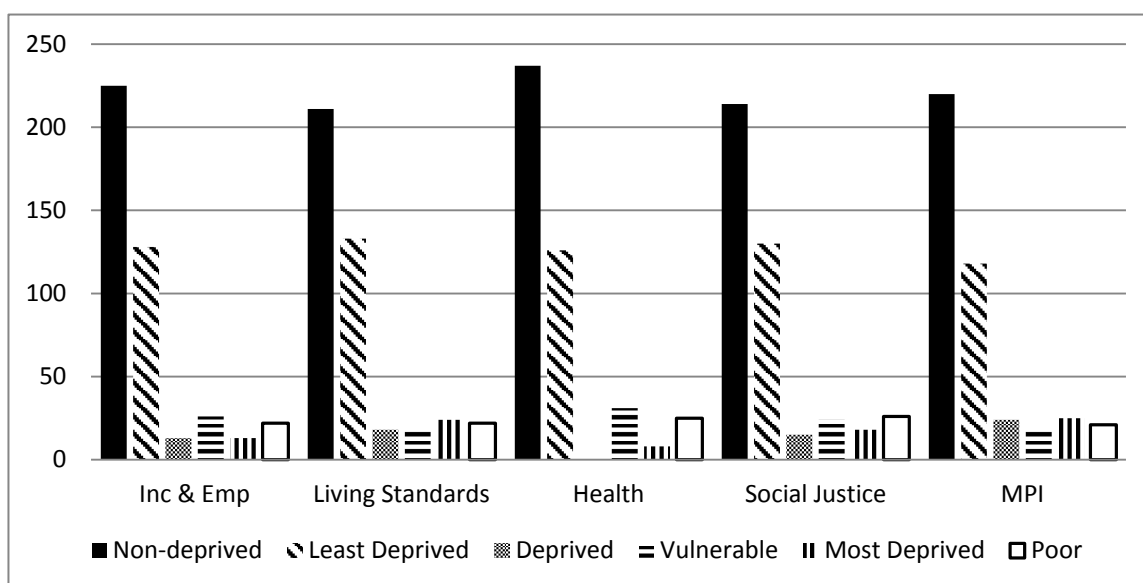
Table 5-34: Well-being deprivation scale

Percentile	Interpretation*
50%-100%	Non-deprived
20-50%	Least Deprived
15-20%	Deprived
10-15%	Vulnerable
5%-10%	Most Deprived
<=5%	Poor

Table 5-35: Distribution of deprivation among respondents

	Inc & Emp	Living Standards	Health	Social Justice	MPI
Non-deprived	225	211	237	214	220
Least Deprived	128	133	126	130	118
Deprived	13	18	0	15	24
Vulnerable	26	19	31	24	19
Most Deprived	13	24	8	18	25
Poor	22	22	25	26	21

Figure 5-2: Distribution of deprivation among the respondents



5.7 Answering the research questions

This section answers the research questions based on the quantitative data analysis. I will revisit these answers again in chapter 7, where I triangulate the quantitative findings with the qualitative findings and literature. The section begins by answering the main research question, followed by the sub-questions.

5.7.1 What are the multidimensional well-being characteristics of individuals with HEA in SA?

The MWI indicates that 16.6% of the respondents were multidimensionally deprived. This means that just under 17% of the respondents experienced deprivation in at least all the indicators of a single dimension, or in a combination of indicators across dimensions. The data show that the deprivation of those respondents who were multidimensionally deprived, was distributed across all four dimensions, except health. In other words, none of the multidimensionally deprived respondents experienced deprivation in the dimension of health. The MWI also shows that none of the respondents were in severe poverty, or vulnerable to poverty. In terms of the intensity of poverty experienced, the MWI shows that on average the poor were deprived in 36% of the weighted indicators. The MWI of the respondents was

calculated as 0.028, which is less than the national MPI of SA, which is 0.044 (compare tables 5-32 and 5-33 above).

5.7.2 What is the socio-economic status of those who obtained a university undergraduate degree?

The findings show that due to the HEA of the respondents, just under 80% found employment within 6 months after graduating from university. None of the respondents earned an income below the upper or lower poverty lines of SA, which suggests an above-average SES.

Furthermore, more than 70% of the respondents had a clear source of income, which is an important buffer against poverty, as mentioned earlier. The data also show that there is no significant relationship between income and degree major, which means that their degree major had little or no impact on their earnings. Moreover, based on the income levels of the respondents, none of them experience extreme poverty or are vulnerable to extreme poverty. More than 60% indicated their HEA improved their financial situation. The composite SES score of the respondents showed that more than 70% had a high level of SES.

5.7.3 What is the human well-being of those who obtained a university undergraduate degree?

As discussed previously in chapter 2, Sen's CA perceives well-being as the collective sum total of various dimensions related to freedom and opportunities, while traditional poverty regards well-being as having a standard of living based on money only. Therefore, to answer this research question, we need to examine the achievements of the respondents in the various dimensions of the theoretical framework. The findings show that the majority of the respondents generally experienced a good level of human well-being. Most indicated their HEA improved their financial situation. Generally, most were satisfied with their living standards, irrespective of their income brackets. Nearly 87% of the respondents viewed themselves as having a reasonably comfortable standard of living. They owned a high level of assets. In comparison to the national average of personal asset ownership, the respondents generally recorded a higher percentage of ownership (see table 5-22 above). The MWI calculation also shows that none of the respondents were deprived in the health dimension and over 60% could afford private medical insurance. In terms of social justice aspects, more than 70% of

participants said they have never felt isolated from society and the majority of the respondents reported that they felt safe at home. However, only 41% said they had access to self-development opportunities and 50% indicated they had equal access to economic and political opportunities. The common reasons cited by respondents for having limited access to opportunities were education (51%), ethnicity (42%) and residential area (32%). All in all, although the respondents generally had a reasonable level of well-being, the data show mixed achievements in the various dimensions. For example, while none of the participants were deprived in terms of health, only about 40% had access to self-development opportunities. Moreover, only 27% said they were above the poverty line, while a further 24% said they were slightly below the poverty line.

5.7.4 Do university graduates experience a reasonable level of social justice in terms of security and opportunities?

As discussed previously, social justice in terms of the CA means equality of opportunities, which emphasises that society should be arranged in such a way that everyone has the capability to function adequately in the different dimensions of life (Nussbaum, 2003). This means that every person has the same opportunity in every aspect of life. Analysis of the survey items related to social justice indicated that respondents had mixed experiences in terms of opportunities. Only 41% of the respondents said self-development opportunities were available to them, while 33% said no and 25% did not know. This suggested that over half of the respondents had no access to self-development opportunities, either knowingly or unknowingly. However, only 39% of the participants indicated they had fewer economic and political opportunities than others, while 50% said they had equal opportunities. A further 11% indicated they did not know. Furthermore, 73% of the respondents indicated that they had never experienced social exclusion, while 27% said they had. This suggests that some level of lack of access to opportunities exists in the society. In line with the overall findings thus far, only 9% attributed poverty as a reason for having fewer opportunities. Interestingly, 29% mentioned education as a factor for having less access to opportunities. Overall, the data suggest that respondents experienced mixed levels of social justice in terms of opportunities, while most indicated a good level of security at home.

5.8 Chapter summary

In this chapter I presented and discussed the quantitative findings according to the survey items, theoretical framework and research questions of this study. At the outset of my research, I intended to develop a multidimensional well-being framework for HEA in SA by exploring the correlation between HEA and multidimensional well-being in terms of the MWI, which is essentially a quantitative measurement. However, I added the qualitative phase to enhance the study and better understand the well-being and deprivations of the respondents. Therefore, the quantitative phase is more comprehensive than the qualitative phase. This section summarises some of the important findings.

The data show that male and female respondents were equally distributed. Also, the findings show that the majority of respondents did not own their own homes. Only 34% owned their own homes, while just over 60% of the respondents were renting. As expected, the majority of the respondents were in meaningful full-time employment with salaries being their major source of income. Several studies in the literature suggest that having a clear source of income is an important buffer against poverty and promotes well-being.

With regards to the impact of HEA on the financial situation of the respondents, the data show mixed results. Although over 60% of the respondents indicated their financial situation improved due to their HEA, just over 20% indicated it did not. Moreover, there is no statistically significant difference between males and females on this. Similarly, the analysis shows there is no statistically significant relationship between household income and degree major. This means that the type of degree major either has no impact or a weak impact on the income of respondents.

Overall, the data show that HEA leads to improved economic well-being and that respondents were not experiencing material deprivation. Also, after constructing a composite score of the SES of the respondents, the analysis showed that over 70% had a high level of SES, which is in accordance with the literature.

The analysis of the survey items related to living standards suggested that respondents were generally satisfied with their standard of living, irrespective of their income bracket. However, males were generally more dissatisfied than females with their living standards. Interestingly, the majority of the respondents indicated that they had more economic and political opportunities than others, due to their academic achievements.

The survey items relating to the state of well-being of the respondents showed that 27% of the participants perceived themselves as being above the poverty line, while 24% thought they were slightly below it. About 15% said they were dissatisfied with their standard of living. Analysis of the data also indicated a moderate degree of association in the relationship between monthly household incomes and the level of satisfaction of living standards.

All in all, the various data analysed showed that respondents were generally comfortable with their standard of living. The quantitative findings have also shown that respondents with higher household incomes had higher levels of health satisfaction, but the correlation is weak. Moreover, the analysis showed a statistically significant difference exists between receiving adequate health care and the distance of the nearest clinic to someone's home. Respondents received adequate health care at clinics which were near or within reasonable distance from their homes, while those whose houses were located far from health clinics did not experience adequate health care. The survey items related to social justice, indicated that just under 30% of respondents felt they experienced some form of social exclusion, while just over 70% indicated they had never felt isolated from society. The two main causes for feeling isolated from society were due to a lack of money and a lack of transport. Respondents generally felt safe in their homes and did not experience being a victim of crime. Finally, respondents gave mixed responses about the availability of self-development opportunities, with 40% expressing the availability of opportunities, 33% said none were available, while 25% did not know. Nearly 40% of respondents indicated they had fewer economic or political opportunities than others, while 50% said they had equal opportunities. The three main causes of limiting access to opportunities identified by the respondents were education, ethnicity and residential location. The analysis of the computed MWI, according to the AFM, showed that 16% of the respondents were multidimensionally deprived, while those who were deprived experienced deprivation in 36% of the indicators on average. According to the MWI calculation, none of the respondents was vulnerable to poverty.

Chapter 6: Qualitative findings

6.1 Introduction

The second phase of this study consisted of sequential qualitative semi-structured interviews. The main aim of this phase was to gain further understanding of the impact higher education has on the personal well-being of participants in order to inform the quantitative findings. Also, I must acknowledge that qualitative analysis is a skill that I lack and therefore, this chapter is not as detailed as the quantitative analysis. The interviews further explored participants' views on how their university education impacted their lives. These findings are presented in this chapter. I asked several questions during the interview and these questions were firstly formulated on the quantitative data analysis discussed earlier, and secondly based on several themes found in Sen's capability approach, discussed in chapter 2.

The qualitative sample size ($n=30$) was reasonable for this study (see table 6-1 below for a list of interviewees). According to Marshall (1996) the appropriate sample size is any sample size that answers the research questions adequately. The sample size used was able to support the thematic analysis and therefore was adequate. The qualitative data support the findings of the quantitative data and add richness and depth to the overall research (Patton, 2002).

Table 6-1: Demographics of interviewees

	Alias	Sex	Race	Marital status	HEI*	Year graduated	Degree Major
1.	Adisa	F	Black	Single	RU	2007	Industrial Psychology
2.	Andani	M	Black	Single	UFH	2013	Economics & Management
3.	Asanti	F	Black	Single	UL	2013	Business Management
4.	Bokang	F	Black	Single	UNIVEN	2013	Mining Geology
5.	Cedric	M	Black	Single	WSU	2009	Software Development
6.	David	M	Coloured	Married	UFH	2011	Public Administration
7.	Hilda	F	Black	Single	NWU	2011	Economics & Law
8.	James	M	Black	Married	NWU	2006	Finance & Economics
9.	Liezl	F	White	Single	NWU	2001	Chemical Engineering
10.	Magada	F	Black	Single	UL	2013	Psychology & Public Administration
11.	Maria	F	White	Married	NWU	2009	Chemical Engineering
12.	Marion	M	White	Married	NWU	2011	Zoology & Botany
13.	Marshall	M	Black	Single	UNIVEN	2010	Economics
14.	Memory	F	Black	Single	UL	2008	Computer Science
15.	Nelson	M	Black	Single	UFH	2010	Humanities
16.	Newman	M	Black	Single	UFH	2013	Social Science
17.	Nomsa	F	Black	Married	UL	1995	Psychology
18.	Omar	M	Indian	Married	RU	2012	Computer & Information Science
19.	Pumla	F	Black	Single	RU	2010	Accounting
20.	Rendani	F	Black	Single	UL	2014	Construction Management
21.	Riandi	F	White	Single	NWU	2012	Training & Development
22.	Rodney	M	Black	Single	UNIVEN	2011	Information Systems
23.	Siyanda	F	Black	Married	WSU	1999	Information Technology
24.	Suzanna	F	Coloured	Married	NMMU	2009	Environmental Geography
25.	Takalani	F	Black	Single	RU	2013	International Relations & Sociology
26.	Tembo	M	Black	Single	UNIVEN	2010	Media & English Studies
27.	Trevor	M	Black	Single	UL	2010	Psychology
28.	Victor	M	Black	Single	UFH	2013	Marketing Management
29.	Wanda	M	Black	Single	WSU	2009	Human Resources
30.	Wynand	M	White	Single	NWU	2014	Business Administration

* NMMU = Nelson Mandela Metropolitan University, NWU = North-West University, RU = Rhodes University, UFH = University of Fort Hare, UL = University of Limpopo, UNIVEN = University of Venda, WSU = Walter Sisulu University

The purpose of the semi-structured qualitative interviews was to explore the perceptions graduates had on the impact HEA had on their lives. In analysing the qualitative data, I used a list of functionings (thematic analysis approach) which I extrapolated from a review of the literature. I followed this approach because I wanted to investigate and ‘see’ whether or not there were general trends in the responses of the participants, and to what extent these informed the literature on multidimensional poverty and well-being. Mills, Durepos and Wiebe (2010, p. 5) define thematic analysis as follows:

Thematic analysis is a systematic approach to the analysis of qualitative data that involves identifying themes or patterns of cultural meaning; coding and classifying data, usually textual, according to themes; and interpreting the resulting thematic structures by seeking commonalities, relationships, overarching patterns, theoretical constructs, or explanatory principles.

Although thematic analysis is not a research method *per se*, it is an effective analytical approach and data-synthesizing strategy for making sense of and reducing large quantities of qualitative data (Mills, Durepos, & Wiebe, 2010). Therefore, I adopted this approach in analysing the qualitative data. After a review of the literature on CA (see chapter 2) I constructed a list of relevant functionings (see table 6-2 below) which I considered the most important for understanding multidimensional poverty and well-being, relevant to the intended study sample, and which could contribute knowledge to the literature on individual well-being.

According to Gasper (2007, p. 342), Sen and several other scholars supporting the CA generally agree that well-being can be measured in any one of three spaces (with the first having the highest priority):

- (i) Capability: personal well-being freedom
- (ii) Functionings: how people actually live
- (iii) Utility: declared feelings of satisfaction, or the fulfilment of preferences

Consequently, there is a debate in the literature on whether well-being should be assessed in terms of capabilities alone, or only functionings, or a combination of both. The reason for this debate is probably due to Sen’s own changing view on the topic. In 1985, Sen wrote that “the well-being of a person is best seen as an index of the person’s functionings” (cited in Brandolini

& D'Alessio, 1998, p. 4). However, later on, in *Development as Freedom*, Sen (1999, p. 75) , states "the evaluative focus of the capability approach can be either on the achieved functionings or on the capability set." However, in later writings Sen places more emphasis on the evaluative space of capability (Clark, 2005a). Nevertheless, the empirical literature on CA informs us that it is feasible to either measure well-being in the evaluative space of capabilities (opportunity/freedom) or functionings (achievements). Flores-Crespo (2007) measured the human well-being of university graduates in Mexico using functionings. In another study, Martinetti (2000) also measured individual well-being in Italy in the evaluative space of functionings.

In using a pre-defined list of functionings, the aim of the qualitative data analysis was to investigate whether the theoretical notions of functionings and well-being of the CA could be operationalized in a multidimensional poverty and well-being study. This form of approach is a deductive analytical approach to analysing the data (Elo & Kyngäs, 2007). Therefore the qualitative findings of this study are presented in four major thematic sections related to the major themes of Sen's capability approach. However, I also present the functionings which emerged from the data and this is indicated where applicable. Table 6-3 presents the themes which emerged from the interview data.

Table 6-2: List of functionings to evaluate university graduates' well-being

Functionings
Personal well-being
1. Being able to live a healthy lifestyle
2. Being able to feel satisfied with living standard
3. Being able to have social recognition in society
Individual well-being
4. Being able to think and reason critically
5. Being able to have self-development opportunities
Economic well-being
6. Being able to earn an income
7. Being able to find employment
8. Being able to afford and buy essential necessities
Social well-being
9. Being able to have access to socio-political opportunities
10. Being able to fully participate in society

Sources: (Sen, 1985, 2007), (Comim et al., 2010), (Robeyns, 2005), (Flavio Comim, 2001), (Robeyns, 2006a), (Clark, 2005a), (Bérenger & Verdier-Chouchane, 2007), (Alkire & Foster, 2011), (Flores-Crespo, 2007)

Table 6-3: Emerged functionings from the data

i	Being able to feel empowerment
ii	Being able to own a house
iii	Being able to own a vehicle
iv	Being able to own material assets

The pre-defined list and emerged list of functionings used in the thematic analysis are related to the main and supplementary research questions:

- (i) What are the multidimensional poverty and well-being characteristics of individuals with HEA in SA, if they are multidimensionally deprived? (main research question)
- (ii) What is the socio-economic status of those who obtained a university undergraduate degree?
- (iii) What is the economic well-being of those who obtained a university undergraduate degree?
- (iv) Do university graduates experience a reasonable level of social justice in terms of security and opportunities?

This chapter is divided into several sections. The next section reports on participants' views on how HEA impacted their life in general. Sections 3 to 6 explore the range of functionings found in the responses (see table 6.2 above). The last section summarises the chapter.

6.2 Effect of higher education on life in general

One of the first questions I asked interviewees was how their university education affected their life in general. I asked this question in order to get an overall sense of the general impact HEA had on the interviewees' lives, and the responses were very meaningful and varied. A number of interesting issues, ideas and concepts emerged in their responses to this question, which I discuss here. Generally, interviewees explained that their HEA:

- (i) empowered them
- (ii) improved their cognitive skills
- (iii) provided employment and other opportunities
- (iv) developed them personally
- (v) equipped them with various capabilities

Andani, a single black male, who graduated from the University of Fort Hare (located in the Eastern Cape) in 2013 with a Bachelor of Commerce, explained that his HEA impacted his life and current character in numerous ways. He explained that:

My university education affected my life in a great way. In general it strengthened me; it developed me personally. I had the fortunate benefit of studying full-time in a university environment. The education in itself impacted my understanding of the world; it gave me greater understanding of my industry, it gave me a better understanding of the world. It really built me as a person. It changed my life. It changed certain habits that I had – I was a binge drinker and all that kind of stuff and being at a university environment enabled me to stimulate my intellectual skills, which weren't stimulated that much before. I became very active in terms of student life and student societies, so it gave me a sense of wanting to develop my community. It developed me emotionally; it developed me as an active citizen, it

developed me to become a leader. I grew holistically. I'm telling you, my life has been elevated to another level. I am who I am today because of my university experience.

In describing his university experience, Andani attributed his whole way of life to his HEA. He focused a lot on how his understanding of various aspects changed. He went from a binge drinker to becoming an active citizen. To me it is interesting that Andani refers to his time at university as an experience, which shows that to him it was more than simply obtaining a degree. During his time as a university student, he participated in student organizations and that experience helped him to shape his views on the importance of social consciousness. This shows that Andani's time at university was very fruitful in terms of gaining access to socio-political opportunities. However, he makes no mention of how the knowledge he gained at university actually shaped his life. In other words, Andani's current awareness of the challenges faced by communities around him was shaped while at university. To him, his education gave him several functionings such as an understanding of the world, improved habits, intellectual skills and he became more aware of his community. While interviewing him, I could sense his sense of excitement and gratitude for his education. He spoke like someone ready to take on the world and attributed all this positive attitude and energy to his HEA. Andani's view on how his education affected his life in general resonates with themes of social consciousness, personal development, cognitive skills and empowerment. Having said that, it is also interesting to note that material well-being, employment and income were not mentioned by Andani. Perhaps he did not mention these because he was now employed in a good job with a good income. I think, to him, the expansion of his overall functionings and access to opportunities were more important than material well-being. Overall, his HEA positively impacted his life on a personal and social level, by strengthening his personality, worldview, intellectual and organizational skills, and due to his social consciousness, he became an active citizen in his society.

Similarly, James explained that his HEA impacted his life in a good way. James, a married black male, resides in the North-West Province and graduated in 2006 from the North-West University. He graduated with a degree in Industrial Psychology. James explains:

I can generally say in a good way. The first thing is that I managed to get employed, got a good job and I'm living well. And it made me a better person in the sense that I've grown cognitively in terms of my thinking capability and, status-wise, I've grown.

To James, living well is defined in terms of being employed and having good cognitive abilities. He also regards social status and personal development as essential. The response of James

shows that he is concerned with both material well-being and non-material well-being, which are two important aspects of Sen's definition of well-being. However, he mentioned getting employed first as a condition of living well and then the other aspects. I think this underscores the importance of being employed, particularly in SA with an unemployment rate of about 25% (StatsSA, 2015b). Moreover, this is in agreement with the literature of the CA, as discussed previously, which states that human capital is instrumental in terms of expanding well-being beyond economic terms.

According to Memory, her university education impacted her life in multiple ways, but she particularly focused on aspects of personal development. Memory graduated from the University of Limpopo, located in Limpopo Province, in 2013 with a degree in Computer Science. She is black and single. She explained further:

My university education affected my life in so many ways. I grew to be a more mature person. I'm now more focused. I know what I want in life. I'm a positive person. I know that I have all the basics to explore the world since I have my first degree now. I know what I want in life and where I'm going. Also, due to my university education I learned to be more responsible.

Although Memory said her university education affected her life in many ways, she only focused on the personal development aspects. I sensed from the interview that she is a very assertive person, ambitious, and that was the message that she wanted to convey to me. From her conversation, she was very focused and determined and she attributed these to her university education. She felt empowered. Memory is a Computer Science graduate and she works in that field, which is generally a male-dominated industry. Perhaps this could explain why she is an assertive individual. Later on in the interview, Memory mentioned that many women dropped out of the university because the course was very difficult, but she did not. This indicated to me that she was really determined and focused. Due to her HEA, Memory now has a clear direction as to what she wants from life and where she is going.

However, Tembo said that his HEA did not affect his life in general due to his degree major. Tembo is black and single and he graduated from the University of Venda in 2012 with a degree in Media and English Language Studies. He explained:

My university education didn't really affect my life and this might be due to my degree that I have. I have studied Media Studies and English and after I graduated I stayed home for two years before I got a job. Sometimes I really think that if I had pursued other things, I would be much better off than I'm now. The reason for that I think is the policies in South Africa with regards to job creation. I then furthered my studies in Health Information Systems but still I couldn't find a job because with my degree I can only work for the Health Department, so it was very demotivating after I completed my studies. I finally got a job in a small consulting company where I'm now.

Tembo lives in Limpopo province, one of SA's poorest provinces. He believes that his choice of degree major caused him to be unemployed for two years. The previous cases highlights and reaffirms existing literature (see for example Walker & Fongwa, 2017) on the role of HE as essential for employment opportunities, but the case of Tembo also points to the fact that HEA does not always result in graduate employment. A study conducted by Walker & Fongwa (2017) concludes that students with a field of study in the area of Humanities have less chances of getting employed. The findings of their study shows that graduates in Accounting, Engineering, Science and Technology have better employment prospects. Moreover, their study also shows that Univen graduates are generally at a disadvantage when they graduate because graduates from this university is less sought after by employers. Therefore, these reasons could explain why Tembo was unable to find employment after graduating from Univen. Upon further probing about his further studies, Tembo said he got a part-time internship at a hospital and they paid for his further studies. However, that also did not help him to secure a job at the government department of health. To Tembo, finding meaningful employment was essential for living a satisfactory lifestyle and although he did not mention material well-being as important, I think it is very important to him and he regarded having stable employment as important for it. He was also dissatisfied with government policies on employment since his degree was specifically for those graduates who wanted to work in the public health care system, but he could not find a job there. Instead, he ended up working for a private company as a consultant.

Overall, respondents expressed positive views on their life after graduating from university, but this is not the case for all graduates. Looking at the NVivo 10-generated word frequency cloud (see figure 6.1), the positive improvements on the participants' lives included thinking skills,

opportunities, social status, understanding, health, employment, choices, confidence, capabilities, and many other positive attributes, as evident in their choices of words such as ‘improved’, ‘better’, ‘changed’ and ‘thinking.’

Figure 6-1: Word frequency cloud (HE affected life in general)



In the analysis of the responses of all the interviewees to this question, a number of common concepts emerged (see figure 6-1). Table F-2 in appendix F gives a complete list of all respondents’ answers to the question on how HEA affected their life in general. In general, the themes of employment, personal development, critical thinking, emphasis on personal capabilities such as being focused, responsible and a better understanding of other people were recurring themes found in the responses to this question. In answering this question, interviewees generally used the term ‘positive effect’ or similar terms to describe how their HEA impacted their lives. This shows that HEA had a positive impact on the general life of most respondents, which is in agreement with the literature on Sen’s CA, which perceives poverty as the deprivation of capabilities; i.e. not having the basic capabilities to function in society is regarded as a form of multidimensional poverty (Sen, 1985; 2012). However, some students also expressed difficulties in finding employment, while some indicated their HEA had no positive impact on their well-being. This indicates that university education does not always benefit all students. In accordance with the literature review on the impact of higher education, the interview respondents identified various positive impacts such as employment, cognitive skills, personal development and their understanding of the world as important.

6.3 Interview theme 1: Personal well-being

Personal well-being is a key concept – and the opposite of poverty – in Sen’s CA. Although ‘personal well-being’ was an ambiguous term in Sen’s capability approach when it first emerged in 1979, today there is an almost general consensus that health and living standards, at least, should be two of its indicators (Flavio Comim et al., 2010). However, in later writings, Sen (1985) refined his idea of well-being by stating that well-being is in fact a product of the capability to function in society and a lack of capabilities leads to poverty. I have also included ‘access to health care’ and ‘socioeconomic status’ as a further two indicators because I believe both are important for personal well-being, and this is extensively discussed in the literature (see for example Bérenger & Verdier-Chouchane, 2007; Callander et al., 2012; Sen, 2002). Education is not mentioned here as an indicator of personal well-being because the objective of this study is to investigate the impact of HEA on the overall well-being of respondents. As stated in the introduction and again in chapter 4, a pre-requisite for participating in this study was having obtained at least a bachelor degree at one of the seven universities mentioned in the introduction. Therefore, all participants have at least a bachelor degree. This section presents the findings for the theme ‘personal well-being’ according to the four indicators: health condition, living standards, access to health care and socioeconomic status.

6.3.1 Health condition

Interviewees were specifically asked to comment on their own health. The item related to this asked interviewees: “How do you perceive your own health?” Health condition is generally regarded as a key indicator of personal well-being and an essential capability for having adequate living standards to ensure an individual’s basic functioning within a society (Callander et al., 2012). Moreover, the UNDP (2008, p. 5) defined the poor by stating that ‘the poor are not only those with the lowest incomes but also those who are the most deprived of health, education and other aspects of human well-being.’

Analyses of the interviewees’ responses to the question on health condition show three recurring sub-themes: (i) very good or excellent health, (ii) good or average health, and (iii)

healthy and active lifestyle. I have used these recurring sub-themes as the organizing principle for presenting extracts from the interview data to illustrate how participants expressed themselves and their perceptions of their health conditions.

6.3.1.1 Very good or excellent health

According to Nelson, his health is very good because he has access to information on what is healthy and what is not healthy. He explains:

My health is very good. You know nowadays you can learn a lot about eating healthy on the Internet. I'm healthy because I eat well, I don't smoke and I don't drink alcohol.

Nelson eats healthy, does not smoke and does not consume alcohol. This indicates that he is very conscious about his health and he is capable of making good choices with regard to his consumption. Nelson graduated in 2009, which means he is probably in his early 30s and in SA, it is common for singles in his age group to either drink or consume alcohol. Therefore, the fact that Nelson does neither of these shows he is very serious about his health.

Similarly, James also indicated that his health condition is very good. He graduated with a degree in Finance and Economics and works in that field. He said this:

I'll say I'm quite a healthy person and I think my tertiary education assisted me to be more health conscious because my job depends on my mental agility to be able to make a living. I don't do drugs or expose myself to excessive alcohol consumption. I know better.

To James being healthy is important because he is obviously in a demanding job where he needs to be fit, physically and mentally. Interestingly, he is of the view that his current health awareness is due to his tertiary education because he is more informed about making healthy choices. James also said that he is enrolled in private medical aid provided by his company. This gives him access to good health care facilities and doctors.

Takalani, a graduate from Rhodes University, said that although she does not exercise, she eats healthy and takes care of her health. She graduated in 2013 with a degree in International Relations and Sociology. In explaining why her health condition is great, she explained:

My health is great. As I said before, my university education changed my way of thinking and this also goes for my health. I would say that I now take better care of my health than before. As a young woman I'm conscious about my body and that means eating healthy and developing healthy habits such as enough sleep. I don't really exercise, but I control my diet.

Takalani is very conscious of her body and therefore she is very aware of her health. However, she does not exercise and I think she probably does not have an active lifestyle. She also attributes her health awareness to her university education because her way of thinking changed in general. I think she is now healthier than before because she mentions that her thinking has changed, which indicates improvements in her health situation.

6.3.1.2 Good or average health

According to Adisa, her health is good. She explains further:

Healthy but could be better. I haven't been really sick in a few years, so I guess my health is okay.

From her response, I think Adisa does not place her health high on her list of priorities. She describes her health as 'okay' which suggests it is average. To her, as long as she is not sick, she is fine. This shows that she is not actively seeking to improve her health, so she probably does not follow a set exercise routine, nor does she actively strive to eat healthy foods only.

According to Marshall his health is also average. He explains:

My health is not perfect, it could be better. I have no chronic sickness and I can afford to pay for a good doctor when I'm not feeling well like the usual cold or flu.

He knows that his health is not excellent, but he is satisfied with his health condition. Also, Marshall has access to private medical care when needed because he is able to pay for it. Although he states that his health is not perfect, I think on average he has good health since he has no chronic illnesses. This indicates that he may subconsciously take care of his health either by eating well or abstaining from unhealthy things such as alcohol, smoking or drugs. During the interview he also commented that he has a good standard of living and SES, indicating his personal well-being is good.

Another interviewee also indicated that his health is good, except for having hay fever. Omar explains:

I think I'm in good health with the exception of hay fever, but that's not really curable. Otherwise my health is good. I have access to a family doctor who never charges me and I don't have any medical aid.

I think Omar is fortunate in the sense that he does not need to pay to visit his doctor, who is one of his family members, and therefore he does not need medical aid. He has always had hay fever and regularly visits his doctor, but since it is free, Omar does not feel the need for medical aid. He therefore has access to good private medical care and this could explain his good health condition. He later said that he will not be able to afford private medical care, if he has to pay for it.

6.3.1.3 Healthy and active lifestyle

According to Siyanda - a black married woman - who graduated in 1999 in Information Technology from Walter Sisulu University, her health condition, physical and mental, is very good. Although from the Eastern Cape, at the time of the interview she was working in Cape Town. She explains further:

I'm very healthy and very sporty. I'm in a good state of mind. At the moment I'm in Cape Town which is a big city with excellent services. Back home in the Eastern Cape things are tough. If you go to clinic you don't get proper care. When you are sick you can't even get a Panadol – they'll ask you to buy it because there's no medicine in the clinics. So, yes I'm in very good health. Maybe it's because of my level of socio-economic status or because I have good medical aid from my company; so I go to a private doctor and private hospital when sick.

To Siyanda, good health is not only about being physically well, but also mentally. She attributes her good health to the fact she is active in sports. This means that she is conscious about being healthy and regards it as important. Interestingly, Siyanda attributes her state of good health to being located in Cape Town where the facilities are excellent, because according to her experience, the facilities in the Eastern Cape are poor and this adversely affects an individual's health condition. Moreover, she thinks that her health is very good since she has health insurance from her company, and she also thinks that her current socio-

economic status allows her to have good health since she attends private health care facilities. Being able to have private medical aid is important for Siyanda because she comes from a very poor background, and having access to good facilities means she can take better care of her health.

Like Siyanda, Wynand's health condition is also excellent because he enjoys being active, as he explains:

My health is excellent, I keep fit and enjoy being active. Even though I work from 5am to 7pm, I try to make time to keep fit by jogging or going to the gym.

Although he works long hours every day, he is very committed to being active and being healthy. This indicates that Wynand is aware of the importance of good health. Although he did not say so, I think he also follows a healthy diet. He also has a very high paying job, so he can afford private medical care.

Liezl, a single white female, describes her health as excellent and having a sporty lifestyle. She explains:

I'm very healthy. I do a lot of sports. I would say I'm in an excellent condition. I have high cholesterol but I manage that. There's nothing worrying me about my health.

Although Liezl has high cholesterol, she characterises her health as excellent. It is possible that her high cholesterol is hereditary. Nevertheless, high cholesterol is generally regarded as a silent threat which places an individual at risk of a heart attack, so although she states her health is excellent, she is not healthy. Having said that, Liezl is very active in sports and therefore her health condition is regarded as excellent since she has no other chronic illnesses.

Tembo, a single black graduate, also describes his health condition as very good. As he explains:

I think my own health is pretty good. Actually I do exercise a lot. I do regular testing like HIV and those. I try but I don't eat healthy at all, but I do exercise.

Although Tembo tries to eat healthy, he does not actually eat healthy regularly. However, he compensates it by exercising regularly and he also goes for regular HIV-testing. This shows that he is fairly conscious about his health condition, although he could improve his diet. Earlier on in the interview Tembo stated that he is not very satisfied with his current living standards because he does not earn enough money to buy what he wants. I think this explains why he does not eat healthy regularly because he lives from month-to-month only and rarely has extra money. Also, Tembo lives in the Limpopo Province in a small town and he mentioned earlier in the interview that at times it is difficult to find what he needs. Although he wants to eat healthy, limited income and availability of products hinders this.

The responses of the interviewees to the question of health condition generally indicates that they are conscious about their health, even though some only have average health, while others have excellent health and live active lifestyles. The data point to a common recurring theme of health awareness, which reflects positively on the personal well-being of the interviewees. Although it is not clear from the data why the interviewees generally have good health awareness, it may have something to do with their higher education. It is generally agreed in the literature that higher levels of education lead to improved health, which in turn leads to better well-being. In reviewing the qualitative literature on the relationship between education and health, Hammond (2002) observed that education has a positive impact on individuals' health. In another study, Vila (2005) also concluded that one of the individual benefits of HE is improved health, along with higher income. An OECD (2006) report on education and health in the USA concluded that higher levels of education result in better and less stressful jobs and access to better health care which collectively contribute to improved health conditions of individuals with higher levels of education. Since the interviewees generally reported good health conditions and since they all have HEA, it is reasonable to conclude that my findings - in terms of the correlation between HEA and health condition - are broadly similar to other qualitative findings found in the literature. However, as mentioned at the start of this section, health is only one indicator of personal well-being; another is living standard, which is discussed next.

6.3.2 Living standard satisfaction

The quantitative analysis related to living standards (see section 5.2) asked respondents:

'Taking everything into account, how satisfied are you with the way you live these days?' The

response scale ranged from one to five ('very satisfied' to 'very dissatisfied'). The majority of the respondents were generally satisfied with their standard of living, irrespective of their income, with females being more satisfied than their male counterparts. This section presents several transcript extracts, in order to look beyond the statistics on living standard satisfaction. Here, I unpack the responses of interviewees in order to deepen our understanding of the nature of living standard satisfaction experienced by the interviewees, and to make sense of what factors they regard as important for having a comfortable living standard. In doing so, I hope to find meaning in the data to better understand the personal well-being of the interviewees.

In explaining their living standards satisfaction, the interviewees draw on several common ideas and issues. Concepts such as (i) essential necessities (access to health, education, freedom, water and electricity), (ii) income (money, savings and investments), and (iii) consumer durables (laptop, telephone/mobile phone, Internet access) and (iv) material possessions were recurring themes mentioned by interviewees whether they were satisfied or dissatisfied with their living standards. I present their views according to the three common sub-themes which emerged.

6.3.2.1 Essential necessities

Essential necessities has always been an important measurement of well-being because it generally shows the extent of an individual's abilities to meet his/her expenses and indirectly shows whether or not an individual's income is sufficient.

Tembo, a single black male who graduated from the University of Venda, was not satisfied with his current living standards because he barely has enough money to meet his basic expenses. He explains:

Unfortunately, I'm not satisfied with my living standard because I'm living from month-to-month. I'm just able to buy the basic things that I need like paying my rent, food, public transport and phone bill. I have no savings and I don't have a place of my own. I'm still using public transport because I don't own a car yet. The only thing I want to emphasize is that although my university education hasn't made a great

impact on my life and living standard, it doesn't mean that the effect is not yet felt. I've a better chance than those who haven't gone to university.

Tembo's main reason for not being satisfied with his living standard seems to be related to not being able to comfortably afford basic necessities – he struggles to meet all his basic needs. In answering an earlier question, Tembo mentioned that he could not find a job for two years because he studied Media Studies and English. It took Tembo eventually two years to find a job, which was only temporary and during the interview, he told me that his contract is going to come to an end the following month. So, Tembo does not actually have meaningful full-time employment, and therefore it is understandable that he is not satisfied with his living standard. However, Tembo was very optimistic and thought that his living standard would improve in the future. Also, he acknowledged that although he is not satisfied with his living standard, he still thought that he is better off than those who did not attend university.

Bokang graduated from the University of Venda in 2013 with a degree in Mining Geology. She's black and single. In addition, she lives with her parents.

Very satisfied. All my expenses are paid for and all my basic needs are met. I'm able to spend a good amount on clothing and I have no problem buying what I need. I'm living in an affluent area. I think I'm having a very good standard of living and I'm in a good place in terms of income and employment.

Bokang is very satisfied with her living standard for a number of reasons. First of all, she lives with her parents, which means she does not pay rent and she probably does not need to spend any money on food and other expenses such as electricity and water. In her response she said: 'All my expenses are paid for and all my basic needs are met.' This means that she is not the one paying for them. Secondly, she has a very good job – working as a mining geologist. Although Bokang, like Tembo, graduated from Univen, she was able to employment easily, while Tembo struggled to find employment. This is consistent with the research findings by Walker & Fongwa (2017) which shows that graduates in the field of science is able to find employment easier than those in Humanties. The finding is consistent with findings of a graduated tracer study conducted in SA (CHEC, 2013). The fact that Bokang lives in an affluent area suggests that her parents are most likely reasonably wealthy and therefore she has no financial pressure.

6.3.2.2 Income

Having a stable income and employment are obviously essential for a comfortable living standard. Therefore, a lack of sufficient income is most likely to lead to less satisfaction with living standard, while an above average income is most likely to lead to satisfied living standards. According to the World Bank (2013) employment is the most important determinant of living standards globally, since it is the primary source of income for most people – particularly in less developed countries. In the context of SA, this is no different with income playing a crucial role in accessing opportunities, which in turn converts into real achievements (Walker & Fongwa, 2017). Data from the previously mentioned graduate tracer study in SA, points to the importance of access to finance for university students to successfully complete their studies (CHEC, 2013).

The first transcript extract shows the importance of income the interviewee attached to living standards satisfaction:

Highly satisfied. I'm young and have a high level of salary. I think being in a position where I don't have to worry about money is important in life and for my living standard. I want.... I need to be able to afford things.

Liezl, a single white female, graduated in 2001 from North-West University in Potchefstroom, North West province. Although the province is one of the poorest in SA, the town of Potchefstroom has generally been a white town and was a key European settlement area during the history of the country. Liezl graduated as a chemical engineer and she has a very good job with a high income. From my conversation with her, I observed that money was very important to her because she lives an expensive lifestyle. However, she works very hard and probably deserves it. It took me almost three weeks to schedule an appointment with her because she was always traveling around the country due to her work. Being a woman engineer is certainly not an obstacle for Liezl and she works very hard. I think this explains her emphasis on income because it allows her to relax in the best possible way when she is not working.

Pumla, a single black female who graduated from Rhodes University in 2010 with a degree in Accounting, attributed her living standard satisfaction primarily to her income. She explains:

I'm satisfied because of my income. I feel that my education improved my access to employment and employment leads to income - not my education. Before I wasn't independent and now I am because I have enough money to live my life. Because of my living standard now I really feel empowered as a young black woman.

Interestingly, Pumla thinks that her education is not responsible for her current income. I think she does not realise that it is due to her education that she has the current job. Therefore, her education is actually responsible for her income. Moreover, she feels empowered because of her money. Personally, I think her perspective is very shallow and skewed. She only thinks her employment and income are important and discounts her higher education as not having played a role in her well-being. However, later on in the interview, Pumla said: "My education empowered me as a woman." While she thinks her higher education strengthened her and equipped her with the necessary skills to have better control over her life and decisions, she thinks her income and standard of living are due to her employment and not her education.

6.3.2.3 Consumer durables and material possessions

Consumer durables and material assets are also important determinants of living standards and personal well-being. According to Amendola & Vecchi (2014), durable goods (such as appliances, furniture and vehicles) have a positive and significant impact on living standards and overall improve individual well-being.

Riandi, a single white female who graduated in 2012 from North-West University with a degree in Training and Development, explained that she is extremely satisfied with her living standards because she can afford to buy material and durable goods. She explains:

Extremely satisfied. I bought a new car after starting work. I can also afford to buy some items like a TV, laptop and furniture that I couldn't afford previously. This really make me happy and satisfied with my life.

It seems that Riandi enjoys a good income with a high proportion of disposable income because she was able to buy herself a car as well as other material possessions. Her level of satisfaction seems linked to her ability to buy material assets. She is employed by a very large company and has an above-average salary. Therefore, money is not a problem for Riandi. I think she has sufficient disposable income because she had not yet bought a house and so had

no mortgage to pay. Moreover, she is single and does not need to provide financial support to her family. Consequently, buying material and durable assets is not a financial strain on Riandi.

According to Magada, she is not satisfied with her living standards because she does not own a house, nor a car. She explains:

I'm not satisfied because I did not achieve all that I want. Although my income increased and I became financially independent and I no longer depend on my parents, I'm still not satisfied. I just started working so I'm not earning enough; I have no car and no house and I can't buy the things that I want.

Magada is young graduate, who graduated in 2013 from the University of Limpopo in Industrial Psychology and Public Administration. She states that her income increased and although she has achieved some financial success, she is not happy. Personally, I think that she is impatient in terms of what she can achieve at the moment. She has only been working for about two years, so she needs some time before she can buy a house or a car. These are both expensive assets and it is not easy to buy them, especially in SA – as I explained previously. Based on her explanation, her dissatisfaction stems from not being able to buy expensive material assets like a car or a house. However, she is financially independent, which suggests she earns sufficient income to sustain herself and afford basic necessities. Therefore, she is definitely not poor, but like other interviewees, she can't afford a car or house.

However, Marshall stated that he is very satisfied with his living standards because he owns a house and can afford his day-to-day expenses. According to him:

Very satisfied. I own a bond-free property and I can cope with my day-to-day financial requirements. I can also afford to buy things like a mobile phone and other things that I enjoy.

Marshall graduated from the University of Venda in 2010 with a degree in Economics. A graduate tracer study conducted at Maastricht University, Netherlands, shows that graduates in the field of Economics generally have very low unemployment rates (CHEC, 2013). A similar study conducted on graduate unemployment in SA, shows that the highest percentage (50%) of all graduates employed by banks in SA graduated with a

degree in the field of Economics (Oluwajodu et al., 2015). This shows that, relatively to graduates in the field of Humanities, Economics graduates are easily absorbed in the labour market. Marshall is black and single. At the age of 25, Marshall seems well-off. He managed to buy a house and has a meaningful income which allows him to buy material things as well as necessities. As an economist, he has a stable job and Marshall also told me during the interview that although he grew up in poverty, he is now enjoying a much higher standard of living and considers himself middle-class. Owning a bond-free property is a major achievement for Marshall, considering that many interviewees do not own a house and most people who buy a house in SA usually take about 10 to 20 years to repay their mortgages.

Although the quantitative data analysis showed that the majority of respondents did not own a house, many of the interviewees regarded owning a house as an important reason for being satisfied with their living standard. Moreover, it also seemed that owning a house was important not only for themselves, but also presented them with an opportunity to provide better housing for their family, as shown in the below transcript extracts:

- (i) 'I used to stay in a sharing house. Now I moved my family and myself into our own houses. My parents now live in a better house.' (Hilda, female)
- (ii) 'I have a place to live.' (Marion, male)
- (iii) '...own a bond-free property.' (Marshall, male)

In terms of housing, the residential area was also regarded as important for a good standard of living. This is interesting because the quantitative findings show that one of the three main reasons why respondents lack access to opportunities was due to the residential area. 'Good neighbourhood,' 'living in an affluent area' and 'live in a well-developed area' were some of the ways interviewees described the importance of the residential area. Interestingly, all the interviewees who said they were not satisfied with their living standard cited a lack of owning their own house as a main cause for their dissatisfaction. They used terms such as 'still can't buy a house' and 'no house' to describe their reasons.

The data also show that interviewees were very satisfied due to other reasons:

(i) 'I'm now able to travel overseas and locally.' (Nkosie, male)

(ii) 'I'm now very successful in my career.' (Siyanda, female)

Apart from the reasons given above, the interviewees were generally satisfied with their current standard of living due to diverse reasons (see table 6-4). However, owning a house and/or car and having sufficient income appeared to be major reasons for being satisfied with their living standard. Conversely, not having sufficient money, not owning a house or car seemed to be some of the main reasons why respondents were dissatisfied with their living standards. Some interviewees said:

(i) 'I want to start a family but I can't and I still can't buy a house.'
(Cedric, Male)

(ii) 'I just started working so I'm not earning enough; I have no car and no house.' (Magada, female)

(iii) 'I have to work too hard to earn a good income.' (Rendani, female)

(iv) 'I have to work very hard for what I wanted since high school until now.' (Takalani, female)

(v) 'I'm not living the kind of lifestyle that I want.' (Trevor, male)

Table 6-4: Sample reasons why respondents were satisfied with living standard

Respondent	Gender	Response
Newman	Male	I have shelter.
Pumla	Female	I'm satisfied because of my income.
Rodney	Male	Now I'm having enough money for myself and my family.
Adisa	Female	I would like to buy a new house and car, but I can't yet.
Asanti	Female	I can afford my lifestyle and my needs are fulfilled.
Wanda	Male	I'm earning a good income and I have a good job.

Respondents were also asked their views on what possessions they perceived as important to ensure an acceptable standard of living. The data revealed that respondents generally shared common views on what material possessions were important to ensure a comfortable standard of living. Owning a car and house were the most common responses. Surprisingly, very few named money as being important for a good standard of living, while some thought a telephone was important. The freedom to move freely was also mentioned by some. Other possessions and factors mentioned were: education for their children, medical aid, Internet, access to health, owning a business, and access to basic services (water and electricity). It seemed that the possessions mentioned by the interviewees were in line with the possessions owned by respondents of the quantitative survey. As discussed previously, these assets are commonly owned in SA and therefore regarded as essential assets. Thematically, being financially independent was mentioned by almost one-third of respondents as an important factor in having a comfortable standard of living (see table 6-5). Being financially independent meant earning a sustainable income, being able to afford basic necessities, being able to support their family without relying on grants or loans.

Table 6-5: Being financially independent as a key theme

Person	Gender	Response
Bokang	Female	... if there's no pressure to take money from my necessities ...
Cedric	Male	... if I can pay for my own house, car and provide for my family without taking a loan ...
Hilda	Female	... able to cater for myself and my family ...
Liezl	Female	... being in a position that you don't need to wonder if you can afford something ...
Marshall	Male	... able to cope with day-to-day financial requirements ...
Nkosie	Male	... sustainable income ...
Pumla	Female	... not relying on government grants ...
Riandi		... just getting through the month without needing to worry about money ...

The interviewees regarded the following four material aspects as important for their standard of living:

- i. Essential necessities (access to health, education, freedom, water and electricity)
- ii. Income (money, savings and investments)
- iii. Consumer durables (laptop, telephone/mobile phone, Internet access)
- iv. Material possessions (car, house, clothing)

Although Sen's CA argues that capability, or the ability to achieve 'functionings' (achievements) is the core of well-being, Sen also argues that income, or opulence, does not necessarily improve or worsen standards of living (Sen, 1985) because what is important in assessing living standards is the capability, such as living a healthy life and being able to make informed decisions. While Sen recognises the importance of income to acquire basic necessities, he argues that income ultimately is a function of age, gender, social status, location and health (A. Sen, 1999; Wagle, 2002). To Sen, aspects such as mortality, nourishment and other non-material aspects are more important than income or opulence because opulence can co-exist with deprivation on an individual as well as societal level (Wells, 2013). A contemporary example of this situation is SA, where a small percentage of the population live in opulence while the majority live in poverty or extreme poverty. The average annual household income in SA is about 103,000 ZAR, but in the poorest provinces, the average household income ranges from 56,000 – 69,000 ZAR and in the wealthy provinces it is 156,000 ZAR (StatsSA, 2011a). This shows how opulence and deprivation co-exist within one country. On an individual level, a person may be wealthy, but he/she may experience deprivation in terms of health or social exclusion. Therefore, opulence alone is not an accurate measure of well-being. This section showed that most of the interviewees were satisfied with their standard of living and gave material well-being as the main reason for their satisfaction. Therefore, the data suggest that most of the interviewees were not deprived in material well-being. The next section examines whether or not the interviewees had sufficient access to adequate health care facilities.

6.3.3 Access to health care facilities and services

According to Sen (1985), living a healthy life is just as important as income when assessing an individual's standard of living. This means having access to adequate health care facilities and being able to afford health care, either through free health care provided by government clinics or having private health insurance. Interviewees were asked two questions related to access to health care. One question asked about their views on the adequate availability of clinics in their residential areas. Another asked them to give their views on the adequacy of the facilities and services at these clinics.

The interviewees had mixed perceptions about the condition of the clinics and level of services being offered at these clinics. While some perceived health clinics in their areas to be in poor condition, some described the conditions as good.

6.3.3.1 Improved health care facilities

There appear to be certain areas with good government clinics - which means inhabitants in those areas have adequate access to health care facilities and services. The below transcript extracts illustrate this.

According to David, the health care facilities and services are not optimal, but acceptable. David graduated from the University of Fort Hare in 2011 with a degree in Public Administration. He is married and coloured. He explains further:

It's not where it should be. The government has been doing its utmost since 1994 to ensure closer proximity of government hospitals to the masses. However, I can afford medical aid so I don't need to go to government hospitals. They could be better. The facilities and services are not enough to cope with the demands of the masses. The government is working on a national health insurance.

David thinks the health care facilities have improved through the efforts of the government, but the demand for services is too much to handle, and therefore the services and facilities are not excellent. I think David has this view because of his education in public administration. He

recognises the difficulties associated with public administration and delivering services to the public. While he thinks the services are acceptable, he does not make use of them for himself and his family. Therefore, it is obviously not good. More interestingly is his choice of words to describe government hospitals as being in close proximity to the masses. However, he does not make use of government hospitals, so I sense a feeling of 'good for them, but not good for me' attitude. In fact, earlier on in the interview, David described himself as follows: 'I now have a master's degree, which sets me apart from other people from the same background as myself.' To me, this shows that David regards himself as not being part of the masses and therefore he thinks public health care facilities and services are good, but not good enough for him.

Another interviewee described the situation as adequate in some instances and inadequate in others. Rodney, a single black male who graduated from the University of Venda (Limpopo province) in 2011 in Information Systems, explains:

Facilities have improved and new health care buildings were built. They aren't perfect but they are good. Adequate in some instances and inadequate in other instances. I think they're more adequate in urban and major towns than in rural and small towns.

According to him, health care facilities and services are good in urban areas, but not in rural areas. Rodney does not have private medical aid and he makes use of public health care facilities. Therefore, I think his view is probably an accurate assessment of the conditions of health care in SA. A study by Mayosi & Benatar (2014) investigating the state of health and health care in SA, concluded that although health care services improved in SA, it is not sufficient to address the inequalities of and demands for health care services, especially among the poor. This conclusion is evident in Rodney's perspective because he mentions that services have improved with new facilities, but the services are still not sufficient to meet the demands.

Marshall, who is also from Limpopo and graduated from the University of Venda in 2010 with a degree in Economics, indicated that his area has adequate health care facilities and services. He explains:

There are a sufficient number of government clinics and hospitals in my area – two hospitals within the geographic area. They have adequate health services and people do not need to pay for the services. Sometimes they are overcrowded, but I'll say the facilities and services are adequate for us. Maybe not as good as in Europe but good enough for my area.

Marshall is single and black and he makes use of the public health care facilities. Therefore, he has first-hand experience about the condition of the clinics and their facilities. However, as a single young man, he probably does not make much use of the clinics, since he said earlier on in the interview that his health condition is not perfect, but he has no chronic illnesses. This suggests that he most likely visits these clinics infrequently. Nevertheless, he thought they are adequate. Having said that, he also said that the facilities are not as good as in Europe, but acceptable for those living in Limpopo. The latter is one of SA's poorest provinces and I think Marshall is perhaps settling for less due to overwhelming poverty in his area. To me, this is not an acceptable perspective because rich and poor deserve equal access to the same standards of health care services and facilities - being poor does not mean individuals should be satisfied with a lower quality of health care, even though it is free.

The above-mentioned transcript extracts indicate that health care facilities and services are regarded as adequate, although not sufficient due to the high demand for these services. However, the interview data also showed that facilities and services were not sufficient in certain areas. This is discussed next.

6.3.3.2 Insufficient health care facilities

Interviewees used words such as 'poor', 'not adequate', 'sub-standard', 'in a mess' and other negative adjectives to describe the nearest clinics, and in general, they painted a very negative picture of the availability and condition of government clinics in their areas.

Tembo, a single black male interviewee, who graduated from the University of Venda in 2010 did not have a very good opinion about health care facilities and services in the province of Limpopo. Tembo first graduated with a degree in English & Media Studies and later studied Health Information Systems. He worked for about two years at the Department of Health - the

government department responsible for public health in SA. In describing the state of government clinics and hospitals, one respondent related the below story, which painted a very grim picture of the overall state of government health clinics in areas where people needed them the most:

I was in charge of 118 clinics and 9 hospitals. The condition of these is better at some and at others the situation is so unbearable that I would just go home and cry. The nurses are very good and their attitudes are wonderful. The government really needs to step up its game. My friend who is a doctor had a car accident just 3km from the hospital where he works. The hospital couldn't help him. He was then flown by helicopter to a hospital 200 km away which also didn't have facilities and there was no person qualified to treat him: she (the doctor) was on holiday. He lay in the emergency section the whole night and died the following morning.

Tembo's story is truly heart-breaking and, I believe, a very good perspective of the health care system in SA. As a South African, I regularly hear stories from my family members about clinics unable to provide care for them because clinics simply do not have the necessary facilities. People often have to take their own linen and bedding when they have to be admitted to government hospitals because there is none in the hospitals. Although Tembo's friend was working as a doctor at the clinics, he could not receive health care from the clinics where he worked, and eventually died. Tembo's description of the state of health care clinics is not confined to his area only, but a national problem. Although Tembo was in charge of 119 clinics and 9 hospitals, he was powerless to do anything because the problem seems to originate from the national government's public health policy and system.

According to Hilda, her experience at the public clinics is not good. Hilda, a single black female, graduated from North-West University in 2011 with a degree in Economics and Law.

There's only one government clinic in a large area, so it's not sufficient to serve the area. The facilities are inadequate and inefficient. If you want service you need to go early in the morning and wait the whole day before the nurses will attend to you and usually you won't get proper attention. A couple of months ago I went to the clinic and stood in the line from 6am but the clinic only opens at 8am. I eventually left the clinic at 2pm that day and I still had to buy my own medicine.

Hilda resides in the district of Mahikeng (formerly Mafikeng), North-West Province and there is only one clinic in her area. She thinks that the clinic is able to meet the demands of the local population, and therefore the facilities and services are inefficient and inadequate. Based on her personal experience, individuals need to stand at least two hours in line before the clinic opens in order to receive some kind of health care service. She had to spend most of the day at the clinic, and since she still had to buy her own medicine, I can only conclude that the service must be sub-standard.

Similarly, Maria described the condition of the clinics as being 'in a shocking state' with 'no medicine' and 'services are inadequate.' Maria, a single white chemical engineer, graduated from North-West University in 2009. At the time of the interview, she resided in Newcastle, the third largest city in the Kwazulu-Natal province of SA. She explains:

Government health clinics are in a shocking state. People go to other towns for medical facilities. No medicine. The services are inadequate. I would never go there. The building is run-down and I can't imagine the state of the equipment and condition of the inside building.

Maria paints a very bleak picture of health care facilities and services in her area. Although Newcastle is a very large city, she said there is only one health clinic in her area. She also said that she would never go to the clinic for services due to the poor state of the clinic. However, Maria works for a very large multinational corporation and she has very good private medical insurance, and therefore has no need to go to the public clinics. To my personal knowledge, I think it is very rare for a white individual to go to a public clinic since their services are generally sub-standard, as explained earlier by Tembo, Hilda and David. Therefore, I am not surprised that Maria said she will never go to the public health care clinics. As a private medical insurance holder, she has a choice, but what about the poor? To them, that is all they have and they have no choice but to use them. Having said that, Maria also said that the locals go to other towns for health care services, suggesting that perhaps the particular clinic in her area is very bad, while those in other towns are better.

Newman, a single black male, who graduated from the University of Fort Hare in 2013 with a degree in Social Science, described health care facilities and services as poor. Newman resides in the Eastern Cape. He described them as follows:

They lack behind in services. People stay there for hours or even the whole day. The buildings look fine but the people working there don't know how to treat people. They have attitude problems. The clinics are not good at all – we don't benefit from them.

To Newman, the buildings are fine, but the health care personnel lack the necessary skills to provide adequate health care services. Consequently, the services are not efficient and this probably leads to inefficient health care services. To him, the condition of the buildings are unimportant because the essential services are provided by the staff and if that is lacking, than the service is poor. Efficient health care is important to Newman, because he is not financially stable and does not have private medical insurance. I think the perspective of interviewees like Newman is more important – as opposed to Maria who does not use it - because individuals like Newman make use of the service. Therefore, the condition of health care facilities and services directly impacts his access to health, which, in turn, may adversely affect his own health.

Overall, it appears that the availability of adequate health care clinics is dependent on location and geographic areas and although the government was working on improving access to health care clinics, they seem inadequate in proportion to the number of people who need to use these clinics. Those with private medical insurance do not make use of government clinics because of the poor services and facilities available. Those who do make use of public clinics either thought they were adequate, but not perfect, or bad. However, some also thought they were good, but this was location-dependant. At best, those unable to afford private medical health care appear to have access to sub-standard services and facilities. In comparing this to the quantitative data, 66% of the respondents said they could afford private medical care, while 34% said they could not. In relation to the theory on the impact of education on health, it is generally agreed that HEA leads to better health and this could explain why only a small number of interviewees relied on private medical care, or their companies provided private medical care so they were able to afford it. However, the qualitative data shows that interviewees are largely healthy and rely on public health care facilities. In fact, in the calculation of the health deprivation of the respondents in the quantitative phase, only 31 out of 427 were vulnerable, 8 most deprived and 25 poor, while the rest were non-deprived in the health dimension. This indicates the participants are generally in good health.

The next section investigates the SES of interviewees.

6.3.4 Socioeconomic status

Socioeconomic status (SES) is generally defined as a measure of an individual's combined economic and social status based on education, income, and occupation (Baker, 2014). Moreover, it is generally agreed in the literature that SES is a relative and complex concept that is difficult to measure. Therefore, as expected, the interviewees gave a range of perspectives of their SES. Considering that all respondents were university graduates, respondents were asked to reflect on whether or not their SES improved after education and, if so, how. In this study, I did not measure SES directly but only asked respondents' perceptions of their SES and how they felt it improved, or did not improve. Unfortunately, I did not ask interviewees for the reasons if they indicated their SES did not change. This was a mistake on my part.

The data show the interviewees generally thought their SES improved after graduation, while some said it did not change. First, I present a number of transcript extracts to show some of the common ideas interviewees used to describe their current SES situation. Then, I present sample extracts from the interviewees to show a recurring theme that emerged in relation to interviewees' SES: The interview data show that university graduates are generally regarded as role models and as successful individuals in their communities because they graduated from university.

6.3.4.1 Interviewees' perception of their SES

According to Andani, his SES increased dramatically. He explains:

My socio-economic status improved dramatically. I think through my education I got immediate access to knowledge work and this puts you in a very privileged position in terms of being able to have access to a range of people like managers and CEOs. Got access to knowledge and the ability to interact with people from all walks of life.

Andani, who previously said his HEA affected him greatly, also thought that his SES improved and gave him the necessary capabilities to interact with individuals from different social backgrounds. He also felt privileged because of his knowledge. Andani is a very eloquent

individual, who places a lot of emphasis on knowledge and information. I think this is probably due to his job as an investment analyst, which means that he often interacts with wealthy individuals who may not be from the same background as him. Considering that Andani comes from a poor background, his current SES is remarkable. He also previously mentioned that he now owns a house worth over one million Rands and that he is financially very stable. He attributed his success to his university education.

Similarly, Nkosie said his SES improved due to his education:

My SES improved a lot. I gained respect from others because I come from a poor background so they looked up to me when I graduated from university. The people in my community respect me now. I think this is because I now live in a well-developed area; I have a car and a house. I'm now able to travel overseas and locally. My family sees me as a success.

Nkosie thinks his SES improved after he graduated from university and he also think that his community regards him as a success due to his material assets. Although he comes from a poor background, he now owns a car, a house in an affluent area and he is able to travel. His community is probably poor and therefore not able to obtain the material things he managed to acquire. Therefore, he is a role model or an inspiration to his community. Nkosie resides in the Eastern Cape Province. According to the census 2011 data (StatsSA, 2013b), only 8.3% of individuals aged 20 and above have obtained higher education in that province, so Nkosie's community sees it as an immense achievement for him to have graduated from university.

Conversely, Pumla explained that her SES only increased marginally. She explains:

It didn't change much but increased marginally. I gained financial freedom and became independent from my parents. I became empowered as a young black woman. Before I wasn't independent and now I am. Before I didn't have a car and couldn't drive. Now I have a car and I can drive.

In spite of saying her SES increased marginally, it seems that she accomplished a lot as a result of her education: (i) she gained financial freedom, (ii) she became independent, and (iii) she became an empowered woman. Moreover, she now owns a car and drives wherever she wants to go. Previously she could not and had to rely on public transportation. This, in itself, I

think, is an important capability which empowers her as a woman and individual. Like Nelson, Pumla is also from the Eastern Cape, one of SA's poorest provinces, which is largely rural. Therefore, I think Pumla's SES actually improved considerably, although she thinks it is only marginally.

According to Bokang, her SES did not change since it is dependent on her parents' SES. She explains:

MY SES hasn't changed as it's attached to the SES of my parents. I'm living in an affluent area. There are a lot of things attached to SES and so people don't have opportunities because they lack the necessary SES.

Bokang is still single and young. Therefore, it is understandable that she regards her SES to be connected to that of her parents. She only graduated in 2013 and is still in the early stages of her career. Therefore, it is understandable that her SES is a reflection of her parents' SES.

Similarly, Suzanna also said her SES is attached to her parents', and therefore it did not change after her university education. In explaining this, she said:

It stayed the same because I'm still living with my parents. I think my SES depends on that of my parents. My parents are educated and we live in a good area. Since their SES is good, I think mine is also good. I earn well and I can afford everything. I have an above average income. I can go on holiday as many as 3 – 4 times a year.

Although she is 26 years old and married, she is still living with her parents. Therefore, it is interesting that she thought her SES is still attached to her parents' SES. Moreover, she connects her SES with that of her parents and not in terms of her own family (husband). To me, this shows that Suzanna is very comfortable living with her parents. The practice of young married couples living with their parents has become a common trend in SA because houses are very expensive and most young married couples are unable to buy their own homes. As a result, they end up living with their parents, if space permits. In the case of Suzanna, it sounds like her parents are well off and therefore she is able to live with them. Previously, I presented Bokang's views of her SES, which is also attached to her parents' SES. In the case of Bokang it is understandable, but I think it is interesting that Suzanna, a married woman who graduated in 2009, still perceives her SES to be attached to her parents' SES. Perhaps Suzanna thinks it is

safer to live in the shadow of her parents' SES because, to borrow Bokang's view, having the necessary SES opens opportunities for an individual. Social inequalities is a major issue in SA (due to the legacy of apartheid), and belonging to the 'right' social class is important for accessing various opportunities in SA, and since Suzanna's parents are educated and well off, this may explain why she perceives her SES to be attached to that of her parents' SES.

One recurring theme that emerged in relation to interviewees' SES is that their communities generally regard them as role models and as successful individuals because they graduated from university. Consequently, the interviewees now regularly play advisory and supporting roles amongst family members and within their communities.

6.3.4.2 University graduates perceived as role models

The responses of the interviewees show that they regularly play advisory and supporting roles amongst family members and within their communities due to their HEA. The following transcript extracts illustrate this.

Cedric - who graduated in 2009 from Walter Sisulu University, Eastern Cape – now plays an important supporting role in his community due to his improved SES. He graduated with a degree in Software Development. He explains:

In my family I'm the one helping them and guiding my siblings. They see me as a helping man. My community looks up to me. They come to me for advice. They respect me.

Due to his education, Cedric is now an important advisor and supporter to his family and community. Due to his education, and probably successful career as a software developer, Cedric enjoys a good SES within his community. As mentioned previously, the Eastern Cape is one of SA's poorest provinces and educational attainment levels are generally low. For example, 10% of all adults over 20 years of age have no schooling, 18% completed some primary schooling, while a further 20% only completed high school and only 8.5% completed tertiary education (StatsSA, 2013b). This probably explains why the community has a high regard and respect for someone from the community who graduated from university.

Similarly, Asanti, who is from Limpopo, also indicated that due to her university education her SES improved and she is now a role model for youngsters in her community. Asanti is a black single female who graduated in 2013 from the University of Limpopo with a degree in Business Management. She explains:

My socioeconomic status changed as I became an inspiration and a role model for younger people in my community and family.

Like the Eastern Cape, Limpopo province also has low educational attainment levels, with only 9.5% of adults having completed tertiary education and 35% having completed some primary schooling (StatsSA, 2013b). Therefore, I think, Asanti also indicated that her SES changed and now she is a role model for younger people due to her HEA. It is interesting that Asanti and Cedric both explained their SES in terms of playing supportive roles in their communities, despite being from two different provinces. I think this can be attributed to the fact that in both their communities HEA is rare, and therefore they are regarded as role models.

Tembo also explained that his community regards him as a role model because of his HEA. He is from Limpopo and graduated in 2010. Tembo is black and not yet married. Although he is working in another city, he indicated that in his hometown he is regarded as a role model. He explains:

In my hometown people are very excited to see me because they know I graduated from university. My community perceives me as successful because I graduated from university. I'm able to enjoy conversations with people from all walks of life. My community sees me as someone who has achieved something.

Tembo's community sees him as a successful individual because he graduated from university. Tembo mentioned in the interview that he is well respected in his community and whenever he returns to his hometown, people always stop him to ask for advice on a range of issues because, in their eyes, he is successful. However, in response to an earlier question about living standards, Tembo explained that although his living standards improved, he still struggles to make ends meet. Tembo also said:

I aspire to be an inspiration to young people. Today I'm going home although I have no money, but when I arrive there, I must portray myself as someone successful.

Although he acknowledged that at times he has no money, he believes that he must portray himself as successful because that is how his community perceives him. This shows that his community has a strong desire for role models with a university education. I think since so few individuals have successfully completed university education or even schooling, the community perceives any individual as successful as long as he has graduated from university. It does not matter whether or not he has a successful career afterwards. Tembo knows this, and for this reason he believes that he must portray an image of success.

Memory, a single black woman who graduated from the University of Limpopo in 2013 with a degree in Computer Science, regularly acts as a career advisor to young women in her community. She explains:

My SES has changed. Many women dropped out because it's tough but I didn't. So, I have high SES. Many young girls ask me for career guidance.

Due to her successful completion of her university education, she is frequently asked for career advice. According to her, she has a SES and many young girls admire this. Memory is active in her community and she believes her HEA has a positive impact on other young people in her area, as she explains further:

My education has empowered many young people in my area. So they feel inspired and want to go to university.

Memory's successful completion of university is giving hope to other young people to attend university. Her HEA sends a message to other young people that university is not out of reach for them and it is possible to graduate from university. In SA, this is a particularly important issue, because access to higher education, participation in higher education and high dropout rates at university are major issues affecting black students in general (Letseka & Maile, 2008).

Overall, the interviewees generally enjoyed a positive SES within their families and communities due to their university education. Moreover, the findings show that among the families and communities of the interviewees, not many individuals graduated from university and those who had graduated were looked upon as a source of inspiration or role models within their respective communities. Interestingly, the SES findings correspond to the quantitative findings of respondents' SES (see chapter 5). In the quantitative phase, a

composite score for SES was computed in SPSS. This score had two categories: high SES and low SES. The majority (72.4%) of survey respondents recorded a high SES score.

The next section looks at the second theme: capabilities of individuals. Under this theme, several sub-themes emerged from the interviews, which are discussed below.

6.4 Interview theme 2: Individual well-being

The capabilities of individuals is a major and central theme in Sen's CA and refers to what people are able to do and be (Sen, 2001). Capabilities refer to the various skills, or functions, a person has and are essential in contributing to overall individual well-being. In *Development as Freedom*, Sen (1999, p. 44) outlines what is the essence of capabilities:

The capability of a person is a derived notion. It reflects the various combinations of functionings (doings and beings) he or she can achieve. It takes a certain view of living as a combination of various 'doings and beings'. Capability reflects a person's freedom to choose between different ways of living.

Although Sen himself never listed any specific capabilities, a large body of literature exists on what capabilities and functionings are and what they should be. These may include, but not be limited to, being healthy, being employed, being educated, having freedom, having friends and family and being part of a social arrangement (Anand et al., 2005; Saith, 2001). Nussbaum (2000), in particular, argued for a 'canonical' list of capabilities and she proposed a list of 10 basic human capabilities in her work *Women and Development: The Capabilities Approach*. However, Sen rejected a fixed list of basic human capabilities, stating that "to have such a fixed list, emanating entirely from pure theory, is to deny the possibility of fruitful public participation on what should be included and why" (Sen, 2005, p. 158). Therefore, I did not adopt the capabilities suggested by Nussbaum and others. Instead, I applied an inductive thematic analysis using NVivo 10 to extract a list of functionings contained in the qualitative data. This approach which I adopted is in line with Amartya Sen's view that capability/functionings lists should be adapted and drawn up based on local situations.

Here I will examine only those functionings which emerged from the qualitative data: (i) cognitive skills, (ii) access to knowledge, (iii) empowerment, and (iv) personal development.

6.4.1 Cognitive skills

Interviewees were asked to comment on how their university education affected them. One of the themes which emerged from these comments is ‘cognitive skills.’ Interviewees indicated their cognitive skills improved, or their way of thinking changed, as a result of their university education. The first transcript extract shows this:

Through my university education I elevated myself. My critical thinking improved and my ability to develop critical thoughts of life in general and being able to make my own decisions.

Maria, who graduated as a chemical engineer, explains that because of her university education, she was able to enhance her cognitive abilities. This gave her the necessary capabilities to shape her vision of the kind of life she wants to live and empowered her to formulate her own decisions. In my conversation with her, she was very confident, showed clarity of thought and focus. As a woman, these are an important skills to acquire to build her career, especially considering that she is working as an engineer – generally a male-dominated industry. According to the Engineering Council of South Africa, although 11% of registered engineers were women, only 4% of professional engineers in SA are women and many women left the industry due to gender-bias (Padayachee, 2013). Maria’s cognitive skills are therefore important for her career and life in general.

Cedric, who works as a software developer, also commented that his cognitive skills improved as a result of his university education. He explains:

My education built my knowledge. I became open-minded. It changed the way I think. Before I got educated, I found it difficult to find information but now I know how to find information and how to analyse what is important and what is not. I think I’m now more critical in my thinking.

This extract is an interesting example of how HEA transforms an individual’s knowledge, as well as his ability to think better and make better decisions. Like Maria, Cedric’s university education also empowered him to make better decisions. As a software developer, this is

probably an important trait to have because it means Cedric is in a position to solve complex issues more effectively. Considering that we are now in a knowledge-economy, where information is a key determinant of success and growth, Cedric's cognitive skills are important capabilities to assist him in his life and career. He also acknowledged that he now knows how to make important decisions about what information is important and what is not important.

The below four transcript extracts show the various ways in which interviewees indicated their cognitive skills improved as a result of their university education:

- (i) My ability to handle complexity changed. My way of thinking changed and my outlook improved. (Liezl, female)
- (ii) My thinking changed to a more critical way. (Omar, male)
- (iii) It made me a better person in terms of my thinking skills. My mental agility improved. I now have a better worldview. I became a rounded person who grew in totality. (James, male)
- (iv) My education made me open-minded. My university education taught me how to think. (Tembo, male)

According to Liezl, she is now better able to manage difficult situations and has a better perspective on life. This means that she is probably more positive in terms of her thinking and more optimistic in her outlook on life. I think this puts her in a better situation to handle the many challenges in life and promotes successful living. Liezl is a very successful woman and she is an engineer. During the interview she described herself as healthy, successful, sporty and someone who earns a high salary. The attributes used by Liezl to describe herself show that she is certainly optimistic and has a positive outlook on life.

Omar is Indian, married and works as an IT technician. His university education too changed his way of thinking by becoming more critical. This means that Omar became more self-motivated and rational about life in general because critical thinking means the ability to follow a logical sequence of thinking to arrive at the best possible course of action. I say this because it is the way Omar described himself. After graduating from Rhodes University in 2012 with a BSc degree in Computer and Information Sciences, he could not find a job because he lives in a small town just outside of Durban. Omar decided to be pro-active and settled for a job as an IT technician for a small company and now he is working for a big company. During the interview

he also told me that although he is not satisfied with his living standards, he believes in living his full potential. This shows that Omar is self-motivated and focused on making the best of his life by using critical thinking to decide what are the best options for him and his family. Although he could not find a job, he did not lose hope. Instead, he chose an alternative career-path closely related to his field of study and now is successful in his career and enjoys a good standard of living.

Similarly, James said that his HEA improved his thinking skills and this made him a better person. He also said that his mental agility improved. This means that James regards himself as someone who is quick to adapt to changing circumstances and able to do so energetically. James is an investment analyst, and therefore mental agility is a key skill to function effectively and efficiently in his job. However, he believes it also made him a better person, changed his way of looking at the world and in totality, he became a well-balanced person. Accordingly, James attaches a lot of value to his thinking skills because he believes it shaped his overall character.

Tembo believes that his university education made him more open-minded, which means he has become tolerant to new ideas and issues without being prejudicial towards them. To him, his university education revolutionised his way of thinking, because he believes that he did not know how to think before he attended university, but now he knows how. Although Tembo initially struggled to find employment after graduating from university due to his field of study (Media Studies & English), he enhanced his education by studying Health Information Systems. Consequently, he landed a job managing 118 clinics and 9 hospitals in Limpopo province. This shows that Tembo was open-minded and willing to take on new challenges to improve his career and living standards.

The above transcript extracts show that HEA had a profound impact on the cognitive abilities of individuals and through these, they acquired capabilities to improve their careers, living standards and overall well-being. I believe this is in accordance with Sen's CA theory, which states that all aspects of human flourishing are collectively responsible for overall human well-being - not just income and utility. A recent study conducted by Heckman & Corbin (2016) concluded that both cognitive and non-cognitive skills are equally important in shaping the capabilities necessary to ensure individuals' well-being. Moreover, they assert that cognitive

abilities are an essential aspect of Sen's CA because cognitive abilities help individuals decide which capabilities are 'functionings' (the range of things individuals value to be or do) essential for their lives. In addition, the emerged theme of HEA improving cognitive abilities supports the general arguments found in the literature, which refute the claim of the Human Capital Theory that education only leads to human capital in the form of increased income and better employment opportunities (Heckman & Corbin, 2016). Furthermore, interviewees also said gaining access to knowledge was an important capability they gained as a result of their education. Again, this shows that higher education has benefits other than income and employment, which also have positive impacts on respondents. In this regard, while the rate of return to education is often measured in terms of income and employment, education brings other capabilities, which are important in the CA and from a multidimensional poverty perspective. To conclude, the acquisition of cognitive skills, as a result of their university education, was regarded as an important capability by the interviewees.

6.4.2 Access to knowledge

The *Human Development Report* (UNDP, 1999) considers access to knowledge as a core aspect of human well-being. Similarly, a study conducted by Fukuda-Parr (2003) concluded that in the space of human development, access to knowledge is an important achievement valued by people, but it is often overlooked by researchers. More importantly is Sen's central argument that the core purpose of development should be to enhance individuals' capabilities, and the qualitative data shows that interviewees thought their university education gave them not only access to knowledge, but the capability to find knowledge and information useful to their lives. The below transcript extracts illustrate this:

(i) Studying improved my income, life in general, health (now I'm more aware of being healthy) and taught me how to research and find information and how to process that information in the best way. (Hilda, female)

(ii) I gained a lot of knowledge and now have a greater perspective on life. It changed my knowledge and the way I see things. I see or understand people now better. (Newman, male)

(iii) My education gave me access to knowledge and information and as a result people are now approaching me for resources and information. These are two of the

most important things I got from my university education. My education informed me better about the world around me and I am now able to make better choices about personal development. I now have a better insight about life in general. (David, male)

According to Hilda, apart from having an improved income and being healthy, she also acquired the skills of conducting research with the aim of finding the relevant information and how to process that information appropriately. It is interesting that Hilda regards her cognitive skills just as important as her income and health. Hilda graduated in economics and law, and she is currently working as a lecturer at North-West University, Limpopo. This means that Hilda relies on her cognitive capabilities on a daily basis to teach and do research. Therefore, researching, processing and making sense of information is a key functioning for Hilda because it helps to advance her career by doing and being the things that she values in her life.

Newman, on the other hand, explained that his education helped him to have a better understanding of people and how the world around him works. Newman graduated with a BA (Social Sciences) and he did not manage to find meaningful employment after graduation. He lives in the Eastern Cape where a high rate of unemployment persists. In spite of having a difficult life, Newman remains optimistic. He believes that his education improved his living standards and his thinking abilities, and although he still needs to improve his life, he is satisfied that he now has a much better understanding of people and things around him. Furthermore, I also think that Newman's education helped him to grow as a person and he is much better off than before attending university. He may not be at a point where he would like to be, but he is better off than previously.

In the case of David, HEA gave him access to knowledge and he is using this new-found capability to assist individuals in his community. Having access to knowledge also helped David with his own personal development and having a better understanding of the world. Accordingly, access to information also helped David in making better decisions about his career and life in general. In explaining himself, David sees himself as being better off than most South Africans because, according to him, less than 5% of South Africans have successfully completed tertiary education. By having the capability to access information, David has been able to improve his life considerably. He now has a Master's degree in Public

Administration and he believes this sets him further apart from those in his community who have no university education.

The above-mentioned quoted extracts show that access to knowledge is an important capability valued by interviewees. Moreover, access to knowledge has presented graduates with opportunities to enhance their lives in meaningful ways.

Another capability frequently found in the responses of interviewees was employability or aspects related to it. This is discussed next.

The next section presents the theme of empowerment that emerged from the data.

6.4.3 Empowerment

As mentioned earlier, the concept of functioning is central in Sen's capability approach and it refers to various dimensions of a person's life. These dimensions include, amongst others, education, employment, health, income, freedom, survival and empowerment (Deneulin & Shahani, 2009). Hence, empowerment is one of the key concepts in multidimensional poverty studies. While empowerment has many definitions, in terms of the CA and multidimensional poverty reduction, empowerment may be defined firstly 'as a progression that helps people gain control over their own lives and increases the capacity of people to act on issues that they themselves define as important', and secondly 'as an emancipation process in which the disadvantaged are empowered to exercise their rights, obtain access to resources and participate actively in the process of shaping society and making decisions' (Luttrell, Quiroz, Scrutton, & Bird, 2009, p. 16). More specifically and in relation to Sen's CA, empowerment may also be defined as follows (Eyben, Kabeer, & Cornwall, 2008, p. 4):

Empowerment broadens poor people's freedom of choice and action, expanding their assets and capabilities and enabling them to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives.

Based on the aforementioned definitions of empowerment, this section looks at how interviewees explain how their HE empowered them as individuals.

According to Wanda, his HEA empowered him in several ways. He explains:

My skills set was influenced the most by my university education. Due to my education I learned to assist other people easily; due to my education I experienced no discrimination in my work place and people treated me fairly. My education opened a lot of employment opportunities and my income increased substantially.

Wanda graduated from Walter Sisulu University in 2009. He completed a degree in Human Resources. He is a black single male and grew up in the Eastern Cape – a largely rural and one of the poorest provinces of SA. Wanda’s education has empowered him in several ways. Firstly, it allowed him to gain control over his own life. His skills set improved, which suggests that Wanda now possesses the necessary capabilities to make choices he values as important. Also, he no longer feels that people discriminate against him. This shows that he has the capacity to act on matters important to him because, I think, discrimination occurs when an individual allows others to discriminate against him/her. Secondly, his university education emancipated him because he got access to employment and a stable income. Lastly, Wanda now actively participates in his society because he mentioned that he now has the skills to assist others without hesitation. In his response, Wanda frequently repeated the word ‘education’ and I think this shows how grateful he is for having had access to higher education and the positive impacts it made on his life.

Asanti, a single black female, graduated from the University of Limpopo in 2013 with a degree in Business Management. According to her, her HEA improved her life beyond employment and income. She explains:

It improved my life. I’m now able to understand more things about life and can face challenges in life easier. I also became an inspiration and a role model for younger people in my community and family. I can afford my lifestyle and my needs are fulfilled.

Victor graduated from the University of Fort Hare in 2013 with a degree in Marketing Management. He is a single black interviewee who could not find employment after graduating, so he started his own business. He explains:

University increased my opportunities, but my income level remains low. I didn't find a job so I started my own business. My life changed slightly. Affected my life by giving me more freedom to do the things I want to do. Increased very much, visibly. I now participate in many community projects/activities. I became an extrovert. It taught me how to put the pieces together and how to formalize my skills and apply them in life. My ability to better talk to people and better understand people and their behaviour.

Riandi, a single white graduate from North-West University, also explained that her HEA empowered her. She graduated in 2012 with a degree in Training and Development. She explains:

Education changed my life. I got a job after I graduated. My income became better and I'm now employed with a large company. I have money I can spend and I don't need to ask anyone. Extremely satisfied. I bought a new car after starting work. I can also afford to buy some items like a TV, laptop and furniture that I couldn't afford previously. This really makes me happy and satisfied with my life.

Based on her explanation, I think Riandi became an empowered woman by securing a good job after she graduated. Moreover, she is now in a position where she is financially independent and she has control over her own life. She is able to purchase the necessary assets she deems important. She has freedom of choice and actions. This means that she is capable of making her own decisions and define for herself what is important and valuable in her own life. As a woman, this is important. Too many women across the world are not free to make their own decisions, and neither are they able to determine what things in life they value due to social restrictions placed on women. Riandi's HEA has empowered her as an individual, and as a woman.

According to Nelson, his HEA helped to develop his personal confidence and he is now in a position to articulate his views on things that matter to him. He explains:

My education developed me personally and gave me confidence to say my views. My financial income became very good and I got a very good job. I have a car and a house. I'm now able to travel overseas and locally.

He is a single black graduate from the University of Fort Hare. He graduated in 2010 with a degree in Humanities. Based on what he said, Nelson's higher education enabled him to act on various issues he thought important – he is no longer afraid to do so. In addition, he is now engaged in meaningful employment and is financially stable. This is an important capability because it allows him to have control over his life and empowers him to access the necessary resources for living the kind of life he regards as important. He also now has the freedom to travel locally and overseas whenever he has the time and feels like it. Earlier on in the interview, Nelson also mentioned that he is now respected in his community because he is a university graduate and he has his own house, car and is financially independent. HEA therefore emancipated Nelson by empowering him in terms of moving from a state of being disadvantaged to being privileged. In the post-apartheid SA, this is important because it helps to reduce the many areas of inequalities prevalent in South African society. I think it is not possible for a country like SA to move forward and away from its apartheid past without the presence of individuals like Nelson. Moreover, poverty can only be eradicated in SA if more disadvantaged individuals are given access to HE, so that they can empower themselves to become part of the non-poor who are financially stable and not vulnerable to poverty.

The above transcript extracts and discussions thereof show that interviewees were able to empower themselves due to their HEA. The data show that both males and females generally acquired a range of capabilities related to freedom of choice, having control over their own lives and the capability to acquire assets and actively pursue issues and decisions that matter in their lives. The data also show that there is a general theme of empowerment in the interviewees' responses. In table 6-7, below, I present an additional number of short extracts showing the various ways and concepts interviewees used to express their views that they became empowered after graduating from university. Based on the discussion, I think HEA has a strong positive correlation with empowerment. From the table, it is observed that both males and females felt empowered by their ability to do things and having gained access to opportunities. This is an important observation because it points to the core of Sen's CA, which argues that human development is about individuals having the opportunity and freedom to achieve the things they value to do and be (Sen, 2001). In other words, when individuals have the freedom and opportunity to do and be what they value, then we have true development.

Table 6-6: Responses related to the emerged theme of empowerment

Person	Race	Gender	Quote
Bokang	Black	Female	It [HEA] has allowed me to open up to the realities and opportunities of life.
Cedric	Black	Male	When I was at university I dreamt of doing many things and now I'm doing them. My education influenced my career ambitions and helped set my career goals. I improved a lot personally and professionally.
Magada	Black	Female	I'm now seen as someone who is qualified and are seen as better off because of my university education.
Maria	White	Female	Before my education I couldn't buy a car. I had to walk everywhere. Now I am independent and I can drive everywhere. I elevated myself.
Pumla	Black	Female	My education empowered me as a woman.
Suzanna	Coloured	Female	My education allowed me to reach my potential.
Takalani	Black	Female	Feeling empowered due to my education. I'm not the same person I was 5 years ago.
Siyanda	Black	Female	My education opened doors that I could never have entered.
Adisa	Black	Female	It [HE] opened a lot of opportunities.
Victor	Black	Male	[HEA] affected my life by giving me more freedom to do the things I want to do.

The next section discusses the major theme of economic well-being.

6.5 Interview theme 3: Economic well-being

Traditionally, unidimensional poverty is measured in terms of economic, or material, well-being (see chapter 2), which is different from personal well-being discussed in section 6.3 of this chapter. Although Sen (1999) stressed the importance and relevance of economic well-being, his CA argues that it should not be the only way to define and measure poverty. The previous section looked at the non-material or non-economic aspects of interviewees' capabilities. This section examines the economic aspects. Common indicators of economic well-being – a multidimensional concept - found in the literature are employment, consumption, income, and material assets. However, consumption is not part of the qualitative conceptual framework of this study because it investigates multidimensional poverty, and consumption is an indicator of unidimensional poverty (as discussed in chapter 2). Therefore, consumption is excluded from the sub-themes in this discussion. Also, to avoid duplication, I discussed employability in section 6.4.3 and therefore I will not discuss it again here. The data on employability show that interviewees generally experienced good access to employment,

although lack of experience hindered employment opportunities for some. First I discuss income, followed by access to asset ownership of interviewees.

6.5.1 Improved income

The qualitative data show that the income of interviewees generally improved as a result of their university education. However, analysis of the data also show that income either increased substantially, moderately or remained unchanged. These are discussed next.

6.5.1.1 Substantial income increase

According to Wanda his income increased significantly as a result of his education. He explains:

My education opened a lot of employment opportunities and my income increased substantially.

Wanda grew up in a rural area in the Eastern Cape province and had a difficult life. However, after completing university, he got a job in Johannesburg and relocated there. In Johannesburg, salaries are usually high. Considering that Wanda is from a rural area, grew up in poverty and is now working in Johannesburg mean that he is much better off than previously. In addition, Wanda also said that he is able to afford a car and lives in a suburban area. All these show that his HEA opened employment opportunities to earn a high income.

Similarly, Nomsa's income increased substantially, as explained by her:

My standard of living improved considerably and my financial situation is far better than I ever could have imagined it would be.

Nomsa graduated in 1995 and is currently working in a senior management position. Therefore, it is understandable that her income has increased substantially since graduating from university. Moreover, she has a good standard of living and also said that she is able to go on holiday whenever she has available time. This shows that she is earning a very high income. In explaining her economic situation, she said this:

My family's economic circumstances have improved in that I now can afford a home in an affluent area, I am able to assist other less fortunate members of my family, my kids attend the best schools, my husband and I drive decent cars.

Again, this shows that Nomsa is very well-off due to her career and income, and more importantly, she is in a position to financially assist members of her family who are poor. She is also investing in the education of her children, showing that she is aware of the importance of education and its impact on the overall economic well-being it has. I think Nomsa has good money management abilities, benefits from her high income and shares it with her family and those in need.

Hilda, who obtained a degree in Economics and Law, explains the impact of her education on her income as follows:

I was an administrator and after I studied I became a lecturer. My employment improved and my income doubled. My income improved from a scale of 0 to 10.

In Hilda's case, her income increased substantially. According to her, it increased from zero to 10, which indicates a very big increase. She explains it is like it is almost impossible. Hilda attributes her increase in income to her university education because she worked as an administrator after completing high school and earned very little. Before attending North-West University, she lived in a house which she shared with others because she could not afford to live on her own. However, after she graduated and got employed, she moved into her own house and she also managed to buy a better house for her parents. All these achievements were made possible by her HEA, which gave her access to better employment opportunities and a better income.

Liezl also managed to secure a very high salary as a result of her university education. She explains:

I moved up the corporate level and my income increased exponentially. I'm young and have a high level of salary.

Liezl graduated as a chemical engineer and she is single. Based on her explanation, she is in a very good job with a very high salary. She also said that she is in a position where she does not

need to worry about money. Meaning, she has enough disposable income to buy the things she needs.

The above transcript extracts show that some interviewees had a substantial increase in their income due to their HEA. The latter gave them access to employment opportunities with high salaries. However, others said their income only improved slightly after completing university.

6.5.1.2 Moderate income increase

According to Trevor, his university education gave him access to employment opportunities, but his income only increased slightly. He explains:

My education opened up more employment opportunities but my income only increased slightly. My education was not enough to improve my income significantly.

Trevor completed a degree in Psychology at the University of Limpopo. However, according to him, his degree gave him access to employment opportunities, but his income only increased moderately. This could be due to his field of study. As far as I know, psychology is not a well-paid profession in SA. A good friend of mine graduated with a degree in psychology and could not find employment in his field for three years. He ended up becoming an English teacher. In explaining further, Trevor said:

My standard of living isn't where it should be or deserve to be but it's better than before.

This shows that he is not earning sufficient to afford the things he wishes to buy. Moreover, Trevor had a study loan to help pay for his studies and he is now paying off his loan. I think this affects his available disposable income and standard of living. In spite of this, he felt that his university education had a positive impact on his life because it enlightened him about his career and broadened his mind.

Another interviewee, Magada, also said that she does not earn enough. She explains:

I just started working so I'm not earning enough; I have no car and no house. There are many things I wish to buy, but I can't because I don't have enough money. I

would like to buy my own laptop or big screen TV or some new furniture for my room.

She graduated with a degree in Industrial Psychology and Public Administration in 2013. The main reason why she said her income is not enough is because she only started to work recently. This means that she lacks work experience and she is probably at an entry-level salary rate. Based on her explanation, I think she lacks sufficient income because she desires to buy material assets, but she cannot afford them. However, I think she can afford basic necessities.

According to Tembo, his income did not improve because he could not find meaningful employment opportunities after graduating from university. He explains:

My income wasn't so well affected because I couldn't find many employment opportunities. Just after completing my studies, I stayed at home for 2 years before I got a job.

Tembo also said that his university education did not have a significant impact on his life and standard of living. He believed this was due to his major he studied at university. Tembo studied media studies and English at the University of Venda. He also said:

I'm living from month-to-month. I'm just able to buy the basic things that I need like paying my rent, food, public transport. I have no savings and I don't have a place of my own. I'm still using public transport because I don't own a car yet.

This shows that Tembo is earning just enough to afford basic necessities. He cannot afford material assets like a car, house and other high-priced items. Nevertheless, Tembo is not poor. He is still able to afford to buy what he needs, and Tembo believes that will have access to better opportunities in the near future due to his university education.

The data also show that HEA had no impact on the income of some interviewees.

6.5.1.3 Income unchanged

In spite of completing his university education, Newman's income did not increase and his employment opportunities did not improve. He explains:

My income hasn't increased and I did not get better employment opportunities. Jobs are scarce. I gained a lot of knowledge and now have a greater perspective on life, but in terms of reality, I'm still struggling. I don't deserve the standard of living I have now.

Newman graduated from the University of Fort Hare in 2013 with a BA (Social Science). At the time of the interview, Newman was a recent graduate and could not find employment and he was struggling. Since his income did not improve, he was dissatisfied with his standard of living. I think Newman could not find employment because of his degree major. It is often difficult to find employment with a degree in Social Sciences. Furthermore, Newman had no experience and I believe this also limited his employment opportunities. He resides in the Eastern Cape, which is generally characterised with high unemployment levels and few employment opportunities. Perhaps he needs to relocate to a bigger city such as Johannesburg to broaden his employment opportunities.

After graduating from Walter Sisulu University, Siyanda was unable to find employment at first. She explains:

My income didn't improve because WSU graduates don't earn good incomes, but after I graduated, I was able to get a job.

Siyanda, also from the Eastern Cape, was able to find employment because she relocated to Cape Town. During the interview, she explained that she is now very successful in her career and enjoys a very good standard of living. However, she attributed this to being in Cape Town and she also said that in the Eastern Cape, employment is scarce and limited opportunities are available. Although her income initially was unaffected by her HEA, she was able to turn her situation around by relocating to another province.

Victor, who graduated from the University of Fort Hare with a degree in Marketing Management in 2013, resides in the Eastern Cape. After graduating, he could not find employment, so he decided to start his own business. He explains:

It increased my employment opportunities, but my income level remained low. I didn't find a job so I started my own business. After I graduated I had to move back to my family home and stayed in a bedroom that was once used as a garage.

Although Victor was unable to find employment, he started his own business to earn a living. However, he had to move into his parents' house because he could not afford to pay rent on his own. Although Victor said his university education helped him to become an extrovert and participate in community projects, his standard of living and income did not improve after graduating. According to Victor, his life did not change after university. During my interview with him, I sensed that Victor is not ambitious and he appeared discouraged about his ability to access employment opportunities and improve his income.

This section shows that, in terms of income, interviewees experienced different levels of income due to their university education. According to the HCT, one of the individual benefits of more years of education is increased income. However, looking back at some of the criticisms against the HCT discussed in section 3.1.2.1 of chapter 3, these variations in income make sense. Some of the criticism against the HCT states that more years of education does not always lead to increased income, because other external factors such as labour market, location, personal abilities, gender and skills may impact an individual's income. Interviewees had different perceptions about how their income was affected by their university education. I think the perception of interviewees on how their HEA impacted their income could be due to socio-economic backgrounds. For example, an individual who comes from a very poor family and who grew up in a small rural area probably grew up with no or little money, but after completing university education, he/she found employment and started earning a salary. In such a case, I think, any reasonable level of income would be regarded as substantial or exponential. On the other hand, someone who grew up in less poverty may be accustomed to having some money and is in a position to decide whether or not his current level of income increased marginally or significantly. I remember when I got my first job, my salary was low but to me it was a huge sum of money, simply because I had none before that. Irrespective of the level of increase in income, I think it is important to recognise that HEA generally improved the income of the interviewees. The next section discusses the being able to find employment as an indicator of economic well-being.

6.5.2 Being able to find employment

According to the Human Capital Theory, employability is one of the private returns to education (Harmon et al., 2003). Although there is a wide range of employability definitions in

the literature, it is generally agreed that employability refers to the set of skills and attributes an individual possesses to gain meaningful full-time employment and build a career in it (Williams, Dodd, Steele, & Randall, 2015). An earlier study conducted by Hillage & Pollard (1998, p. 1), defined employability as "about having the capability to gain initial employment, maintain employment and obtain new employment if required."

According to Bhorat, Mayet & Visser (2012) the quality of HEIs play a key role in the employment or unemployment of graduates in SA. They argue that graduates from historically white institutions (HWIs) have better access to employment opportunities, while those from historically black institutions (HBIs) take longer to find employment. Also, their findings show that 62% of students at HBIs do not complete their university education, while at HWIs it is 37%. Overall, their study concludes that race, field of study and the selected HEI of study are all key determinants of graduate employment/unemployment rates. The research findings by Letseke, Breier & Visser (2010) also found that the choice of HEI, field of study and socio-economic status of students affect their employment/unemployment prospects.

The quantitative findings showed that the majority of the respondents found meaningful full-time employment, which meant they had a positive return on the investment in their higher education. The qualitative data show that HEA helped graduates to find employment opportunities and enhance their income. At the same time, the data also show that lack of experience is an obstacle for new graduates in securing employment. This section presents several interview transcript extracts to explain these recurring themes.

According to Andani, both his income and employment opportunities improved. He explains:

My education influenced my income a lot. My employment opportunities improved and my education gave me access to other opportunities to improve my income and employment.

According to Andani, his HEA did not only give him access to employment opportunities and improve his income, but also access to other opportunities. Andani became employable immediately after graduating from the University of Fort Hare in 2013. As an investment analyst, Andani's employability opened many other opportunities for him because he started to regularly interact with CEOs from big corporations in SA and this gave him further access to

knowledge and the ability to interact with people from different social classes and races.

Andani also mentioned during the interview that he has already managed to buy his own car, as well as a house of approximately one million rand, although he is only 25 years old. His employability therefore placed him in a good position to grow his capabilities and improve his economic well-being.

Bokang also said she was able to find good employment and income due to her university education. She explains:

Going to university led to a good job and opportunities. I'm having very good job opportunities with very good income.

Bokang, single and black, graduated from the University of Venda with a degree in Mining Geology, and as a black woman, several employment opportunities were available to her. Mining geology was reserved for whites only during apartheid, and therefore she had no problem in finding a job immediately after graduating. She has a good income and her job is very satisfying to her. This shows that she loves her job and she is probably good at it.

Similarly, Hilda, in describing how her education affected her employability, said:

My financial and employment status improved. After I studied I became a lecturer. My employment improved and my income doubled. My income improved from a scale of 0 to 10!

Hilda studied economics and law and - as she said - she became a lecturer at North-West university, where she studied. To Hilda, the most important benefit of employment was her income, which increased exponentially. After completing high school, she worked as an ordinary administrator for some time, but she earned very little. She then decided to go to university and this explains why Hilda emphasises her increase in income after graduating from university. She also said that due to her employment as a lecturer, she was able to move to a house of her own – previously she shared a house with other people. Through her employability, Hilda was able to improve her life, as well as that of her family, and she was able to gain more respect from her family since she was now in a much better financial position and had a respectable career.

Although the above three interviewees (Andani, Bokang and Hilda) all graduated from HBIs, they were able to find meaningful employment after graduating from university. As mentioned previously, economics graduates are amongst the most unemployed graduates in SA, but this is not the case with Hilda. However, her field of study was a combination of economics and law. Her HEA gave her access to employment opportunities and improved her well-being. Similarly, Andani studied finance, while Bokang studied Mining Geology. In all three cases, their fields of study did not prevent them from finding employment.

Pumla, a single black female, said her education gave her the necessary capabilities to become a required candidate for employment. She explains:

My education improved my access to employment. It improved my quality of life.
Education made me more worthwhile. Improved the calibre of what kind of
candidate I became for employment.

Pumla got a degree in accounting from Rhodes University in 2010. It is interesting that Pumla never mentioned money in describing her employability, but rather said it improved her life. I think this means that she benefitted holistically from her employment. She had a meaningful career and she became a better person through her employment. In other words, she had the required capabilities to function competitively and competently in her career. Further on during the interview, she also said she had a very satisfying living standard because of her income. This means that Pumla earns a high income and she probably possessed the necessary skills set to maintain a meaningful career in the field of accounting.

6.5.2.1 Lack of experience restricts employment opportunities

According to Maria HEA restricted her access to employment, as she explains:

Higher education didn't open up employment opportunities because I applied for
over 400 jobs and I only found a job after 2 years. I couldn't find a job because I
lacked experience.

Although Maria took over two years to find a job, she now has a very good job as a chemical engineer. She also said that she now owns a car and earns a very good income. Maria may have struggled initially to find a job due to lack of experience, but she now has a very good

career and is working for a large company. More importantly, she is working in the same field that she studied at university. Therefore, I think perhaps she applied for the wrong positions initially, since she then had no experience. Now she enjoys a comfortable living standard and is self-sufficient. As mentioned previously, Maria is white with a degree in chemical engineering. Although the findings by Walker & Fongwa (2017) shows that students generally have the perception that students with engineering degrees have better employment prospects, this was not the case with Maria. The fact that it took her over two years to find employment shows that not all students are readily absorbed into the labour market. However, Maria graduated from the University of North-West, which is a newly merged university, established in 2004 after a HBI and a HWI were merged. This could explain why it took her two years to find employment, despite having a degree in chemical engineering.

Omar studied computer science, but he could not find a job in his field of study. One reason for this could be that Omar lives in a small town outside of Durban. Initially Omar was disappointed because he could not find a job. He explains:

I had greater expectations but limited employment opportunities because I had no experience. This forced me to work as an IT technician which I was not qualified for at university. I live in a small town so job opportunities are limited.

In the case of Omar, he also did not have the necessary experience to work as a computer scientist and so he settled for a job as an IT technician. During my conversation with Omar, he told me he was really depressed because he could not pursue the career he wanted to. Nevertheless, he has accepted his job, and although he graduated in 2012, he is still working now as an IT technician. This means that he is somehow satisfied with his current career. Also, Omar told me that he intends to establish his own IT consulting company soon. Again, this indicates that Omar is satisfied with his career in IT.

Tembo, who graduated in English and Media Studies, also could not find a job for two years. He explains:

My income wasn't so well affected because I couldn't find many employment opportunities. Just after completing my studies, I stayed at home for 2 years before I got a job. Employment is all about the experience – not the university degree.

According to Tembo, his lack of experience hindered his access to employment opportunities and his income. In fact, he only found a job after he continued his studies in Health Information Systems, which is his current career. After he completed his Health Information Systems course, he immediately got a job in the Department of Health, where he eventually became a manager in charge of several government clinics. At the time of the interview, Tembo was working as a health consultant for private and public hospitals. This shows that Tembo probably studied the wrong degree course at university and therefore he could not find employment opportunities after graduating. As mentioned previously, graduates with a degree in the field of Humanities generally find it difficult to secure employment, which further explains Tembo's need to retrain so that he could find employment.

Overall, the transcript extracts presented the most salient and recurring themes related to employability. This section shows that HEA generally improved the employability and income of interviewees, but the lack of experience plays a key role in hindering employment opportunities for newly graduated university students. Nevertheless, the section shows that interviewees were generally satisfied that their university education improved their employment prospects and income. Interestingly, the findings indicate race played no role in respondents' ability or inability to find employment, because they were from three of four demographic groups (see table 6-6). I think the qualitative data show that HEA generally has a positive impact on the employment opportunities of the interviewees.

Table 6-7: Respondents whose HE did not improve their employment prospects

Person	Gender	Race	Response
Marion	Male	White	Due to my age (29yrs) and race, I had less employment opportunities so I am self-employed on a farm.
Maria	Female	White	HE didn't open up employment opportunities because I applied for over 400 jobs and I only found a job after 2 years. I couldn't find a job because I lacked experience.
Newman	Male	Black	My income hasn't increased and I did not get better employment opportunities. Jobs are scarce.
Tembo	Male	Black	Just after completing my studies, I stayed at home for 2 years before I got a job.
Omar	Male	Indian	I had limited graduate opportunities because I had no experience. This forced me to work as an IT technician which I was not qualified for at university.

6.5.3 Asset ownership

As mentioned previously, asset ownership is an important indicator of economic well-being and social exclusion, although it does not paint a complete picture of total economic well-being. I previously mentioned (see chapter 2) the widely-cited example given by Adam Smith in 1776 about the importance of owning a linen shirt to avoid social exclusion. In that example, Smith argued that although owning a linen shirt was not a necessity of life, but a customary asset to own in order to avoid social exclusion or being ashamed in society. Asset ownership is also used as an indicator of well-being by Statistics South Africa, the government agency responsible for collecting statistical data on the population of SA (HSRC, 2014). Therefore, asset ownership remains an important indicator of economic well-being or material deprivation. Although none of the semi-structured interview questions asked the interviewees about assets, asset ownership emerged as a recurring theme in questions relating to living standards. Interviewees were first asked how they perceive their own standard of living, and secondly, what they regard as important for their standard of living. Asset ownership emerged frequently in their responses to these questions. The following transcript extracts show some interviewees' responses to the questions: *"How would you explain your satisfaction level of your standard of living?"* and *"What items (possessions, benefits) would you say are important to you?"*

Cedric is dissatisfied with his living standards because he is unable to buy a car or a house. He explains:

Not really satisfied . I want to start a family but I still can't buy a car or house.

He also said the following items are important for his living standards:

House, car, phone, TV, laptop.

To Cedric, not owning a car or a house is preventing him from starting a family. This shows that he regards these two items as essential for a family. In addition, he thinks that owning a phone, TV and laptop are important for a good standard of living.

Similarly, Magada also said she is dissatisfied with her living standards because she is unable to purchase the necessary assets she thinks are important for her. She explains:

Not satisfied because I did not achieve all that I want. I just started working so I'm not earning enough; I have no car and no house. There are many things I wish to buy, but I can't because I don't have enough money. I would like to buy my own laptop or big screen TV or some new furniture for my room.

To Magada, owning a house and car is important. She also mentions other material assets like owning a laptop, TV and furniture as important assets. This shows that she does not own these assets and therefore her economic well-being is probably limited. She said that she does not earn enough and therefore cannot afford to buy these assets. Based on her explanation, I think Magada is experiencing limited material deprivation. However, earlier in the interview she said she has a "well-paying job" which shows that she is either not managing her income well, or she is spending most of her income on other things like clothing, entertainment and food.

Maria, a chemical engineer, said that although she initially struggled to find employment, she is now very satisfied with her living standards and owns a car. She explains:

Before my education I couldn't buy a car. I had to walk everywhere. Now I am independent and I can drive everywhere.

This shows that Maria regards owning a car as an important asset which makes her independent. This is understandable, because in SA the public transportation system is limited, unreliable and unsafe. Maria also said that although she does not currently own a house, it is an important asset to own for complete satisfaction of living standards. In the case of Maria, owning a car is more about independence. However, her response also shows that she could not afford a car before, but after graduating and finding employment, she managed to buy a car. Therefore, I think Maria experiences a good level of economic well-being.

Andani described his level of satisfaction with his living standards as follows:

I have a car, own property and have full-time access to the internet.

This shows that material assets are very important to Andani in terms of his living standards, and the ownership of material assets also shows his economic achievements. It shows that Andani is financially independent. In describing the impact his HEA had on his income and

career, Andani did say that he became financially independent after graduating from university. His ownership of high-value assets confirms his financial success.

Similarly, Hilda described her satisfaction level of her standard of living in terms of owning a house. She explains:

I used to stay in a sharing house. Now I moved my family and myself into our own houses. My parents now live in a better house.

To her, owning a house is very important for a good standard of living. She did not only buy a house for herself, but also for her parents. This shows that Hilda is grateful to her parents for raising her and she has a sense of social consciousness to help them now that she is in a better financial position.

James, who graduated from North-West University with a degree in Finance and Economics in 2006, described his economic condition as follows:

I'm better off than the average South African. I have a spacious home. I have security and I fit into society with respect.

James describes his economic situation in relation to the average South African, security and social position. However, what is interesting is James' choice of words – 'owning a spacious home.' This shows that he perceives home ownership as an essential material asset for his achievements in terms of economic well-being, social standing and security. Moreover, to James, his home ownership symbolises financial security and social status. In SA, a large proportion of the people cannot afford their own homes, therefore owning a large house means economic well-being and security. In describing his SES, James also said that his SES increased dramatically and again, he described it in terms of owning a house and car. He said:

My socio-economic status improved dramatically. I feel I'm better than the average South African. I have better housing; a better car and I grew personally.

James' view about his SES in terms of owning a house and car is in line with his overall perception that his economic well-being improved and owning a house and car attests to that.

The qualitative data shows that although interviewees regarded owning a car and a house as important in terms of living standards and economic well-being, less than half owned a car and even less owned their own houses. However, those who did own a car and a house used their ownership of these assets to show they are financially independent or to indicate their economic well-being. I did not ask the interviewees why they did not own a car or a house because it is common knowledge in SA, that buying a car (new or used) or house is extremely difficult for two reasons. One is the high prices and interest rates (currently 10.25%), so most people, even if they are employed, find it difficult to afford it. Two, in 2005, the South African government enacted the National Credit Act to curtail predatory lending to individuals who may not be able to afford or meet the lending criteria (Government of SA, 2004). While this was a good step in ensuring justice for consumers, it also meant banks have to apply stringent lending criteria before granting loans to individuals. Others either rented or stayed with family. However, interviewees generally owned other assets like cell phones, TVs, computers and appliances. Apart from having a house and car, interviewees mentioned other assets they regarded as important. These included Internet, telephone, things not easily replaceable, laptop, water, good food, electricity, telephone, insurance, electronic gadgets and extra money. Interestingly, in spite of almost all interviewees being employed full-time, and the majority being satisfied with their living standards, the rate of car and house ownership was very low. The reason for this low rate of ownership, as explained above, is due to lending obstacles and high interest rates in SA. However, based on the interview data, the majority of interviewees measured living standard satisfaction in terms of being employed, having income and being able to afford material things such as food, clothing and other necessities. In terms of economic well-being, this shows that although HEA enabled respondents to get access to employment opportunities and improve their income, many were not able to afford high-value assets like a car or a house, since only a few own a house. In addition, based on these findings, HEA improved the economic well-being of respondents to some extent but not to the point where respondents enjoyed an above-average standard of living.

The next section discusses the theme of relative social exclusion.

6.6 Interview theme 4: Social well-being

Social well-being is about social inclusion, and its absence means social exclusion. According to Amartya Sen (2000), the concept of social exclusion was first used by Aristotle, but the modern

understanding of social exclusion was popularized by René Lenoir in 1974. However, Silver (1994, p. 541) defines social exclusion as being excluded from:

a livelihood, employment, earnings, housing, minimal consumption levels, education, the welfare state, citizenship, legal equality, democratic participation, public goods, family, sociability, humanity, and respect.

Levitas et al. (2007, p. 9) define social exclusion in terms of multidimensional deprivation:

Social exclusion is a complex and multidimensional process. It involves the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities available to the majority of people in a society, whether in economic, social, cultural or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole.

It is therefore possible for individuals to be socially excluded due to many reasons. Social exclusion, viewed in terms of Sen's CA, means being deprived of being or doing the things that matter most to individuals, causing them to reach a condition of multiple deprivations. In the context of SA, HEIs has the potential to play a crucial role in combatting social exclusion due to the potential of HEIs to facilitate human flourishing and hence reduce inequalities (CHE, 2002).

I think it is important to point out here two main ideas about social exclusion. The first is that social exclusion is a socially constructed concept since it depends on a particular society and takes different forms in different societies. Secondly, and perhaps more importantly, social exclusion reflects a violation of social justice, at least in terms of equality of opportunities, lack of social cohesion or social solidarity and an inability to participate in a society (Barry, 1998). It is therefore important to understand individuals' perception of social justice to gain some insights about the nature of social exclusions prevalent in South African society. In speaking about social justice and what it meant to the respondents, most of them had an understanding of what it means. Only one respondent said she was not sure what social justice meant. The rest gave various descriptive explanations of social justice and from these I was able to construct a thick and vivid picture of the nature of social exclusion from the perspective of the respondents. Thematically, a number of social justice issues emerged from the qualitative interview data and are explored in the following sections.

6.6.1 Access and equal opportunities

This was perhaps the issue most frequently mentioned by respondents. Many respondents felt a strong desire for having access to basic opportunities as a way of defining social justice.

(i) Everyone has equal opportunities regardless of political connections. (Memory, female)

(ii) When all people have equal opportunities to access benefits in equal ways. (Rodney, male)

(iii) When everyone has opportunities to reach their full potential ... [and] when all have the same opportunities in all areas. (Rodney, male)

Considering SA's history, I think it is not surprising that equal opportunities and access to benefits are important social justice issues for the interviewees. SA's history is deeply rooted in separation of groups, areas, inequalities and denial of opportunities for all and therefore, I think, these were mentioned by many interviewees as important social justice issues. Some interviewees said only individuals with 'political connections' have access to opportunities.

According to Newman:

We're far away from it [access to opportunities] because only those who have connections (political) have access to opportunities.

Wanda echoed Newman's view:

opportunities are for those who have connections with political parties.

Magada also shared Newman's and Wanda's views:

It's more political. I don't feel equal opportunities for everyone. There aren't equal opportunities. Only the politically connected, wealthy get opportunities and those in rural areas don't get equal opportunities.

The interviewees, obviously, had very strong views on equal opportunities and those factors they thought acted as barriers to equality and access to opportunities. I think the answer provided by one respondent, Siyanda, - when asked about equal opportunities - sums it all up accurately:

Yes, if you're educated and if you have the skills and experience, all opportunities are accessible. Example: To apply for a job you need to email your CV and people in rural

areas have no access to the Internet. Although young people can use the Internet, they are not able to afford it. The Blackberry was our god in terms of Internet access, but now it's no longer free. Although Wi-Fi is free in malls, how many people will go to malls? Wi-Fi should be free in schools and clinics.

Victor's view supports Siyanda's opinion, though in a different way:

There's an invisible ceiling which prevents individuals from taking advantage of opportunities and there are also hidden requirements to take advantage of the opportunities.

Siyanda's account of equal opportunities paints a very comprehensive picture. From her explanation, she thinks that some forms of structural barriers exist, even though opportunities are available. Victor's 'invisible ceiling' also suggests the existence of structural barriers preventing access to opportunities. The views of both Siyanda and Victor show that being educated in SA reduces or removes these barriers.

Some interviewees said individuals' backgrounds and geographical locations also limited access to opportunities. According to Trevor, peoples' individual backgrounds limited their access to opportunities. He explained:

Not everyone gets the same opportunities due to their background. I feel bad about it but I can't change it. People in different living areas or from different social backgrounds have different opportunities available to them.

Tembo shares the above views:

Because of geographical location people have no information about anything. So a child from these locations will have no opportunities. Another reason is racism. Many people still believe that certain races are unable to do certain jobs.

Wanda also thought that geographical and class imbalances affect equality of opportunities:

In rural areas opportunities are limited. The equation between rural and urban is unbalanced. Similarly, the working class and the rich have unequal opportunities.

A number of other interviewees also thought the differences between rural and urban areas affected equality of opportunities and prevented access to opportunities. It is widely acknowledged in the literature that rural areas often have limited access to opportunities due to geographical remoteness, lack of facilities and services, limited employment opportunities and limited access to knowledge (Sabina Alkire & Housseini, 2014). As a result, inequalities exist between rural and urban areas. The interviewees mentioned this as a major obstacle for access to equal opportunities, as shown below:

- (i) Those in rural areas don't have equal opportunities. (Nelson)
- (ii) In the rural and urban areas equal opportunities don't exist. (Rodney)
- (iii) Because of geographical location people have no information about anything. So a child from these locations will have no opportunities. (Tembo)
- (iv) In rural areas opportunities are limited. The equation between rural and urban is unbalanced. Similarly, the working class and the rich have unequal opportunities. (Wanda)

In spite of apartheid having ended over 20 years ago, the legacy of apartheid and racism still appears to impact access and equality of opportunities. This can affect both black and non-black individuals. Black respondents said inequality exists because whites are still privileged, while white respondents blamed racism for inequality of opportunities.

Takalani, a black respondent, had this to say:

Defining equal opportunities is very complex due to our history. As a black person I can say there's equal opportunities but not for a white person.

Tembo, another black respondent, explained:

There are no equal opportunities now. White people will say they are being neglected because of Black Economic Empowerment.

During apartheid, white people were privileged and had access to widespread opportunities, while the majority of the nation had no or little opportunities. After apartheid, BEE was implemented which gave Black Africans, coloureds and Indians more privileges, while whites were being denied certain opportunities. This was implemented to redress the imbalances in terms of employment, government procurement, land ownership, wealth creation and

government employment positions. Therefore, a black person will now have access to a lot more opportunities than a white person.

On the other hand, Memory, another black respondent, felt that everyone has equal opportunities, regardless of their political affiliations:

Everyone has equal opportunities regardless of political connections.

While many said access to opportunities was restricted in one way or the other, a small number of respondents had contrary opinions and felt access to opportunities was for all and available freely. According to Hilda:

Opportunities are there and all one need to do is use them. Most people are able to access opportunities.

Suzanna said:

Opportunities are available for everyone.

These contrasting views, as I have mentioned in chapter 6 and in other parts in this chapter, are largely due to the legacy of apartheid, which made SA a highly unequal society, which was mainly divided along racial lines. Therefore, it is understandable, I think, that the respondents will have conflicting viewpoints on whether or not opportunities are available for all or not.

This section highlighted some mixed results, albeit major findings. Firstly, the majority of respondents felt the availability of opportunities was limited to certain individuals, while a few thought opportunities were available to everyone. This suggested that not all individuals had access to the same opportunities. Secondly, while respondents had different views on access to opportunities, they expressed a unanimous world view of equality of opportunities for all. Considering SA's historical past of apartheid (see chapter 1), I think this is a major finding because it showed the interviewees had a positive sense of social justice. However, although almost all the respondents acknowledged the need for equality of opportunities, almost all admitted a severe lack of equal opportunities for all due to lack of access or geographical location. The next section considers education.

6.6.2 Lack of education

Although all the respondents in this study obtained a university education, a number of respondents felt that one of the main reasons why individuals experience social exclusion is because they do not possess the necessary education or skills to integrate in society. I think this is particularly an important issue because of the racial laws that were in place during apartheid. Due to the Bantu Education Act (as discussed in chapter 1) many black were denied access to university and those living in rural areas had no schools available to attend. Consequently, a large percentage of blacks never attended school, nor university. Therefore, I think, some of the respondents felt that lack of education and skills limited individuals' chances of social inclusion in a variety of ways, as the following excerpts illustrate:

- (i) 'Some people don't meet the educational requirements which lower their chances ...' (Rendani, female).
- (ii) 'Not all have access to opportunities because people don't have the necessary skill sets to take advantage of the opportunities.' (Marshall, male)

According to Maria (female) the lack of education as a barrier to social inclusion was more prevalent in rural areas and amongst black people:

Rural/ black people can't reach their full potential because they need education.

Another respondent, Rendani, also saw education as a barrier to social inclusion:

Some people don't meet the educational requirements which lower their chances.

From personal knowledge, the lack of education and skills, especially among blacks, remains a major problem in SA. Several reports (see for example Haroon Bhorat, 2005; Leibbrandt et al., 2010; Lilenstein et al., 2016) have highlighted how this lack of knowledge and skills is one of the major barriers for blacks to join the skilled labour force, which mean they are unable to earn a meaningful income to move out of poverty.

On the other hand, Liezl believes the problem is not lack of education but rather the quality of education that acts as a barrier:

'Many individuals get lower education so they aren't competent and graduates can't reach their full potential.'

I think it is a combination of lack of education and low quality education. The apartheid education system provided education in three levels of qualities: whites received superior education, coloureds and Indians medium quality, and blacks received the lowest quality of education.

Many interviewees regarded the lack of education as a critical barrier to access opportunities. Moreover, the responses of the interviewees suggested that many people did not have the necessary level or quality of education, and therefore they lacked the necessary capabilities, which led to social exclusion. Another sub-theme that emerged was the availability of resources and facilities. This is discussed in the next sub-section.

6.6.3 Lack of resources

Some respondents also said there was an unbalanced situation in terms of available resources and facilities, as one respondent pointed out:

‘Everybody wants opportunities but they are not available to all. The baselines for many are different. For example, a person born into a rural family in the Eastern Cape will have no running water and no books to study.’ (James)

Another respondent, Cedric (male), felt that graduates lacked access to opportunities because the majority of people did not have access to the Internet:

‘I feel South Africa needs more graduates to be encouraged to take advantage of the opportunities. Most people don’t have access to the Internet to take advantage of the opportunities provided by government agencies.’

Under the main theme of social exclusion, it was observed that respondents mentioned a number of factors leading to social exclusion. These were access and equal opportunities, lack of education and lack of resources in rural areas as compared to urban areas. Overall, although the majority of the respondents recognised the importance of equal opportunities to ensure social inclusion, the majority of interviewees were of the opinion that although equal opportunities were available to all South Africans, many were not able to access these

opportunities due to a variety of barriers. These barriers were discussed also. Only a few thought all individuals enjoyed an inclusive experience in South Africa.

6.7 Chapter summary

This chapter presented findings of the qualitative data collected from semi-structured interviews. This section summarises the important findings.

The findings showed that although HEA had a positive impact on the general life of the respondents after graduating from university, this was not the case with all participants. Analysis of the data shows that some interviewees experienced difficulties in finding employment after graduating. While some graduates with degrees in the fields of Humanities and economics could not find employment immediately, graduates with degrees in engineering and computer science also experienced difficulties in finding employment. However, other graduates also with similar degrees were able to find employment. In addition, graduates from similar HEIs reported mixed results in the sense that while some graduates from a particular university could not secure employment immediately after graduation, others from the same institution could find employment. For example, Newman with a degree in Humanities from the University of Fort Hare could not find immediate employment, but Nelson, also with a degree in Humanities from the University of Fort Hare found employment immediately after graduating from university. This is consistent with the literature which shows that although the choice of HEI and field of study influences the benefits derived from HEA (see for example Bhorat, Mayet, & Visser, 2012; Oluwajodu et al., 2015; Walker & Fongwa, 2017), other socio-economic factors (see for example CHEC, 2013; Letseka et al., 2010) and previous education (see for example CHE, 2002; Wilson-Strydom, 2011) too play a role in the benefits derived from HEA. Therefore, HEA does not automatically translates to personal well-being for everyone.

The interviewees expressed positive views about their personal well-being, economic well-being, standard of living, were in good health, enjoyed a positive SES, experienced improved employment opportunities and income, improved cognitive skills, personal development,

improved world view, feelings of empowerment and better access to knowledge. On the other hand, they did not have a very good opinion about health care services and facilities within their areas, the majority did not own a house or car, although they regarded owning a house and car as an important reason for being satisfied with their living standard.

In regards to social well-being, almost all the interviewees acknowledged that access to equal opportunities was a vital requirement for social inclusion. However, most also said there were several barriers present in the South African society which caused many to be denied access to the available opportunities. The common barriers mentioned by interviewees were: (i) unequal opportunities, (ii) lack of education, and (iii) lack of resources in rural areas as compared to urban areas. Overall, the qualitative findings showed a general positive correlation between HEA and well-being, as was expected. In chapter seven, the quantitative and qualitative data will be mixed and triangulation will be applied to check for validity and reliability.

Chapter 7: Discussion and conclusions

7.1 Introduction

This thesis presented an interpretation of well-being based on Amartya Sen's capability approach, and the effect HEA could possibly have on individual overall well-being.

The main objective of this thesis was to investigate the impact HEA has on multidimensional well-being in SA by using a sequential (QUAN→Qual) MMR approach. The previous two chapters presented the quantitative and qualitative findings. The main objective of this chapter is to discuss and interpret the quantitative and qualitative findings by integrating the separate analysis (Tashakkori & Teddlie, 1998) with the literature in order to explore the research questions this study sought to answer. A further objective of this chapter is to present the limitations of this study and suggest some recommendations for policies and future research on the topic of this study.

This chapter is divided into several sections. The next section discusses and triangulates the findings in relation to the literature and according to the research questions. Section 3 explains contribution to knowledge made by this study. Section 4 states the limitations of this research. Section 5 offer a number of policy recommendations, while section 6 offers some recommendations for future research related to HEA and multidimensional poverty and well-being. Finally, I end this chapter and thesis with some concluding remarks.

7.2 Answering the research questions

The purpose of the research design adopted in this study was to investigate the research topic by obtaining different and complementary data (Creswell & Plano Clark, 2007). This section integrates the findings of the two sets of the data. Since the MMR design was an explanatory sequential design (QUAN→qual), the quantitative findings have priority in answering the research questions, while the qualitative findings help to explain the initial quantitative results

(Creswell & Plano Clark, 2007). This section answers the research questions by triangulating the quantitative findings, qualitative findings and literature review related to this study.

7.2.1 Research question 1

What are the multidimensional well-being characteristics of individuals with HEA in SA?

Although poverty is a much discussed topic in the literature, it has always been, and remains, a topic that attracts a lot of disagreement in terms of how to define, measure and evaluate poverty, or well-being. Amartya Sen's capability approach provides a normative framework for defining, understanding and measuring poverty and well-being in terms of capabilities, rather than income or consumption. Chapter 2 showed how our understanding of poverty and well-being shifted from a one-dimensional perspective, focusing on income, to a multi-dimensional perspective, focusing on capabilities and functionings, as informed by the theoretical underpinnings of Sen's capability approach. The traditional approach of defining and measuring poverty focuses on income, and as chapter 2 shows, a large body of literature shows that this is an inadequate approach to poverty/well-being studies because it fails to capture the real deprivations of individuals. One dimensional poverty defines poverty as a shortfall of income, while Sen's CA argues that well-being is dependend on the functionings (doings and beings individuals have reason to value) experienced by individuals. Therefore, well-being from the CA perspective is inherently multi-dimensional and, more importantly, it captures an individual's well-being in a more comprehensive manner.

The quantitative data in this study shows that 64% of respondents said their financial position improved as a result of their HEA, 22% indicated no change and 15% said they are worse off (see table 5.18, chapter 5). While these are important statistics, it does not explain the possible deprivations respondents may experience and therefore, provides an incomplete picture of respondents well-being. The mentioned data does not explain the depth of poverty and neither does it explain the distribution of deprivations across indicators. In other words, the one-dimensional data provides insufficient statistical data on the true state of deprivations (monetary and non-monetary) experienced by individuals.

On the other hand, the multi-dimensional statistical data paints a more comprehensive picture of respondents' well-being. For example, the data shows that just under 17% of respondents

are multi-dimensionally poor across all four dimensions, except health, while none were in severe poverty. Therefore, from a multi-dimensional perspective, the data provides more depth and breath of well-being. Moreover, according to Burger, McAravey, & van der Berg (2017) income is an inadequate measure for characterising class in an unequal developing country like SA. To this end, they argue that a multi-dimensional measure is better suited to capture SA's middle class, which most respondents in this study seem to fall into. In defining a middle class, Burger et al. (2017) state that middle class is a societal class in which individuals achieved the minimum threshold in all the selected capabilities. In the case of this study, the respondents achieved minimum levels in all the dimensions, except health. This suggests that the majority of the respondents belong to the middle class. Secondly, Burger et al. (2017) also state that capabilities present individuals with opportunities to achieve well-being. Although this is not the case for all the respondents in this study, the majority achieved a reasonable level of well-being, as discussed in the rest of this section.

In calculating the multidimensional poverty of the respondents, the MPI shows that only 16.6% of the respondents were deprived, while those who were multidimensionally poor experienced deprivation in 36% of the weighted indicators on average. Moreover, none of the respondents was 'vulnerable to poverty' or in 'severe poverty.' The multidimensional poverty calculations also showed that the majority of respondents were non-deprived or least deprived in all the four dimensions of the theoretical framework. In other words, most experienced well-being. Further statistical analysis revealed that HEA had the most impact on the health status of the respondents and the least impact on social justice. The least impact on social justice was expected because according to Sen (2001), social justice refers to the freedom people have to formulate capabilities. In other words, social justice creates the 'space' in which peoples' capabilities/functionings are allowed to develop and flourish. In the context of SA, I have selected the social justice space parameters to include personal security, social exclusion/inclusion and social opportunities. Therefore, although the analysis of the quantitative data showed HEA has no significant impact on the dimension of social justice, I believe the selected indicators created the 'space' in which respondents were able to achieve their 'doings' and 'functionings.' This is also supported by the qualitative data because the majority of the respondents indicated having positive experiences in feeling safe in and out of their homes, not being victims of crime and having access to social opportunities. Social inclusion is an important aspect of peoples' freedoms to be and do what they desire.

Returning to the impact of HEA on the health status of respondents, the qualitative findings revealed similar results. The majority of the interviewees indicated they were in very good health condition, in spite of having access to poor health facilities and only a few having private medical insurance. Moreover, as discussed in chapter 6, the qualitative data suggested that most lived active lifestyles, actively sought information to improve their health and were health conscious. The relevance of health as an indicator of poverty is well documented in the literature (see for example Callander et al., 2012; Case & Deaton, 2002; Falkingham & Namazie, 2002; Oshio & Kan, 2014; UNDP, 2010; WHO, 2003). It is generally agreed that lower income leads to poor health conditions of individuals. Similarly, in multidimensional poverty, health is an important indicator of well-being (Alkire & Santos, 2010; Sen, 1985), particularly in all international multidimensional poverty indices such as the UNDP's HDI and OPHI's MPI. A multidimensional study conducted in Australia concluded that individuals require three capabilities for adequate living standards: income, health and education (Callander et al., 2012). Similarly, a study conducted in Japan concluded that health is a key indicator in the measure of multidimensional poverty (Oshio & Kan, 2014). Overall, both the quantitative and qualitative findings showed that the participants generally had low incidences of multidimensional poverty, suggesting that HEA had a positive impact on the overall well-being of participants. The findings of this study are also in agreement with the general literature on development which argues that education and health, particularly, are essential for development and poverty alleviation (Preece & Singh, 2003). Sen (1999) argues that well-being is not having enough money, but rather having the necessary capabilities to function effectively in society, and furthermore he argues that a lack of education in itself is a form of poverty. In an extensive review of the literature related to education and poverty, Van der Berg (1994, p. 3) concluded that 'better educated people have a greater probability of being employed, are economically more productive, and therefore earn higher incomes'. Therefore, to answer the research question, I will conclude that individuals with HEA generally experience low levels of multidimensional poverty, are not vulnerable to poverty, on average have high levels of health satisfaction, and generally experience well-being. These are all in agreement with the findings of previous studies and in agreement with the general literature on multidimensional poverty, well-being and educational attainment.

7.2.2 Research question 2

What is the socio-economic status of those who obtained a university undergraduate degree?

Educational achievements, income level and occupation are typical indicators of SES (Baker, 2014; White, 1982). Moreover, Chakravarty & D'Ambrosio (2006) argue that low levels of SES may contribute to social exclusion, since social exclusion leads to economic deprivation and being disadvantaged socially and culturally.

The quantitative findings measured respondents' SES in terms of income, employment and asset ownership. Since HEA was a prerequisite to participate in this study, this was excluded from the calculations because all respondents had obtained a university degree, at least. The data on income and employment showed that respondents generally had an above average level of economic well-being and on average they did not experience material deprivation. This is in accordance with the findings of a number of empirical studies which show HEA leads to improved economic well-being (see for example Bloom et al., 2006; Psacharopoulos & Patrinos, 2004; Vijaya et al., 2014). However, a recent study (Baldry, 2016) of South African graduates at 23 public HEIs found that individuals in the upper three SES groups are four times more likely to be employed than those in the bottom SES group. A similar study (Letseka et al., 2010) of graduates at 7 HEIs also found that there is a strong correlation between SES and choice of educational institution and their ability to map out their career paths. In this regard, their study observed that those with high SES has a much better ability in making appropriate decisions about their employment and other life choices because they have better access to opportunities and social networks. This indicates that SES also has an impact on the well-being of graduates since it is a strong predictor of employment. According to Walker and Fongwa (2017) SES acts as a barrier to both access to university, as well as access to employment opportunities after graduating from university. However, in this study the focus was on the SES of graduates after graduating from university. The fact that most participants indicated a high level of SES shows that most of the respondents experienced social mobility due to their HEA, and therefore they reported high levels of SES.

In the context of SA, HEA is often seen as not only a way out of poverty, but also as a way of redressing the inequalities in society. According to Louw, Van der Berg, & Yu (2007), HEA plays an important role in social mobility. The findings of their study show that black Africans have the highest social mobility within the black population group in SA. According to the study, this social mobility among the black population is due to their HEA since it opens However, their study also concluded that race remains a major obstacle to social mobility for many, in

spite of the opportunities presented by HEA. Unfortunately, studies of race and social mobility in SA is not very well developed and only a few limited studies are available (Louw et al., 2007). Moreover, according to Piraino (2015) race plays a significant role in hindering social mobility in SA. However, I think all the participants in this study have experienced social mobility of some level.

It is therefore no surprise that respondents reported high SES, which is also according to the HCT, which states that the return on the investment in education has immediate benefits to individuals in terms of employment and income. In order to calculate the SES of the respondents, I used a composite score based on 21 survey items related to income, employment and asset ownership. The analysis showed that the majority of respondents had a high level of SES in terms of SA. The qualitative findings yielded a similar result. The interviewees generally explained that their SES improved remarkably as a result of their educational achievements. Moreover, as a result of their improved SES, many interviewees had become role models, sources of inspiration, mentors, exemplary community figures and career counsellors to their extended family and community members. This is particularly interesting because numerous studies in the literature have shown that low SES is a strong barrier to widening access to HE, yet the majority of the participants in this study reported high levels of SES and, in the qualitative interviews, they told numerous stories of how their HEA afforded them opportunities to be exemplary individuals in their communities and families. For example, a study conducted in Australia by James (2007) concluded that low SES is one of the major causes preventing the poor from gaining access to higher education. This is consistent with an earlier survey of the literature on access and equity in higher education which observed that low SES, amongst other factors, is a major barrier to accessing higher education for the poor (Skilbeck & Connell, 2000). With regards to the correlation between SES and HE, the findings of this study are in agreement with other studies on SES and HE. However, both studies by Baldry (2016) and Letseka et al. (2010) concluded that Black Africans have lower SES than other races. This was not the case in the findings of this study. This could possibly be due to the low number of other races amongst the respondents.

Furthermore, the high SES of respondents corresponds to the findings of research question 1 because it is now widely acknowledged in the literature that a strong positive correlation exists between SES and health status (Stronks et al., 1997; White, 1982). In other words, if

respondents have a high SES, as they do in this case, they should also have good health. Meaning, individuals with high levels of SES are healthier than those with low levels of SES. Therefore, to answer this research question, I am pleased to conclude that the majority of those who obtained a university degree experienced improved levels of SES due to their educational achievements.

7.2.3 Research question 3

What is the economic well-being of those who obtained a university undergraduate degree?

Well-being is about an individual's standards of living. It is a multidimensional concept, which encompasses both economic and non-economic aspects. According to Wagle (2005) , economic well-being incorporated as an integral part of multidimensional poverty helps to present a more comprehensive and realistic picture of multidimensional well-being. Similarly, Osberg & Sharpe (2003) argue that economic well-being is essential in any overall picture of human well-being because it gives a more complete assessment of human well-being in terms of Sen's CA. In other words, both human well-being and economic well-being are important for expanding individuals' freedom to choose the kind of lives they wish to live (OECD, 2013; Stiglitz et al., 2009).

Overall, the quantitative findings showed that the majority (84%) of the respondents were engaged in meaningful full-time employment and over 80% had a fixed income from salaries. Having a sustainable source of income is important for individual well-being because it allows individuals to engage in other activities they have reason to value (OECD, 2013; Stiglitz et al., 2009). Also, it means that the majority of the respondents were neither deprived in terms of employment nor income. In addition, qualitative findings showed that majority of the respondents owned essential assets and other assets allowing access to information and supporting livelihood. This was further supported by the quantitative findings which showed that over 61% of respondents paid rent. Since home ownership constrains asset purchasing power, the respondents had more available income to buy assets (Cauley et al., 2007). In comparing asset ownership of the respondents with the 2011 census data (see figure 5-2, chapter 5), the respondents had a much higher rate of asset ownership than the population in general, therefore, indicating respondents had a higher standard of living in comparison to the

overall population. However, I must caution here against drawing a definitive conclusion because, as Sen (2001) states, a person may be well but not doing well. Perhaps future research could focus on this aspect. Moreover, I think the high rate of asset ownership and reasonable amount of disposable income. is also an important point, since asset ownership remains an important determinant of living standards and provides evidence of material non-deprivation (Vijaya et al., 2014). According to Sen (2007), the ownership of commonly used assets in a society is an indication of material well-being. In addition, the analysis of the qualitative findings showed that almost all the participants said their income improved due to their education.

In spite of their overall economic achievements, both the quantitative and qualitative data showed that participants generally did not own a house or a car. In my opinion (as explained in detail in section 6.5.3 of chapter 6), these are both high value assets and could suggest that although participants experienced good economic well-being, it was not sufficient to purchase a house or car. In the context of SA, this is not surprising because high property prices prevent most people from buying property. According to the 2013 General Household Survey (StatsSA, 2014a) only half of South Africans own their own homes.

The finding that participants with HEA have a good level of economic well-being is in accordance with the recent literature on HEA and economic well-being, which suggests that HEA leads to improved economic well-being (Bloom et al., 2006). However, this conclusion is also in contrast to earlier views of the HCT that HEA contributes very little to economic growth and poverty reduction (Tilak, 2003). In a widely-cited qualitative study – *‘Can anyone hear us? Voices from 47 countries’* - conducted by Nayaran (2000, p. 29), a poor person in Brazil described material (economic) well-being as follows: ‘It’s the cost of living, low salaries, and lack of jobs. And it’s also not having medicine, food and clothes.’ In this study, none of the participants described their economic well-being in this way, and likewise, the majority of the participants said they had a decent standard of living, almost all were employed, earned reasonable salaries and had access to medicine and other material assets. Therefore, this also suggests that the majority of participants did not suffer from material deprivation and had a reasonable standard of economic well-being. In addition, the MPI calculation in the quantitative phase showed that none of the respondents were vulnerable to poverty or experienced poverty.

Based on the main findings related to economic well-being, I think it would be a fair assessment to answer the research question by stating that individuals with HEA have a reasonable level of economic well-being in terms of employment, income, asset ownership, but not in terms of home and vehicle ownership.

7.2.4 Research question 4

Do university graduates experience a reasonable level of social justice?

Amartya Sen's CA argues that development in itself is freedom and therefore, capabilities, or achievements, are not only what an individual is able to do or be, but also what an individual could potentially do or be (Nussbaum, 2003; Sen, 2001). Moreover, in the literature on multidimensional poverty and capabilities, social justice is about creating the required 'space' in which individuals' capabilities are allowed to flourish (Sen, 2001). Unfortunately, social justice is a contested term with different meanings for different people (Robeyns, 2017). In this regard, Miller (1999) argues that a minimal conception of social justice is one in which an individual or group of individuals do not receive what they should receive in relation to the rest of the society, while Barry (2002) argues that social justice is equality of opportunity. In other words, the presence of social justice means social inclusion, while the absence of social justice leads to social exclusion. According to Barry (2002, p. 4), "social exclusion is a violation of the demands of social justice" because, firstly, it conflicts with equality of opportunity and, secondly, it leads to the inability of individuals to effectively and meaningfully participate in existing social structures.

In looking at the definition of social justice, one could perhaps observe that it is a difficult construct to measure due to the many ways social justice can be defined. Also, concepts such as equality of opportunity and meaningful participation are difficult to measure because there is no definitive boundaries of who is responsible for opportunities – personal, societal or governmental. For example, two individuals living in the same neighbourhood, may both have equal access to opportunities but due to their individual characteristics, each one may access these opportunities differently, which could result in very different results. Moreover, as mentioned previously in chapter 2, other personal factors such as socio-economic conditions, schooling and home environment may also have an effect on an individual's perception of

social justice or ability to access opportunities. For example, in this study two of the interviewees Liezl and Maria, both graduated from the North-West University and both are white females, Yet, in their interviews, they reported very different experiences about how their HEA impacted their well-being. Liezl said her university education drastically expanded her access to employment and social opportunities. On the other hand, Maria said that her university education impacted her life minimally, which indicates that she was not able to access opportunities, like Liezl. In other words, it seems that Liezl and Maria did not have the same level of access to opportunities, or they had equal access to similar opportunities, but Liezl was better positioned to access these opportunities, while Maria was not. Wilson-Strydom (2015) particularly argued this point by stating that social justice should be about having equal access to opportunities in order to achieve similar outcomes. However, Sen's view of social justice also means that individuals are free from violence and able to live freely in society, but also have access to self-development opportunities and access to socio-political opportunities (Carlson, Nguyen, & Reinardy, 2016). Therefore, in this study I chose to use a few social justice measures related to personal safety and security, social inclusion, access to self-development opportunities and access to socio-political opportunities.

The quantitative findings showed that the majority of the respondents never felt isolated or cut-off from society. Like the quantitative data, the qualitative data showed that the majority of respondents did not experience social exclusion and they also indicated they had adequate access to self-development opportunities and equal socio-economic opportunities. In fact, the majority felt they had more access to socio-economic opportunities than others due to their HEA. Having said that, a small number of respondents said they had limited access to opportunities due to a lack of 'political connections.' Furthermore, several respondents felt that access to opportunities was dependent on education, skills, experience, and geographical location, the background of individuals and due to existing disparities between rural and urban areas. In terms of equal opportunities, some black respondents said they had equal opportunities, but a white person may not have equal opportunities (due to BEE, see section 5.3.2 for an explanation on this) due to the current political dispensation seeking to redress social inequalities created by half a decade of apartheid.

Returning to the point of feeling isolated, nearly one-third said they felt isolated or cut-off at some point. Interestingly, of those who indicated they experienced social exclusion (isolated or

cut-off from society), attributed this mainly to having a lack of money and transport. These two causes of social exclusion are interesting and surprising considering that the majority of respondents were engaged in meaningful full-time employment. However, in the context of SA and in terms of vehicle ownership of the respondents, I think it may not be overwhelmingly surprising for two reasons. One, public transport is generally either dangerous (in terms of crime), unreliable or unavailable in many parts of SA, particularly in poor areas. Two, most of the respondents indicated that they do not own a car. Consequently, I believe that a combination of not having a car and poor public transport is likely to lead to being isolated from society, if an individual has limited disposable income.

In spite of the high crime rates in SA, the majority said they felt safe at home and had not been a victim of crime during the last year prior to the survey. A possible explanation for this could lie in the qualitative findings. During the interviews, most said that living in a good neighbourhood was essential. In terms of safety and security aspects, it appeared that the participants experienced overall a good level of social justice. However, the opportunities aspect of social justice tells a different story. Less than half of the survey respondents indicated they had self-development opportunities, while one-quarter said they were not aware of self-development opportunities available to them. Nonetheless, the quantitative data showed that nearly half of the respondents thought they had equal economic and political opportunities, while almost 40% said they did not.

Looking at the quantitative data alone, it appeared that there was great divergence in the opinions of the respondents with regard to the availability of opportunities. However, the qualitative data shed some light on these different viewpoints of the participants. During the interviews, the interviewees also expressed different views on the availability of opportunities and it appeared there were some reasons for these divergent views. According to the interviewees, some did not have access to opportunities due to not having 'political connections' with political parties, while some also added lack of skills, remote geographical locations, social backgrounds, lack of education and lack of resources such as internet and societal barriers. In the context of SA - a country with high levels of inequality and a long history of racial segregation (as discussed in chapter 2) – it is understandable that these conditions will exist in the society.

A report on equality and poverty in post-apartheid SA showed that: (i) 58% of all South Africans live in poverty, (ii) vast inequalities exist in areas of education, health and infrastructure, (iii) widespread prevalence of crime, (iv) the unemployment rate of 40% is steadily increasing and (v) very little economic activities exist in most communities (Hoogeveen & Özler, 2005). Recognising the existence of these deep-rooted inequalities in South African society, the government of SA adopted the *National Development Plan* (National Planning Commission, 2011, p. 262), which stated that 'given the country's apartheid history, higher education provides opportunities for social mobility and simultaneously strengthens equity, social justice and democracy.' Considering this backdrop of social inequalities I think, the divergent findings on social justice experienced by the research participants make sense.

To answer the research question, although most of the participants experienced a reasonably good level of social justice in terms of security, and access to social and economic opportunities, some did not. It is therefore reasonable to conclude that not all participants experienced a reasonable level of social justice, despite their HEA. To qualify the aforementioned statement, I think it is important to keep in mind that analysis of the quantitative data showed that HEA had the least or no impact on the social justice of respondents.

This section triangulated the findings of the quantitative and qualitative data. In doing so, the triangulation data showed that the qualitative data supported the quantitative data with similarities and almost no differences. Therefore, the qualitative findings largely validated the quantitative findings in all four research questions and dimensions of the theoretical framework. Although the qualitative data enriched my understanding of the impact HEA has on well-being and deprivation, I think my limited qualitative skills caused me to not fully explore this phase of my research.

7.3 Contribution to knowledge

This study explored the impact HEA has on the multidimensional well-being characteristics of participants. This is a new perspective on the topic, for two main reasons. Firstly, traditional poverty and well-being studies are usually one-dimensional – i.e. a focus on minimum income or consumption as a measure of well-being/poverty. Secondly, the value of educational attainment is traditionally assessed in terms of human capital outcomes – i.e. income and employment as a return on the investment in education. However, this study assessed the impact of HEA by using a bespoke well-being framework which integrated both the human capital theory as well as the capability approach in order to investigate the multi-dimensional characteristics of university graduates in SA. In doing so, this study contributes to the theoretical understanding of the impact HEA has on individual well-being as articulated by Amartya Sen's capability approach theory (Sen, 2001). At the outset, this study used relevant theories (human capital theory and capability approach theory) to design a framework to guide the study, firstly, and secondly, to make sense of the collected data and observations by explaining their meanings in a manner that deepens our understanding either through confirmation of what we already know or by offering a new perspective. Consequently, this study makes an empirical, theoretical and methodological contribution to our understanding of how HEA affects the various dimensions of multidimensional deprivations experienced by individuals in SA. I discuss these contributions in the next few paragraphs.

In this study I sought to bring a new perspective to our understanding of the benefits of HEA. I have done so by shifting the focus from an emphasis on human capital theory outcomes, i.e. income and employment, to a capability approach outcome, i.e. multi-dimensional well-being. However, in keeping with Sen's capability approach, which argues that the human capital theory must not be discarded because it has benefits, this study also investigated the impact of HEA on income and employment opportunities of respondents. According to Sen (1997, p. 1959), research "must go beyond the notion of human capital, after acknowledging its relevance and reach. The broadening that is needed is additional and cumulative, rather than being an alternative to the 'human capital' approach." For example, in this study, 84% of the respondents reported having a stable income, while 64% said their access to meaningful employment improved as a result of their university education. If we are to stop here, one is likely to conclude that the majority of the respondents are well-off. However, upon further investigation, the data also show that only 41% of the respondents indicated they have access

to self-development opportunities and only 50% perceived they have equal opportunities in society. From a social justice perspective – an idea strongly embedded in the capability approach - a lack of access to opportunities, in any form, is an indication of the presence of social exclusion and social inequality. The data shows that the majority of graduates were absorbed into the labour market due to their university education. This indicates that HE had a significant impact on the lives and well-being of the graduates in terms of intellectual, interpersonal and employment opportunities. Moreover, HEA expanded the real freedoms of graduates to live the kind of lives they value. In this regard, this study shows that HEA has significance beyond mere human capital, since the graduates indicated their HEA expanded their cognitive skills, gave them a better understanding of society, raised their levels of self-awareness and made them more conscious about their society and their role within society. Hence, the data reaffirms that the capability approach is a much better framework to assess the benefits derived from university education.

A second contribution to knowledge is methodological. Although a large body of literature exist on poverty, well-being and higher education in SA, this study was the first study to investigate the correlation between HEA and multidimensional well-being in SA using a MMR design. Most poverty/well-being studies - unidimensional or multidimensional – in SA (and globally) are usually conducted using either quantitative methods or qualitative methods. However, several scholars (Alkire & Foster, 2011; Bamberger et al., 2010; Kanbur, 2003; Mitra et al., 2013) have called for more poverty/well-being studies using MMR due to its superiority as a research methodology (Ravi Kanbur, 2003). Moreover, very few studies measuring multidimensional poverty/well-being use MMR (Kanbur, 2003). One of the first post-apartheid studies (Woolard & Leibbrandt, 1999) attempting to draft a profile of poverty in SA used income quantitative data, and so did several other studies after that (see for example Borat & Kanbur, 2005; Budlender, 2008; HSRC, 2014). Several studies investigating the role of higher education in SA have been carried out on the returns of higher education using quantitative data and focusing on human capital theory outcomes (see for example Baldry, 2016; Mwabu & Schultz, 1996; Reddy, 2004; Van der Berg, 2002). Only one recent study (Walker & Fongwa, 2017) investigating the role of universities in employability and human development in SA used a MMR. However, the goal of their study focused on employability, and therefore, did not investigate the multi-dimensional well-being attributes of graduates. Therefore, this study made a methodological contribution to the literature on multidimensional poverty/well-being

by having mixed qualitative and quantitative methods to develop a multidimensional well-being for HEA in SA.

A third contribution is empirical. The benefits of higher educational attainment remains a contested issue in the literature, as discussed in chapter 2. While the human capital benefits of HEA is widely reported in the literature, the capability approach and its derived benefits is an emerging field and we are not yet fully sure of the full set of capabilities derived from HEA. Moreover, functionings and capabilities vary with different researchers providing different lists (Alkire, 2002). Nevertheless, Sen is against a specific list of capabilities that all societies should strive for, because this will allow for a more flexible approach since every society is different (Unterhalter, 2004). While this study never intended to, or does not, offer a list of capabilities, the triangulated findings show respondents were generally of the opinion that their HEA improved both their monetary and non-monetary returns and improved their well-being. Analysis of the data shows that generally respondents experience human flourishing in a number of functionings such as income, employment, cognitive thinking skills, empowerment, health, access to knowledge, sense of being an active citizen, enhanced perceptions of the individual and being responsible individuals and social awareness. Interestingly, the majority indicated their HEA improved their lives in terms of non-monetary aspects, which further suggests that capabilities are regarded as more important than money. During the qualitative interviews it became apparent that these non-monetary capabilities are essential to graduates because they seem to enlarge graduates' 'quality of life'. This supports the capability theory's argument that deprivation is much more than opulence or income (Alkire, 2005). However, these achievements were not uniform across all respondents. However, in spite of their achievements in several dimensions, graduates still experience deprivation in certain dimensions such as social exclusion and home ownership, as discussed in chapter 6. Although these empirical findings are not new (see for example Cockerill, 2014; Flores-Crespo, 2007; Kapur & Crowley, 2008; Murray, 2009; Thomson, 2008), they confirm that HEA plays some form of role in expanding human flourishing. In other words, these findings add to our empirical knowledge about the extent and nature of how HEA expands the capabilities of university graduates such as employment skills, cognitive skills and social skills. Although educational attainment has long been proposed as a primary cause of reducing poverty, surprising little empirical evidence explores the multi-dimensional role of HEA on well-being. Similarly, while a large body of literature exists on the general impact of educational attainment on poverty/well-being, this study contributes to our knowledge about the role of

HEA in multidimensional well-being after graduating from university. This is an important contribution to the literature on capabilities since most studies in the literature focus on primary and secondary educational attainment (Barro & Lee, 1993; Bloom et al., 2006; Botha, 2010; Psacharopoulos & Patrinos, 2004).

A fourth contribution this study makes to knowledge is related to the wider benefits derived from HEA. Several studies on the outcomes of higher educational attainment points to multi-dimensional benefits university graduates derive from it. These include, but not limited to, higher incomes and better employment opportunities (Flores-Crespo, 2007), improved health (Hammond, 2002; Johnston, 2004), living standards satisfaction (Heckman & Corbin, 2016), empowerment (Finley, 2017; Lanzi, 2007; Tilak, 2003), active citizenship (Brennan, Durazzi, & S  n  , 2013), overall well-being (Brennan et al., 2013) and expansion of individual capabilities (Alkire, 2002; Flores-Crespo, 2007). Moreover, it is generally agreed in the literature that HEA is positively correlated to both economic as well as human development, at least at the individual level (Flores-Crespo, 2007; Robeyns, 2006a; Tilak, 2003). According to Flores-Crespo (2007), HEA benefits graduates in terms of higher income and access to better employment opportunities. He asserts that higher income serves as a means of human development because university graduates can use their increased incomes to enlarge their capabilities by furthering their education or starting a business. Also, he states that better employment opportunities is an important functioning to expand individual capabilities. The data from this study shows that 74% of graduates earn a meaningful income, while 78% of graduates found meaningful employment within six months after graduating from university. These are important findings because it reaffirms the findings of other studies that university education generally leads to better employment and income. However, the data also shows that nearly 15% of graduates took 7 – 12 months to find meaningful employment, which also confirms that higher education does not always benefit everyone, as discussed in chapter 2. For example, one of the respondents, Liezl who graduated with a degree in engineering, said that she is very satisfied with her income, while another graduate, Trevor who holds a degree in psychology, said he is earning a low income and struggling to survive because he is now repaying his study loan.

There is a large body of literature on the correlation between educational level and health and it is generally agreed in the literature that increased levels of educational attainment lead to

better health condition. However, analysis of the quantitative data (see chapter 5) showed that graduates who could afford private medical care generally reported their health condition as excellent, while those relying on government health care centres situated far away from their homes reported their health condition as average. According to Sen, access to adequate health care is a basic capability and we can see here that a lack of access to adequate health care services lead to the absence of an elementary functioning, i.e. being in good health (Alkire, 2002). This is confirmed by the quantitative data of this study. However, in the qualitative interviews most of the interviewees said their HEA made them more conscious about their health and many lead active lifestyles. This also contributes to the literature on the correlation between education and health, which states that higher levels of education and increased incomes generally lead to better health conditions (Vila, 2005).

The triangulated findings related to standard of living show two divergent notions of standard of living. Firstly, according to Sen, standard of living should include all 'valued functionings' – material and non-material (Alkire, 2002). However, in the qualitative phase, respondents were asked to explain their rationale for satisfaction or dissatisfaction with their standard of living, most did so mainly in terms of material achievements. They cited reasons such as having essential necessities, consumer durables and material possessions as the main causes for their satisfaction (see section 6.3.2 for a discussion on this). In terms of their satisfaction with their standard of living, the quantitative data shows that a significant positive correlation exist between income and standard of living satisfaction. Moreover, 60% described themselves as wealthy, while a further 30% said they have a comfortable standard of living. This shows that material well-being remains an important factor in living standard satisfaction. Secondly, in SA access to HEIs is almost always seen as a way out of poverty and social mobility (Melanie Walker & Fongwa, 2017) for disadvantaged students, and therefore, it is perhaps understandable that standard of living satisfaction is seen in terms of material achievements. Moreover, in my view, considering SA's past legacy of racial segregation, ownership of material possessions could be important for social recognition (Lanzi, 2007), or to avoid social exclusion. If we are to recall Adam Smith's discussion (see my explanation of this in section 2.2 of chapter 2) about how a labourer thinks it is necessary to own a linen shirt to avoid feeling ashamed and avoid social exclusion. Just like the labourer's linen shirt is not a necessity, interviewees regard ownership of these material assets as important for social recognition, and perhaps as a sign of social mobility. I believe this is an important conclusion to expand our knowledge about perceptions of university first-generation graduates, who are now part of SAs emerging

middle-class. Overall, the triangulated data show improved standards of living for most of the respondents, which supports the findings of other empirical studies found in the literature that university education has immediate individual economic benefits and facilitates upward social mobility (Peercy & Svenson, 2016). Although the respondents recorded high levels of asset ownership, but in terms of high-value assets such as house and car, most of the participants were not able to afford them. This suggests that although their HEA led to improved income levels and living standards, it was not sufficient to purchase items such as a house or a car.

With regards to the non-monetary benefits derived from HEA, respondents offered a number of perspectives on how their university education impacted their well-being. In the qualitative interviews, respondents were asked how their HEA affected their life in general. In response, there was a general consensus among interviewees that their university education had a positive effect on their lives in terms of empowerment, cognitive/thinking skills, personal development, self-confidence, access to knowledge and social consciousness. The body of literature on human development generally states that education leads to human capital (income and employment) which leads to human capabilities, which leads to expanded human well-being. This view was articulated by Sen in *Development as Freedom* (1999) when he wrote that there is a strong relationship between human capital and human capabilities. While the former focuses on the productive capabilities of individuals, the latter focuses on their substantive freedoms to lead the kind of lives they have reason to value and making real choices. There is a general consensus in the literature on this (Flores-Crespo, 2007; Lanzi, 2007; Robeyns, 2006a; Saito, 2003). The triangulated data of this study shows that HEA improved the human capital of the respondents, but it also expanded their human capabilities. In this regard, this study makes a contribution to the literature by confirming the causal relationship between educational attainment, human capital and human capabilities.

Overall, the empirical findings provides further evidence that HEA is essential for acquiring the necessary capabilities and functionings to be or do the things individuals value as important. This was evident from the findings because most participants attributed their current capabilities and achievements to their HEA. This study also considered poverty/well-being from a multidimensional perspective. Although it is now generally accepted and understood that poverty is multidimensional (Wagle, 2013), our knowledge of the full extent of it is still limited in SA. This study contributed to the concept of multidimensional well-being, in the

context of SA, by exploring the subject in a more in-depth way. Therefore, the empirical findings contribute to the body of literature on the correlation between HEA and multidimensional well-being in SA.

Theoretically, this study also contributed to the current knowledge on the correlation of HEA and human well-being in a number of ways. Firstly, the Human Capital Theory states that educational attainment leads to individual returns in terms of higher income and employment opportunities (Psacharopoulos & Patrinos, 2004). While the quantitative findings were in agreement on this, the qualitative findings showed that individual returns extends far beyond only income and employment to include several non-monetary returns, as mentioned above. On the other hand, the findings strengthens the theoretical body of knowledge of Sen's capabilities and functionings by showing that these are regarded as more important than income by participants. Therefore, suggesting and confirming that although monetary aspects are important to the respondents, the non-monetary aspects play a much larger role in the overall well-being of individuals, which is articulated by several scholars. Most studies on multidimensional poverty and well-being use income, health and education as dimensions to measure deprivation. However, this study went further by including employment, living standards and social justice as dimensions. The findings showed that being employed does not necessarily mean having sufficient income or having a decent standard of living. While most participants were engaged in meaningful full-time employment and having decent income levels, several participants indicated they were not entirely satisfied with their living standards, which suggests that satisfaction of living standard goes beyond merely having employment and income, and that well-being is indeed multi-dimensional (Sen, 1985). Therefore, the findings further strengthen our knowledge of the characteristics of overall human well-being. Moreover, this study supports Sen's notion that an individual could be well (healthy), without being well-off (wealthy) and without being able to have an adequate standard of living (Sen, 1985).

To conclude this section, this thesis study contributed to the literature on the correlation between HEA and multidimensional well-being by demonstrating that: (i) the benefits of HEA goes beyond income and employment, (ii) the assumptions of Sen's CA is correct in arguing that human well-being is the sum total of both monetary and non-monetary capabilities, and (iii) MMR produces rich and in-depth analysis of multidimensional well-being. In sum, it

provides sufficient causal empirical evidence that university education expands human well-being beyond monetary measures, notwithstanding the centrality of monetary benefits.

7.4 Limitations

Although this study makes a useful contribution to the literature on HEA and multidimensional poverty and well-being, it also has a number of limitations. Firstly, the data were collected from respondents who attended eight universities located in three of SA's nine provinces. Therefore, the findings cannot be generalized for the whole of SA. Secondly, all the data for this study were collected online. Therefore, individuals with no internet access were automatically excluded from this study because I did not intend to measure extreme poverty, or those living on less than \$2 per day (UNDP, 2008), neither acute dimensional poverty, poverty where the poor cannot meet the minimum necessities of life (Alkire & Santos, 2011). Thirdly, this study only included individuals who responded to social media and email invitations to participate in the study. As a result, this study does not consist of a random sample and might, therefore, reflect a bias in the sense that the sample might not be representative of the whole population. Having said that, this also means that every individual who participated did so with full commitment because they obviously had a keen interest in the research topic. Finally, it was not part of this study's research questions to explore what processes take place during university education that help expand students' capabilities, which ultimately enhances their well-being. However, this is an important aspect for fully understanding how university education nurtures the capabilities of students and therefore, is an important aspect for future research.

Although this study has the above limitations, overall I think these limitations had a minor impact on the research, and the validity and reliability of the study remain intact. I say these limitations had a minor impact on this study because at the outset my goal was to develop a multidimensional wellbeing framework for HEA in SA. As a South African, I know that in SA, a university graduate usually lives in developed parts of the country where internet and telecommunications infrastructures are available. Therefore, access to participants was not a

problem. Secondly, my research goal was never to measure acute multidimensional poverty because those living in extreme poverty are unlikely to have achievement HEA.

7.5 Policy recommendations

This study is an attempt to develop a multi-dimensional well-being framework of university graduates in SA by profiling what matters to university graduates. In doing so, this study sheds some light on the important role HEA plays in expanding the well-being of university graduates. The data consistently shows that graduates derive a range of benefits from attending university. These benefits are multi-dimensional, economic, non-economic and far-reaching. The results indicate significant benefits in terms of increased income, accessing employment opportunities, which would not have been possible without university education. Furthermore, HEA expanded the capabilities of graduates, allowing them to become valuable members of their communities who attained social mobility. In view of the above analysis, I offer the following policy recommendations to assist in further expanding human flourishing and well-being amongst university graduates.

7.5.1 Expand access to higher education

In reviewing the literature on university access in SA, it became evident that there are many barriers for young South Africans wishing to enter university. The 2012 General Household Survey (StatsSA, 2014a) shows less than 4.3% of individuals aged 18 – 29 were enrolled in higher educational institutions, indicating limited access to higher education for most and suggesting few South Africans have opportunities to improve their well-being. Also, during the qualitative interviews, participants also mentioned that gaining access to HEIs is challenging, particularly for black South Africans. The findings of several studies (Baldry, 2016; CHE, 2002; Wilson-Strydom, 2011) also draw similar conclusions. Furthermore, both the quantitative and qualitative findings show that individuals with university education are able to expand their overall well-being and capabilities. Therefore, I recommend that there should be wider access to higher education for individuals, especially those from previously disadvantaged communities and rural areas. There is an urgent need for the government of SA and HEIs to formulate an actionable plan to ensure the poor have access to HEIs and access to funding

opportunities. Notwithstanding the widening access and participation of students, especially first-generation students, a number of studies also show that granting access to HEIs is insufficient because these students are often under-prepared for the challenges required to successfully complete university education due to a lack of capabilities and pre-university schooling, as well as financial resources to pay university fees (CHEC, 2013; Walker, 2008; Wilson-Strydom, 2015a). These challenges faced by students often lead to high numbers of students dropping out of university (Letseka et al., 2010). Therefore, both the government and HEIs need to put in place a transparent and accessible funding scheme to help students pay for higher education, as well as a program to ensure students complete their education once admitted to university. Also, programs aimed at widening access to and participation in HEIs need to students those from low-income families, especially women and those in rural areas. In SA, this is a particularly important issue, because access to higher education, participation in higher education and high dropout rates at university are major issues affecting black students in general (Letseka & Maile, 2008).

7.5.2 University study programs and labour market demands

The qualitative findings show that a number of graduates found it difficult to secure meaningful employment soon after graduating from university. In some instances graduates had to retrain in order to secure employment. This indicates that students' chosen field of study could hinder employment opportunities. A number of studies have shown that field of study is an essential determinant of graduate employment/unemployment. According to a study conducted by Bhorat et al. (2012) field of study is a key determinant of graduate unemployment in SA. A later study concluded that graduates in SA struggle to find employment because they chose the wrong field of study (Oluwajodu et al., 2015). Similarly, a study conducted by the Cape Higher Education Consortium concluded that graduates' field of study is statistically the strongest predictor of undergraduate employment in SA (CHEC, 2013). Walker & Fongwa (2017) also found that field of study strongly influences graduate employability. Therefore, the government and HEIs need to place emphasis on establishing a form of mechanism to assist graduates in choosing fields of study which are aligned to the needs of the labour market to avoid graduate unemployment.

7.5.3 Transformation of the public health system

The data shows that only graduates with private health care insurance receive adequate health care. Data from the qualitative interviews indicate that public health care facilities are lacking or sub-standard, especially in poor residential areas. In this regard, the data further indicates that access to health care services is limited in two ways. Firstly, the distribution of health care clinics is insufficient. Many graduates live in areas where there is no clinic. Secondly, the facilities and equipment are insufficient or non-functional. Also, medical staff at clinics are often over-worked because of the large areas these clinics need to serve. Consequently, those attending public health care clinics receive inadequate health care services. Although increased education has a positive effect on the health condition of graduates (Johnston, 2004), access to quality health care is an essential basic human right. Therefore the government has a responsibility to ensure that individuals, especially in rural areas, have access to quality health care facilities and services. According to Sen (1999), the access to adequate health care opportunities has an influence on individuals' substantive freedom to live a better life. This view is supported by another which reveal that improved access to health care services enhances an individual's prospect of experiencing a healthier life (Mayosi & Benatar, 2014). Health is an important determinant of well-being. Therefore, government should endeavour to work with local governments and councils to enhance the availability and quality of health care services to all individuals. Furthermore, better attention needs to be given to the possibility of implementing an efficient national health care system in order to provide adequate health care services to the poor.

7.6 Recommendations for future research

In the context of SA, this study is the first to investigate the impact of HEA on multidimensional poverty. In using a MMR approach, this study integrated quantitative and qualitative data to create a rich picture of the impact HEA has on the overall economic, social and non-monetary well-being of respondents. The findings of this study deepened our understanding of the complex social phenomena of multidimensional poverty and well-being of respondents. As with most research, this study and its findings give rise to new research questions for further investigation. Based on the discussion of this chapter, I think future research should further explore the role of social justice in creating the 'space' to enable individuals' 'doings' and 'functionings' according to Sen's CA. Future research should also further explore the impact

HEA has on the living standards of individuals. More in-depth focus is needed to fully understand HEA's impact on the many dimensions of individuals' living standards. Another aspect for further research is to investigate how university education helps to expand human well-being. Despite the important role of university education in human development and well-being, we still do not know enough of how university education functions and it is often treated as a 'black box' – i.e. the internal education system is too complex to be readily understood. Further research is needed to open and look inside this black box of universities to fully understand its impact on human well-being and capabilities. Finally, the findings of this study are limited to respondents who graduated from eight universities in SA. Therefore, future research should also extend the scope of the research to include all universities in SA in order to produce findings from a wider national sample. I hope to publish the findings of my study in the near future. Also, I would like to further explore the causal relationship between HEA and multidimensional poverty in SA in the near future by looking at national panel data with the goal of developing a more robust and nation-wide study.

7.7 Concluding remarks

HEA is a viable and highly sustainable method to reduce multidimensional poverty and inequalities in SA (National Planning Commission, 2011), as evident by the findings of this study and other studies in other countries (see for example Arias, Giménez, & Sánchez, 2016; Bhattarai, 2016). Moreover, as advocated by a number of international declarations and reports such as the UNDP's *Millennium Development Goals* (2008), UNDP's *Human Development Report* (2014), education reduces poverty. With SA's high rate of poverty and levels of HE participation rate, I hope the findings will contribute to increased efforts to widen access to HE in SA. The study has found that generally respondents had the following capabilities: (i) cognitive skills, (ii) abilities to access a range of knowledge, (iii) employability, (iv) empowerment, and (v) a desire for personal development. Furthermore, the study found that HEA has almost no impact on social justice and the study participants reported mixed experiences with social justice issues. I think, and know as a South African, this is due to SA's apartheid legacy. It will take time to reduce the inequalities in the country, and although a lot has already been achieved, the country still needs to go a long way to redress all its existing inequalities. Nevertheless, I think wider access to higher education will help to close the inequality gap, but I do not think the various social justice issues raised by the participants will

be resolved soon. This is because the issues of social justice are complex, and almost half a century of discrimination, social exclusion and inequalities between the various races, from 1948 to 1994, will take time to resolve. Overall, the findings of this study demonstrated that HEA has the most impact on the dimensions of employment, income and health and the least impact on social justice. Finally, the MPI calculation showed that only 16% of individuals with HEA was multidimensionally poor in 36% of the weighted indicators used to measure multidimensional poverty. Moreover, none of them was vulnerable to poverty or in severe poverty. This suggests that HEA plays an important role in expanding human well-being. While the data shows that at times HEA fails to deliver expanded well-being at times, this is not the norm. Overall, this study shows that university experience plays a fundamental role in widening both instrumental and intrinsic functionings of graduates, leading to human flourishing, which allows individuals to do and be what they value.

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Appendices

Appendix A

ONLINE QUESTIONNAIRE

INTRODUCTION

Do you have an undergraduate degree? Yes No

If yes, in which year did you graduate? _____

Please indicate your degree major: _____

PART 1: DEMOGRAPHICS

1. Please indicate your gender Male Female
2. Please state your population group
 - African / Black
 - Coloured
 - Indian / Asian
 - White
 - Other: _____
3. Marital status
 - Married
 - Single
 - Divorced / separated
 - Widowed
4. How many people are there in your household? _____
5. Are you currently employed full-time?
 - Yes
 - No
6. Please indicate your age (in years) _____.

PART 2: EMPLOYMENT & INCOME

7. How many months did it take you to find full time employment or start a business after graduation? _____ months
8. Is this employment or business related to your undergraduate degree?
 - Yes
 - No
9. Who is the main breadwinner in your household? _____
10. How many breadwinners are in your household? _____
11. Which sources of income do you have? (select as many as needed)
 - Interest received on deposits/loans/savings/shares
 - Regular allowances received from individuals not living with you
 - Salaries and wages
 - Profit from business or professional practice
 - Income from letting of fixed property

- Alimony/maintenance from divorced spouse, family members, etc.
- Social welfare grants

12. Which income mentioned in Q9 is the main income?

- Interest received on deposits/loans/savings/shares
- Regular allowances received from individuals not living with you
- Salaries and wages
- Profit from business or professional practice
- Income from letting of fixed property
- Alimony/maintenance from divorced spouse, family members, etc.
- Social welfare grants

13. To what degree has your financial situation improved as a result of your university degree?
(Please circle a number.)

Significantly better 1 2 3 4 5 Significantly worse

14. Are you employed?

- Yes (If yes, go to question 15.)
- No (If no, skip to the next section.)

15. Please indicate your monthly household income (in South African Rands)

- 0 – 6,000
- 6,001 – 12,000
- 12,001 – 18,000
- 18,000 – 24,000
- 24,001 – 30,000
- 30,000 and above

PART 3: HEALTH

16. Please rate your own health condition. (please circle a number)

Poor 1 2 3 4 5 Good

17. Are you covered by a medical aid or any other private health insurance?

- Yes
- No

18. Do you suffer from any chronic illness/long term illness or condition? (e.g. TB, AIDS, cancer, or other illness.)

- Yes
- No
- Don't Know

19. Can you afford private medical care?

- Yes
- No

20. How much time does it take to reach the nearest health clinic?

- Very nearby
- Within reasonable distance
- No health centre in my area
- Health centre is too far

- Don't know
21. Does this health centre have enough medical supplies/facilities to provide adequate health care?
- Yes
 - No
 - Don't Know
22. Have your health problems or the health problems of anyone in your household been caused/made worse by a lack of access to health services?
- Yes
 - No

PART 4: STANDARD OF LIVING

23. What kind of house are you living in?
- House
 - Outbuilding
 - Flat
 - Living with family
 - Other: _____
24. My current accommodation is _____.
- owned
 - rented
25. Is the house connected to an electricity supply?
- Yes
 - No
26. Would you say you and your household are at present _____?
- Wealthy
 - Very comfortable
 - Reasonably comfortable
 - Poor
 - Very poor
27. Taking everything into account, how satisfied are you with the way you live these days? (Circle one response)
- Very satisfied 1 2 3 4 5 Very dissatisfied
28. How much monthly income do you think is necessary to keep a household such as yours out of poverty? _____
29. How far above or below the level of income (mentioned in Q25) would you say your household is?
- A lot above that level of income
 - A little above
 - About the same
 - A little below
 - A lot below that level of income
 - Not sure
30. Which of the following items do you own? (Please select all that apply).
- Computer / laptop
 - TV set(s)
 - Hot running water
 - An electric stove

- Fridge/freezer
- Land line telephone
- Cell phone
- Washing machine
- Built-in kitchen sink
- One or more motor vehicles

PART 5: SOCIAL JUSTICE

31. Over the last two years, how safe do you feel inside your home?
- More
 - The same
 - Less
32. In the past 12 months, has any person in your household been a victim of crime?
- Yes
 - No
33. Have there been times in the past year when you have felt isolated and cut off from society for any of the following reasons? (Circle all that apply).
- Lack of money
 - Lack of own transport
 - No friends/family
 - Irregular or expensive public transport
34. How safe do you feel walking alone in your area after dark?
- Very unsafe 1 2 3 4 5 Very safe
35. How safe do you feel when you are alone in your own home at night?
- Very unsafe 1 2 3 4 5 Very safe
36. In your opinion, are there adequate self-development opportunities (e.g. learning a new skill, volunteering, etc.) available to you?
- Yes
 - No
37. Do you think that you have fewer economic or political opportunities than others?
- Yes
 - No
 - Don't Know
38. Thinking about your answer in Q 34, which of the following factors do you think contribute to your answer?
- Religion
 - Ethnicity
 - Minority group
 - Poverty level
 - Living area
 - Education

THANK YOU FOR PARTICIPATING IN THIS RESEARCH STUDY.

Appendix B

SEMI-STRUCTURED INTERVIEW QUESTIONS

Overview

1. Please describe how your university education has affected your life in general.

Income & Employment

2. In terms of income and employment, could you explain your views on how your university education has influenced your income and employment opportunities?
3. Socioeconomic status is a measure of an individual's or family's economic and social position based on education, income, and occupation. Thinking about the definition, how do you think your socio-economic status has improved as a result of your education? And if so, could you please explain how?

Living Standards [... refers to the level of wealth, comfort, material goods and necessities available to a certain socio-economic class in a certain geographic area.] (Wikipedia)

4. How would you explain your satisfaction level of your standard of living?
 - a. Could you perhaps give one or more examples to clarify your viewpoint?
5. In your opinion, how would you define a comfortable standard of living for yourself?
 - a. What items (possessions, benefits) would you say are important to you?

Health

6. How do you perceive your own health?
7. Would you care to discuss your views on available health facilities such as day-care clinics/government hospitals to you in your area?
 - a. Are the facilities and services adequate at these health clinics?

Social justice [... refers to the ability people have to realize their potential in the society where they live.]

8. What does social justice mean to you?
9. How do you feel about equal opportunities for everyone in South Africa?
 - a. Do you think that all individuals have the same amount of opportunities available to them?

Closing

10. Is there anything else you would like to add that we have not covered?
11. Considering your living standards and financial situation as a whole, could you describe how your university education has influenced them?
 - a. What aspects would you particularly single out as having been influenced the most?
12. Is there anything else you would like to discuss or add?

Thank you for participating in the interview.

Appendix C

Request to participate in a telephonic research interview

Dear Respected University Graduate,

I am a doctoral student at the University of Southampton, England, and I'm looking for graduates willing to participate in a telephonic interview. Interviews will be conducted through Skype/landline telephone at your earliest convenience.

Based on my sample, graduates would need to be from one of the following universities in South Africa:

1. Nelson Mandela Metropolitan University (NMMU)
2. North-West University (NWU)
3. Rhodes University (RU)
4. University of Fort Hare (UFH)
5. University of Limpopo (UL)
6. University of Venda (UNIVEN)
7. Walter Sisulu University (WSU)

Below I outline all the information, including the interview questions, to allow you to make an informed decision to participate. The interview will last for about 15 minutes.

Also, please feel free to share this invitation with other university graduates whom you know. The more respondents I get, the better the data reliability will be.

RESEARCH PURPOSE

The purpose of my research is to investigate the impact of higher educational attainment on graduates' well-being in South Africa.

This study has been approved by the Ethics Committee of the University of Southampton, under the following reference numbers:

Study title: Developing a multi-dimensional well-being framework for Higher Education: evidence from South Africa

Study reference: 24749532

Ethics reference: 2013Q1-2

PARTICIPANT SELECTION AND PURPOSE OF STUDY

You are invited to participate in this telephonic interview which investigates the impact of higher educational attainment on poverty alleviation. The aim of my study is to assess the socioeconomic benefits of higher education to undergraduate students who graduated from South African universities. You are kindly invited to voluntarily participate in this study.

DESCRIPTION OF THE STUDY

The interview should take approximately 15-30 minutes to complete. You may request to stop the interview or refuse to answer any question at any time. By conducting these interviews, I hope to gain a deeper understanding of how university education impacts poverty reduction in South Africa.

PROCEDURE AND RISKS

1. I would like to record the interview, if you are willing, and use the tapes to write my thesis. I will record the interview only with your written consent, and will ask that no personal identifiers be used during the interview, to ensure your anonymity. Please feel free to say as much or as little as you want. You can decide not to answer any question, or to stop the interview any time you want. The tapes and transcripts will become the property of this research project.
2. All the recordings and recording transcripts (or copy of notes taken) will be kept anonymous, without any reference to your identity, and your identity will be concealed in any reports written from the interviews. Your participation in this study will be confidential and all responses to the telephone interview will be reported in summarized form and not by individual respondent.
3. There are no known risks associated with participation in the study.
4. Your participation in this study will include one telephonic interview. This interview will involve a Skype video call, if possible, otherwise a landline telephone call.

COST COMPENSATION

Participation in this study will involve no costs or payments to you.

CONFIDENTIALITY

All information collected during the interview will be kept strictly confidential. No publications or reports from this interview or research project will include identifying information on any participant. If you agree to voluntarily participate in this interview, please sign your name on the following page.

If you have any questions, please feel free to contact me at fasliemiller@gmail.com

INTERVIEW QUESTIONS

1. Please describe how your university education has affected your life in general.
2. In terms of income and employment, could you explain your views on how your university education has influenced your income and employment opportunities?
3. Socioeconomic status is a measure of an individual's or family's economic and social position based on education, income, and occupation. Thinking about the definition, how do you think your socio-economic status has improved as a result of your education? And if so, could you please explain how?
4. How would you explain your satisfaction level of your standard of living?
 - a. Could you perhaps give one or more examples to clarify your viewpoint?
5. In your opinion, how would you define a comfortable standard of living for yourself?
 - a. What items (possessions, benefits) would you say are important to you?
6. How do you perceive your own health?
7. Would you care to discuss your views on available health facilities such as day-care clinics and government hospitals in your area?
 - a. Are the facilities and services adequate at these health clinics?
8. What does social justice mean to you?
9. How do you feel about equal opportunities for everyone in South Africa?
 - a. Do you think that all individuals have the same amount of opportunities available to them?
10. Is there anything else you would like to add that we have not covered?
11. Considering your living standards and financial situation as a whole, could you describe how your university education influenced them?
 - a. What aspects would you particularly single out as having been influenced the most?
12. Is there anything else you would like to discuss or add?

Thank you for taking the time to assist with this research.

Sincerely,

Faslie Miller

Appendix D

INTERVIEW CONSENT FORM

Study title

Developing a multi-dimensional well-being framework for Higher Education: evidence from South Africa

Researcher name: Faslief Miller

Study reference: 24749532

Ethics reference: 2013Q1-2

Participant selection and purpose of study

You are invited to participate in this study which investigates the impact of higher educational attainment on well-being. The aim of my study is to assess the socioeconomic benefits of higher education to undergraduate students who graduated from South African universities. You are kindly invited to voluntarily participate in this study.

Description of the study

The interview should take approximately 20-40 minutes to complete. You may request to stop the interview or refuse to answer any question at any time. By conducting these interviews, I hope to gain a deeper understanding of how university education impacts poverty reduction in South Africa.

Procedure and Risks

1. I would like to record the interview, if you are willing, and use the tapes to write my thesis. I will record the interview only with your written consent, and will ask that no personal identifiers be used during the interview, to ensure your anonymity. Please feel free to say as much or as little as you want. You can decide not to answer any question, or to stop the interview any time you want. The tapes and transcripts will become the property of this research project.
2. All the recordings and recording transcripts (or copy of notes taken) will be kept anonymous, without any reference to your identity, and your identity will be concealed in any reports written from the interviews.
3. There are no known risks associated with participation in the study.

Cost Compensation

Participation in this study will involve no costs or payments to you.

Confidentiality

All information collected during the interview will be kept strictly confidential. No publications or reports from this interview or research project will include identifying information on any participant. If you agree to voluntarily participate in this interview, please sign your name on the following page.

Data Protection

I, _____, agree to be interviewed for the research entitled '**The impact of higher educational attainment on poverty alleviation: evidence from South Africa**' which is being conducted by **Faslie Miller** from the University of Southampton, United Kingdom.

Furthermore:

1. I certify that I have been informed of the confidentiality of information collected for this project and the anonymity of my participation.
2. I have been given satisfactory answers to my inquiries concerning research procedures and other matters.
3. I have been advised that I am free to withdraw my consent and to discontinue participation in the interview at any time without prejudice.
4. I agree to participate in this **recorded interview**. I understand that the interview and related materials will be kept completely anonymous, and that the results of this study may be published in an academic journal or book.
5. I agree that any information obtained from this research may be used in any way thought best for this study.
6. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure.
7. I have read and understood the explanations provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.
8. I have been given a copy of this consent form.

Name of interviewee: _____

Signature of Interviewee: ☐ (Checking this box will be regarded as a signature.)

Date: _____

I have explained the project and the implications of being interviewed to the interviewee and I believe that the consent is informed and that he/she understands the implications of participating in the interview.

Name of interviewer: Faslie Miller

Signature of interviewer: ☐ Date: _____

Appendix E

Theoretical framework, dimensions and indicators

Figure E-1: Theoretical framework

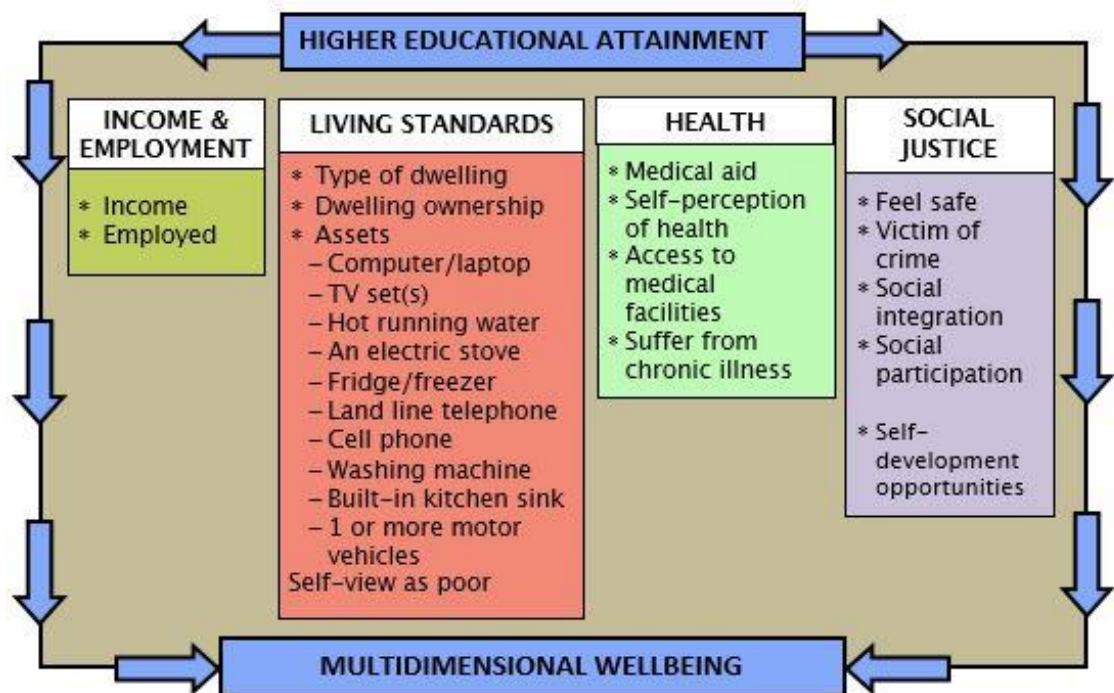


Table 7-1: Dimensions and indicators of theoretical framework

Dimensions	Indicators
Income and Employment	<ul style="list-style-type: none"> • Income • Employment status
Living Standards	<ul style="list-style-type: none"> • Type of dwelling • Dwelling ownership • Assets <ul style="list-style-type: none"> – Computer/Laptop – TV set/s – Hot running water – An electric stove – Fridge / Freezer – Land line telephone – Cell phone – Washing machine – Built-in kitchen sink – One or more motor vehicles
Health	<ul style="list-style-type: none"> • Self-view as poor • Medical Aid • Self-perception of health • Access to medical Facilities • Suffer from chronic illness
Social Justice	<ul style="list-style-type: none"> • Feel safe • Victim of crime • Social integration • Social participation • Self-development opportunities

Source: Adapted from: Alkire & Santos (2010), Cohen (2009) and SA Census 2011 data (StatsSA, 2011a).

Appendix F

Respondents' views on how HE affected their lives

Table 7-2: Respondents views on how HE affected their lives in general

Person	Response to question on how HE affected life in general
Andani	My education affected me in a great way. It strengthened me and developed me personally. It impacted my understanding of the world and gave me a sense to develop my society. It built me as a person and changed my life. It developed me as an active citizen. It enabled my intellectual skills and I learned how to organize things.
Bokang	It has allowed me to open up to the realities of life and opportunities to go to a good university which led to a good job.
Cedric	My university education changed my life and I was able to get a decent job. I'm now able to support my siblings.
David	My education informed me better about the world around me and I am now able to make better choices about personal development. I now have a better insight about life in general.
Hilda	It improved my life and my family's life. My financial and employment status improved.
James	It affected my life in a good way. I got a job and I'm living well. It made me a better person in terms of my thinking skills. My status improved.
Liezl	Quality of life improved. I became marketable and gained financial literacy. My outlook improved. I gained personal growth and got global exposure due to my degree.
Magada	It made me able to socialize with different people; balance time and money; move from living with my family to living on my own
Maria	Didn't affect my life a lot.
Marion	Learned to be patient
Memory	My education affected my life in so many ways. I'm now more focused. I know what I want and where I'm going. I became more responsible.
Marshall	I am able to help my family, especially the children of my brother with money for their studies.
Newman	It changed my knowledge and the way I see things. I see / understand people now better.
Nelson	My education developed me personally and gave me confidence to say my views.
Nomsa	Attaining a university education has changed my life socially, economically and my world view
Pumla	Education improved my access to employment and my quality of life.
Rendani	Without education I'm nothing. Now I can see where I'm going and I can better decide where to go.
Riandi	Education changed my life. I got a job after I graduated.
Rodney	My life changed in terms of social status and income. I come from a poor family so I struggled to finish my studies. It affected my life greatly.

Siyanda	My education affected my life positively. It opened doors that I could never have entered.
Suzanna	People look at me differently. They think I am more capable and now have a better social status.
Takalani	My university education changed my way of thinking and it made me more independent.
Adisa	Positively, because it opened a lot of opportunities. My education impacted the way I think about life, i.e. thinking critically.
Trevor	Positive effect on my life. It opened me to a different world. I got exposed to the world and the things that are happening. It enlightened me about my career.
Asanti	It improved my life. I'm now able to understand more things about life and can face challenges in life easier.
Tembo	My university education (Media Studies & English) hasn't affected my life a lot. Just after completing my studies, I stayed at home for 2 years before I got a job. If I had pursued other disciplines I would have been better off. Only after I studied Health Information Systems I got an internship at the Dpt. of Health. I finally got a job in a small consulting firm. My education made me open-minded.
Umar	My thinking changed to a more critical way.
Victor	Affected my life by giving me more freedom to do the things I want to do.
Wanda	I learned to assist other people easily
Wynand	Firstly, it helped me find a job (which is quite difficult in SA). I am able to support my girlfriend (who is still studying) and my father.

Appendix G

Applying the Alkire Foster method

12 Steps to a multidimensional poverty measure

The Alkire Foster methodology (Sabina Alkire & Foster, 2011) can be applied in twelve steps, as outlined below (OPHI, 2016a). The first six steps are common to many multidimensional poverty measures; the remainder are specific to the Alkire Foster method.

Step 1: Choose unit of analysis (individual or household).

Step 2: Choose dimensions based on five commonly used methods: (i) through deliberative participatory exercises and perspectives of stakeholders; (ii) from a list-generated public consensus such as the MDGs, for example; (iii) based on implicit or explicit assumptions about what people do value or should value; (iv) based on convenience (limited data availability) or authoritative convention; and (v) based on empirical evidence regarding people's values, consumer preferences and behaviours.

Step 3: Choose indicators for each dimension on the principles of accuracy and parsimony. The AFM requires that the data for all the indicators must be available for all the individuals. In other words, no data can be missing.

Step 4: Set poverty lines by establishing deprivation cut off values for each indicator. This allows for each person to be identified as deprived or non-deprived with respect to each dimension.

Step 5: Apply the poverty lines to each indicator within each dimension and for each individual person. In this step, individuals are identified as being deprived (D) or non-deprived (ND) for each indicator, with respect to the individual's achievement for each indicator's cut off condition. The process is repeated for all indicators in all dimensions. ND means an individual's value in that dimension is higher than the cut off, while D means the value is lower than the cut off.

Step 6: Count the number of deprivations for each person by considering the weighted scores among indicators in order to calculate the weighted sums.

Step 7: Set the second cut off, k , which gives the number of dimensions in which a person must be deprived in order to be considered multidimensionally poor. This means that if $k=2$, an individual who is deprived in two or more dimensions is regarded as multidimensionally poor.

Step 8: Apply cut off k to obtain the number of poor individuals and remove all non-poor data in order to focus on the profiles of the poor and the dimensions in which they are deprived. All information on the non-poor is replaced with zeros. This process of replacing nonpoor data with zero is called *censoring* in the AFM.

Step 9: Calculate the Headcount, H , by dividing the number of poor people by the total number of people. The headcount is merely the proportion of people who are multidimensionally poor.

Step 10: Calculate the Average Poverty Gap, A , which is the average number of deprivations a poor person suffers. This is calculated by adding up the proportion of total deprivations each person suffers and dividing it by the total number of poor persons.

Step 11: Calculate the Adjusted Headcount, M_o . If the data are binary or ordinal, multidimensional poverty is measured by the adjusted headcount, M_o , which is calculated as H times A . Headcount poverty is multiplied by the 'average' number of dimensions in which all poor people are deprived to reflect the breadth of deprivations.

Step 12: Set Weights.

These steps will generate data showing in which dimensions respondents are deprived.

Appendix H

Request to participate in pilot study

1. Email invitation

Invitation to participate in pilot study

Dear _____,

I would like to invite you to take part in a survey I am running as part of my PhD studies. This is only a pilot survey to gather any feedback on question structure and I would therefore appreciate your help in completing this short survey. To take this survey, please click on the link: <https://www.isurvey.soton.ac.uk/5246>

I'll also appreciate it if you could share this link with anyone else who recently graduated from university (at least 6 months ago).

Many thanks for your time!

Faslie Miller
PhD Student
University of Southampton, UK

2. Invitation posted on social media websites

Invitation to participate in pilot study about obtaining a university degree and its impact on well-being

Dear Alumni

Have you recently graduated with an undergraduate degree and are you from South Africa? Then I would like to invite you to take part in a survey I am running as part of my PhD studies.

This is only a pilot survey to gather any feedback on question structure and I would therefore appreciate your help in completing this short survey.

To take this survey simply click on the link: <https://www.isurvey.soton.ac.uk/5246>

I'll also appreciate it if you could share this link with anyone else who recently graduated from university (at least 6 months ago).

Many thanks for your time!

Faslie Miller
PhD Student
University of Southampton, UK