

POVERTY AND DISABILITY

IN SOUTH AFRICA

Research report 2014

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*Enabling the social inclusion of people with disabilities. *Ensuring full and equal enjoyment of all human rights and freedoms.
*Promoting respect for their inherent dignity. (UNCRPD, 2006)



CENTRE FOR SOCIAL
DEVELOPMENT IN AFRICA



UNIVERSITY
OF
JOHANNESBURG



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The Australian Department of Foreign Affairs and Trade (DFAT) is responsible for the Australian Government's international relations, trade and development assistance programmes.

This study was a collaborative initiative between the DFAT and the CSDA, University of Johannesburg.

It must however be noted that the views expressed and information contained in this report are not necessarily those of or endorsed by DFAT, which can accept no responsibility for such views or information, or for any reliance placed on them.

Editing: Philanie Jooste, The Word Horse, www.wordhorse.co.za
Layout: Ebrahim Karim, University of Johannesburg Graphics Department
Printing: 4 Color Print
ISBN: 978-0-86970-778-4



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ACRONYMS

ADL	Activities of Daily Living
ANOVA	Analysis of Variance
BBBEE	Broad-Based Black Economic Empowerment
CAQ	Consumption Adequacy Questions
CASE	Community Agency for Social Enquiry
CBRC	Community-Based Rehabilitation Consultants
CES-D 10	Center for Epidemiological Studies Short Depression Scale
CSDA	Centre for Social Development in Africa
DBE	Department of Basic Education
DFAT	Australian Department of Foreign Affairs and Trade
DG	Disability Grant
DPSA	Disabled Persons South Africa
DWCPD	Department of Women, Children and People with Disabilities
ELQ	Economic Ladder Questions
FGT	Foster-Greer-Thorbecke
HDI	Human Development Index
ICF	International Classification of Functioning, Disability and Health
ICIDH	International Classification of Impairments, Disabilities and Handicaps
JPDS	Johannesburg Poverty and Disability Study
NHI	National Health Insurance
NIDS	National Income Dynamics Study
PSU	Primary Sampling Unit
SALDRU	South African Labour and Development Research Unit
STI	Sexually Transmitted Infection
UCT	University of Cape Town
UNCRPD	United Nations Convention on the Rights of People with Disabilities
WG	Washington Group on Disability Statistics
WHO	World Health Organization



Executive summary

Research has not been able to adequately conceptualise the complex relationship between poverty and disability thus far (Groce, Kett, Lang, & Trani, 2011; Palmer, 2011). Furthermore, empirical evidence that can sufficiently interrogate the nature of the relationship is scant, partly because of difficulties with collecting reliable data about disability. This study was therefore intended to address this gap from a South African perspective.

It can be argued from a conceptual point of view that the capabilities framework developed by Sen (1999) offers insights into not only the ways in which poverty serves to marginalise people, but also how disability can lead to capability limitations that stop people from achieving certain functionings, both because of the individual-level disability, and because of the interaction of the disability with the social, political and economic environment (Burchardt, 2004; Mitra, 2006). The capabilities framework allows us to understand that poverty and disability affect one another in a circular relationship (Braithwaite & Mont, 2009). It also enables us to demonstrate how both poverty and disability interact with one another to produce multiple layers and experiences of marginalisation which are likely to reinforce negative outcomes like loss of income, lower levels of education, and lower levels of health and well-being. Where these processes of marginalisation – both marginalisation due to poverty *and* marginalisation due to disability (amongst other forms of marginalisation) – are recognised and addressed with appropriate policy and programmatic interventions, we are likely to begin to see changes in the outcomes for both those who are poor, and those who live with a disability.

This study was specifically conceptualised in response to a need to interpret the complex relationship between poverty and disability and to understand what policy and programmatic interventions might work to break the cycle of poverty and disability. This need was expressed by disabled people's organisations represented at the 2010 launch of the *Johannesburg Poverty and Disability Study* (JPDS) (Graham, Selipsky, Moodley, Maina, Rowland, & CSDA, 2010). At that launch representatives of disabled people's organisations recognised the value of the data contained in the Johannesburg report, which focused on people with disabilities living in the eight poorest wards of Johannesburg. However, they called for data at a national level that could begin to explain the relative effects of race, gender and class, amongst other socio-economic variables, on disability, and how these factors shape poverty outcomes in South Africa. With this imperative in mind, the Centre for Social Development in Africa (CSDA) conceptualised a national poverty and disability study, using secondary analysis of available data contained in the *National Income Dynamics Study* (NIDS) (South African Labour and Development Research Unit (SALDRU), 2008; 2011). The intention was to complement the NIDS data with data from the *Johannesburg Poverty and Disability Study*, as well as with qualitative research gathered in a rural area, namely Lillydale in Mpumalanga, one of the nine provinces in South Africa.

The overarching aim of the study was to understand how poverty and disability intersect to shape key capability outcomes for both non-disabled people and people with disabilities in the South African population. To this end, it had five key objectives:

- to understand how disability shaped employment, income and asset poverty at the household and individual level
- to understand how poverty and disability interacted to shape educational outcomes
- to understand how poverty and disability interacted to shape health outcomes
- to understand how poverty and disability intersected to shape quality of life and social capital outcomes
- to understand the experience of poverty and disability in rural (rural formal and tribal authority) areas and assess how this compared with the experience of the same factors in urban (urban formal and informal) areas.

In achieving these objectives, the research was intended to feed into ongoing conversations with civil society and state organisations regarding key leverage points that could be mobilised to enhance capability outcomes for all people, but for people with disabilities in particular. The report thus outlines key policy and programmatic recommendations which are being taken forward in discussions with representatives of disabled people's organisations, as well as with key state stakeholders, primarily in the Department of Social Development.

The study found a disability prevalence of 18 per cent (4.5 million in 2008) in the South African adult population. For the purpose of this study, a narrow definition of disability was used. Disability was defined as functional difficulties in at least one of the following areas: sight, hearing, mobility and self-care, where an individual reported some, a lot or severe difficulties in these functionings. This was the only data available on disability in the NIDS data set. These results suggest a higher prevalence estimate than the Census data which captured eight per cent of people having some level of difficulty in the areas tested (Statistics South Africa, 2012). This discrepancy may be explained by the different ways in which the questions were asked in each study, as well as the inclusion of only adults in the NIDS analysis.



The average age of the people with disabilities was 47 years, while that of the non-disabled population was 34 years. Seventy one per cent of those with disabilities were women. Eighty three per cent of people with disabilities were African, reflecting the population demographics of the country. Fifty six per cent of people with disabilities indicated that they live in an urban area. There were no differences in access to basic services between households that included a person with disabilities and those that did not, demonstrating that provision of basic services has benefitted all people, including people with disabilities.

The analysis demonstrated that people with disabilities tend to have very strong household networks of support, although the data could not reveal the quality of that support. More people with disabilities indicated that they were married or living with a partner than non-disabled people, and households in which a person with disabilities was living were larger on average than households without people with disabilities. This could suggest two possible scenarios. On the one hand, older people who were more likely to experience difficulties are being supported by the extended family. On the other hand, it could mean that elderly people attracted other people to their households as they are caregivers and often have access to an old age pension. Where people with disabilities had severe difficulties, it was often the support of the family or household that replaced absent or minimal services from the state or other organisations. In interviews conducted both in the JPDS and the rural case study, it was evident that household members are a key source of support for people with disabilities. However, this relationship was not uni-directional. People with disabilities also contributed positively to households, both in terms of bringing in grant income, as well as meeting household responsibilities. Interestingly, higher numbers of people with disabilities expressed being either main or joint decision makers in the household, probably because older household members are more likely to be the decision makers, and also more inclined to report difficulties.

As can be expected given historical data in South Africa, people with disabilities were less likely to be employed than their non-disabled counterparts. They were also less inclined to be unemployed (unemployed with a desire to work), because most people with disabilities of working age (18 to 65 years) indicated that they were not economically active (unemployed with no desire to work). People with disabilities were more prone to have never looked for a job (68 per cent of people with disabilities compared to 55 per cent of non-disabled people), and were significantly more likely to state that health reasons were the main motivation for work stoppage. Overall, people with disabilities appeared more despondent about their prospects of finding work. For people with disabilities the challenges of finding employment seemed to remain over time, as non-disabled people were far more likely to have found work over a period of three years.

People with disabilities who were employed were more likely to be employed in insecure forms of employment—either in the informal economy or in the formal economy, but without written contracts or UIF contributions. Over 50 per cent of employed people with disabilities were providing support in household income-generating businesses. While this was positive, such roles may be overlooked, unpaid and under-appreciated, suggesting that there are inequalities in the type of employment that people with disabilities and non-disabled people are able to access. This also had implications for inequalities in income.

These findings suggest that the advocacy efforts of disabled people's organisations that target employers about equity policies and advise them on how to ensure reasonable accommodation, should continue to be a priority. But such efforts must be complemented by programmes that work with discouraged work-seekers with disabilities to develop solutions, and ensure greater labour market participation. Interventions need to address both the demand and supply side of the labour market equation. Efforts could also be made to ensure that job and income security are not compromised when promoting employment for people with disabilities. It is important to guard against exploitation and precarious employment within the labour market.

People with disabilities earned a median income of almost R400 (US\$42.11)¹ per month less than non-disabled people. It must be noted though that the effects of race and gender on earnings was far more marked than that of disability. This is due to the small population size of people with disabilities relative to race and gender. However, over time disability seemed to play an increasing role in shaping income inequality. This suggests that efforts to rectify the racial and gendered nature of income inequality would address the inequalities in income experienced by people with disabilities to some extent. However, if disability was not taken into consideration, disability-related income inequality may persist over time.

Although only 10 percent² of people with disabilities indicated that they were receiving the disability grant, it had a marked impact on whether or not they lived below the lower bound of the poverty line (less than R502 (US\$52.84) per month). Without the disability grant 78 per cent of people with disabilities lived below this line. With the grant this number was reduced to 69 per cent. When all grant income was included the number of people with disabilities living below the lower

¹ All conversions to US\$ in the report are based on a 2008 exchange rate of US\$1 = R9.50.

² Given the high number of older people in the sample of people with disabilities and the use of the inclusive measures in the analysis, it is possible that these people were not eligible for the disability grant because of their age and/or lower severity of difficulties.



bound of the poverty line decreased to 41 per cent. And the number of people with disabilities living above the upper bound of the poverty line (above R924 (US\$97.26) per month) increased from 17 to 39 per cent in 2008.

The poverty alleviating effects of social grants for the non-disabled population were also marked. People with disabilities, who are more grant dependent (46 per cent of people with disabilities as opposed to 21 per cent of non-disabled people received one grant), fared better than their non-disabled counterparts with regards to income from grants. The effects of the social grant system on poverty alleviation for the poorest, and for people with disabilities in particular, should be viewed as a major positive programmatic intervention. The NIDS data suggests that there are more people with disabilities that might be eligible for the disability grant but who do not receive it. This might be due to them not meeting the criteria for temporary and permanent disability, or that they are unaware of the grant. More work needs to be done to educate and support qualifying people with disabilities to access this means of income protection. In addition, targeting complementary services like access to assistive devices, training and small business loans and support at people receiving the disability grant may be one way in which to ensure that the effects of the grant become more transformative.

Non-disabled people on average had 2.7 more years of education than people with disabilities. Significantly more people with disabilities had no schooling than non-disabled people, and non-disabled people were more likely to progress to secondary and post-secondary education than people with disabilities. However, these differences are largely explained by age. Because the population with disabilities is older on average (47 years) than the non-disabled population (34 years), most of the differences in education could be attributed to the lack of schooling experienced by older members of the Coloured and African population who were possibly affected by the unequal educational access under apartheid. This is not to deny the immense challenges still in the education system, particularly with regard to quality and access to the resources required for special needs. However, we are beginning to see changes. The fact that the education gap between people with disabilities and non-disabled people is closing should be celebrated, but also monitored over time to ensure that gains are not lost. Furthermore, there is a need to focus on quality of education, particularly in light of qualitative data which demonstrate that special needs schools are under-resourced and over-subscribed. The NIDS data did not contain information on skills development programmes for people with disabilities. However, given that this is a focus in the *White Paper for Post-School Education and Training* (2014), further work is needed in the area.

As can be expected from research in other parts of the world (McColl, Jarzynowska, & Shortt, 2010; Gulley, Rasch, & Chan, 2011), people with disabilities were far more likely to report poor health than non-disabled people. Reporting of poor health was also affected by both gender and age with women and older people more likely to report poor health. Given that women and older people make up a large proportion of the population of people with disabilities, this in part explains the difference. However, people with disabilities were more likely to report being infected with tuberculosis and were more prone to be affected by a range of non-communicable diseases. People with disabilities were also more likely to report difficulties with accessing health services. This finding suggests that disabled people's organisations' calls for greater focus on people with disabilities in the health care system, particularly with regard to access and education, should continue. Furthermore, policy makers in the health system need to understand the potential disabling effects of illness, particularly chronic conditions.

Finally, the study reveals that while people with disabilities were less likely to report emotional well-being, positive life satisfaction, and economic prosperity, these outcomes were also strongly affected by age and income and a range of other unidentified variables. This demonstrates that individual-level characteristics such as resilience and a positive attitude may strongly shape well-being outcomes.

It should be noted that the data used in the study had key limitations. By focusing on national-level data and high-level relationships between key variables, it necessarily obscured the complexity of disability, both in terms of types of impairments, as well as severity. A person with a severe mobility difficulty will evidently have very different outcomes to a person with a mild sight difficulty. The data also relied on self-reporting of difficulties. Self-reporting of activity limitations is a reliable way of asking people about their own difficulties. This is different to asking respondents about their level of vision, hearing or muscle strength (referred to as impairments³), which is difficult to do without having good access to vision, hearing and mobility assessments by professionals. Household surveys typically explore self-reported activity limitations, and not impairments. These measures (with some slight variations of wording) of activity limitations in seeing, hearing and mobility have been extensively tested internationally and in South Africa (Miller, Mont, Maitland, Altman, & Madans, 2010; Schneider, 2009; Schneider, Dasappa, Khan, & Khan, 2009). Measuring activity limitations in self-report surveys gives a good indication of the difficulties experienced and recognised by respondents. It does not give us an indication of the level of vision, hearing and mobility difficulty which would need to be assessed differently to the way it was assessed in the NIDS e.g. an eye test would be needed. These measures of activity limitations are inclusive of both people who identify as disabled

³ As set out in the in World Health Organization's International Classification of Functioning, Disability and Health (ICF) (WHO, 2001).



and those who do not identify as disabled, but have difficulties seeing, hearing and in mobility, such as older people and people with chronic illnesses. This inclusive nature will have an impact on the findings described in this report as many people with disabilities will be elderly.

Where possible, severity and type of impairment have been considered, but the primary aim of the study required a meta-level analysis which compresses the complexities in order to seek out relationships. This means that continued research, which interrogates the ways in which particular types of disabilities and levels of severity affect outcomes, is necessary.

Nevertheless, despite these limitations of the data, the study highlights the value of the capability approach in explaining the relationship between poverty and disability. Whilst data of the nature analysed in this study can point to the strength of relationships between key socio-economic variables and disability, and illustrate the ways in which poverty and disability both serve to marginalise people and undermine functionings, it cannot account for the individual-level factors that are also of importance. Thus, as Graham, Moodley and Selipsky (2013, p.4) argued, individual-level factors might ensure that a person with a disability may not experience the adverse outcomes of that disability “because of how he/she navigates the social environment using the range of personal, social and financial resources he/she may have available”.

This study reveals some of the relationships between poverty and disability and demonstrates where disability plays a significant role in shaping outcomes, as well as where other socio-economic variables play a stronger role. The key finding of this study was that disability intersects with a range of socio-economic variables, most importantly age, race and gender, to result in particular negative outcomes including reduced levels of income, lack of labour market participation, and lower levels of health care. This suggests that integrated approaches for addressing the needs of those living in poverty are essential in addressing the needs of people with disabilities too, as the case of access to basic services demonstrated. However, it is also necessary to ensure that people with disabilities are recognised as a particularly vulnerable group in the population and that, in some cases, particular interventions are required. For instance, by focusing on expanding access to education for all and ensuring access to special needs schools depending on the needs of children, we are starting to see positive benefits in terms of closing the education inequality gap for people with disabilities.

Social investments in unlocking the capabilities of all people, including increasing access to basic services, education and health care, as well as increasing labour market participation is recommended. This is considered to be the best approach to securing better functioning outcomes for all people, and particularly for people with disabilities. This approach to policies and interventions will ensure that people with disabilities are not left behind the development curve.



Part 1: Introduction, literature review and methodology

1.1 Introduction

While the relationship between poverty and disability is well-established in the literature on the subject (Mont & Cuong, 2011; Palmer, 2011), there is still widespread acknowledgement that we do not understand the nature of this complex relationship, and that we lack data to support theories of the relationship, particularly from developing contexts. As Palmer (2011, p.217) noted, “most of the empirical work on disability and poverty has addressed poverty through an economic resources lens with application to high-income countries”. Similarly, Seddon and Lang (2001) argued that literature in the field is often dominated by ‘northern’ perspectives that fail to understand the challenges associated with disability in the context of wider development challenges. Furthermore, claims about the connections between poverty and disability are often anecdotal rather than evidence-based (Groce et al., 2011).

In addition, the World Report on Disability (World Health Organization, 2011) covered a broad spectrum of issues and areas of policy that have been the focus of much concern and debate over decades, and have found their way into the 2006 United Nations Convention on the Rights of People with Disabilities (UNCRPD) (Bickenbach, 2011). It highlighted the lack of empirical research and gaps in evidence about disability issues across the globe. But the report also drew specific attention to the paucity of disability-related research emanating from low and middle-income countries and, among a raft of recommendations, called for an increase in disability research to support evidence-based disability policies and programmes. The publication of the World Report on Disability (2011) has lent credence to the kinds of questions we have addressed in this report. There is need for empirical research in low- and medium-income countries and to strengthen and support research on disability.

With these research gaps in mind, the research team involved in this study sought to better understand the nature of the relationship between poverty and disability in the South African context. The study focused on the links between poverty and disability at a national level in South Africa.

This study emerged from feedback provided by representatives of the disability rights movement in July 2010 in response to the release of a study on the relationship between poverty and disability in the urban context of Johannesburg (Graham et al., 2010). At this meeting the need was expressed for a national-level study, which adequately assessed the ways in which poverty and disability are linked.

The study was conceptualised in response to this identification of a major gap in our understanding of poverty and disability in the South African context; namely, that we do not have datum that enable us to explain the complex relationships between race, class, gender, poverty and disability. Being able to identify key relationships is of central importance in ensuring that policies and programmes aimed at combatting poverty and inequality are designed to tackle key issues, whilst addressing the particular needs of those with disabilities. A further issue that was noted was that we have little understanding of how poverty and disability interact in the rural context, where access to services and employment is often more limited. The need to understand rural poverty was seen as a priority area for the previous South African Department of Women, Children and People with Disabilities (now incorporated into the Department of Social Development).

1.1.1 DISABILITY IN SOUTH AFRICA

In South Africa, census data showed that almost 8 per cent of the population over the age of 5 years and 18 per cent of the population 45 years and older (Angela Ngyende, personal communication, 2014) reported one or more difficulties.⁴ This is similar to the global average prevalence rate for the adult population of almost 16 per cent (WHO, 2011) with lower income countries demonstrating higher prevalence rates.

South Africa has a fairly well developed set of policies that seek to address the challenges that people with disabilities face, all of which feed into the *Integrated National Disability Strategy White Paper* (Republic of South Africa, 1997). For instance, people with disabilities are recognised as a target group for employment equity purposes (Republic of South Africa, 1998) and are a designated beneficiary group in the *Broad-Based Black Economic Empowerment Act* (Republic of South Africa, 2003). These policies are intended to promote economic inclusion for people with disabilities. However, in recognising

⁴ These include people with at least two questions where they report “some difficulty” or one question where they report “a lot of difficulty” or “cannot do at all”.



that many people with disabilities cannot access the labour market, social protection provision was made in the form of a means-tested disability grant for people over the age of 18, and the care dependency grant for caregivers of disabled children under the age of 18 who need care on a permanent basis. These interventions are intended to provide a basic income for people with disabilities and children's caregivers who are not able to access the labour market as a result of their disability or the disability of a child.

In terms of education, the *Education White Paper 6: Special needs education* (Department of Education, 2001) seeks to provide educational facilities for children who cannot participate in a mainstream school due to the nature of their disability. It simultaneously calls for such schools to be resource nodes for surrounding mainstream schools to facilitate access for disabled children who do not require such extensive learning support and can cope in a mainstream education environment. Furthermore, in 2009 the Ministry of Women, Children and People with Disabilities was established and tasked with addressing the needs of these identified vulnerable groups.

These features suggest that at the policy level there is growing commitment to ensuring that people with disabilities are catered for. Many of these policy-level wins have been achieved through the strong lobby groups for people with disabilities, many of which were involved in the anti-apartheid struggle and were able to influence policy early on in the transition to democracy. South Africa's National Development Plan also places disability issues and concerns on the national development agenda (National Planning Commission, 2011).

Despite this wide range of policies, people with disabilities are considered to still fair worse than their non-disabled counterparts. Many have claimed that people with disabilities are still disproportionately represented amongst the poor and unemployed (Community Agency for Social Enquiry (CASE), 1999; CASE, 2005; Statistics South Africa, 2007) and there is evidence to suggest that disabled learners very rarely benefit from mainstream education, and many are not able to access special education schools (Wilson & Selipsky, 2010). This evidence suggests that while policies are good, implementation may be failing people with disabilities.

This study sought to assess whether people with disabilities are in fact disproportionately affected by poverty, and if so, in what ways and why. In the context of widespread poverty where outcomes for many people in the population are less than ideal, to what extent does disability play a contributing role in poverty and vulnerability? Or is it the circumstances of poverty that are most debilitating? In answering these questions, it was anticipated that the study would enhance understanding of the poverty-disability nexus, and yield important implications for policy and programmatic interventions in South Africa.

1.1.2 THEORETICAL PERSPECTIVES FRAMING THE STUDY

With the aforementioned questions in mind, it bears mentioning how we conceptualised the core concepts of this study. Further insight into the conceptual underpinnings is provided in Section 1.2. Disability is understood in this study from a capabilities perspective (Burchardt, 2004; Mitra, 2006), which acknowledges both the environmental factors that shape the experience of disability (as is argued in the social model), as well as the individual experience of a particular disability (which is the focus of the biomedical model). In Section 1.2 we argue why a theory that brings together both the environmental and individual aspects of disability is important, and therefore why the capabilities lens on disability is most useful. However, it must be noted that in actually measuring disability we were guided by available data. The NIDS questionnaires included questions commonly used in the World Health Organization's International Classification of Functioning, Disability and Health (ICF) which focused on the experiences of being able to conduct a series of basic activities of daily living (ADL). The NIDS data did not include questions that could adequately allow an assessment of psycho-social or intellectual disabilities and as a result this study focuses primarily on physical (upper and lower body mobility) difficulties, as well as sensory (sight and hearing) difficulties.

The capabilities perspective, mentioned above, interfaces well with how poverty was conceptualised for the purposes of this study. We took a multiple deprivation (Noble, 2006) view of poverty that begins with income poverty, but moves beyond that to ensure that deprivation in health, education, and living conditions is accounted for. Furthermore, the capabilities perspective on poverty and development (Sen, 1999) suggests that the ultimate measure of development lies in the ability of human beings to achieve functionings – understood as activities that people engage in as well as anticipated states of being. To achieve such functionings, access to assets such as health, education, income and social capital, amongst others, are necessary. The capabilities perspective is also a multi-dimensional approach to poverty, which was considered in the framing of the study and the analysis conducted.

1.1.3 AIM AND OBJECTIVES OF THE STUDY

The overarching aim of the study was to understand how poverty and disability intersect to shape key capability outcomes for both non-disabled people and people with disabilities in the South African population. To this end, the research had five key objectives:



- to understand how disability shaped employment, income and asset poverty at the household and individual level
- to understand how poverty and disability interacted to shape educational outcomes
- to understand how poverty and disability interacted to shape health outcomes
- to understand how poverty and disability intersected to shape quality of life and social capital outcomes
- to understand the experience of poverty and disability in a rural area and assess how this compared to the experience of the same factors in an urban area.

1.1.4 RESEARCH DESIGN AND METHODOLOGY

A longitudinal, mixed-methods explanatory research design (Bergman, 2008) was used to achieve the abovementioned aim and objectives. Within this design, the dominant-less dominant approach proposed by Creswell (1994) was incorporated. This approach provided an opportunity to identify and explain 'dynamic and cross-sectional' aspects of relationships (Frees, 2004), as well as explore results using qualitative methods.

Nationally representative panel data – the *National Income Dynamics Study Waves 1 and 2* (SALDRU, 2008; 2011) – was analysed to better understand how disability shapes the experience of poverty and whether poverty shapes outcomes for people with disabilities. Furthermore, qualitative research was conducted in a rural area of Mpumalanga, one of the nine provinces in South Africa. The purpose of this component of the study was to supplement and elucidate the findings from the NIDS analysis, and to gain in-depth insights into the experiences of individuals and households living with a disability, focusing on how disability affected their ability to manage poverty in a rural area. The study also drew on findings from an earlier study conducted in Johannesburg, which sought to understand the links between poverty and disability in an urban context (Graham et al., 2010; Graham et al., 2013). Findings from the urban study as well as the rural case study were used to comment on the NIDS findings and to highlight the different experiences across rural and urban landscapes.

For the purpose of this study, disability was defined as functional difficulties in at least one of the following areas: sight, hearing, mobility and self-care where an individual reported some, a lot or severe difficulties in these functionings (see Section 2.1.1). This introduction to the report is followed by a literature review (Section 1.2) on poverty and disability, with a particular focus on the capabilities framework as the most appropriate framework to establish an understanding of the complex relationship between disability and poverty. We consider empirical evidence about the ways in which disability interacts with a range of capabilities and functionings, including education, employment and health. The research design and methodology (Section 1.3) are then discussed in brief before the findings of the study are discussed in Part 2 of the report. Within this section we consider empirical evidence that has sought to test the ways in which poverty and disability interact to shape various capability outcomes for people with disabilities. The report first outlines the demographic profile of people with disabilities (Section 2.1) in order to contextualise many of the results. Attention is then focused on the ways in which disability intersects with a range of other socio-economic variables to shape some of the key means (Sen, 1999) that may enable the achievement of functionings – education (Section 2.2), income through both employment, and social protection (Section 2.3). The report also considers collective capabilities or social capital (Section 2.4), which Dubois and Trani (2009) argued are a key means for achieving functionings, particularly for people with disabilities. Section 2.5 discusses health status and access to health care, and analyses the variables in relation to disability that may shape health outcomes. The report then considers measures of achieved states such as emotional and subjective well-being, and economic welfare, which are indicators of quality of life (Section 2.6). Part 3 provides a summary of the study findings before considering the policy and programmatic implications of the study.

1.2 Literature review and conceptual framework

The relationship between poverty and disability has been widely recognised and documented (Braithwaite & Mont, 2009; Mont & Cuong, 2011; Palmer, 2011); but it is a complex relationship to disentangle, despite increasing empirical research that attempts to understand the connections. A key challenge in achieving a more nuanced understanding of the intricate ways in which these issues interact, has been the lack of adequate conceptualisation of this link. Conceptualisations of both poverty and disability have been extensively debated resulting in fairly nuanced and well-established ways of thinking about these concepts in isolation of one another. Conceptual considerations of the *link* between poverty and disability are relatively more recent and require further interrogation and debate. This section of the report considers a) the ways in which poverty has been conceptualised and the views to which we subscribe for the purposes of this report; b) the ways in which disability has been conceptualised and how we view the concept in this report; and c) the ways in which the link between poverty and disability are being conceptualised, and how this report is intended to contribute to a better understanding of this relationship.



1.2.1 CONCEPTUALISING POVERTY

From an absolute to a multi-dimensional view of poverty

Perhaps the most oft-quoted definitions of poverty are those pertaining to the 'breadline' or 'poverty line' – the idea that there is a minimum amount of money per day, below which people could be said to be living in extreme poverty. These measures of poverty draw on the definition of absolute poverty. This definition allows for researchers to determine the costs of a basic basket of goods, and to identify the income that would be needed to purchase such goods, or to meet basic needs. The exact contents of such a basket of goods or the basic needs identified are variable, but the premise is the same – that there is a measurable scale of income below which people can be considered poor. For instance, according to Argent, Finn, Leibbrandt and Woolard (2009), a commonly used poverty line amongst economists in South Africa is the Foster-Greer-Thorbecke (FGT) line (Foster, Greer, & Thorbecke, 2010), which contains an upper and lower-bound for poverty in the country (Hoogenveen & Ösler, 2005). The FGT index then considers the number of people whose income in 2008 is less than R502 (US\$52.84) at the lower bound and less than R924 (US\$97.26) at the upper bound to determine the extent of poverty. Such measures are useful in that they provide an absolute measure of the extent of poverty and allow researchers to track changes between groups and over time. In this research we did consider the absolute measure of poverty to be useful for these reasons and used the FGT index in our analysis.

However, it must be noted that absolute poverty is not the best reflection of how poverty manifests in reality. Absolute measures of poverty impose a definition of what goods are needed to meet basic needs and do not account for the relative experience of poverty; that is the needs that arise from social expectations and norms. Nor does it adequately conceptualise the ways in which poor people, by virtue of their poverty, are made more vulnerable to exploitation within the systems of society (Webster 1997). Structural deprivation – another conceptualisation of poverty – considers the ways in which poor people are marginalised and excluded from various systems of society.

More recently, definitions of poverty have shifted to understanding the complexity of the issue. As a result, current definitions of poverty highlight, for instance, the multi-dimensional nature of poverty, accounting for deprivation in terms of income, employment, education, health, social capital and the like. The Multiple Deprivation Index (Noble, 2006) is one such conceptualisation of poverty. This index considers five key forms of deprivation:

- Income and material deprivation takes into account both income (as it is most often used in measures of poverty) as well as any material assets that people have access to.
- Health deprivation considers access to health services as well as longevity.
- Educational deprivation takes into account the number of years of education a person has, given that such an asset is a strong determinant of future earnings (Chamberlain & Van der Berg, 2002).
- Employment deprivation considers people's access to earning an income.
- Living arrangement deprivation accounts for the services and housing to which people have access.

Other conceptualisations of poverty have considered the multidimensional nature of the concept, but have approached the idea from an asset rather than deficit point of view. Such conceptualisations consider what poor people *have* rather than what they do not have. One such conceptualisation is that of the livelihoods approach (Chambers & Conway, 1992; Rakodi, 2002). This approach considers the various forms of capital to which people have access, how such capital can be used to enhance lives and enable people to cope with shocks, and how the erosion of such capital increases vulnerability. As Carney (in Rakodi, 2002, p.3) noted,

A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

This sustainable livelihoods framework (demonstrated in Figure 1) takes into account how assets (natural, human, social, financial and physical) that are available to individuals assist them to develop livelihood strategies to navigate various vulnerability shocks and trends over which they have no control (vulnerability context). It also takes into account the political structures and processes that facilitate access to assets and how they can be used to influence the vulnerability context. The interaction between the assets and the political context result in livelihood strategies which then produce livelihood outcomes such as increased income, health benefits, food security and the like, and assist people to become more resilient to the vulnerability context.

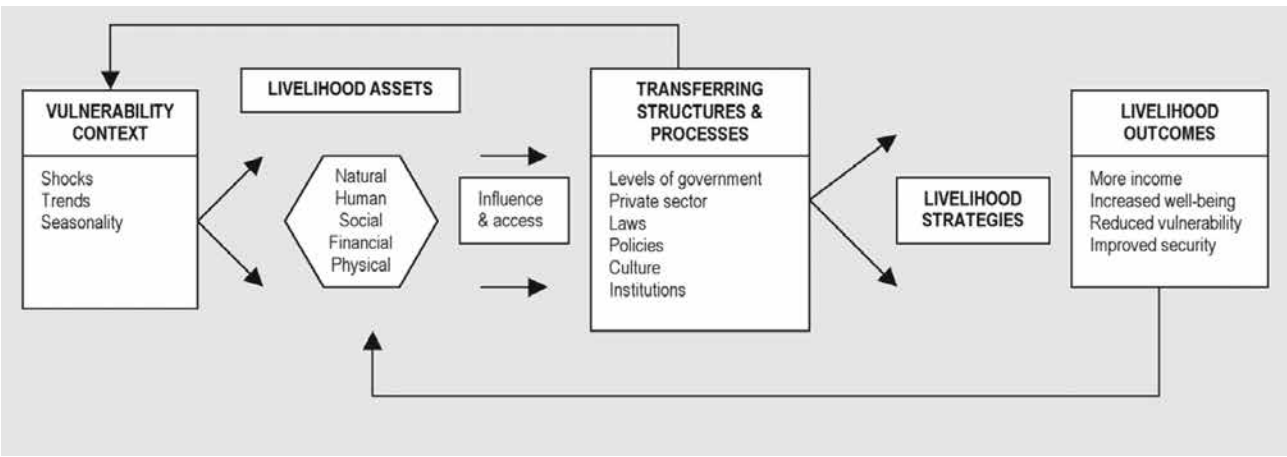


Figure 1. The sustainable livelihoods framework (Rakodi, 2002)

Poverty from a capabilities perspective

The work of Amartya Sen (1999) and Martha Nussbaum (2001) considered poverty from a capabilities perspective, which argues for the importance of individual functionings and capabilities (Sen, 1999) in evaluating human well-being/poverty or quality of life. Within this framework poverty is understood to be multi-dimensional, featuring economic, political, structural and other elements, all of which may limit the capabilities of people. To fully understand the capabilities framework, the two core concepts – functionings and capabilities – need to be understood.

Functionings are understood as activities in which people engage, as well as anticipated states of being such as health or well-being. Capabilities are opportunities to achieve such functionings (Mitra, 2006). These capabilities rely on assets available to the individual (human, social, educational and financial), as well as the social and political landscape that acts to enhance or constrain capabilities. What is ultimately important in the capability approach is that individuals have the freedoms to lead the kind of lives they want to lead, to do what they want to do, and be the persons they want to be. Sen (1999) and Nussbaum (2001) referred to mechanisms that constrain capabilities as ‘unfreedoms’. Development involves expanding the “freedoms and removing the sources of unfreedoms, such as poverty and poor economic opportunities” (Sen, 1999, p.3) to enable people to achieve functionings.

An individual's capabilities may be limited in many ways, for example, by living in poverty, by being a woman in a culture that denies women equal opportunities (Nussbaum, 2005; Sen, 1999), by being disabled in a society that discriminates against people with disabilities, and/or by belonging to a minority ethnic group that is oppressed within a larger society. For the purposes of this study, we viewed poverty as a multidimensional issue; as a range of possible asset deprivations that result in unfreedoms (from a capabilities perspective) and limit the possibilities for developing livelihood strategies. We therefore considered poverty to include issues of income and material assets, education, health, employment and social capital, and measured these in various ways throughout the study (as discussed in Section 1.3 on methodology).

Having discussed the ways in which poverty is understood, the report now considers how disability has been conceptualised.

1.2.2 CONCEPTUALISING DISABILITY

In the same way that poverty has been understood in various ways over the past decades, understandings of disability have also shifted considerably over time. According to the United Nations Convention on the Rights of People with Disabilities (UNCRPD), disability is regarded as “an evolving concept” (United Nations, 2006). The *World Report on Disability* (WHO, 2011) tackled the question of defining disability, but also reminds the reader of the complexity of defining this dynamic and multidimensional concept: “Disability is complex, dynamic, multidimensional, and contested” (WHO, 2011, p.3). The UNCRPD indicates that “persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others” (Guernsey, Nicoli & Ninio, 2007, p.24). Moreover, persons with disabilities are diverse and heterogeneous, while health and disabling conditions can be visible or invisible, temporary or permanent, static, episodic, or degenerating and painful.

In order to better understand how disability is conceptualised within this complex field, it is important to engage with the key models of disability – the medical and social. These models have been well documented (Gilson & DePoy, 2002; Handley, 2003; Gabel & Peters, 2004; Devlin & Pothier, 2006; Watermeyer, Swartz, Lorenzo, Schneider, & Priestley, 2006). However, a brief description of these models is important as a basis for the discussions that follow.



From the medical to the social model

Disability has traditionally been understood in terms of the biomedical or individual model. According to this model, disability is seen as a personal tragedy whereby the person with the disability is perceived as having a problem and needing to deal with that problem, while society is supposed to represent 'normal functioning'. Disability is conceptualised within this model as a 'lack of' some kind of ability – an impairment (Watermeyer et al., 2006).

Related to the biomedical model is the welfarist model. According to this perspective, disability is understood to be a condition that is "a tragedy or object of sympathy and charity. People with disabilities are therefore pitied, given hand-outs, and cared for in separate institutions" (Whitehead, 2004, p.14). Olson, Penna and Veith (2004) noted how this model of disability, despite being well-meaning, serves to isolate those with disabilities. It reflects conceptualisations of people with disability as incapable of organising and running their own lives, including their own rehabilitation. Whilst acknowledging the medical needs of all people, it is now also acknowledged that people with disabilities lack access to basic human rights and face social inequality (Coleridge, 1993; Lonsdale, 1990; Oliver, 1990) through universal processes of marginalisation, exclusion and discrimination. But questions of concern for social equality and access to human rights of people with disabilities fall outside the remit of the medical model that locates social exclusion in the individual. This model makes the disabled person the problem and its reliance on and obsession with medically-based interventions or solutions distracts society from seeking the real causes of 'exclusion' and processes of 'disablement' (Oliver & Barnes, 1998; Tregaskis, 2004). The model is therefore characterised by the dependence of people with disabilities and stereotypes of disability that elicit manifestations such as pity, fear and patronising attitudes.

The dominance of the medical and welfare models may in part help us to understand the continued link between poverty and disability. Within this model, disability is viewed in contrast to 'normal functioning' and as manageable primarily through medical and related professions. As such, efforts to mainstream disability issues, to address the exclusion of people with disabilities, and to deal with structural barriers that people with disabilities face in accessing education and employment for instance, have only been placed onto the agenda relatively recently. Such systems have been slow to change, with people with disabilities still experiencing the effects of exclusion and poverty.

Criticisms of the above models of disability, largely from activists within various disability rights organisations, resulted in recognition of the ways in which the social and physical environment serves to create barriers for 'normal' participation and functioning in society. The social model recognises the ways in which people with impairments tend to be excluded, marginalised, and devalued; and how they experience different types of disadvantage and negative labelling which in turn affect their quality of life and that of their family members and significant others (Watermeyer et al., 2006). In essence, the social model created a shift away from an individualistic perspective, whereby people with disabilities are seen as suffering from a pathological condition and in need of sympathy and a cure, to the perception that disability is often imposed by society on individuals with impairments.

The social model identifies three major types of discrimination. Institutional discrimination occurs when, for example, there is no legislation for equal employment opportunities. Environmental discrimination excludes people with disabilities from access, e.g. when there is no ramp for a wheelchair user. Attitudinal discrimination is expressed through fear, condescension or embarrassment, resulting in intentional or unintentional exclusion (Duncan & Watson, 2009). Rowland (personal communication, 2011) drew attention to a further source of discrimination, namely technological discrimination which presents technological barriers to participation, e.g. when blind and deaf-blind persons do not have access to enabling computer technology. In terms of this model, "disability can range from mild to severe, can be constant or episodic, and whether a person is considered to have a disability is highly dependent on their environment – not just the physical environment, but the cultural and legal environment, as well" (Braithwaite & Mont, 2009, p.2). Consequently, this paradigm shift resulted in disability being seen as "an experience that arises out of the interaction between a person with a health condition and the context in which they live" (Schneider, 2006, p.8).

A key criticism of the social model is that it tends to limit considerations of the individual experience of the body in relation to disability (Shakespeare & Watson, 2001; Handley, 2003; Michailakis, 2003; Watermeyer & Swartz, 2008). The model also does not allow for an interrogation of the ways in which a wide range of impairments interface with the environment to result in very different experiences of disability. In addition, the individual agency of those with impairments is at risk of being overlooked in a model that focuses predominantly on the external environment and on material inequality to explain the disadvantages faced by people with disability. The International Classification of Functioning, Disability and Health was the WHO's attempt to adapt the social model into a model that allows for disability and health status to be assessed, accounting for both individual and social components.

International Classification of Functioning, Disability and Health

In response to the criticism that the social model was at risk of excluding individual experiences of impairment and functioning, the World Health Organization in 2001 formulated the *International Classification of Functioning, Disability and Health* (ICF). The ICF was a revised version of the *International Classification of Impairments, Disabilities and Handicaps*



(ICIDH), first developed in the 1980s (WHO, 2001), which represented a medicalised model of disability (Simeonsson, Leonardi, Lollar, Bjorck-Akesson, Hollenweger, & Martinuzzi, 2003). Its revision reflected a change in ideological thinking about the 'problem' of disability, arguing that it must be understood as part of wider social, economic and political contexts (Coleridge, 1993; Oliver & Barnes, 1998). As argued by Imrie (2004, p.2), the resulting ICF represents the integration of the medical and social models to form a bio-psychosocial model (Bickenbach, 2011; Palmer & Harley, 2012).

The ICF organised information according to three levels: (1) the body dimension which includes bodily functions and structure; (2) the activities dimension which covers the range of activities performed by an individual; and (3) the participation dimension which classifies areas of life in which an individual is involved, has access to, and experiences societal opportunities or barriers. Environmental factors such as access to buildings, climate, relationships with family, friends and health care workers, and societal attitudes all exert an impact on these dimensions. In addition, personal factors including age, race, gender, education, experience, personality, social background and coping style also influence the person's functioning (Ross & Deverell, 2010). Using the ICF framework, the *World Report on Disability* (WHO, 2011, pp.262–263) highlighted the following barriers to participation for people with disabilities: inadequate policies and standards, negative attitudes, lack of provision of services, problems with service delivery, inadequate funding to implement policies and plans, lack of accessibility, inadequate consultation and involvement, and lack of rigorous data and evidence. However, Dubois and Trani (2009, p.6) maintained that although the ICF is useful as a classification system and as a tool for measuring prevalence, "it has limited utility in terms of policy design, programme definition, development practice, promotion of participation and identification of barriers to inclusion".

It is possible that Dubois and Trani's (2009) view partly reflected a frustration with the limitations of connecting conceptualisations of poverty and development, and those of disability to adequately understand the complex ways in which these issues interface. While a great deal has been done to try and understand the issue empirically, conceptualising the link has received less attention.

What emerges from critically interrogating the models and measurements of disability, are the limitations of various models of disability in representing and articulating disability within an international poverty/development context. In our endeavour to further understand the link between poverty and disability, we explore here the potential of the capability approach (Sen, 1999; Nussbaum, 2001) as a theoretical framework for understanding the actual and potential ways or the extent to which poverty and disability are linked.

1.2.3 UNDERSTANDING THE LINK BETWEEN POVERTY AND DISABILITY

The international community and the United Nations (UN) in particular recognise disability as a global development and human rights issue. In spite of this acknowledgement, there is an apparent lack of explicit conceptualisation of the link between poverty and disability in poverty, development and disability-related literature.

Disability is a development issue because of the bidirectional link to poverty. "Disability may increase the risk of poverty, and poverty may increase the risk of disability" (WHO, 2011, p.10). Thus, if a person is disabled, he or she is less likely to have benefited from formal education, and more likely to be unemployed. If employed, they will earn significantly less than their non-disabled counterparts (Lang & Upah, 2008). Similarly, poorer people have a higher risk of becoming disabled. While this understanding of the mutually reinforcing factors that propel the disability/poverty nexus has injected new insights into understanding the concept of disability, disability is not an area which has received much attention in the literature on poverty and development (Mizunoya & Mitra, 2013), leading to difficulties in conceptualising how these two issues interact. Yeo (2005) wrote that the relationship between disability and poverty has often been referred to as 'a vicious cycle'. She argued, however, that this imagery obscures the similarities between the processes of marginalisation experienced by people with disabilities and poor people. She therefore suggested that disability and poverty are often manifestations of the same processes.

In response to these frustrations, the capabilities perspective is used to articulate the relationships and similarities between the experiences of poverty and disability.

Understanding poverty and disability from a capabilities perspective

Although Sen (1999) himself did not refer in great detail to disability in his discussion of capabilities, others have used his framework to better conceptualise the link between poverty and disability (Sharma, 2005; Mitra, 2006; Dubois & Trani, 2009). Dubois and Trani (2009) argued that, in the language of capabilities, disability can be defined as reduced capability that originates out of the interface between the person's disability and the interaction with the environment/context which may serve to limit opportunities for people with disabilities. In this way the focus is very much on the context, in the same way as the social model draws attention to context. Addressing this aspect requires "reducing the consequences of disability" (Dubois & Trani, 2009, p.198) in that person's environment. However, the capabilities approach to disability also allows insight into the individual-level experience of disability.



Mitra (2006) and Burchardt (2004) posited that disability can be both “a deprivation of capabilities or a deprivation of functionings” (Mitra, 2006, pp.240-241). A limitation in functionings (or engagement in actual activities) may be due to the disability itself or to the social environment. This is termed “actual disability” for Mitra (2006). But disability can also be understood in terms of limitations to capabilities or opportunities – “potential disability” – “potential, since a person with an ‘actual disability’ may not experience the ‘potential disability’ because of how he/she navigates the social environment using the range of personal, social and financial resources he/she may have available” (Graham et al., 2013, p.4).

Here disability can be accounted for at both the individual level and the social level. Sen (1999) made the case that in certain instances income deprivation and experience of adversity can operate to compound disadvantage and constrain capabilities. For instance, a person with a disability is less likely to be able to earn an income, thereby increasing their income deprivation. In addition, they are also constrained in their ability to convert income into functionings since their cost of living may be higher, and they may be physically constrained in attaining certain functionings by an inaccessible environment (Groce et al., 2011).

The capabilities framework is also concerned with what people do have access to that can be leveraged to enhance capabilities and functionings. Certain mechanisms or assets are seen as being able to enhance capabilities. In using the capabilities framework to develop the Human Development Index (HDI), three key mechanisms were identified – education, access to health care and income. In this study we considered all three of these aspects and also included other assets drawn from the livelihoods framework (Chambers & Conway, 1992; Rakodi, 2002) and multiple deprivation index (Noble, 2006). These included social assets, access to employment, access to services, and material (non-income) assets. We viewed these assets as both mechanisms that could enhance the capabilities of people, as well as outcome indicators. This followed Sen’s argument that freedom should be viewed as both a means and an end.

The following sections of this review cover the literature that has considered how disability impacts on these various assets.

Disability and education

From a capabilities perspective, education is a key mechanism that is viewed both as a capability itself (an opportunity), as well as an asset that unlocks functionings. Education is thus integral as a freedom in and of itself as well as a means to an end, since education contributes to the ability of “people to help themselves and also to influence the world” (Sen, 1999, p.18). The capabilities approach makes a case for individual aspects (such as age and gender) and social capabilities (such as access to education and gender roles) being necessary to enable individuals to convert capabilities into functionings (Sen, 1999). Emmett (2006) indicated that people with early onset of disabilities are less likely to find employment than those with late onset of disability, irrespective of the type of disability. “One possible contributing factor is education, because schools (whether special or mainstream) often do not make sufficient provision for the special educational needs of children with disabilities” (Emmett, 2006, p.230). In essence, early onset disability may result in limited education, contributing to a limited capability set. In addition, late onset disability in the face of a poor educational capability due to poverty means that when certain functionings (such as the ability to engage in manual work) is lost, there is a constraint in converting educational capabilities into functionings.

Evidence reveals that people with disabilities in various developing contexts continue to struggle to access education, whether in the mainstream or through special needs mechanisms (WHO, 2011). Available statistics in Zimbabwe, for instance, showed that in 2003 disabled students constituted less than one per cent of the 78 481 students in universities, technical and teachers’ colleges (Chataika, 2010). In South Africa, despite policies that seek to address the needs of disabled children in education, both through the provision of special needs education schools and support for mainstream schools to integrate children with special needs, implementation of such policies is limited. Graham et al. (2013, p.6), focusing on the eight poorest wards of Johannesburg, found that while 34 per cent of their non-disabled sample had completed their matriculation (school-leaving) certificate, “only 20 per cent of people with disabilities had completed their school-leaving certificate”. CASE (1999) showed that many disabled children attend primary school but few move onto high school; a finding confirmed by Graham et al. (2013) who found that 27 per cent of people with disabilities as compared to 16 per cent of non-disabled persons had primary education only. In December 2013, the South African Department of Basic Education identified 453 special needs education centres nationally and 24 949 ordinary schools (Department of Basic Education, 2013).

Groce et al. (2011) identified lack of education as a contributing factor to poverty amongst people with disabilities, and equally poverty has an adverse impact on education (Mitra, Posarac, & Vick, 2011). In some instances people with disabilities require supportive and assistive devices for everyday activities. Where such needs are unmet, it may inhibit their participation in education amongst other things (WHO, 2011). In addition, negative attitudes of schools in terms of the integration of disabled children, requirements for training teachers and additional support in the classrooms, impact negatively on the education of people with disabilities (WHO, 2011). In South Africa, it is argued that the situation is particularly problematic and that children with disabilities who are integrated into mainstream schools are often prevented from obtaining a quality education, because of large classes and inadequately trained teachers (Lansdown, 2002).



Groce et al. (2011) stated that in developing societies people with disabilities do not benefit to the same extent as their non-disabled counterparts from investments in education. Loeb, Eide, Jelsma, Ka Toni and Maart (2008) showed that, in the Eastern and Western Cape, access to education remained lower amongst people with disabilities, even though equal economic status was assumed amongst households with and without disabilities. Furthermore, the disability grant contributed to income of the households without having an impact on education, suggesting that additional factors determine access to education (Loeb et al., 2008).

Unequal access to education opportunities (which is a long-term poverty alleviation strategy) often increases people with disabilities' vulnerability to poverty. Education is one of the most significant factors determining differences in income levels across the population (Mont & Cuong, 2011; Mitra, Posarac, & Vick, 2011; Mont & Nguyen, 2013). It is therefore important to understand whether there are differences in levels of education between people with disability and those with no disability.

Disability, income and employment

The inadequacies and inequality in access to equitable education have further negative implications for employment and ability to earn an income. Income is recognised as a key mechanism for enhancing capabilities within the capabilities perspective, and severe lack thereof is considered an unfreedom. Employment and social protection mechanisms are key means to achieving an income and both are considered in this report.

In the context of South Africa, the Constitution guarantees people with disabilities the right to equal employment opportunities. Despite the comprehensive policy landscape and the extensive work of the disability rights movement, access to employment opportunities for people with disabilities is still a challenge in South Africa. Statistics from a number of developed countries indicate that the unemployment rate among people with disabilities is higher than that of the non-disabled population. Palmer (2011) contended that people with disabilities in developing countries may have higher employment rates than those in developed country contexts because they can work in the informal sector. However, these informal work arrangements are often associated with low pay, difficult work conditions, and lack of adequate social protection mechanisms (WHO, 2011). In contrast, Mizunoya and Mitra (2013) reviewed employment data from eight developing countries and in all cases the employment rate among people with disabilities was lower. Loeb et al. (2008) found that in the Eastern Cape of South Africa, where unemployment is generally high, there was a negligible difference in employment rates among disabled and non-disabled working-age people. However, in the Western Cape, where the economy is stronger, there were significant differences with the employment rate among non-disabled working-age adults being double that of people with disabilities.

Employment and occupation are key mechanisms through which people may earn an income. Failing to earn an income or experiences of 'income earning handicap' in capability terms (Sen, 1999) help create and sustain conditions for poverty. Earning handicap implies that the individual cannot earn an income at all, or enough to enable her/him to lead a life full of choices. In this study, we acknowledged lack of participation in employment as a significant sign of income poverty.

However, it is within this space that social protection comes to play a role. Social protection can be defined as "policies and programmes that protect people against risk and vulnerability, mitigate the impact of shocks, and support people from chronic incapacities to secure basic livelihoods" (Adato & Hoddinott, 2008, p.1), and can take the form of either social assistance (non-contributory payment) or social insurance (contributory schemes). In developing contexts, with high levels of unemployment, the ability of people to pay towards contributory schemes is limited and the main form of social protection is social assistance or grants. While many countries have undertaken to pay grants to vulnerable groups as a poverty alleviation mechanism (Palmer, 2013), Devereux (2013) argued that a comprehensive social protection system can be more transformative. In this thinking the state invests in wider social development objectives that complement the provision of grants to ensure that citizens are empowered to use grants in ways that might break the cycle of poverty.

In South Africa, people with disabilities, who are not in employment, are entitled to receive a disability grant from the government. It is a means-tested grant given to people with an income of below R27 552 (US\$2 900.21) per annum (if single) or R58 224 (US\$6 128.84) (if married) in 2008, who have a disability (confirmed by a medical professional) that prevents them from working. In 2008, the disability grant was R960 (US\$101.05) per month.

The disability grant has been found to play an important poverty alleviation role in South Africa. Loeb et al.'s (2008) research in the Eastern Cape showed that households receiving the disability grant were at the same level or better off than households where no person with a disability was living. Graham et al. (2010) found that the disability grant was an essential form of income in households with a person with disabilities, and was used to meet basic household needs such as food and clothing.

From a capabilities approach, having a disability may contribute to both an 'earning handicap' (in which people with disabilities may not be able to earn an income), as well as a 'conversion handicap' (where people with disabilities are limited to use the available income to live a valued life because of additional expenses, for instance). Both of these may create a



form of 'unfreedom', in capability terms (Sen, 1999). For this reason it is important to consider social grants as one potential asset to which people with disabilities have access in order to address this unfreedom.

Disability and social capital/collective capabilities

Within the livelihoods framework (Chambers & Conway, 1992) social capital is identified as an asset that protects people from vulnerability shocks and may enable them to leverage opportunities for earning an income.

Within the capabilities framework, social capital may be termed collective capabilities (Dubois & Trani, 2009). Within developing contexts, in particular, incorporating the idea of collective capabilities or social capital into the discussion on the links between poverty and disability is important, given the profound role that extended families and households often play in providing support through sharing of income, remittances, and physical or health support that might not otherwise be available through the public system. Graham et al. (2010) found in their study of poverty and disability in Johannesburg that support from family or household members played a key role in people with disabilities ability to cope. It is important to note though that social networks do not automatically provide support. Where networks are conflict-ridden they may actually act in negative ways to diminish outcomes for particular members of the family. As Dubois and Trani (2009) noted, collective networks only operate to enhance capabilities where members of the networks work in constructive ways. It is also important to bear in mind that care arrangements within the household may place an extra burden of care on poor households, and particularly women (Patel, 2009), which is often unsupported and unrecognised. A final point about collective capabilities is that it should not only be viewed as a one-way relationship of support being provided to people with disabilities. A key finding of Graham et al. (2010) was that people with disabilities often played important support roles within the household. In certain circumstances this support enabled other household members to go out and seek employment. Given the important role of collective capabilities, this study sought to understand the household situation of people with disabilities, and what kinds of support are available both within the household and within the community.

Disability and health

A further important aspect of the capabilities approach is health, which is considered to be an essential outcome of development interventions (an end), as well as a means to other outcomes. Health is seen as so important in the framework that, like education, it is one of the key measures included in the Human Development Index in the form of 'Life Expectancy'. In this study we considered access to health care and health outcomes as aspects of poverty interventions and outcomes, and assessed how people with disabilities fare in comparison to their non-disabled counterparts.

In South Africa, it is well documented that people with disabilities are less likely to have adequate access to health care services and health information (Eide, Schür, Ranchod, Rohleder, Swartz, & Schneider, 2011). Yet, the relationship between health conditions and disabilities is difficult to understand as several environmental and demographic factors need to be considered.

Health conditions that could have an effect on disability were categorised into two areas for this research – communicable and non-communicable diseases. The relationship between injuries and disability was omitted, due to the absence of such empirical data in the NIDS dataset. Following the discussion on diseases and disability, self-reported health status and some of the challenges facing people with disabilities with regards to access to health care are described. This is important in understanding the nuances between disability and health.

Communicable diseases include diseases such as malaria, HIV, TB and cholera. In 2011, an estimated 34 million people were living with HIV worldwide, of which 5.6 million resided in South Africa (Statistics South Africa, 2013; WHO, 2013). Moreover, in 2011, the WHO estimated that 8.7 million people have been infected with TB worldwide. Over 95 per cent of TB deaths occur in low- and middle-income countries (WHO, 2013). The South Africa 2013 country report on the Millennium Development Goals indicated that the "HIV/TB co-infection rates exceed 70% with TB being the most common opportunistic infection" (Statistics South Africa, 2013, p.14). Malaria is endemic in three provinces in South Africa, i.e. Limpopo, Mpumalanga and KwaZulu-Natal (Statistics South Africa, 2013).

Non-communicable diseases such as cancer, diabetes, cardiovascular diseases (heart disease and stroke), mental disorders and other chronic illnesses are common worldwide. As described in the *World Report on Disabilities*, studies conducted in Australia, the United States of America and Canada in 1998, 2001 and 2006 respectively, found that non-communicable diseases were associated with disability (WHO, 2011). In 2010, the WHO estimated that the burden of non-communicable disease in South Africa was two to three times higher than that in developed countries (Mayosi, Flisher, Lalloo, Sitas, Tollman, & Bradshaw, 2009).

Evidence from developed country contexts demonstrates that people with disabilities are far more likely to experience ill-health and require health-related services in their lifetime. For instance, Gulley, Rasch and Chan (2011) compared the health care needs of people with chronic medical conditions and those with disabilities in America. They found that disability consistently predicted higher emergency department use and higher hospitalisation rates. Despite the greater need for



health care services, people with disabilities also experienced much greater health care access problems. The challenge with access was also experienced by people with disabilities in Canada who had more than three times as many unmet health care needs as their non-disabled counterparts. The greatest deterrent to receiving needed services among individuals with disabilities was cost. In many cases issues such as transportation and the need for attendants tended to adversely affect access (McColl, Jarzynowska, & Shortt, 2010).

The above demonstrates the greater health care needs and limited health care access that is experienced by people with disabilities in developed country contexts. Evidence is growing on barriers to health care access for people with disabilities in developing country contexts. The Equitable Project (see www.sintef.no/Projectweb/Equitable) has documented a number of barriers to health care experienced by people with disabilities in resource-poor settings in Africa, including South Africa, Namibia, Sudan and Malawi (Swartz et al., 2011; Van Rooy, Amadhila, Mufune, Swartz, Mannan, & MacLachland, 2012; Braathen, Vergunst, Mji, Mannan, & Swartz, 2013; Kritzinger, Schneider, Swartz, & Braathen, 2014). Transport costs and distance are all important barriers, mirroring similar findings in developed countries. Evidence further demonstrates that, in developing countries, due to inadequate public health services, disabilities arise as consequences of preventable diseases. These lead to impairments associated with primary health conditions and communicable diseases like tuberculosis, HIV/AIDS and other sexually transmitted infections (STIs) (WHO, 2008), as well as childhood cluster diseases such as measles, mumps and poliomyelitis (Galazka, Robertson, & Kraigher, 1999). Thus, people with disabilities need good access to health care for both their disability-related and general health care needs, and conversely, people with poor health are likely to experience increased activity limitations.

Understanding the health care needs of people with disabilities as well as the challenges they may face in accessing both general as well as specialised health care services is therefore essential. Access to health care services is a key asset in the capabilities framework, which should promote better health and thus greater freedom for the attainment of capabilities. For this reason, this study considered the health care outcomes for people with disabilities as compared to their non-disabled counterparts, and considered questions of access to health care services.

Disability and quality of life

Ultimately the capabilities framework promotes greater quality of life for all. As countries address the various unfreedoms associated with marginalisation and poverty, so people are able to pursue their capabilities and attain greater quality of life.

There is debate regarding whether disability shapes perceptions of quality of life with some arguing that disability has a profound negative effect on quality of life (Hosain, Atkinson, & Underwood, 2011), and others noting the disability paradox which suggests that people with disabilities express a high satisfaction with their lives (Albrecht & Devlieger, 1999). What is clear in an assessment of the literature is that quality of life perceptions are not determined directly by disability, but rather by the ways in which individuals negotiate their disability within particular contexts (Viemero & Krause, 1998). This confirms Ross and Deverell's (2010) point that experience, personality, social background and coping style are all key factors to consider in understanding how disability is experienced.

Hosain, Atkinson and Underwood (2011) conducted a study in rural Bangladesh where people with disabilities faced a great deal of cultural stigma, as well as lack of access to education and employment, and limited family life. In South Africa, low levels of well-being were reported by youth with disabilities who were unemployed, less educated and received low levels of social support (Cramm, Lorenzo & Nieboer, 2013). All of these cultural and contextual factors related to how the disability shaped the participants' perceptions of quality of life. Edwards, Patrick and Topolski (2003) also reported that adolescents with a disability in the United States demonstrated lower quality of life than their non-disabled counterparts. However, they explained that this experience is related to contextual variables such as sense of inclusion, family support, and the like; as well as to the presence of depressive symptoms, which are shaped by the disability rather than being attributed to the disability itself. The role of family and the impact of disability on the family is also important in assessing the quality of life outcomes for people with disabilities. In contrast, studies conducted in Sweden and Finland (Viemero & Krause, 1998), where access to services is much better and where the stigma associated with disability is likely to be lower, results showed that perception of quality of life was directly related to satisfaction with occupational status, social integration, and having a sense of meaning in life, all of which may or may not be shaped by the person's disability.

What is clear therefore is that there is no direct linear relationship between quality of life outcomes and disability. Rather a range of contextual and individual-level variables that interact with disability tend to shape people's perceptions of their life satisfaction. We considered life satisfaction or quality of life in this study as a key indicator of people's own perceived outcomes, as a subjective measure that compliments the objective measures of educational, health, employment and income outcomes.

Considering the interplay between gender, race, geographic location and disability

A key question guiding this study was the extent to which disability acts as a compounding factor in explaining various poverty-related outcomes such as low income, lack of education and access to health care, and constrained quality of



life. In South Africa, both Africanisation and feminisation of poverty due to historical processes and systems of patriarchy and apartheid mean that we have to consider the ways in which other aspects of a person's identity shape such poverty outcomes. For this reason we considered the roles that race, gender and geographic location play in shaping outcomes, as compared to the effect of disability. However, we must also consider that gender, race, disability and geographic location do not operate independently of one another. Rather there is an interplay between these different aspects of identity and location at the individual level.

The case of gender and disability makes this very clear. For instance, in Zimbabwe Eide, Nhiwathiwa, Muderredzi and Loeb (2003) found that 34 per cent of women with disabilities compared to 22 per cent of men with disabilities had never attended school; a pattern reflected in many parts of the world. Estimated literacy rates for people with disabilities worldwide are three per cent, with rates for women and girls with disabilities being about one per cent (Arnade & Haefner, 2006; Groce, 2003). While these figures are only estimates, disabled women's inferior access to education, and ultimately to jobs, power, community support and choices, contributes to lives of poverty and isolation. The argument is that disability creates and exacerbates poverty, particularly for women who experience even greater isolation than men. Moreover, their chances of achieving economic security through employment, marriage or inheritance of property are equally slim. Research has shown that women with disabilities compared with non-disabled women and men with disabilities are more likely to be unmarried, married later, and if married, divorced earlier (Human Rights Watch, 2010). In the case of disabled African women, Kamga (2011) maintained that they are more likely to not be considered as suitable marriage partners. Marongwe and Mate (2007) highlighted the exclusion of girls with disabilities in marriage. This report demonstrated that wealth creation was a prime motivator for having children within all indigenous cultures in Zimbabwe where child rearing is perceived as a form of 'social insurance', with the marriage of a girl child expected to attract family wealth in the form of '*amalobolo*' (bride price). In the case of a girl with a disability *amalobolo* is expected to be low, reflecting what is considered to be the lesser value of a girl with disability. This cultural practice is common in many African communities, especially south of the Sahara.

Ethnicity, culture and geographic location are three further aspects of identity, amongst many others, that play a role in shaping the outcomes of people with disabilities. While the gendered aspects of disability have been considered to some extent (Rousso, 2003; Eide & Ingstad, 2013; Kasiram & Subrayen, 2013), few studies have considered the interplay between race and disability or geographic location and disability. For this reason this study considered how these variables shape outcomes for people with disabilities.

1.2.4 CONCLUSION

This section of the report has outlined the ways in which both poverty and disability are conceptualised, and highlighted the empirical evidence that observe the links between poverty and disability. It has also noted that most research has failed to adequately conceptualise the links between poverty and disability. To address this gap, two conceptual approaches to understanding the links between poverty and disability are proposed – the livelihoods model, and the capabilities approach to understanding disability and poverty. Both of these approaches to understanding the links between disability and poverty are useful in this study because they combine an understanding of disability that accounts for both the social and individual experience of disability; and an understanding of poverty that accounts for its multidimensionality.

What is ultimately important in terms of this study, is to acknowledge that individuals have the freedoms to lead the kind of lives they want to lead and be the persons they want to be (Sen, 1999; Sharma, 2005; Nussbaum, 2002), but that there is a range of social and individual-level factors that tend to affect and potentially have a bearing on the outcomes for people with disabilities, more than their non-disabled counterparts. Reflecting what human beings are able to be and able to do (Sharma, 2005), the capability approach enables us to unpack the link between poverty and disability. Individuals' capabilities are determined by their life chances that are in turn linked to access to education and health services. But they are also linked to the economic, social and political environments in which they live. These can either enable, or suppress opportunities 'to be' and 'to do', with disability, gender and other identity-markers working with other factors in shaping notions of 'freedom'. In reviewing the literature on poverty and disability and interrogating the complex multiplicity of factors that impact on the relationship between these two phenomena, this section has endeavoured to provide the theoretical backdrop to the empirical study.

1.3 Methodology

The research design for the study was a longitudinal, mixed-methods explanatory design (Bergman, 2008). Within this design, the dominant-less dominant approach proposed by Creswell (1994) was incorporated. Because this design allows for changes over time to be assessed alongside understanding the situation at a moment in time, this approach provided an opportunity to identify and explain 'dynamic and cross-sectional' aspects of relationships (Frees, 2004). The qualitative component allowed us to explore results emerging from the survey data in more detail, and to gather information about particular contexts.



The need to determine relationships between poverty, disability and various intervening variables meant that a quantitative approach was necessary as the dominant component of the design. Statistically representative findings about such relationships are particularly important from a policy point of view. In order to assess how policies and programmes are influencing change, a longitudinal approach was incorporated. Specifically, the study incorporated a longitudinal panel study, which involves the analysis of data collected from the same individuals over time (Frees, 2004; Frees & Kim, 2008). The less-dominant component involved a case study exploration, drawing primarily on information from a rural case study to elucidate the relationships identified in the quantitative component. The rural case study data were assessed in relation to information gathered from an urban case study conducted in Johannesburg in 2010 (Graham et al., 2010).

1.3.1 DOMINANT COMPONENT – SECONDARY DATA ANALYSIS

Collecting nationally representative data is both logistically complex and very expensive. Given the availability of a comprehensive dataset that did account for disability, it was decided that a secondary analysis of this data would be the most cost and time-effective method of assessing relationships between the key variables of this study. The *National Income Dynamics Study* (NIDS) is a panel study which commenced in 2008 and was conducted by the South African Labour and Development Research Unit (SALDRU) at the University of Cape Town (UCT), with funding from the European Union (EU) via the South African Presidency. According to Leibbrandt, Woolard and De Villiers (2009, p.3), panel studies such as the NIDS

... have been invaluable in promoting understanding of who is making progress in a society and who is not and, importantly, what factors are driving these dynamics. In addition, panel data is invaluable for the purposes of evaluating and monitoring the efficacy of social policies and programmes.

Given the public availability of such data, the purpose of the data, and the fact that the dataset included information that would allow us to identify respondents with disabilities, it was decided that a secondary analysis of the data would be the best approach. The use of such data had additional advantages. Firstly, the nature of a *panel* survey is that data are collected from the same participants over a period of time. The NIDS is repeated every two to three years and follows the same households and participants. This approach allows researchers to track change over time, that is, it allows for a longitudinal analysis. The implication is that researchers are able to assess which groups are benefitting from programmes, and which are not, which is essential for good policy-making. As Frees (2004, p.5) noted, panel data allow researchers to “study dynamic relationships and to model the differences, or *heterogeneity*, among subjects”.

Despite the advantages of panel data, there are some drawbacks. These include non-response errors which can occur if the non-response is systematic; and attrition (drop-out) rates over time, which curb the comparability of the data and exacerbate non-response bias if the attrition is systematic. The NIDS data, like most other surveys undertaken in South Africa, are subject to non-response bias given that refusals are highest among affluent respondents, and in the South African context affluent respondents still tend to be White. This problem is compounded by the fact that attrition is also highest among affluent and White respondents. Non-response bias and attrition were corrected by the use of weights.

A further advantage of the NIDS data in particular is that the implementation of a panel survey was determined by the South African Presidency with the express goal of influencing pro-poor policy making. As such, the networks that researchers using NIDS are able to access for policy impact are that much more available. To date, two waves of data have been collected and released (2008 and 2011) for analysis. A further wave of data was collected in 2013 but was not available for analysis at the time of writing.

The NIDS data

The NIDS collected data from all members of a sampled household, including the children. It involved collecting data through four questionnaire types – a household level questionnaire completed by an adult in the household on behalf of the household, an adult questionnaire completed by all adults in the household, a child questionnaire completed by caregivers on behalf of all children in the household, and a proxy questionnaire for members of the household who were not available for interviewing. The survey collected data regarding a range of issues, including:

- demographic information
- access to services
- employment and employment heritage
- education and education heritage
- health
- income and income sources
- social capital
- quality of life.



According to Leibbrandt, Woollard and De Villiers (2009), sampling for NIDS involved a stratified, two-stage cluster sample design. A total of 400 Primary Sampling Units (PSUs) were proportionally allocated according to the 53 District Councils, and then randomly selected from Statistics South Africa’s 2003 Master Sample of 3 000 PSUs. The target population for NIDS was private households, as well as respondents living in workers’ hostels, convents and monasteries. Those residing in other living quarters and institutions such as hospitals, military barracks, old age homes and prisons were excluded.

Ultimately 7 305 households were reached and 28 255 participants responded. This sample size ensures that the data are nationally representative when the design and post-stratification weights are used.

Overview of the sample

When working with panel data, it is important to consider the sample size changes across waves due to the death or attrition of individuals in the first sample. In the Wave 1 adult dataset there were 16 878 adults. In the merged Wave 1 and Wave 2 dataset only 15 491 were carried over to Wave 2. In Wave 2 an additional 3 080 adults were interviewed raising the adult sample to 18 571.

Table 1. Sample sizes for Wave and Wave 2 NIDS panel data

	Wave 1	Wave 2
Adult sample size from Wave 1	16 878	15 491
New adults in Wave 2		3 080
Total for each wave	16 878	18 571

Approach to the analysis and variables

In order to determine the nature of relationships between the key variables, the first step in the analysis process was to define the key variables of interest. The first variable was disability. The NIDS data included a number of questions on activities of daily living (ADL) that could be used to determine disability, including questions related to lower and upper body mobility, sight, hearing and self-care. The decision about how to combine such variables into measures of disability was based on our conceptualisation of disability (discussed in Section 1.2 above) and the available data.

Given that “disability is complex, dynamic, multidimensional, and contested” (WHO, 2011, p.3) and that disability is regarded as “an evolving concept” (United Nations, 2006), measuring disability is no easy task. Self-reporting of disability is subjective and reflects the respondents’ own understanding and experiences of difficulties in basic functioning (seeing, hearing and mobility in this study), and not professionally assessed levels of vision, hearing and mobility. There is evidence that respondents with more income are more likely to self-report difficulties, especially with regard to vision problems, than those with less income (Mont & Cuong, 2011), and that moderate difficulties tend to be under-reported. For the purposes of measurement, disability in this study was measured in a narrow sense as the presence of difficulties in seeing, hearing, walking and self-care, as an operational proxy for persons at risk of being disabled, in the broad sense of the term (including participation restrictions and environmental factors). The measurement of disability in this study was further limited to only three domains of functioning and not the full range of difficulties putting people at risk for disability. Asking questions about difficulties experienced in a range of functionings acknowledges that these difficulties arise as a result of the connection between the presence of impairments and their interaction with the environment (Braithwaite & Mont, 2009).

A further key variable of interest was poverty. As discussed in the review of literature in Section 1.2, poverty was conceptualised in this study as multi-faceted. It includes income poverty as well as features of education deprivation, employment deprivation, living arrangements, and access to forms of social and household capital (Noble, 2006). As such poverty was measured in various ways. In order to ensure the most comprehensive picture of poverty the analysis involved concentrating on key areas of deprivation and assessing how disabled and non-disabled respondents fare in each of these areas. In this report we focused on the following as key aspects of the multi-faceted nature of poverty:

- education
- employment
- income
- health
- social capital
- access to services
- quality of life.

In order to assess differences between people with disabilities and non-disabled respondents, two forms of analysis were conducted. The first involved measuring differences in measures of central tendency (usually the mean or median depending on the nature of the data) for people with disabilities and non-disabled respondents. Where differences were



found, linear multiple regression was conducted to identify what factors most strongly shaped the differences. The NIDS is a nationally representative sample. It can therefore be assumed that the demographic profile (e.g. race and gender) of the sample is reflective of the general population. The findings of the study in Section 2.1 confirm this assumption as the profile of people with disabilities closely matches the 2011 Census (Statistics South Africa, 2012). It is therefore not surprising that these factors are significant predictors of the measured outcomes (see the regression analysis in part 2).

Reliability and validity

Reliability and validity of the instruments used in the NIDS study was enhanced through a number of mechanisms during the design and testing of the questionnaires. A team of experts was recruited to consult on the development of the questionnaire and to give input on the types of questions used (Leibbrandt, Woolard, & De Villiers, 2009). Wherever possible, standardised measures were incorporated into the questionnaire. For instance, the Center for Epidemiological Studies Short Depression Scale (CES-D10) was used for the mental well-being module (Leibbrandt et al., 2009). Furthermore, the questionnaire was assessed through a piloting phase of the study in which the questionnaires were tested in Gauteng and KwaZulu-Natal in 2007 (Leibbrandt et al., 2009). The pilot phase enabled the research team to gain insight into how respondents and interviewers interpreted questions as well as the level of quality control. Changes were made to data collection techniques to ensure greater quality control and standardisation in the data collection. Professional services were used to translate the questionnaires into all languages to ensure that interviewers did not interpret questions differently.

1.3.2 LESS-DOMINANT COMPONENT – RURAL CASE STUDY

In order to explore particular findings in more depth and to gain greater insight into how poverty and disability are experienced within a particular context, a rural case study was conducted. Data from this case study were intended to complement data from an urban case study – that of the *Johannesburg Poverty and Disability Study* (Graham et al., 2010). Both sets of case study data were intended to better understand the findings of the secondary data analysis. Given that the NIDS data are nationally representative and provide insights into differences between urban and rural geographic types, including data from both an urban and a rural case study, allowed for greater depth of knowledge regarding the secondary data findings. The rationale for inclusion of a rural component was to address a key gap in our understanding of how disability is experienced within these areas.

“A case study may be understood as the intensive study of a single case where the purpose of that study is – at least in part – to shed light on a larger class of cases” (Gerring, 2007, p.20). Lillydale, Mpumalanga was selected as a case that is fairly typical of other rural areas. However, given that all case studies are individual and contextual in nature, it is evidently not representative of all rural areas. Lillydale was selected for two main reasons. The first had to do with its relative typicality in terms of a range of issues facing rural areas – elevated poverty levels, high unemployment rates, limited road and transport infrastructure, and constrained access to basic services such as adequate housing, sanitation and water. In all of these respects Lillydale is typical of other rural areas. However, the second reason for selecting Lillydale had to do with access. In order to facilitate the selection of participants and data collection in the area we had to work with a contact from Disabled Persons South Africa (DPSA). DPSA Mpumalanga runs a programme which places community-based rehabilitation consultants (CBRC) in various rural areas in the province in order to support families to cope with the challenges related to living with a disability in a rural area (Rule, Lorenzo, & Wolmarans, 2006). Through DPSA, a former CBRC was identified to assist us with negotiating access to the site, selecting participants, and acting as a translator during interviews. However, it is acknowledged that by working through DPSA for logistical purposes, we introduced a bias into the case selection. Not all rural communities have access to CBRCs through organisations such as DPSA. Furthermore, DPSA works closely with the school for children with disabilities, which operates near Lillydale, and is a resource to which most rural communities would not have access. These features of the case created bias, and must be borne in mind when considering how the findings of the case study can be seen as typical of other rural cases.

Data from the *Johannesburg Poverty and Disability Study* (Graham et al., 2010) were also used in this study. The abovementioned study was conducted by the CSDA as an urban case study of poverty and disability. The data were available for further analysis and allowed the research team to elucidate interesting statistical findings. Details about the methodology for this study can be found in Graham et al. (2010).

Case study methods and sampling

The case study used a mix of qualitative methods with a range of participants. The study commenced with negotiating access to the community via the *induna*⁵ of the area, who agreed to our participation. A key informant interview was conducted with the *induna* and his headmen. Following this interview, further key informant interviews were conducted with the local ward councillor, a traditional healer working in the community, a DPSA Mpumalanga representative, and

⁵ Local traditional leader



teachers at the school for children with disabilities. Key informant interviews focused on community assets and challenges, social and cultural perceptions of people with disabilities, and questions pertaining to community-level services and how people with disabilities are catered for.

In addition to key informant interviews, interviews were conducted with members of identified households, including households where at least one member had a disability, as well as households where there were no identified members with a disability. The intention of focusing on both types of households was to try and determine the particular assets or challenges facing households with a person with a disability. Households in which a person with a disability lived were sampled using snowball sampling. A small number of households were identified by the ex-CBRC who had worked in the area and knew various households in which people with disabilities lived. From these households, further households were identified via a snowball technique. For the other households, a convenience sampling method was used, in which some of what were perceived as the poorest households in the area were identified by the ex-CBRC and then invited to participate. Eight of each type of household (with and without people with disabilities) was identified for participation and members of these households were interviewed.

During the interviews, key descriptors of the household were collected in terms of material assets and living arrangements. The interviews focused on family roles and responsibilities, networks of support, access to basic services, sources of income, and (where relevant) experiences of living with a disability/ caring for a child with a disability in their current context.

In addition to the above, the research team was engaged in observation focusing particularly on the points of access or barriers for people with disabilities in the area. To complement this aspect of the case study, the team used GIS mapping to note where households were in relation to major roads and key services.

Data analysis

All data were analysed thematically using an inductive approach. The analysis team developed themes that emerged from the coding of the interview transcripts, rather than imposing pre-established themes from theory onto the data. The themes pertained to some of the key issues that emerged in the secondary data analysis and related to income sources, access to basic services, experiences with employment, access to social protection, and education history. In addition, the analysis identified themes related to household relationships and interaction with the community. All qualitative data were managed and analysed using the data management software package ATLAS.ti.

1.3.3 LIMITATIONS

The first limitation of the study is that the survey data were not collected expressly for the purposes of our research. Therefore key questions pertaining to disability, including age of onset and access to assistive devices, were not asked of participants. Furthermore, the survey lacks questions on psycho-social and intellectual impairments, which limits the definition of disability in this study. We were only able to measure particular functional difficulties that were available to us in the NIDS data. Disability was therefore narrowly defined for the purpose of this study. The NIDS data did not allow for the distinction between current incapacity (e.g. have difficulty seeing) and disability that endures for a longer period that might have an impact on the human development variables in the analysis e.g. education and income. The sample size was rather small for people with moderate to severe sight and hearing difficulties, and this should be interpreted with caution. Disability prevalence decreased between Waves 1 and 2. This was not due to a drop out of participants in the follow up study but appears to be due to positive changes in levels of functioning of the respondents (refer to Section 2.1.2). Data on health status in the NIDS survey was also limited. Therefore, it was difficult to understand the impact (if any) that health had on disability of the NIDS participants. Nevertheless, the NIDS dataset does offer some of the most comprehensive data pertaining to disability as it relates to various other social and economic issues, and for this reason it was decided that a secondary analysis would still be beneficial. The NIDS data were collected across all nine provinces of South Africa and are nationally representative, but are not intended to be analysed at the provincial or lower levels (Leibbrandt, Woollard, & De Villiers, 2009).

A further limitation relates to the income data. Overall the response rate for questions pertaining to income was poor with around one quarter of the respondents providing estimates of income. To improve the data, income was calculated using a statistical imputation process. However, the data could not be imputed for many cases and non-response on the income questions was still high. This compromised the reliability of the income data and this data should therefore be interpreted with caution.

The case study data also had limitations. A key weakness lay in the translation of information. Despite training sessions and discussions with one of the interpreters, translations were not always adequate and questions were sometimes translated in leading ways. Data where this weakness was identified have been treated with caution in the analysis.



1.3.4 ETHICAL CONSIDERATIONS

All ethical guidelines were followed in the collection of the NIDS data. The process was passed through the Commerce Faculty Ethics Committee of the University of Cape Town, which granted approval on the basis that all human subject issues were considered and appropriately handled (Leibbrandt et al., 2009, p.8).

Ethical approval for the research processes pertaining to the rural case study was sought from the University of Johannesburg's Faculty of Humanities Ethics Committee. Based on the demonstration that the study abided by the principles of beneficence, non-maleficence and confidentiality, ethical approval was granted. The research was discussed with all potential participants in their own language and they were provided with an opportunity to ask questions before choosing to consent to the research. Informed consent forms were signed prior to commencing with the research. Participants were guaranteed anonymity and confidentiality. In the case of key informants, permission was sought for the use of their title, and if appropriate, their names in the report.

1.3.5 CONCLUSION

The complexities of defining concepts such as poverty and disability are necessary to highlight and advance theoretical debate, but do not always allow for adequate standard measures to be created and tracked over time. Nevertheless, this study has used, as far as possible, the best measures in terms of current thinking; and while some of the complexities were overlooked in the process of measurement, the data nevertheless still provide excellent insight into the situation faced by people with disabilities and how this might change over time. The addition of a rural case study allowed for greater complexity to be accounted for, but the overall aim of the research, from a policy point of view, was to identify national trends that can then be addressed. In responding to this aim, the selected design and methods appeared to be the most appropriate.

Having discussed the conceptual and methodological approaches to the study, the report now turns to the findings of the analysis.



Part 2: Findings of the study

2.1 Prevalence and demographic profile

2.1.1 PREVALENCE OF DISABILITY

For the purposes of research and policy discussions it is necessary to estimate the prevalence of disability in order to compare how people with disabilities fare in relation to their non-disabled counterparts. The Washington Group on Disability Statistics (WG) recommends that people should be classified as disabled if they report some difficulty with at least one of the functional areas: sight, hearing, cognition, mobility, self-care and communication. The adult questionnaire in the NIDS survey contained questions on difficulties with sight, hearing and speaking, walking, climbing stairs, lifting/carrying heavy objects, and basic activities of daily living such as bathing and dressing. The respondents were required to give a self-assessment of any difficulties which they experience. These questions may be used to assess the prevalence of disability in South Africa. For the purposes of this analysis a person with disabilities is defined as any adult who reports some, a lot, or severe difficulties with vision, hearing, and/or upper or lower body mobility (walking, climbing stairs, lifting heavy objects).

The indicators used in this analysis are narrower than those recommended by the Washington Group as they do not include cognition and communication questions. This is due to the lack of comprehensive measures available in the NIDS data to adequately ascertain the presence of such disabilities. Otherwise, the definition of disability used in this analysis closely approximates adherence to the Washington Group’s recommendation that a benchmark of some difficulty with sight, hearing, mobility and self-care be used.

The study yielded a disability prevalence of seeing, hearing and/or mobility difficulties of 18 per cent in the South African adult population. In the 2011 Census (Angela Ngyende, personal communication, 2014) the rates of difficulties were reported for the population five years and older. The percentage of people with one or more difficulties for the different lower age cut-off points are shown in Table 2. A person was counted in if he or she had at least two domains with ‘some difficulty’ or one domain with ‘a lot of difficulty’ or ‘cannot do at all’.

Table 2. Percentage of people with one or more difficulties reported (Census, 2011)

	Age cohort				
	5+ yrs	15+yrs	20+yrs	45+ yrs	50+yrs
Total (%)	8	8	8	18	21

These figures highlight the increased prevalence in older age groups.

The Census results for the number of people reporting individual difficulties (as opposed to the above rates) were the following for the population five years and older (Statistics South Africa, 2012):

- Seeing: 11 per cent reported any difficulties seeing, 2 per cent reported ‘a lot of difficulty’ or ‘unable to see’.
- Hearing: 4 per cent reported any difficulties hearing, 1 per cent reported ‘a lot of difficulty’ or ‘unable to hear’.
- Walking/climbing stairs: 4 per cent reported any difficulties in walking or climbing stairs, 1 per cent reported ‘a lot of difficulty’ or ‘unable to walk/climb stairs’.

Given the high average age for the people with disabilities in the NIDS sample, the overall rates matched reasonably well to those from the Census 2011 (Statistics South Africa, 2012) for all domains of functioning. The NIDS analysis was therefore triangulated with the Census 2011 data. Furthermore, the inclusion of three and four questions on mobility and self-care respectively in the NIDS, compared to only one each in the Census 2011, would have increased the number of people responding as having difficulty with activities of daily living.

Based on the aforementioned criteria it is estimated that there are 2 953 people with disabilities in the weighted NIDS dataset, suggesting a prevalence level of 18 per cent in the South African adult population. Extrapolating from the survey data to the adult population of the country indicates that there were 4 597 698 people with disabilities in 2008. The vast majority (73 per cent) had mobility problems, followed by vision impairments (42 per cent) and hearing impairments (15 per cent). One in five people with disabilities (20 per cent) had multiple disabilities. The NIDS results are in line with similar figures for the rest of the world. The *World Report on Disability* (WHO, 2011) found that the global prevalence rate for the adult population is 16 per cent, ranging from 11 per cent in higher income countries to 18 per cent in lower income countries. Mont and Cuong



(2011) estimated the prevalence of disability at 15 per cent in Vietnam and Mont (2007) suggested that disability prevalence was 12 per cent in the United Kingdom, 15 per cent in Brazil, 19 per cent in Canada and 19 per cent in the United States of America. However, given that these prevalence measures were derived from studies which use different methodologies to assess prevalence, the findings are not directly comparable.

2.1.2 DEMOGRAPHIC PROFILE

Gender, race and age

Given that the majority (63 per cent) of the NIDS adult sample was female, it is not surprising that seven out of ten (71 per cent) people with disabilities were female. The racial profile of people with disabilities in this study was close to the general population profile with 83 per cent being African, 8 per cent Coloured, 5 per cent White, and 3 per cent Indian. Just over half of people with disabilities (56 per cent) lived in urban areas.

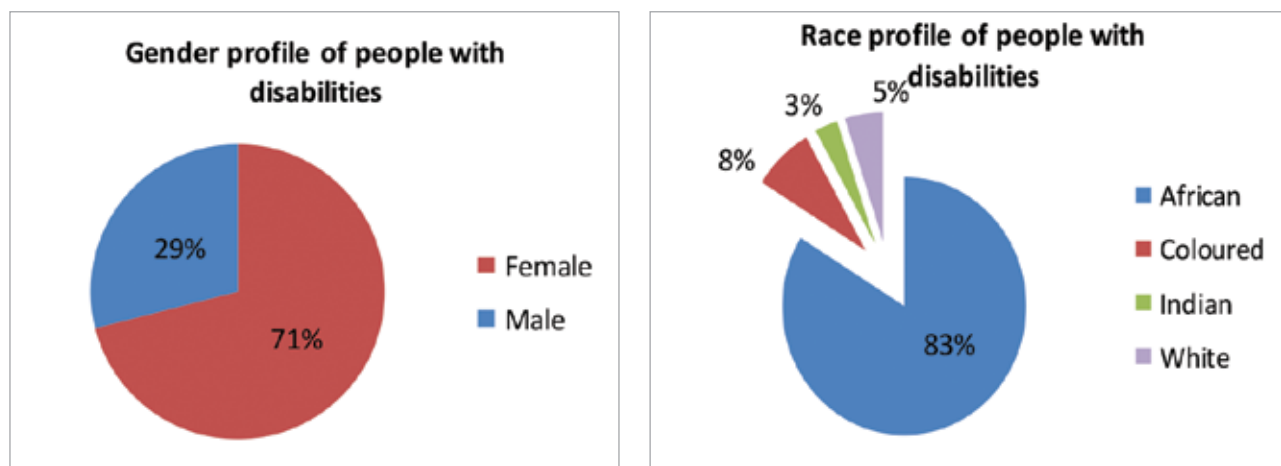


Figure 2. Gender and race profile for people with disabilities (NIDS, 2008)

Table 3. Age profile by disability status (NIDS, 2008)

Age cohort (10 years)	Non-disabled (%)	People with disabilities (%)	Total (%)
15-24	32	14	29
25-34	26	15	24
35-59	34	42	35
60+	8	29	12
N	11 565	2 953	14 518

Table 3 depicts the age distribution of people with disabilities and non-disabled adults. The population of people with disabilities was older than the general population. One in four persons with disabilities was over the age of 60. The average age among disabled people was 47 years compared to 34 years for the non-disabled. This finding concurs with disability in the Census (see Table 2 above), other South African studies (CASE, 1999), as well as studies internationally (e.g. Mont & Cuong, 2011).

Marital status

As demonstrated in Table 4, in 2008, just under 50 per cent of people with disabilities were married or living with a partner.

Table 4. Marital status for people with disabilities (NIDS, 2008)

Marital status	Non-disabled (%)	People with disabilities (%)
Married	30	36
Living with partner	9	9
Widowed	5	18
Divorced/separated	3	3
Never married	53	33
N	11 565	2 953



The majority (89 per cent) of women with disabilities had given birth. The extent of divorce or separation was relatively low at 3 per cent. These findings are encouraging. However, these results did not yield significant differences between people with disabilities and non-disabled adults who were married, living with a partner or divorced. One in three (33 per cent) people with disabilities and 53 per cent of non-disabled adults were single and had never been married. This difference was significant at the 95 per cent confidence interval. A further 5 per cent of non-disabled adults and 1 in 5 (18 per cent) of people with disabilities were widowed.

Changes in the sample and profile from Wave 1 to Wave 2

In the Wave 1 sample 2 953 (18 per cent) of 16 878 adults were deemed disabled. There was some attrition amongst the disabled population with only 2 600 people with disabilities from Wave 1 being retained in the Wave 2 dataset. Accounting for retained as well as new people with disabilities in Wave 2, the total number of people with disabilities in Wave 2 was 1 956, which is 11 per cent of the adult sample.

Transition matrices were used to analyse any changes in the number of people self-reporting difficulties with sight, hearing and mobility. Some changes were noted. There was a notable and puzzling improvement for instance amongst those reporting difficulties with sight in Wave 1. Almost 80 per cent of those indicating a lot of difficulty in Wave 1 indicated no difficulty in Wave 2. Similar findings were evident amongst those indicating hearing problems. While some of these improvements may have been as a result of access to assistive devices such as glasses or hearing aids, or (in the case of sight problems) to surgery (e.g. cataract), these interventions are unlikely to explain such a substantial change. Some of the difference may also have to do with the small sample size of people with moderate to severe sight and hearing difficulties, the ways in which respondents interpreted questions, and/or the way in which the questions were asked by the interviewers. For mobility difficulties there was little evidence of substantial changes across the two waves.

The majority (85 per cent) of those who did not have a disability in Wave 1 remained so in Wave 2, but 14 per cent experienced sufficient difficulty with sight, hearing or mobility to meet the requirements for being deemed disabled in Wave 2. A striking finding is that the majority (68 per cent) of those who were regarded as disabled in Wave 1 did not report enough difficulties in Wave 2 to maintain this status and moved into the non-disabled category. Only 32 per cent (610 adults) who were disabled in Wave 1 remained disabled in Wave 2. Early on in the Wave 1 analysis the difficulty in ascertaining disability was noted, particularly the subjectivity of self-assessment. The unexpected findings in Wave 2 data suggest that self-reporting may be inconsistent across time; however panel data may help us in identifying those who report consistent disability over waves. Therefore it is plausible that a more stringent and conservative estimate of the prevalence of disability should be based on the 610 adults who remained disabled in both waves. This suggests a prevalence rate of 4 per cent in Wave 1 and 3 per cent in Wave 2. A further analysis by severity of reported difficulties might provide some explanations for the Wave 1 to Wave 2 differences.

2.2 Education

As discussed in the literature review (Section 1.2), a key area in which people with disabilities fare worse than non-disabled people is in education (WHO, 2011). Groce et al. (2011) identified lack of education as a factor contributing to poverty amongst people with disabilities, and equally poverty has an adverse impact on education (Mitra, Posarac, & Vick, 2011). Although there is clear evidence that points to the link between disability and lower levels of education, we often do not fully understand why this is the case. A key challenge in understanding exactly what shapes this relationship is the lack of age of onset data, which would allow for a clear analysis of how childhood disability affects access to education. While the NIDS also does not have such data, the aim of this section was to compare the education levels of people with and without disabilities. This will help to identify factors associated with the relationship between education and disability in order to determine leverage points for improving this relationship.

2.2.1 EDUCATION STATUS

The analysis of the NIDS data confirms the differential education completion rates between people with disabilities and non-disabled people. As Table 5 demonstrates, non-disabled people on average had 2.7 more years of education than people with disabilities.

Table 5. Mean number of years of education for people with disabilities and non-disabled people (NIDS, 2008)

Disability status	Mean number of years of education
Non-disabled	9.3
People with disabilities	6.6



When education is viewed in terms of categories, a statistically significant difference was found between people with disabilities and non-disabled people. More people with disabilities had no schooling than non-disabled people, and non-disabled people were more likely to progress to secondary and post-secondary education than people with disabilities. There was no differentiation between mainstream and special schooling in the NIDS data. Figure 3 shows that a larger percentage of respondents with disabilities indicated that they did not have any schooling (22 per cent) when compared to the non-disabled respondents (7 per cent). People with disabilities were also less likely to have had secondary level education. Only one in three (38 per cent) compared to 52 per cent of non-disabled adults had some secondary schooling. Completion of secondary school was low for all adults but again only 10 per cent of people with disabilities compared to 20 per cent of non-disabled persons finished secondary school. The completion of tertiary education was very low across both groups. The South African Department of Basic Education (DBE) reported that while school attendance has improved for primary and secondary levels in children with and without disabilities since 2002, the main reason for non-attendance of tertiary education in 16- to 18-year-olds, who have completed secondary school, was no money for fees (DBE, 2013).

A similar distribution of educational attainment amongst disabled and non-disabled people was reported by CASE (1999) for the South African population, and Graham et al. (2013) for eight wards in Johannesburg. CASE (1999) pointed out that the lack of attention to special needs in primary school resulted in disabled students being unable to reach high school. In the CASE survey of 1998, age of onset information was collected, and the resulting analyses showed a marked difference between early and late onset of disability in terms of educational achievement.

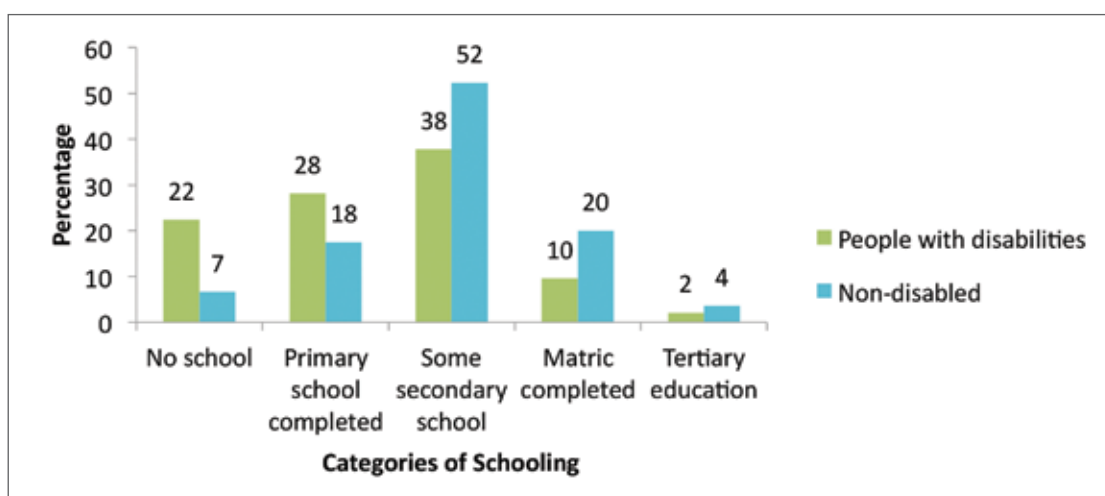


Figure 3. Level of schooling by disability status⁶ (NIDS adult respondents, 2008)

To gain a deeper understanding of this result, the average score for the highest educational attainment was calculated for the disabilities in hearing, sight and mobility separately, and by level of difficulty experienced. The results are presented in Figure 4.

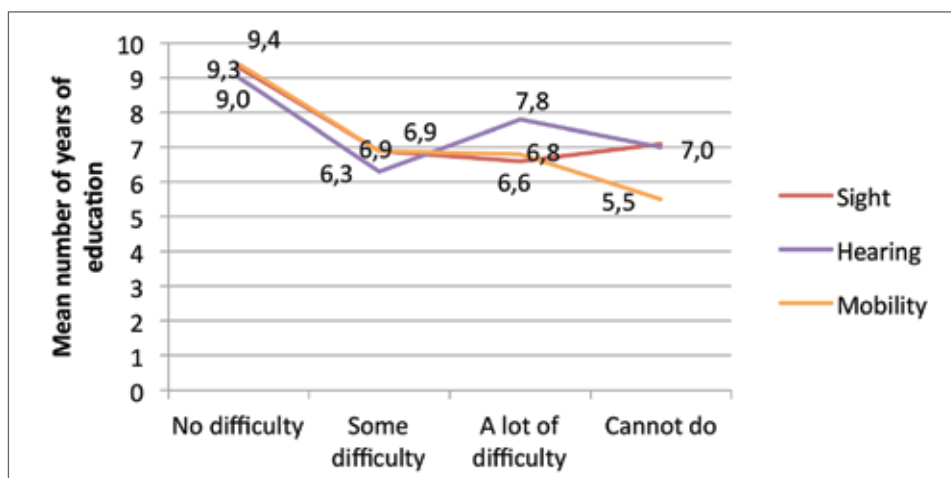


Figure 4. Mean educational attainment by severity and type of disability (NIDS adult respondents, 2008)

⁶ All differences in Figure 3 were statistically significant at the 95 per cent level of confidence, except for tertiary education.



Figure 4 demonstrates that education levels decreased as people's mobility declined. For those with sight difficulties, a similar pattern emerged, although there was a slight increase in years of education for those who indicated that they were blind, as compared to those who indicated that they had a lot of difficulty with vision. Those with hearing difficulties did not follow this pattern. There was a sharp decrease in the number of years of education for those who indicated having some difficulty with hearing, as compared to those who had no difficulty. But interestingly, there was an increase where people indicated having greater difficulty. This could possibly be because greater hearing difficulties are likely to be identified sooner in life and people experiencing these difficulties were likely to be exposed to alternate forms of education earlier (National Dissemination Center for Children with Disabilities, 2010). However, those who indicated that they were deaf had seven years of education on average – a similar number of years to those who mentioned sight difficulties. Overall, those who indicated being blind or deaf had on average 1.5 more years of education than those who had severe difficulties with mobility.

2.2.2 EXPLAINING DIFFERENCES IN EDUCATION

Although these contrasts in years of education between people with disabilities and non-disabled people are stark, it is important to understand what might explain these differences. As discussed in the previous section, the people with disabilities in the sample (and in the population) was on average significantly older (with a mean age of 47 years) than the non-disabled population (which had a mean age of 34 years). In South Africa, the older African and Coloured population is less likely to be educated because of the effects of apartheid era policies on education (Branson & Lam, 2009). Thus, this key difference in education levels between people with and without disabilities may be explained, not by disability, but by the higher average age of the population with disabilities.

The analysis of education level by age categories for the adult sample allows us to determine the possible effect of disability on education, whilst accounting for the effect of age. This may give an indication of where onset of disability is likely to have been early and during school-going ages. However, we can only point to possible effects. Without a clear record of age of onset of disability we lack information about how the disability itself affects education. This information is particularly important in the case of persons with a hearing impairment as there can be profound differences between losses acquired pre-lingually (i.e. prior to the development of language), or post-lingually (i.e. after the development of language).

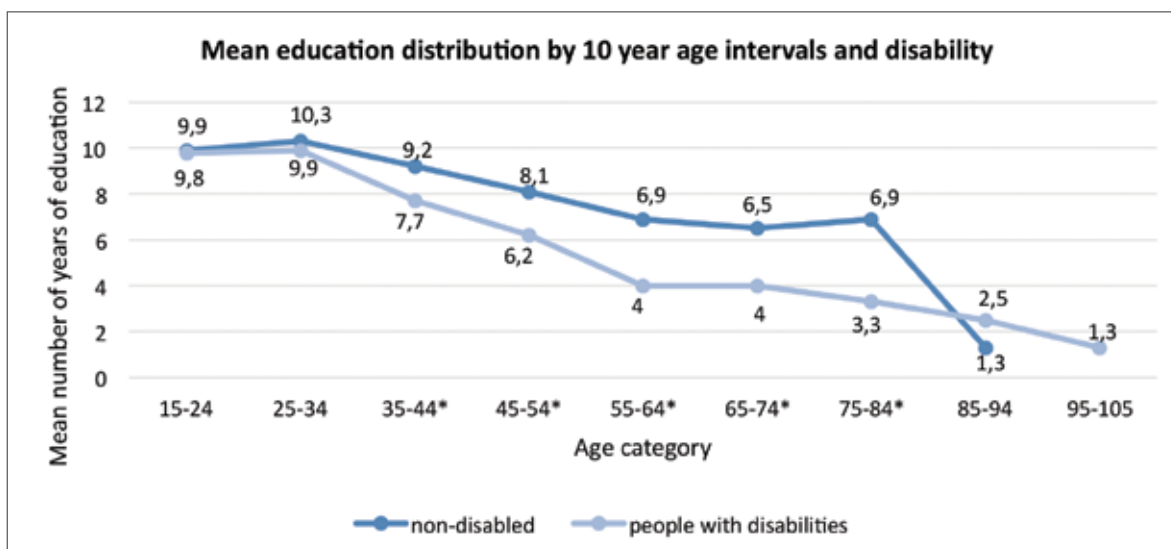


Figure 5. Mean years of education by 10-year age intervals and disability⁷ (NIDS adult respondents, 2008)

Figure 5 demonstrates that even when accounting for age, for the population aged between 35 and 84, people with disabilities still have significantly lower average levels of education than their non-disabled counterparts. This finding suggests that disability has a marked effect on access to education, or low educational achievement may be associated with age. However, it is promising to note that for the younger cohorts education levels between people with disabilities and non-disabled people were very similar. This may reflect improved access to education for children with disabilities. However, further analysis by age of onset (not available in NIDS), would allow for a more nuanced understanding.

⁷ *Indicates the age groups at which there is a significant difference at 95 per cent confidence level in educational attainment between people with disabilities and non-disabled respondents.



A regression analysis assessing the relative effects of race, age, parents' level of education, income, geographic location, gender and disability on educational attainment demonstrates that even when accounting for these other variables, disability still had a significant effect on education, resulting in approximately one year less education. However, race had a much larger effect with African people likely to have three years less education than their White counterparts. Geographic location also had a major impact with those living in urban areas likely to have two years more education than those living in rural areas. This suggests that African people with disabilities living in rural areas are likely to be the worst affected in terms of access to education, and demonstrates the compounding effects of various aspects of marginalisation – race, geographic location and disability.

2.2.3 EDUCATION, DISABILITY AND GEOGRAPHIC LOCATION

The findings regarding the effects of race and geographic location was borne out by the rural case study data. Overall, quality of education in the area seemed to be low, despite a high number of schools in the vicinity, suggesting that the challenge lies not in accessing education but in accessing quality education. Participants talked of children not attending school and of schools not having mathematics and science teachers available.

The ward councillor for the area noted the following regarding education in the area:

You know in education, [there is] a little bit improvement. I have seen results for last year. They have improved from lower results; they are up to 65 per cent now. At least they are improving, but it's a pity of our learners, they tend to go to taverns. They are not serious about education, but you know teachers are doing well; like they are conducting some studies, weekend studies, winter studies, helping learners to catch up on their studies.

Thus education in the area seemed to be lacking quality. However, education for children with disabilities was even more of a challenge. In Lillydale there is a special needs school that caters for children with a wide range of disabilities, from mobility difficulties, hearing and sight impairments, to severe intellectual and emotional difficulties. There was a strong perception amongst participants, including key informant interviewees, that all children with disabilities, regardless of the type and severity of difficulty, needed to go to the special needs school for disabled children. There was limited recognition of the need to mainstream learners with disabilities who could cope in a mainstream school. This meant that children who could easily be integrated at the local mainstream primary and secondary schools were automatically placed at the special needs school where, despite the best efforts of the teachers and support staff, access to any quality education was severely restricted.

For researchers observing activities at the special needs school it became clear that education was limited. There were too few classrooms for the number of learners, there was a wide range of ages and needs that could not all be met without some specialised support, and there was a focus on practical training and keeping children busy, rather than actual teaching of the school curriculum. The teachers at special needs school themselves spoke of the many challenges they faced in trying to provide an education to children with such wide ranging needs. In addition, they felt that they lacked both the technical and physical resources to adequately educate the children in their care.

Some of the teachers who participated in a focus group noted:

We don't have enough training. We still want more... Uhm like we don't know the sign language.

Some of them, there are blind children around the community, but they don't attend, why, because they see there is no Braille teacher. So, that's the main challenge to the teachers.

The teachers at the school also felt that teachers in mainstream schools and parents of children with disabilities did not understand the purpose of the school. They recounted instances of teachers referring children with mild learning difficulties to the special needs school, thus removing them from the mainstream schooling system and further burdening teachers with an even wider range of support requirements. This may have been due to the lack of support services in ordinary schools for children with learning difficulties. They also felt that some parents viewed the special needs school as a place which could 'babysit' their children with disabilities, and not many people in the community saw it as a place of education. Conversations with community members revealed a perception that because children with disabilities were provided for in a special needs school, there was not much more that could or should be done to address their needs. The researchers got the impression that parents and community members had very low expectations for the education of learners with disabilities.

Nevertheless, the special needs school is a key support mechanism in the community for children with disabilities and their parents, despite its severe challenges. Parents of children with disabilities spoke of the support they received from teachers who tried to help them understand their child's disability and how to manage it in the home. One parent said:



Yes, we feel good, because they teach us. Like if he forgets when you send him to do something, we were taught not to give up on them, and not to shout at them.

It is important to understand that while the special needs school is a key support structure in the community, there are many parents who are unable to send their children to the school. The special needs school is located in Lillydale, but is intended to serve families located in surrounding villages in the area of Bushbuckridge. Many of these families cannot afford the transport costs to send their children to the special needs school. These families are unlikely to have the support afforded to families whose children go to the special needs school, and their children are probably not exposed to any form of education.

The statistical analysis showed that people with disabilities in rural areas are likely to have almost four years less education than non-disabled people in urban areas; and people with disabilities in rural areas have two years less education than people with disabilities in urban areas. The case study analysis provides some insight into the realities of education for children with disabilities in rural areas. It also points to the need to address a key gap in service provision.

2.3 Employment and income

As discussed earlier in this report, disability has an effect on employment and income. The late onset of disability may result in loss of employment, and earlier onset of disability may affect access to education, which in turn impacts on access to employment (WHO, 2011).

In South Africa, the *Employment Equity Act* (Republic of South Africa, 1998), the *Broad-Based Black Economic Empowerment Act* (Republic of South Africa, 2003), as well as the *Integrated National Disability Strategy White Paper* (Republic of South Africa, 1997), noted the importance of including people with disabilities in the labour market and economy. To this end, people with disabilities are one of the targeted groups for employment equity and Broad-Based Black Economic Empowerment (BBBEE). The question is, to what extent has the presence of these policies led to better employment and income outcomes for people with disabilities? This section of the report considers this question.

2.3.1 EMPLOYMENT

Employment status

The NIDS data revealed that 47 per cent of people with disabilities compared with 34 per cent of non-disabled adults were not economically active (unemployed with no desire to work) (see Table 6). Not economically active people are those within the working-age population (18 to 65 years) who opt to be out of the labour market and may include people with severe difficulties who feel that they cannot work or have stopped looking for employment.

Table 6. Employment status by disability status for people 18 to 65 years (NIDS, 2008)

Employment status	Non-disabled (%)	People with disabilities (%)
Employed	46	39
Unemployed	21	15
Not economically active	34	47
N	10 797	2 122

The employment rate was higher for non-disabled people (46 per cent). The unemployment rate (unemployed with a desire to work) for people with disabilities was slightly lower at 15 per cent than for non-disabled people (21 per cent). This is accounted for by the fact that just under half the working-age population with disabilities were not economically active.

People with disabilities were significantly more likely to state that health reasons were the main motivation for work stoppage. Unemployed people with disabilities were also more prone to have been unemployed for longer than five years compared with the non-disabled. As expected, more economically inactive people with disabilities (68 per cent) had never looked for a job compared to 55 per cent of the non-disabled adults. Overall the disabled respondents appeared more despondent about their prospects of finding work. Four in ten claimed that the main reason that they were not available to work in the past four weeks was because they had become discouraged about their chances of finding work. One in ten people with disabilities gave up searching for jobs because they were despondent, while one in ten were either pregnant or had family responsibilities. These findings suggest that it may be possible to boost employment among people with disabilities if support services are available to help them find jobs and cope with health problems and despondency.



Those who did not have disabilities were significantly more likely to be employed than people with disabilities. Thirty-nine per cent of people with disabilities compared to 46 per cent of non-disabled people were employed in 2008. This finding suggests that South Africa exhibits the same trend as developed countries where disability is associated with lower employment rates. These results concur with Mizunoya and Mitra's (2013) conclusion that employment gaps for people with disabilities are more evident in middle-income countries than in low-income countries.

The transition matrix for employment (based on those who had a disability in Wave 2) reveals that, of those people with disabilities who were employed in Wave 1, just under half (49 per cent) retained their employment in Wave 2, 42 per cent became economically inactive, and 8 per cent became unemployed. On a positive note, of those people with disabilities who were unemployed in Wave 1, almost a quarter (23 per cent) found employment by the time Wave 2 data were collected. However, more than half of unemployed people with disabilities in Wave 1 became economically inactive in Wave 2, highlighting the fact that discouragement among job seekers with disabilities remains a problem over time. Just under a quarter of people with disabilities who were unemployed in Wave 1 were still unemployed in Wave 2. Only 8 per cent of the economically inactive found work in Wave 2, while 7 per cent started seeking work and regarded themselves as unemployed.

In contrast, those who did not have a disability in Wave 2 were significantly more likely to retain their employment. Sixty-one per cent of non-disabled adults maintained employment from Wave 1 to Wave 2. Only one in ten became unemployed. More unemployed, non-disabled adults (28 per cent) in Wave 1 found employment in Wave 2 than their counterparts with disabilities (23%).

These findings suggest that for people with disabilities employment is precarious over time. People with disabilities are more likely to become unemployed than their non-disabled counterparts, and are more likely to become economically inactive, suggesting that despondency plays a key role in their employment status. They were also more likely to be unemployed for longer periods (4.5 years) than their non-disabled counterparts (3.7 years), before they found their current employment.

The unemployment rates for adult males and females with disabilities were 11 and 13 per cent respectively, providing scant support for Mizunoya and Mitra's (2013) finding that men with disabilities face greater unemployment than women. This is an interesting finding, since gender is often thought to play a role in further marginalising women with disabilities. In terms of access to employment, at least, this assumption does not seem to be borne out. In contrast the CASE survey (1999) showed a statistically significant difference between women and men with disabilities, with disabled women having lower employment rates (11 per cent compared to 15 per cent for men with disabilities). Given the time period between 1998 and 2008, this change could be a real change.

Types of employment

Just over two out of three (67 per cent) non-disabled working adults compared to 58 per cent of workers with disabilities had a formal written contract. Workers with disabilities were more likely to be employed on the basis of a verbal contract. Having a formal contract is an indicator of greater job security.

People with disabilities were more likely to be employed in elementary work and less likely to be professionals. Fewer people with disabilities were employed in craft and trade work or as plant and machine operators. However, a positive finding was that the proportion of people with disabilities employed as associate professionals, legislators, senior officials and managers, shop and sales workers, and to a lesser extent clerks, was almost on par with those who did not have a disability, although they made up a very small percentage of the employed people with disabilities population. This finding suggests that there are inequalities in the type of employment that people with disabilities and non-disabled people are able to access, with people with disabilities more likely to work in positions that require fewer skills and in jobs that have less job security. This also has implications for the income from employment rates between people with disabilities and non-disabled individuals, with people with disabilities likely to earn less. However, these inequalities seem to rectify themselves at the higher levels of employment. Individuals with disabilities who were able to access jobs that require more skills were probably able to do so because of advantages in access to education earlier on in life, and because of access to assistive devices such as wheelchairs, braille systems, and the like. These individuals were also more likely to earn similar wages to their non-disabled counterparts.

A series of questions were asked related to whether persons receive a 13th cheque, or bonus, and whether they had a second job or engaged in casual employment in order to develop a sense of the formality of employment, as well as whether such employment resulted in greater sources of income. Fewer people with disabilities compared to non-disabled people benefited from formal sector employment benefits such as 13th cheques and profit share, suggesting that not only are people with disabilities more likely to work at the lower end of the labour market, but also that they are more likely to be engaged in informal and insecure types of employment.

The employment of people with disabilities was on a par with their non-disabled counterparts with regard to informal work activities such as piecework, casual work and personal agriculture. This finding provides some support for Palmer's (2011)



assertion that people with disabilities in developing countries can benefit from employment in the informal economy. However, it should be noted that employment in the informal sector is often precarious and low-paid, and workers in this sector tend to endure poor working conditions and do not benefit from social protection measures like unemployment insurance. Interestingly, more than half of people with disabilities reported that they assisted others with business activities compared to only one in three non-disabled adults. These are likely to have been businesses run by household members or friends, suggesting that people with disabilities provide a valuable source of support in running and assisting with household income generating activities. This finding extends evidence by Graham et al. (2010), which suggested that people with disabilities often provide support within the home which enables other members of the household to derive an income. While Graham et al. (2010) pointed to the care and household responsibility work that people with disabilities often assist with, the above finding shows that this support extends to income generating activities. However, it must be noted that often such support is not paid for and therefore may not be as highly valued in the household.

2.3.2 INCOME

Earnings from work

The survey asked respondents to estimate their earnings from employment including salaries or wages from primary and secondary jobs, 13th cheques, profit share, bonuses, piecework earnings, casual work income, income from self-employment, and income from agricultural produce or other business activities. Given that the data collection was spread over several months, the data were deflated to take account of inflation, with September 2008 being the base month.

Table 7. Monthly average income from employment by disability status (NIDS, 2008)

	Non-disabled	People with disabilities	Total
Mean income from work per month	R1 220 (US\$128.42)	R472 (US\$49.68)	R971 (US\$102.21)
Median income from work per month (employment only)	R1 475 (US\$155.26)	R1 046 (US\$110.11)	R1 369 (US\$144.11)
N ⁸	4 217	667	4 884

On average people with disabilities earned significantly less per month than non-disabled people from all forms of employment. Non-disabled people earned a monthly average income from employment of R1 220, which was almost three times what the respondents with disabilities earned (R472). However, the average income is very sensitive to the large variations in income which is characteristic of South Africa and other countries with high income inequality. In addition, the substantial number of unemployed or economically inactive people with zero income also influences the calculation of average income. These problems can be alleviated to some extent by using another measure of central tendency, the median. The median income is the level of income above and below which 50 per cent of the data points lie. Due to the large number of unemployed people the median income was zero for both groups. The median income was then recalculated for only those respondents who earned an income above zero. When the median income of wage earners was calculated for those with and without disabilities, the differential between the two groups decreased to just over R400 (US\$42.11) per month. Thus workers with disabilities were still earning considerably less than their non-disabled counterparts.

We used regression analysis to compare the influence of disability on income with other explanatory variables such as employment, education, race and gender. The dependent variable was the log of total individual income from all types of work. The independent variables included education, employment status, gender, race, urban/rural and disability. This analysis allowed an examination of the influence of disability, if any, on income.

The regression analysis revealed that 38 per cent of the variation in the income from work could be explained by the model. Education, race, gender and employment were significant predictors of monthly income from all forms of work. As expected, education had a positive but modest effect on income. In contrast, being female or African had a negative effect as Africans earned 47 per cent less than Whites. Females earned around 39 per cent less than males. Urban respondents earned almost a third more than rural respondents. The key finding was that disability was not a significant predictor of earnings from employment. Thus the regression suggests that employment, race, gender and education were the main influencers on income. However, disability may interact with these variables. For instance, the demographic profile presented in Section 2.1 shows that 71 per cent of the people with disabilities were female, suggesting that women are more likely to report functioning difficulties than men. Similarly, people with disabilities are less likely to be economically active as discussed above. Thus, although the presence of a disability itself does not necessarily explain differences in income, the ways in which disability interacts with other factors, and the ways in which it shapes particularly access to employment and education does impact on income levels.

⁸ Data need to be interpreted with caution due to high non-response error.



A random effects panel regression was run to understand the effect of disability on income over time. The regression model, which was significant, was run using the natural log of real income from work as the dependent variable. The independent variables were the same as those used in the regression of real income from Wave 1. The most notable change in the panel regression was that disability became a significant predictor of income, whereas when looking at Wave 1 data only, disability did not have a significant effect. People with disabilities earned 11 per cent less from working activities than non-disabled adults.

The severity of disability also played a role in income levels as demonstrated by an analysis of variance (ANOVA), which was run using the variables for mobility, hearing and sight difficulties. The tests showed that there was a significant negative effect of mobility difficulties⁹ as well as sight¹⁰ and hearing¹¹ difficulties on income from work.

The mean differences in income from work as calculated by the Bonferroni post-hoc tests are shown in Table 8.

Table 8. Severity effects on income from work (NIDS, 2008)

As compared to 'no difficulty'	Mobility (Rand)	Hearing (Rand)	Sight (Rand)
Some difficulty	-814 (-US\$85.68)	-483 (-US\$50.84)	-575 (-US\$60.53)
A lot of difficulty	-810 (-US\$85.26)	-608 (-US\$64.00)	-383 (-US\$40.32)
Cannot do	-991 (-US\$116.59)	-672 (-US\$70.74)	-673 (-US\$70.84)
As compared to 'cannot do'	Mobility (Rand)	Hearing (Rand)	Sight (Rand)
Some difficulty	177 (-US\$18.63)	234 (US\$24.63)	97 (US\$10.21)
A lot of difficulty	181 (-US\$19.05)	65 (US\$6.84)	289 (US\$30.42)

The findings demonstrate that difficulties with mobility constrained income from work to a greater degree than hearing or sight impairments, with those with at least some mobility difficulties earning an income of R814 (US\$85.68) less than those with no difficulty, and R331 (US\$34.84) and R239 (US\$25.16) less than those with some difficulty with hearing or sight respectively. The table also demonstrates that there were key differences in income as the severity of the difficulty increased, but that these differences tended to diminish as the level of difficulty increased. This suggests that experiencing difficulties has an influence on earnings and that those with severe difficulties, particularly those with severe mobility difficulties, are the most affected.

The analysis of income for the overall population in the NIDS data sets shows that education is a major predictor of income. The analysis shows that individual income was raised by 13 per cent for each additional year of education. Females earned 33 per cent less than males and Africans earned 30 per cent less than other race groups. Adults in urban areas earned 30 per cent more than those in rural areas. It must be noted that even though disability was significant in this regression, it was less so relative to gender and race. As mentioned previously, disability prevalence was only 18 per cent in the NIDS analysis which is more than the eight per cent identified in Census 2011. Females and Africans still earned less than people with disabilities, and African people with disabilities and women with disabilities fared worse than any other groups.

The implications of the findings are that policies aimed at enhancing access to employment and education for *all* people as a general poverty alleviation strategy should also benefit people with disabilities. In particular, measures which promote racial and gender equality in terms of access to employment and levels of income should benefit people with disabilities as well, as many are African and female. However, it is also important to be cognisant of the ways in which disability interacts with variables such as being economically active and having access to education in order to ensure that the presence of a disability does not place people with disabilities at a greater disadvantage. The panel regression highlights an important finding – that over time disability tends to play an increasing role in shaping differences in income. This finding suggests that efforts to rectify the racial and gendered nature of income inequality would need to address the inequalities in income experienced by people with disabilities. However, if disability is not taken into consideration in a targeted way as well, disability-related income inequality may persist and become more pronounced over time.

A key strategy to address income differentials may be to work with organisations of people with disabilities in order to focus on why so many people with disabilities withdraw from the labour market and to address the barriers they face. While for many persons disability may be so severe that they are unable to work, for others the social and physical barriers to work, and the discouragement they experience, may be the primary reasons. The latter issues need to be addressed in order to

⁹ $F(3,15542) = 51.86, p < 0.05, \omega = 0.06.$

¹⁰ $F(3,14549) = 16, p < 0.05, \omega = 0.03.$

¹¹ $F(3,14360) = 7.93, p < 0.05, \omega = 0.02.$



ensure that more people with disabilities are economically active, and in turn have a greater chance of being employed since employment status has the strongest effect on greater income levels.

In addition to earnings from work, deductions that were made from salaries were also analysed. Where people have automatic deductions from earnings, this suggests being engaged in more formal employment, and it gives an indication of the kinds of income security that are being saved for in the event of a 'shock' such as illness, job loss or retirement.

Table 9. Contributions to medical aid, UIF and pension/provident funds (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)
Medical aid contributions	6	2
UIF contributions	16	8
Pension/provident fund contributions	10	5
N	11 565	2 953

People with disabilities were far less likely to make contributions for medical aid, UIF and pension funds compared to non-disabled adults as shown in Table 9. This is probably due to the fact that fewer people with disabilities were engaged in formal employment and they were less likely to be engaged in employment at the upper skills levels. It demonstrates that people with disabilities face greater work and income insecurity in times of shock. These findings imply that disabled workers may be more reliant on the public health care system when they are ill or injured, and that they are more likely to rely on old age pension grants than private retirement funds. Private retirement funds typically pay out higher monthly payments than the old age grant.

Income from grants

Table 10. Access to grants by disability status (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)	Total (%)
No grants	77	49	72
One grant	21	46	26
Two grants	1	5	2
More than two grants	0	0	0
N	11 565	2 953	14 518

Over three quarters (77 per cent) of non-disabled and almost half (49 per cent) of people with disabilities received no grants. Just under half (46 per cent) of people with disabilities and 21 per cent of non-disabled adults received one grant. Very few respondents received more than one grant. The majority of the disabled recipients of grants were unemployed or not economically active. Of the adult grant beneficiaries with disabilities, 21 per cent were employed. These are likely to be people who were in the lower end of the labour market and thus earning less than R27 552 (US\$2 900.21) per annum in 2008 (the income threshold for single applicants).

Table 11. Receipt of grants by disability status (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)
State old age pension	7	34
Disability grant	3	11
Child support grant	18	18
Foster care grant	1	2
Care dependency grant	<0.5	1
N	11 565	2 953

Over a third of people with disabilities (34 per cent) received a state pension grant, rendering this grant the primary form of social protection for people with disabilities. This finding is not surprising given that people with disabilities have an older average age than non-disabled people and many qualify for the state old age pension instead of the disability grant. This also demonstrates that the old age pension is well targeted and that many of those disabled older persons who should be receiving it are accessing it. Similar numbers of people with disabilities and non-disabled people reported receiving the child support grant (17.6 per cent and 17.9 per cent respectively). Surprisingly only 11 per cent of people with disabilities in



the overall sample were receiving the disability grant and three per cent of non-disabled people were receiving the grant. For those younger than 60 years, 15 per cent of people with disabilities received the disability grant.

These findings highlight the complexity of defining disability. It is possible that many of the people classified as disabled in this analysis do not regard themselves as having a disability and therefore have not applied for the disability grant. Additionally, many people classified as having a disability in this analysis may not be deemed as such by medical practitioners who may use more stringent measures of disability. Alternatively, potential recipients may not be aware of the grant or how to make an application for it. A few of the people who were receiving the grant have been deemed non-disabled by the criteria used to determine disability in this analysis. These may be people who were on temporary grants and their experience of difficulties has since been resolved. They may also experience a disability (such as intellectual or emotional disabilities), which could not be factored into the disability variable used for this study. Alternatively, they may have incorrectly indicated which grant they were receiving. The rural case study experience indicates that there is widespread confusion about the type of grant which is received, particularly with regard to the differences between the disability grant, the old age pension, as well as the care dependency grant, all of which have the same value. The high rate of reported difficulties in the older population (60 years and older) is congruent with 39 per cent of people with disabilities receiving the state old age pension in the NIDS. Reported uptake of the care dependency grant was very low, confirming findings from a research study by DSD, SASSA and UNICEF (2012).

A comparison of grant access across the waves revealed that receipt of a state pension increased among non-disabled people and remained relatively stable for people with disabilities. Access to the disability grant was low in Wave 1 and declined slightly in Wave 2. Marginally more non-disabled adults than people with disabilities benefited from the child support grant in Wave 2. Access to the foster care grant and care dependency grant remained low.

An analysis of the effects of the income from grants was also conducted. Income from grants was deflated with September 2008 being the base year. Table 12 indicates that people with disabilities received R502 from all grants on average per month which was significantly more than the R165 non-disabled people got.

Table 12. Income from grants by disability status (NIDS, 2008)

	Non-disabled	People with disabilities
Mean income from all grants ¹² per month	R165 (US\$17.37)	R502 (US\$52.84)
Median income from all grants ¹³ per month	R0	R421 (US\$44.32)
N	11 565	2 953

However, the analysis among adults who received grants indicates that the median income from all grants among people with disabilities was R421 per month while it was R0 for non-disabled adults. Both the mean and median values confirm that people with disabilities are notably more reliant on income from grants than those who did not have disabilities.

This demonstrates the importance of the social grant system in addressing the needs of people with disabilities, who are more likely to struggle with finding employment. Although the poverty alleviating effects of social grants for the non-disabled population are marked, for people with disabilities this is even more so given their higher levels of grant income. In fact, the combined effects of grants received by people with disabilities ensures that their income is brought up to a similar level as those who do not have a disability and in this way goes some way towards addressing income inequality that may arise from having a disability – although it does not take into account the additional costs associated with having a disability. It should also be noted though that grant income currently plays primarily a poverty alleviating rather than transformative role. As was found by Graham et al. (2010) in the urban case study of Johannesburg, grant income was primarily used to meet household basic needs such as food, medication and schooling costs and was not used towards the purchasing of devices that might enhance independence, or towards the purchase of assets or materials to invest in developing a micro-enterprise. In the rural case study, only one participant mentioned using the grant money he received to buy cigarettes which he then sold on to neighbours in order to earn a small additional income.

Having analysed the sources of income, the report now turns to considering the effects of disability on income poverty, taking into account all sources of income.

¹² Excludes foster care grant.

¹³ Excludes foster care grant.



2.3.3 DISABILITY AND INCOME POVERTY

There are numerous methods for assessing poverty. Economists favour income and expenditure measures which are in line with the economic resources approach described by Palmer (2011). The difficulty of applying these measures to examine the relationship between disability and poverty is that the data are usually collected at household level and thus the income and expenditure of the disabled household members are merged with the other non-disabled members. However, the individual income data from the NIDS dataset can be used to gauge the income poverty of people with disabilities, but given the high non-response error for the individual income questions, the data must be interpreted with caution as they may not be reliable.

Argent et al. (2009) utilised the Foster-Greer-Thorbecke (FGT) indices which measure the number of people who are living below the poverty line. They used the Hoogeveen and Ösler (2005) estimates of the lower and upper bounds for poverty in South Africa which when adjusted for inflation is at R502 (US\$52.84) and R924 (US\$97.26) per capita per month for 2008. The FGT index considers the number of people whose income is less than R502 at the lower bound and less than R924 at the upper bound to determine the extent of poverty.

Table 13. Monthly income from salaries and self-employment by disability status (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)	Total (%)
Monthly income less than R502	64	78	66
Monthly income between R502 and R924	5	5	5
Monthly income more than R924	32	17	29
N	11 565	2 953	14 518

Using data on earnings from a broad range of work activities we calculated the monthly individual income for respondents. From Table 13 it is evident that significantly more people with disabilities fell below the lower bound of the poverty line. Almost 80 (78 per cent)¹⁴ of people with disabilities compared to just over 60 (64 per cent) of non-disabled adults had a monthly individual income less than R502, representing a gap of 14 per cent. Seventeen per cent of people with disabilities compared to just under a third (32 per cent) of the non-disabled had a monthly individual income which exceeded the upper bound of R924.

Table 14. Monthly income from salaries, self-employment and disability grant by disability status (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)	Total (%)
Monthly income less than R502	61	69	63
Monthly income between R502 and R924	5	8	6
Monthly income more than R924	33	22	31
N	11 565	2 953	14 447

When the contribution of the disability grant was added to the monthly income earned from salaried employment and self-employment, the number of people with disabilities earning less than the lower bound of the poverty line decreased significantly. Just under 70 per cent of people with disabilities had a monthly income of less than R502 when the disability grant was included. The results concur with a living conditions survey which found that people with disabilities in low-income areas benefited from the contribution of the disability grant (Loeb et al., 2008). The number of people with disabilities living above the upper bound of R924 increased slightly from 17 to 22 per cent with the inclusion of the disability grant. As expected, the number of non-disabled people with income above R924 did not change significantly as a result of the disability grant.

The survey results show that access to the disability grant helps to close the income gap between people with and without disabilities. For those who qualify, it is crucial that they have access to the grant as this will further reduce income inequality between persons with and without disabilities.

¹⁴ Per capita income is generally less than individual income; therefore the lower bound of R502 per month is likely to be a conservative measure of poverty although it is higher than the World Bank measure of one US dollar per day which would be around R250 per month for 2008. The high number of missing data for the income questions compromises the reliability of the data.



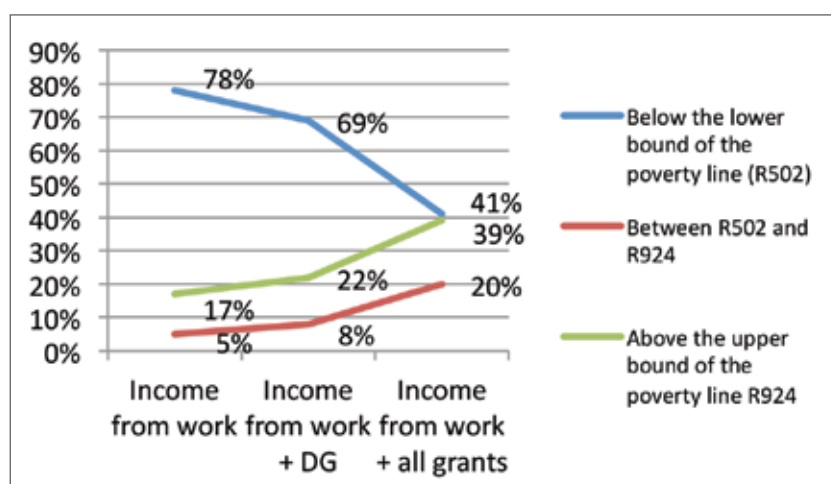
Table 15. Monthly income from salaries, self-employment, disability grant, old age grant, child support grant and care dependency grant by disability status (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)	Total (%)
Monthly income less than R502	54	41	52
Monthly income between R502 and R924	8	20	10
Monthly income more than R924	37	39	38
N	11 565	2 953	14 447

People with disabilities benefited further from the contribution of other grants. As discussed previously, more people with disabilities were the recipients of old age grants (because of their age) and child support grants than the disability grant. Thus when old age grants, child support grants, foster care grants, and the care dependency grant contributions were added to income from work and the disability grant, the number of people with disabilities earning less than R502 per month declined to 41 per cent. This is a considerable improvement of 28 per cent. Similarly, the number of non-disabled people living on less than R502 dropped as a result of the grants, but the decrease was not so dramatic. Represented graphically for people with disabilities only, the effects of the disability grant and all the other grants can be seen by the decline of the blue line (people living below the lower bound of the poverty line), and the increases in the other two lines as a result.

Figure 6. Change in percentage of people living below and above the upper and lower bounds of the FGT poverty line when income from grants is taken into account (NIDS, 2008)

These findings confirm that grants are having a pronounced effect on reducing the number of people with disabilities who live in poverty and in closing the income gap between people with disabilities and non-disabled people.



2.3.4 POVERTY TRANSITIONS

Transition matrices can be used to compare the income categories for Wave 1 and Wave 2 to get a sense of transitions in and out of poverty among people with disabilities.

Table 16. Monthly income from salaries, self-employment and disability grant by wave for adults with disabilities in Wave 1/ Wave 2 (NIDS, 2008)

Wave 2 → Wave 1 ↓	Below R502 (%)	R502 to R923 (%)	Above R924 (%)	Total (%)
Below R502	87	3	9	100
R502 to R923	53	14	33	100
Above R924	39	6	56	100
N	3 138	172	636	3 946



Table 16 compares the real income from work plus the disability grant for Waves 1 and 2 among adults who presented with a disability in both waves. The vast majority (87 per cent) of people with disabilities who were below the lower bound of R502 per month in Wave 1 were still in this position in Wave 2. Their poverty status remained unchanged. Only nine per cent moved out of the lower bounds of the poverty line to above the upper limit of the poverty line of R924 (in 2008 real values). A much smaller group, three per cent, moved above R502, but still stayed below R924.

This analysis demonstrates that income poverty below the lower bound of R502 is very resistant to change. A discouraging finding is that more than half (53 per cent) of people with disabilities who were caught between the lower and upper bound in Wave 1 moved below R502 in Wave 2. They therefore became poorer over the two waves. Only 14 per cent of the aforementioned category remained stable, and encouragingly 33 per cent moved above the upper bound poverty line.

Just over half (56 per cent) of those who were above the upper poverty threshold in Wave 1 remained stable in Wave 2. Thirty nine per cent moved below the lower bound, and 6 per cent into the in-between category. Overall findings are fairly negative. Between Wave 1 and 2 more people with disabilities (even with the assistance of the disability grant) fell into deeper poverty than those who emerged out of poverty. A possible contributing factor could be the costs associated with disability, such as additional transport costs and care burdens which may increase household and individual poverty.

Table 17. Monthly income from salaries, self-employment and all grants by wave for adults with disabilities in Wave 1/Wave 2 (NIDS, 2008)

Wave 2 →	Below R502 (%)	R502 to R923 (%)	Above R924 (%)	Total (%)
Wave 1 ↓				
Below R502	69	8	23	100
R502 to R923	24	14	62	100
Above R924	20	8	72	100

The picture is more optimistic when all grants are taken into account. As indicated previously, the lower bound of the poverty line (less than R502 per month) is resistant to change and even with the help of all types of grants 69 per cent of those below this poverty line in Wave 1 were still there in Wave 2. Just over one in four persons (25 per cent) saw improvement with eight per cent moving into the in-between category and 23 per cent moving above the upper bound and technically out of poverty. More optimistically, when all grants are taken into account 62 per cent of those who were in the in-between category in Wave 1 moved above the upper bound poverty line of R924 in Wave 2. However, almost a quarter (24 per cent) of people with disabilities who were in the in-between category fell below the lower bound poverty threshold in Wave 2. A further favourable finding is that the majority (72 per cent) of those who were above the upper bound in Wave 1 maintained this standing in Wave 2. One in five (20 per cent) found that their income including all grants dropped to less than R502 per month and eight per cent dropped into the in-between category. Overall, when all grants are taken into account, slightly more people emerged from poverty than fell into poverty.

This finding demonstrates that while there is some variation in income amongst people with disabilities over time, poverty amongst people with disabilities is very resistant to change with few people managing to make the transition to above the upper bound of the poverty line. Thus, despite grants playing a very important poverty alleviation role as has been demonstrated above, they do not play a poverty eradication role for people with disabilities. Other investments such as education and employment are also important.

2.3.5 PERSONAL OWNERSHIP AND DEBT

While income is an important measure of poverty, it can mask other assets to which people may or may not have access, such as material assets. This section looks specifically at the NIDS data in terms of ownership and debt vulnerability at the individual level. It aims to determine the kinds of material assets to which people with disabilities as compared to non-disabled people had access.

On average, participants with disabilities owned 1.6 personal items while non-disabled participants owned 1.8 personal items. However, the differences were not statistically significant, suggesting that there were no major differences in personal ownership between people with disabilities and non-disabled people. A regression analysis demonstrated that gender and race are the strongest explanatory variables for personal ownership in the model tested. In fact, interestingly, when gender, educational attainment and race are held constant, the analysis demonstrates that ownership *increased* fractionally with disability. This analysis suggests that females with disabilities may be worse off in terms of personal ownership than their male counterparts. However, an analysis of ownership levels between male and female people with disabilities demonstrates that there were no statistically significant differences between men and women in this regard.



There were significant differences in levels of debt. An analysis of the number of debts (as opposed to the value of debts¹⁵) indicates that non-disabled people had significantly more debts than people with disabilities. While it is positive that people with disabilities are less likely than non-disabled people to have debt, it may also indicate increased vulnerability. Those who are able to access loans and greater numbers of loans are also more likely to have the income to qualify for such loans. Given that people with disabilities had lower levels of income on average than their non-disabled counterparts, they were less likely to be able to access loans as a source of support when required, or to finance larger asset purchases. This suggestion may be borne out by an analysis of the differences in levels of debt between male and female respondents with disabilities. Male respondents with disabilities were significantly more likely to have additional debts than their female counterparts.

2.4 Social capital

As discussed earlier, a key component of the capabilities framework that has received some attention amongst those working on issues of poverty and disability is the importance of collective capabilities – those capabilities that are located in an individual's connection with and access to a range of social networks, including household relationships (Dubois & Trani, 2009). This section of the report considers data pertaining to social capital. In the first instance household living arrangements of people with disabilities and non-disabled people are considered. This includes the household size, family ties, and the extent of mixed generation households. The second part of the section analyses household decision making. The third and final part assesses the extent to which disabled and non-disabled people belong to organisations, and how they feel about their neighbourhoods.

2.4.1 LIVING ARRANGEMENTS AND FAMILY TIES

What proximal family and household bonds and ties are likely to make up the largest part of potential social capital to which an individual has access? In this section we consider the household living arrangements – number of people, who is living in a household, as well as the family ties – and the extent to which people with disabilities and non-disabled people have family ties through marriage, children and intergenerational living.

The data show that for the full sample, the average number of people living in a household was 3.6 people. This is in line with the Census data which found that the average household size in South Africa is 3.6 people (Statistics South Africa, 2012). Households in which there is at least one individual who has a disability were somewhat larger with an average household size of 4.4 people. For households that do not include a disabled household member, the average size was 3.2 people.

This difference in household size may be attributed to intergenerational living. Because older people are more likely to have a disability than younger people, the larger household size for households with people with disabilities may be due to older relatives moving in with children and grandchildren in order to be cared for and supported. To establish whether this is the case, an assessment of the number of generations living in a household was conducted.

The generational analysis demonstrates that 35 per cent of non-disabled people lived in double-generation households as compared to only 26 per cent of people with disabilities. In contrast 45 per cent of people with disabilities lived in multiple or skipped generation households, whilst only 33 per cent of non-disabled people lived in households with the same household configuration. This suggests that people with disabilities are more likely than their non-disabled counterparts to live in households with multiple or skipped generations. This may in part explain the larger household sizes for people with disabilities.

However, household size may also be affected by the geographic location of the household. An analysis of the mean household size by geographic location demonstrates that households located in tribal authority areas were larger on average than those in any other area, with rural formal households being the smallest on average. The data also demonstrate that households with people with disabilities were more likely to be located in tribal authority areas than households with no members with disabilities.

A regression analysis demonstrates that, even when holding geographic location constant, having people with disabilities in the household still had a significant effect on the household size. On average, households with a person with disabilities were likely to have one extra household member when compared to households with no disabilities while holding constant location of the household. This may be due to the increasing responsibilities associated with the care of persons with disabilities.

¹⁵ The NIDS questionnaire asks about the value of the last payment and the value of the remaining debt, but not the total value of the debt.



In terms of the kinds of household and family relationships that people had available, an analysis of marital status and children was conducted. The data show that people with disabilities had slightly more secure relationships. For people with disabilities, 43 per cent were either married or living with a partner and 57 per cent had been widowed, divorced or never married. For non-disabled people, only 36 per cent were either married or living with a partner, with 64 per cent being either widowed, divorced or never married. People with disabilities also had longer-lasting relationships with their spouses or partners. For people with disabilities the median number of years that they were in a partnership was 23 years, whereas for non-disabled people the median number of years in a partnership was 13 years. This suggests that people with disabilities live in households and are involved in partnerships that are more secure and longer standing. While this may in part be explained by the higher average age of the population of people with disabilities, it may also have to do with the potential importance of household support for people with disabilities.

Larger household sizes are probably explained by the need for people with disabilities to live with other household members in order to ensure support and care when necessary. In the urban case study (Graham et al., 2010), 93 per cent of people with disabilities indicated that their families were a key support mechanism for them. Where people with disabilities had severe difficulties, it was often the support of the family or household that replaced absent or minimal services from the state or other organisations. Similarly in the rural case study, it was evident that household members were the key source of support for people with disabilities. One participant who was a wheelchair user spoke about the support his younger sister provided in fetching water, purchasing food, and helping him to get dressed. Despite having access to a wheelchair, the surrounding environment was not conducive for wheelchair users and he had to rely on his younger sister to help him manage daily tasks. Similarly, in many of the households, mothers, grandmothers, and in one case a father, were the primary carers of those who had severe difficulties. These household members often had no training, expressed frustration, and had very little financial, emotional or physical support, despite caring for family members on an almost full-time basis. This demonstrates the importance of households as a unit of care, but also points to the need to support household members as they carry the care burden that is then removed from the state. Community-based rehabilitation consultants, often employed by independent NGOs, provide much needed support in such areas and these services should be scaled up. Training and group support may be other interventions that are required. In addition, assistive devices in the home that can help family members to lift and carry people if necessary should be provided as part of the health care services for people with disabilities.

Whilst in some cases the difficulties experienced by people with disabilities may be severe, in many other cases people with disabilities are able to live relatively independently. A key finding of the urban case study (Graham et al., 2010) was that people with disabilities felt they played a very important role in the household, either by caring for other household members (older persons or children), attending to family obligations, or maintaining the cleanliness of the house; allowing other household members to be out seeking work. It should therefore not be assumed that the collective capabilities operate in one direction. Rather, the capabilities that arise from a close household network stand to benefit all household members under circumstances where such households operate in a constructive way.

A further indicator of social capital is the level of engagement that people have within the household. An indicator of this may be involvement in household decision making. The NIDS questionnaire asked about household decision making for a range of major decisions, the two most important of which are monetary decisions, and decisions regarding children's schooling. The analysis shows that people with disabilities were more likely to be the main decision makers (57 per cent) about money than their non-disabled counterparts (39 per cent). Similarly, 43 per cent of respondents with disabilities were identified as being responsible for decision making about children's schooling, whilst only 27 per cent of non-disabled respondents indicated this role.

Table 18. Decision making (main decision maker) in the household by disability status (NIDS, 2008)

		Monetary		Children	
		Non-disabled	People with disabilities	Non-disabled	People with disabilities
Main decision maker	n	4 501	1 684	3 137	1 273
	%	39	57	27	43
Not main decision maker	n	7 064	1 269	8 428	1 680
	%	61	43	73	57
TOTAL	n	11 565	2 953	11 565	2 953
	%	100	100	100	100



When including the joint decision makers in the same analysis (Table 19), 74 per cent of people with disabilities indicated being involved in decision making. Only 54 per cent of non-disabled people revealed the same. Similarly 57 per cent of respondents with disabilities were identified as being responsible, either solely or jointly, for decision making with regard to children’s schooling, whilst only 39 per cent of non-disabled respondents indicated the same.

Table 19. Decision making (main and joint decision maker) in the household by disability status (NIDS, 2008)

		Monetary		Children	
		Non-disabled	People with disabilities	Non-disabled	People with disabilities
Decision maker	n	6 189	2 192	4 479	1 680
	%	54	74	39	57
Not decision maker	n	5 376	761	7 086	1 273
	%	46	26	61	43
Total	n	11 565	2 953	11 565	2 953
	%	100	100	100	100

This demonstrates that people with disabilities are participating meaningfully in the household, a finding that confirms the research conducted by Graham et al. (2010) which showed that, in Johannesburg, people with disabilities recognised themselves and were recognised by other household members as playing an important role in the household. This may in part have to do with age. Older people are more likely to present with difficulties in functioning, and may also be the recognised household head by virtue of their age. In certain cases, they may be the household member that brings in the primary income into the household in the form of the old age pension or the disability grant. Either way, it is encouraging to note that people with disabilities are recognised as playing a meaningful role in their households.

2.4.2 COMMUNITY ENGAGEMENT AND NEIGHBOURHOOD TRUST

Beyond the family and household, people may find networks of support in their communities, either through informal arrangements such as neighbourhood friendships, or through more structured arrangements like religious organisations or community-based organisations.

In terms of religious activities, most respondents, regardless of disability status, revealed the importance of religious activities. The vast majority (88 per cent) of non-disabled respondents and 91 per cent of respondents with disabilities stated that religious activities were either important or very important to them.

Across the sample participation rates in community-based organisations were low, with most respondents indicating that they did not belong to any of the types of groups that were listed. The only exception was for burial societies, where just over 60 per cent of the people with disabilities belonged to such an organisation. A further 6 per cent of people stated that they belonged to a stokvel.

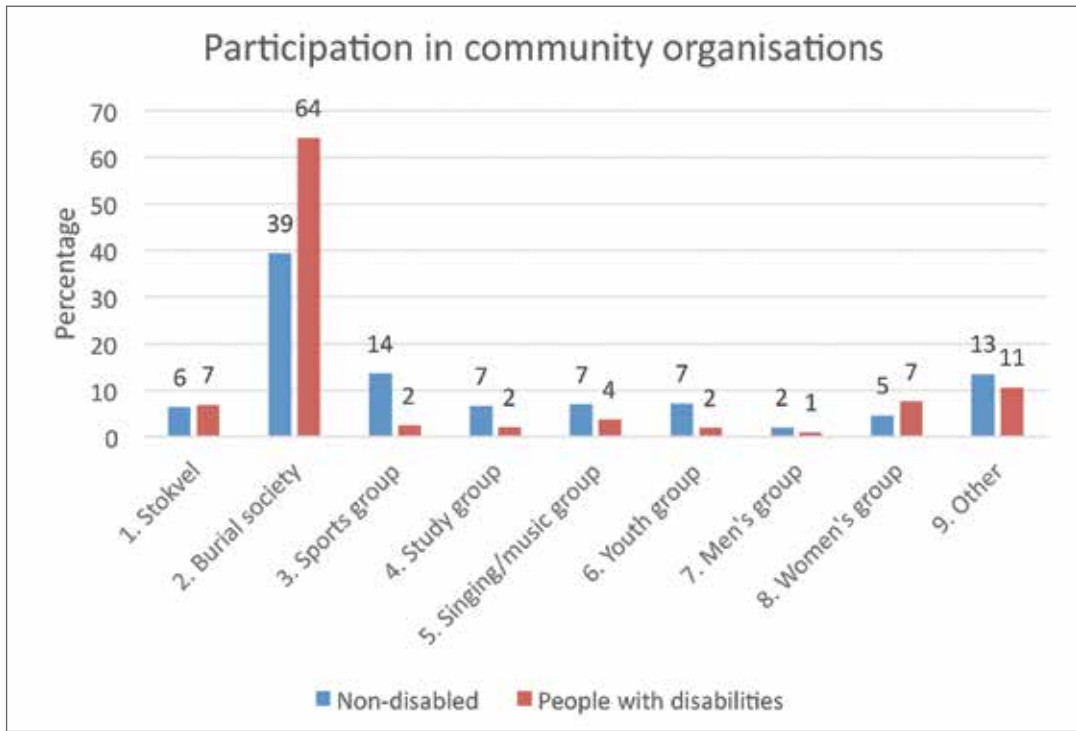


Figure 7. Participation in selected organisations by disability status (NIDS, 2008)

Although participation rates were generally very low, it is interesting to note some of the differences between people with disabilities and their non-disabled counterparts. Figure 7 shows the differences in participation in some selected types of organisation, by disability status. The figure demonstrates that far more people with disabilities than non-disabled people participated in a burial society. As can be expected, far fewer people with disabilities than non-disabled people participated in sports clubs.

Aside from participation, social capital may also reside in the sense of trust that one feels within a community. Most people in the sample (78 per cent) expressed either a strong or moderate preference for staying in the area where they were living. Of the sample of people with disabilities, 82 per cent indicated that this was the case as compared to 75 per cent of non-disabled respondents. In terms of trust, most respondents (75 per cent) stated that they would not trust someone who lives close by to return a wallet with R200 (US\$21.05) in it. There were no significant differences between the attitudes of people with disabilities and non-disabled respondents in this regard.

2.5 Health

Health is a key capability within the capabilities framework, essential for converting assets into functionings. It is also strongly related to an individual's sense of well-being. Evidence from a range of studies demonstrates that people with disabilities are more likely to experience ill-health (Gulley et al., 2011; McColl et al., 2010) and have greater difficulties with access to health care and health information (Eide et al., 2011). This section of the report discusses health status and access to health care, and analyses the variables in relation to disability that may shape health outcomes.

2.5.1 HEALTH STATUS

Participants in the NIDS were asked how they would describe their health at present. The responses on the scale ranged from "excellent" to "poor". Self-reported health status was found to be affected by demographic variables such as age, gender and geographic location (Banerjee, Perry, Tran, & Arafat, 2010). A study conducted in 2013, using the same scale, found that over 75 per cent of adults rated their health as moderate or good, with men reporting better health than women. Poor health was disclosed by older individuals. Those living in urban areas reported better health than those in rural areas (Phaswana-Mafuya et al., 2013).

Overall, most of the population reported having excellent (33 per cent), very good (27 per cent) and good (23 per cent) health. Although this was the case, significant differences arose in self-reported health status in terms of disability status, gender and age. No significant differences were reported across geographic areas or race groups.



Table 20. Self-reported health status amongst people with disabilities and non-disabled people (NIDS, 2008)

Health status	Non-disabled (%)	People with disabilities (%)	Total (%)
Excellent	36	16	33
Very good	30	15	27
Good	23	23	23
Fair	9	25	12
Poor	3	21	6
N	11 565	2 953	14 518

The results in Table 20 capture the responses to the self-reported health status questions by disability status. The overall trend is that people with disabilities were far more likely to report having poor health than non-disabled people. This is to be expected as activity limitations arise from health conditions or impairments, and confirms research from developed country contexts (Gulley et al., 2011; McColl et al., 2010).

Table 21. Self-reported health status amongst males and females (NIDS, 2008)

Health status	Male (%)	Female (%)	Total (%)
Excellent	37	29	32
Very good	29	26	27
Good	21	25	23
Fair	9	13	11
Poor	5	7	6
N	11 565	2 953	14 518

Table 21 demonstrates that there were significant differences for the full sample in self-reported health status, with women reporting poorer health than men. This confirms research from various parts of the world that suggest that women are far more likely to report poorer health. This may also explain some of the differences between people with disabilities and non-disabled people, since the majority of people with disabilities in the NIDS sample were female.

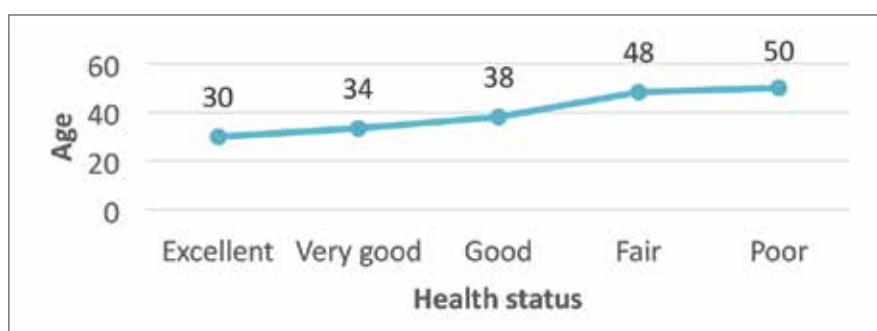


Figure 8. Average age of participants by self-reported health status for all participants (NIDS, 2008)

Figure 8 illustrates that older people are more likely to report poor health than younger people, which is in line with trends across the world. This may also contribute to some of the differences in self-reported health between people with disabilities and non-disabled people, since the average age of the people with disabilities was higher.

In terms of communicable diseases, four per cent of the adults in the sample stated that they had been diagnosed with tuberculosis. Amongst this group of individuals, there were significantly higher percentages of people with disabilities who had been diagnosed with the disease. This highlights the disabling effects of illnesses or the susceptibility of people with disabilities to illness.



Table 22. Tuberculosis amongst people with disabilities and non-disabled people (NIDS, 2008)

TB	Non-disabled (%)	People with disabilities (%)	Total (%)
Yes	3	6	4
No	97	94	96
N	11 565	2 953	14 518

Data for HIV/AIDS infections were not as openly available in this study. However, evidence from other studies has focused on the challenges that people with disabilities experience with access to information and treatment for HIV. Because HIV is primarily a sexually transmitted infection, and people with disabilities face the assumption that they are not sexually active, people with disabilities are often overlooked in communication about prevention of HIV and are treated with surprise or reluctance when seeking testing or treatment at clinics (Groce et al., 2011; Groce, Rohleder, Eide, MacLachlan, Mall, & Swartz, 2013).

Non-communicable diseases covered in the NIDS data include high blood pressure, diabetes, stroke, asthma, heart problems and cancer. There were no significant differences in prevalence of high blood pressure and cancer between disabled and non-disabled respondents. However, people with disabilities had a significantly higher prevalence of diabetes, stroke, asthma and heart problems, as shown in Table 23. All of these conditions are known causes of functional difficulties in seeing, hearing and/or mobility.

Table 23. Incidence of major non-communicable diseases amongst people with disabilities and non-disabled people (NIDS, 2008)

Heart problems	Non-disabled (%)	People with disabilities (%)	Total (%)
Yes	2	8	3
No	98	92	97
Asthma			
Yes	3	6	4
No	97	94	97
Stroke			
Yes	1	3	1
No	99	97	99
Diabetes			
Yes	3	8	4
No	97	92	96

In addition, there was superficial information on psychiatric disorders, epilepsy, emphysema and Alzheimer's disease. Table 24 shows the prevalence of these conditions amongst the people with disabilities and non-disabled sub-groups.

Table 24. Non-communicable diseases amongst people with disabilities and non-disabled people (NIDS, 2008)

Non-communicable disease	Non-disabled (N)	People with disabilities (N)
Psychiatric disorders	52	36
Epilepsy	80	42
Emphysema	4	4
Alzheimer's disease	3	3

There was a difference between non-disabled and people with disabilities in terms of the number of people that presented with psychiatric disorders and epilepsy, with non-disabled respondents having a slightly higher positive response than people with disabilities. However, due to the low response rate and the indirect nature of the question, which asked if there are any other illnesses that the respondent has not reported on, these results should be interpreted with care.

2.5.2 ACCESS TO HEALTH INSURANCE AND HEALTH CARE SERVICES

Overall, only 1 712 persons (four per cent) within the adult population revealed that they were covered by medical aid. Nevertheless, significantly lower numbers of people with disabilities reported being covered by medical aid, suggesting that despite potentially having higher health care costs, they are also less likely to be able to pay for such services.



Table 25. Medical aid coverage amongst disabled and non-disabled people (NIDS, 2008)

Medical aid coverage	Non-disabled (%)	People with disabilities (%)	Total
Yes	18	10	4
No	82	90	96
N	11 595	2 953	14 518

With the planned introduction of the National Health Insurance (NHI) system, people with disabilities are likely to benefit. However, it will be necessary to ensure recognition of the increased health costs that many people with disabilities are likely to bear.

Figure 9 illustrates the length of time that elapsed since the participants last consulted someone about their health. The majority of the respondents consulted someone about their health in the last 30 days (26 per cent) or more than one and less than two years ago (25 per cent).

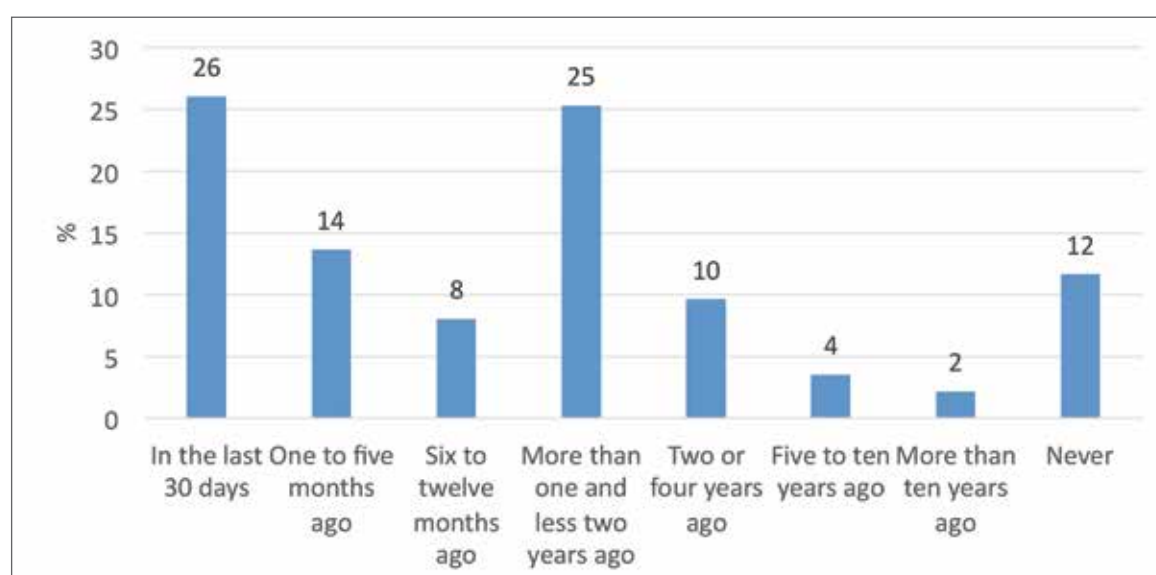


Figure 9. Length of time that lapsed since last consultation about health (NIDS, 2008)

For the purposes of this study, a comparison between people with disabilities and non-disabled participants of the time lapse between health consultations was of interest. The results show that significantly higher numbers of people with disabilities (44 per cent) consulted someone about their health in the last 30 days, compared to their non-disabled counterparts (20 per cent), confirming the increased health needs of many people with disabilities.

Table 26. Length of time that lapsed since last consultation about health amongst people with disabilities and non-disabled people (NIDS, 2008)

Last consultation regarding health	Non-disabled (%)	People with disabilities (%)	Total (%)
In the last 30 days	20	44	24
One to five months ago	14	15	14
Six to twelve months ago	8	8	8
More than one and less than two years ago	29	16	27
Two to four years ago	10	5	9
Five to ten years ago	4	2	3
More than ten years ago	2	2	2
Never	13	10	13
N	11 595	2 953	14 518



Significantly higher numbers of people with disabilities accessed health care services in public hospitals and public health clinics, while significantly larger proportions of non-disabled respondents were able to consult a private doctor. This is probably related to differences in income with people with disabilities having lower levels of income than their non-disabled counterparts.

Table 27. Place of last health consultation for people with disabilities and non-disabled people (NIDS, 2008)

Place of last health consultation	Non-disabled (%)	People with disabilities (%)	Total
Public hospital	14	22	16
Private hospital	4	3	4
Public health clinic	37	47	40
Private clinic	3	2	3
Private doctor	40	26	36
Nurse or chemist	1	1	1
Traditional healer	<0.5	<0.5	<0.5
Do not remember	<0.5	<0.5	<0.5
N	11 595	2 953	14 518

Due to the fact that people with disabilities were more likely to access public health care services, significantly smaller numbers (33 per cent compared to 47 per cent of the non-disabled participants) paid a consultation fee at the last health consultation.

In rural areas where public clinics are the only accessible places for consultation, the interviewees had mixed responses about the quality of health care. Although most of the respondents felt that they did not experience any challenges receiving health care at the local clinic, one respondent cited difficulties. These contrasting views are illustrated below:

Yes, we were having a challenge at the clinic where our clinic condition is not as good as we are expecting, the structure itself, it's old and even if you get inside there is not enough staff there to work or helping people there. And normally our clinic helps most of the surrounding communities here because if you go via the nearest communities they don't have clinics.

At the clinic they treat us well, even the transports are fine. We also have a hospital... They also treat us well there and it helps us with people who are HIV positive. Those who follow the rules and take their medications properly, they live a long time.

2.6 Quality of life

When considering the multidimensional nature of poverty, it is important to go beyond income and employment. Access to a range of basic services and other assets can make a marked difference in the life of an individual, significantly shaping their quality of life. For this reason we consider the data pertaining to access to services as well as perceived quality of life.

As part of South Africa's approach to poverty alleviation, the state has invested heavily in policies aimed at ensuring that all members of the population have access to a range of basic services including housing, safe sanitation and energy sources. The strategy is intended not only to meet the Constitutional rights to human dignity, but also to ensure that many basic needs are met through government provision, allowing income to be expended on meeting other household and individual-level needs.

A key indicator of poverty therefore is household living standards, including access to basic services as well as access to household-level assets. This measure moves the discussion of poverty beyond the realm of employment and income to consider other material assets. For this reason, access to durable goods and to basic services are key indicators that are measured in various surveys in South Africa, including the South African Census.

The latest census results (Statistics South Africa, 2012) showed general improvement in access to basic services, as well as ownership of cellular phones, computers, fridges and televisions since 2001. This section of the report considers whether there are differences in access to material assets and basic services at the household level between households with and without residents with disabilities.



2.6.1 ACCESS TO BASIC SERVICES

The state has made significant gains over the past 20 years in ensuring that households have access to basic services. In 2001 for instance, 85 per cent of households had access to piped water (Statistics South Africa, 2003). By 2011, this percentage had increased to 91 per cent (Statistics South Africa, 2012). The NIDS data confirmed this indicating that most people (92 per cent) had access to piped water, either from a tap in the dwelling (49 per cent), piped water on the stand (25 per cent) or piped water from a public tap (17 per cent).

Despite this high coverage, the interviews conducted in Lillydale made it clear that households in urban areas were slightly better off than those in rural areas. A key concern raised by community leaders and members alike was access to clean water and sanitation. For instance, the headman of the area had the following to say:

Water is the key problem. We have half a year without water. The municipality gives us water through watermen. Others made boreholes.

A community member explained that were it not for the work of charity organisations they would not have water in the community:

We don't have water nearby. White people came and make a borehole for us and they allow us to fill three water cans a day.

Another community member also spoke about how the addition of boreholes has made life slightly easier:

Here in Lillydale things go slowly; they are not easy. Even water, we did not have water, but at least now we have boreholes and it is better now.

Nevertheless, people are still required to go and fetch water at the boreholes that have been installed and on many occasions the research team witnessed long queues of community members waiting to collect water. The challenge that this situation raised for people with disabilities in particular was clear. One of the participants in a wheelchair explained that he had to pay a neighbour to go and fetch water for him and that he sometimes did not have enough money to pay for this service. Clearly, while major gains have been made in ensuring access to water, there are still pockets where such services are limited.

In terms of sanitation, in 2001, 54 per cent of households had access to a flush toilet and 29 per cent to a pit latrine. Fourteen per cent of households had no access to any form of toilet (Statistics South Africa, 2003). By 2011, 60 per cent had access to a flush toilet and 28 per cent to a pit latrine. Only 5 per cent of households had no access to a toilet (Statistics South Africa, 2012). The NIDS Wave 1 data demonstrated similar results with 60 per cent of households having access to either a flush toilet with on-site or off-site disposal. Just over a quarter (30 per cent) had access to a pit latrine. Approximately 6 per cent of households had no access to a toilet. Households with people with disabilities were slightly worse off than those without. Just over 53 per cent of households with people with disabilities had access to a flush toilet as compared to 60 per cent of households without people with disabilities. This means that households with people with disabilities were slightly more likely to use either a pit latrine system or had no access to a toilet.

In the rural case study it became evident that while many households had access to a pit latrine, either on the stand or nearby, those living on the periphery of the village (many of whom were Mozambican migrants) had no access to sanitation services. As one non-disabled participant stated, "We go to the bush." For people with disabilities who were in wheelchairs, having a toilet outside, even if it was nearby, was a struggle, particularly since such toilets were rarely wheelchair accessible. While progress clearly is being made in terms of access to sanitation services, attention needs to be paid to the needs of particular groups of people with disabilities when delivering such services. Ensuring that toilets on stands or in communities are wheelchair accessible is essential if the state wants to facilitate dignified access to basic services for all.

In terms of energy sources, most respondents had access to electricity for cooking (72 per cent), heating (62 per cent) and lighting (83 per cent). The figures in Table 28 demonstrate that households with people with disabilities were slightly worse off in terms of access to electricity (no statistical significance), and were more likely therefore to use paraffin or wood, or had no access to fuel (for heating).



Table 28. Sources of energy for households with or without people with disabilities (NIDS, 2008)

Source of energy for cooking	Non-Disabled (%)	People with disabilities (%)	Total (%)
Electricity from mains	72	67	71
Electricity from generator	1	1	1
Gas	3	2	3
Paraffin	12	13	12
Wood	12	15	12
Coal	1	2	1
Animal dung	<0.5	<0.5	<0.5
Solar energy	0	0	0
None	0	0	0
N	3 295	844	4 139
Source of energy for heating	Non-Disabled (%)	People with disabilities (%)	Total (%)
Electricity from mains	64	49	61
Electricity from generator	1	1	1
Gas	1	1	1
Paraffin	8	9	8
Wood	17	21	17
Coal	2	3	2
Animal dung	<0.5	<0.5	<0.5
Solar energy	0	0	0
None	8	16	9
N	3 276	834	4 110
Source of energy for lighting	Non-Disabled (%)	People with disabilities (%)	Total (%)
Electricity from mains	83	80	82
Electricity from generator	1	1	1
Gas	<0.5	<0.5	<0.5
Paraffin	3	5	3
Candles	13	15	13
Solar energy	<0.5	0	<0.5
None	0	<0.5	0
N	3 293	845	4 138

The majority of the sample lived in a dwelling or brick structure on a separate yard (59 per cent). Most people had corrugated iron/zinc roofs (63 per cent) and brick walls (64 per cent). Table 29 shows that households with people with disabilities were more likely to live in a traditional dwelling than a house or brick structure on a separate yard than those without people with disabilities. Households with people with disabilities were also slightly more likely to live in a backyard room or flat.

Table 29. Household dwelling type for households with or without people with disabilities (NIDS, 2008)

Dwelling type	Non-disabled (%)	People with disabilities (%)	Total (%)
Dwelling/house or brick structure on separate yard	60	55	59
Traditional dwelling/hut/structure	9	14	10
Flat or apartment in a block of flats	5	6	5
Town/cluster/semi-detached house	3	3	3
Unit in retirement village	0	<0.5	<0.5
Dwelling/house/flat/room in backyard	7	9	7
Informal dwelling/shack in backyard	5	5	5
Informal dwelling/shack not in backyard	8	8	8
Room/flatlet	2	2	2
Caravan/tent	<0.5	<0.5	<0.5
N	3 253	848	4 101



In the rural case study analysis, a key challenge identified by the ward councillor was access to decent housing. In observing households, while there was some provision of formal brick housing, many people lived in traditional huts they had built for themselves. In the urban case study, the data demonstrates that most of the people with disabilities (54 per cent) lived in brick structures, followed by informal dwellings (19 per cent) (Graham et al., 2010). These differences are indicative of the urban and rural experiences, with informal dwellings being more pervasive in urban areas and traditional dwellings more prevalent in rural areas.

Fewer households with people with disabilities (52 per cent) had access to weekly refuse removal by local authorities, when compared to 62 per cent of non-disabled households. A higher percentage of households with people with disabilities did not have a streetlight near the households (52 per cent), when compared to 43 per cent of households with non-disabled members. All of these data suggest that while access to basic services has been expanded significantly, households with people with disabilities have tended to lag slightly behind. It is not clear why this might be the case since services are rolled out at community level with no evident exclusionary practices. However, it does suggest that households with people with disabilities are slightly more vulnerable in terms of access to services than those without. The evidence from the rural case study demonstrates some of the clear challenges with regards to service delivery in particular pockets, as well as how this impacts on the lives of all people, but people with disabilities in particular, who have to rely on other community members for assistance.

2.6.2 ACCESS TO HOUSEHOLD ASSETS

Access to household assets such as a telephones and durable goods like household appliances are a further measure of household living standards. Analysis of durable goods in the households was conducted by creating a new variable, which captured the number of durable goods present in the household. The questionnaire explored the presence of durable goods such as appliances, items that could be used for income generation or subsistence (such as a plough), and luxury items like satellite dishes and televisions. Households with non-disabled members were likely to own slightly more durable goods than those with people with disabilities. Households with non-disabled members owned on average 7.2 durable goods items while households with people with disabilities owned 6.4 items.

Households with people with disabilities were slightly less prone to have access to a working telephone or cellular phone than those with non-disabled members. Only 80 per cent of households with a person with disabilities had access to a cellular phone, compared to 87 per cent of households without people with disabilities.

2.6.3 CONSUMPTION ADEQUACY

The Consumption Adequacy Questions (CAQ) (Pradhan & Ravallion, 2000) were asked in the NIDS questionnaire to provide a measure of subjective poverty. The analysis demonstrates no significant differences between perceived adequacy of consumption between people with disabilities and their non-disabled counterparts.

When considering whether the household head had a disability or not, the results become slightly more pronounced. Forty two per cent of households with a household head with disabilities reported that their food consumption was inadequate, as compared to only 33 per cent of non-disabled household heads. Similarly, only 11 per cent of household heads with disabilities as compared to 16 per cent of non-disabled household heads suggested that their food consumption was more than adequate. As can be expected, 46 per cent of household heads with disabilities reported that their health care consumption was inadequate as compared to only 39 per cent of non-disabled household heads.

2.6.4 ECONOMIC WELFARE

The Economic Ladder Questions (ELQ) (Ravallion & Lokshin, 2001) allow participants to assess their level of welfare in relation to others and over time.

Table 30. Perceptions of income as compared to households in the same area by disability status (NIDS, 2008)

	Non-disabled (%)	People with disabilities (%)	Total (%)
Much above average	3	3	3
Above average	9	6	9
Average	42	36	41
Below average	31	36	32
Much below average	15	20	16
N	11 595	2 953	14 518



Table 30 demonstrates that non-disabled people were significantly more likely to report having a similar income to those around them than people with disabilities. Additionally, people with disabilities were more likely to report being below average or much below average when compared to other households in the same area.

In terms of perceptions of income relative to the wider population, people with disabilities were slightly more prone to report being amongst the poorest of the population. In terms of perception of change over time, and expectations for the future, fewer people with disabilities (19 per cent) than non-disabled people (24 per cent) felt that they were at or only slightly below average compared with their economic welfare 15 years ago.

Figure 10 and Figure 11 demonstrate graphically how the non-disabled population (Figure 10) and people with disabilities (Figure 11) felt about their economic well-being over time. The blue line in Figure 11 shows the perceptions of people with disabilities about how their household fared in terms of economic well-being 15 years ago. In comparison to the blue line in Figure 10 it is evident that more people with disabilities felt that they were on the poorer side of the six-point scale than non-disabled people, as is indicated by the sharp downward slope of the blue line in Figure 11. It is interesting to note that amongst both groups, far fewer people perceived that they were currently amongst the poorest of the population as compared to their perceptions of 15 years ago.

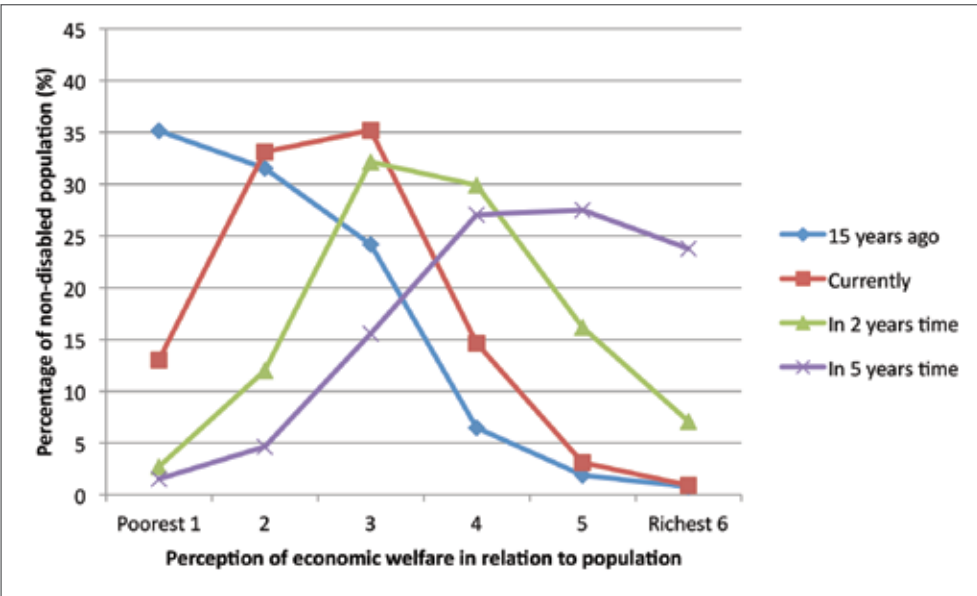


Figure 10. Past, present and future evaluations of economic welfare, non-disabled population only (NIDS, 2008)

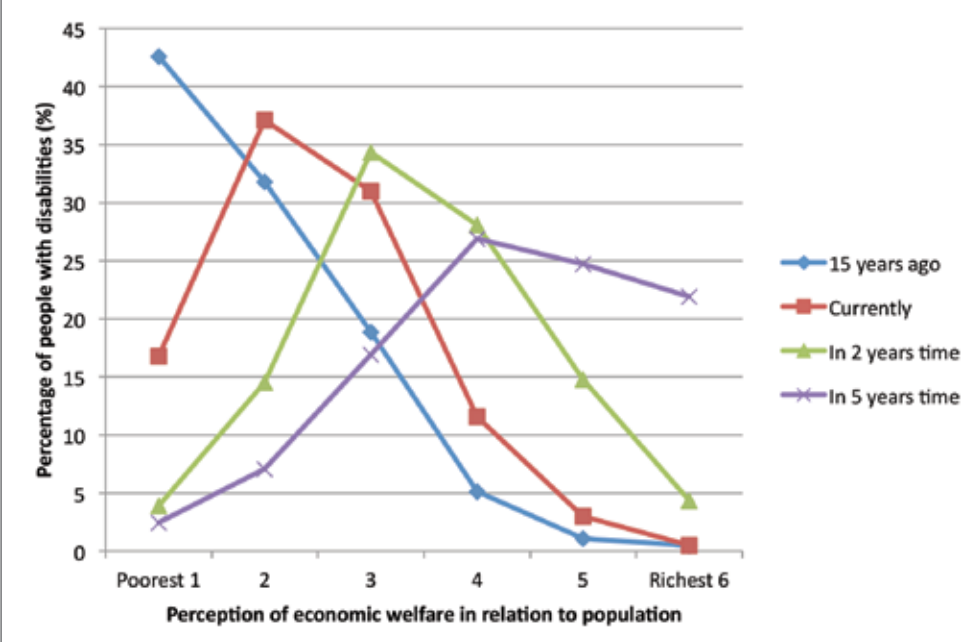


Figure 11. Past, present and future evaluations of economic welfare, people with disabilities only (NIDS, 2008)



The red line in both figures indicating people's perceptions of economic well-being today follow one another fairly closely, illustrating that the perceptions of people with disabilities and non-disabled people were similar. The graphs also show that non-disabled people were only slightly more optimistic about their future economic well-being (green and purple lines) than people with disabilities.

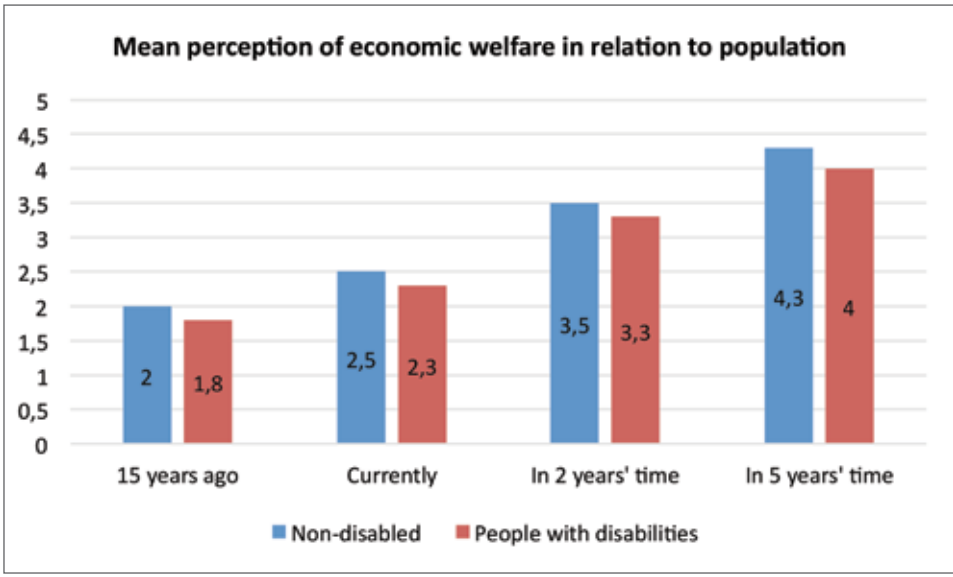


Figure 12. Mean past, present and future perception of economic welfare (NIDS, 2008)

At the level of averages it becomes evident that people with disabilities were slightly less optimistic about their economic well-being over time than their non-disabled counterparts. Although the differences in the means were all statistically significant, the differences were not large. This suggests that people with disabilities and non-disabled people had very similar perceptions of their economic well-being, although people with disabilities perceived themselves to fare slightly worse on the economic scale than their non-disabled counterparts.

2.6.5 EMOTIONAL WELL-BEING

A further indicator of quality of life is that of emotional well-being and mental wellness. In the NIDS questionnaire a battery of questions – the Center for Epidemiological Studies Short Depression Scale (CES-D10) – was used to assess certain behaviours and feelings related to psychological distress (Ardington & Case, 2009). A higher total on the scale indicated a higher prevalence of depressive symptoms. When assessing the emotional well-being of people with disabilities and non-disabled participants, it became evident that non-disabled people were far more likely than people with disabilities to experience emotional well-being. However, it is unclear whether this difference was attributable to disability or to other variables. For instance, if more women have disabilities than men, and women are more likely to present with depression, the difference may be explained by gender rather than disability. For this reason, further analysis was conducted.

This analysis demonstrates that the CESD scores were significantly correlated with educational attainment, income and age. As educational attainment increased, CESD scores decreased, suggesting that higher education levels were associated with greater emotional well-being. Given the discussion in Section 2.2 about the educational attainment of people with disabilities, this may explain in part the differences in CESD scores between people with disabilities and non-disabled people. Income was also negatively correlated with CESD scores and age was positively correlated with CESD scores. Since people with disabilities are likely to have less income as discussed above, this may in part explain the higher CESD scores.

A regression analysis of CESD scores accounting for the effects of age, gender, income, geographic area and educational attainment demonstrates that while all of these variables were significantly correlated with CESD scores, the model has very low explanatory value. This suggests that there are a range of other factors which contribute to the overall variance in CESD scores. This finding backs up evidence presented by Ross and Devereil (2010), which suggested that a range of personal factors, including resilience and coping, as well as household support and friendships, need to be considered when assessing differences in emotional well-being.

2.6.6 SUBJECTIVE WELL-BEING

A final measure of quality of life is subjective well-being. In the NIDS questionnaire subjective well-being was measured with two questions indicating perceptions of satisfaction. The first asked the respondent to indicate on a scale of 1 to 10



where 1 means “very dissatisfied” and 10 means “very satisfied”, what their level of satisfaction is at the time of answering the question. The second question asked the person to indicate whether they are happier, less happy or the same as they were ten years ago.

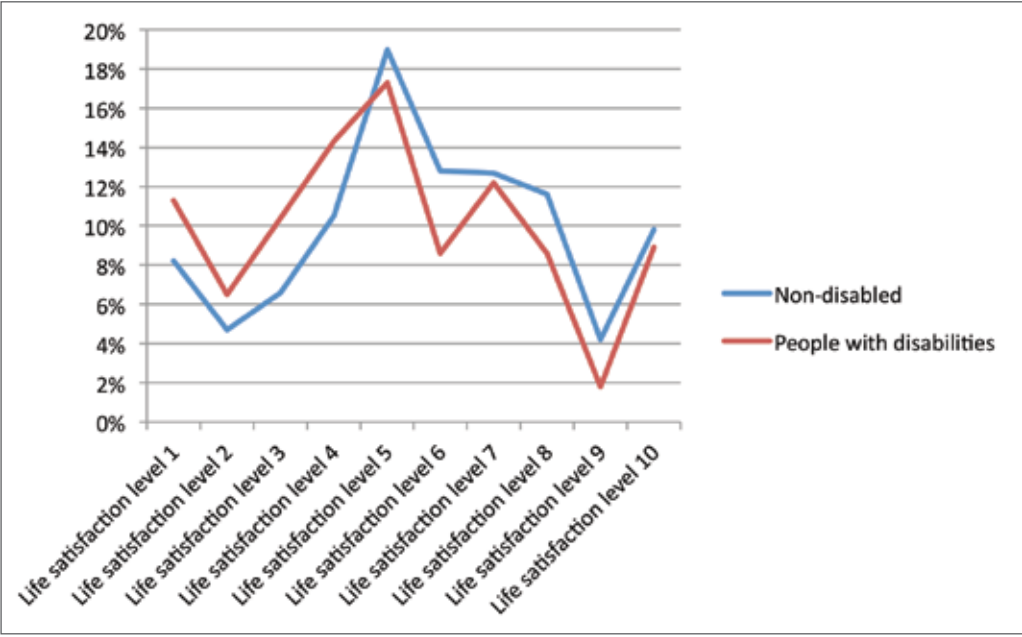


Figure 13. Life satisfaction levels by disability status (NIDS, 2008)

In terms of the first question, on average people with disabilities were significantly less satisfied than their non-disabled counterparts. If the analysis is disaggregated to look at the differences within each life satisfaction group, it becomes evident that there were some significant differences at various life satisfaction levels. Figure 13 depicts that people with disabilities were more likely to report lower life satisfaction than non-disabled people.



Part 3: Summary of the findings, policy implications and recommendations

The data reported on in this study reveal the complexities of the relationship between poverty and disability, particularly given the range of other socio-economic factors such as race, class, age, geographic location and gender that intersect with disability to either constrain or enable capabilities. However, one key finding continues to emerge across the data. Disability does not fully explain adverse outcomes such as constrained income, lack of labour market participation, and lower education levels. Disability does not necessarily have a direct link to poverty outcomes. Rather, other socio-economic variables such as race and gender continue to have a marked effect on such outcomes. However, the presence of a difficulty or disability in the life of an individual most certainly does intersect with factors such as gender and race and can result in increased marginalisation.

To understand the data conceptually, the capabilities framework was used. This theoretical framework offers insights into, not only the ways in which poverty serves to marginalise people, but also how disability can lead to capability limitations that prevent people from achieving certain functionings, both because of the individual-level disability and because of the interaction of the disability with the social, political and economic environment (Burchardt, 2004; Mitra, 2006). What the capabilities approach offers is a conceptual lens that recognises that income alone cannot account for poverty status, since capabilities at the individual level (such as age, health status or gender) and social level (such as access to education, gender roles and expectations) affect whether income can be converted into functionings. Here disability can be accounted for at both the individual level and the social level.

Thus, unlike the social model, the capabilities framework considers both the individual-level effects of disability, as well as the interaction of the disability with the environment. The capabilities framework allows us to understand how both poverty and disability interact with one another and with other socio-economic factors to produce multiple layers and experiences of marginalisation which are likely to reinforce negative outcomes like loss of income, lower levels of education, and decreased levels of health and well-being. Where these processes of marginalisation – both marginalisation due to poverty and marginalisation due to disability (amongst other forms of marginalisation) – are recognised and addressed with appropriate policy and programmatic interventions, we are likely to begin seeing changes in the outcomes for both those who are poor and those who live with a disability. In addition, as Dubois and Trani (2009, p.198) argued, it demonstrates how “reducing the consequences of disability” in that person’s environment ensures that people with a disability are not “left behind” when development occurs.

3.1 Summary of the findings

3.1.1 PREVALENCE AND DEMOGRAPHIC PROFILE

There is no standard approach for assessing disability and the different methodologies used to estimate disability prevalence levels in the countries where surveys were undertaken limits the comparability of the data. The Washington Group on Disability Statistics established by the United Nations Statistical Commission recommends that persons who experience some difficulty with regard to sight, hearing, walking, cognition, communication and self-care (Mont & Cuong, 2011) should be classified as having a disability. The NIDS data can be used to determine the prevalence of disability among adults in South Africa based on difficulties encountered with regard to vision, hearing, and upper and lower body mobility.

Analysis of the NIDS data reveals a disability prevalence rate of 18 per cent. This rate is higher than the Census 2011 rate of eight per cent (Statistics South Africa, 2012), and this may be attributed to differences in the way the questions were asked and the inclusion of only adults in the NIDS analysis. The reported rate was derived from self-reporting of difficulties that people had with upper and lower body mobility, sight and hearing. It is a relatively crude measure of disability that relies on self-reporting of experiences, and when aggregated, as has been done in this study, masks the complexities of different types and levels of severity of disability. The way disability was measured in this study could also lead to the exclusion of psycho-social and intellectual difficulties. Nevertheless, the questions used to determine disability are in line with the World Health Organization’s International Classification of Functioning, Disability and Health (WHO, 2001) and served the purpose of providing aggregate data. Whilst masking complexities, it did allow for testing of relationships between variables. Further analysis could disaggregate data further by age and severity of difficulties.

Most people with disabilities were African (83 per cent), female (73 per cent), and lived in urban areas (56 per cent). The population of people with disabilities had a higher average age (47 years) than the non-disabled population (35 years), reflecting the fact that ageing people are more likely to experience mobility, hearing and sight difficulties that may result in a disability. This demographic overview shows that disability coincides strongly with a range of other socio-economic



variables. Much of the analysis demonstrates the effects of age, gender and race on various outcomes. Given that the majority of people with disabilities were African, female and older, there are strong intersections between these variables and disability, which may explain particular outcomes. The methods of analysis used in the study therefore sought to unpack the relative effects of these multiple variables on a range of capability enhancing factors including employment, education, income, health, and functionings such as quality of life.

From a capability enhancing point of view, there are key means such as education, health and income that can enable people to achieve functionings. For this reason the study focused on ways in which disability interacts with variables to shape outcomes in these three key domains.

3.1.2 EDUCATION

Disability is known to have a negative compounding effect on education in developed and developing contexts (Groce et al., 2011; WHO, 2011). In South Africa, the legacy of apartheid, the high unemployment rate, poverty, inadequately trained teachers, poorly resourced schools, and a failing education system results in low educational attainment. Within this context people with disabilities fared worse than their non-disabled counterparts (CASE, 1999; Graham et al., 2013). The analysis of the data shows that even when accounting for age as well as other variables, disability still has a marked effect on educational attainment.

But it is not only disability that affects this outcome. Those with severe mobility disorders have the lowest levels of education, and those who are African and live in rural areas are more severely affected than people of other race groups who reside in urban areas. This finding demonstrates the compounding effects of race, geographical location and disability on education outcomes; and the long-term effects of a social system that excluded particular groups of people from education opportunities. The lack of assistive devices (e.g. wheelchairs), physically accessible schools, and transport to get to the schools, could also be contributing factors.

Given that education capability is an essential point of leverage for functionings, it is evident that this is a key priority area with the ability to lift people out of poverty. However, significant investments in education may have had a positive impact on education levels for all people, as suggested by the younger cohorts of people with disabilities reporting almost the same levels of education (in terms of years of education) as their non-disabled counterparts in the NIDS Wave 1 dataset.

Access to good education should be afforded across geographic locations and race groups, regardless of the presence or absence of disability. For children with disabilities, reasonable accommodation should be introduced to enable participation and the support required for children with disabilities to progress beyond primary-level schooling. For people who become disabled in adulthood, the effects of disability are likely to be amplified if coupled with an already low educational achievement. For further insights into the dynamics between education and disability, and in light of previous evidence for early-onset disability having a greater negative effect on educational attainment (CASE, 1999), it is recommended that future work probe the age of onset of disability to be able to draw stronger conclusions.

3.1.3 EMPLOYMENT AND INCOME

In terms of income, the study assessed two main pathways to income – employment and social protection. The analysis shows that despite current policies aimed at promoting the inclusion of people with disabilities into the economy, there were still fewer people with disabilities than non-disabled people employed. This finding is commensurate with research conducted in developed and middle-income countries, where disability is associated with lower employment rates. The main reason for this disparity lies in the number of people with disabilities who indicated that they are not economically active. Excluding the older population, it was evident that just under half of people with disabilities as opposed to just over a third of non-disabled people were not economically active. Most people with disabilities suggested that they were discouraged work-seekers, with only 10 per cent indicating that they had childcare or family responsibilities. This suggests that labour market despondency, and not health-related considerations, is the key reason why people with disabilities opt out of the labour market. The analysis also demonstrates that amongst those who were employed, people with disabilities were more likely to work in vulnerable or precarious employment than their non-disabled counterparts. Interestingly, they were earning on average R400 (US\$42.11) less per month than non-disabled employees, reflecting that income disparities are still present in the labour market.

It is encouraging to note that the inequalities experienced at the lower end of the labour market seem to rectify themselves at higher levels of employment. Individuals with disabilities who have had access to adequate education earlier in life, and who are using assistive devices, were likely to be able to access skilled jobs with the advantages of greater pay and security.

Although people with disabilities were earning less than non-disabled people, disability was not a significant predictor of earnings from employment. Rather employment, race, gender and education levels were the main predictors of income.



However, disability may interact with these variables. So, although the disability itself does not explain differences in income, the ways in which disability interacts with other factors such as access to education, access to employment, and the compounding effect of gender, race and disability, do shape income levels. This finding suggests that efforts to rectify the racial and gendered nature of income inequality would address the inequalities in income experienced by people with disabilities to some extent. However, if disability is not taken into consideration in a targeted way as well, disability-related income inequality may persist and become more pronounced over time.

In the context of high unemployment levels for all people, income from social protection becomes a key point of consideration. The study reveals that social protection plays a vitally important role in ensuring that people with disabilities have some form of income through the disability grant, state pension and the child support grant. The analysis demonstrates that people with disabilities were far more likely to be grant dependant (46 per cent of people with disabilities as opposed to 21 per cent of non-disabled people received one grant) and that grant income was the single most important source of income for poor people and for people with disabilities in particular. Although only 10 per cent of people with disabilities indicated that they were receiving the disability grant, it had a marked impact on the number of people with disabilities living below the lower bound of the poverty line. When all grant income was included the number of people with disabilities living below the lower bound of the poverty line decreased from 66 to 41 per cent. The number of people with disabilities living above the upper bound of the poverty line increased from 17 to 39 per cent.

The low uptake of disability grants suggests that more work needs to be done to educate and support people with disabilities to access this means of income protection where they qualify. Secondly, there is potential to consider the possible transformative effects of social protection (Sabates-Wheeler & Devereux, 2008). While no data were available in the NIDS dataset on the utilisation of grants, data from the Johannesburg Poverty and Disability Study (Graham et al., 2010) suggests that grant income is largely used to meet basic household needs such as food. This means that the grant cannot be used to purchase assistive devices or to invest in education. Considering ways in which other services such as access to assistive devices, training, and small business loans and support can be targeted at people receiving the disability grant, may be one way in which to ensure that the effects of the grant become more transformative, ensuring that people with disabilities are able to exit out of poverty.

The effects of the social grant system on poverty alleviation for the poorest, and for people with disabilities in particular, should be viewed as a major positive programmatic intervention. Because people with disabilities were less likely to generate livelihoods from employment than their non-disabled counterparts, were more likely to be involved in precarious employment, and were earning less in the labour market than their non-disabled counterparts, social grant income provides greater security in terms of livelihoods and is a significant poverty alleviation strategy that could be enhanced and improved upon.

3.1.4 SOCIAL CAPITAL

While education, health, and income from employment and social protection are key means to achieving functioning, the study also assessed social capital or collective capabilities that might serve to enable people to achieve desired functionings. Where people are able to access social networks of support, depending on the quality of such networks, these can be mobilised to achieve certain outcomes. This is the theory put forward by social capital theorists and one which has been adapted to understand the household resources to which people with disabilities might have access to (Dubois & Trani, 2009). The analysis reveals that people with disabilities were more likely to live in larger, intergenerational households. People with disabilities were more prone to report being married or living with a partner than their non-disabled counterparts. This suggests that people with disabilities are choosing to live in households where other household members can provide care, and points to the important role that households play in caring for people with disabilities. Conversely, many, especially older people with disabilities, may be a source of income to which their adult children and grandchildren gravitate, often resulting in the older person being a caregiver themselves. Many people with disabilities indicated that they were either main or joint decision-makers in the household, suggesting that they play a very important role.

3.1.5 HEALTH

Health is a key factor shaping the achievement of functionings from a capability perspective. The analysis demonstrates that people with disabilities were more likely to report having been affected by both communicable and non-communicable diseases, were less prone to disclose a positive health status, and were less likely to have been able to access adequate health care services. Due to their higher prevalence of disease, they consulted health practitioners more often. Despite this, people with disabilities had lower access to medical insurance compared to their non-disabled counterparts. The lack of health care insurance for people with disabilities meant that they were more likely to access health care at public clinics and public hospitals, with their non-disabled counterparts being more likely to consult private doctors. What is evident though, from the qualitative component, is that there are difficulties in accessing these public clinics, particularly for people with



disabilities. The increased use of public health care amongst people with disabilities is reflected in the lower amount of consultation fees paid by them.

The analysis also reveals that, while gender and age interacted to some extent with these outcomes, disability itself was a key explanatory factor in these outcomes. This suggests that greater efforts are required to ensure better health education and access to health care for people with disabilities.

3.1.6 QUALITY OF LIFE

When considering the multidimensional nature of poverty, it is important to go beyond income and employment. Access to a range of basic services and other assets can make a marked difference in the life of an individual, significantly shaping their quality of life.

The state has made significant gains over the past 20 years in ensuring that households have access to basic services. In 2001 for instance, 85 per cent of households had access to piped water (Statistics South Africa, 2003). By 2011, this percentage had increased to 91 per cent (Statistics South Africa, 2012). The NIDS data confirmed this indicating that most people (92 per cent) had access to piped water, either from a tap in the dwelling (49 per cent), piped water on the stand (25 per cent), or piped water from a public tap (17 per cent). Despite this high coverage data suggest that, in terms of access to basic services, people with disabilities fared a little worse on access to flush toilets, water and electricity. This suggests that households with people with disabilities were more vulnerable and faced additional struggles in the absence of such services.

Having considered some of the key means to achieving functionings, the analysis also sought to understand essential outcomes such as emotional, economic and subjective well-being. In terms of perceptions of poverty, people with disabilities were more likely to report dissatisfaction with their consumption levels and economic well-being, and also reported lower life satisfaction and emotional well-being levels. While age, gender and educational attainment partly explain these differences, it is clear that disability interacts with such variables to produce these outcomes. There is thus a clear need for support mechanisms such as counselling to be provided to people with disabilities to ensure greater emotional well-being.

The above findings suggest that efforts to address poverty through comprehensive and wide-reaching investments will also serve to benefit people with disabilities.

3.2 Policy implications and recommendations

The study demonstrates the importance of analysing the ways in which disability and poverty, alongside a range of other socio-economic variables, shape outcomes in complex ways. Focusing only on disability when considering how best to address the needs of people with disabilities may delay progress because other factors like gender and race continue to shape access to employment, levels of income and health status. Therefore an integrated approach that ensures comprehensive social investments to address poverty, alongside targeted strategies for people with disabilities where necessary, seems to be the best approach to ensuring that inequality gaps are closed and that people with disabilities are not left behind in development efforts. South Africa's policy approaches in areas including social protection, education and economic participation are well thought through in their redistributive efforts, and also make provision for the needs of people with disabilities. This should in the long term stand to benefit all people, including those with a disability, provided policies are well implemented.

The data on education effectively demonstrates this viewpoint. While the education system in South Africa continues to receive criticism, efforts to ensure access to education for all people seems to be paying off, with younger cohorts of learners completing more years of education than older cohorts of the population. At least in terms of education access, progress has been made. This progress has extended not only to the general population, but also to people with disabilities, demonstrating that the education inequality gap between people with disabilities and non-disabled people is closing. However, access to education says nothing about the quality of education. Qualitative evidence suggests that quality of education for children with disabilities is still a struggle, with few teachers adequately trained, and a lack of assistive devices for those requiring them. The Department of Basic Education's approach to ensuring that special needs education schools become sites of capacity building for surrounding schools and communities (Department of Education, 2001) is yet to be properly realised. The rural case study reveals that such schools are a vital source of support for parents of children with disabilities. These schools need to be adequately resourced to ensure better quality of care and education, enable specialised interventions depending on type and severity of disability, and enhance the multiplier effects of their presence in communities into households and into mainstream schools. There is thus a key role to play for the disability rights movement in ensuring such implementation and assuring quality.



Labour market participation continues to be a challenging area for all people and particularly for people with disabilities, largely due to high levels of unemployment in the country. Thus, despite policy and programmatic efforts that seek to encourage greater labour market participation for marginalised groups, inequalities still persist. Again, policies that have been put in place to redress inequalities in economic participation are well considered, especially given that they also integrate the needs of people with disabilities. However, this has not necessarily resulted in positive outcomes for people with disabilities who are still more likely than their non-disabled counterparts to opt out of the labour market, largely due to being discouraged. This suggests that the labour market, whilst being difficult to access for all people in the context of high levels of unemployment, is still particularly problematic for those with disabilities. The level of functional difficulty experienced by people with disabilities also impacted on access to employment. There is need to also recognise that for some people with disabilities, partial employment may also be an opportunity. This has received limited attention in the consideration of policy options. There is a role for the disability rights movement to play in advocating for reasonable accommodation measures and educating employers about employee rights. Furthermore, programmes and counselling for people with disabilities to ensure they are able to re-enter the labour market as work seekers are important interventions.

The study demonstrates the immense contribution that investments in social protection mechanisms in the form of grants have had for people with disabilities. Such investments ensure that people with disabilities have a basic income protection, and that the income inequality gap between those with a disability and non-disabled people is closed to some extent. Access to social grants has a major poverty alleviating effect that should be celebrated. However, it should be noted that the current system does not allow for the transformative potential that social protection mechanisms may offer if constructed differently. Considering ways in which other services for people with disabilities could be linked with access to the grant may go a long way in expanding the possibilities of the disability grant to effect greater changes in households and for individuals with a disability. For instance, targeting those receiving the disability grant for access to relevant assistive devices may enhance their independence and alleviate some of the burden of care that currently rests with households. Similarly, programmes that offer training, and small business loans and support, can be targeted at people receiving the disability grant and may be one way in which to ensure that the effects of the grant become more transformative.

The data also demonstrates the need for continued efforts to ensure that health care services are more accessible for people with disabilities, both physically and socially. People with disabilities displayed higher rates of infection for both communicable and non-communicable diseases, suggesting that there is a need to include targeted health messaging for people with disabilities in education and prevention programmes. This is something that the disability rights movement has long advocated for when considering HIV prevention programmes. However, this could be expanded to include messaging about a range of illnesses. Furthermore, whilst access to health care is something that needs to be expanded for all, there is a need to ensure that services are physically accessible and that health care professionals are adequately trained about how to engage with people with disabilities.

The study confirms the importance of the household and household relationships for people with disabilities. This suggests that a key site of involvement for programmatic interventions needs to be the household rather than the individual alone. Evidently, households provide the basis of support for people with disabilities and should be assisted to continue this role. Training, counselling and access to devices that can assist with the care of people with disabilities are essential interventions. The work of community development workers in identifying households where a person with a disability lives, and ensuring that such households are connected with relevant services and resources, must be recognised and supported. Moreover, organisations such as special needs schools and local NGOs can be enormous resource centres for households that include a person with a disability, particularly where the disability is severe and difficult to manage. Such organisations could provide additional training, peer groups of support and advice to households.

In summary, the strategies that the state has embarked on to address poverty and inequality gaps in South Africa have been positive and are in some ways beginning to yield results that benefit the wider population, as well as people with disabilities. However, it is evident that there is also a need to have targeted strategies to ensure that the needs of people with disabilities are met and that they are not left out of the benefits of such investments. For this reason there is ample work for organisations forming the disability rights movement to secure effective implementation of policies, and to ensure that the rights and needs of people with disabilities are constantly accounted for.



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Appendix 1: Personal communication

Angela Ngyende, Statistics South Africa, 2014

William Rowland, Honorary Life President of the South African National Council for the Blind and Honorary President of Disabled People South Africa, 2011



Acknowledgements

The research presented in this report has been due to a truly collaborative effort. In addition to the authors of the report a number of people played an important role in the study's conception, execution and finalisation.

We would like to thank Dr William Rowland for passionately advocating for research of this nature. Dr Rowland has immense insight into what is required in the field of disability studies to ensure more effective advocacy and policy making. His ideas germinated the idea for this study and his tireless networking made the study financially possible.

We also thank the Australian Department of Foreign Affairs and Trade for their generous research grant, without which this study would not have been possible.

The work of Prof Leila Patel in reviewing drafts of the report and providing overall guidance on this project must be acknowledged. Reem Mutwali acted as a research assistant on the project and conducted some of the initial statistical analysis. Thabile Ubisi, Ellem Nkuna and Emmanuel Mbunyane provided dedicated fieldwork assistance and translation during the rural case study fieldwork and Thabile worked hard to ensure that interviews were transcribed and translated timeously. Without their support the case study component could not have happened.

The input received from the reviewers of this report – Prof Theresa Lorenzo, Head of Disability Studies at the Department of Health and Rehabilitation Sciences, University of Cape Town and Mr Michael O'Donovan, Senior Analyst at the Multi-Level Government Initiative, University of the Western Cape – was invaluable in strengthening the final product. We thank them for their careful attention to detail and critical feedback.

Most importantly it is the input received from those who agreed to participate in the study that makes the final product a possibility. Participants' willingness to answer questions and their insights into the challenges they face as well as how they cope each day are invaluable.

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