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Evaluating the Impact of Facility and Household-Level Factors on Early Learning Development in Philippi, Western Cape

By

Siphe Madyibi

3126232

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Supervisor: Professor Amiena Bayat

Signature: S. Madyibi

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ABSTRACT

Early learning opportunities in South Africa are both inaccessible and unequal in quality due to facility and household-level factors. With minimal resources, Early Childhood Development (ECD) facilities in poor communities provide low-quality ECD services to children. Part of the reason that ECD facilities are under-resourced and of poor quality is their inadequate funding. The disparity in quality means that poor children may still lag behind children who have had access to high-quality, well-resourced ECD facilities. Beside facility-level factors, the process of early learning is also influenced by household factors. Studies have found that low-cost stimulations such as storytelling, singing and playing with household objects can be used as tools to promote early development within the confines of the household.

Despite research showing the benefits to societies of early interventions in preschooling, many ECD facilities in poor communities have not been able to access government resources to improve their services and outcomes. This study investigated the extent to which ECD facility-level factors such as underqualified staff, poor infrastructure and registration status as well as household-level factors impact on the early learning of poor learners in Philippi, one of the biggest poor urban settlements in the City of Cape Town in the Western Cape. The impact of the registration status of the facility was also tested in relation to facility-level factors. The researcher visited 20 ECD facilities and 40 caregivers in Philippi. Face-to-face interviews were conducted with the ECD principals, practitioners and caregivers. In addition to the interviews, the researcher employed an observation questionnaire for each facility. The data was analysed using the Consolidated Criteria for Reporting Qualitative Research (COREQ) framework, while the quantitative elements employed descriptive statistics and the Fisher Exact Test of Independence.

The study found that there are no socioeconomic differences between the children who attended registered facilities and those who attended unregistered facilities as households in Philippi face common problems of poverty, low educational attainment and limited learning material at home, among others. There are, however, significant quality differences between registered and unregistered facilities, with the former being better off than the latter, partly due to registered facilities receiving a government subsidy. The South African government may currently refuse subsidy funding to facilities serving poor children if they do not meet the requirements for registration detailed in the ECD norms and standards applied by the

Department of Social Development (DSD). Without sufficient assistance from the government, unregistered facilities are likely to remain unable to meet the ECD norms and standards. Hence the study further argues for a revision of the ECD Policy and ECD norms and standards as well as the government funding model to enable greater investment in early learning and improved long-term educational outcomes.

Keywords: Early Learning, Early Childhood Development, Early Childhood Development Facility, Children's Act of 2005, ECD Norms and Standards, South Africa, Philippi

DECLARATION

I declare that *Evaluating the Impact of Facility and Household-Level Factors on Early Learning Development in Philippi, Western Cape* is my own work, that it has not been submitted for any degree or examination in any university, and that all the sources that I have used or quoted have been indicated and acknowledged by complete references.

Signature: S. Madyibi

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"I will give thanks to you, Lord, with all my heart; I will tell of all your wonderful deeds"

Psalm 9:1

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LIST OF ABBREVIATIONS

AGSA	Auditor-General of South Africa
COREQ	Consolidated Criteria for Reporting Qualitative Research Framework
CPAP	Country Programme Action Plan
CSG	Child Support Grant
DBE	Department of Basic Education
DPME	Department of Monitoring and Evaluation
ECCDP	Early Childhood Care and Development Policy
ECD	Early Childhood Development
ECE	Early Childhood Education
EMIS	Education Management Information System
ETDP SETA	Education, Training and Development Practices Sector Education and Training Authority
FPL	Food Poverty Line
GHS	General Household Survey
KG	Kindergarten
LBPL	Lower-Bound Poverty Line
LOGSE	Ley Organica de Ordenación General del Sistema Educativo
LTSM	Learning and Teaching Support Material
NDP	National Development Plan
NEPI	National Education Policy Initiative
NGO	Non-Governmental Organisation

NIDS	National Income Dynamics Study
NPO	Non-Profit Organisation
NQF	National Qualifications Framework
PBDM	Planning and Building Development Management
PIRLS	Progress in International Reading Literacy Study
PMG	Parliamentary Monitoring Group
RDP	Reconstruction and Development Programme
SDS	Social Development Strategy
SES	Socioeconomic Status
Stats SA	Statistics South Africa
TVET	Technical and Vocational Education and Training
UBPL	Upper-Bound Poverty Line
UN	United Nations
UNICEF	United Nations Children's Fund
USD	US Dollar
WHO	World Health Organisation

CHAPTER ONE: INTRODUCTION

1.1 Introduction and Background

Economic development is only possible through interventions in human capital development. Human capital development is defined in economics as investments made in education and health care. In other words, investments that promote productivity, growth, improved competitiveness and economic progress in human beings (Schultz, 1961:1). This makes human capital integral to and a prerequisite for economic growth and development. According to Todaro and Smith (2015:383), developing economies face profound and complex challenges in growing human capital that will ultimately feed into their economic development. In pursuing economic development through investment in human capital, economies have to consider the timing of the investments in human capital, especially investments in education, since the impact of human capital investments like education varies across the life cycle of a human being. Cunha and Heckman (2007:31) argue that it is imperative that a nation, especially one faced with limited resources and choices to intervene in the schooling system, considers the timing of its educational interventions. Local and international studies agree that the earlier the investment is introduced, the better the outcome (Heckman, 2006:1900; Kotzé, 2015:2; Spaull & Kotzé, 2015:23). Given this consensus, early investment in human capital should arguably prioritise Early Childhood Development (ECD). Investment in ECD could potentially address several societal challenges, including the need to grow skills and competence, improve academic performance and alleviate and reduce poverty. The effectiveness of such global early interventions as the Head Start and the High/Scope Perry PreSchool Project, particularly among disadvantaged children, is well established in the literature.

Early childhood is roughly the period, from conception to about eight or nine years, corresponding to the most intense period of brain development in the human lifespan (WHO & UNICEF, 2012). All basic skills of language, problem-solving, socialising and inquisitiveness are acquired in the period from birth to seven years. Therefore, the focus of ECD programmes is this period of rapid physical, mental, emotional and spiritual growth, which includes all the child's early learning experiences within the formal ECD environment and in the family. ECD and early learning are associated with the sensitivity and vulnerability of early brain development (Black, Walker, Fernald, Andersen, DiGirolamo, Lu, McCoy, Fink, Shawar, Shiffman & Devercelli, 2017:78). The early years are also considered ideal for

teaching and demonstrating values of peace, respect and appreciation of diversity (DSD & UNICEF, 2006:12). Ultimately, the concepts, skills and attitudes that a child acquires in its early years lay a foundation for lifelong learning. Furthermore, adequate exposure to ECD and early learning enables children to thrive in primary and, subsequently, secondary schooling (Mbarathi, Mthembu & Diga, 2016:8), performing better, with less lower-class grade repetition and dropout. Progress in education is typically associated with better labour outcomes in adulthood in terms of employability and income. Therefore, a child who has had adequate ECD and early learning interventions performs better at school, has a lower probability of juvenile negative behaviour and a higher probability of being employed as an adult (National Development Agency, 2012:1). Early intervention may take place in the child's household and/ or the ECD facility the child attends.

ECD services are among many components of human capital in which developing countries lag. More than 20 years ago, Stevens (1997:396) contrasted the availability of ECD services in developed and developing countries and found that ECD services were available to nearly all children in developed countries while their accessibility was limited to privileged children in developing countries.

Although the South African government only enacted the National Integrated ECD Policy in 2015, the ECD Policy had a long genesis, with the government committing to early learning in the 2001 White Paper on Early Education. The White Paper was integral in putting the spotlight on the provision of early learning, effectively proposing the implementation of the reception year Grade R (Department of Education, 2001a:4) and pre-Grade R (Department of Education, 2001a:39). While the White Paper advocated for the provision of early learning in the country it did not guarantee its integration into law as a fundamental right. The White Paper was followed by the Children's Amendment Act, Act 41 of 2007, an amendment of the Children's Act, Act 38 of 2005, also acknowledging the importance of early learning and setting the standards for an acceptable ECD facility through the ECD minimum norms and standards (Republic of South Africa, 2008:23). The National Development Plan (NDP) was introduced in 2012 and implemented in 2013. The NDP reiterates the call of the 2001 White Paper to introduce two years of compulsory pre-primary education for four and five-year-olds (National Planning Commission of South Africa, 2012:300). It states that the South African government considers early learning an integral component of achieving the overall mandate of the NDP to reduce inequality and eradicate poverty by the year 2030 (National Planning Commission of South Africa, 2012:300).

The National Integrated ECD Policy defines ECD as a period of human development from birth until a child starts formal schooling (Republic of South Africa, 2015:11). The policy advocates and encompasses the many aspects of ECD, including child health, nutrition, protection and early learning (Statistics South Africa, 2018a:1). It states unequivocally that "Government recognises early childhood development as a fundamental and universal human right to which all young children are equally entitled without discrimination" (Republic of South Africa, 2015:22).

Despite early learning being considered a foundation for better school outcomes and lifelong learning, and despite the government accepting ECD as a human right, preschool education is not a fundamental right according to the South African Constitution. If preschool education is not a basic right, the government is not legally compelled to provide it. By contrast, basic education is not only a fundamental right enshrined in the South African Constitution, it is an unqualified right (although not defined), and the government is compelled to provide it. According to the South African School Act of 1996, basic education refers to compulsory education from the age of seven or Grade 1 to the age of 15 years old or Grade 9, whichever one is reached first (Branson, Kekana & Lam, 2013:3). The first phase of schooling, the Foundation Phase, encompasses Grades R to 3. Effectively, this means that the government is legally responsible for schooling from Grade 1 but has committed to providing the non-compulsory Grade R, as the first year of Foundation Phase. Until the legal definition of 'basic education' is expanded, the State bears no responsibility and has no constitutional obligation to provide schooling before Grade 1. Therefore, in as much as the national government recognises the importance of preschool education in the Children's Amendment Act of 2007 and the NDP, the provision of early learning by the government remains optional.

The Western Cape Government (WCG) has committed in similar vein to the national government to prioritising ECD and early learning. The WCG prioritises ECD (and early learning) for the following reasons (Western Cape Government, 2013:4):

- It is considered instrumental for child protection and early intervention.
- It provides a foundation for better school outcomes and lifelong learning.
- It is a tool to reduce poverty.
- It contributes towards skills development and competency, which are paramount for economic opportunities.

This positioning of ECD and early learning as tools to reduce poverty implies that, while ECD is essential for every child, it is even more critical for children residing in poor households and communities.

1.2 Problem Statement

While the literature confirms the many benefits associated with ECD and early learning, the realisation of these returns is dependent on the accessibility of ECD services, the quality of the available ECD services and facilities in poor communities, and households' capacity to contribute to early learning. Children from low Socioeconomic Status communities such as Philippi are often denied early learning opportunities through the shortcomings of their ECD facilities as well as unconducive household environments.

A study by Hall, Sambu, Almeleh, Mabaso, Giese and Proudlock (2019:36) uses a sample of children aged 0–6 years from the 2017 General Household Survey (GHS), divided by household income quintile to show a clear trend linking access to an ECD programme to household income. For instance, a three-year-old child in the highest income quintile is twice as likely to participate in an ECD programme as a three-year-old in the lowest income quintile. The ECD access gap narrows significantly when children enter free public schooling in Grade R (Hall et al., 2019:36). Thus, except for the children accessing Grade R in no-fee-paying schools, the study shows that poorer children in South Africa are much less likely to be able to attend ECD programmes than the children of wealthier parents.

Privately-owned ECD facilities, ranging from formal and registered facilities to informal and unregistered facilities, are the backbone of early learning provisioning in the country. Because most of these ECD facilities need to achieve a profit and cover expenses, their fees are out of reach for the poor. Even ECD facilities operated by non-government organisations (NGOs) on a non-profit basis tend to be compelled to charge fees, which may be supported by subsidies from government or funders.

Sherry and Draper (2013:1302) state that school readiness requires children to be empowered with physical, motor, social, emotional and language development, general knowledge and basic cognition. As a result of cost and other factors such as physical distance or cost of transport, significant numbers of children from poor households who could not attend ECD programmes lack school readiness on entering primary school and are likely to encounter problems with numeracy and literacy. South African school children, mostly due to factors

related to under-resourcing of schools and poverty, regularly underperform across grades and subjects in benchmark tests in comparison to their peers, as documented in numerous studies (Bayat, Louw & Rena, 2014; Spaull & Kotzé, 2015; Van der Berg et al., 2011).

Where poor families do manage to gain access to ECD facilities in or near their communities, these facilities are typically under-resourced and offer poor quality services or standards (Statistics South Africa, 2018a:7). These tend to be funded and run by NGOs that are themselves under-resourced.

According to a study by Statistics South Africa (2018a:70), 11% of the ECD facilities studied did not have an outside playing area, 20% did not have playing equipment and more than 50% did not have educational toys for their children. Inadequately resourced facilities may not sufficiently stimulate children's cognitive and non-cognitive abilities to lead to holistic development (Waldfogel, 2015:9). When children attend a learning facility without acquiring a meaningful learning experience, Kotzé calls their experience 'silent exclusion', (Kotzé, 2015:13). Such children may still lag behind children who had had access to high-quality, well-resourced ECD facilities.

Mbarathi et al. found a plethora of unregistered ECD facilities in informal urban settlements (2016:9) like Philippi. Often these facilities are unregistered because they do not meet the ECD norms and standards (for safety, learning programmes, infrastructure and qualifications of staff, among others) imposed on registered ECD facilities according to the Children's Amendment Act of 2007 (Republic of South Africa, 2008:23). Because unregistered ECD facilities are denied government subsidies, these ECD facilities are further constrained in their ability to employ competent staff, expand infrastructure and procure learning and teaching material. Consequently, unregistered ECD facilities achieve poor learning outcomes.

Many unregistered ECD facilities operating in the Cape Town Metro are unable to comply with health, safety and environmental as well as learning and teaching requirements (City of Cape Town, 2015:18). Although clearly in need of government assistance, the City is unable to assist two common types of ECD facilities found in poorer communities. Firstly, ECD facilities established in privately-owned converted residential houses are excluded from benefiting from council residential infrastructure upgrades (City of Cape Town, 2015:18). Secondly, privately-owned ECD facilities in informal settlements cannot be upgraded because the land they are on tends to have been occupied illegally.

The process of early learning is also influenced by household factors. Studies have found that low-cost stimulations such as storytelling, singing and playing with household objects can be used as tools to promote early development within the confinement of the household. Even after eliminating the role of affordability, Statistics South Africa (2018a:73) show that children from white households received the highest frequency of stimulation while children from black households received the least. Stimulations are necessary for reaching developmental milestones in motor development, language and understanding. This means that black children in RSA do not receive adequate stimulation to encourage early learning and are likely to face an uphill battle trying to be on par with their peers. This is because the same group of children accessing poor ECD facilities or none are also likely not to receive adequate stimulation activities aimed at promoting early learning at home.

Many household factors impact on early learning. In Dickerson and Popli's study in the UK, the cognitive development of a sample of 8 741 poor children was investigated in a series of standard tests, measured in four waves up until the children were seven years old (Dickerson & Popli, 2016:545). The study established a negative correlation between cognitive development and poverty in all four waves. The study concluded that the socioeconomic status (SES) of the family, parental inputs and poverty status all had substantial impacts on children's early cognitive development (Dickerson & Popli, 2016:556).

Global studies also show the opposite is true, that high-quality interventions accessed early in a child's life can lessen the negative impact of household factors on child development (Cunha & Heckman, 2007:31; Cunha, Heckman, Lochner & Masterov, 2005:1). Hence, not only does early intervention accrue the highest returns for children from disadvantaged backgrounds (Cunha et al., 2005:1) but, without it, evidence suggests that early disadvantages are difficult to reverse (Shonkoff, Richter, Van der Gaag & Bhutta, 2012:461).

In sum, early learning opportunities in poorer communities vary in terms of accessibility, quality of facilities, affordability, norms and standards met and whether and how the household conditions children are exposed to help or hinder early learning. While acknowledging that there are differences in the experiences and conditions of poor communities in South Africa, the focus of this thesis is on examining the impact of ECD facilities and household factors on the achievement of early learning in Philippi, a poor South African community comprising a mix of township, informal and peri-urban farm settlements.

1.3 Research Question

This study seeks to investigate to what extent ECD facility-level factors such as underqualified staff, inadequate infrastructure and registration status, and household-level factors impact the early learning of poor preschooling children in Philippi in the Western Cape?

1.3.1. Sub-research Questions

Evaluating the impact of these factors on early learning development in Philippi, this thesis seeks to answer the following research questions.

- What is the current state of ECD facilities in Philippi, Western Cape?
- What determines the differences in the quality of ECD facilities across Philippi in the Western Cape?
- How do the ECD norms and standards as advocated by the Children's Amendment Act of 2007 affect the efforts of early learning in Philippi, Western Cape?
- To what extent do household factors impact the early learning of preschoolers in Philippi, Western Cape?

1.3.2. Objectives of the Study

Hence the thesis has the following research objectives.

- Provide an overview of the current state of ECD facilities in Philippi, Western Cape.
- Investigate how the quality of ECD facilities differs across Philippi in the Western Cape, and the reasons for this.
- Determine the extent to which ECD standards and norms as advocated by the Children's Amendment Act of 2007 affect the registration of ECD facilities.
- Investigate the extent to which household factors such as parental involvement, socioeconomic status and stimulation impact on the early learning of the child.

1.4 Significance of the Study

ECD is a key feature of the development policy agendas of developed and developing countries. As a signatory to the Sustainable Development Goals (SDGs), the fourth goal of which is 'quality education', South Africa committed to improving universal access to quality

ECD care and education programmes (Gove & Black, 2016:599). Philippi is a relatively disadvantaged community in which children stand to gain the most from high-quality ECD interventions. This research seeks partly to investigate the quality of ECD facilities that the children of Philippi can access. Since it is mooted that returns on ECD investment are comparatively higher for children with disadvantaged backgrounds, conducting this research in Philippi may assist policymakers and funding agencies to understand whether low-income areas in the country are reaping the positive ECD returns that follow sufficient investment and, to a lesser extent, may inform those monitoring the country's progress with the SDGs, specifically concerning the achievement of quality education.

South Africa has also committed to ECD and early learning in the NDP, which predicts that the improvement of ECD in terms of quality and access will have a rippling positive impact on improving the outcomes of the country's unimpressive education system (National Planning Commission of South Africa, 2012:300). A positive relationship between high-quality ECD programmes and a high-performing schooling system should not only result in positive economic outcomes for the country, but contribute to poverty alleviation and development in economically disadvantaged communities, including through improving ECD facilities and early learning in families through direct investment. In assessing the quality of ECD facilities and household provision of early learning in Philippi, the study will contribute insights and data to the growing body of knowledge in the field of ECD in South Africa and thereby inform future policy and planning in the sector.

1.5 Organisation of the Thesis

The thesis is segmented into nine chapters. **Chapter 1** introduces and provides the background, the research objectives and the significance of the study. The literature review is divided into Chapter 2 and 3. **Chapter 2** reviews theories from the disciplines of Economics, Education and Psychology related to the rationale of ECD and early learning. **Chapter 3** reviews empirical studies in South Africa in relation to facility-level factors such as the qualifications of ECD personnel, the infrastructure of facilities and pedagogy of play, and household-level factors, including stimulation, absent fathers and the socioeconomic status of the family. **Chapter 4** reviews selected national and foreign ECD interventions and extracts key lessons. **Chapter 5** provides a background to the structure of ECD facilities in the country as well as the early learning sector. This chapter was deemed necessary to contextualise the study and provide insight to the reader regarding, the current structure of ECD facilities, the registration process

as well as the official norms and standards set for an ECD facility in South Africa. **Chapter 6** discusses the methodology and data employed in the study. Chapters 7 and 8 present the findings of the thesis. **Chapter 7** discusses the findings concerning facility-level factors impacting on early learning and **Chapter 8** presents the findings of the study on household-level factors impacting on early learning in the Philippi community. **Chapter 9** concludes the study by summarising key points, the scholarly contribution of the thesis and the author's recommendations for areas of future research.

CHAPTER TWO: THEORETICAL LITERATURE

2.1 Introduction

This chapter explores the literature of theories supporting ECD and early learning that have emerged in several fields of study, including economics, education and development psychology.

In the study of economics, early learning and ECD can be understood in terms of return on investment, human and social capital formation as well as equity. Educationalists perceive ECD and early learning as a foundation for formal schooling and lifelong learning and have developed theories arguing that early learning is a gateway to subsequent learning in numeracy and literacy. Development psychology is concerned with the impacts of the child's early environment or eco-system on the child's early learning development and later adult development or learning outcomes.

2.2 The Economics of ECD and Early Learning

Neuroscientists' studies of brain development have established that the human brain is most sensitive and responsive in the early years of life, suggesting that early investment in ECD and early learning would be more effective than intervention later. In development economics, early intervention in ECD is viewed as an investment with expected economic and social returns of equity and efficiency, leading to human and social capital formation. The provision of early learning is affected by unequal endowments at the disposal of households reflecting differences in Socioeconomic Status (SES). Unequal resources lead to unequal opportunities for children, with some having an advantage over others due to receiving better development opportunities. The relevant economic theories on human capital, capital formation, SES and social capital are discussed below.

2.2.1 Human Capital Theory

Economists have long known that people and their abilities are an important part of wealth accumulation in any economy (Schultz, 1961:2). The early economist Adam Smith, faced with the question of how national wealth is measured or constituted, argued that, in addition to the

country's physical resources and endowments, all the acquired and useful abilities in a country's population should be considered part of the country's capital or wealth (Schultz, 1961:2). It follows that the wealth of the country is as much dependent on the skills and abilities of its population as it is dependent on its physical investments and natural resources (Olaniyan & Okemakinde, 2008:479). Schultz (1961:1) defines human capital as direct expenditure on education, health care and all other activities that enhance human capability and positively affect a country's productivity. This standard definition assumes there is a causal relationship between spending on human capital goods (education and health) and the country's productivity (Flabbi & Gatti, 2018:2). Therefore, the main idea behind human capital is that formal learning increases the efficiency and productivity of labour ((Flabbi & Gatti, 2018:2; Olaniyan & Okemakinde, 2008:479). It follows that a highly educated population is a productive population. If human capital enhances abilities and supplements innate abilities, it means there will be differences in the levels of competency and skills within the population or labour force based on individuals' levels of education. Consequently, human capital theory states that individuals will earn different wages or incomes based on their different skills and education levels (Schultz, 1961:4). The human capital theory attributes wage differentials to education differentials, assuming that individuals who are better educated possess high skills and competency not found in the uneducated workforce and consequently are likely to earn more. Olaniyan and Okemakinde (2008:482) state that should the causal relationship between education and earnings hold, it is sensible that education would be made available for low-income groups in the community with intentions of lowering poverty and reducing income inequalities.

In addition to private returns through higher earnings, investment in education is also argued to generate social returns or positive externalities. Social returns or positive externalities mean that the benefits of the investment in education cause a third party, such as the community or country, to also reap the benefits of education (Olaniyan & Okemakinde, 2008:480). Examples of social returns include knowledge that leads to innovation, improved law and order and citizens that are less likely to be a state burden (Hall, 2006:166; Olaniyan & Okemakinde, 2008:480). Cremin declared education to be the great equaliser in society (Cremin, 1957, cited in Rumberger, 2010:246) because investment in education liberates and enables social mobility for the educated and their families (Olaniyan & Okemakinde, 2008:481). Education is seen as a durable mechanism for social transformation as it enables the poor and vulnerable groups to access the labour market and improve the state of their welfare (Rumberger, 2010:246). Barnett

and Belfield (2006:88) stress that social mobility begins with investment and participation in early education. The underlying argument of social returns is that, through education, individuals are transformed into productive citizens, causing the entire community to be better off. Therefore, these social returns associated with education are strong motivations for government to undertake human investment. However, this does not preclude individuals from financing their education.

Without entirely discrediting its empirical validity, the well-established human capital theory has been subjected to criticism, particularly its assumption of the causal relationship between skills measured by years of schooling and higher remuneration in the labour market. Historically, it was argued that the wage differential assumed by the human capital theory did not reflect improvements in individuals' productive capacity caused by education but instead, employers rely on education as a proxy for skills and abilities. Therefore, the value of education is to serve as a signalling device to place one in the right job based on the possibility that one may possess specific skills (Layard & Psacharopoulos, 1974:985; Marginson, 2019:10). This is further supported by the fact that prospective employers often do not have any other information on the abilities of job applicants except their education. The high wages of the educated do not reflect their productivity or efficiency, but the expectation that follows the number of years studying or the qualification obtained. In this view, education is used as the sole basis for earnings without it guaranteeing higher competency (Layard & Psacharopoulos, 1974:986) and high wages can be observed without necessarily an accompanying increase in productivity.

Moreover, in ascertaining the wage differential owing to the causal relationship between earnings and formal education, the theory does not control for innate ability nor family background and socioeconomic status (Welch, 1975:65). This means that returns on education as a component of human capital are calculated purely and exclusively as a result of formal education. Welch argues that family background is crucial in fostering human capital as it contributes through motivating or providing a quality learning environment and access to funds for investments in human capital (Welch, 1975:69). Pierre Bourdieu has compellingly argued the critical role of the family in creating human capital. According to Bourdieu, families promote human capital using at least three forms of capital, namely economic, cultural and social capital (Bourdieu, cited in Richardson, 1986:16). As defined, there is an over-emphasis on monetary resources in human capital theory and less regard for other household factors such as the education levels of parents and their resources at home (Bourdieu, 1986:243).

The argument to incorporate the role of the family in human capital theory is substantiated by empirical models that prove that controlling for ability and/ or for family background reduces the measured contribution of income to education. However, it does not reduce it to zero (Welch, 1975:65). The fact that the traditional human capital theory does not account for family influence is inconsistent because the theory accepts that, for private individuals, families assume a large portion of the human investment. Therefore, families cannot both foster and hinder human capital and simultaneously not influence wage differentials. Logically, if families partly explain the level of human investment, then families also explain wage differentials to an extent, because it is as a result of their investment that there even are wage differentials. The role of families, whether in fostering or hindering human investment, should be accounted for in human capital theory.

Another limitation of this theory is its inability to consider employer discrimination (Welch, 1975:70). Returns on education are confined to wage differentials, with higher wages associated with more years of study. However, considering employer discrimination, returns could also be lower. Finally, there is the assumption that abilities are fixed at very early ages. This static conception of ability is at odds with a large body of literature in child development research that show that basic abilities can be altered in the early years of life. Schooling produces ability, ability creates a demand for schooling (Heckman, 2000:6). The fact that abilities can be altered means that children are not born with fixed abilities. Skills are cultivated and developed. Therefore, the differences in the abilities of children are due to the differences in their development, not due to innate abilities.

In sum, although human capital theory provides a solid foundation for investing in individuals, it confines human capital within the walls of formal schooling, employing a static model that does not distinguish the role of the timing of the investment in determining the returns.

2.2.2 Capital Formation Theory

Human capital theory emphasises formal education as the primary producer of skills in the economy. Effectively, this means that any skills and abilities can only be produced through formal learning (Heckman, 2000:4). The theory of capital formation, as put forward by Heckman and fellow researchers, differs from human capital theory in several aspects.

The notion of schools or formal education institutions being the only mechanisms to generate skills and abilities is somewhat restrictive and particularly disregards the role of families in

fostering skills and abilities. Secondly, it does not account for the different types of skills or abilities. Heckman (2006:1900) and Cunha et al. (2005:4) argue that family environments, which children become part of early in their lives, are significant predictors of their subsequent cognitive and non-cognitive skills. Historically, societies have relied on formal schools to reduce skills gaps found across socioeconomic groups. However, studies show that skills and academic achievement gaps form even before children begin formal schooling (Heckman 2006:1901). This means that interventions to reduce the skills gap should precede formal schooling. Moreover, interventions should target families. Heckman (2006:1901) argues that the (non-cognitive) abilities and motivation children bring when they start schooling are crucial and have a significant bearing on the children's ability to succeed at school, more than the traditional inputs children receive at school.

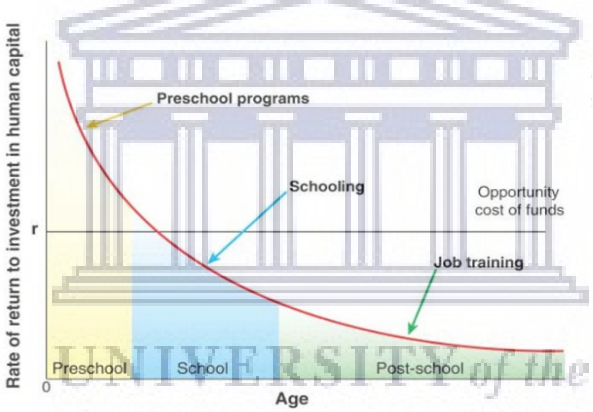
Cunha et al. (2005:4) and Heckman (2006:1901) state that skills and abilities are diverse. Hence, there are cognitive abilities, typically measured through an IQ test, and non-cognitive abilities, namely self-control, patience and temperament. A modern economy calls for both cognitive and non-cognitive skills. For instance, non-cognitive skills such as perseverance, motivation and tenacity are crucial to success as a learner and an adult (Heckman, 2006:1901). In this model, skills and abilities are used interchangeably.

The importance or significance of early intervention is embodied in this theory. The process of capital formation is governed by a multi-stage technology. Within the multi-stage technology, some stages, called sensitive stages, are considered to be more effective in producing specific capabilities. It is highly recommended that specific skills be cultivated during the sensitive period. The critical period is one period that has prerequisite skills for the subsequent stage (Heckman, 2007:13252). In this theory, the process of capital formation emphasises how the process of learning is interlinked, such that capabilities produced at one stage enhance the capabilities attained at later stages. This is better explained using two principles of self-productivity and complementarity (Cunha & Heckman, 2007:31). Self-productivity ensures that skills produced at one stage enhance the skills attained at later stages, meaning the process of acquiring skills is self-reinforcing. It resonates from the idea that what one has learned today will enable one to learn another skill in the future with the latter skill being more complex. However, the complexity would be reduced if the first skill was acquired early in life (Cunha et al., 2005:5). The principle of complementarity states that skills produced at one stage raise the productivity of investments at subsequent stages. This feature also implies that early investment has to be followed by later investment for the initial investment to be productive

(Cunha et al., 2005:5). Under the complementarity principle, it is expected that a child who has attended early education is likely to perform better in subsequent grades, on condition that the investment was ongoing for all tiers of education. Thus, early investment is crucial and has to be consistent throughout one's life. The model assumes that parents are the most influential figures in fostering child development (Cunha et al., 2005:7). Putting parental influence at the centre of the model places the responsibility of ECD provisioning on families, which is at odds with the identification of education and early learning as public goods with sufficient positive externalities to warrant the state assuming responsibility.

The investment in ECD and early learning should be in disadvantaged children to ensure that the investment is both equitable and efficient. The above argument is captured in figure 2.2.2 below.

Figure 2.2.2: Rates of Return to Human Capital Investment



Source: Heckman (2006:1901).

The graph shows the returns of human capital investment in disadvantaged children. The return on investment on the y-axis is shown against age on the x-axis. There is an inverse relationship between the two. As disadvantaged children become older, the dollar return per year from their human capital decreases. It is implied that as age advances, a point will be reached when investment in the disadvantaged person will not be as profitable. There are three opportunities for educational investments presented in the graph, namely preschool, school and post-school through job training programmes. The return on investment in preschool is higher because of complementarity and self-productivity, which raise the productivity of future investment. The assumption is that preschool investment complements future investment. Conversely, without preschool investment, the future investment will have lower returns. Moreover, preschool investment has the lowest opportunity cost. On the graph, the opportunity cost is denoted as

(r). The opportunity cost represents investments in financial assets other than early human investment. Opportunity cost is higher after preschool. Therefore, the cost of human capital increases as age increases. It follows that preschool has the highest returns and the lowest opportunity cost in comparison to subsequent educational investments.

As it has already been mentioned that parents are the key influences on their children's capabilities, the model assumes that parents are altruistic and likely to invest in their children to affect their skills positively. Parental investment is denoted I_t when the child is t years old, where t=1,2…T. At birth, the child is endowed with the genetic and environmental condition denoted Θ_1 and h denotes parental capabilities explained by the parents' capabilities, genes, income and education (Heckman, 2007:13253).

Therefore, technology formation when the child is t years old can be written as

$$\Theta_{t+1} = f_t (h, \Theta_t, I_t)$$

Estimating for subsequent periods, adult stock of capability, perhaps Θ_3, can be written as h^i. The model will estimate the child's cognitive stock after two investment periods. By that time, the child will be a young adult. This can be written as

$$h^i = m^2 (h, \Theta, I_1, I_2)$$

The investment of the previous period is critical to explain current cognitive stock. On the above equation, I_1 and I_2 represent a parental investment in period 1 and period 2. Therefore the current stock of capability is a function of investment in the previous periods. Critical and sensitive periods for investments pose restrictions on the potency of the investment (Cunha & Heckman, 2007:37). For instance, assuming that investment is zero in period 1, there will not be returns on investing in period 2. This is because period 1 was a critical period for period 2.

It is noteworthy to mention that the essence of Heckman's argument and those of fellow scholars who are proponents of early learning is not that the government should not invest in formal schooling but that the returns on education would be higher and more economically efficient if the investment began early. Heckman recognises that modern families have lost the traditional fabric of families, the presence of two married parents. The government does not have any power to reinstate or alter modern family structures. A government is, however, not precluded from recognising social gaps and finding ways of improving the social and economic outcomes of children raised in these families (Heckman, 2011:33).

2.2.3 Differences in Socioeconomic Status (SES)

Drawing from the argument of Heckman that parental investment is critical in child development, the SES of parents matters in child development. SES remains a subject of great interest to those who study children's development (Bradley & Corwyn, 2002:372). Is child SES worth investigating? The root of the debate is the extent to which SES impacts on child development. The depth of SES impact on child development has not always been understood. Duncan, Brooks-Gunn and Klebanov (1994:297) stated that the effects of relative deprivation on children are not at all understood. The authors further contrasted the lack of insight in understanding SES with the apparent precision with which poor children are counted, contending that governments do not have a problem with merely estimating poor children but fail to convert or relate this information to the composition and inference of the SES of families. Understanding the role of SES in early development is aggravated by the inability of the literature to agree on the definition and composition of SES.

A considerable portion of the literature agrees that SES is a multi-dimensional concept. Hence using income exclusively is considered insufficient to explain SES thoroughly. It has hence become common practice to use indices that combine multiple variables into overarching themes (Webb et al., 2017:49). Using indices raises the question of which variables informing SES should be included in determining SES? A majority of social scientists favour a combination of income and occupational status (Bradley & Corwyn, 2002:373; Hoff & Laursen, 2019:243). A combination of income and occupational status is argued to be a superior or more accurate measure to infer family well-being, as opposed to only income or poverty status. Both income and poverty lines are considered volatile. Poverty status based on poverty lines is relatively easier to manipulate. If families moved above the poverty line, but still not very far above, their poverty status will change and be interpreted as non-poor, but the well-being of the families may not have significantly changed (Duncan et al., 1994:297).

In addition to income and occupation status, Bollen, Glanville and Stecklov (2001:157) also argue for the inclusion of education level. Besides the advantage of parental income, children can also benefit from their parents' education which also falls under parental SES. The advantage, as expressed by Taylor and Yu (2009:6), is that educated parents are more likely to initiate the education process during the preschool years. When formal schooling begins, these educated parents are likely to directly assist their children with homework. Moreover, such parents also possess valuable knowledge regarding children's health, social and emotional well-

being, which all ultimately feed into their children's educational performance (Taylor & Yu, 2009:6). Schultz argued that there is a simple truth concerning human capital, that people invest in themselves and those investments are quite significant (Schultz 1961:2).

The arguments put forth by Schultz (1961) and Coleman (1988) were found consistent with that of Becker and Tomes (1994:258) who argued of unequal opportunities in terms of child development, which in some literature is referred to as intergenerational mobility. Becker and Tomes (1994:261) state that some children possess an advantage over their peers as a result of the SES of their families or any other factor relevant to development. Expenditure on early learning, formal education, the health of the child and other relevant human capital variables can significantly differ between families. Children reared in families that prioritise human capital and have adequate resources to invest in human capital are likely to be afforded early learning opportunities, while children of low SES are less likely to be afforded the same opportunities. Thus, skills differentials have been created between these groups of children. Eventually, in their future, these skills differences will lead to wage differentials (Becker & Tomes, 1994:261). The skills differences are not as a result of innate abilities but based on differences in opportunities determined by the SES of the family. The views of Schultz (1961) and Becker and Tomes (1994) are still relevant in the current literature. According to Becker (1988:10), economic privilege is transmitted from one generation to another. Thus, current parental income and wealth are strong predictors of the next generation's well-being. The current distribution of SES in South Africa appears to have been cemented by the bleak history of this country. Taylor and Yu (2009:6) argue that the prevailing hierarchical structure of society in terms of access to wealth and power was determined through decades of institutionalised inequality along racial lines.

Whether intentional or through market failure, when access to human capital is linked to the ability to pay, those who do not have adequate resources will not be able to invest in themselves. Education cannot be the great equaliser if it depends on the ability to pay for it. In 1966, the US government commissioned James Coleman to investigate inequalities within the education system. The Coleman report of 1966 unearthed surprising findings, which indicated that family background and SES are better predictors of educational achievement than ethnicity or government subsidy, across racial lines (Kahlenberg, 2001, as cited by Taylor & Yu, 2009:4).

In the ongoing debate regarding SES, not everyone agrees on how much SES matters for child development. Of the arguments attempting to dilute the relationship between SES and child development, some originate within behavioural genetics. Rowe (1994), for example, argues that SES is caused in part by parents' genetic endowments. Thus, "an analysis relating children's families' SES to their achievement that does not somehow adjust for parent and child genetic endowments risks over-attributing to SES causation that should be attributed to genetic influences" (cited by Duncan & Magnuson, 2001:8). This argument challenges the weight of the SES of the family by indicating that genetics may be a better determinant of future achievement than SES.

Webb et al. (2017:49) maintain that the current literature still lacks a deep understanding of the impact of SES on child development. The authors propose that a start could be made on the construction of SES that is directly for children and relates to ECD outcomes rather than adult SES. Moreover, Duncan and Magnuson (2001:8) argue that other factors may influence parenting practices and child development that are typically not included in composing SES, such as the quality of schooling received by parents. However, there is still the issue of which aspects of SES most strongly connect to cognitive development (Bradley & Corwyn, 2002:375). Without consensus on SES indices, any results of an SES study can potentially be criticised on the basis that different outcomes could have been reached had different measures been used (Bollen et al., 2001:154). In that case, an entire study could be discounted based purely on how the SES was constructed.

2.2.4 Forms of Capital: Economic, Cultural and Social Capital Theory

In the discussion above on SES, it was stated that children are endowed with unequal opportunities in life to succeed. SES represents one of the mechanisms in which children can be advantaged or disadvantaged. In addition to the SES of the family, Bourdieu (1986) mentions three forms of capital that lead to unequal opportunities: economic capital, cultural capital and social capital.

Economic Capital Theory

Economic capital refers to the financial resources that can directly be converted into money which the family possesses (Bourdieu, 1986:242). The economic resources of a wealthy family provide their children with access to high-quality learning programmes and materials.

Cultural Capital Theory

Cultural capital includes characteristics that lead to social mobility such as education, intellect and family traditions (Bourdieu, 1986:242). Objects that symbolise cultural capital include books and artworks (Bourdieu, 1986:243). Tramonte and Willms (2010) distinguish between static cultural capital and relational cultural capital. Static cultural capital refers to the possession of resources of high cultural goods which parents own and are willing to share with their children (Tramonte & Willms, 2010:203). These assets may include artworks, musical instruments and classical music recordings. Relational cultural capital refers to the activities and discussions between the child and the parent. The activities and discussions can range from political, cultural and social matter or books that the parent has read (Tramonte & Willms, 2010:203). As a result, the innate ability and effort of children from households that are endowed with static cultural capital and relational cultural capital play a relatively lesser role in school achievement.

Cultural capital has been used to account for the different educational achievements of learners. Often the distinguishing variables between learners that attend the same school but achieve different educational outcomes are their differences in cultural capital; that is, the differences in the educational levels of their parents and the resources they have at their disposal at home (Bourdieu, 1986:243). Bourdieu also describes cultural capital as a hidden inheritance that is passed from one generation to the next (Bourdieu, 1986:245). In the absence of cultural capital, poverty and other disadvantages are also passed to the next generation (Bourdieu, 1986:245).

Social Capital Theory

Social capital refers to the connective networks one has in the community or within a certain group of people (Bourdieu, 1986:242). According to Morrow (1999:746), the idea of social capital and how it relates to child development can also be attributed to the work of Coleman in the USA. Coleman posits that the "social capital of the family is the relations between children and parents" (Coleman, 1988:110) and also relations with non-parent members of the family. With respect to social capital, Coleman makes a distinction between social capital found within the family and social capital found outside of the family (Morrow, 1999:747). Within a family, social capital for a child refers to the adult's human capital (Morrow, 1999:747). Social capital within a family also includes the presence of adults in the family and the attention that these adults give to the child (Morrow, 1999:747). This means that the

physical absence of adults in a family is a deficiency of social capital. Coleman makes it clear that single parents and dual-earner families lack social capital because they do not have enough time to devote more attention to their children. This premise is said to also apply to families that have many children because the parents' time has to be divided among the many children (Morrow, 1999:747).

Highlighting the significant role of parents in child development, Woolcock and Narayan (2000:226) argue that meticulous parents are aware that their children's intelligence and motivation are not sufficient to ensure a bright future for them. Hence the parents devote time helping their children with school work and choosing the right school. The implication of this argument is that child development and early learning cannot be the responsibility of the child. At a very young age, children do not even know there is something called a future for which to prepare. Furthermore, Entwisle and Astone (1994:1527) emphasise that social capital ought to include the presence of grandparents within the household since that may garner increased support which is not present for other children who live with only one parent in the house or even both parents.

The African proverb that it takes a village to raise a child is a good illustration of social capital at the community level. Social capital outside the family refers to social relationships that take place in the community (Morrow, 1999:747). If it is argued that working mothers and single parents are the primary cause of declining social capital, this, in the long run, spills over to reduction in social capital in the community because there is less time for social cohesion (Morrow, 1999:748).

Having or lacking social capital has long-term implications. Children largely inherit their parents' social capital through the family name (Bourdieu, 1986:249). As children grow, they use those networks to access opportunities that their peers do not have access to, such as admission to prestigious schools. Consequently, the development and opportunities people receive are restricted by their social capital or lack thereof (Bourdieu, 1986:248). The negative implication of the social capital theory is that groups of people in a society who have inferior socioeconomic standing will only have access to other community members who also have inferior socioeconomic standing or social capital deficiency. Therefore, they will continue to have sparse networks and restricted information and influence (Lin, 2000:785). The converse will be true as those with better socioeconomic standing will access others of similar SES to their mutual benefit.

2.3 The Educationalist View: Emergent Literacy Theory

The origin of the emergent literacy theory is mostly attributed to the 1966 doctoral dissertation of Marie Clay (Crawford, 1995:75; Whitehurst & Lonigan, 1998:849). The emergent literacy theory argues that children's basic literacy skills form part of sequential development that is cultivated before formal schooling begins (McNaughton, 2014:89; Whitehurst & Lonigan, 1998:848). Emergent literacy precedes formal schooling and likely coincides with the early learning phase (Nehal, 2017:42). Typically, the most conducive period to foster emergent literacy is between birth and six years of age or when children start schooling (Justice, Chow, Capellini, Flanigan & Colton, 2003:320). A child's basic literacy skills, which are expressed in vocabulary, reading and writing, are cultivated or triggered through the child's exposure to interaction within the household and surroundings before formal schooling (Whitehurst & Lonigan, 1998:849). The precursor for emergent literacy is the household of a child. This is because basic vocabulary and word familiarity typically occur within households and social settings (Purcell-Gates, 1996:406).

Roberts, Jergens and Burchinal (2005:346) state that the home environment must be a home literacy environment to encourage the process of emergent literacy. In other words, the home environment must trigger or stimulate early literacy skills. To determine the extent to which the home environment encourages emergent literacy, researchers typically measure the frequency of book reading at home, the child's interest during book reading by the parent, stimulation toys at home and the level of interaction between the child and parent (Roberts et al., 2005:346). For instance, parents can use the book-sharing technique to develop a child's vocabulary and reading ability (Nehal, 2017:53). From shared book reading, children can progress to silent reading, where they read independently. Households that continually engage in the aforementioned stimulation activities are considered to be the most conducive to triggering emergent literacy.

A body of ethnographic and linguistic research has supported the argument that children acquire basic literacy, which comprises of word familiarity, reading and writing, at home. In the study of ethnography and linguistics, children are typically observed in their social setting to assess the impact of their natural environment on literacy skills acquisition (Purcell-Gates, 1996:406). Since the development of emergent literacy relies on households and communities, Justice et al. (2003:321) add that unfavourable social conditions such as poverty are detrimental

to emergent literacy. Poverty is associated with limited exposure to reading material and parental interaction with the child.

Emergent literacy is a foundation for a child to advance to conventional reading and writing and the child that lacked exposure to emergent literacy will struggle to acquire language, to write and to read (Justice et al., 2003:320). This could lead to future problems, especially since literacy skills are paramount for education and employment success (Dämmrich, 2016:2).

2.4 Developmental Psychological Theories on Early Learning

Many psychologists theorise that variations in environments shape child development and can determine the adult future of children (Scarr, 1992:4). Several theories postulate a substantial correlation between child development and the environment in which the child is raised. In the theory of social learning, renamed the social cognitive theory in 1986 (Grusec, 1992:777), Albert Bandura states that people and children learn behaviours through the observation of others, then impersonate what they have observed (Krishnan, 2010:4). The theory is partly founded on the principle that individuals are relatively consistent in their behaviour patterns. Furthermore, individuals hold strong ideologies that they retain despite changing conditions and impose judgemental reactions to restrict their actions. Hence, there is self-regulation in their behaviour (Grusec, 1992:782). The consistency of individuals in terms of what they consider human standards makes them ideal sources of information for children.

The attachment theory is the result of the joint efforts of John Bowlby and Mary Ainsworth (Bretherton, 1992:759). This theory posits that a child needs a relationship with a primary caregiver to develop normally and learn, forming an attachment or bond that provides a secure base from which to learn about its environment. This relationship ultimately affects and influences the child's development (Bretherton, 1992:759).

The writings of Jean Piaget, Lev Vygotsky, John Dewey, Jerome Bruner and Ulrick Neisser form the foundation of cognitive development theories as well as learning and instruction (Huitt & Hummel, 2003:1). Although the theorists' thinking and reasoning in terms of child cognitive development differ, they share the idea that children learn through interacting with their environment or surroundings. This idea sheds light on the importance and role of the child's surroundings in fostering and providing a platform for ECD and early learning.

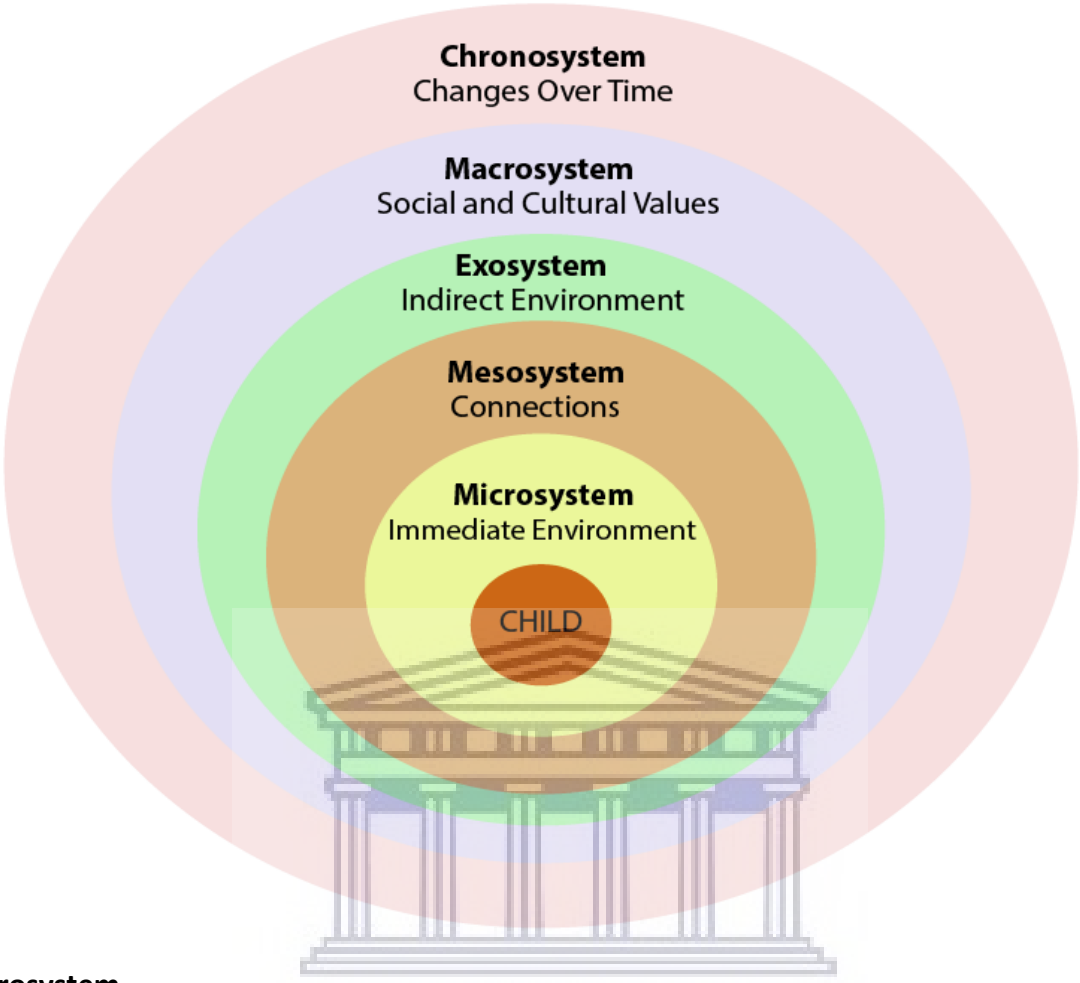
2.4.1 Bronfenbrenner's Ecological Systems Theory

While considered pioneering, Bronfenbrenner's initial theory strongly drew on Kurt Lewin's (1935) ideas. Lewin explained behaviour as a function of the interaction between a person (P) and environment (E). Krishnan (2010:5) also identifies the work of Bandura (1969) and Vygotsky (1978) as inspirations for the Bronfenbrenner model. The resemblance is consistent as all the authors identify the environment, whether explicitly or implicitly, as the primary mechanism in a child's development. The ecological systems theory has been widely used to explain the holistic development of a child. Bronfenbrenner's starting premise, in keeping with the basis of behavioural science, is that human development is "a product of interaction between the growing human organism and its environment" (1979:16). Bronfenbrenner developed his ecological systems theory in an attempt to define and understand human development within the context of the system of relationships that forms the person's environment (Johnson, 2008:2). A child is not raised in isolation. The theory of the ecological system of human development emphasises the role of caregivers and the quality of the child's surroundings as crucial determinants in child development. It further argues that because the child develops, the interaction within the various environments also develops into a complex nature/ dynamic (Härkönen, 2007:2).

Bronfenbrenner's ecological systems theory describes the following environmental levels (discussed below): the *microsystem, mesosystem, exosystem, macrosystem* and, added later, the *chronosystem* (Tudge et al., 2009:200).

As shown in figure 2.3.3.1, the theory imagines the ecological environment of a child as a series of nested concentric structures or systems.

Figure 2.3.3.1: Bronfenbrenner's Ecological Systems Theory



Microsystem

The microsystem comprises the pattern of activities, roles and interpersonal relations experienced by the developing child in a given setting with particular physical and material characteristics (Bronfenbrenner, 1979:22). This is the most influential and closest environment to a child, holding power to either promote or hinder the child's development. Among others, the family, caregivers and schools are located in this environment (Bronfenbrenner & Evans, 2000:120). Examples relevant to this thesis include the childcare facility and the neighbourhood of residence.

Mesosystem

The mesosystem refers to the interrelations among the different parts of a child's microsystem (Bronfenbrenner, 1979:25). These interactions have an indirect impact on the development of a child. This can be illustrated using the relationship between caregivers and ECD practitioners. The extent to which practitioners involve caregivers in their children's early learning process has a bearing on the learning experience of the child. Alternatively, caregivers deciding not to

interact with their child's ECD practitioner will affect the child's progress. Scholars such as Mukuna and Indoshi (2012:266) and Dookie (2013:26) expound the concept of parental involvement further by breaking it down into *school/facility-based parental involvement* and *home-based parental involvement*. The former includes the attendance of parental meetings and participating in school events. Ultimately, school-based parental involvement assists the facility to function better and achieve its overall vision and mission. When the facility functions better, a more meaningful early learning environment is created for the children. On the other hand, home-based parental involvement refers to parent-child interactions that promote a child's cognitive and non-cognitive abilities. It further includes the provision of health and nutrition for the child. Home-based parental involvement directly contributes to better performance at school. Hence, it is essential for early learning.

Exosystem

The exosystem refers to one or more settings in which the child is not directly involved as an active participant or even present. However, the decisions taken in this setting ultimately affect the child (Bronfenbrenner, 1979:25). The exosystem represents the more extensive social system and encompasses events, contingencies, decisions and policies over which the developing child has no influence (Johnson, 2008:3). An example is a workplace at which the parent works. Although the workplace is the microsystem for the parent, decisions taken in the workplace, such as compiling the work schedule of the parent, will affect the time that the parent can spend with the child.

Macrosystem

The macrosystem encompasses the cultural environment in which the child lives and all the other systems that affect it, such as the political sphere, economy and belief systems (Bronfenbrenner, 1979:26). The macrosystem can be thought of as the "social blueprint" of a given culture, subculture or broad social context and consists of the overarching pattern of values, belief systems, lifestyles, opportunities, customs and resources embedded therein (Johnson, 2008:3). For example, compared to a child growing up in a developed economy, a child growing up in a less developed economy is likely to experience considerable impediments to its development, including malnutrition, lack of access to education, political instability or inadequate ECD policy. Argued mainly in this thesis is the impact of the country's ECD policy on ECD facilities' registration status and their overall state.

Chronosystem

Bronfenbrenner added the chronosystem later as a fifth dimension that comprises an element of time (Bronfenbrenner, 1995, as cited by Johnson, 2008:2). The chronosystem considers the dimension of time in relation to a child's development, including how events in a particular time in a child's life affect the later development of a child. The chronosystem can refer to both short and long-term time dimensions of the individual over the course of a lifespan, as well as the socio-historical time dimension of the macrosystem in which the individual lives (Johnson, 2008:3). For example, the impact on a child's development of the death of both parents would differ in a young child compared to the effect on offspring that was already an adult. The timing of poverty is also likely to influence development, although different studies of the effects of timing have produced contradictory results (Duncan et al., 1994:298).

2.4.1.1 PPCT Model and the Ecological System Theory

The PPCT model grew out of Bronfenbrenner's original ecological systems theory. 'PPCT' refers to the model components Process, Person, Context and Time (Tudge, Mokrova, Hatfield & Karnik, 2009:199). Each of the components of the model is briefly discussed below.

Process

Process refers to the activities that regularly take place in the lives of developing individuals. Examples include playing with a young child or reading to a child. Bronfenbrenner considered these processes as the engines of development, as it is through these activities and interactions that individuals come to make sense of their world and understand their place in it (Tudge et al., 2009:200). Processes that lead to developmental change may include parent-child or child-child activities, group or solitary play, reading, learning new skills, studying, athletic activities and performing complex tasks. Having more of these activities fuels child development and having fewer delays child development (Bronfenbrenner & Evans, 2000:118). The current term for these activities is 'stimulation'.

Person

Although Bronfenbrenner acknowledged the relevance of biological and genetic aspects of the person, he devoted more attention to the personal characteristics of the individual. Among these characteristics are what he termed force characteristics. Force characteristics explain differences of temperament, motivation and persistence, among others. Bronfenbrenner uses

an illustration of two children who may have similar resource characteristics, but their developmental paths will differ if one is motivated to succeed and persists in success-elated tasks while the other is not motivated and does not persist (Tudge et al., 2009:200).

Context

Bronfenbrenner developed his ecological systems theory in an attempt to define and understand human development within the context of the system of relationships that form a person's environment (Johnson, 2008:2). According to Bronfenbrenner, one's development is strongly influenced and, to an extent, determined by everything in the surrounding environment.

Time

According to Bronfenbrenner and Morris (1998:995), time is multi-dimensional and can be classified as micro-time, meso-time and macro-time. Micro-time refers to what is occurring during some specific activity or interaction. Meso-time is the extent to which activities and interactions occur with some consistency in the developing person's environment and macro-time corresponds to the chronosystem and the dimensions of the individual's experiences of and interaction with the environment over the lifespan.

2.5 Conclusion

This chapter explored the theoretical literature on ECD and early learning in the fields of study of economics, education and development psychology, in which several theories relevant to the thesis were reviewed.

The human capital theory contributes the important notion that human investment is integral to a country's economic growth and welfare. However, the theory overemphasises the returns of formal education without considering the timing of investment and the learning that happens outside formal education, such as learning within households. As such, while it remains a forerunner in the literature of human development, this classical theory poses significant limitations in explaining ECD and early learning. The capital formation theory attempts to address the limitations in the human capital theory by considering the timing of the investment, acknowledging that the process of learning begins in infancy and continues throughout the lifespan, and incorporates the role of families in fostering human capital. Importantly, Heckman and others showed that early investment resulted in the highest social returns. Moreover, the emergent literacy theory suggests that investing in ECD and early learning

would lay a solid foundation for subsequent learning. Such investment involves more than just the government investing in facilities as families play a crucial role in early learning.

With respect to equity, social capital theory and the socioeconomic status (SES) of the family, many authors investigated the problem that children are endowed with unequal family resources. It is apparent that a child's development is largely determined by the environment the child grows up in, and the ability of the family to invest in early learning is limited by its SES. In relating the theoretical literature to the South African context, the support of the South African government through the ECD Policy and material investment in both ECD facilities and households seems strongly indicated, with the emphasis on support to disadvantaged communities.

Among the development psychological theories relevant to child development, Bronfenbrenner's ecological systems theory (later termed bioecological systems theory) and PPCT model stand out as a comprehensive attempt to fully describe the various impacts of the environment on a child's development. Firstly, applying the ecosystem model put forth by Bronfenbrenner, it is noted that the two environments concerned in the thesis—the households and ECD facilities in Philippi—lie within the microsystem. Secondly, the ECD sector does not only depend on private investment but is governed and funded by the government and lies within the macrosystem.

Having reviewed the theoretical literature relevant to ECD and early learning, the next chapter will review the empirical studies on factors that influence child development and early learning in South Africa.

CHAPTER THREE: REVIEW OF THE EMPIRICAL LITERATURE

3.1 Introduction

ECD facilities should be places where children are nurtured, stimulated, protected and taught. If properly managed and resourced, ECD facilities foster child development and early learning. Attending an ECD facility does not guarantee that children will develop the required skills to enable them to perform better at school. Kotzé (2015:5) states that it is common for ECD facilities in South Africa to lack the human and infrastructural resources necessary to stimulate cognitive and non-cognitive skills. As a result, such ECD facilities end up being mere child-minding facilities. The National Integrated ECD Policy of 2015 ('ECD Policy') acknowledges the family as the natural and most suited environment to foster child development and growth (Republic of South Africa, 2015:25). Early learning interventions by the state and other organisations in the absence of families struggle to produce a holistically developed child (DSD & UNICEF, 2006:13). This means that effective early learning development interventions require the collaboration of ECD facilities, households and government policies. This chapter reviews empirical studies on ECD facility and household-level factors that impact on early learning in South Africa.

3.2 South African ECD Facility-Level Factors on Early Learning

The Statistics South Africa General Household Survey (GHS) estimates that about 38,4% of children aged 0–4 years of age nationally attend a formal ECD facility (Statistics South Africa, 2018b:10). In the Western Cape, ECD facility attendance for the same age group is higher at 43,7% (Statistics South Africa, 2018b:10). Besides primary schools, community-based ECD facilities are the most common providers of early learning programmes in the country for pre-Grade R. This section of the thesis reviews ECD facility-level factors, the majority of which are factors primarily controlled by the ECD facilities and therefore within their ambit to influence or change. These include the *professional competence of staff*, *state of infrastructure in ECD facilities*, *school readiness*, *management in the ECD facilities*, *pedagogy of play*, and *inequalities in education* each of which is discussed below.

3.2.1 Professional Competence of ECD Staff

Kotzé identifies ECD practitioners as critical parties in instilling quality early learning (2015:17). They are the people who interact with the children daily and, to an extent, are the most powerful in determining child development. ECD practitioners are the implementers of early learning as their knowledge filters to the child. Further elaborating on the crucial role of ECD practitioners, Kotzé (2015:17) contends that even if a child comes from an impoverished household, a high-quality practitioner can still impart quality learning experiences to that child. Fourie finds that a formal teaching qualification in the field of ECD (Fourie, 2013:60) is regarded as a minimum requirement for being considered a qualified and competent ECD practitioner.

The South African Department of Social Development (DSD) conducted a nationwide audit of ECD facilities in 2014. One of the indicators the DSD used to measure the quality of ECD facilities was the qualifications of ECD staff, meaning the educational attainment of the ECD practitioner specifically in the field of ECD. The national audit completed 60 572 profiles of staff in the audited ECD facilities (DSD, 2014:88) and found that qualifications were generally lacking for the majority of the staff. More than 35% of the principals/ matrons and 40% of practitioners had not completed Grade 12 (DSD, 2014:94). Moreover, 37% of principals/ matrons did not have an ECD qualification, while more than 55% of practitioners were without an ECD qualification.

Further exposing the lack of qualifications and training in ECD practitioners, Fourie (2013) conducted a study in which 250 Grade R practitioners from community-based schools participated in a 10-month training intervention in 2011 that included lecturers and student teachers from North-West University. Before the intervention, questionnaires were administered to the practitioners investigating their knowledge of ECD. The responses revealed apparent incompetence, evident when the practitioners could not explain fundamental ECD principles. Fourie (2013:64) states that the practitioners were unable to identify or define essential content such as counting, recognising colours and shapes, sequencing, songs, stories, motor skills visual and auditory exercises, all basic concepts that these practitioners would need to communicate to the learners. These results posed a serious concern as to how the practitioners could teach the 8 000 Grade R learners in their care if they could not identify or define basic terms. One of the practitioners, aware of her gap in skills and qualifications, stated:

‘I have Standard 8. I attended a course but it was more about cleanliness but not to learn the child. I cannot do the activities. I do not have knowledge of how I am supposed to teach learners’ – Grade R teacher (Fourie, 2013:62).

The responses of the Grade R practitioners were used as a foundation for designing a training programme aimed at empowering ECD practitioners (Fourie, 2013:63). Five months after the intervention, wherein the practitioners were taught early learning content, they answered the same questionnaire that they had received before the intervention (Fourie, 2013:63). Aside from definite improvement and increased content knowledge, there was increased learner participation in class, improved school readiness and a positive attitude from practitioners, as well as parental acknowledgement of the critical role of ECD practitioner in fostering early learning (Fourie, 2013:64). This intervention revealed that the lack of skills and knowledge of ECD practitioners could be rectified through training.

Seven years before the above intervention, the South African government attempted to address the skills deficit of ECD practitioners. In 2004, the government created a space for learnerships in the existing Expanded Public Works Programme system to open the gates of learning for ECD practitioners who did not have a recognised ECD qualification (Berg, 2008, cited in Sherry & Draper, 2013:1298). The programme was intended to provide a second opportunity for poorly educated ECD practitioners to go back to school. However, their lack of education – most of the ECD practitioners who received the learnerships were non-matriculants – was also a hindrance to fully capitalising on the opportunity and they struggled to cope with studying (Sherry & Draper, 2013:1298). The programme also gave rise to unintended consequences. One unintended complication was the substantial differences between the stipend received while participating in the learnership and the actual wages received when the ECD practitioner worked at an ECD facility, which tended to be lower than the stipend (Sherry & Draper, 2013:1298). As a result, the now-qualified ECD practitioner had less incentive to work at an ECD facility, defeating the purpose of introducing the programme in the first place.

More recently, it has been observed that, because there is a huge gap between salaries earned by Grade R teachers employed by the Department of Basic Education (DBE) and ECD practitioners employed at community-based ECD facilities, there is a drain of qualified personnel from community-based ECD facilities to employment at formal schools as practitioners are drawn to higher remuneration, employment stability, medical aid and retirement benefits (Richter & Samuels, 2017:15). This leaves the ECD sector with two

challenges related to the competence of staff. Firstly, there is a shortage of qualified ECD practitioners. Secondly, community-based ECD facilities are unable to attract and/ or retain qualified practitioners in the industry. Consequently, community-based facilities are more likely to employ relatively unqualified personnel with limited ECD knowledge.

3.2.2 Role of Registration Status in Early Learning

It is illegal to operate an ECD facility in South Africa without it being registered (Giese & Budlender, 2011:7). Before the Children's Act, Act 38 of 2005, was introduced, ECD facilities were regulated under the Children's Care Act of 1983 (Centre for Child Law, 2012:11). Following the replacement of the Children's Care Act by the Children's Act, facilities that had previously been registered under the 1983 law had to re-apply for registration under the new minimum norms and standards advocated by the Children's Act. Facilities were granted five years for re-registration with the consequence of losing their registration status if they did not comply.

Facility registration was investigated in the 2014 ECD national audit. The ECD audit included 17 864 ECD facilities of which 8 032 (or 45%) were fully registered with the provincial DSD, 1 922 (10,8%) were conditionally registered and 7 892 (44,2%) were unregistered (DSD, 2014:20). The unregistered ECD facilities were mostly found in low-income urban areas, urban townships and informal settlements (DSD, 2014:28). Since a facility has to meet the minimum norms and standards requirements stipulated in the Children's Act to be able to register with DSD, registration status is a somewhat reliable indicator of the overall quality of the ECD facility. That is, ECD facilities that have failed to obtain registration status may be inferred to be of relatively low quality. The location of unregistered ECD facilities in low-income communities suggests that they would struggle to comply with the ECD norms and standards necessary to secure registration. Alternatively, owners of facilities in low-income urban areas may not be aware of the importance of registration. An ECD facility has to be registered to be considered for a government subsidy (DSD & UNICEF, 2006:37). This means that unregistered ECD facilities have to use their resources to strive to meet the conditions for full registration. The 2014 national audit discovered ECD facilities that were only conditionally registered as a result of inadequate infrastructure, lack of equipment and inadequate qualifications of staff (DSD, 2014:33). These three reasons are considered the main hindrances to full registration in the country.

In an interview-based study conducted by Clampett of principals at 15 registered ECD facilities in the Western Cape, the author showed that registration status also correlates with having an approved learning programme as well as a non-profit organisation (NPO) certificate (Clampett, 2016:33). Registered with DSD as an NPO and registration of the learning programme approved by the DSD or DBE are among the norms and standards requirements for registration of the ECD facility. Hence, in the 15 registered facilities, Clampett reveals that the principals understood the value of a learning programme in terms of attaining and maintaining consistent quality and eliminating the possibility of practitioners facilitating their classes haphazardly (Clampett, 2016:45). An NPO certificate not only assists a facility to register with DSD, but it attests to the legitimacy of the facility to potential outside funders (Clampett, 2016:45). It follows that unregistered facilities that also do not have an NPO certificate may struggle to secure private funding other than parents' fees. However, even after registering as an NPO, some facilities struggle to comply with the governance and legal requirements of an NPO and thereby fail to maintain their NPO status (Housing Development Agency, 2014:7).

The registration status of ECD facilities is pertinent to the quality of services they can offer or afford. Without being registered, facilities are unlikely to receive an operating government subsidy and to access training opportunities (Housing Development Agency, 2014:4). The DSD allocates subsidies to ECD programmes delivered by NPOs and subsidies for registered ECD facilities (Giese & Budlender, 2011:3), the latter being of more interest to this thesis. ECD facilities may receive the government subsidy from DSD or DBE. DBE allocates subsidies to ECD facilities that are registered to offer Grade R, while DSD subsidises pre-Grade R. Registering under DSD does not guarantee that an ECD facility will receive the DSD subsidy. It has to qualify for funding, although registration is required for consideration to receive the subsidy. To qualify for government funding, the caregivers of the children have to meet an income means test (Giese & Budlender, 2011:3). The responsibility of administering the income means test mostly lies with the ECD facility as it has to submit all the relevant documents that support the eligibility (Giese & Budlender, 2011:7). Upon qualifying for the subsidy, the subsidy amount is typically calculated per child per day for children between 0 and four years of age whose caregivers have met the means test (Giese & Budlender, 2011:3). The subsidisation of ECD facilities is a contentious issue in the field of ECD research. In the view of Kotzé (2015:14), this subsidy funding structure is counterproductive and exposes unregistered ECD facilities to low-resource pitfalls.

The DBE mainly subsidises community-based registered ECD facilities that have been approved to provide Grade R. These ECD have to register with the DBE, separately from the DSD registration. DBE also considers a means income test for caregivers to determine the number of children who qualify to be subsidised (Giese & Budlender, 2011:4). Considering that Grade R is also offered at formal public and private schools, research conducted by Giese and Budlender (2011:4) noted a decline in the trend of subsidising community-based schools that offer Grade R. DBE officials interviewed in the study acknowledged a deliberate shift from community-based Grade R to promoting Grade R in public schools.

Although funding support from government is crucial in the ECD sector to provide quality early learning services to children, the government is not legally compelled under the Children's Act to disseminate those funds, even in cases where the facility complies with the ECD norms and standards (ETDP SETA, 2019:23). A report by the Financial and Fiscal Commission shows that, of 992 093 children enrolled at an ECD facility in South Africa, only 465 409 or 46,9% were subsidised (Financial & Fiscal Commission, 2015:74). In the Western Cape, 59 000 of a total of 103 200 children at ECD centres were subsidised (Financial & Fiscal Commission, 2015:74). In all the provinces, the number of children subsidised is below the total number of children enrolled at ECD facilities. The Housing Development Agency report on early education detected little willingness by the government to work with unregistered facilities (Housing Development Agency, 2014:5). This is because the government's ECD Policy includes and only benefits facilities that are already conditionally or fully registered. There is no practical system to assist unregistered facilities through the steps required to become registered.

3.2.3 State of Infrastructure in ECD Facilities

Lack of infrastructure is the main reason that most ECD facilities are denied registration and why some only receive conditional registration (DSD, 2014:33). Sotuku, Okeke and Mathwasa (2016:28) allude to the importance and function of ECD facilities' infrastructure, stating that architects should not design spaces that merely enable children to meet minimum requirements in their developmental milestones but instead design spaces that challenge children to go beyond the accepted norm. In assessing the quality of infrastructure within ECD facilities in the country, the national audit investigated the types and condition of the buildings, among other factors. In terms of the type of building used as an ECD facility, it was found that 55% of fully registered ECD facilities and 53% of conditionally registered ECD facilities were

housed in buildings specifically built as ECD facilities (DSD, 2014:201). The rest of the ECD facilities, both registered and conditionally registered, were housed in residential dwellings, places of worship, community halls and primary schools (DSD, 2014:202). By contrast, only about 30% of unregistered ECD facilities were housed in purpose-built ECD facilities (DSD, 2014:202). The proportion of unregistered ECD facilities housed in residential dwellings was higher compared to registered and conditionally registered ECD facilities in every province (DSD, 2014:203).

The type of building used for an ECD facility is relevant in several ways, including the issue of the size and safety of the facility. Where the building has been built specifically for an ECD facility, it will likely meet the requirements for bathrooms, kitchen and play areas. Moreover, a building specifically built for an ECD facility is likely to be safer for children than a residential dwelling partly converted into an ECD facility. With respect to residential houses or places of worship being used as ECD facilities, there are competing functions for the building which impact on space available for ECD activity, such as sufficient space for children to safely play.

One of the indicators in the audit used to infer the condition of the building was the reported presence of defects in the roof. The audit established that 22% of fully registered, 27% conditionally registered and 20% of unregistered ECD facilities reported having roof defects (DSD, 2014:204). At first glance, it seems unexpected that unregistered ECD facilities would report the lowest incidences of defected roofs. The researcher speculates, probably correctly, that unregistered ECD facilities may have the lowest rates of defective roofs because unregistered ECD facilities are most likely to operate in people's homes. Therefore, while it might be easy to delay repairing roof defects for an uninhabited ECD building, it may be less tolerable in a residential home. Moreover, the costs of fixing a roof defect in a private home may be lower than that of a dedicated ECD facility building.

Sotuku et al. (2016:30) conducted a study of 10 ECD facilities in a rural community in the Eastern Cape, seeking to assess the state of ECD infrastructure in this province. The authors discovered that the physical infrastructure of the sampled ECD facilities was in an appalling state of disrepair (Sotuku et al., 2016:30). Some of the ECD facilities had broken floors, which the authors referred to as 'potholes in the house'. Most of the wall paint was peeling and six of the facilities had leaking roofs (Sotuku et al., 2016:31). The inadequate infrastructure also extended to overcrowded classrooms. One of the requirements of the guidelines on ECD norms

and standards is that children should have sufficient indoor space to move about freely (DSD & UNICEF, 2006:39), which is impossible if the space is overcrowded. The state of ablution infrastructure was worse with only two facilities having toilets in a good condition with washing basins (Sotuku et al., 2016:31). The lack of sanitation threatens the health and hygiene of both staff and children.

The poor state of the interiors of the ECD facilities stood in contrast with the outside of the ECD facilities that the authors observed were attractive, inviting and easily identifiable through murals and their designs as facilities for children (Sotuku et al., 2016:31). Having attractive and easily identifiable exteriors contributes very little towards child development if the interiors are unacceptable. The children spend most of their time indoors; it is where they learn, engage in activities, eat and sleep. The authors discovered that all the ECD facilities were built under the Ciskei Government during apartheid and because they had not received any financial assistance from government post-1994, the ECD facilities had deteriorated to their current state.

Thus, in this study, rather than ECD infrastructure reflecting the kind of spaces and designs that challenge children to go beyond the accepted norm, they seemingly were not even meeting the minimum requirements (Sotuku et al., 2016:28).

3.2.4 School Readiness at ECD Facilities

According to Biersteker et al. (2008:228), children should enter formal school based on their readiness/ preparedness as opposed to chronological age. Hence, children should not enter the first grade based on merely being seven years old. Sherry and Draper (2013:1302) define school readiness by stating that a child should be empowered with physical, motor, social, emotional and language development, general knowledge and basic cognition. If school readiness precedes formal schooling, a child ought to have acquired the mentioned development before entering formal schooling. Children who begin school without having developed these skills enter schooling already at a disadvantage. Alluding to the importance of early learning and school readiness, Fourie (2013:59) states that it is too late for a child to start its education when it enters formal schooling. This is because the basis of child development occurs during early learning in the period before school-going age.

Fitzpatrick argues that school readiness may be considered one of the effective strategies to curb school drop out (2014:157). The argument is that children who have been well prepared

for school through attending preschool (i.e. ECD) are set on the path of academic success and unlikely to struggle later and subsequently drop out of school.

The DBE divides schools into quintiles to determine the schools' allocations of funding. The quintiles are determined based on the equipment of the school, other resources and the SES of the community in which the school is situated (Janse van Rensburg, 2015:2). Essentially, Quintile 1 represents the most deprived 20% of schools and Quintile 5 the most resourced 20% of schools. In 2015, the Gauteng Department of Education, suspecting that their Grade R learners were not school-ready, investigated school readiness (Janse van Rensburg, 2015:1). The study had a sample of 114 Grade R children (Janse van Rensburg, 2015:13). The study included all the quintiles to examine whether school readiness differed by quintile or could be explained by quintile rankings. School readiness was measured using the Roux Group Test for School Readiness, which covers different sub-test/ sub-measures including drawing a person, number concepts, language and experience, among others (Janse van Rensburg, 2015:12). Surprisingly, none of the schools scored enough to be considered school-ready. However, some individual learners managed to score 63% or higher, indicating school readiness (Janse van Rensburg, 2015:15). The study found that SES was not the most relevant predictor of school readiness. Rather, school readiness was mostly explained by the quality of teachers. Irrespective of the SES of the school, the common factor among all the schools was the low level of training possessed by their teachers (Janse van Rensburg, 2015:16). The study showed that children do not become school-ready merely by attending Grade R or preschooling. School readiness is largely determined by the quality of the school or facility and, in this case, the qualification of the teacher.

3.2.5 Management in ECD Facilities

The lack of management in ECD facilities contrasts significantly with the clear management hierarchy and job functions found in formal schooling (Modise, 2019:117). ECD facilities in the country primarily fall within the private sector, except for Grade R at public schools, the government regulates the ECD sector, but private entities and individuals establish and manage ECD facilities. The national audit showed that the private ECD sector generally neglects administrative responsibilities. The lack of administrative record-keeping applies to both the record-keeping of children enrolled and key information relating to ECD employees (DSD, 2014:85). Record-keeping in terms of employees includes job descriptions, contracts and payslips. Without a documented job description, it becomes a complicated task to expect ECD

employees to complete their required tasks or make them accountable for outputs. On the positive side, the majority of ECD facilities have a documented constitution and an elected management committee (DSD, 2014:40). Modise (2019:118) contends that one of the factors that contribute to poor management is the lack of professional training of a substantial proportion of principals. They are in management based on being owners of the facilities, not necessarily because of their competence or ability. Management and leadership at ECD facilities can also be provided by governing bodies. Unfortunately, the placement and retention of a well-functioning governing body may be challenged, largely because governing body positions are not incentivised (Clampett, 2016:47).

3.2.6 Pedagogy of Play

Kotzé warns that Grade R, which forms part of early learning, should not be a watered-down version of formal education (2015:5). Global scholars of ECD oppose the idea of early education merely being an extension of formal schooling. One of the defining characteristics or traits of early learning, which significantly differs from formal schooling, is that children learn through play. Play is a prescribed pedagogy found in the Curriculum and Assessment Policy Statement (CAPS) syllabus for Grade R (Nehal, 2017:37) and the early learning phase. Respected developmental theorists like Piaget (1962) and Vygotsky (1978) developed the notion of play as pedagogy. While accepting play as a fundamental teaching and learning instrument in early learning, there are considerable challenges in its comprehension and ultimate implementation. For example, there is no clear definition of 'play' and the significance of play (Aronstam & Braund, 2015:2). Aronstam and Braund differentiate between two types of play, namely formal and informal play. Formal play is defined as having clear goals and roles. Moreover, it strongly relates to the curriculum and is often facilitated by the practitioner or teacher. As a result, teachers tend to attach a higher value to formal play. On the other hand, informal play tends to be spontaneous and executed by the children themselves (Aronstam & Braund, 2015:2).

Aronstam and Braund conducted a study on the perceptions of Grade R teachers on informal play (2015:1). The study interviewed 104 Grade R teachers in 41 schools in the Western Cape (Aronstam & Braund, 2015:1). The authors found that 80% of the teachers indicated that children learn through play (Aronstam & Braund, 2015:8). The remaining 20% of teachers, who were mostly from disadvantaged communities, were not familiar with the pedagogy of play (Aronstam & Braund, 2015:8). Practitioners' understanding of play may be influenced by

their cultural context and level of professional training. For instance, some cultures may trivialise the role of play as merely fun activities (Aronstam & Braund, 2015:3).

Aronstam and Braund (2015:3) note that there is limited empirical information on how play could be executed as a form of early learning pedagogy. Nehal (2017:37) contends that although the CAPS integrates play in the curriculum it fails to explicitly reveal its definition of free play and how it relates to child development. It is indicated that play should be integrated with clear specification on how the practitioners ought to initiate and facilitate free play. If the practitioners do not understand play, they are unlikely to implement it and consequently, the benefits of play cannot be realised. Another challenge which practitioners face in terms of utilising play as pedagogy is the lack of resources and time (Aronstam & Braund, 2015:9).

A further threat to integrating play in early learning programmes emanates from parents who prefer a strong focus on academia in preschools, under the belief that a highly academic method is a superior teaching method for young children compared to the methodology of learning through play (Kabay, Wolf & Yoshikawa, 2017:45). Overall, the pedagogy of play faces numerous difficulties in the country.

3.2.7 Inequalities in Education

According to Atmore et al. (2012:122), the apartheid system whose socioeconomic inequalities still largely endure in the country, also created a childhood of adversity for most black South African communities. This is evident in the general poverty, health care, quality nutrition and notably inadequate access to education that most black communities still experience today. During apartheid, early learning and ECD services relied on government subsidies rather than the government assuming the responsibility of provision as it did for formal education. However, between 1948 and 1969, the government severely cut its subsidy towards ECD services and the little left was allocated to "white preschools" (DBE, 2001b:9).

In the absence of government support, groups of black women took it upon themselves to open learning opportunities for young black children (Biersteker et al., 2008:229). Stevens (1997:398) notes that women in black communities, including rural homelands and townships, started preschools called educare facilities. Many of these well-intentioned women faced numerous challenges associated with running an educare facility apart from the expected funding and other resource constraints. Stevens (1997:398) also identifies the women's lack of education and training in the field of ECD, with many principals having barely completed their

secondary education. Lacking formal ECD experience and training, these women drew on their own experiences in school and at home to develop their teaching model. Both of these areas of experience were predominantly rooted in the traditional and authoritarian modes of teaching. Unsurprisingly, their teaching model tended to also be traditional and authoritarian. Against this background, it is not surprising that many ECD facilities in rural settlements and urban townships still bear a resemblance to their roots.

Aubrey (2017) sheds light on some of the inequality that exists within the ECD sector. The author compared and contrasted the quality of three diverse ECD contexts in KwaZulu-Natal, namely: private ECD facility, NGO-supported ECD facility, and a charity-based ECD facility (Aubrey, 2017:3). For data collection, she interviewed the practitioners of the three facilities and used observation (Aubrey, 2017:4). The findings showed stark differences in the different ECD facilities. Private ECD facilities were proven to be better resourced with outdoor toys, furniture, an abundance of learning material (crayons, puzzles, paint, etc.). There were also higher opportunities for facilitating play with a watered lawn area, climbing gym, and swings with other play equipment (Aubrey, 2017:5). The charity-based facility lacked in almost all of the factors found in the private ECD facility. While the quality of the NGO-supported facility was rated as somewhat in the middle, between the private ECD facility and the charity-based facility. Hence, the NGO-supported facility had limited learning material, an outside gym but limited play objects, and swings crafted from old vehicle tyres (Aubrey, 2017:6).

The striking difference in the quality of the facilities was also reinforced by the qualification levels of the practitioners. The practitioners employed at the private ECD facility and the NGO-supported facility were trained and qualified, while the practitioners at the charity-based facility lacked the relevant ECD qualification (Aubrey, 2017:6). What is clear in this article is that quality differences among facilities may be caused by variations in the finances and resources of the facilities. Due to having more resources, the private facility was a higher quality facility. Parents could afford to pay the substantial fees and thus the facility could afford to buy learning material, improve infrastructure, maintain the facility, and even employ competent staff. On the contrary, the charity-based facility could not secure enough funds to achieve the same quality.

The entire South African education system has previously been described as bimodal or dualistic in nature (van der Berg & Hofmeyr, 2018:1; Spaull & Kotzé, 2015:23). The terms “bimodal” and “dualistic” suggest that there are two distinct school systems attended by

children. The two systems serve different races and classes of children. One system represents the majority of the children in the country, historically known as black and coloured schools. These historically non-white schools are infamous for low performance and underdevelopment. The second system refers to historically white schools that serve the minority of South African learners but have an abundance of resources and skills at their disposal (van der Berg & Hofmeyr, 2018:1). Hence, the latter system of education continues to outperform the latter. However, in recent years with the rise of the black middle class, race privilege has been traded for class privilege. It, therefore, stands to reason that inequalities in the South African education system may be more strongly explained by income class rather than race (Hunter, 2010:2641).

3.3 South African Household-Level Factors on Early Learning

The National Integrated ECD Policy acknowledges that the family is the natural and most suited environment to foster child development and growth (Republic of South Africa, 2015:25). This communicates the importance of the home environment in child development and early learning. The next section of this chapter discusses factors found in South African households that impact on early learning, namely stimulation at home, stunted growth, poverty and deprivation, 'learning without daddy' (absent fathers) as well as parental perceptions of early learning.

3.3.1 Stimulation at Home

Primary caregivers or parents are considered the most critical providers of care, support and stimulation to their children (DSD, 2006:35). Stimulation is necessary for reaching developmental milestones in motor development, language and understanding. A child's ability to interact and relate is initially learned from parents or guardians (Jamieson, Berry & Lake, 2017:35). Infants receive information from their parents simply by observing their parents' gaze, facial expression and body language. From those observations, children learn to distinguish between hostile and friendly individuals. They also use their parents' affection, attention and encouragement to develop self-worth or esteem (Jamieson et al., 2017:35). Therefore, how a child is treated at home during child development influences the treatment they will give to themselves and how they apportion self-worth.

Children are born with innate skills, but these skills have to be discovered and stimulated. The GHS of 2016 (Statistics South Africa, 2018a:73) measured the frequency and type of

stimulation received by children aged nought to six years from their caregivers, across 'race' groups[1]. The survey included questions on how often someone in the household read or told stories to children, had conversations with them, sang to them, encouraged them to imitate daily activities with older children or adults at home, and how often the child was told an object's name and given an explanation of what the object did.

The study found that 64,9% of white children always have conversations with an adult, while only 47,9% of African black children do. Moreover, 80,2% of white children always have an adult sing to them in comparison to 73,2% of African black children and 79% of coloured children. Frequency of reading or storytelling is relatively low for all population groups. However, it is significantly lower for African black children at 34,4% than coloured children (at 41,8%) and white children (53,2%).

In the 'explanation when a child points to ask' category, African black children have the lowest frequency of answers. Only 21,5% of African black children always received an answer to their questions when pointing to an object compared to 66% of white children. However, a majority of children never get a response from parents or caregivers when pointing to an object. In terms of encouraging a child to imitate household activities, 47,8% of white children always imitate household activities, followed by Asian/Indian children (41,9%), coloured children (40,6%) and lastly African black children (31,8%). From the above statistics, it is apparent that white children receive the highest frequency of stimulation within their households. This indicates that white households are most likely to foster and provide conducive environments for child development. African black children generally receive the lowest frequency of stimulation from their parents or caregivers. The 2018 GHS showed that stimulation activities at home are still low. Approximately 46,8% of adults never read a book with a child, 43,1% never draw or colour with a child and 35,1% of adults never tell stories to their child (Statistics South Africa, 2018b:11). The frequency of stimulation also differed by households' income quintile. To this end, children belonging in the highest income quintile appeared to receive the highest frequencies of stimulation (Statistics South Africa. 2018a:74). Considering the above statistics,

[1] Note: Statistics South Africa considers it necessary, for statistical reasons and for the purpose of understanding issues of redress, to demographically profile data according to 'race' or population groups corresponding to the categories 'African black', 'white', 'coloured' and 'Asian/Indian'. Stats SA infers no biological differences between persons so identified nor does it intend its use of these terms to be read as an acceptance of the scientific validity of 'race' or an endorsement of racism.

there is ample evidence indicating disparities in the development of children measured by the type and frequency of stimulation.

Considering that low stimulation at home is most prevalent in low-income areas, Vally, Murray, Tomlinson and Cooper (2015:866) introduced a book-sharing intervention in Khayelitsha in Cape Town. The sample consisted of caregivers residing in Khayelitsha who had children between 14 and 16 months old. The caregivers were randomly assigned to two groups: the treatment group with 49 participants and a control group with 42 participants (Vally et al., 2015:867). The treatment group was trained for eight consecutive weeks on book sharing. The training included book-sharing techniques with their children, demonstrations and individual guidance. The car egivers were encouraged to engage in book sharing at home with their child using the picture book they received in the training, for at least 10 minutes a day (Vally et al., 2015:867). The intervention measured the effect of book sharing on child language as measured by the MacArthur-Bates Communicative Development Inventory (CDI), child attention measured by the Early Childhood Vigilance Task (ECVT) as well as vocabulary measured by the Peabody Picture Vocabulary Test-Revised (PPVT-R). After the eight weeks of training, the children whose caregivers had been part of the treatment group performed better in all the measurements, in comparison to the children in the control group. The caregivers who had received the training reported a substantial increase in the number of words their children understood and were able to vocalise (Vally et al., 2015:869). The children from the treatment group also showed a significant gain in attention retention (Vally et al., 2015:870). The fact that the caregivers from the control and treatment groups shared similar background demographics (Vally et al., 2015:869) indicates that ECD intervention can mediate household factors and social factors when presented early in life.

3.3.2 Stunted Growth

Human capital was defined as an investment in health and education. This means that to grow a country's human capital, there should be a corresponding investment in education and health. It has been argued that earlier investment in human capital is associated with larger returns. In this view, child health is an indicator of the state of future human capital. Stunted growth is one of the key indicators used to measure child health in economies. In its simplest definition, stunting is evident when children are too short for their age (UNICEF, World Health Organisation & World Bank Group, 2016:2). The World Health Organisation (WHO) demarks stunted children as those whose height for their age is two standard deviations less than the

average of a healthy reference population as expressed by the WHO's Child Growth Standards Median (Casale, 2016:3). The most common causes of stunting are malnutrition, repeated infections and poor social stimulation. More than a third of all stunted children lived on the African continent in 2016 (UNICEF et al., 2016:3). Consequently, children living in Africa are considered more likely to experience stunting than all other children in the world, except for children in Asia. Stunting is associated with physical growth delays, the brain unlikely to develop its full cognitive potential, learning difficulties and ultimately lower earnings as an adult. The health status of a child therefore has a direct impact on its education outcomes (Casale, 2016:2).

Casale (2016:1) examined the relationship between stunting and educational outcomes for children 14 years and younger using the National Income Dynamic Study (NIDS). Casale used the 2008 anthropometric data captured in the child questionnaire in wave one and compared it with their educational outcomes in 2014/2015 in wave four (Casale, 2016:2). The balanced panel study followed the children identified as stunted in wave one to identify their educational outcomes in wave four, with a sample size of 4 482 children aged 0–8 years in 2008 and 7–14 years in 2014/2015 (Casale, 2016:2). The study established a negative correlation between stunting and educational outcomes. There were significant differences in the educational outcomes of the children who were stunted in wave one and those who were never stunted. The children who were stunted in wave one were likely to enrol late for Grade 1, complete fewer years of primary education and were more likely to repeat a grade (Casale, 2016:13).

In a subsequent study, Casale (2019:3) explored the relationship between catch-up growth and educational outcomes to determine whether stunted children who had recovered could catch up academically to children who were never stunted. The study once again used the NIDS data sets. However, it compared the health status of wave one to the educational outcomes of wave 5, the 2017 dataset. Catch-up growth was determined if the child could no longer be classified as stunted according to the WHO definition mentioned above. Casale found that 62% of the children who had been stunted in wave one were no longer stunted. Despite this, the recovered children still completed fewer years of schooling compared to children who were never stunted (Casale, 2019:17). The recovered children continued to have the same educational outcomes as children who were still stunted (Casale, 2019:17). Even though the children appeared not to have caught up academically to their counterparts, the author argued that it was still necessary to implement nutritional programmes or interventions so that children did not fall further behind in their education (Casale, 2019:3).

3.3.3 Poverty and Deprivation

There is a strong negative correlation between poverty and ECD and a large degree of consensus in the literature about the adverse effects of poverty on child development. In terms of ECD, poverty increases the risk of exclusion from ECD facilities as poor parents are less likely to afford the ECD fees. Moreover, poor people are less able to provide nutritious food and hygienic environments to children or access health care.

Stats SA uses poverty lines to measure national poverty rates. Using the 2017 GHS collected by Stats SA, Hall et al. (2019:9) measured the poverty rate among children aged 0–6 years old, using the Food Poverty Line (FPL) and Upper-Bound Poverty Line (UBPL). The FPL represents the severest level of poverty in which people living below this poverty line do not have enough money to buy a minimum diet, while being on the UBPL means one can only afford the minimum basic food and non-food items (Delany, Jehoma & Lake, 2016:34). Using a 2017 poverty line of R1,138 per person per month, Hall et al. (2019:9) found that approximately 65% of children reside in households living below the UBPL. The poverty rate using the FPL was 35% of the children, which was equivalent to earning R531 per person per month for the same year. Delany et al. (2016:35) argue that the UBPL is most relevant to monitor child poverty. If a child is above the UBPL, such a child receives a minimum required diet, while a child below the FPL almost certainly experiences undernourishment.

Poverty rates are highest in the largely rural, former homeland territories of South Africa. This means that children who reside in rural areas are most vulnerable to poverty (Hall et al., 2019:10). Analysis of the GHS data primarily attributed the substantial poverty rates to low employment or economic inactivity among household members (Hall et al., 2019:10). About 29% of children live in households in which no household member is working or employed, whether in the informal or formal sector. Such households are likely dependent on social grants and remittances from friends and extended families.

Measuring poverty with poverty lines provides a quantifiable indication of the poor. However, they can exaggerate a change in status. For example, if a family's income moves slightly above the poverty line, the poverty status will change and could be interpreted as non-poor although the well-being of the family has not changed significantly, or at all (Duncan et al., 1994:297). Omotoso, Adesina and Gbadegesin (2020) advocate using a multi-dimensional poverty index with a range of indicators to measure the level of deprivation as opposed to the simple income

method of poverty lines. The advantage of a multidimensional poverty index is that it identifies factors that contribute to a person's quality of life that are not captured by poverty lines.

The study conducted by Omotoso et al. (2020:1159) estimated children's vulnerability to falling into poverty as a result of unexpected shocks. The authors labelled their sample group the "almost forgotten children" and the "vulnerable non-poor children". The descriptions are fitting considering that poverty lines typically overlook children who live above the poverty line but lack in quality of life. Omotoso et al. (2020) used the GHS of 2002 and the 2017 dataset with sample sizes of over 40 000 and 27 000 respectively, confining the study to children from 0 to 18 years old. Moreover, they employed the Alkire-Foster method of measuring multi-dimensional poverty classifying children as deprived or non-deprived (Omotoso et al., 2020:1159). Children were considered deprived if they were deprived in 33% of the weighted social indices comprising education, health, economic (in)activity and living conditions (Omotoso et al., 2020:1160). The results revealed that 16,3% of non-poor children in South Africa were deprived in 2002, which decreased to 11,9% in 2017 (Omotoso et al., 1165). Multi-dimension poverty is also traced back to economic inactivity among household members. Finally, it is most pronounced among African black children (Omotoso et al., 1169).

The decrease in poverty rates mentioned above is associated with government social grants, specifically the child support grant (CSG) the government implemented to mitigate the effects of poverty on children. The CSG has the highest growth rate of all the social grants in South Africa (Hall et al., 2019:30), increasing from 22 000 children in 1998 to more than 12 million in 2019. During the 1998–2019 period, age eligibility for CSG increased from below seven years to 18 years of age. The increased age eligibility explains the exponential growth in the number of beneficiaries of the CSG (Hall et al., 2019:30). Although the CSG is praised for being well-targeted, the CSG amount of a little above R400 per month at the time of the study is not universally accepted. Given that the FPL is above R500, the criticism is that CSG should at least ensure that children are not living below the FPL (Hall et al., 2019:31) as, even with the CSG, a child may still suffer malnutrition.

Since policy recommendations differ based on the method used to estimate poverty, both poverty lines and multidimensional poverty should be considered by policymakers. Using the money-metric of poverty lines, it may be considered prudent to recommend monetary transfers to the poor, which would decrease the number of people classified as poor. However, this would not guarantee improving the quality of people's lives in terms of access to essential services

and human capital. Households facing high unemployment, low levels of education, poor living standards and health outcomes lack human capital and are vulnerable to poverty (Omotoso et al., 2020:1168). These factors cannot be solved merely by cash transfers. Recommendations based on multi-dimensional poverty would transcend money transfers to include human capital.

Notwithstanding the extensive literature on poverty and child development, Duncan and Magnuson (2018:14) state that it is not always easy to isolate and identify poverty as the causal impact of constraints on child development. This is because poverty is usually associated with other negative experiences such as distressed parents, being raised by a single parent and poorly resourced schools. For instance, studying the 2014 GHS, Delany et al. (2016:36) found a link between the poverty rate and absent parents. Only about 17% of the children in the poorest quintile lived with both parents in the same household, compared to 76% of the children in the highest quintile living with both parents. Therefore, it is not always clear whether child development was constrained by poverty or was affected by a related negative experience that coincided with poverty.

3.3.4 Learning without Daddy

In South Africa, the role of parenting has primarily been assigned to mothers with fathers mainly providing financial support to their children. The country is witnessing an ongoing academic dialogue on the role of positive fatherhood in post-apartheid South Africa's ECD sector (Mncanca & Okeke, 2016:221). Both Mncanca and Okeke (2016:222) and Budlender and Lund (2011:926) trace the roots of the problem of absent fathers, particularly in the black community, to the colonial era, exacerbated by the disruption of family life caused by apartheid influx control and migrant labour policies and continued in the post-apartheid era through the consequences of high rates of unemployment, high prevalence of HIV/Aids and a variety of related social ills.

According to Jamieson et al. (2017:14), more than 60% of registered births at the Department of Home Affairs do not contain information on the father. The GHS of 2016 shows that paternal absenteeism continues with approximately 47,6% of South African children living in single-parent households (Statistics South Africa, 2018a:13). Of the total number of children, 45,6% of children live with their mothers only, and 2% live with their fathers only. Single parenthood is more common in African black families than any other population group in the country as among African black children, only 35% live with both their parents, while approximately 86% of white children live with both parents (Statistics South Africa, 2018a:62).

Budlender and Lund (2011:930) contend that the South African Maintenance Act of 1998 provides little relief to single mothers and fails to force fathers to assume responsibility for the well-being of their offspring. The Act does state that a non-resident biological parent ought to provide for the child irrespective of whether the parents are married to each other. The father is only held liable to care for their offspring if the court determines that the father can afford child support payments. Due to high unemployment and uncertain incomes many men are cleared from paying child support (Budlender & Lund, 2011:930).

Paternal absenteeism forces single mothers to occupy both parental roles. Children raised by single parents forfeit the care and upbringing they could have received from a dual parenting system (Statistics South Africa, 2018a:62). Further, African black women, who are more likely to be single parents, are also statistically most affected by poverty, which further curbs their ability to provide for their children's development. According to Statistics South Africa (2017a:19), 45,4% of African black females were classified as poor, using the Lower Bound Poverty Line. The poverty rate of African black women was the highest for all population groups.

It is also commonplace, particularly in rural areas, for children to be raised by grandparents (Statistics South Africa, 2018b:6), usually because the biological parents have migrated to urban areas in search of employment or educational opportunities, are incapacitated or have died. It is estimated that 12% of children live with neither of their parents (Statistics South Africa, 2018a:13). Such children are at risk as early childhood experiences of deprivation, neglect or social disruption can create shocks that transition into adulthood (Shonkoff et al., 2012:461).

In a qualitative study on the role of fathers in promoting early learning involvement, Mncanca and Okeke (2016:227) revealed that ECD facilities do not necessarily encourage fathers to be involved in their children's early education nor compel parents to provide both maternal and paternal details when they register the child. Moreover, the male participants in the study also mentioned they only receive correspondence from the preschool when they have to pay fees. Hence the role of fathers is still primarily limited to being a provider, neglecting all the other aspects that affect child development, such as early education. This limit on the male role is not only imposed by the ECD facility. The Stats SA Time Use Survey of 2000 revealed that men aged 15–64 years of age spent approximately three minutes a day on the care of their

children while women in the same age category spent an average of 39 minutes per day caring for children in their households (Budlender & Lund, 2011:929).

3.3.5 Parental Perceptions of Early Learning

Shumba, Rembe and Pumla investigated parents' perceptions of the role of ECD facilities and their participation in early learning provisioning in Mdantsane in the Eastern Cape (Shumba et al., 2014:458). The study also investigated parents' motivations for sending their children to ECD facilities. Using semi-structured interviews, the authors conducted the study in two ECD facilities, and two parents were selected in each facility (Shumba et al., 2014:459). The study revealed that parents sent their children to ECD facilities so that the parents could have ample time to complete chores in the house without being disturbed (Shumba et al., 2014:458). The study also found a gap in the parents' understanding of ECD policy issues. Parents could not differentiate between rules set by the principals and policy enacted by the government (Shumba et al., 2014:460). All the parents admitted that they did not fully participate in their children's early learning at the facility. Due to illiteracy and uncertainty of what was expected of them by the facility, the parents lacked confidence in their ability to get involved in the facility and directly assist their children in the process of learning. One parent said that they would get involved if the facility delegated to them what they were supposed to do as parents. Kabay et al. (2017: 44) note that there are few empirical studies investigating parents' perceptions on early education in less developed economies.

3.4 Conclusion

This chapter reviewed facility and household-level factors that impact on early learning. Regarding facility-level factors, the literature argued that there is a general lack of qualifications among ECD personnel, a poor state of infrastructure at ECD facilities and a lack of school readiness among children in the country. The literature discussed considered the role of management at an ECD facility, the effect of ECD facility registration status as well as a shallow understanding of the concept of play as a form of pedagogy. Furthermore, the brief discussion on inequalities in the South African education system showed that children from different economic circumstances attend vastly different schools and facilities, in terms of quality.

The reviewed literature on household-level factors showed various socioeconomic challenges faced by households that ultimately compromise child development. ECD and early learning

were subjected to the threats of low stimulation at home, stunted growth, poverty and deprivation as well as absent fathers. Moreover, some of the caregivers were reluctant to get involved in the ECD facilities their children attended because of illiteracy and uncertainty about their roles. There are relatively few evidence-based studies on facility and household-level factors that influence early learning development in South Africa even though both ECD facilities and households face challenges that have the potential to threaten children's early development. The next chapter is devoted to reviewing key early ECD interventions that were made in developed and developing economies.

CHAPTER FOUR: STUDIES ON ECD INTERVENTIONS

4.1 Introduction

Jalongo, Fennimore, Pattnaik, Laverick, Brewster and Mutuku (2004:143) caution that before a country can claim that children are its future, it should be fully conscious of the social responsibility implicit in that claim. This chapter outlines various early interventions undertaken by governments and organisations in selected developed economies and their less-developed counterparts. In reviewing these interventions, the thesis aims to identify the structure of the programmes and aspects of the curricula used and assess the success or failure of the programmes. The chapter concludes with lessons learned from the reviewed interventions.

4.2 ECD Interventions in Developed Economies

The United States of America (USA) introduced many ECD interventions, including the Chicago Longitudinal Study, Albuquerque Child Development Facilities, Arkansas Better Chance, Pre-Kindergarten Program, Head Start and the High/Scope Perry PreSchool Project (Burger, 2010:154). Three early interventions were selected for review from developed economies, namely Head Start and the High/Scope Perry PreSchool Project from the USA and the early childhood education (ECE)[2] government reformation policies in Spain.

4.2.1 Head Start

Head Start Background

Head Start is considered one of the oldest and most extensive nationally-funded preschool programmes in the USA (Sabol & Chase-Lansdale, 2015:136). The Head Start programme began during the US civil rights era and its establishment is attributed to the presidency of Lyndon Johnson and his 'war on poverty' mandate (Sabol & Chase-Lansdale, 2015:136). It began as a summer programme in 1965, enrolling approximately 561 000 mostly African American children (Garces, Thomas & Currie, 2002:1000). By 1966, the programme had

[2] ECE is the part of ECD that focuses on the formal learning environment and the teacher's pedagogic strategies, whereas ECD encompasses the whole of child development, including nutrition, motor skills, social skills, etc.

expanded to serve approximately 750 000 African American and white children. By the early 1970s, the programme had changed from a summer programme to a year programme but, because the longer duration of the programme came with higher costs, the enrolment was reduced and higher costs were absorbed for each child (Garces et al., 2002:1000).

By design, the programme aimed to assist preschool children from low-income households to attain early school success by having access to quality preschools, with the hope of reducing social inequalities over time (Cronger, 1988, cited in Lee, Brooks-Gunn, Schnur & Liaw, 1990:495). African American children were mainly enrolled initially, as the group seen as most vulnerable to poverty in the US at that time. The mandate of Head Start was to equalise opportunities through early learning (Lee et al., 1990:495).

Head Start Curriculum

A majority of Head Start programmes and centres use either the High/Scope curriculum from the Perry PreSchool Project or the Creative Curriculum for Preschool, which was first developed in 1978 (Dodge, Colker & Heroman, 2002, cited by Bierman, Domitrovich, Nix, Gest, Welsh, Greenberg, Blair, Nelson & Gill (2008:1802). The Head Start programme is based on a 'whole child' model that aims to offer holistic development. The whole child model eliminates the often narrow focus placed on academic performance by learning programmes. To achieve holistic development, the services offered include preschool education, health care, mental care, nutrition services and parental support (Garces et al., 2002:1000; Puma, Bell, Cook, Heid, Shapiro, Broene, Jenkins, Fletcher, Quinn, Friedman, Ciarico, Rohacek, Adams & Spier, 2010:1; Waldfogel, 2015:2).

Evaluating the Head Start Programme

The Head Start Programme set out to narrow socioeconomic gaps among children from different socioeconomic backgrounds, specifically to improve the future economic prospects of low-income children through access to a quality preschool education. Since the programme was conceived as a long-term intervention in the 'war on poverty' and poverty tends to be a long-term phenomenon that affects multiple generations, the effectiveness or success of the Head Start Programme should be measured in terms of its long-term benefits rather than short-term effects. The literature generally seems to consider this programme among the most successful in the history of such interventions (Abbott-Shim, Lambert & McCarty, 2003:191).

This positive appraisal partly explains the endurance of the programme. However, not all the literature agrees on the success of Head Start.

The Head Start Evaluation, Synthesis, and Utilisation Project (McKey, Condelli, Ganson, Barrett, McConkey & Plantz, 1985:25) synthesised nearly all extant literature and unpublished studies in a focused and coherent form and reported initial positive and educationally meaningful effects of Head Start. These effects were followed by a declining performance in subsequent years and few meaningful differences between Head Start and control groups on any of the measures by the second year after Head Start attendance ended, namely Grade 1 (Lee et al., 1990:496; Waldfogel, 2015:2). A significant number of studies argue that this programme yielded mixed results in terms of its effectiveness (Waldfogel, 2015:2). This inability to yield positive, sustained effects has been seen as a significant drawback of the Head Start programme. Lee et al. (1990) deduced a few reasons for the absence of sustained effects on the test scores. Head Start is an early learning intervention confined to preschool, one tier of learning that is followed by three other tiers, namely primary schooling, secondary and higher education. In some post-Head Start cases, the primary school that a child subsequently attended had the power to 'undo' the advantage accrued in the programme (Lee et al., 1990:504); that is, the child would start to score lower on the test scores. The undoing of the Head Start advantage could also emanate from the home environment. After Head Start participation, there are no guarantees that families will uphold the principles and commitment to their children's education. Finally, Lee et al. (1990:504) question whether it was realistic to expect any nine-month intervention, whether Head Start or any preschool programme, to overcome the past or future accumulated effects of disadvantage.

Even the US government at some point was uncertain about the success of the programme. The US General Accounting Office Report (1997), taking the view that, for the intervention to be considered effective as per its original objective it must have had a far-reaching impact and long-term benefits, asserted that there was little evidence to gauge the effectiveness of the programme (Abbott-Shim et al., 2003:192). As mentioned earlier, the high test scores obtained initially by Head Start programmes faded out later (Garces et al., 2002:999). Concerning the fading of test scores, Heckman has challenged the potency of the test scores. People's abilities are diverse, ranging from cognitive to non-cognitive skills (Heckman, 2006:1901; 2007:13250). Cognitive skills are often measured in test scores and other IQ tests. However, the success of an individual is often greatly affected or determined by non-cognitive skills. For instance, a child's performance at school may be affected by non-cognitive skills like

motivation, perseverance, self-control and time management. Without these non-cognitive skills, even with a reasonable IQ ability, children may still underperform if they are not motivated to succeed or can persevere. The overall argument was that IQ tests were too narrow to diagnose an ECD intervention as a failure. Therefore, one component of skills should not cast the entire intervention as a failure (Heckman, 2006:1901).

Over the years, other research studies somewhat redeemed the programme. Garces et al. (2002:1011) attempted to ascertain the long-term impact of the programme. The study utilised the Panel Study of Income Dynamics (PSID) in which data was gathered on household members aged 30 years or below who were asked whether they had ever been enrolled in Head Start or attended any other preschool or day-care programme (Garces et al., 2002:1002). The sample comprised about 4 000 adults aged 18 years and above in 1995. On the positive side, the study established that about 75% of the sample had completed high school (Garces et al., 2002:1008). Moreover, African Americans who were enrolled in the Head Start programme were less likely to have been criminally charged than a sibling who did not attend (Garces et al., 2002:1011). The same study argued there was little evidence that Head Start was associated with higher adult earnings, except for white children (Garces et al., 2002:1009). While the study found that enrolment in Head Start increased the probability of attending college, that positive effect was driven by white children who participated in the programme, who were associated with a higher probability of graduating and earning a higher income (Garces et al., 2002:1011). The correlation was not statistically significant for African Americans. If the Head Start intervention was most beneficial to white children it defeated the point of the programme as it was initially introduced to assist economically vulnerable children who were most likely to be people of colour.

A study by Sabol and Chase-Lansdale (2015:136), investigated whether the participation of children in the Head Start programme led to parent well-being, as measured by parents' educational advancement and employment. The study took a novel approach in examining the effects on parents' well-being, considering that the programme was intended to benefit children. The study took advantage of the data-rich Head Start Impact Study (HSIS), a randomised trial of over 4 000 three and four-year-old children, tracking them through to the third grade (Sabol & Chase-Lansdale, 2015:137). The children were split between an enrolled group, meaning those assigned to a Head Start programme, and a control group, meaning those not granted access to the programme for the years 2002 to 2003 (Sabol & Chase-Lansdale, 2015:140). In addition to assessing the effects on parents of the Head Start programme, the study was also

interested in assessing whether the programme impacts might differ according to the age of entry into Head Start. Hence, the enrolled group was further split between three-year-olds and four-year-olds. The three-year-old cohort had attended the Head Start programme for two years, while the four-year-old cohort only participated for one year. The sample size was broken down as follows for the three-year-old cohort: 1 203 children randomly assigned to the programme and 701 assigned in the control group. For the four-year-old cohort, 958 children accessed the programme and 574 were in the control group (Sabol & Chase-Lansdale, 2015:141).

The research revealed that the parents of the three-year-old cohort that participated in the programme had achieved significant advancements in their educational attainment in comparison to the parents of the control group (Sabol & Chase-Lansdale, 2015:137). Perhaps having the child enrolled for two years allowed sufficient time for parents to plan and finally enrol at a higher education institution. These findings were particularly strong for parents who had had at least some higher education before the programme. This suggests that it is relatively easy for parents with some tertiary education to further advance their education than parents who never participated in tertiary education. The findings were also found to apply to African-American parents, younger parents as compared to older and parents who were married (Sabol & Chase-Lansdale, 2015:151).

The findings seem to confirm that the programme impacts may differ by the age of entry into Head Start and the duration of participation in the programme. The findings suggest that possibly either or both the age and duration in the programme matters and that more years in the programme was associated with better outcomes. However, in terms of employment advances, the study could not prove employment advances as a result of having a child participating in the programme (Sabol & Chase-Lansdale, 2015:137).

Finally, a concern of the Head Start programme is its varying quality in different centres. Because of the expansion of the Head Start programmes, it has become a challenge to achieve a consistent level of quality in all the centres (Waldfogel, 2015:3).

4.2.2 The High/Scope Perry PreSchool Project

The High/Scope Perry PreSchool Project Background

The High/Scope Perry PreSchool Project operated between 1962 and 1967 (Schweinhart, Barnes & Weikart, 1993:108). The Perry PreSchool Project was the brainchild of the Division

of Special Services of the Ypsilanti School District in Michigan and was developed for high-risk children who stood to benefit the most from an intervention (Parks, 2000:5). In total, 123 African American children were eligible to participate in the project. Of that number, 58 were randomly allocated to the programme, and the remaining 65 were allocated to a control group (Schweinhart et al., 1993:110). The 58 children were aged three to four years old, from low-income households and considered at risk of school failure owing to environmental factors and low IQ scores. The sampled children participated in the programme for approximately two years. The programme comprised of classroom activities, weekly home visits by teachers and monthly group meetings with parents (Schweinhart et al., 1993:108). The study was able to maintain contact with approximately 95% of the initial group (Schweinhart et al., 1993:108).

Schweinhart et al. (1993) summarise the critical components of the programme in terms of empowering teachers, parents and children. In terms of empowering teachers, the project relied on highly trained staff in the field of early education. Moreover, it fostered a close relationship between the teacher and the child as well as maintaining the child-staff ratio of not more than ten children per adult (Schweinhart et al., 1993:110). The teachers were highly empowered and trained through in-service training and extensive managerial support (Schweinhart, 2000:139). Under the programme, the school year began in October and ended in May, which amounted to seven-and-a-half months. Classes were conducted for two-and-a-half hours in the morning, five days a week (Schweinhart, 2000:139). To empower parents, teachers conducted weekly home visits that lasted about 90 minutes. During the home visit, the teacher had discussions with both mother and child in which school activities were reviewed and discussed (Schweinhart, 2000:139). The focus of the visit was to help parents provide the necessary support for their child to develop intellectually, socially and physically (Schweinhart et al., 1993:110).

The High/Scope Perry PreSchool Curriculum

The educational approach used in the Perry PreSchool was based on the approach of Jean Piaget that views the child as an active learner (Parks, 2000:2; Schweinhart et al., 1993:109; Schweinhart & Weikart, 1997:120). It encourages the intellectual participation of the learner and fosters social development (Parks, 2000:2). The children are intentional learners and their process of learning is optimised when children themselves plan activities, complete them and review them afterwards (Schweinhart, 2003:3). Therefore, children were responsible for daily

planning, carrying out and reviewing their activities. The children also spent time outdoors (Schweinhart & Weikart, 1997:120).

Evaluating the High/Scope Perry PreSchool Project

Throughout the years, the High/Scope Perry PreSchool Project documented positive outcomes that include scholastic success, social returns and economic returns. The positive outcomes found for the participants when they were adults aged 27 years old and subsequently at 40 years are discussed below. The findings were consistently compared with the control group.

With regard to private economic returns, at age 27 the participating group had higher earnings, where 29% of them earned USD2,000 or more per month, while for the control group, only 7% of them earned the same amount (Schweinhart et al., 1993:108). The treatment group maintained higher earnings than the control group. At aged 40, their average annual earnings were USD20,800, while the annual average for the control group was considerably lower at USD15,300 (Schweinhart, Montie, Xiang, Barnett, Belfield & Nores, 2005:2). Moreover, 76% of the treatment group were employed, against 60% employment in the control group (Schweinhart et al, 2005:2). Finally, 76% of the Perry PreSchool Project graduates had savings accounts compared to only half of the control group (Schweinhart et al., 2005:2). The participants also fared better in home and car ownership; 36% owned homes in comparison to only 13% of the control group, and 30% owned second-hand cars with only 13% of the control group owning second-hand cars (Schweinhart et al., 1993:108). Car ownership increased at age 40, with 82% of the treatment group owning cars against 60% of the control group (Schweinhart et al., 2005:2).

Considering that the project was an education intervention, it is encouraging to note that 71% of the participants completed 12th grade or higher, whereas 54% from the control group did not complete 12th grade or higher (Schweinhart et al., 1993:108). At age 40, graduation rates had increased in both groups. However, 77% of the treatment group had high school diplomas in comparison to 60% of the control group (Schweinhart et al., 2005:1). The disparity in the high school graduation rate was even higher among females: 88% in the treatment group against 46% of the females in the control group (Schweinhart et al., 2005:2).

The returns of the project were not confined to the participants. At age 27, the participants were found to be less of a state burden than non-participants: 59% were receiving social services in comparison to 80% of the control group (Schweinhart et al., 1993:108). They also had fewer

arrests of 7% compared to 35% of the control group (Schweinhart et al., 1993:108). At age 40, the control group had higher lifetime arrests of 55% compared to 36% for the treatment group (Schweinhart et al., 2005:3). At age 27, 57% of the women who participated in the project had out-of-wedlock children in comparison to 83% of births of non-participant women. More participating women (40%) were married compared to 8% of the control group (Schweinhart et al., 1993:109). Parks (2000:2) states that social returns included lower rates of crime, a lower incidence of teenage pregnancy and less welfare dependency. These positive returns of the programme for the treatment group were also proven through robust econometric models (Heckman, Pinto & Savelyev, 2012).

Considering that the project was made possible by the allocation of public funds, an attempt should be made to also express the returns in monetary terms. Schweinhart et al. (2005:3) expressed the returns and costs in USD at the year 2000 equivalent value, discounted at 3%. The average cost per participant was USD15,166 while the value of the returns to society was calculated at USD244,812 per participant. From the public returns of the project, 88% was in terms of crime savings, 4% in education savings, 7% in increased taxes paid due to higher earnings and 1% was savings on welfare (Schweinhart et al., 2005:3). The estimated economic benefit in 1992 was USD88,433 per participant (Schweinhart et al., 1993:109). This means that the economic benefits accumulated in real terms over the years. Despite these high returns, Schweinhart et al. call their estimate modest, implying actual returns may be higher since other positive returns are difficult to monetise, such as family involvement and health (Schweinhart et al., 2005:4). The project can be considered an extremely sound economic investment, comparing favourably with alternative uses of public resources and even with private-sector investments (Schweinhart, 2003:5).

The programme was not without drawbacks. The High/Scope Perry PreSchool Project study had a relatively small sample and was confined to the African American population. Vinovskis (1999:195) opined that there is little doubt that any 'race' would have had a different outcome as a result of ethnic differences. The critical factor was the economic level of the family rather than ethnicity. The chief concerns raised about the High/Scope Perry PreSchool Project are centred on the validity of the programme, both its external and internal validity (Schweinhart et al., 2005:8). Concerns of internal validity relate to the extent to which differences in the samples are exclusive because of the High/Scope Perry PreSchool intervention. External validity, on the other hand, concerns the extent to which the outcomes of the study can be generalised to other interventions despite its limited sample. The issue of the limited sample is

also raised by Vinovskis (1999:196), particularly to what extent the findings can be relevant on a larger scale given that the intervention had a relatively small sample and was confined to one location.

Schweinhart et al. (2005:8) state that internal validity is achieved from the fact that the sample was randomly assigned between the control and the treatment groups. Moreover, the outcomes of the study or the results were adjusted for seven background covariates. The covariates were adjusted because they were initially proven to have a significant relationship with preschool experience. The covariates included having a father at home and/ or an older sibling assigned to the same treatment group (Schweinhart et al., 2005:8). Adjusting for the covariates enabled the results to be attributed to the intervention with more accuracy.

Further defending the external validity of the intervention due to its 'limited sample', Schweinhart et al. (2005:8) mention that had the sample been too small, the outcomes would not have been statistically significant. In terms of generalising the outcomes of the study to other ECD interventions, Schweinhart et al. (2005:8) state that a generalisation of the study applies only to other reasonable similar interventions. A similar intervention with the Perry Preschool Project is one that shares homogenous variables, including the curriculum, teacher-children ratio, highly competent practitioners, home visits and a group of children from low-income households. A drastic change in the variables may affect the findings. For instance, unqualified practitioners and overcrowded classes may reduce the returns.

What was also interesting were the significant gender differences in outcomes. Heckman, Pinto & Savelyev (2012:19) using an econometric regression established a statistical difference in cognitive and academic achievement measures in favour of female participant. While Nores, Belfield, Barnett, and Schweinhart (2005:249) credit, a large portion of the gains from the intervention to the low criminal activity rates by the male treatment group. Typically, criminal activities by females tend to be lower. However, most literature regarded these findings as insignificant for policy design (Vinovskis, 1999:196). For policy-makers, the big concern is the cost of implementing this programme. According to the estimate of Barnett (1995), in year 1990 USD, the programme cost more than USD12,000 per recipient, which was about three times as much as Head Start, as indicated by Vinovskis (1999:198). Such a cost would exert significant fiscal pressure on any country should it be implemented en masse. However, the benefits might justify the expenditure. The High/Scope Perry PreSchool Project is often likened to the Head Start programme. Comparing these two interventions may give the impression that

they have achieved similar returns. However, Schweinhart et al. (2005:12) state that the Head Start programme has not achieved a similar standard to reap the same long-term returns of the High/Scope Perry PreSchool Project.

The Perry PreSchool Project remains one of the first longitudinal ECD interventions to observe lasting programme effects on participants' later educational achievement, economic success and avoidance of criminal activity (Nores et al., 2005:256; Schweinhart, 2003:2). It demonstrated the long-term benefits of a good-quality preschool programme for children living in poverty (Schweinhart, 2000:137). The programme was able to accrue positive benefits that transcended academic performance to include social responsibility and socioeconomic success (Schweinhart, 2000:137).

4.2.3 The Spanish Education Reform

Spain was arguably among the first economies to recognise the importance of pre-elementary education. Despite its early recognition, effective educational reforms to advance ECE were only implemented from 1990, when the Spanish government began implementing an education reform policy with a new education law called the Ley Orgánica de Ordenación General del Sistema Educativo (LOGSE)[3]. According to Moreno Mínguez (2018:16) and Ibáñez and León (2014:278), the introduction of LOGSE constituted the government's first indication to integrate early education with the rest of the education ministry, effectively recognising the importance of early education to elementary and secondary education. The LOGSE structured non-compulsory ECE into two cycles. The first cycle catered for children aged four months to three years, while the second cycle was for children between three and six years of age (Moreno Mínguez, 2018:98). The second cycle benefited greatly from government spending which led to rapid expansion and the rise in the quality of preschool education (Ibáñez & León, 2014:278).

Evaluating Spanish Early Childhood Education

The extensive subsidisation of the second cycle (fee-free attendance) reduced the financial burden typically placed on families by ECD programmes (Sandstrom, 2012:130). With the free provision of ECD programmes, the enrolment rate of this age group doubled from 40% in 1991 to 80% in 1998 (Ibáñez & León, 2014:281). The second cycle achieved universal access, even though it was not compulsory (Sandstrom, 2012:131). Between the two cycles of preschool

[3] Translation: Organic Law of General Organisation of the Education System.

education in Spain, there were differences in access, state funding and quality. Access to the second cycle is free, universal and attached to primary schools. This was retained in the current legislation, the Organic Law of Education of 2006, which determines that there should be enough spaces in public and semi-public schools to meet the demand (Ibáñez & León, 2014:280). For the first cycle, attendance is voluntary, parents pay fees and the availability of the ECE centres varies across municipalities (Ibáñez & León, 2014:279).

A study by Moreno Mínguez investigated the correlation of preschool attendance with educational outcomes (Moreno Mínguez, 2018:99). Data from the 2011 Progress in International Reading Literacy Study **(**PIRLS**)** showed that learners who attended preschool for a longer duration went on to perform better at schools, specifically in mathematics and literacy (Moreno Mínguez, 2018:104). It was further established that for children across Europe who had attended preschool for more than a year and came from a low-educated household, reading scores on average were 18 points higher than children from the same SES who had attended preschool for less than a year (Moreno Mínguez, 2018:105). For Spain, the reading advantage for children with low SES who had attended preschool for more than a year is 15 points higher (Moreno Mínguez, 2018:105). Similar results were obtained for mathematics (Moreno Mínguez, 2018:106). Therefore, in Spain, preschool attendance of more than a year had positive effects on subsequent educational outcomes in mathematics and literacy. Effectively, preschool attendance in Spain ameliorated the influence of inequalities in home environments.

While Spain has made significant progress in the second cycle of ECE, the first cycle receives less funding and is less accessible. Moreover, their practitioners earn comparatively less and work under less favourable conditions compared with the practitioners in the second cycle, who are employed by the Spanish government (Ibáñez & León, 2014:285).

4.3 ECD Interventions from Developing Economies

Governments in developing countries are still in the infancy of early learning interventions. The study reviewed three interventions, the Madrasa Early Childhood Programme found in three African countries, the ECD policy in Ghana as well as the reception year in South Africa.

4.3.1 The Madrasa Early Childhood Development Programme: Kenya

Background to the Madrasa Early Childhood Development Programme

The Madrasa Early Childhood Development Programme was a response to a request from Muslim communities in Mombasa, Kenya, as a tool to improve the educational standards of Muslim children in the community (Malmberg, Mwaura & Sylva, 2011:125). Muslim children were among the worst-performing students in Kenya at that time. The community-based preschool programme targets low-income communities in East Africa (Mwaura, Sylva & Malmberg, 2008:240). The first Madrasa preschool was established in Kenya in 1986, with only four staff members and four children (Evans, Bartlett & Virani, 2008:6). Since its humble beginning, the programme has expanded to Uganda and Zanzibar with 203 preschools, from which nearly 68 000 preschool children have graduated (Malmberg et al., 2011:126).

Even though the programme is similar, each country has tailored its services to meet the unique needs of their communities (Mwaura & Mohamed, 2008:389). The programme is a combined effort of local and international Muslim leaders, donors and communities as well as the practitioners (Mwaura & Mohamed, 2008:391). The operation, management and ownership of the preschools are placed mainly in the hands of the communities (Mwaura & Mohamed, 2008:390). Significantly, communities have offered their resources and labour to build and maintain the preschools (Mwaura & Mohamed, 2008:392). The involvement of communities is aimed at fostering a sense of ownership as well as supporting cost-effectiveness.

The programme relies on the competence of the practitioners. Practitioners are required to have completed a minimum of eight years of schooling plus a one-year teacher/ practitioner training course (Malmberg et al., 2011:125). Before they start teaching, the practitioners also attend six months of training which leads to an ECD certificate (Malmberg et al., 2011:125). Practitioners receive post-graduation support, which is a form of professional development to maintain their skills (Malmberg et al., 2011:125). The practitioners also attend a teacher-training programme during school holidays (Evans et al., 2008:29). The training is considered paramount since some of the practitioners are local Muslim women who did not complete secondary schooling (Evans et al., 2008:27). Because Madrasa preschools are owned by the communities rather than the governments, the programmes depend on donor funders such as UNICEF, the World Bank and many others although, due to their success, the government in Kenya also allocates funding (Evans et al., 2008:34).

The Madrasa Early Childhood Development Programme Curriculum

Initially, the Madrasa Early Childhood Development Programme used the Perry PreSchool Project curriculum (Evans et al., 2008:20), a curriculum inspired by the child development theories of Piaget (1962) and Vygotsky (1978). In selecting the curriculum, the programme deliberately distanced itself from the traditional 'chalk and talk' method of teaching but instead emphasised the pedagogy of play and children being active participants (Evans et al., 2008:20). Under this learning philosophy, children are viewed as active agents in their learning and discovery of knowledge. Therefore, children do not merely observe, but they are involved and initiate the process of learning. Emphasis is placed on two learning and teaching instruments – a high-quality learning environment and high-quality teacher-child interaction (Mwaura et al., 2008:240).

The curriculum was integrated with Islamic education (Mwaura et al., 2008:240). The Muslim community chose to integrate a secular curriculum with Islamic education to afford their children knowledge without compromising on their identity and values. Over the years, the curriculum has been revised regularly with new content added, making it culturally sensitive to the different African countries (Evans et al., 2008:23). The curriculum is a hybrid of secular and Islamic education, embodying an active learning teaching approach known by the acronym MAMACHOLASU, which stands for material (MA), manipulation (MA), choice (CHO), language (LA) and support (SU) (Madrasa Resource Facility, 2000:14, cited in Mwaura et al., 2008:240).

Evaluating the Madrasa Early Childhood Development Programme

Mwaura et al. (2008) investigated the impact of the Madrasa programme on cognitive development in the first two years of preschoolers' enrolment in the programme. The Madrasa children were compared to non-Madrasa children enrolled in other preschool programmes in East Africa and children not attending any preschool programme (Mwaura et al., 2008:241). The study included 168 Madrasa children and 153 non-Madrasa children (Malmberg et al., 2011:126). The study confirmed that children attending Madrasa and other preschools have positive cognitive development traits in comparison to children staying at home (Mwaura et al., 2008:251). While attending any preschool was associated with cognitive development, the study revealed that Madrasa children experienced higher cognitive development than children attending other preschools. Thus, the findings emphasised that the type and quality of early

intervention matters, which means that some programmes may develop cognitive skills better than other programmes (Mwaura et al., 2008:251). The study observed substantial increases in verbal, non-verbal and numeric cognitive school readiness in children who attended the programme, between their inception and halfway through preschool, in comparison to the non-participants (Malmberg et al., 2011:130). However, there is a diminishing return to the intervention for the subsequent periods. This means that the intervention may work well for younger but not necessarily for older preschool children (Malmberg et al., 2011:130).

The purpose of preschool education is to prepare for formal schooling. In other words, the experience of preschool education contributes to a smooth transition to primary schooling. It was, therefore, unsettling to discover that the Madrasa preschool children had challenges transitioning into primary school. The Madrasa programme subsequently discovered that this was because the Madrasa children were accustomed to a child-centred learning environment which the primary schools did not provide. Although the challenge of transitioning was experienced in all three countries, 35 of the communities in Uganda started Madrasa Primary schools to protect and augment the initial preschool investment and to ensure that primary schooling did not undo the initial gains (Evans et al., 2008:61).

4.3.2 Early Childhood Care and Development Policy: Ghana

Background of the Early Childhood Care and Development Policy (ECCDP)

Ghana became the first Sub-Saharan country to adopt an ECD policy of universal access to early childhood education in 2004 (Engle, Dunkelberg & Issa, 2008:304; Kabay et al., 2017:44). As a result, access to preschool was introduced in 2007, including two years of compulsory pre-primary education known as Kindergarten (KG). In 2005, as part of the Early Childhood Care and Development Policy of 2004 (ECCDP), the country introduced the Capitation Grant scheme whereby the primary schools receive a small grant for each enrolled child (UNICEF, 2011:8). A condition of the capitation grant was that schools were not allowed to charge fees. Hence, the capitation grant enabled free attendance of schools and KGs. Since the KGs are attached to primary schools (UNICEF, 2011:11), this meant that Ghana became the first Sub-Saharan country to offer two compulsory and free preschool years (Engle, Dunkelberg & Issa, 2008:304; Kabay et al., 2017:46).

The ECCDP in Ghana responded to the need to fulfil the country's obligation established in the Children's Act of 1998 to develop and protect the children of Ghana. ECD services in

Ghana had been notoriously scarce, with 90% of children in Ghana between 0–6 years of age not having had access to an ECD service. Finally, the expanded ECD fed into the country's poverty alleviation strategy (Boakye, Etse, Adamu-Issah, Moti, Matjila & Shikwambi, 2015:170).

Curriculum

The curriculum in Ghana is founded on the principle of putting the child at the centre of learning as well as the pedagogy of play (Kabay et al., 2017:46).

Evaluating Kindergarten in Ghana

In making two years of preschool education compulsory and free the government in Ghana assumed the burden of responsibility from parents (Kabay et al., 2017:46), although caregivers are still required to finance their children's uniforms and other costs (Boakye et al., 2015:173). Consequently, between 2000–2010, the enrolment rates for KGs grew to 93% (UNICEF, 2011:17). The new policy was proactive in meeting the challenge of inadequately skilled practitioners as Ghana has about 15 colleges that provide practitioner/ teacher training (Boakye et al, 2015:172).

In addition to the ECCDP, Ghana also forged an agreement with UNICEF through the Country Programme Action Plan (CPAP). The CPAP was a five-year agreement for 2006 to 2010, aimed at fostering ECD through child protection, health and nutrition, monitoring and advocacy for ECD, sanitation and hygiene as well as education (UNICEF, 2011:1). As part of the agreement, Ghana's ECD services received financial support from UNICEF. Financial assistance for 2010 was estimated at the USD645,000 (UNICEF, 2011:15). The funds were used for ECD provisioning, training of practitioners, learning and teaching material, among other needs. Towards the end of the agreement, UNICEF conducted a case study of the ECD Kindergarten programme in Ghana (UNICEF, 2011:3). Data collection for the study included interviews with key informants, focus groups with parents and observation of ECD activities and services (UNICEF, 2011:5). The study found that, despite the rapid increase in KG enrolment, there were still gaps in the supply of KGs. That is, there were primary schools, mostly in rural and remote areas, that did not have KG classes attached to them (UNICEF, 2011:18). Hence, low-income families were more likely not to have enrolled their children to a KG class. The study was unable to determine the quality of the KGs as Ghana at the time had not adopted clear standards that defined a good-quality KG class (UNICEF, 2011:19).

Notwithstanding the uncertainties surrounding standards, the investigation uncovered at least four factors impeding the quality of KGs in Ghana, namely: overcrowding in class, inadequate infrastructure, limited learning and teaching materials, and limited practitioners with formal training (UNICEF, 2011:22).

Overcrowded classes are prevalent in Ghana and the investigation found that the problem was most severe in the Afram Plains district where class sizes ranged from 24 to 188 children with one teacher and an assistant. The average teacher to children ratio in this district was 1:53 against the national average of 1:37 (UNICEF, 2011:22). Poor infrastructure was evident in the observation of the facilities, many of which were poorly ventilated and lit (UNICEF, 2011:22). The KGs were also found to have limited learning and teaching materials. The scarcity of the learning and teaching materials led to teachers withholding the few materials they had to preserve them. For instance, teachers were hesitant to give children books, fearing they would be damaged (UNICEF, 2011:22). Although higher learning institutions for ECD exist in Ghana, only a small proportion of practitioners accessed the institutions. In 2008–2009, the Education Management Information System (EMIS) showed that about a third of the practitioners had received formal training in ECD training (UNICEF, 2011:20). Therefore, the rapid expansion (UNICEF, 2011:21) of the KG classes forced the resources to be distributed thinly to all KG classes in the country. From the focus groups with the parents, it was established that there was no indication that parents had been successfully integrated into their children's early learning. Many parents reported having infrequent interactions with their children's practitioners (UNICEF, 2011:20) and there was no evidence that parents had become more involved in ECD due to the policy.

The investigation by UNICEF in Ghana did not reveal evidence of the impact of kindergarten on cognitive development. Positive cognitive outcomes and non-cognitive outcomes are integral to lobby for ECD investment. Moreover, the ECCD Policy which supported the two preschool years concurrently led to the neglect of the younger-aged children, for whom there are limited ECD services available (UNICEF, 2011:22).

4.3.3 South African Reception Year (Grade R)

Background

Grade R is the first reliable indication that the South African government acknowledges the importance of early learning (Margetts & Phatudi, 2013:41). The development of Grade R is

the largest-ever public commitment to ECD in South Africa (Biersteker et al., 2008:231). With the introduction of Grade R, the South African government took responsibility for early childhood education, which was for many years in the hands of NGOs.

The reception year originated in the De Lange Commission launched in the 1980s to recommend ways to improve the country's education system. There were high rates of failure and school dropout particularly among the African black learners (Department of Education, 2001b:9). The commission recommended that a preschool bridging class be introduced to better prepare children to enter primary school. This recommendation was not implemented by the apartheid government. At the dawn of democracy, the National Education Policy Investigation (later known as the 'National Education Policy Initiative' or simply the 'NEPI') again called for the introduction of the reception year (Margetts & Phatudi, 2013:41). The 1995 White Paper on Education and Training communicated the first democratic government's plan to introduce a reception year as part of compulsory schooling for children aged five years (Biersteker et al., 2008:229) although Grade R was only implemented in 2001.

Grade R is meant to prepare children for formal schooling, which begins in Grade 1. Grade R can be provided by either a public primary school or privately integrated as the highest grade at an ECD facility. To be admitted to Grade R, a child must be at least four years of age and turning five years old before 30 June in the year entering Grade R (Kotzé, 2015:7). Following the White Paper advocating for Grade R provision, funding for this grade is a delegated responsibility of provincial education departments for which they receive a subsidy from the national government (Atmore, Van Niekerk & Ashley-Cooper, 2012:128).

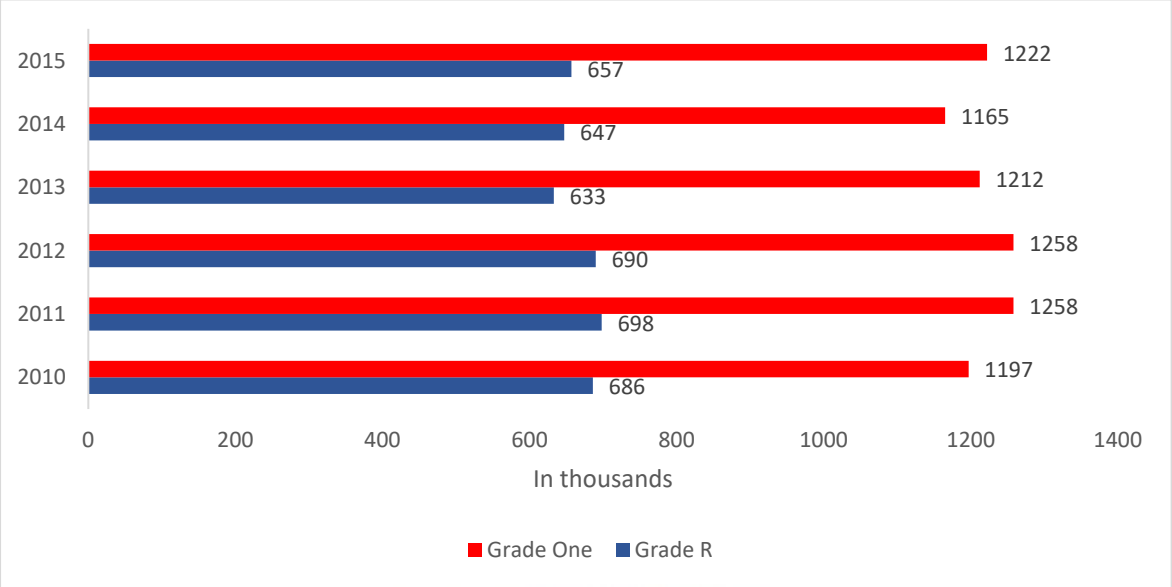
Curriculum

South African Grade R uses the Curriculum and Assessment Policy Statement (CAPS). CAPS focuses on creative art, physical education, personal and social well-being as well as basic literacy and numeracy.

Evaluating Grade R

Statistics South Africa, extracting from the GHS of 2010 to 2015, produced the following enrolments for Grade R and Grade 1 (Statistics South Africa, 2017b:6).

Figure 4.3.3: Grade R and Grade 1 Enrolments Trends (2010–2015)



Source: Statistics South Africa (2017b:6).

Figure 4.3.3 illustrates the imbalance between Grade R and Grade 1 enrolment. Logically, the enrolment for Grade R should be somewhat equal to or consistent with the enrolment of Grade 1, under the logical assumption that Grade R learners will all progress to Grade 1. However, figure 4.3.3 shows that over the years from 2010 to 2015, the enrolment figure for Grade 1 learners is consistently higher than the enrolment for Grade R and almost double that of Grade R. This implies that a significant number of Grade 1 learners have not attended Grade R.

At the inception of Grade R, the government had planned that by 2010, as reflected in the Education White Paper 5, there would be universal provisioning of Grade R. Effectively, every child who began Grade 1 would have attended Grade R first. The goal was not reached in 2010 as by then, Grade 1 enrolment reached just over 1,1 million each year and Grade R enrolment stood at approximately 67% of that (Atmore et al., 2012:127). In 2014, the government issued a draft policy framework on universal access to Grade R that explained that universal access meant that Grade R should be available to all who want to enrol (International Budget Partnership & UNICEF, 2016:9). It therefore would not enforce 100% enrolment but would merely ensure Grade R availability. Atmore et al. (2012:126) suggested it would take until 2018 for universal access to be achieved, while the DBE expected that all children attending Grade 1 would have attended Grade R by 2019 (Education, Training and Development Practices Sector Education and Training Authority, 2018:67). The School Realities report, however, showed that 815 488 Grade R were enrolled in 2019 while there were 1 150 672

Grade 1 learners (DBE, 2020:2). As in all previous years, the numbers of enrolments of Grade R and Grade 1 learners have not approached parity, which would indicate that all the learners in Grade 1 had attended Grade R.

The National Treasury in 2008 contended that the government should measure what children ultimately learn; that is, the quality of the learning experience that the Grade R learners received, rather than how many children were enrolled (Richter & Samuels, 2017:16). In 2012, the DBE and the Department of Performance Monitoring and Evaluation in the Presidency (DPME) commissioned a study to gauge the impact of Grade R on educational outcomes (DPME & DBE, 2013:10). The study developed a new dataset through merging the EMIS and SNAP data on learners and the Annual National Assessment (ANA) of 2011 and 2012. The ANA shows the performance of Grade 1 to Grade 6 learners in mathematics and home language (DPME & DBE, 2013:43). The developed dataset included 18 102 schools (DPME & DBE, 2013:43).

The cognitive impact of Grade R is measured as the difference in the percentage of a standard deviation owing to full exposure to Grade R (DPME & DBE, 2013:50). For the year 2012, the study established a standard deviation of 10,2% for home language and only 2,5% for mathematics. Most of the successful ECD interventions typically achieve a standard deviation on cognitive measures of around 40%; therefore, the effects of Grade R in South Africa are minimal (DPME & DBE, 2013:53). Despite the poor returns for the entire country, the returns are non-existent for schools in the lower-income quintiles, while for schools in the 4th and 5th quintile, the standard deviations for mathematics and home language were 10% and 20% respectively. The learning outcomes of children attending higher-quintile schools are expected to improve because of attending Grade R, with no expected benefits associated with attending Grade R in the lower-quintile schools (DPME & DBE, 2013:54).

Moreover, the returns are significant and higher for the provinces that are already top performers and for top individual learners. Schools in the 4th and 5th quintiles are likely to have better-qualified staff, better-equipped premises and more resources than schools in deprived areas (ETDP SETA, 2019:68). The results suggest that Grade R intervention benefits groups in the society that are already advantaged. Therefore, Grade R appears to reinforce educational inequalities. It appears that Grade R inherited the inequality that exists in South Africa's education system (Spaull & Kotzé, 2015:23). Ideally, an ECD intervention should

narrow the inequality gap by ensuring that the disadvantaged children derive the highest returns.

As early as 1997, in the National ECD Pilot which involved 2 730 facilities, it was recommended that the quality of Grade R in community-based facilities and Grade R attached to schools should be improved (Richter & Samuels, 2017:13). The poor quality of Grade R at public schools and ECD facilities has been noted in the literature (Kotzé, 2015:2). Among the causes of low quality are inadequate funding, lack of qualifications among practitioners and inconsistent learning programmes.

During the first year of introducing Grade R, the National Treasury provided conditional grants to over 4 500 facilities. In addition, funds were allocated for training practitioners and providing support along with monitoring. By the end of the first year, only a third of the funds had been utilised due to the lack of capacity in the provincial DSDs (UNICEF, 2019:121). Shifting the responsibility from central government to the provincial DSDs was identified as one of the errors the South African government made when implementing Grade R (UNICEF, 2019:121) since the provincial departments have less capacity in terms of personnel and this often led to inequalities between provinces. The expenditure on Grade R improved when the reception year was integrated into the Basic Education infrastructure administered by the national DBE.

When comparing the expenditure per child as a proportion of GDP per capita of a learner enrolled in education, ECD facilities for ages 0–4 years receive 5%, Grade R receives 7%, primary education receives 15%, secondary schools 17% and tertiary institutions receive the highest per capita share of 45% (Richter, Berry, Biersteker, Harrison, Desmond, Martin, Naicker, Saloojee & Slemming, 2014:33). The International Budget Partnership and UNICEF (2016:9) analysed the South African budget and confirmed the meagre funding of Grade R and ECD facilities. The funding structure is further criticised in the ETDP SETA report on ECD Sector Skills (ETDP SETA, 2019). The report contends that if the funding structure were such that ECD facilities were allocated the highest portion of the GDP expenditure on education, the government would not have to spend as much as it does on the tertiary sector because the foundation of learning will have been laid (ETDP SETA, 2019:31). It is mainly due to the neglect of the ECD sector that South Africa is not reaping the benefits of its extensive investment in education (ETDP SETA, 2019:30).

Grade R funding in the country is governed by national norms and standards that the government issued in 2008. This document presumes that the provincial government should at least finance a basic package for Grade R. The basic package includes the remuneration of practitioners, learning material and administration, among others. The per learner amount was set at 70% of Grade 1 learner funding. However, provincial governments have some leeway through the guidelines of funding to set the Grade R learner amount at 50% of Grade 1 learner funding as opposed to 70% (International Budget Partnership & UNICEF, 2016:9). This flexibility granted to provincial governments led to inequalities in Grade R funding across provinces. For example, in the 2015/16 financial year, North West allocated about R9,227 per Grade R learner for the year, while the Western Cape allocated R5,810 for the corresponding year (International Budget Partnership & UNICEF, 2016:9).

Practitioners generally lack a relevant ECD qualification and there is a shortage of qualified and skilled practitioners in the country (ETDP SETA, 2019:69). Many Grade R practitioners have an ECD certificate at levels 1–4 on the National Qualifications Framework. However, they are required to possess a Diploma in Grade R teaching (level 6) or Bachelor of Education in Foundation Phase teaching (level 7). Levels 1–4 are considered a low level of training or qualification for teaching Grade R (ETDP SETA, 2019:73). The Auditor-General of South Africa (AGSA) condemned the low qualifications of Grade R practitioners in August 2015, noting that the minimum qualification for a Grade R teacher was a diploma and not an ECD certificate (ETDP SETA, 2019:98). One of the problems is that the government increased qualifications without ensuring that there were adequate training providers to provide the relevant training and qualifications. The ETDP SETA notes that Technical Vocational Education and Training (TVET) colleges would be able to increase skills capacity should they be appropriately funded and adequately resourced for this purpose (ETDP SETA, 2019:69). Another cause of the shortage of skills in ECD is that Grade R facilities are unlikely to attract and retain qualified personnel who are underpaid and receive few benefits in comparison to government-employed teachers in the Foundation Phase (ETDP SETA, 2019:100).

The lack of qualifications transcends practitioners and includes principals and supervisors (ETDP SETA, 2019:69). Some NGOs intervened to offer training programmes to the ECD staff. However, many of the training programmes offered by NGOs were not accredited or recognised by the DBE (Richter & Samuels, 2017:15). As a result, there was a misalignment of qualifications found on the Higher Education Qualification Sub-Framework and the qualifications and training opportunities offered by NGOs (ETDP SETA, 2019:72). Another

constraint that the ECD sector faces is the lack of administration of ECD facilities by the national and provincial governments. Reliable and adequate data on matters such as funding and coverage in this field is lacking (DPME & DBE, 2013:6).

Overall, the government's plan for universal access to Grade R led to a rapid expansion of Grade R. However, Van der Berg, Girdwood, Shepherd, Van Wyk, Kruger, Viljoen, Ezeobi and Ntaka (2013:2) argue that the rapid expansion led to "virtually no measurable impact for the poorest three school quintiles" Kotzé (2015:2) contends that the poor quality of Grade R provisioning is a result of the poor quality of ECD facilities and the fact that Grade R has been incorporated in an education system that already suffers from numerous failures. The report from the DPME and DBE concluded that the impact of Grade R in South Africa was insignificant in low-income areas although, for schools in high-income areas, there was some impact in terms of children's performance (ETDP SETA, 2019:68). The poor impact of Grade R in South Africa contradicts international studies that typically promise positive returns for ECD intervention.

4.4 Final Lessons on ECD Interventions

Having reviewed the literature on various ECD interventions in this chapter, the next section attempts to extract lessons from these experiences that could prove critical to the successful implementation of an ECD intervention.

4.4.1 Extensive Investment

High-quality programmes require extensive funding or fiscal commitment. To justify the high cost involved, Waldfogel (2015:9), Heckman (2006:1901) and others argue that ECD interventions pay for themselves several times more than the initial investment in the long term. Extensive investment also enables the cost of preschool education to be waived or subsidised for disadvantaged children to avoid their parents paying high fees. Extensive funding was part of the reason that the Perry PreSchool Project out-performed most of the interventions reviewed. Abolishing fees would widen access for all members of society, but especially the poor. On the other hand, implementing an ECD programme with constrained funds leads to virtually no measurable benefits for the children. The negative impact of limited funds is evident in South Africa and Ghana, where rapid expansion caused resources to be spread too thinly.

4.4.2 Subsequent Investment

ECD interventions ought to be followed by subsequent educational investment. In the absence of subsequent investment, the initially accrued short-term benefits often confirmed in test scores fade. Following the capital formation theory, under the dynamics of complementarity, early investment has to be followed by later investment for the initial investment to be productive (Cunha et al., 2005:5). Without subsequent investment, later schooling can undo all the cognitive and non-cognitive skills accrued in the intervention. Subsequent investment does not only refer to the facilities component but the household component as well. If the parents were actively involved in the learning of their preschool children, that method has to continue throughout schooling. Because of the threat of losing the initial gains of the programme, the Head Start programme planned to introduce a 'Follow Through' programme in 1967 that never materialised as planned. Subsequent investment was also extended into primary schooling in the Madrasa preschool programme. The rationale here is not that the government should not invest in other tiers of education but rather that the subsequent investments will be inefficient if ECD investment is neglected.

4.4.3 Trained and Qualified Staff

Practitioners or teachers are critical to a successful ECD intervention as successful ECD programmes require highly trained and competent staff (Waldfogel, 2015:9). The teachers employed in the Perry PreSchool Project were highly trained and qualified, contributing to its success, whereas the lack of qualified practitioners is partly why South African Grade R has not produced the expected educational returns. Qualified practitioners cannot be attracted and retained due to unfavourable working conditions and the fact that practitioners do not enjoy the benefits at the disposal of primary school teachers from Grade 1.

4.4.4 Child-Centred Curriculum

The Perry PreSchool Project developed a curriculum relying on the work of Jean Piaget that views the child as an active learner. Over the years, the curriculum was adapted for several interventions, including the Head Start and Madrasa programmes. The curriculum is founded on the following of active learning principles, a carefully planned and friendly environment, a daily routine, reviews and adult-child interaction. The objective of the curriculum is to empower the child rather than merely 'speak over the child' and hence, teachers are facilitators guiding children to initiate and complete tasks.

4.4.5 Collaboration of Stakeholders

While the children are at the centre of the intervention, collaboration of parents, communities and practitioners is necessary. Strong collaboration among the stakeholders, excluding the children, is particularly evident in the Head Start, Perry PreSchool Project and Madrasa interventions. Collaboration ensures that household and facility-level factors that may impede early learning are addressed. For households, interventions included the targeting of low-income households and the involvement of parents as part of the outcomes for the programme. The families were encouraged to actively participate in their children's education.

4.4.6 Monitoring and Research

The programmes reviewed were monitored and evaluated throughout the years of their implementation. For example, the Madrasa programme carried out its first internal evaluation of the programme between 1993 and 1994 (Evans et al., 2008:10). Evaluating the programmes clarified the effectiveness of the programme in fostering cognitive and non-cognitive skills.

4.5 Conclusion

The USA was a pioneer of interventions in the ECD sector. The early efforts of the USA not only fostered the debate on ECD, but also produced empirical evidence to prove the merits of ECD. The long-term approach taken by the USA is noteworthy, whereby preschool interventions like Head Start and the Perry PreSchool Project were seen in the context of the 'war on poverty'. The fact that these two interventions ran concurrently allowed for a comparison of what worked and what didn't. The Spanish government revisited education legislation several times since its democratic transition, instituting various ECD policy reforms to achieve universal access for the second cycle. By contrast, developing countries have barely scratched the surface in both short-term and longitudinal interventions. The Madrasa programme operating in Uganda, Kenya and Zanzibar achieved a measure of success in providing ECD to disadvantaged children. Ghana became the first Sub-Saharan country to legislate and implement universal access to early childhood education in 2004. However, the high enrolments were coupled with a low-quality learning experience. In South Africa, the reception year has been associated with low quality and rapid expansion. Considering that the reception year was intended to be compulsory according to Education White Paper 5 and yet is still not compulsory, ECD development in South Africa is progressing at a snail's pace. The South African government has only partially implemented the recommendation of the ECD

pilot project of 1997 that concluded that the burden of early education should be shifted from caregivers to the state (Richter & Samuels, 2017:13). Although the government has extensively funded Grade R in comparison to the rest of ECD, the investment is not reaping positive effects because of low quality. The next chapter comprehensively examines what characterises an ECD facility in South Africa and the significant developments in ECD policy in the country.

CHAPTER FIVE: BACKGROUND ON ECD FACILITIES

5.1 Introduction

Chapter 5 contextualises the study by examining what an ECD facility is understood to be in South Africa, the current structure of ECD facilities as well as the legal aspects relevant to an ECD facility in terms of its registration and the minimum norms and standards applicable to its establishment and operations. It is noted that at the time of writing of the thesis there were significant structural and policy changes in motion in the ECD sector. Therefore, while the discussion below is based on the conditions current at the time of writing, the chapter concludes by mentioning some of the proposed policy changes in the ECD sector.

5.2 Key Definitions

This thesis has a focus on early learning. In South Africa, the term *early learning* usually applies to the period of development of children from birth to the start of schooling (Republic of South Africa, 2015:12). Early learning is guided by a caregiver and takes place in the household the child resides in and can also be provided by an ECD practitioner at an ECD facility.

Following the National Integrated ECD Policy of 2015, *early childhood development* is defined in South Africa as all services aimed at the development and well-being of children, including their nutrition, health, protection and early learning (Republic of South Africa, 2015:11). An ECD facility is a partial care facility that provides an early childhood programme that encompasses early learning and the development of children before they start formal schooling (Republic of South Africa, 2015:11). Depending on its registration status, an ECD facility may admit babies, toddlers and/ or preschool-aged children. Within this definition, an ECD facility can refer to a crèche, a day-care centre for young children, a preschool and/ or an after-school care facility.

5.3 The Current Structure of ECD Facilities in South Africa

ECD services in South Africa are a shared responsibility among at least three state departments, namely the DBE, Department of Health (DOH) and the DSD, the latter department standing at

the forefront of ECD provision (DSD & UNICEF, 2006:16–17). Within this multisectoral structure of ECD, there is always the possibility that shared responsibilities increase opportunities for communication failures and neglect of responsibilities (Kotzé, 2015:14). With three departments in charge of ECD services at times, people may not know which department is mandated with which tasks.

ECD facilities may be fully registered, conditionally registered and unregistered. Fully registered facilities comply with all the minimum norms and standards explained in section 5.5 below. Conditional registration, valid for one year and including a government subsidy, was introduced after Members of Parliament expressed concern that many ECD facilities would not be able to meet the then proposed ECD norms and standards. Conditional registration allows ECD facilities that fall short of the minimum ECD norms and standards the opportunity to address their deficiencies and attain compliance with the ECD norms and standards (Berry, Jamieson & James, 2011:40). With conditional and fully registered ECD facilities, there is the assurance that they meet or are attempting to meet the prescribed norms and standards of an acceptable ECD facility. With unregistered facilities, it cannot be assumed that they comply with the norms and standards of an ECD facility or that the children are adequately stimulated, protected and nurtured. Without these assurances, the government does not allocate subsidies to unregistered ECD facilities. Despite their inferior status and resourcing, unregistered facilities are essential institutions for the children of poor and vulnerable households.

5.4 ECD Facility Regulations: Minimum Norms and Registration

All the minimum requirements and steps for registration are outlined in detail in the DSD Guidelines for Early Childhood Services. The minimum ECD norms and standards as well as the requirements for registration of an ECD facility are summarised below.

5.4.1 ECD Facility Regulations: Minimum Norms and Standards

Compliance with the minimum norms and standards of an ECD facility is a prerequisite for registration. The extent to which an ECD facility complies determines the outcome for registration and the type of registration the facility might receive. Minimum norms and standards for ECD facilities provide for the structure of the premises and equipment, personnel, active learning, management, health, safety and nutrition and parental involvement. The ECD

Guidelines further warn that a facility may be closed down under specific circumstances, namely, an unsafe building or structure, physical abuse of children, insufficient and incompetent personnel, jeopardising of children's health, lack of a stimulation programme or contravention of children's rights (DSD & UNICEF, 2006:31).

5.4.1.1 Premises and Equipment

Concerning premises and equipment, the emphasis is placed on their safety, cleanliness and space. The requirements of safety demand that children are not exposed to physical, emotional and social harm. Hence, precautions must be taken to protect children from the threat of fire, accidents and any possible hazards. To this end, the physical structure of the building has to be safe, weatherproof and well ventilated. In most cases, only a formal structure would satisfy the physical structure requirements. In addition to safety, there should be developmentally appropriate and adequate equipment that accommodates the number of children serviced. Moreover, an ECD facility ought to have enough indoor and outdoor space for the activities expected (DSD & UNICEF, 2006:34).

5.4.1.2 Nutrition

Children should be served a meal at least once a day while they are at the facility. However, the ECD facility is not obligated to provide the food. Either or both the ECD facility and the carer of the child should provide the food (DSD & UNICEF, 2006:34). This might mean a substantial commitment for poor households and facilities that they might not be able to meet, which means that children from poor households without adequate nutritious food may end up attending an ECD facility in a poor community that is also unable to provide adequate nutritious meals.

5.4.1.3 Management

There needs to be a management structure to administer administrative systems and procedures (DSD & UNICEF, 2006:35). Management is vital for the long-term function as well as the daily operation of the facility. The principal typically undertakes most of the managerial responsibilities. Managerial activities include overseeing daily operations and staff, quality assurance, planning and communication with parent clients, the state, suppliers and service providers.

5.4.1.4 Parental Involvement

The policy on child development in the country recognises the critical role of caregivers in fostering child development. Caregivers cultivate child development through stimulation, support and care. With both families and ECD facilities attempting to nurture and unlock the potential of the children, good communication between them is needed. Communication enables the caregivers to communicate any dissatisfaction they may have with the facility (DSD & UNICEF, 2006:35).

5.4.1.5 Practitioner Qualifications

To become a qualified ECD practitioner, an applicant must have a National Certificate in Early Childhood Development at National Qualification Framework (NQF) Level 1 to 6 of the South African Qualifications Authority, or any relevant ECD qualification or a minimum of three years' experience in implementing ECD programmes (Berry et al., 2011:45). Practitioners, including principals, are further encouraged to undertake continuous training (DSD & UNICEF, 2006:35).

5.4.1.6 Active Learning

ECD facilities are not merely premises to keep children; they cultivate and develop children's cognitive and non-cognitive skills. The ECD facility should construct a learning programme that delivers developmental opportunities for children to reach their potential (DSD & UNICEF, 2006:35). Rather than children passively absorbing information, the Guidelines advocate active learning as the principal underpinning the engagement of children in the learning process.

5.4.2 ECD Facility Regulations: Registration

Registration for an ECD facility is two-fold. Firstly, the ECD facility must register as a partial care facility. Secondly, it must register its learning programme (Berry et al., 2011:32). An ECD learning programme can simply be understood as a curriculum as it indicates planned activities that will be undertaken by the facility to develop the children and provide learning (Berry et al., 2011:24). An ECD facility is required to apply for registration with the relevant provincial DSD (DSD & UNICEF, 2006:39). Registration is part of quality assurance as it ensures that an ECD facility is safe and appropriate to cultivate child development through the transfer of

knowledge, attitudes and skills. The following steps are involved to register an ECD facility in South Africa.

Step 1: Contact Provincial DSD Personnel

A person intending to establish an ECD facility establishes communication with the respective provincial DSD which is represented by a social worker or an authorised DSD official. During this contact, the following are discussed: registration requirements, registration procedures, Children's Amendment Act of 2007, minimum standards, application form, subsidy procedure and monitoring and evaluation of an ECD facility (DSD & UNICEF, 2006:36).

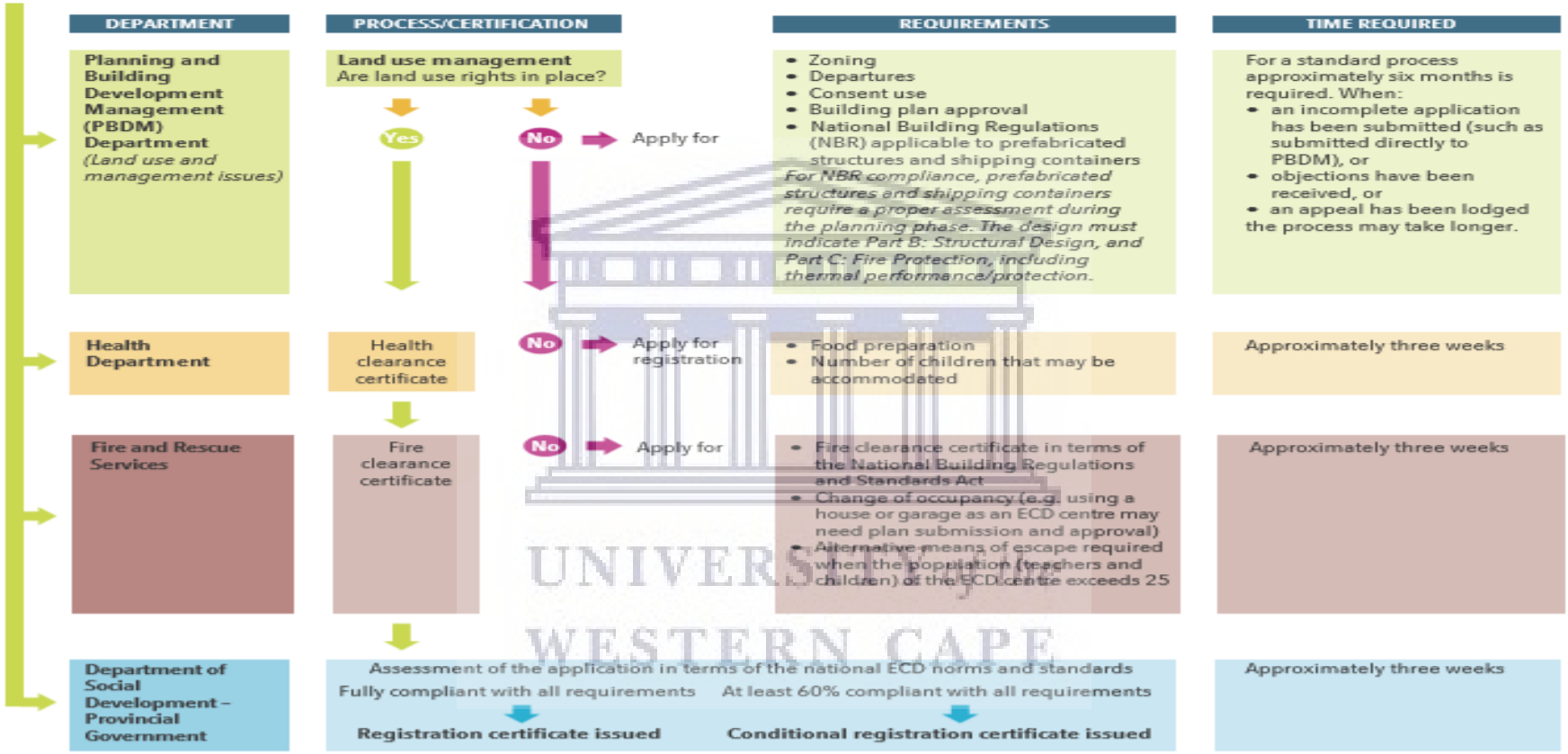
Step 2: Applicant Receives Application Form

The applicant receives an application form from the DSD official. The application form is to be submitted with supporting documents that include a menu, daily programme, needs assessment which justifies the need for the facility, and the lease agreement, proof of ownership or permission to occupy the land. Supporting documents in terms of human resources must include job descriptions, and grievance and disciplinary procedures (DSD & UNICEF, 2006:36).

Step 3: DSD Informs Other Key Departments

When the completed application has been submitted along with the supporting documents, DSD visits the premises of the proposed ECD facility. DSD also updates other relevant departments in writing, including Planning and Building Development Management (PBDM), the DOH, as well as the local Fire and Rescue Service. The correspondence acknowledges receipt of the application to establish an ECD facility (DSD & UNICEF, 2006:37). The activities involved in Step 3, which represent the bulk of the registration process, are illustrated in figure 5.5.2.

Figure 5.4.2: Registration Process of an ECD Facility



Source: City of Cape Town (2015:20).

The mandate of the PBDM is to investigate whether the applicant has the right to use the land as an ECD facility. Especially in low-income residential areas, the applicant often does not have the right to use the land as an ECD facility. In that case, the applicant must apply for zoning and building plans, a time-consuming process that may take six months to complete. The next department to evaluate the registration application is the DOH. The responsibility of the Health Department is to issue a health certificate or clearance after considering how the food will be prepared and the number of children the premises can accommodate. This means that facilities do not have the sole right to decide the number of children to enrol. This process may take three weeks to be completed. The mandate of the Fire and Rescue Service is to ensure the safety of the children and the staff. This department assesses the safety of the physical structure in terms of compliance with the National Building Regulations and Standards Act, Act 103 of 1977. This may also take three weeks to complete.

Figure 5.4.2 depicts a simple, linear process of an applicant progressing seamlessly from one department to the next until registration is granted. The process is, however, significantly complicated for ECD facilities by the realities of operating in low-income areas. The figure assumes complete information is available, that applicants know the process, that they can make contact with DSD, submit the required documents and know which the departments and sub-departments are involved and how to access them. However, people living in poor communities rarely engage with government bureaucracy. The figure also does not explicitly show the necessary commitment of monetary resources required by the applicant. In the registration process, the application form and consultation with the DSD are the only services the applicant receives for free. The applicant is required to fund the costs of zoning or rezoning, producing and submitting completed building plans, construction and complying with the requirements of the fire department and DOH as well as the purchase of all equipment. For example, the applicant may have to apply to PBDM/ land department to rezone the property from use as a residential house to business use as an ECD facility (Berry et al., 2011:11). Depending on the local regulations, rezoning may involve physical changes to the structure, different rates tariffs, rules for hygiene, noise and waste disposal, etc. When the (re)zoning process has been passed, the owner or manager receives a (re)zoning certificate to that effect. Berry et al. (2011:11) state that owners/ managers are typically liable to pay a significant amount of money when completing the process before receiving the (re)zoning certificate. This process is an even greater stumbling block for poor ECD facilities in informal settlements, which may be unable to rezone the land as they have illegally occupied the site.

Fire detection and prevention is an unavoidable area of expense in the registration process. The fire and rescue department assesses the safety of the premises and prescribes changes to minimise fire risks. For example, it may decide the building requires a fire-resistant ceiling, an alarm or a particular level of fire extinguishers, all large expenses for an ECD facility, that serves a low-income community and is not receiving any subsidy. Failure to comply with the risk assessment will halt the registration process. Finally, the figure assumes a level of efficiency at the DSD that in reality is often plagued by delays in processing the stages of registration. Delays in registration will delay not only the business commencing operations but affect its projected income in fees and the subsidy as well as planned expenditure.

Step 4: Grant Conditional/ Full Registration Certificate

The DSD must receive a health clearance certificate, safety certificate and other documents that include administrative structure, financial information and the learning programme to grant conditional registration. DSD officials complete a checklist to ensure that the requirements outlined in steps 2 and 3 above are met. If the one-year approval is given, the subsidy will be awarded to assist the facility to meet the minimum standards. To be approved, the facility needs to attain minimum standards in the following: administrative and financial management systems; ensuring a quality service is provided to children which embodies physical, intellectual, emotional and social care; and, the satisfactory physical condition of the facility as well as the general function of the facility. While the above are not met, the DSD officials will continue to consult with and review the facility (DSD & UNICEF, 2006:37).

Step 5: Monitor ECD facility

Assuming the one-year conditional registration was granted, DSD officials will monitor and conduct an assessment of the facility to determine whether to upgrade the registration to full registration valid for two years. Should the facility fail to meet the stated standards and conditions, the conditional certificate and the subsidy will be extended for a further six months. The six-month extension is a grace period in which the facility is meant to satisfy all the ECD norms and standards. If the six months lapse and the facility has not complied, the facility faces possible closure and the loss of the subsidy (DSD & UNICEF, 2006:37).

5.5 ECD in the Western Cape

Social development implies improvement in the quality of people's lives, especially the lives of poor and vulnerable groups within the society (City of Cape Town, 2015:18). Children from low-income households and communities may be considered at the forefront of vulnerability. Although ECD can be fostered at home, the main models of ECD provisioning in the Western Cape are ECD facilities. Recognising the dominance of the ECD centre-based model in the province, the City of Cape Town adopted the Social Development Strategy (SDS). The overarching objective communicated in the SDS is to increase the number of children attending good ECD facilities through assisting unregistered ECD facilities in low-income areas (City of Cape Town, 2015:18). In other words, the City has adopted a policy to assist ECD facilities that are excluded by the ECD Policy because they do not meet the minimum norms and standards and thereby qualify for registration.

Because of the neglect of the ECD sector, the responsibility of ECD provisioning in the province has fallen on the caregivers (Western Cape Government, 2013:12). It is therefore unsurprising that the provisioning of ECD in the province is characterised by gross inequalities in terms of access and quality, whereby children from affluent households have access to high-quality ECD services, whereas the much larger population of children living in poverty either have access to poor-quality ECD services or access none at all (Western Cape Government, 2013:11).

5.6 Future ECD Policy

In the State of the Nation Address of 2019, the South African President Cyril Ramaphosa made two important announcements regarding ECD policy in the country; namely, the migration of the ECD responsibilities of DSD to the DBE and the introduction of pre-Grade R (Presidency of the Republic of South Africa, 2019). These policy developments have received both positive and sceptical reactions in the sector.

5.6.1 The Migration of ECD Facilities

The migration of the ECD responsibilities of DSD to the DBE is likely to lead to an increased budget for ECD facilities, improved workforce, closer alignment to the curriculum with the Foundation Phase and the raising of the importance and status of ECD to approach the other tiers of education in the country (Hall et al. 2019:7). Historically, one can argue that the

government has not seen ECD as equal to the other tiers of education nor prioritised early learning and formal education in the same way. Formal education has been seen as a critical development policy area by the state with most of the years of formal schooling legally enforced as compulsory education. Moreover, early learning under DSD is poorly funded in comparison to formal education under DBE. According to the 2019 Budget Review, approximately R260 billion was distributed to the DBE, while over R22 billion was allocated to the provincial DSDs responsible for early learning, mostly for funding community-based preschools (National Treasury, 2019:55–56). The budget for the DBE is nearly 12 times the funding allocated to provincial DSDs for ECD. Therefore, migrating to DBE might exert positive pressure on the government to increase funding for ECD services and facilities. Locating ECD facilities under the DBE might increase the perceived importance of ECD in the country.

Moreover, supporters of the migration from DSD to DBE cite the supposed higher efficiency and capacity of DBE as opposed to DSD (Harrison, 2019: para 4). It is envisaged that the DBE has a higher capacity to provide ECD services since it already accommodates Grade R in primary schools. Finally, integrating early education with formal education might enable closer alignments with the respective curricula and reduce the early deficiencies in numeracy and literacy prevalent in the Foundation Phase (Harrison, 2019: para 3). On the other hand, ECD is complementary but remains different from schooling. ECD combines early learning, nutrition and emotional development. With ECD migrating to the DBE, there is a risk that ECD would be treated the same way as formal education, stripping it off its creativity, play and imaginary elements as well as disentangling the package of care and learning. The fear is that upon migrating, DBE will prioritise early learning and neglect other ECD components. To this end, Harrison (2019: para 12) warns that pre-Grade R cannot merely be an extension of formal school years.

Since the declaration by the President regarding the migration, the state has been criticised for the lack of clarity and a clear plan on how the migration will be implemented with ECD professional Professor Eric Atmore stating that the migration is an untested concept (cited in Okoye, 2019: para 11).

Another commentary from the Tshikululu Social Investments, noted that migration will also not address the key issues facing ECD facilities and the lack of coordination in the different departments involved in ECD and there is a risk that the migration will merely shift poor service

delivery from one department to another (2019: para 14). Finally, ECD provisioning in the country is enshrined in the Children's Act of 2007. While the Act acknowledges the multisectoral nature of ECD, it assigns the overall responsibility of ECD to DSD, including administrative responsibility, support and monitoring of ECD facilities. The Act will have to be amended to accommodate the planned migration (Tshikululu Social Investments, 2019: para 6). The main question is whether the migration will positively impact on the current state of ECD and address the roots of the problems facing ECD services and facilities in South Africa, which do not all emanate from the provincial DSDs. This question is crucial, considering the costs involved in the migration.

5.6.2 Pre-Grade R

The NDP first proposed the introduction of universal access to pre-Grade R (Kotzé 2015:2), which was defined as a level of coverage at which at least 75% of the country's four and five-year-olds are receiving early education and care (Kotzé 2015:1). The commitment by the South African government to ensure access to pre-Grade R was confirmed by the President in the 2019 State of the Nation Address. The promise of pre-Grade R is a significant milestone in ECD policymaking in South Africa. Although there is a near consensus on the importance of early education/ learning, the quality of early learning remains an issue in the country. The report by the ETDP SETA on skills raises concerns about the adequate supply of qualified practitioners to facilitate pre-Grade R (ETDP SETA, 2019:107). The ECD sector already does not have enough qualified practitioners. With pre-Grade R as an official grade, a substantial additional workforce will be required in the ECD sector. It follows that there should already be sufficient training opportunities available to upgrade the current unqualified workforce.

Lacking details of the envisaged implementation of pre-Grade R, Harrison (2019: para 11) speculated about whether pre-Grade R would use the existing school infrastructure, as with Grade R. In the light of the inadequacy of the existing school infrastructure, the author questions the wisdom of using the infrastructure at schools for pre-Grade R, noting that this infrastructure was not intended to accommodate younger children. The implication is that the government has to build new infrastructure for the pre-Grade R children.

There is some merit in the view that in focusing on Grade R and now pre-Grade R, the country is ignoring the prevailing view in the early learning and ECD sector that brain development in children is most critical in the ages of 0–3 years, a period of ECD when the child's brain is most

responsive to cognitive and non-cognitive development (Hall et al., 2019:7). By definition, early learning starts from birth and continues until the child starts formal schooling.

On examining the readiness of the country to provide pre-Grade R, Kotzé (2015:5) warns that pre-Grade R and Grade R are at risk of being reduced to watered-down versions of Grade 1, disregarding the importance of play and other non-cognitive skills. Preschooling should complement rather than merely copy formal schooling. The author suggests the following recommendations for the implementation of pre-Grade R (Kotzé, 2015:24):

- Extensive investment in infrastructure, and learning and teaching support materials;
- Employment of competent teaching staff;
- Extensive funding to train existing practitioners;
- Large-scale capacity at national, provincial and local departments to ensure ECD facilities and practitioners receive consistent support for curriculum implementation;
- Clarifying the precise position of the ECD sector and where it fits within the overall skills development framework in the country.

The misgivings about pre-Grade R is understandable, being based on the current unsatisfactory delivery of Grade R and the entire Basic Education system as well as conditions in private ECD facilities.

A joint Parliamentary meeting in March 2020 between DSD and DBE recorded by the Parliamentary Monitoring Group (PMG, 2020) provided clarity on some of the issues raised concerning the migration of the ECD responsibilities to DBE. In the meeting, the Members of Parliament stated that the migration would not lead to an overnight radical increase in the funding for ECD (PMG, 2020:1). Secondly, the ECD sector would continue to use the hybrid model of private ECD facilities and public schools, with pre-Grade R remaining at ECD facilities. Pre-Grade R would be subsidised using the same funding model per child used for Grade R, of R15 per child per day for 264 days (PMG, 2020:1). Finally, practitioners would not be employed by the DBE but remain employees of their facilities. These explanations appeared to substantiate much of the scepticism in the sector regarding the migration and the introduction of pre-Grade R. If nearly everything was to remain the same, what positive impact would the proposed policy reforms bring? It may be argued, as Kotzé (2015) did above, that the reforms needed in the sector should be more along the lines of increased funding, expanded infrastructure, qualified practitioners and better working conditions to attract and retain the

qualified practitioners. Without such interventions, it is unlikely that the quality of and access to ECD services in the country will improve.

5.6.3 New Categorisation System Proposed

Given the misgivings raised by some researchers and participants in the ECD sector about the government system of subsidising ECD facilities (see sub-section 3.2.2 and Chapter 7), including that it is counterproductive (Kotzé, 2015:14), a proposal by the Housing Development Agency (2014:11) to revise the subsidy funding structure is a welcome addition to the policy debate and informative in revealing some of the policy challenges facing the sector.

In the current policy, all unregistered ECD facilities are denied government funding support. Only once a facility has navigated an arduous, time-consuming and expensive registration process involving the DSD and several other departments and authorities, and satisfied a host of requirements based in the ECD norms and standards and ECD Policy, and been approved for registration by the DSD, can the facility hope to receive the support of a government subsidy. The subsidy is linked to the number of children cared for, is conditional and subject to periodic review. Failure to maintain norms and standards will lead to deregistration and the loss of the subsidy. Rather than the simple all or nothing system, the Housing Development Agency mooted a new system to facilitate informal and unregistered facilities to become registered. The proposal includes a new categorisation system that would be the basis of a tiered funding system. The identification and mapping of the facilities would assist in the broader categorisation of the facilities. The Housing Development Agency (2014:11) proposes that facilities fall under three categories and six subcategories. The broader categories enable the identification of the needs of the facility as well as the support it requires from the government.

Of the three broad categories, Category A includes fully and partially registered facilities or facilities that have a high potential to achieve this quickly. Category A facilities would still require investment and support from all spheres of government for nutrition, programming and training. Ongoing investment would ensure that the facilities operate and provide high-quality early learning and care to the children. Only a few facilities, if any, in low-income areas and especially informal settlements would qualify as Category A facilities. Category B refers to medium-functioning facilities that provide basic or acceptable informal ECD services. The owners of these facilities would have invested in the facility but still lack in some norms and standards that would require investment to ensure compliance. Category C comprises all the

unacceptable facilities of the lowest quality. In this case, there would be two appropriate responses. Those that maintained some standards and were deemed capable of improvement would be provided with emergency investment aimed at mitigating safety and health threats, especially if there were no alternative facilities for children at risk. Where a facility didn't show promise of improvement and where there were better existing alternatives in the community, it would be closed. The three categories are further distinguished into six sub-categories with a clear mandate of how to assist each sub-category of facilities. The main purpose of the categorisation is to establish a relationship between facilities and the government that allows all facilities a fair opportunity to improve and ultimately provide high-quality ECD services. Importantly, the government would no longer stand at a distance and wait for under-resourced facilities to miraculously comply with an exhaustive list of ECD norms and standards. The identification and categorisation of facilities in this proposal, as well as the introduction of consistent assistance by the government before facilities have reached the desired state, would particularly benefit ECD facilities in informal settlements and communities like Philippi. These facilities are more likely to be informal structures falling in Category B or C.

5.7 Conclusion

This chapter briefly discussed the structure of ECD services in the country and the Western Cape and highlighted the role of government in the ECD sector. The South African government has used regulation and policymaking to effect change in this sector. This is mainly evident in the ECD norms and standards which facilities have complied with to have their registrations approved and thereby access government funding. The norms and standards are critically important as they establish acceptable quality standards for all the key operational areas of ECD facilities and enable the facilities and officials to strive towards accepted performance benchmarks. On the other hand, meeting the norms and standards, which are rigidly applied, is largely problematic for under-resourced, privately-funded ECD facilities in disadvantaged communities that have neither investors nor capital to upgrade their facilities and staffing to the levels required. Unintentionally, the requirements further disadvantage the already disadvantaged as most ECD facilities will remain unregistered and therefore unsubsidised. The conclusion is unavoidable that policymaking in the ECD sector has rendered ECD services in most of the country unequal, inadequate and inaccessible. The next chapter explains the research methodology adopted to investigate the facility and household-level factors impacting ECD delivery in the Philippi community.

CHAPTER SIX: METHODOLOGY

6.1 Introduction

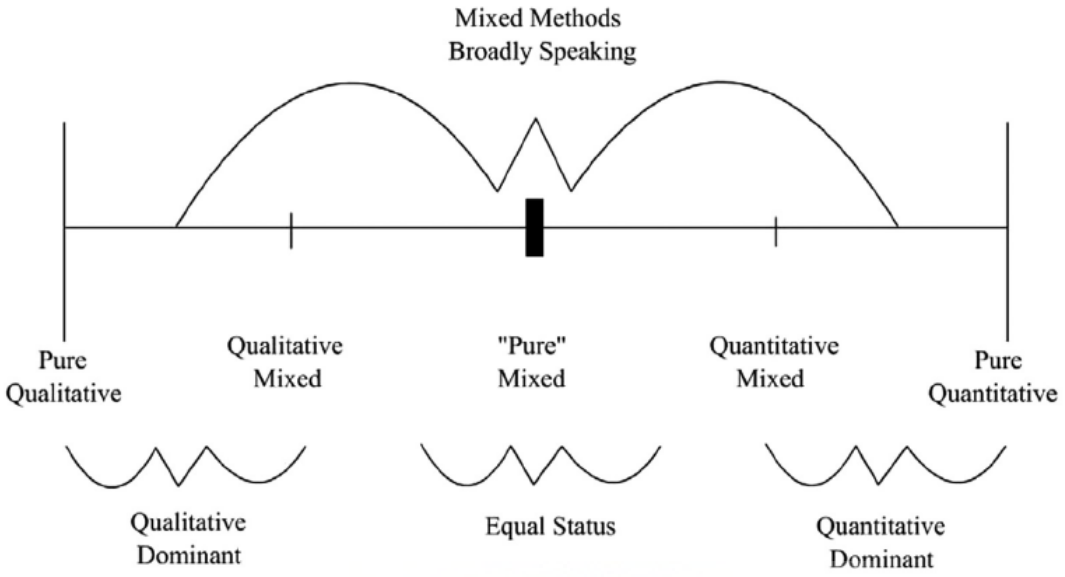
Selecting a suitable methodology is key in empirical studies. Firstly, the methodology is a blueprint of how the various research questions were answered. Secondly, the methodology preserves the scientific integrity of the study because it provides a systematic account of the methodological process employed in reaching the findings and provides insights into the thought process of the researcher while conducting the research. This chapter discusses the overall research methodology employed in the study, the Consolidated Criteria for Reporting Qualitative Research (COREQ) framework, data analysis for quantitative data, ethical clearance as well as the limitations of the study.

6.2 Research Methodology

The researcher employed a mixed methodology for this thesis, combining qualitative and quantitative methodology. Using a mixed methodology enabled an in-depth study of the factors that affect early learning development in Philippi, from the perspective of the two important stakeholders, namely ECD facility personnel and the caregivers. Complementing the qualitative nature of the in-depth discussion, quantitative data allows for measurement and objective comparison. A mixed-methods approach can therefore offset the limitations inherent in each methodology (Malina, Norreklit & Selto, 2011:6).

Johnson, Onwuegbuzie and Turner (2007:124) argue that there are three types of mixed-methods research, namely qualitative-dominant research, equal status research and quantitative-dominant research. The varying degrees of the three mixed methods are illustrated below.

Figure 6.2: Types of Mixed Methods



Source: Johnson et al. (2007:124).

The equal status is denoted as a pure mixed method, in which there are an equal treatment and presentation of both quantitative and qualitative methods. In the remaining two types of mixed methods, there is an overrepresentation, respectively, of either the qualitative method or the quantitative method. For instance, the qualitative-dominant study, often denoted as QUAL+ quan research, emphasises the qualitative method. Johnson et al. state that it "relies on a qualitative, constructivist-poststructuralist-critical view of the research process, while concurrently recognising that the addition of quantitative data and approaches are likely to benefit most research projects" (2007:124).

This thesis follows a qualitative-dominant research methodology.

6.3 COREQ Framework

Owing to the dominance of the qualitative method within the mixed methodology, the thesis employed the COREQ framework found in Tong, Sainsbury and Craig (2007) to guide the methodology of the research. The COREQ framework is used to guide qualitative-dominant studies that typically employ interviews and focus groups for data collection. It provides a checklist to be followed when analysing and reporting on qualitative-dominant studies (Tong, Sainsbury & Craig, 2007:351). Adapting the COREQ framework, the participant selection, data collection and data analysis employed by the study are discussed below.

6.3.1 Study Design

6.3.1.1 Participant Selection

It is widely known that, due to costs and time constraints, when researchers cannot include the entire population in the study, a sample is extracted. Two critical decisions follow the decision to choose a sample: deciding on how to select the sample, i.e. sampling scheme, and deciding on the number of research participants, which is the sample size (Onwuegbuzie & Collins, 2007:281).

Sampling Schemes for ECD Facilities

Onwuegbuzie and Collins (2007:238) define the sampling scheme as the strategies that are employed in the study to select the study unit. To select the ECD facilities, the researcher used non-random sampling. Non-random sampling includes purposive, snowball and quota sampling (Babbie & Mouton, 2001:166). Purposive sampling allows the researcher to deliberately select sources of data: in this case, ECD facilities that were likely to provide rich information relevant to answering the research questions (Babbie & Mouton, 2001:166–167; Onwuegbuzie & Collins, 2007:287). The selection of the sample may also be based on researcher judgement and available resources. Relying on purposive sampling, the researcher further attempted to have an equal sample of registered[4] and unregistered facilities. Finally, the researcher ensured the selected ECD facilities were not close to each other.

Sampling Schemes for Caregivers

In selecting the caregivers, the researcher used convenience sampling. Convenience sampling is a non-random sampling strategy in which the sample is chosen based on accessibility to the researcher. Convenience sampling was employed because the researcher could not establish access to all the caregivers. Because the majority of the caregivers do not drop off or fetch their children from the facility, the researcher was confined to considering caregivers that could be accessed at the respective facility as the available caregivers. Applying convenience sampling, the researcher approached the caregivers regarding the research and, on obtaining their consent, scheduled appointments to conduct the interviews at the caregivers' homes.

[4] Although the DSD in South Africa distinguishes between conditionally registered facilities and fully registered facilities, the two were combined under 'registered facilities'" in this thesis.

Method of Approach

The principals were approached in person. The researcher visited the facilities and asked the principals to participate. Upon receiving the consent of the principals, the researcher next directly approached the practitioners at the ECD facilities. The researcher used the same in-person approach to recruit the caregivers, approaching the caregivers when they were dropping off their children in the morning or fetching them in the afternoon.

The Sample Size for ECD Facilities

Onwuegbuzie and Collins (2007:289), borrowing from Sandelowski (1995), state that when conducting a mixed methodology study, the sample size should not be so small that data saturation is not achieved and should not be so large that it becomes difficult to conduct a conducive analysis with enough depth. The overall population of facilities in Philippi that could be established was 59 ECD facilities. The researcher selected 20 of the 59 facilities as the sample for the study – 10 registered ECD facilities and 10 unregistered ECD facilities. The total number of 59 facilities could not be verified as the actual number of facilities in Philippi as many are presumed to be unregistered and less formal. The researcher obtained the total by locating all visibly identifiable ECD facilities in a drive through the study area, making every effort to visit each street in Philippi. Since it is likely that every operating ECD facility, registered or unregistered, would need to physically identify their location to their market (the name of the facility, bright paint colours, murals and visible play areas are typical examples of this), the 59 facilities observed may be considered a close approximate of the number of ECD facilities that exist in the Philippi sub-areas. For each facility, the interviews were conducted with the principal and the practitioner responsible for the highest grade, which was either Grade R or pre-Grade R.

The distribution of the 20 ECD facilities chosen from the different parts of Philippi is shown in the table below.

Table 6.3.1.1: Philippi Sample by Sub-area

	Acacia	Brown's Farm	Lower Crossroads	Luzuko Park	Marcus Garvey	Marikana	Thabo Mbeki	Total
Total population	6	22	19	2	4	3	3	59
Chosen sample	2	4	8	1	1	2	2	20

Source: Primary data.

Non-Participants

About 18 of the facilities refused to participate in this research. Some of the facilities refused when the researcher first approached them to participate in the interviews, while others initially agreed but later withdrew when the researcher attempted to confirm the appointment by telephone. Reasons for refusing included the facility being too busy but most of the refusals were from principals of unregistered facilities who were reluctant to participate because of the fear of being 'exposed' since they were operating their facilities illegally. Even after the researcher assured them of anonymity and confidentiality, they would not participate.

6.3.1.2 Setting of Data Collection

The interviews with the ECD personnel took place in their respective facilities. In cases where the principal had an office, the interview took place in the office. In the absence of an office, interviews were conducted in either a classroom or a room in the principal's house. The practitioners' interviews took place in their classrooms. Finally, the researcher made appointments to meet with the caregivers at their homes at convenient times. In these cases, the caregivers also gave their telephone numbers and home addresses. Subsequently, the researcher visited the caregivers' homes and conducted the interviews.

Data Collection

Data Collection Tool

The data was collected through four questionnaires: the ECD Practitioner questionnaire, Principal questionnaire, ECD Facility Observation questionnaire and Caregiver questionnaire (see Appendix C). Except for the observation questionnaire, all the questionnaires were designed to facilitate semi-structured interviews. Semi-structured interviews guide the researcher to remain on course during the interview by following questions that were prepared

ahead of time. However, they also provide flexibility for the researcher to probe for further clarity.

For the principal and the practitioner questionnaire respectively, the researcher interviewed the ECD facility principal and the ECD practitioner teaching the highest grade in the facility. Serving as a guideline for the compilation of the facility questionnaires, the researcher drew on the 2004 nationwide Audit of ECD Centres (DSD, 2014) and the Western Cape 2009 Audit of ECD Quality (Western Cape DSD, 2010) as the audits shared somewhat similar mandates to this research thesis, although different in scope, of investigating the state of ECD facilities as well as their quality. To further address the research objectives of this thesis, the researcher constructed questions centred on facility-level factors which the reviewed literature argued impact on early learning. For the practitioners, the following facility-level factors were investigated.

Table 6.3.1.2a: Factors investigated in the Practitioner Questionnaire

Demographics • Age, population group, sex
Professional competence • Educational qualification • Relevant work experience • Training attended
Class dynamics • Class size • Struggling children • Class attendance • Learning resources
Curriculum • Use of curriculum
Parental involvement • Encourage parental involvement
Challenges and areas of improvement

Principal Questionnaire

The principal questionnaire also investigated facility-level factors that impact early learning development. However, the principals responded to questions related to the issues of management of the facility, finances, parental involvement and the impact of the ECD Policy.

Table 6.3.1.2b: Factors investigated in the Principal Questionnaire

Demographics • Age, population group, sex
Professional competence • Educational qualification • Relevant work experience • Training attended
Parental involvement • Parent meetings
Impact of ECD Policy • Barriers to registration
Sources of income • Fees • Subsidies and donations

Observation Questionnaire

Observation is a complementary tool to other research methods of data collection. Studies are not precluded from relying on observation as the only research method. However, observation is often employed in studies to complement surveys and interviews. In the current study, the observation method was supplementary to the interviews and was expected to enhance understanding of the ECD facility sector in Philippi. Using the observation questionnaire, the study primarily aimed to identify the role of the physical environment. Hence, the observation questionnaire investigates the state of the infrastructure at the selected facilities as well as their overall quality.

Table 6.3.1.2c: Factors investigated in the Observation Questionnaire

Living environment • Mostly formal/ informal?
State of infrastructure • Type of building • Safety: gate, fence, hazardous objects in the yard? • Play area • Health: types of toilets • Overcrowdedness: children demarcated? • Outside appearance
Overall quality • Poor, fair, good, very good

Caregiver Questionnaire

The caregiver questionnaire was used to investigate the second element of the thesis, which is the impact of household-level factors on early learning development. The questions were constructed based on the reviewed literature. For example, Taylor and Yu (2009:6) argued that educated parents are more likely than uneducated parents to initiate and value preschool education. Parental education is thus a significant factor in determining a child's access to early education. Hence, the caregiver questionnaire includes questions on the socioeconomic status of the caregiver. The researcher also drew on the 2018 GHS administered by Statistics South Africa for a section on stimulation at home.

Table 6.3.1.2d: Factors investigated in the Caregiver Questionnaire

Child and caregiver demographics • Age, population group, sex
Socioeconomic status of the caregiver • Educational attainment • Economic activity • Household income • Poverty status
Early learning at home • Stimulation activities • Learning material at home
ECD facility • ECD facility fees • Parental involvement • Concerned or satisfied with the facility? • Parental perception of early learning

Interview Guide

The process of data collection began with the development of the questionnaires. In developing the questionnaires, the researcher was guided by literature on factors affecting early learning and the South African ECD National Audit of 2014 questionnaire informed some of the questions. Upon completing the preliminary questionnaires, the researcher conducted a pilot test from 22 to 26 October 2018 in Lower Crossroads, one of the urban settlements in Philippi. The area was chosen because the researcher had obtained the highest affirmative responses from both registered and unregistered ECD facilities there agreeing to participate in the study. The researcher selected one registered and another unregistered ECD facility for the pilot, which included caregivers of the selected ECD facilities to test the caregiver questionnaire. The sample size for the pilot consisted of two ECD principals, two practitioners and three

caregivers. Two of the three caregivers were from the registered ECD facility and the other from the unregistered ECD facility.

Data Collection Device

The interviews between the participants and the researcher were tape-recorded.

Field Notes

The researcher made field notes guided by the observation checklist. To illustrate the nature of the field notes, part of the observation questionnaire informed the evaluation of the features of the infrastructure for the facilities. Hence, notes were made about the presence of features such as a lockable gate, an outside play area and the condition of the play area.

Duration

Official data collection began on 5 November 2018 and was completed in May 2020. The data collection process comprised two phases. The first phase constituted the data collection at the ECD facilities and the second phase the data collection on the caregivers. The data collection period exceeded the timespan the researcher had initially planned because of two reasons. Firstly, ECD facilities preparing for graduation ceremonies from mid-November were often unavailable for interviews. Secondly, although school holidays typically begin in mid-December, the researcher visited the facilities earlier and found them empty, as the children had stopped attending towards the end of November and after graduation. The second phase of data collection begun in March 2020 and was completed at the end of May 2020. Quality assurance of the questionnaires was ensured through a weekly check of the completed questionnaires by the research supervisor.

Data Saturation

There are different types of saturation in research. The most common form of saturation is theoretical or data saturation. Glaser and Strauss conceived the notion of theoretical saturation, defining it as the point at which no new data is found by the researcher (Glaser & Strauss, 1967, as cited in Guest, Bunce & Johnson, 2006:64). Therefore, data saturation in qualitative research is defined as a point reached when subsequent interviews do not yield new data, new themes and new coding (Guest et al., 2006:64). Without an exact figure to indicate data saturation, the researcher continues conducting interviews until new data and new themes do not emerge, at

which point data saturation is reached and further interviews are unnecessary. The researcher applied this method to determine the point of data saturation in this study.

6.3.2 Data Analysis

Data analysis refers to the transformation of raw data, i.e. the transformation of the responses of the participants as well as the observation notes into a coherent and meaningful depiction of the issue being studied. This sub-section of data analysis was only applied to the qualitative elements of the questionnaires. To analyse the data collected from the four questionnaires, the researcher used content and thematic analysis, applying them to different parts of the questionnaires. The essence of both content and thematic analysis is the approach of identifying themes in the responses of the participants to analyse the data. Thematic analysis was used to identify themes or patterns that emerged from the transcripts. The researcher followed the six phases of conducting thematic analysis put forth by Braun and Clarke (2006:89–96).

Figure 6.3.2: The Six Phases of Thematic Analysis

Source: Braun and Clarke (2006).

Phase One: Familiarise with Data

For the researcher to be familiarised with the data collected, the researcher conducted all the interviews and transcribed each interview using tape recordings as well as notes made during the interviews. Thereafter, the researcher reviewed the transcripts line by line.

Phase Two: Generate Initial Codes

Initial codes were generated by the researcher grouping together similar responses, interesting responses and largely responses that addressed the research questions. The researcher looked at semantic codes, in which the meaning derived was confined to the explicit words of the respondents. Therefore, the researcher did not go beyond the actual words of the respondents in interpreting.

Phases Three: Search for Themes

The researcher organised the initial codes into themes.

Phase Four: Review Themes

In reviewing the themes, some of the codes were combined under one theme. The researcher also established relationships between themes. For instance, the registration status of the facility was linked with other factors such as the qualifications of ECD personnel.

Phase Five: Define and Name Themes

The researcher defined and named the themes based on the essence of the theme.

Phase 6: Produce Report

Finally, data analysis was done concurrently with data collection. Conducting the processes of data collection and analysis simultaneously enabled the researcher to identify the point of data saturation. The findings were presented under themes using figures and quotations from the participants. Next to the quotations, the participant is identified using a numeric code which also corresponds to the given numeric code of each facility.

6.4 Quantitative Method: Data Analysis and Findings

For the quantitative analysis, the study employed descriptive statistics as well as Fisher's Exact Test of Independence (hereafter 'Fisher's exact test' or 'the Fisher exact test'). For the descriptive statistics and Fisher's exact test, the researcher used the Statistical Package for the Social Sciences (SPSS) 26, subsequently renamed Statistical Product and Service Solutions. Descriptive statistics are essential for providing accurate summaries of the data, thereby providing statistical meaning to the data. The descriptive statistics serve to complement and, to an extent, offset the limitation[5] of the Fisher exact test in cases where the data is not suitable for the Fisher exact test.

The Fisher exact test uses nominal data to test whether there is a statistical association between the nominal variables (Chan, 2003:498). Statistical significance is determined by the probability, referred to as the p-value or (pr). The p-value establishes whether the statistics

[5] The Fisher exact test is preferred only in categorical variables that are binary. However, the questionnaires also included categories of variables that exceeded binary variables. This assumption is discussed below.

obtained closely match the value one would expect to find in the entire population (Dahiru, 2008:22). To appropriately employ Fisher's exact test, the following assumptions have to hold. The Fisher exact test is most preferred when the sample size is small, such that the number of observations of any cell in a contingency table is less than five. Finally, the data has to be presentable as a 2 x 2 table or binary variables with two columns and two rows (Applegate, Tello & Ying, 2003:605).

Fisher's exact test was used to determine whether there was an association between the registration status of the facility and several facility-level factors (see Chapter 7). Facility-level factors included the qualifications of the principal/ practitioner, learning materials and quality rating of the facility, among others. Fisher's exact test was also used to investigate a statistical association/ relationship between household-level factors and the type of facility the child attended (see Chapter 8). Type of facility refers to whether the facility is registered or unregistered. Household-level factors include the poverty status of the child, the economic activity of the main caregiver, the type of area they live in and educational toys that they have at home. Testing the registration status of the facility against these household-level factors is intended to determine if household factors such as the poverty status or residential dwelling explain the type of ECD facility the child attends in terms of registration.

The Fisher exact test uses hypothesis testing for assessing the relationship or association. An example to illustrate how the Fisher exact test was used to test for association between the categorical variables follows below.

Among the many facility-level factors, the researcher sought to determine if there is a relationship between the quality of the facility and its registration status. A 2 x 2 contingency table is used to present the data. The registration status of the facility is either 'registered' or 'unregistered', while the quality is 'acceptable' or 'unacceptable' quality. To determine the quality, the researcher rated the facility using the minimum ECD norms and standards as quality measures. Hence, a predetermined level of compliance to the norms symbolises acceptable quality while deepening to a certain level of non-compliance represents unacceptable quality.

In testing for the relationship, there is a null hypothesis (h_0) and an alternative hypothesis (h_1).

h0:There is no association between the registration status of facility and the quality rating of facility (Independent)

h1:There is an association between the registration status of facility and the quality rating of the facility (Not independent)

A critical p-value is used as the cut-off, to either reject or not reject the null hypothesis. R.A Fisher, the originator of the test, arbitrarily chosen a p-value of 0.05 to test for significance. However, one may test at 0.01, 0.05 and 0.1 (Dahiru, 2008:21).

The thesis tested at all the aforementioned significant levels, hence

$$p > 0.1 \; No\ Statistical\ Significant\ Association/Relationship$$

$$p < 0.1 \; Statistical\ Significant\ Association$$

The widely accepted interpretations of association and no association either means that the two variables on the row and column are dependent for association, or independent for no association. No association means the two measured variables are independent, therefore reject the null hypothesis. It follows that no statistical association would mean, for instance, that there is no relationship between the facility registration status and the quality rating of the facility; the two are independent. However, a p-value of less than 0.1 means there is a statistical relationship between the variables measured.

6.5 Ethical Consideration

Sotuku et al. (2016:30) define ethics in research as encompassing all the honourable principles that guide the investigation from the day it commences to completion, the publication of findings and beyond. According to Hennink, Hutter and Bailey (2011:63), ethical principles are more pronounced in a study that includes a qualitative element than any other research method. This is because qualitative studies are more likely to use primary data. Consequently, qualitative researchers are likely to come face to face with their social subjects for data collection. It is of utmost importance that the researcher upholds ethical research standards. Therefore, this study, including the methodology, was approved by the Humanities and Social Science Research Ethics Committee of the University of the Western Cape (UWC). Because the study included registered ECD facilities under the Western Cape DSD, ethical clearance

was also obtained from the Western Cape DSD for permission to approach registered ECD facilities in the province. The following ethical issues were considered.

6.5.1 Informed consent

The aforementioned ethical clearance from the Humanities and Social Science Research Ethics Committee of UWC and the Western Cape DSD permitted the researcher to conduct the research. Further permission was required from the participants. All the participants in the study, including ECD personnel and caregivers, were provided with sufficient information about the research. The researcher had a written document explaining the research project and the researcher explained the objectives of the study to the majority of the respondents who were Xhosa-speaking, in that language. The participants were presented with a consent form to sign as evidence that they agreed to participate in the study. The consent form addressed six issues and for each point, the participant either ticked a box indicating consent to that issue, or crossed out the issue, indicating they withheld consent to that point. Hence, some participants consented to participate in the study but refused permission for their interviews to be tape-recorded. The complete informed consent form used in the study is included as Appendix B.

6.5.2 Anonymity and Confidentiality

Anonymity and confidentiality are often used interchangeably in research but Hennink et al. (2011:71) explain them as distinct concepts. Confidentiality means that the information discussed between the researcher and the participant will not be disclosed. That being said, it is not easy to fully honour confidentiality as the results of the research extracted from the responses are often published. To uphold confidentiality, often only the research team accesses the original responses and the data is kept at a secure facility. Anonymity was strictly upheld for the participants in this study, including the identities of the caregivers and names of the ECD facilities and pseudonyms were used for the participating individuals and ECD facilities.

6.6 Limitations

In using primary data to conduct this study, the researcher was confronted with the following limitations.

6.6.1 Language Barrier

To eliminate language barriers for the respondents, all the interviews were conducted in Xhosa, except for four interviews in English. Two of these four respondents spoke Afrikaans as their first language and the other two respondents were English-speaking foreign nationals unable to speak Xhosa. A significant implication of conducting interviews in Xhosa was that the transcripts produced from the tape recordings are English translations of the Xhosa originals. In translating Xhosa to English, there is always the possibility of not fully capturing the respondents' responses, as the transcripts are not verbatim responses of the respondents.

However, the alternative of conducting the interviews in English would have denied the respondents the opportunity to freely express themselves. This is especially true considering the low educational outcomes in an area like Philippi. Should the participants not have been able to fully understand questions posed to them in English, the study would not have achieved accurate and detailed responses. In conducting most of the interviews in Xhosa and transcribing the interviews in English, every effort was made to maintain the accuracy of the transcriptions.

6.6.2 Inconsistent use of tape recording

Initially, the researcher intended to record all the interviews in the study, to ensure the respondents' verbatim responses were preserved and assure the accuracy and integrity of their use. However, two participants refused to allow their interviews to be tape-recorded. To abide by the ethical requirements of the study, their wishes were respected and the two interviews were not tape-recorded. However, the researcher made accurate notes of the responses of these participants.

6.7 Conclusion

This chapter discussed the methodology employed in the study which pursued a mixed methodology using primary data as the best means of responding to the research questions. Data was collected from ECD facilities and caregivers through in-depth interviews in different areas of Philippi and further data obtained through close observation of the environment in which the ECD facilities were situated. This chapter concluded with the ethical consideration of the research as well as its limitations. The remainder of the thesis discusses the findings obtained and conclusions reached in the study.

CHAPTER SEVEN: FINDINGS ON ECD FACILITY-LEVEL FACTORS IN PHILIPPI

7.1 Introduction

This chapter examined the extent to which ECD facility-level factors affect the provisioning of early learning development in Philippi in the Western Cape and investigated whether and how the registration status of the ECD facilities determines some of the factors experienced in the area and, ultimately, how the registration status of the facility affects the provisioning of early learning development in Philippi.

The findings are drawn from three of the four questionnaires used in the study, namely the principal, practitioner and observation questionnaires (see Appendix C and D). There are deliberate variations between the principal and the practitioner questionnaires. The practitioners' responses concern the class: questions on the curriculum employed, struggling children, class characteristics and parental involvement as well as the adequacy of resources in class. The principal answers on behalf of the entire facility: questions related to the issues of management of the facility, its finances, parental involvement and the registration status. Considering that the education levels and skills of the personnel impact on early learning, as confirmed in the literature, and form part of the facility-level factors affecting ECD provisioning, this area was included in both principal's and practitioner's questionnaire. The observation questionnaire evaluated the infrastructure of the facilities.

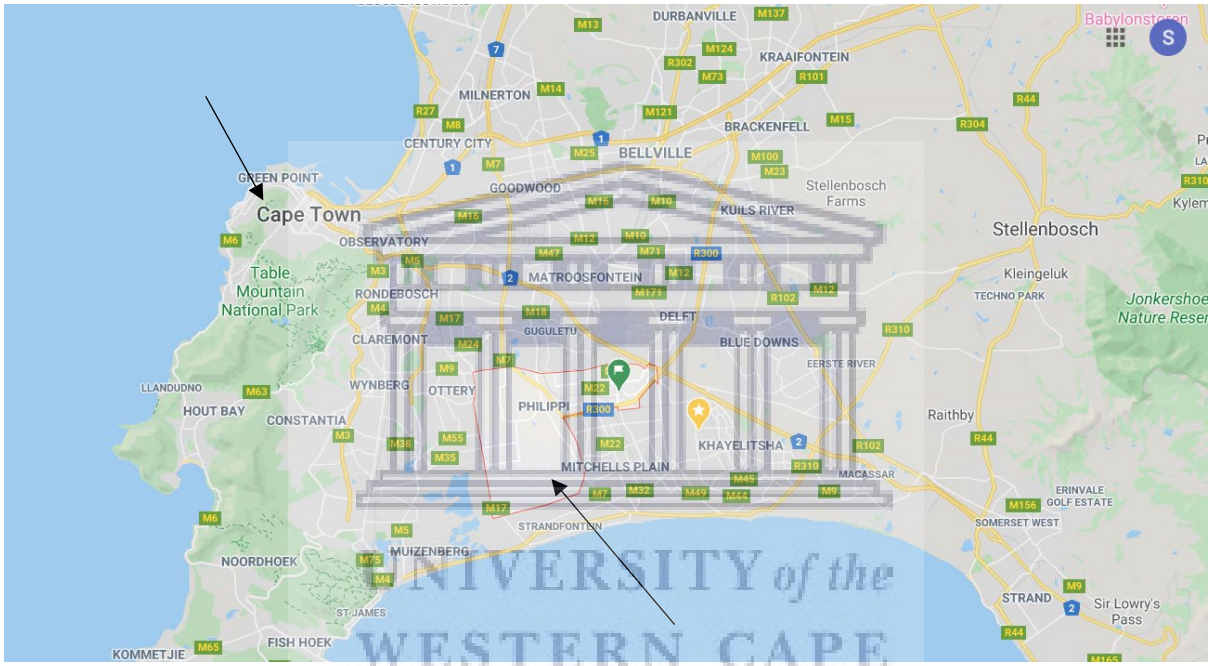
For statistical robustness, the thesis employed Fisher's exact test, testing a number of ECD facility-level factors against the registration status of the facility. The test examined whether a statistical relationship existed between the facility-level factors and the registration status of the facilities. Specifically, the test determined whether the facility-level factors were dependent on or explained by the registration status of the facility. Fisher's exact test also eliminated the possibility that the statistical outcomes are due to sampling chance. The statistical significance is tested at 0.01, 0.05 and 0.10 alpha[6].

[6] *** p<1%, **p<5%, *p<10%

7.2 Study Area: Philippi

This research was undertaken in Philippi, a low-income township in the City of Cape Town metropole in the Western Cape. According to the 2016 Community Survey conducted by Statistics South Africa, the City of Cape Town has more than 4 million residents and approximately 1,2 million households (Western Cape Government, 2016:5). It is projected that, by 2023, the population in this city will have grown to 4,2 million people (Western Cape Government, 2016:5).

Figure 7.2: The City of Cape Town and Philippi



Source: Map Data, 2020 AfriGIS.

In the City of Cape Town, Philippi is among the largest townships in terms of population size (Anderson, Azari & Van Wyk, 2009:4). Philippi's urban settlements originate in the apartheid era when many of its original residents migrated from the former Ciskei and Transkei homelands (Anderson et al., 2009:4). The area includes the more sparsely populated Philippi Horticultural Area and Philippi Industrial Area as well as densely populated areas of low-income formal housing and informal settlements stretching towards Cape Town International Airport. Philippi is characterised by poverty, high unemployment and crime, and the sprawling informal settlements are often subjected to fire and seasonal floods. The main urban areas are Acacia, Heinz Park, Phola Park, Brown's Farm, Samora Machel, Lower Crossroads, Marcus Garvey, Marikana and the Thabo Mbeki informal settlements.

Due to the lack of credible statistical data, the researcher encountered challenges in attempting to compile a socioeconomic profile of Philippi. The last census undertaken in the area was the 2011 national census conducted by Statistics South Africa, based on which the City of Cape Town produced a socioeconomic profile. The demographic breakdown still reflects Philippi's apartheid roots, with 94% of residents identified as African black, followed by 4,7% coloured and the remaining 1,3% being other population groups. A majority of Philippi residents speak Xhosa, followed by Afrikaans (Strategic Development Information and GIS Department & City of Cape Town, 2013:3).

The report includes key socioeconomic indicators. In Philippi, only 32% of those aged 20 years and older have completed Grade 12 or higher. Although about 62% of working-age residents are employed, in terms of income, approximately 78% of households have a monthly income of R3,200 or below (Strategic Development Information and GIS Department & City of Cape Town, 2013:3). This indicates that a large number of the employed residents must work in low-income menial jobs. Finally, about 44% of households live in a formal dwelling, 22% in a backyard shack and the remaining 33% in a shack not in a backyard (Strategic Development Information and GIS Department & City of Cape Town, 2013:5). Overall, the socioeconomic indicators paint Philippi as a poor community lacking economic opportunities, commercial infrastructure and public amenities.

Although the community itself is poor and deprived, it lies within one of the most productive provinces in the country, the Western Cape. In 2017, the Western Cape contributed 14% of the country's Gross Domestic Product (GDP), making it the third most significant contributor in terms of provinces. Yet in 2015, the Western Cape, together with the Mpumalanga province, were the second most unequal provinces in terms of income (Statistics South Africa, 2019b:37). The Gini coefficient, which is the official measure of income inequality was 0.62, compared to 0.65 for the country (Statistics South Africa, 2019b:32). The Gini coefficient ranges from zero to one, with zero representing perfect equality; hence, 0.65 represents a significantly uneven distribution of income. This shows that income is unevenly distributed within the province, inevitably excluding other groups of people. In highly unequal communities, deprivation for many and abundance for few tend to coexist.

7.3 Evaluating the Infrastructure of the Facility

Adequate infrastructure plays a critical role in the provisioning of ECD services. Many facilities are denied registration on the basis of not having proper and adequate infrastructure. In terms of the norms and standards for the building infrastructure of the ECD facility, it is advocated that ECD environments should have more than one room to allow for children demarcation and avoid overcrowding. The building should also meet health and safety standards for the care of children, including adequate light, water and ventilation, a lockable access gate, fence and the absence of hazardous objects. There must be adequate sanitation and appropriate and sufficient toilets in the facility. A widely accepted principle in the ECD sector is that 'children learn through play'. Thus, a safe outside play area is essential ECD infrastructure. The infrastructure of the sampled ECD facilities is evaluated below using all the aforementioned elements of infrastructure.

7.3.1 Type of ECD Facility Building

The type of area in which the facilities are situated needs to be considered as social context and the conditions under which children live and learn are important factors in child development. The type of area in which the ECD facilities are located may be described as either mostly informal or mostly formal.

Table 7.3.1a: Area Type of ECD Facility

Facility factor		Registered facility N=10	Unregistered facility N=10	Total sample	Fisher's exact (Pr)
The type of area in which the facility is located	Mostly formal	100%	60%	80%	0.087*
	Mostly informal	0%	40%	20%	

Source: Primary data.

At 10% significance with a p-value of 0.087, there is a statistical relationship between the type of area in which the facility is located and its registration status. The dependence relationship of the area to the registration status to an extent explains the likelihood of registered facilities being only found in formal areas. Hence, all the interviewed registered ECD facilities are situated in mostly formal housing areas. This point is significant because it is extremely unlikely that an ECD facility situated in a mostly informal area will receive registration. Children who reside in informal settlements are therefore highly unlikely to have access to

registered facilities in their residential areas. Indeed, 60% of ECD facilities are situated in formal areas, with the remainder situated in mostly informal areas.

Informal settlements tend to be associated with poor living conditions. The broad definition provided by the United Nations (UN) of informal settlements includes areas that lack access to clean water and infrastructure, have a poor structural quality of housing and overcrowding (UN-Habitat, 2003:11). South African informal settlements exhibit consistent characteristics with the definition provided by the UN and continue to develop through the unauthorised occupation of urban land by poor people (Mutero & Makwara, 2018:388).

Types of building used as ECD facilities:

- Formal separate house/ building;
- Formal residential house (not separate);
- Informal building separate from a residence;
- Informal building not separate from a residence.

Table 7.3.1b: Type of building used as ECD Facility

Facility factor		Registered facility N=10	Unregistered facility N=10	Total sample
ECD building	Formal separate house/ building	30%	30%	30%
	Formal residential house (not separate)	70%	30%	50%
	Informal building separate from a residence	0	20%	10%
	Informal building not separate from a residence	0	20%	10%

Source: Primary data.

In this thesis, 'separate formal house/ building' means that the facility does not share a roof with a residential house. It has a designated site and is not a residential dwelling. Table 7.3.1b shows that a separate formal building is equally uncommon for both registered and unregistered facilities. Only 30% of registered facilities are situated in a separate formal building and likewise for unregistered facilities. A facility situated on its own site has a significant advantage in terms of space. Such facilities are likely to have more space inside and outside, evident through multiple classrooms, kitchen, toilets and play area. The facilities were consistent with the argument put forth. The outside areas were spacious, allowing the children to run freely.

Of the registered facilities, the remaining 70% were also formal buildings but extensions to residential houses. The homeowners, who are also the principals, had converted their homes into ECD facilities. Although these ECD premises remained partly residential homes, a greater proportion of their space was apportioned for the children. The multiple classrooms, kitchen and toilets built confirmed the prioritisation of the facility of the children's needs over the homeowners' accommodation needs.

Of the unregistered ECD facilities, 30% are formal buildings attached to the residential house. Moreover, 20% of unregistered ECD facilities are informal buildings separate from an informal residential dwelling. In other words, the third category of dwellings refers to backyard shacks. Backyard shacks are a long way from satisfying the infrastructure requirements for registration. The remaining 20% of facilities are informal structures that are not separate from an informal residential house. Effectively, the shack is both a residential house as well as an ECD facility. An ECD facility that is not separate from the residential house means that the same space used for household purposes by residents is also used as an ECD facility by day. Combining an ECD facility and a residential space under the same roof is a great disadvantage in terms of lack of safety and space, especially a shack that already tends to be small. These unregistered ECD facilities have little prospect of receiving registration as it is impossible for the health department, fire department and any other relevant department to approve their registration considering that one of the critical elements for registration is meeting the norms and standards for the structure of the ECD facility.

7.3.2 Children Demarcation: the One-Room Concept

Children aged three-and-a-half to five years are considered to have a longer attention span and be likely to engage in physical activities. On the other hand, babies between four and six months old are starting to learn to grasp objects without using their thumbs (City of Cape Town, 2015:43). This is consistent with Piaget's four stages of cognitive development (1936, as cited by Huitt & Hummel, 2003:2). Children of the same age group are likely to have achieved the same developmental milestones and therefore be on a similar development path. It is then expected that children of the same age group will be found in the same classroom, and younger children will have their own classroom. Based on the researcher's observations, most ECD facilities in Philippi have very limited space inside to allow demarcation into different age groups in the same room.

The infrastructure should be able to accommodate children of different ages and different needs. The researcher tested the practice of demarcation in unregistered and registered ECD facilities.

Table 7.3.2: Children Demarcation

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Children demarcated into a group	100%	20%	60%	0.001***

Source: Primary data.

The Fisher exact test established dependence between the one-room concept and the registration status of the facility. The relationship is statistically significant at 1% significance. This significant statistical relationship means that the one-room concept or lack of demarcation is mostly explained by the registration status of the facility. Hence, the probability is high that a case of demarcation or lack thereof is influenced by the unregistered status of the facility. Of the unregistered ECD facilities, only 20% of the facilities demarcated the children sitting by age group, and the remaining 80% did not demarcate the children. One ECD practitioner was asked whether they conduct daily lessons with the younger children in the same room that was already argued to have limited space:

> ECD 7 Practitioner: "Sometimes, I put up chairs to divide the room, but you know children, they manoeuvre and pass through those chairs."

The lack of demarcation in facilities is largely because some of the ECD facilities are one-room structures keeping all the children. The usage of 'keep' is appropriate considering that all ages from 0–6 years olds are in one room, reducing opportunities to be taught and increasing the likelihood that they are merely kept there for hours. Older groups of children have achieved most gross motor skills and they are pursuing relatively intense cognitive and non-cognitive skills in preparation for formal school. Space is limited in many of the facilities, which explains the lack of demarcation in one-room facilities. Responding to the lack of space, there were two ECD facilities under construction. It follows that, while the additional rooms were being built, the children would have been moved to one room. In these cases, even the responses to the lack of demarcation contributed to overcrowdedness.

While few unregistered ECD facilities demarcated children, the opposite was true for registered facilities. In all the registered facilities, the children were divided into different classrooms based on their age groups.

One principal of a registered facility commented on the demarcation of children as follows:

> ECD 6 Principal: "When we started, we did not know anything. We used to put all the children in one class, not knowing that they had to be divided by age groups."

Thus unregistered ECD facilities do not only lack the infrastructure to divide the children into different classrooms but those who run them may be ignorant of the importance or significance of demarcating children by age.

7.3.3 Safety Features of the Infrastructure

The operational hours of the ECD facilities suggested that many children spend most of their daytime hours at the ECD facilities. Children start arriving as early as 6am and are fetched around 5pm, except for the aftercare programme. This means that a preschool child could spend around 11 hours at an ECD facility daily. In consideration of the many hours children spend at the ECD facility, the ability of the facility to ensure their safety is crucial.

The observation questionnaire (see Appendix D) assessed the following safety features of the infrastructure:

- Is the ECD facility fenced?
- Is the gate locked during school hours?
- Are any hazardous objects in the yard?

Table 7.3.3: Safety of ECD Facilities

Type of facility	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Have fence	100%	90%	95%	1.00
Have lockable gate	100%	60%	80%	0.087*
No hazardous objects	100%	80%	90%	0.47

Source: Primary data.

The registered ECD facilities fared better on all the safety measures. All the registered facilities had a fence, a lockable gate and there were no hazardous objects in the sight of the children that could prevent them from playing freely and safely.

Concerning unregistered facilities, an overwhelming 90% of the facilities were fenced and only 10% of the unregistered ECD facilities in the study did not have a fence. The lone ECD facility in question is situated in the informal settlement, where shacks are very close to each other and fencing extremely difficult. Moreover, 60% of the unregistered ECD facilities had a lockable gate, with the remaining 40% not having a gate. Without a lockable gate and constant supervision, children are at risk of wandering outside the ECD premises. Likewise, intruders can easily enter the ECD premises. Facilities without lockable gates were chiefly situated in informal dwellings. Fences and gates are normal, standard features of formal housing. However, for informal houses with limited space and resources, a fence and gate are privileges.

The Fisher exact test showed that there is a statistically significant relationship between a lockable gate and ECD facility registration status.

Further investigating safety and protection for children, the researcher assessed the presence of hazardous obstacles in the yard of the ECD facilities that might prevent children from playing freely and safely.

It was found that 20% of the unregistered facilities had hazardous objects in their yards. The objects found in these facilities were bricks, full bricks and broken pieces of bricks. The same 20% of the facilities were being renovated and it became apparent that the bricks found were part of the building materials to carry out the renovations. The ECD facility guidelines from the DSD and UNICEF (2006:39) explicitly state the responsibility of the ECD facility is to ensure the protection of the children. While the bricks may be there to carry out renovations to fulfil the requirements of the DSD for a proper formal structure, they must be stored with due consideration of the safety of the children when they play outside. Alternatively, the ECD facilities could have temporarily shut their doors until the completion of the renovations. However, temporarily closing would have risked losing revenue and possibly losing the children to other nearby facilities. Unregistered ECD facilities do not receive a government subsidy and need every cent of revenue to operate. The ECD facilities would probably refuse to close, even temporarily.

7.3.4 Outside Play Area

Play is a critical element in fostering early learning. Play fosters cognitive development, social and emotional development, speech and language development, as well as gross motor skill development. Apart from extensive knowledge in ECD, the pedagogy of play requires sufficient space and availability of play equipment. The researcher, therefore, investigated the presence of an outside play area and the play objects found in the play area.

Table 7.3.4: Outside Play Area

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Play area in the facility	70%	20%	45%	0.070*

Source: Primary data.

At 10% significance, there is a relationship between having a play area and the registration status. Moreover, the descriptive statistics revealed that 80% of the unregistered facilities do not have an outside play area. By contrast, only 30% of the registered facilities did not have a play area and therefore 70% had an outside play area. Visiting the facilities that lacked an outside play area revealed that this was largely the result of inadequate outside space. As already stated above, a number of the facilities were on converted residential property and some Reconstruction and Development Plan (RDP) houses with other ECD facilities in informal dwellings and backroom shacks. Therefore, there was often no available space to improve outside play areas. The problem of not having an outside play area was explained by one of the ECD practitioners:

> ECD 2 Practitioner: "We do not have an outside play area. We take the children to play outside in the street, and we have to be extra vigilant for passing vehicles. Like today the weather is warm, but we can't just allow the children to go and play outside on their own, there is no space in the yard."

The findings suggest that any type of play undertaken in these facilities has to be done indoors. It also indicates the high probability that these ECD practitioners are less likely to prepare outdoor activities. For some children, this means not only spending 11 hours in the facility but spending most of the 11 hours indoors. The lack of play areas is a direct consequence of the typically limited space in the South African township design of the apartheid era. Historically, townships were created as dormitories serving to house black workers. There was unprecedented economic growth in the country during the 1950s when the demand for labour

escalated (Mahajan, 2014:4; Mills, 1989:66). Since they were only seen as labour pools, the township 'location' design made little provision for families, green spaces, public recreational amenities, commercial hubs or aesthetic appeal. The drab identical houses and hostels were distant from white residential areas and lacked infrastructure such as adequate sanitation, water supply, electricity, street lighting and tarred roads (Mahajan, 2014:4).

The successive governments of the democratic era tried to address the spatial inequalities through upgrading amenities and services and addressing the housing shortage through the RDP. Although RDP housing enabled home ownership, the houses were not much of an improvement over the former apartheid housing. ECD facilities serving low-income areas tend to operate from these houses and continue to be limited in interior and exterior space.

Observation of the majority of the facilities that had outside play areas showed the equipment in the play areas of the facilities appeared old, rusty and inadequate. A practitioner at one of the facilities commented that the ECD facility had been built using donations from the Korean government or an organisation. It is likely that the play equipment had not been replaced since the Korean funding was used.

Lacking an outside play area did not always mean that the children spent the whole day indoors. The principal of one registered facility that did not have an outside play area stated that they took their children to the nearest community park a few times a week for playtime.

7.3.5 Availability of Toilets

Adequate sanitation at ECD facilities, including sufficient and appropriate toilets for the children is a health and safety requirement. The researcher investigated the type of toilet used by each facility. It is noteworthy that the type of toilet the facility uses strongly correlates to the basic services available in the community. It is also recognised that the younger children are most likely using potties. However, the researcher only investigated and measured the presence of flush toilets and chemical/ bucket systems as these were most likely to affect the older group, the research interest of this study. The chemical and bucket system types were combined since some townships use both these systems in the different sections of the community.

Table 7.3.5: Availability of Toilets

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Flush toilet	100%	60%	80%	0.087*

Source: Primary data.

All the registered ECD facilities use a flush toilet. For unregistered facilities, 60% use flush toilets with the remaining 40% using a chemical/ bucket system. The availability of a flush toilet is statistically influenced by the registration status of the facility at 10% significance. Hence, all the registered facilities in this sample make use of flush toilets. The type of toilet used is also to a large extent determined by the type of area the facility is located in. ECD facilities situated in a mostly informal area are more likely to use a bucket system. Since the DOH would consider the type of toilet when vetting the facility, it follows that facilities using a bucket system would be scored less favourably in the assessment for registration.

From the findings on the state of infrastructure, it is apparent that there are statistically significant differences between the infrastructure found in registered facilities and that found in unregistered facilities. Apart from the registration status, the community in which the facility is situated also has an effect on the state of the infrastructure. For instance, the community (captured as type of area) has an influence on the structure of the facility, type of toilet available, the play area, and the safety measures available for the facility. The concluding analysis therefore, further reveals infrastructure differences found in the different parts of Philippi. Registered facilities are faring better on most of the infrastructure measures, not necessarily due to their competence or better management. Instead, registered facilities fare better because they are situated in relatively developed parts of Philippi, while unregistered facilities are put at a disadvantage as a result.

7.4 Preschoolers in Philippi ECD Facilities

The conditions of the research ethical clearance included that a participant may choose not to answer any of the questions while participating in the research. The principal at ECD 12 chose not to disclose the total number of children enrolled in her facility as well as the breakdown by class. Through observation, the researcher estimated the total number of children as being between 20 and 30. However, although the presence of children from babies to Grade R learners was observed, no figures for each age group could be determined. It is for this reason that table 7.4 only shows enrolments at 19 facilities with nine being unregistered facilities.

Table 7.4: Preschoolers in Philippi ECD Facilities[7]

		Registered facilities	Unregistered facilities
N	Valid	10	10
	Missing	0	1
Mean		78	51
Std. Error of Mean		11	9
Median		80	46
Std. Deviation		34	28
Range		118	87
Minimum		30	26
Maximum		148	113
Sum		775	460

Source: Primary data.

The total number of enrolled children in all the sampled registered facilities equalled about 775 children while the nine unregistered facilities had about 460 children. Although registered facilities have enrolled more children, unregistered facilities also have a substantial number of children. In this sample, the number of children enrolled in the unregistered facilities represents children who the government does not subsidise as a result of their facilities' registration status. That is, about 460 children in this research are excluded from government support by the ECD Policy. On average, registered facilities, which do receive government funding, had about 78 children each while the unregistered facilities each had about 51 children.

7.5 ECD Practitioners in Philippi

The practitioners are at the helm of child development. The practitioner questionnaire investigated the profiles of the practitioners, their professional competence, the curriculum and holistic development, preschoolers struggling in class, the description of their classes, access to resources in the classroom, and parental involvement in ECD.

7.5.1 Profiles of Practitioners

The table below shows the profiles of the practitioners who participated in this research, including their gender, population group and age.

[7] Figures rounded off.

Table 7.5.1: Profile of Practitioners

Category		Frequency (Percentage)
N		20 (100%)
Gender	Female	20 (100%)
	Male	0
Population group	African black	19 (95%)
	Coloured	1 (5%)
Age	18–25 years	4 (20%)
	26–30 years	2 (10%)
	31–35 years	8 (40%)
	36–40 years	5 (25%)
	41–45 years	0
	46–50 years	0
	51+ years	1 (5%)

Source: Primary data.

As reflected in table 7.5.1, 20 profiles of the practitioners were completed from the facilities. In terms of gender, all the practitioners participating in the research were female. The over-representation of females in the ECD facilities was also found in the National ECD audit and the Western Cape provincial audit. There was also an overrepresentation of the African black group among the practitioners wherein 95% of the practitioners were African black, with only 5% coloured. There were no Asian/ Indian practitioners. The bias toward the African black group reflects the demography of the chosen study area, Philippi, which has a majority African black population. Finally, concerning the age of the practitioners, it is shown that most of the practitioners, specifically 40%, are aged 31–35 years of age. Only 5% of the practitioners are above 51 years of age.

7.5.2 Professional Competence of ECD Practitioners

Professional competence increases one's ability to complete a given task or a job. Professional competence in this section is indicated by the practitioners' highest education level, the number of years worked in the ECD sector and the number of years working in their respective ECD facility as practitioners. As part of professional competence, the researcher also investigated the practitioners' access to training opportunities.

7.5.2.1 Highest Educational Attainment of ECD Practitioners

Table 7.5.2.1.: Highest Educational Attainment of ECD Practitioners

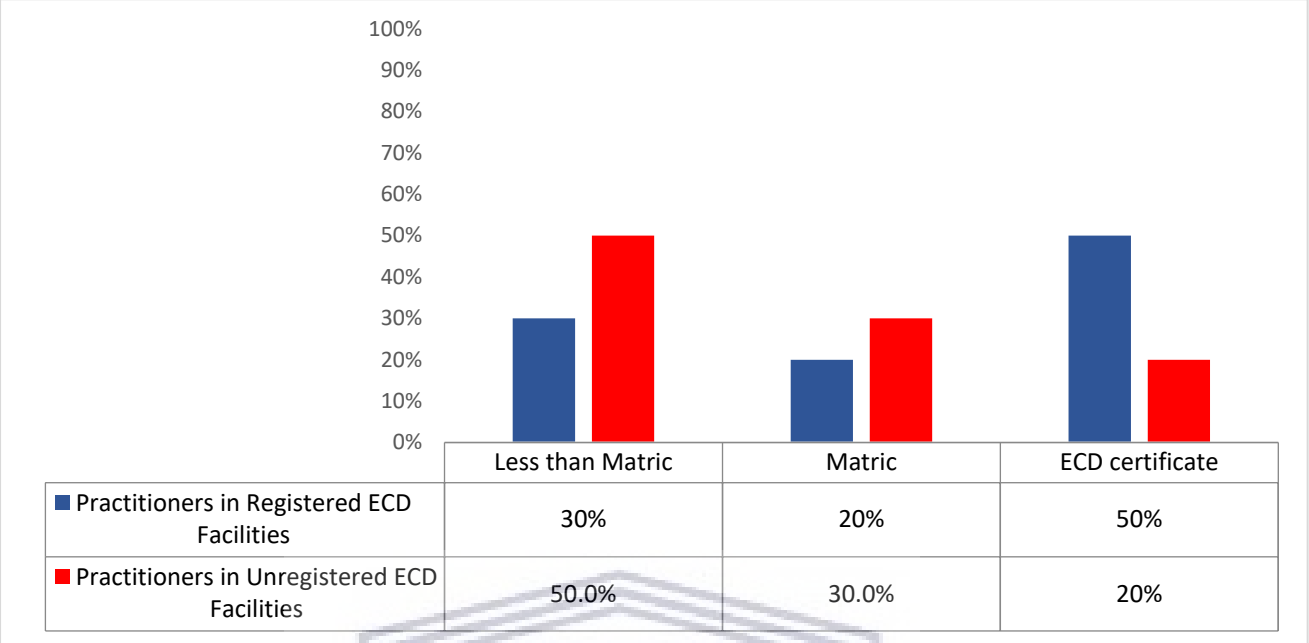
Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Practitioner has ECD qualification	50%	20%	35%	0.350

Source: Primary data.

Practitioners teaching children aged 0–4 years must have an ECD certificate from level 1 to 6 with Grade R practitioners required to have an ECD diploma or degree. In this study, only 35% of the practitioners confirmed having either ECD qualification. The remaining 65% of the practitioners had either matric or less than matric as their highest educational attainment. Half of the practitioners in the registered facilities had an ECD qualification, while only 20% in unregistered facilities held the same qualification. According to the Fisher exact test, there is no association between the educational attainment of the practitioner and the registration status of the facility. The fact that there is no dependence between the two variables means that, to an extent, the level of ECD qualification in practitioners in Philippi cannot be statistically attributed to the registration status of the facility. In other words, the lack of qualification is not statistically dependent on whether the facility is registered or not.

Considering that about 65% of the practitioners lacked an ECD qualification, the researcher further investigated the educational attainment of the practitioners using four categories, namely 'less than matric', 'matric', 'ECD certificate' and 'other higher qualification'.

Figure 7.5.2.1: Highest Educational Attainment of ECD Practitioners by Registration Status



	Less than Matric	Matric	ECD certificate
Practitioners in Registered ECD Facilities	30%	20%	50%
Practitioners in Unregistered ECD Facilities	50.0%	30.0%	20%

Source: Primary data.

Half of the practitioners in unregistered facilities have less than matric as their highest educational attainment. This is followed by 30% of practitioners with a matric certificate. Overall 40% of the practitioners have less than matric as their highest educational attainment. For practitioners in registered facilities, 20% have matric and 30% have less than matric as their highest educational attainment. None of the practitioners had any "other higher qualification." In this sample, in terms of professional qualifications, practitioners in registered facilities are the more qualified group of practitioners since more of them have ECD certificates.

7.5.2.2 Work Experience of ECD Practitioners

Related work experience is broken down into the years the ECD practitioners have worked at an ECD industry, and the years they have worked for their respective facility.

ECD Sector Work Experience

More years of experience are associated with higher professional competence. This assumption of a positive relationship between years of experience and proficiency is argued in the learning curve theory, which assumes that the more one completes the same task the more proficient one becomes at completing that task. For instance, a practitioner might become proficient in

dealing with children's misbehaviour or in teaching a certain concept, such as the alphabet. The ECD guidelines advise that practitioners ought to receive continuous guidance from their supervisor especially in the first three years of working with children (DSD & UNICEF, 2006:66). This highlights the first three years of working with children as critical and possibly the most challenging for the practitioners. It follows that after three years, the practitioner can be assumed to have acquired sufficient work experience to independently and professionally perform their work. Following this line of reasoning, the researcher investigated the proportion of practitioners at the facilities in the study who had worked in the ECD sector for three or more years.

Table 7.5.2.2a: Years Practitioner Worked in the ECD Sector

Facility factor	Registered facility N=10	Unregistered facility N=10	Total sample	Fisher's exact (Pr)
Practitioners with sector experience of three years and above	80%	70%	75%	1.00

Source: Primary data.

Most of the practitioners have worked in the ECD sector for three years and above. Statistically, there is no dependence between working experience and the facility registration status.

Facility Work Experience

To investigate the second element of experience, which is the number of years the practitioners had worked in the facilities in the study, the categories were broadened to include 'less than 1 year', '1 year', '2 to 5 years' and finally '6 years and above'.

Table 7.5.2.2b: Years Practitioner Worked in the ECD Facility

Facility factor		Registered facility N=10	Unregistered facility N=10	Total sample
Practitioner sector experience	Less than 1 year	20%	40%	30%
	1 year	0	10%	5%
	2–5 years	50%	40%	45%
	6 years+	30%	10%	20%

Source: Primary data.

Drawing from the above analysis of years worked in the ECD sector, a majority of the ECD practitioners at the registered ECD facilities have worked at their respective facilities for more

than two years to five years. Specifically, as reflected in table 7.5.2.2b, 50% of them have worked in their facilities for two to five years while 30% of the practitioners in registered facilities have worked at their facility for six years or more. Therefore, only 20% of their practitioners have worked at an ECD facility for less than a year. It is rather concerning that 40% of the practitioners in the unregistered ECD facilities have worked in their facility for less than a year and a further 10% for only one year. The concern is fuelled by the fact that practitioners in unregistered facilities were already shown to be more likely to lack the relevant educational qualification. Only 10% of the practitioners in unregistered facilities have worked at their facility for six years or more and only 40% for two to five years. Hence, the registered ECD facilities have more experienced staff than the unregistered facilities.

The short duration of most of the ECD practitioners' work stints at the unregistered facilities strongly suggests a high turnover of ECD practitioners at these unregistered ECD facilities. Shedding further light on the issue of the suspected high staff turnover, one of the registered facility ECD practitioners interviewed thought it undesirable to work at an unregistered ECD facility, citing the lack of growth opportunities. The practitioner added that ECD practitioners at unregistered facilities were likely to earn low wages/ salaries as these facilities were solely dependent on tuition fees as their source of income. Moreover, there are limited training opportunities from DSD and DBE, especially as it would be difficult for government departments to provide training opportunities to unregistered facilities that are not operational in their system.

Against this background, it makes sense for unregistered facilities to have high staff turnover; the practitioners leave when something better remunerated or more secure comes along. Not receiving a government subsidy not only affects resources such as teaching material and infrastructure; it also affects the quality and stability of the facility's human resources. An unregistered ECD facility is a less attractive employer for qualified and competent teachers. The issue of high practitioner turnover was explored by Wells in a study of 65 practitioners across ten Head Start centres (Wells, 2015:153). The results showed that practitioners who were likely to be retained and thereby have more years of relevant experience in their centres had higher educational attainment, liked the environment and held long-term prospects of staying in the ECD sector (Wells, 2015:157). Conversely, practitioners who were likely to quit were those who did not possess the relevant qualification and had no plans of remaining in the sector. The practitioners in Philippi could be quitting for any of these reasons.

7.5.2.3 Training Opportunities for ECD Practitioners

The facts that ECD practitioners lack educational qualifications and some have limited working experience, especially practitioners in unregistered facilities, are not enough to conclude that these ECD practitioners are incompetent and, since these shortfalls can be compensated for through training opportunities to a modest extent the question was posed: did the practitioner attend (a) training workshop(s) in the last 24 months?

Table 7.5.2.3: Attended Training in the past 24 months

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Practitioner attended training	70%	70%	70%	1.00

Source: Primary data.

The Fisher exact test consistently showed no relationship between the registration status of the facility and the professional competence of the practitioners. This outcome suggests that the professional competence of the practitioners does not statistically differ between the two types of facilities.

Overall, in the case of both registered and unregistered ECD facilities, 30% of the practitioners had not attended training workshops in the last 24 months. It is unfortunate that 15% of practitioners who had not attended training also did not have an ECD qualification. Hence, there is no relationship between attending training in the past 24 months and the registration status of the facility. It was interesting to note that training opportunities for unregistered facilities were exclusively provided by private organisations, while for registered facilities, training was provided by a combination of private organisations and government departments such as the DSD and DBE. This suggests that the likelihood of receiving training from a government department increased if a facility was registered.

The general import of the above discussion and analyses presented is that ECD practitioners in Philippi are underqualified and/ or inexperienced, casting doubt on the professional competency of the practitioners and their facilities in Philippi.

The problem of lack of qualifications extends beyond the practitioners in Philippi to the country's ECD sector. The view of both ECD scholars and the government that there is a serious lack of qualifications among practitioners in the country is supported by the results of

the 2014 nationwide audit of ECD facilities in the country by DSD and the diagnoses of the ETDP report on ECD. The natiowide audit showed that 40% of practitioners had not completed matric and 55% of practitioners were without, an ECD qualification (DSD, 2014:94). A qualified practitioner is a success factor of any early intervention (Waldfogel, 2015:9). For instance, The Madrasa Early Childhood Development Programme required practitioners to have completed a minimum of eight years of schooling plus a one-year teacher/practitioner training course (Malmberg et al., 2011:125). A minimum of eight years of schooling suggest that the programme was willing to employ and empower relatively less educated groups of people. Moreover, throughout the practitioners' employment, they are exposed to continuous professional development even after receiving their ECD certificate. The main issue at hand with unqualified practitioners in this sample and perhaps the country is the lack of exposure to opportunities of upscaling. On average, 75% of the practitioners had worked in the ECD sector for three years and above. Yet 65% of the practitioners were still without an ECD qualification. Apparent from the Madrasa programme is the willingness to invest in the human capital of the practitioners.

Further contributing to the lack of qualification in ECD facilities is that often their human resources is drawn from the same community it operates in. The socioeconomic profile of Philippi attests that the majority of the population comprising the workforce, is relatively uneducated. An unqualified practitioner is not a significant contributor to an intervention.

Finally, a small proportion of the practitioners, especially in unregistered facilities, have limited work experience in the ECD industry. The combination of limited experience and lack of qualifications, along with the consequences of poverty, may reduce the children's chances of receiving a meaningful experience of early learning at an ECD facility in Philippi, especially at an unregistered facility.

7.5.3 ECD Practice: Curriculum and Holistic Development

7.5.3.1 Curriculum

The purpose of an ECD facility curriculum is to prepare the preschoolers for formal school. In other words, a learning curriculum ensures that the preschoolers know basic concepts such as letters, numbers and colours and have developed their vocabulary before beginning formal schooling. Questions related to the curriculum included if the practitioners followed a

curriculum in their teaching, who defined this curriculum and how the learning programme they use provides for the holistic development of the children in their class.

The simple question of whether the practitioner followed a curriculum seemed to confuse some of the practitioners, judging by the following interview exchanges with practitioners from the unregistered ECD facilities.

Question: Do you use a defined curriculum to structure your learning programme?

> ECD 11 Practitioner response: "No."

Follow-up question: Without a defined curriculum guiding you, how do you decide on what to teach every day?

> ECD 11 Practitioner response: "Since I am still studying and currently doing my in-service training, I received a book in college on lesson planning. For instance, when it was summer, all my lessons were related to summer. So I decide. It depends on you what to teach. For instance, if I am teaching on transport then I will teach them about all the different types of transport. So I use the curriculum from the college."

Another practitioner from a different unregistered ECD facility:

Question: Do you use a defined curriculum to structure your learning programme?

> ECD 13 Practitioner: "No."

Follow-up question: How do you then decide what to teach every day?

> ECD 13 Practitioner: "I have a book which I received from 'Inclusive' that tells me what to teach about."

Follow-up question: What is the complete name, 'Inclusive' what?

> ECD 13 Practitioner: "Inclusive training what what…"

> ECD 20 Practitioner: "No. You see those books, for now the principal gave us those books and we use them. The principal also goes to other preschools to copy their curriculum and we also have some knowledge on ECD. So we combine the different ideas."

These responses are challenging. Initially, the practitioners stated they were not following any curriculum, which would mean their teaching was unplanned and lacked clear outcomes. However, when interrogated further it appeared that they did follow a curriculum; they were

just unfamiliar with the word 'curriculum'. The response from ECD 20 Practitioner appeared to suggest that both the practitioners and the principals were impulsively designing the curriculum as they went along, a haphazard-looking process that may not be a pedagogically sound foundation for subsequent learning. Likewise, practitioner in ECD facility 11 gives the impression of autonomously creating a curriculum as they saw fit. Part of the reason practitioners in unregistered facilities are unaware that they are using a curriculum is that they have not yet registered their curriculum, unlike registered facilities that had to submit their learning programme with their registration application. The 2014 national ECD audit captured approximately 7 892 unregistered facilities (DSD, 2014:20). The audit further observed that these unregistered ECD facilities were mostly found in low-income urban areas, urban townships, and informal settlements (DSD, 2014:28), such as Philippi. In all of these facilities, the government is uninformed about their learning programme due to their registration status.

By contrast, practitioners at registered facilities were mostly aware that they were using a curriculum for their teaching.

The researcher enquired about who had provided the curriculum. Most of the ECD practitioners at the unregistered facilities struggled to answer this, the following being a typical response:

> ECD 13 Practitioner: "I use the books that I was given when I started here. I don't know where the books came from."

Unexpectedly, practitioners in registered facilities were also uncertain as to the provenance of the curriculum they used. The following response was typical:

> ECD 4 Practitioner: "When I came here, there was already a curriculum."

The research established that there is a weak understanding and possibly weak application of the curriculum in the ECD facilities studied. The sampled practitioners do not seem to understand the importance of a curriculum. A curriculum is derived from a credible, well-researched theory. It is therefore not a haphazard lesson, which is made up as one goes along. If the practitioner is unable to perceive the linkage between the curriculum, as expressed in the daily lessons, and the intended development outcomes for the child, do they understand why and how to do the lesson in the first place? If the practitioner does not know how what she does every day leads to the holistic development of the child, it calls into question the value in children attending such an ECD programme.

7.5.3.2 Holistic Development

Holistic development includes intellectual, physical, social and emotional development (DSD & UNICEF, 2006:46). As children develop rapidly, the DSD guidelines for ECD services in South Africa caution practitioners to be aware of the need for children to develop holistically. There are many theories in the study of ECD about how children learn. Arguably, the most widely appreciated child development theory is that of Jean Piaget, whose theory has been the foundation of compiling curricula for the Perry PreSchool Project, Madrasa Early Childhood Development Program and even the South African Grade R curriculum. This theory puts the child at the centre of learning. Every activity or interaction is rooted in deliberately developing the child. Therefore, the learning process of children is maximised when the children are involved in their learning. It follows that the practitioner who is most concerned with the holistic development of the child must understand the curriculum and how it translates into holistic development.

Building on the last question on the curriculum, the researcher asked how the curriculum employed by the practitioner provided for the holistic development of the children. From their responses, the practitioners generally did not have a clear understanding of holistic development, including practitioners in registered facilities. As can be seen in the selection of responses below, there were three levels of responses from the practitioners: some practitioners did not understand the term 'holistic development'; a second group of responses was limited to only mentioning one aspect of development, either cognitive skills or social skills; and a third group completely understood holistic development.

> ECD 2 Practitioner: "I don't know how to respond to this question."
>
> ECD 13 Practitioner: "Yes it does because I teach them like dough, there is nothing that they do not do here in class. They have toys."
>
> ECD 20 Practitioner: "When I am teaching them, I will say 'show me your head', so they start talking some came here not able to talk properly but they start talking, others did not know their heads."

It was common for the practitioners to recite the activities that the children do in class as a practitioner in ECD 13 did. However, the practitioners had to connect those activities with skills, which would show they understood how skills contribute to the holistic development of

a child. The second group of practitioners was able to mention at least one aspect of development.

> ECD 5 Practitioner: "It opens their minds, doesn't it?"
>
> ECD 10 Practitioner: "The children are able to know and count numbers. It also develops their vocabulary, they know words."
>
> ECD 15 Practitioner: "We have storybooks which assist the children to develop listening skills. I read stories to the children, they listen, then I ask them questions."

The above practitioners primarily mentioned intellectual development. With education-centred interventions, it is common for stakeholders to over-emphasise intellectual development, in some cases at the expense of equally important non-cognitive development. Non-cognitive skills such as social skills and emotional well-being are argued by Heckman to be crucial for scholastic and labour success (2006:1901). Finally, some of the responses that nearly encapsulated the meaning of 'holistic development' are cited below.

> ECD 1 Practitioner: "Emotionally – children can develop and express different emotions such as happiness, sadness, etc. Through our lessons they show me different emotions.
>
> Intellectually – the children are creative, I see it in their drawings, etc.
>
> Language – they have developed new words, increased their vocabulary."
>
> ECD 7 Practitioner: "(They) do creative arts, express their creativity. They also exercise their muscles. There will also be music and movement; from there you can see if a child is able to express themselves. Other times they play fantasies. We are also using books. As a result, there are children in here who can read already. When you read to them the following day you can ask one of them to read."
>
> ECD 11 Practitioner: "Academically, it helps them…The children develop physically as we do physical activities like jumping, skipping, catching, kicking the ball, stand on one foot, running. Socially, when I arrange them into groups and they do activities together. Making them work with one another, this especially helps those children who are being raised as the only child in their homes because those children are likely not to be able to work with other children."

These practitioners mentioned physical development that they achieve through playing and exercises; emotional development the children can express through creative work and fantasy play; social skills, as they learn to work and relate with other children; and intellectual growth,

including problem-solving skills and broadening their vocabulary. They clearly have a grasp of what holistic development is in the context of ECD.

7.5.4 Preschoolers Struggling in Class

Following the weak understanding of curriculum by the practitioners, the researcher investigated the practitioners' handling of struggling children; the children in their class who take longer to grasp basic concepts taught in class. All the ECD facilities indicated that only a small proportion of their children, less than 25%, struggle or take longer to grasp basic concepts. In light of the proportion of children who were struggling in class, the practitioners were asked to explain the reasons for these children to be struggling. Practitioners in the unregistered ECD facilities attributed the children's struggle to the children themselves and their caregivers who they suggested lacked a role in helping their children learn.

> ECD 14 Practitioner: "Because it is difficult for them. You know we ask the parents very nicely …if you want your parents to speak English but you do not speak English at home. So they come and go home they speak Xhosa. Then they come back but for us, we strive and we get it right. I can tell you there is a lot of them here who could not speak any English who are Shona and Xhosa. Like I said we give three to four months and they can speak English. But some of them, maybe they are lazy or they just want to look around but yeah, I do have two or three but not a lot."

Providing context to the responses of practitioner 14, the practitioner stated that the children who struggle are those whose home language is not English. The facility uses English as the language of learning and teaching while the children speak different languages at home such as Xhosa, Afrikaans and Shona, hence, the argument by some that the language of learning and teaching should be the child's home language. However, the problem that arises is that the nearest facility or the preferred facility may not use the home language of the child.

> ECD 15 Practitioner: "When you are teaching them you will notice that they do not pay attention. You will be teaching them a word and you will find that there is one who does not even want to attempt...Parents divert all that responsibility of teaching to us."

Moreover, practitioners frequently suggested that some children were innately slow learners.

> ECD 11 Practitioner: "I think they are just slow learners. They do not concentrate in class and they like to play while I am teaching."

ECD 20 Practitioner: "I am not sure, for instance, one is always inactive and I asked her sister, she said they are like that, that is how they are in their home. Some are just like that naturally."

While slow learners may exist, the fact that the practitioners had low expectations of some children of this age could potentially affect their strategies for the children's further development. Significantly, in forming their assessment of struggling children, none of the ECD practitioners considered their roles or the role of the ECD environment in which learning was taking place. The children could likely be struggling because their classes are overcrowded, they cannot play outside because of limited space or their ECD practitioners may not understand the curriculum or even lack the skills to teach it.

All the practitioners from the registered ECD facilities in the study confirmed having a small fraction of children in their class, less than a quarter, who take longer to grasp concepts. Their explanations for this were consistent with those provided by practitioners in the unregistered facilities, with a few providing greater insight. Several practitioners volunteered the idea of innately slow learners as an explanation for struggling children.

ECD 4 Practitioner: "The other children are small like I mentioned, they are three years…You know some of the kids are slow learners..."

ECD 5 Practitioner: "The children cannot all be the same, they cannot all learn at the same pace. So maybe others just take time to understand. I do not know what to say. Maybe they are just slow learners by nature. You will teach a child something today and tomorrow they have forgotten about it. The children cannot all be the same."

Another practitioner mentioned the children are easily distracted.

ECD 6 Practitioner: "They like to play. You would be busy teaching and they will be playing. You will tell them to do this and they will say they cannot because they are busy playing."

The practitioners all grasped that children learn at different paces, whether due to innate ability or age. One practitioner reported that her class included children aged 3–5 years old. It follows that the younger ones would require more time to complete the same task.

ECD 2 Practitioner: "They struggle the most when they are just starting so they are not used to being in this environment. Because they used to stay at home they are initially scared to interact here at school."

ECD 2 Practitioner acknowledges the effect of a change in environment on the ability of the child to learn, having observed that some children struggle with the transition from staying at home to attending the facility. However, as time passed they become more comfortable and perform better. Clearly, the year in which a child starts attending an ECD facility has two implications. One, the earlier the child starts attending early education in a learning facility, the sooner that child will be comfortable in that facility and optimise the early learning experience. Two, familiarity with early education through an ECD facility aids school readiness.

The above explanations show the practitioners from both the registered and unregistered facilities tend to attribute the struggle of the children to the children themselves (children playing, innate slow learners) rather than their teaching methods. None of them suggested any improvements to their teaching that might assist struggling children because they took no responsibility for the children struggling. Moreover, the practitioners seem unaware of any role played by the environment in fostering or hindering effective early learning. With that said, there was one practitioner who assumed responsibility.

> ECD 7 Practitioner: "Sometimes I suspect that I as a practitioner, perhaps I am too quick for them, like I go over the lesson too quickly. That is why you have to teach the same thing the whole week, from Monday until Friday."

According to the practitioners, the proportion of struggling preschoolers in their facilities is minimal. However, in as much as the returns of early intervention are reaped in the future, so is the failure. That is, the extent to which preschoolers may have struggled will not be revealed until they are in primary school. It is through the attainment of performance benchmarks or developmental milestones in early primary school, that learners show whether they had a good preschool learning foundation or not.

7.5.5 Description of Classrooms

The description of the classroom includes the age group of the class, class size and number of assistants and practitioners. 'Age group' refers to the age ranges of the children grouped in a class, 'class size' is the total number of children in the class, and 'assistant' refers to in-class adult helpers in addition to the class ECD practitioner.

Table 7.5.5a: Class Description by Age, Class Size and Number of Practitioners in Class for Registered ECD Facilities

	ECD 1	ECD 2	ECD 3	ECD 4	ECD 5	ECD 6	ECD 7	ECD 8	ECD 9	ECD 10
Age group	5–6 years	4–5 years	3–5 years	3–5 years	5–6 years	4–5 years	4–5 years	5–6 years	4–5 years	5–6 years
Class size	30	20	30	21	16	18	30	25	27	27
No. of Assistants	1	1	0	0	0	1	0	1	0	0

Source: Primary data.

Table 7.5.5b: Class Description by Age, Class Size and Number of Practitioners in Class for Unregistered ECD Facilities

	ECD 11	ECD 12	ECD 13	ECD 14	ECD 15	ECD 16	ECD 17	ECD 18	ECD 19	ECD 20
Age group	4–5 years	4–6 years	5–6 years	4–5 years	4–5 years	3–5 years	3–4 years	5–6 years	3–5 years	4–5 years
Class size	15	10	48	25	15	25	9	30	17	26
No. of Assistants	1	0	0	1	0	0	0	1	0	1

Source: Primary data.

Because the sampled children were sourced from either Grade R or pre-Grade R, whichever was the highest grade in that facility, the age group differed for each facility, depending on whether they had Grade R or pre-Grade R. Hence, in the above tables, age ranges from 3–6 years. For registered ECD facilities, the class size ranges from 16 to 30 children, while for unregistered ECD facilities, the class size ranges from 15 to 48 children. The implication of the class size is two-fold. The first implication is the high possibility of overcrowdedness in the class. For instance, at ECD 9, 48 children represent one age group in one room and they still have other children in the same room. During data collection, ECD 9 was extending its capacity by building more rooms. The second implication of the class size concerns the number of practitioners in class or the child to practitioner ratio. As the interviews were conducted with the main practitioners for each class, they were asked whether they had assistants in their class.

Only 40% of the practitioners at the registered ECD facilities reported having assistants in their classes while 60% had no assistants. The proportions were identical at the unregistered ECD facilities, where 60% of the practitioners did not have assistants in their class and 40% did. The number of staff and children in a class is relevant to the practitioner to child ratio. It is known that a lower practitioner to child ratio provides a conducive environment for children to learn. Thus, fewer learners or more staff in the class enables practitioners to engage more closely with the children and have a manageable workload. The High/Scope Perry Preschool Project maintained a child-staff ratio of not more than ten children per adult (Schweinhart et al., 1993:110), one of the lowest child-staff ratios in an early intervention.

However, in South Africa, the Children's Guide for ECD practitioners prepared by Berry et al. (2011:44) states that, for classes with children aged 5–6 years, one practitioner should be responsible for a maximum of 30 children. Only ECD 13 violated this child to practitioner ratio for this age group. Two other facilities, namely ECD 1 and 18, reported exactly 30 children in their classes. For younger children aged between 3–4 years of age, one practitioner should be responsible for a maximum of 20 children. ECD 3, 4 and 16 exceeded this practitioner-children ratio.

7.5.6 Access to Resources in the Classroom

In addition to having a formal structure that is in line with the acceptable ECD norms and standards, competent staff and effective curriculum, it is equally important that facilities have adequate resources, including the tools or instruments that are integral to effectively carry out the process of early learning. These resources typically constitute Learning and Teaching Support Material (LTSM), although they differ from the core LTSM used in formal schools. This is because during the early learning phase, children often cannot yet read but they can learn. Hence, ECD facilities have to be creative in how they enable learning. For example, children can learn through music, movement, creative arts and puzzles. The practitioners were asked if they had the following resources in their class: arts and craft/ creative support material, musical and movement instruments, educational games, puzzles and books. The researcher further enquired about the adequate supply of these resources for children. Resource adequacy was measured in terms of being enough for all the children, for most of the children and for a few of the children.

Table: 7.5.3: Access to Resources in the Classroom

Facility factor		Registered facility N=10	Unregistered facility N=10	Total sample
Adequacy of Art Supply	For all the children	50%	40%	45%
	For most	50%	10%	30%
	For few	0	40%	20%
	For none	0	10%	5%
Adequacy of Music Supply	For all the children	30%	10%	15%
	For most	30%	30%	30%
	For few	20%	0	10%
	For none	20%	60%	40%
Adequacy of Puzzles	For all the children	10%	40%	25%
	For most	60%	30%	45%
	For few	30%	10%	20%
	For none	0	20%	10%

Source: Primary data.

Arts and Crafts

Creative arts resources include paper, paint, paint brushes, play dough, crayons, scissors, glue, strings, sticks and seeds. Half the practitioners at the registered facilities had enough art supplies for most of the children, while the remaining half claimed to have enough for all the children in their classrooms. Therefore, the registered facilities had acceptable/ adequate art supplies. At the unregistered facilities, 10% of the practitioners did not have any art supplies, 40% had enough art supplies for a few of the children in their class, 10% for most and 40% had enough art supplies for all their children. It, therefore, appears that the registered facilities have a somewhat greater supply of art materials or are more likely to have art supplies than adequate unregistered facilities.

Musical and Movement Instruments

Musical and movement instruments refer to drums, tambourines, triangles, cymbals, maracas, castanets, bells and shakers. It appears that the availability of musical instruments is constrained in both registered and unregistered facilities. That said, the lack of a musical instrument is higher in unregistered facilities. More than half of the unregistered facilities, 60%, did not have musical instruments in their classrooms. In the same category, for registered facilities, 20% did not have musical instruments. The lack of musical instruments could not be statistically attributed to the registration status of the facilities.

Educational Puzzles

Educational puzzles include puzzles that teach numbers, shapes, colours and size. In terms of educational puzzles, 20% of the unregistered facilities did not have any educational puzzles. The registered facilities appeared to have considerable educational puzzles in their classrooms – 60% had enough educational puzzles for most of their children.

These resources aid child development and subsequent learning. They are effective in developing problem-solving skills and creativity. Therefore, a facility that lacks these resources impairs children's learning and development. Due to the disparity of resources between registered and unregistered facilities, it follows that children in registered facilities have a greater opportunity to develop, although the registered facilities also did not have as many resources as desirable.

Since the year 2014, the DoBE published and committed to a Learning and Teaching Support Material (LTSM) Policy. The latter aims to manage and ensure the universal provision of LTSM in public schools (Department of Basic Education, 2014:3). Examples of LTSM include textbooks, student workbooks, and teachers' guides. As a measure of universal access to LTSM, the policy aims to provide one textbook, per learner, per subject, which is the government's standard of adequacy. At the formal school level, the government recognises the inequalities that exist within the education system because of the difference in the paying ability of households. The government understands that other learners may not have the ability to purchase the LTSM. Without core LTSM, their learning experience is compromised. At the ECD level, however, the same recognition is not found. In other words, there is no policy to ensure universal LTSM across ECD facilities.

7.5.7 Parental Involvement at ECD Facilities

Dookie (2013: 26) defines parental involvement as the activities in which parents engage in, both at the facility and at home to support the child's educational achievement. Measuring the level of parental involvement, practitioners were asked whether they tried to involve parents in their children's early education and the frequency of parent meetings. Because the principals were also asked about parental involvement in terms of attendance of meetings the responses were integrated into this section because of the consistent theme.

7.5.7.1 Encourage Parental Involvement

When asked if they try to involve the parents, 80% of the practitioners in the unregistered ECD facilities responded positively while 20% of the practitioners did not attempt to involve the parents in their children's early learning. To this end, these practitioners were asked to explain why they did not involve the parents.

> ECD 17 Practitioner: "It is still early, I was planning to involve them as the year progresses. Like when I see a struggling child or child who is behind then I will involve a parent."

> ECD 20 Practitioner: "The preschool is just starting this year so as time goes on I will involve parents."

The above practitioners were planning to involve the parents in case of a crisis.

Practitioners at the registered facilities were confident that they involved the parents. A follow-up question to the practitioners who involved parents was asked to clarify the methods they use to involve parents. The responses mainly concerned giving home activities for children to complete with the help of the parents. Parents were tasked to help children learn letters and numbers, tell the children the day and date in the morning, etc. Practitioners also updated parents when they fetched their children from the facility. Methods to achieve parents' involvement consisted of having a WhatsApp group, voluntary feedback when parents fetch their children, home activities and the parent meeting. Attempting to involve parents in their children's education and doing so successfully were revealed to be a cause of frustration evident in the practitioners' responses.

> ECD 15 Practitioner: "For instance, we tell the children that before coming to school in the morning they should ask what day and date it is from their parents then give feedback in class. If they do that, tell the children the day and date it becomes easier for us. Because the first thing we ask them in class is "what day is it, class?" When you ask the children to give feedback in class, you realise that the parents are not helping us to do our job. They divert all the teaching and learning responsibility to us."

> ECD 7 Practitioner: "We call the parents each quarter, sit down with them, show the child's portfolios to see the child's progress. You know there is that thing where you ask the parent to collaborate with you, to work together but the parents do not do that. You will find that as the teacher you write a letter to the parent asking them to help their children to collect bottle caps for counting in class. There will be few children coming with the lids; you will ask the child

why they did not bring the bottle caps the child would respond my mother told me she is busy drinking, she is not going to do that."

ECD 11 Practitioner: "I do not know, really do not, you know black people, they are really discouraging. Especially in the age group that I teach. They have that notion of preschools merely babysitting their children."

The quotations above clearly illustrate a divide between the objectives of the practitioners and caregivers who for varied reasons are reluctant or unwilling to be more involved in their children's education and development. According to the practitioners, the caregivers' reluctance is related to the overall under-appreciation of early learning and development in the community where the caregivers carry the misconception that preschools are merely babysitting facilities. With that perception of babysitting in mind, the expectation of the caregivers is met each day when they receive their children back safely. There is, therefore, no need for long-term involvement and assistance with home activities. Overall, the lack of parental involvement is attributed to social and cultural issues by the practitioners.

7.5.5.2 Parent Meetings

According to Vandenbroeck (2010:84), parent meetings can provide a valuable platform for facility personnel to engage the caregivers on the curriculum and the daily operations of the facility.

Table 7.5.7.2: Frequency of Parent Meetings

	0 meetings (%)	Twice per year (%)	3 times (%)	Quarterly (%)	More than 5 (%)	Total (%)
Registered	0	0	0	90	10	100
Unregistered	10	10	40	40	0	100

Source: Primary Data.

Nearly all the registered facilities held quarterly parent meetings although many interviewees were dissatisfied with the attendance at these meetings.

ECD 7 Principal: "For instance, we are going to call the next meeting now for this quarter, few of the parents will attend the meeting. They will promise to come; others will ask what the meeting was about. The parents always have problems. We even ask which one do they prefer, should we hold the meeting during the week or Saturday or Sunday after church? Still they do not come."

ECD 15 Principal: “The parents do not care. They do not care about their children. Because sometimes you’ll bump into one of the parents and you'll ask why she did not come to the meeting, she will respond ‘I forgot there was a meeting’. There is hardly ever a serious reason that prevents one from attending the meeting, she just forgot.”

ECD 8 Practitioner: “Their attendance is not good because we have the meetings during the week so other parents are still at work. However, for this year we are planning to hold the meetings during the weekends.”

From the above, two things are clear. One, the principals recognise the importance of parent meetings and are prepared to arrange them at the convenience of the caregivers. Two, for varying reasons, caregivers’ attendance of meetings regularly falls short of the ideal and therefore negatively impacts on the ECD facilities’ attempts to involve parents in their children’s early education.

7.6 ECD Principals in Philippi

7.6.1 Profile of ECD Principals

Table 7.6.1 shows the gender, population group and age of the principals in Philippi.

Table 7.6.1: Profile of ECD Principals

Category		Frequency (Percentage)
N		20 (100%)
Gender	Female	20 (100%)
	Male	0 (0%)
Population group	African	18 (90%)
	Coloured	2 (10%)
Age	18–25 years	0 (0%)
	26–30 years	2 (10%)
	31–35 years	2 (10%)
	36–40 years	3 (15%)
	41–45 years	2 (10%)
	46–50 years	3 (15%)
	51+ years	8 (40%)

Source: Primary data.

All the principals were female, similarly to the practitioners. The African black group dominated the sample’s principals at 90% with 10% being Coloured. In terms of age, most of the principals were above 45 years old and the principals were, as a group, older relative to the practitioners.

7.6.2 Professional Competence of ECD Principals

The professional competence of principals was assessed according to the principals' highest education attained, the number of years the principals have worked in the ECD sector, the number of years they have worked in their respective ECD facilities as principals and, finally, their access to training opportunities.

7.6.2.1 Educational Qualification of Principals

The researcher first enquired if the principals had any ECD qualification, which is a minimum requirement in this sector.

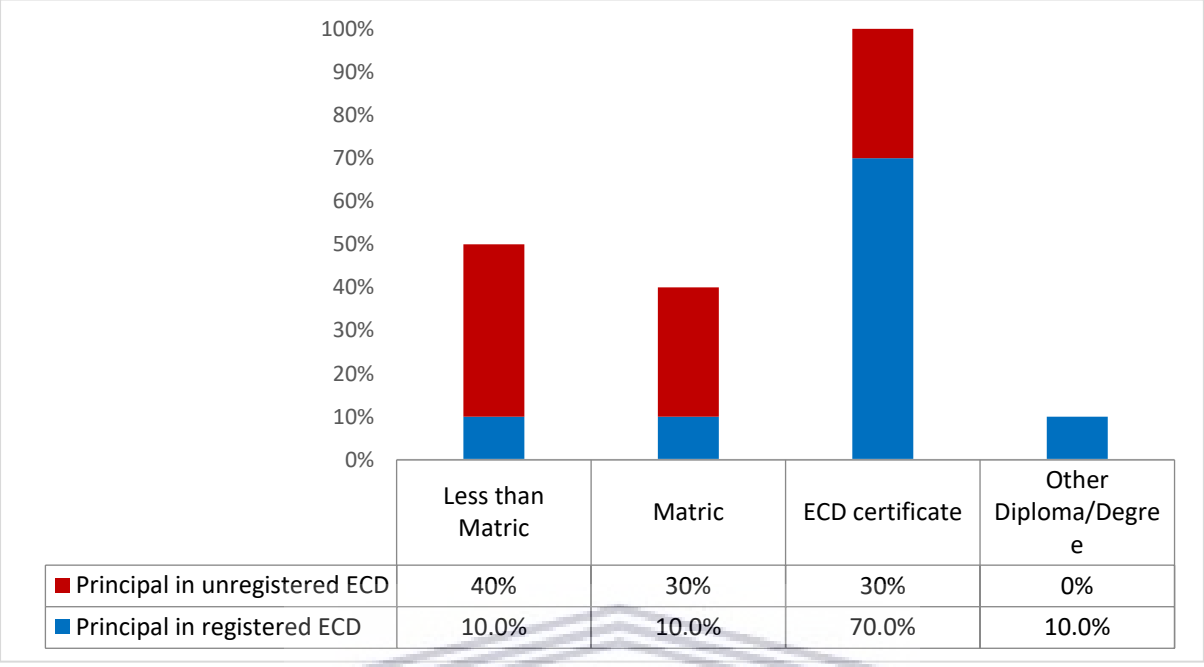
Table 7.6.2.1: Highest Educational Attainment of ECD Principals

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Principal has ECD qualification	70%	30%	50%	0.074*

Source: Primary data.

Overall, about half of the interviewed principals have an ECD certificate. The Fisher exact test shows a statistically significant relationship with a p-value of 0.074 between having an ECD qualification and the registration status. The relationship between having an ECD qualification and the registration status of the facility is statistically significant at 10% significance. This is consistent with the data showing that principals in registered facilities are more likely to have an ECD qualification than their counterparts in unregistered facilities. To this end, 70% of the principals in the registered facilities have an ECD qualification while only 30% of the principals hold the same qualification in unregistered facilities. Although still not satisfactory, the proportion of principals with the relevant qualification is higher than the 35% of practitioners. In figure 7.6.2.1, the highest educational levels are further broken down to include secondary education and other degrees.

Figure 7.6.2.1: Highest Educational Attainment of Principals



	Less than Matric	Matric	ECD certificate	Other Diploma/Degree
Principal in unregistered ECD	40%	30%	30%	0%
Principal in registered ECD	10.0%	10.0%	70.0%	10.0%

Source: Primary data.

In widening the categories of education, one finds that overall, a quarter of the principals have less than matric, while 20% have matric as their highest education level. The principals in unregistered facilities mostly drive the proportion of principals with less than matric, with 40% of the principals. Considering that 70% of the principals in unregistered facilities do not have an ECD qualification, it is also unfortunate that in these facilities, the practitioners are also without the same qualification. Therefore, there is a combined effect of both the practitioner and the principals being unqualified.

7.6.2.2 Work Experience of ECD Principals

The analysis commences with the work experience of principals in the ECD sector and progresses to their experience in their respective facilities. The ECD guidelines recommend that ECD supervisors likely to be principals should have at least three years of experience of working with children (DSD & UNICEF, 2006:66).

Table 7.6.2.2a: Years Principal Worked in the ECD Sector

Facility factor	Registered facility N=10	Unregistered facility N=10	Total sample	Fisher's exact (Pr)
Principal sector experience three years and above	100%	70%	85%	0.211

Source: Primary data.

For unregistered facilities, only 10% of the principals have ECD work experience of less than a year, 40% have 2–5 years work experience and the remaining 50% have worked in the ECD sector for more than six years. Even though the principals in unregistered ECD facilities appear to have considerable experience, principals in registered ECD facilities have more work experience as all the principals in registered facilities have worked in this sector for more than six years.

The Fisher exact test did not establish a statistical dependency relationship between the type of facility and the number of years the principals had worked in the ECD sector. This is shown by the p-value of 0.211. This means that the differences in the working experience of principals are not related to the registration status of their facility.

Facility Work Experience

Facility work experience represents the number of years the principals have worked as principals in their respective facilities.

Table 7.6.5.2b: Number of Years Principals Worked in the ECD Facility

Facility factor		Registered facility N=10	Unregistered facility N=10	Total sample
Principals' facility experience	Less than 1 year	0	10%	5%
	1 year	0	0%	0%
	2–5 years	0	50%	25%
	6 years+	100%	40%	70%

Source: Primary data.

The number of years working in the ECD sector and the number of years working in this ECD facility are almost identical. The fact that years of experience in the facility mirror their work experience in the ECD sector is not coincidental. Most of the principals entered the ECD sector by starting their own ECD facilities as principals. This means that whatever knowledge or best

practice they now use is largely derived from working in and being exposed to one ECD facility. The principals in the registered ECD facilities have more working experience than their colleagues in the unregistered ECD facilities.

7.6.2.3 Training Opportunities for ECD Principals

It was encouraging that all the ECD principals in unregistered and 90% in registered facilities had attended training in the previous 24 months. There is no statistical relationship between attending training and the registration status of the facility. The training workshops focused on different teaching techniques, children's stages of development as well as the health and safety of children. Most of the training courses were provided by NGOs. Although it is encouraging that principals attended some form of ECD training in the last 24 months, except for one principal, the courses seem more fitting for ECD practitioners. One would assume principals would attend managerial and financial training courses befitting their managing, planning, finance, human resource and administrative functions. It is possible that the principals are merely responding to the supply. That is, if the NGOs are only providing child development courses, then principals will attend child development courses.

In comparison with practitioners, principals appeared more qualified as they were more likely to have ECD qualifications, higher work experience and a higher proportion of recent attendance of an ECD training activity or workshop. However, a significant number of them were without an ECD qualification and had limited work experience, both of which are required to run an ECD facility. It is stated in the ECD norms and standards that an applicant (typically a registration applicant is a principal), must either possess a National Certificate in ECD at NQF Level 1 to 6 of the SAQA, or any relevant ECD qualification or a minimum of three years' experience in implementing ECD programmes (Berry et al., 2011:45). Therefore, lacking both a qualification and experience practically guarantees the denial of registration. Another obvious consequence of lack of qualification in the ECD sector is the inability of the principals to complete their jobs. Modise (2019:118) mentioned that one of the factors contributing to poor management is the lack of professional training of a substantial proportion of principals.

The lifelong work of James Heckman contends that the period of investing in human capital is most effective and profitable during early childhood. Therefore, the cost of human capital increases as age increases. It follows that preschool has the highest returns and the lowest opportunity cost compared to subsequent educational investments. Both the principals and the

practitioners are at the centre of instilling early human capital. Unfortunately, the ECD personnel responsible for equipping the children also lack the necessary human capital.

7.6.3 Grade R Assessment

Grade R assessment was only applicable to facilities that offered Grade R. The questionnaire asked how school readiness is assessed to promote the children to the first grade. Overall, Grade R is offered by 10 of the facilities in the sample.

Unexpectedly, the principal of ECD 20, a facility that started operating in the year of the interview, when asked whether the facility offered Grade R, responded: "I would say the five-year-olds are our Grade R class."

On the face of it, the principal appeared not to know if they offered Grade R or had yet to decide if his class of five-year-olds was Grade R. It follows that there had been no planning for this grade in terms of hiring a Grade R practitioner and using the correct curriculum. Below are some of the responses on how Grade R was assessed.

> ECD 12 Principal: "I use the books that I buy myself and I also use books from Unlimited. I give the children home activities and they do assessments per semester."
>
> ECD 13 Principal: "We try to push them. We do assessments and test them; everything that is done in Grade 1, we prepare them."
>
> ECD 20 Principal: "Since we teach them you can tell as you are busy with the lesson that this one understands and the other one does not understand then you will see there is some improvement."

The responses of these principals were very generic. There was no clear criterion of how Grade R is assessed. For instance, the ECD 13 principal mentions "pushing" the children, "assessing" them and "preparing" them. Again, there is no clear indication of how to 'push' a five or six-year-old in this context. Granted that the registered ECD facilities were also not allowed to have Grade R, however, it should be noted that these facilities had at least built separate classes to house Grade R, unlike the unregistered facilities that had one-room facilities. The registered facilities were somewhat confident in how they assessed school readiness, as indicated in this detailed explanation.

> ECD 8 Principal: "We consider whether they are able to listen to instruction, they can count, recognise letters. In addition to counting we do not only consider their ability to count from one

to a hundred, any child can do that, but whether they attach meaning to the numbers. Does the child know the meaning of numbers? The same with colour; a child may know the name of colours but they need to identify – hence we will say 'show me a green object in this room'. Another exercise we do, we will ask them 'how many children in class are wearing a certain colour?' They will stand together as a group based on the colour they are wearing. From there we ask, 'which colour-based group has more children or people?' They will say perhaps red has more, followed by green, etc. We can even plot a graph using that data and put it on the wall. So those are some of the ways we use to assess them.

"For language, we give them magazines to do cut and paste. Perhaps we ask them to identify and cut things that one wears in summer. They will say we wear sunglasses, shorts, hats, sandals, etc. They then do cut and paste; we call that reading and writing.

"We do drawing and colouring. In colouring, they have to colour within the lines or inside the drawing."

The above principal was able to detail how Grade R was assessed in her facility. With these clear outcomes, the children are likely to be well prepared for formal schooling.

Grade R is the pride and joy of the South African government to show its commitment to promoting ECD in the country. Parents may prefer ECD facilities for Grade R for various reasons, namely: the facility is situated closer to the child's home; the child may have already been attending the facility for many years; or the facility has longer operating hours. The Grade R offered at schools is painted in the literature and by educational experts as accessible but with minimal returns on cognitive abilities. This suggests that despite children attending by the thousands, they are not deriving meaningful learning returns. That is concluded for Grade R classes at formal schools, which are likely to use an approved curriculum, and have better infrastructure, qualified practitioners, higher investment per learner, and broader access to LTSM than these ECD facilities in Philippi. It is inconclusive whether the Grade R children in Philippi are not deriving a meaningful learning experience, although most of the facts illuminated in this research appear to suggest that.

7.6.3 Sources of Income for ECD Facilities in Philippi

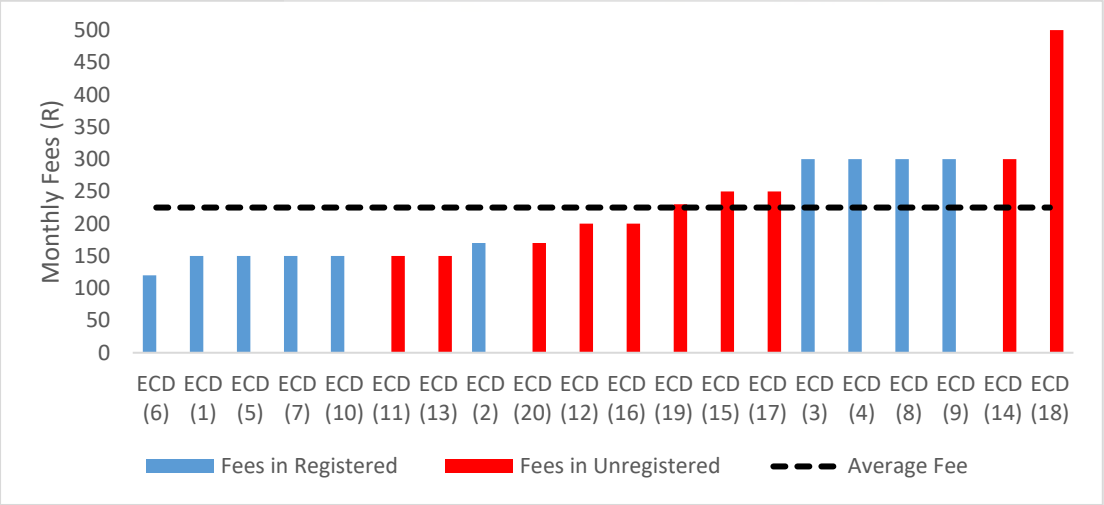
It requires money to operate and maintain an ECD facility of acceptable quality. ECD facilities may receive income from fees, subsidies and donations. The researcher investigated all these possible sources of income.

7.6.3.1 Price of Early Learning: ECD Fees

Regardless of the registration status of an ECD facility, it is a norm for ECD facilities to charge fees to raise operational revenue. However, without a government subsidy and private donations, a school fee becomes the only source of income for an ECD facility. All the interviewed ECD facilities charge school fees. The actual fee amounts differed significantly across the facilities in Philippi. However, all the facilities seem to follow the same pricing structure or rationale. The school fee structure is determined by age group with parents of the youngest group (babies) being charged relatively more and the oldest group (4–6 years old) being charged the lowest school fees.

Figure 7.6.3.1 shows ECD facility fees charged in the study sample to the oldest group of children in the registered and unregistered facilities. 'Fees in Registered' denotes fees in registered ECD facilities, 'Fees in Unregistered' represent fees in unregistered facilities and the 'Average Fee' shows the mean fee. The graph also shows the fee amounts from the lowest fees to the highest.

Figure 7.6.3.1: Fees in ECD Facilities



Source: Primary data.

Owing to the limitation of the Fisher exact test not to conduct statistically sound tests for non-binary categories, the study could not establish if the fee amounts statistically differed by the registration status. However, the following was noted. The mode, which represents the most common fee charged by facilities in Philippi, is R300 per child per month. The lowest amount charged by facilities is R120 in a registered facility. On the other hand, the highest fee charged is R500 per month in an unregistered facility. The large difference in the fees shows the autonomy of the facility owners in setting their own fees. The average fee per month is approximately R225. Using the average fee as the benchmark, about 50% of unregistered facilities exceed the average fee, while 40% of the registered facilities charge more than the average fee. There is no definite pattern in the above graph to determine whether registered facilities or unregistered facilities are concentrated towards the higher, lower or middle fees, although it is noted that the lowest five fee facilities are all registered facilities.

7.6.3.2 Government Subsidy

Government subsidy refers to the conditional subsidy from the DSD.

Table 7.6.3.2: Government Subsidy

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Facility receives subsidy	90%	0%	45%	0.001***

Source: Primary data.

Studying table 7.6.3.2, it was unsurprising to confirm the statistically significant association between receiving a subsidy and the registration status of a facility, statistically significant at 1% (0.01). This is because ECD facility subsidies are mainly reserved for registered facilities and therefore likely to exclude unregistered facilities. Therefore, receiving the government subsidy is dependent on the registration status of the facility.

None of the interviewed unregistered ECD facilities receive a government subsidy, even though they are serving poor communities. Since registered ECD facilities are nearly guaranteed to receive a government subsidy, even though the amount may differ, it was unexpected to find that one registered ECD facility, ECD 4, was not receiving a subsidy. A follow-up question was posed by the researcher to the principal as to why they were not receiving a subsidy.

> ECD 4 Principal: "From the meetings we had attended they told us as soon as you get registered you also start receiving the subsidy. It will not even take more than three months before you get the subsidy. But now the year is almost ending."

The facility had been waiting for the subsidy for more than eight months since their registration was approved without being given the reason for the long wait. It turned out this was not atypical:

> ECD 5 Principal: "I finally got registered in 2013, while I started the process in 2011. But I only started receiving the subsidy from the Department of Social Development in March 2016, for 31 children. Since their financial year starts in April, I was then back-paid or reimbursed from April 2015 to March 2016."

The principal only received the subsidy approximately three years after registration and was only partially reimbursed. The experiences of the two principals indicate a prevailing inefficiency regarding the administration of DSD subsidy processes.

7.6.3.3 Other Subsidies

Besides the school fees and DSD subsidy, an ECD facility may receive private donations expressed in money or in kind.

Table 7.6.3.3: Other Subsidies

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Facility receives other subsidy	20%	10%	15%	1.00

Source: Primary data.

Depicted in table 7.6.3.3, 20% of the registered ECD facilities indicated benefitting from other monetary subsidies. With respect to unregistered facilities, only 10% (one facility) indicated receiving a once-off donation of R10,000 from an NGO. As per the Fisher exact probability (1.00), receiving another subsidy is not affected by the registration status of the facility.

7.6.3.4 Donations-in-Kind

Further, the questionnaire asked whether the facilities had received any donations-in-kind in the previous year.

Table 7.6.3.4: Donations-in-Kind

Facility factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Facility receives donations-in-kind	40%	60%	50%	0.656

Source: Primary data.

For the registered ECD facilities in table 7.6.3.4, 40% confirmed to have received donations-in-kind which included toys and groceries from NGOs. This proportion significantly increased to 60% for the unregistered facilities. Similar to receiving other subsidies, there is no statistical difference between registered and unregistered facilities in terms of receiving donations-in-kind. The ECD facilities regularly received food donations, mostly of rice, porridge and soup, from several NGOs over the previous year. Still, 40% of the unregistered ECD facilities received no government subsidy, no private subsidy and no private donations.

7.6.4 Registered Facilities: Road to Registration

Having shown the registration process of an ECD facility (see figure 5.4.2), below the principals narrate how they navigated through the process. ECD facilities that had obtained registration were asked how long it had taken to complete the registration process as well as the challenges they had encountered with the process.

Duration of Registration Process

Some of the facilities took two to three years to complete the registration process and others exceeded three years. One exasperated principal mentioned that it took more than eight years to be registered. A registration process of between 2–8 years is poorly designed and/ or poorly administered. One of the principals who had experienced a shorter registration period made an interesting comment on bureaucracy in providing her advice.

> ECD Principal 6: "The trick is that you just do what they want you to do. If you do not do what they have requested that makes the process to drag on forever."

As correct and sensible as this advice is, it only applies when one has the ability and the means to comply with all the prescribed norms and standards. ECD principals do not deliberately disobey the DSD's directives, but they lack the financial means and ability to comply.

> ECD 4 Principal: "…SAEP told me to call the social worker immediately and ask what more I still need to do in order to get the registration so they can help me at that moment. They will speak to the social worker over the phone and ask what else still needs to be done to improve the preschool. The social worker then told me, no everything is fine, you do not have to do anything. I felt like crying, everything was fine."

The above example is instructive, as the principal had to call on an NGO (SAEP) to intervene to obtain clarification of the status of her application, which again is a comment on bureaucratic inefficiency rather than anything lacking in her application. Principals perceived NPOs as more cooperative and sympathetic than government officials.

> ECD 9 Principal: "Government does not take educare as seriously as formal schools. Yet on the television, they pretend it is a serious (important) thing."

The table below further clarifies the challenges principals encountered with the registration process.

Table 7.6.4: Challenges with ECD Facility Registration

Challenge	Supporting Evidence
Who owns the land?	*ECD 1 Principal: We were asked if the land which we were occupying was leased to us and it was not. It was vacant land which we just occupied without permission.*
Zoning/ Rezoning land and the building plan	*ECD 2 Principal: This house (currently preschool) used to be a one-room RDP house. Then I extended the house myself, not knowing that I first needed to consult building people or DSD to approve. Then when you want to get registered, they require building plans. We had just built with no building plans.* *ECD 7 Principal: The private sector is all about money. For instance, we paid R3,500 for the initial design of the building plan, to basically draw it. Then we pay another R1,000 to make any changes. Then at Stocks and Stocks, I think you pay them for per square metre that is in your plan, we paid them about R8,000. You have not started with the building you are paying for the paper which you don't even know it will get approved. The money is non-refundable regardless of the outcome of the application. If you keep making changes to the plan you have to pay extra so those are recurring costs.*
Infrastructure: demolish and rebuild	*ECD 1 Principal: Now they are strict; they do not want shacks, containers and bungalows. So we demolished the bungalow and got rid of the containers which meant we had to rebuild with bricks this time. It was tough to move from containers to this formal building, and we needed this structure in order to renew our registration.*
Department inconsistency	*ECD 4 Principal: Then, when you meet someone at the forum, you find that this person got registered although they also have a shack at their yard. How come I did not get registered if they allowed this preschool to get registered, and they also have a shack? I even thought the social worker did not want me to be registered; I stopped the process.*
Everything requires money	*ECD 4 Principal: Mind you, I do not have money, so I had to go around asking for donations.* *ECD 6 Principal: The building inspectors they come and point do this and that and you don't have the money to do all those things.* *ECD 8 Principal: The building we now have was built using donations from mostly SAEP. The cost to build this crèche is approximately R300,000.*
Time-consuming	*ECD 6 Principal: The trick is that you just do what they want you to do. If you do not do what they have requested that makes the process to drag on forever.*

Source: Primary data.

7.6.4.1 Who Owns the Land?

Before one can even build, the first question to be answered is who owns that land on which the ECD facility will be built. Can the potential ECD facility owner present a title deed or lease agreement for the land? The issue of land is one of the biggest challenges facilities face in poor urban areas and more so because urban dwellers, especially in township surroundings, are prone to occupying vacant land without permission. For instance, one of the study areas negatively affected by land ownership is the Marikana informal settlement, situated along the Symphony Way near Stock Road in Philippi East. The name of this township is in honour of the tragic miners' strike that took place on 16 August 2012 in Marikana near Rustenburg. Although its own misfortunes cannot be compared to the original Marikana Rustenburg, this township has suffered their own share of dispossession and violent collision with the police. Since the residents forcefully occupied the land in 2013, they have been subject to numerous violent evictions by the police. However, in August 2017, the Western Cape High Court ruled that people would not get evicted; the City would have to buy the land from the private owners. Despite the court's ruling, on an article written by Gontsana (2018) of news24, the City had not yet reached an agreement on purchasing the land.

The ideal for operators of ECD facilities would be to own their site which would leave them free to develop it in the way most conducive to early learning. However, securing a site presents numerous hurdles, sometimes complicated by the facility already illegally operating at the proposed site. The owner, whether a government entity or private, may not be willing to sell or lease the land. For example, one principal recounted her many long and fruitless journeys to the Department of Human Settlement in Cape Town to secure a lease agreement.

7.6.4.2 Zoning/ Rezoning Land

Municipal regulations require that property must be rezoned if the occupant wishes to change its original use, as would be the case if an owner of a house in a residential area wanted to convert it for use as an ECD facility. The zoning of the land was stated as another frustrating step in attempting to secure registration. As shown in the interview excerpts above, changing a property's use involves many expenses, even before building starts, such as drawing, altering and submitting building plans. It also has to be borne in mind that the operator undertakes these expenses at risk since, upon completion, registration and the attendant government subsidy may still not be approved.

7.6.4.3 Infrastructure: Demolish and Rebuild

Because most principals are converting their own houses to ECD facility, and because houses rarely coincidentally conform to the specifications of DSD and the various government departments requirements of ECD facilities, there is frequently a requirement to demolish and rebuild to comply with the specifications of an ECD facility that will be approved for registration. One of the facilities in the study had been established and successfully registered before DSD adopted the ECD norms and standards that included a condition that an ECD facility should be a formal structure. This ECD facility was already registered and using containers as classrooms under the repealed Child Care Act of 1983. However, when DSD raised the standard under the amended Children's Act, the facility had to comply with the new act to renew its registration. This entailed ridding itself of the containers and building a formal brick structure that was not financed by any government department but by a private organisation.

All three issues discussed above, who owns the land, (re)zoning and building are related to land use and management. On figure 5.4.2 these issues are captured in the first department outside of DSD that facilities are referred to. This means that principals encounter challenges very early early in their registration process.

7.6.4.4 Inconsistency

Inconsistent decision-making and miscommunication often feature between the facilities and the DSD. One principal reported being told by a DSD official to demolish a shack she had in her yard which was not used for the children but served as a storeroom for her home. She gave in to the request but later discovered that many other registered facilities still had shacks in their yards.

7.6.4.5 Everything Requires Money

The facilities have to privately fund the entire registration process, given the little money they receive from the fees and inconsistent monetary donations. The ECD norms and standards are not irrational or unnecessary when it comes to upholding the quality of ECD facilities in the country but compliance with the DSD requirements must be funded. Considering the parlous economic state of communities like Philippi, the government's decision to impose norms and

standards without assisting in the provisioning of ECD facilities that ultimately make the country better off is irrational.

7.6.5 Unregistered Facilities: Barriers to Registration

The first question posed to unregistered facilities was whether the principals had started the registration process. To this end, 90% of the interviewed principals confirmed having started the registration process. The researcher also asked about the challenges they had experienced with the registration process. The principals identified the following barriers.

Table 7.6.5: Unregistered Facilities: Barriers to Registration

Barrier	Supporting Evidence
Inadequate infrastructure	*ECD 11 Principal: The current structure is a backyard shack. DSD is concerned about the safety of the children. It is a one-room structure; we do not have classes.*
Limited financial resources	*ECD 13 Principal: The fire department instructed me to demolish the entire house and rebuild; it costs R180,000 to complete the renovations.* *ECD 15 Principal: This process is really dragged by the land department. They come and point, break those walls down, open another window there, without giving you a cent. Everything you finance it yourself.* *ECD 16 Principal: You do realise that I have teachers that I have to pay. I use the school fees income to pay teachers and buy food. Money is a challenge for me. Everything needs money.*
Imperfect knowledge about ECD Standards and Norms	*ECD 14 Principal: The house is too small to be an ECD facility. Now the room may be small, and now we must break down again, to make the room as they want the room. We must have like evacuation door, and the house is already built. I'm already taking my house for a crèche.*
"I do not own my house"/ ownership	*ECD 14 Principal: This is Cape Community Housing, it's their house. What you must do, you must buy your house now. How much is the house, the house is almost like R40,000, and we must have the cash. So every month the money is going up. Now we also get a rent slip that says we are illegal occupants. And we have to pay R1,500 every month for rent. I will never wake up in one morning and here is a R40,000, you understand?* *ECD 19 Principal: Biggest challenge is a land that is not mine. The land here in Marikana is still in dispute. It is not approved for us to live here. Because of that, I cannot do anything, I am being held back by the land issue. The land is not ours but also it does not belong to the government, it belongs to the private sector. The land dispute is pending in court.*

Source: Primary data.

Challenges with the registration process seem to be rooted in a lack of resources, limited information and money. One principal complained that the DSD indicates its compliance requirements "without giving you a cent". For a typical business, start-up capital is necessary. However, for an ECD facility, a place of development for children, should capital remain the main determinant to open one? With no access to government or private capital, none of the interviewed facilities had the proper structure as outlined in the ECD guidelines. Given the expense of running the ECD facility and the poverty of the caregivers and community, there was little or no prospect of the ECD facilities raising the capital to fund registration compliance requirements. Even if they were able to raise the capital, ECD facilities face environmental

barriers to successful registration over which they have no control and that are beyond their power to change.

Firstly, informal settlements are characterised by overcrowdedness/ overpopulation with dwellings in close proximity and insufficient space for access by road. This denies police, ambulances and firefighters access to congested areas in the event of any emergency, including access to ECD facilities there.

Secondly, the lack of space also means there is no secure outside play area for the children, and probably too little interior space. Moreover, with so little space between structures, there is little physical space for expansion, unless it is possible to acquire neighbouring structures.

> ECD 12 Principal: "If the department wants, they can shut down this preschool because it is below their standards. They will shut it down even though the department did not support you with anything. If they had perhaps assisted me with something in the first place they could do a follow-up. To me, I think before they could follow you they should first try to assist you. Or they can send someone to come and check if there are kids here and what kind of place they are occupying. It is not the place that the department prefers, because I built it myself. I saw that children were growing up with no preschool. So I wish they could start by providing us with a proper structure. They should assist us with everything they require. We do not even have toilets, we stay in an informal settlement. We have these bottles (similar to a bucket system). If the department arrives here and they find children using these bottles do you think they will ever register us? Never."

Thirdly, as illustrated above, informal settlements are poorly serviced in sanitation, water and electricity, which can only be installed by the state. If toilets or running water are lacking in the area, the ECD facility is powerless to comply with DSD norms and standards even if it could fund the necessary plumbing and hardware.

Fourthly, DSD appears to be adamant that ECD facilities in informal settlements are not safe and fall below acceptable standards. However, this standard is disingenuous as the DSD is well aware that the children are growing up in informal dwellings similar to the ECD facility, in the same neighbourhood. Hence, if conditions at the ECD facility are unsafe, the children are exposed to the same risks every day anyway, just by living there. Shutting down the facility would be as pointless and hypocritical as imposing a standard on the facility that none of the surrounding buildings can meet. Yet, this is exactly the effect of the government's ECD Policy. These ECD facilities may put up bright posters and paint murals on the walls but they cannot

solve the problems of sanitation, congestion, informal housing or crime. In short, they cannot solve the deprivation caused by poverty all around them.

Finally, it can also be argued that the multi-sectoral management of ECD provisioning through the collaboration of DSD and various government departments, which is meant to safeguard norms and standards in the best interest of the child, ironically puts registration out of the reach of many ECD facilities in impoverished communities, testing their financial resources, their resolve and their patience. As the ECD 14 principal put it: "…We're getting fed up because it's taking long."

7.7 Quality Indicator: Complying with ECD Norms and Standards

With respect to early learning programmes, Vandenbroeck (2010:83) states that only high-quality early interventions are likely to lead to positive returns.

It is not always easy to define what constitutes quality in an early learning intervention. In South Africa, the ECD norms and standards were introduced to indicate what constitutes a quality ECD facility in South Africa (Manyike, 2012:593). Employing selected ECD norms and standards as a proxy for quality, the researcher evaluated the quality of the ECD facilities in Philippi included in the study. The ECD norms and standards that were chosen include the type of building infrastructure, pedagogy of play, demarcation of children, qualifications of personnel and outside appearance. To an extent, each of these factors has an impact on the quality of the early learning programme. In addition to being ECD norms and standards, these factors were also chosen for the ease of access in measuring them at the ECD facilities. High norms and standards in these factors, therefore, represent the probability of a child receiving a quality early education, while low norms and standards in these factors almost guarantee that the child is accessing a low-quality early learning programme. Henceforth, the ECD norms and standards are referred to as quality indicators.

For this section, there are four categories of quality: very good quality, good quality, fair quality and poor quality. An ECD facility is considered to be a very good quality facility if it complies with all six of the selected ECD quality indicators, good if it complies with five, fair if it complies with four and poor if complying with three or fewer of the quality indicators. This

analysis, therefore, brings together the data from all the questionnaires to provide an overall picture of the state of ECD facilities in Philippi in terms of quality.

Table 7.7a: Quality Indicator: Registered Facilities Complying with ECD Norms and Standards

Quality Indicator	ECD 1	ECD 2	ECD 3	ECD 4	ECD 5	ECD 6	ECD 7	ECD 8	ECD 9	ECD 10
Infrastructure: formal building	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pedagogy of play: have a play area	✓	×	✓	✓	×	×	✓	✓	✓	✓
Children demarcated inside	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Practitioner ECD Certificate	✓	×	✓	×	×	✓	✓	✓	×	×
Principal ECD Certificate	✓	×	×	×	✓	✓	✓	✓	✓	✓
ECD facility easily identifiable on the outside with painting and drawing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Overall compliance	**Very Good**	**Poor**	**Good**	**Fair**	**Fair**	**Good**	**Very Good**	**Very Good**	**Good**	**Good**

Source: Primary data.

Table 7.7b: Quality Indicator: Unregistered Facilities Complying with ECD Norms and Standards

Quality Indicator	ECD 11	ECD 12	ECD 13	ECD 14	ECD 15	ECD 16	ECD 17	ECD 18	ECD 19	ECD 20
Infrastructure: formal building	×	×	✓	✓	✓	×	✓	✓	×	✓
Pedagogy of play: have a play area	×	×	×	×	✓	×	✓	×	×	×
Children demarcated inside	×	×	×	✓	×	×	×	✓	×	×
Practitioner ECD Certificate	×	×	×	×	×	×	×	✓	×	×
Principal ECD Certificate	✓	✓	×	×	×	×	×	✓	×	×
ECD facility easily identifiable on the outside with painting and drawing	×	×	✓	✓	×	✓	✓	✓	✓	✓
Overall compliance	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Poor**	**Good**	**Poor**	**Poor**

Source: Primary data.

From the registered facilities reflected in table 7.7a, 70% of the facilities are of acceptable quality, ranging from good to very good. The remaining 30% of the facilities are either fair or poor quality. It was unexpected that a registered facility would fall short of these quality criteria because, by virtue of being conditionally or fully registered, they are assumed to have complied with most or all these quality indicators, respectively. An overwhelming 90% of the unregistered facilities are of inferior quality. In this research, more than 460 children attended the unregistered facilities. Hence, a significant proportion of the hundreds of Philippi children in these facilities are receiving a low-quality service.

In light of the differences in the facilities across registration status, the researcher sought to establish if there was a statistical dependence relationship between the quality rating of the facility status and its registration status. Two categories of quality were applied: acceptable quality – that is, relatively high quality, and unacceptable quality – that is, low quality. Acceptable quality combines facilities that were initially rated as 'very good' and 'good', while

unacceptable quality combines 'fair' and 'poor quality' facilities. The results of the Fisher exact test are shown in table 7.7c.

Table 7.7c: Dependence between Quality Rating of Facility and the Registration Status of Facility

Facility factor		Registered facility N=10	Unregistered facility N=10	Total sample	Fisher's exact (Pr)
Facility quality	Relatively high/ Acceptable quality	70%	10%	40%	0.020**
	Relatively low/ Unacceptable quality	30%	90%	60%	

Source: Primary data.

According to Fisher's exact test, there is a statistically significant relationship between the quality of the facility and the registration status of the facility, as the p-value 0.020 < alpha 0.05. These results imply that the quality of an ECD facility in Philippi is dependent on the registration status of the facility. Hence, a significant factor in determining the quality of a facility is its registration status. This further confirms that children attending unregistered facilities are prone to receive a low-quality early learning experience. There are therefore differences in the quality of facilities in Philippi that are explained by the differences in registration status.

The differences in quality arise from a combination of factors. A combination of factors is mooted because all the quality indices were initially tested individually using the Fisher exact test and many were not statistically significant. That is, on their own, they were not dependent on the registration status. However, when combined they became significant. It therefore becomes apparent that unregistered facilities are confronted with a combination of factors, which ultimately dilute their quality, including unqualified practitioners, unqualified principals, lack of building infrastructure and lack of play areas. Thus, any attempt to assist unregistered facilities would require a systematic improvement addressing the different aspects of infrastructure and qualifications.

The results also show that children who attend unregistered facilities are confronted with low-quality factors that have an accumulative combined effect. For example, it is likely that children attending a one-room facility simultaneously have an unqualified practitioner teaching them.

Facing multiple negative factors simultaneously increases the probability of these children not reaping any benefits of early intervention.

Schweinhart et al. warn that many developing countries end up with sub-standard ECD services because policymakers practice the "art of compromise" (2005:6) meaning that while promising to prioritise early intervention they settle for distant regulation and the provision of conditional subsidies as a compromise.

7.7.1 Quality and Subsidy

Is there a significant relationship between receiving a government subsidy and the overall quality of the facility? In other words, does the government subsidy, which is primarily reserved for registered facilities, have any impact on the quality of the facilities?

Table 7.7.1: Dependence between Quality Rating of Facility and Receiving Government Subsidy

Facility factor		Receives subsidy N= 9	Does not receive subsidy N=11	Fisher's exact (Pr)
Quality rating	High/ Acceptable quality	77,8%	9,1%	0.005**
	Low/ Unacceptable quality	22,2%	91%	

Source: Primary data.

The Fisher exact test at a 5% level of significance confirms that there is a statistical relationship between receiving the government subsidy and overall quality. Of the nine ECD facilities that receive a government subsidy, 77,8% were rated as being of acceptable quality. On the other hand, of the 11 ECD facilities that do not receive a government subsidy, 91% of them are assessed as of low quality. The evidence, therefore, shows that the DSD subsidy contributes to the quality differences among the ECD facilities.

Having established a relationship between the government subsidy and the overall quality of the facility, to what extent does the subsidy have an impact on other facility-level factors? At a 10% significance level, the subsidy also affects the ECD qualification of principals and the state of the infrastructure. With the state of the infrastructure, there is an association between the subsidy and having or not having a lockable gate at 10% significance and the availability of toilets while the one-room structure is significant at 1%. Clearly, the government subsidy affects other quality indicators or facility factors.

7.8 Conclusion

This chapter discussed facility-level factors affecting the early learning experience of preschoolers in registered and unregistered ECD facilities in Philippi. By employing three questionnaires, the study revealed many facility-level factors that affect the learning experience of children attending the respective ECD facilities. The author argues that some of the factors have a direct impact on early learning development, while others have an indirect impact. For instance, the professional competence of the staff, lack of resources in class, weak understanding of the curriculum and absence of an outside play area all have direct impacts on ECD in Philippi. These factors can stifle opportunities for early learning in this community and many facilities require urgent improvement. The chapter discussed the interwoven issues of the need for assistance, hindrances to registration and subsidisation of ECD facilities and the crucial underlying role of poverty and showed how the government subsidy is statistically proven to improve the overall quality of facilities. The next chapter discusses the research and results pertaining to household-level factors and the role of the caregiver in early child development.

CHAPTER EIGHT: FINDINGS ON HOUSEHOLD-LEVEL FACTORS IN PHILIPPI

8.1 Introduction

Before children attend an ECD facility or formal school, their home is considered their first place of learning. Highlighting the critical role of the home environment in child development, the Bronfenbrenner Ecological System Theory classifies the home environment as the microsystem of the child. The microsystem is the most influential and closest environment to a child, holding the power to either promote or hinder the child's development (Bronfenbrenner, 1979:22).

The responsibility of caregivers in fostering early learning development includes financing access to an ECD facility, directly participating in the child's early learning as well as providing a home environment that encourages early learning opportunities through stimulation activities and the availability of learning materials at home. Although families with children face the same challenge of fostering ECD and early learning, they are not endowed with the same resources or face similar social issues. Inequalities in society mean that children from different home environments have varying opportunities for early learning; some have material and social advantages that others lack.

To examine the role of household-level factors in early learning, the researcher interviewed 40 caregivers from the 20 sampled ECD facilities in Philippi, Western Cape. Two caregivers were selected from each ECD facility so that 20 of the caregivers had children who attended registered ECD facilities and 20 caregivers had children at unregistered ECD facilities. To protect the identities of the caregivers, they were given coded identities corresponding to the codes for the facilities. Thus Caregiver 1a and Caregiver 1b were parents of children attending ECD facility 1, Caregiver 2a and Caregiver 2b sourced from ECD 2, and so on until Caregiver 20a and Caregiver 20b who were sourced from ECD 20. ECD 1 to ECD 10 were the registered ECD facilities and ECD 11 to ECD 20 the unregistered ECD facilities.

All the household information relating to the caregivers' roles in ECD was obtained by interviewing the caregivers. No children were interviewed. The remainder of this chapter is devoted to discussing the household-level factors affecting the child's development, including

household income, poverty at home, subjective affordability and the price of early learning, early learning at home, the ECD facility, parental involvement, caregiver satisfaction and concerns, and parental perceptions of early learning.

8.2 Profile of the Children

Investigating the profile of the children, the researcher asked the caregivers the age, population group and gender of their child. Caregivers were also asked about their marital status. The rationale of probing for the marital status of the main caregivers was to establish the possibility of dual parenting. The category 'living with both parents' includes married parents as well as unmarried parents who cohabit. A single-parent household does not mean the non-resident parent has abandoned parenting duties. Using the responses on marital status, the researcher was able to deduce whether a child lived in a single-parent household or with both parents/ caregivers.

Table 8.2: Child and Household Characteristics

Category		Registered frequency (Percentage)	Unregistered frequency (Percentage)	All children
N		20 (100%)	20 (100%)	40 (100%)
Child Gender	Female	11 (55%)	10 (50%)	21 (52,5%)
	Male	9 (45%)	10 (50%)	19 (47,5%)
Child Race	Black African[8]	20 (100%)	20 (100%)	40 (100%)
Child Age	Four years old	12 (60%)	7 (65%)	19 (47,5%)
	Five years old	7 (35%)	6 (30%)	13 (32,5%)
	Six years old	1 (5%)	1 (5%)	2 (5%)
Caregiver Interviewed	Mother	18 (90%)	17 (85%)	35 (87,5%)
	Father	0 (0%)	1 (5%)	1 (2,5%)
	Grandmother	2 (10%)	2 (10%)	4 (10%)
Home Language[9]	Xhosa	18 (90%)	19 (95%)	37 (92,5%)
	Other African language	2 (10%)	1 (5%)	3 (7,5%)
Lives with both parents	Yes	8 (40%)	11 (55%)	19 (47,5%)
	No	12 (60%)	9 (45%)	21 (52,5%)

Source: Primary Data.

[8] The caregiver questionnaire also included Coloured, Indian, White and Other as categories.

[9] The caregiver questionnaire included all of the 11 South African languages as categories.

In total, 40 children were included in the research. There was an equal distribution between children who attended registered ECD facilities and those who attended unregistered facilities. In terms of gender, 52,5% of the children were female and the remaining 47,5% males. The caregivers were asked to indicate the age of the child at the last birthday. About 62,5% of the children were four years old, 32,5% were five-year-olds and 5% had already turned six. About 92,5% of the children spoke Xhosa as their home language and the remaining 7,5% (three children) spoke another African language. Hence all of the children were black African children.

Regardless of the registration status, the interviews were primarily held with the biological mothers of the children, as well as four grandmothers. Of the sampled children, 47,5% lived at home with both their parents who were either married or living together. Regarding missing fathers and households with skipped generations, Hall and Mokomane (2018:35) argue that such households are considered more susceptible to poverty. Skipped generations in this sample were households headed by a grandparent in the absence of the biological mothers.

Most of the children, 52,5%, did not live in the same household as their fathers. Hall and Mokomane (2018:37) present two concerns over female-headed households. Firstly, women are generally paid less than men. Secondly, the absence of fathers is likely to have an unfavourable effect on children as they have to grow up without the primary male role model. Absent fathers represent an erosion of social capital. Conversely, children with both mothers and fathers in the household have higher social capital and are granted more opportunities to learn and develop their full potential.

8.3 Description of the Living Environment

The previous chapter described the ECD facilities in the context of the physical environment of Philippi, where the children's homes are also located. What is unfortunate concerning the living environment is that it is typically beyond the control of the family to change it. The section below describes the immediate environment where the child's home is situated and the type of housing. A child's home may be located in a mostly formal or a mostly informal area and Philippi, like other low-income areas in the country, consists of a mix of formal and informal houses with shacks appearing in the backyards of government-subsidised formal houses as well as en masse on formerly vacant land. The categories 'mostly formal' and 'mostly

informal' reflect the type of the majority of the houses in a household's immediate environment.

Table 8.3a: Area Type of Households

Facility factor		Registered facility N=20	Unregistered facility N=20	Total sample	Fisher's exact (Pr)
The type of area in which the facility is located	Mostly formal	80%	60%	70%	0.301
	Mostly informal	20%	40%	30%	

Source: Primary data.

The Fisher exact test of 0.301 p-value shows there is no relationship between the type of the area children live in and the type of facility they attend. In Chapter 7, the thesis established a statistically significant relationship between the type of area the ECD facility was situated in and the type of facility (registered or unregistered facility). Although registered facilities are statistically more likely to be built in mostly formal areas, children travel from both formal and informal areas to attend facilities. This is confirmed by the descriptive statistics. Table 8.3.a shows that 60% of the children who attend registered ECD facilities live in mostly formal areas, while 40% of the children live in mostly informal areas. Of the children who attend unregistered ECD facilities, 80% reside in mostly formal areas while the remaining 20% reside in mostly informal areas. Although most of the children in the sample reside in a mostly formal environment this does not mean that the children live in formal houses. A question was thus posed regarding the type of housing the child lives in, divided into three categories:

- Formal brick house/ flat;
- Informal dwelling in an informal settlement;
- Informal dwelling in a formal settlement/ backyarder.

Table 8.3b: Type of Dwelling

Household factor		Registered facility N=20	Unregistered facility N=20	Total sample
Type of dwelling	Formal brick house/ flat	55%	50%	52,5%
	Informal dwelling in an informal settlement	20%	40%	30%
	Informal dwelling in a formal settlement/ backyarder	25%	10%	17,5%

Source: Primary data.

Of the children who attend unregistered facilities, half of them live in formal brick houses, 40% in informal dwelling in an informal settlement and the remaining 10% also in an informal dwelling but in a formal settlement/ backyarder.

For registered ECD facilities, 55% live in a formal brick house, another 25% live in informal dwellings in mostly formal areas and about 20% of the children live in informal dwellings in an informal area. Since none of the registered facilities are situated in an informal area, this means that the 20% of the children living in informal areas travel from their immediate environment to attend the registered facilities. At times, enrolling at the registered facility that is outside their immediate environment will be associated with additional costs. This finding illustrates the undesirable impact of the ECD Policy on low-income areas in informal settlements. The policy makes it extremely difficult for ECD facilities in informal areas to become registered. Thus, should the caregivers want to enrol their children at a registered ECD facility to access a better service, their children would have to commute there and back daily.

8.4 Socioeconomic Status (SES) of the Family

Investigating the SES of the family, the researcher enquired about the educational attainment of the main caregiver, their economic activity and the household total income.

8.4.1 Educational Attainment of Main Caregiver

The educational attainment of the caregiver has several implications for child development. Much of the literature has argued for a positive correlation between the educational attainment of the caregiver and the child. Connelly and Zheng (2003:386) state that the educational attainment of the caregiver has intergenerational implications such that caregivers who are educated receive their returns on education twice, once in the generation that undertook the investment and secondly in their offspring. Children raised by educated caregivers are more likely to receive better educational opportunities. This is partly because educated parents are more likely to initiate the education process during the preschool years and continue throughout schooling (Taylor & Yu 2009:6). Children raised by educated caregivers also have a higher probability of performing well academically. The highest educational attainment of the sampled caregivers is shown below.

Table 8.4.1: Highest Educational Attainment of Caregiver

Household factor		Registered facility N=20	Unregistered facility N=20	Total sample
Educational level of caregiver	No formal education	0	0	0
	Primary education	20%	5%	12,5%
	Secondary education	70%	85%	77,5%
	Matric	5%	10%	7,5%
	Tertiary education	5%	0%	2,5%

Source: Primary data.

Ninety per cent (90%) of all caregivers in the sample have less than matric as their highest educational attainment. Only 7,5% of all the caregivers hold a matric certificate as their highest educational attainment. None of the caregivers whose children attended unregistered facilities had completed a tertiary qualification while only 5% of caregivers in the registered facilities group had a tertiary qualification. Generally, the interviewed caregivers are not well educated.

8.4.2 Economic Activity of Main Caregiver

The researcher investigated whether caregivers engage in any type of economic activity by asking whether the caregiver had a job or economic activity such as a business to earn money. The researcher also determined whether an association existed between the economic activity of the main caregiver and the type of facility the child attended.

Table 8.4.2: Economic Activity by Main Caregiver

Household factor	Registered facilities N=20	Unregistered facilities N=20	Total sample	Fisher's exact (Pr)
Caregiver has a job or business	40%	45%	42,5%	0.749

Source: Primary data.

Although the unemployment rate in South Africa is generally high, it is however stubbornly high for people without formal qualifications. The Quarterly Labour Force Survey for the second quarter of 2019 estimated the official unemployment rate for people without matric at 57% and 33,4% for people with matric (Statistic South Africa, 2019a:7). The unemployment rate is much lower for graduates at 2,2% (Statistic South Africa, 2019a:7). It was already established that 2,5% (one person) of the caregivers had a tertiary qualification. Overall 42,5%

of all the caregivers either had a job or owned a business while 57,5% of the caregivers were not formally economically active. By registration status of the facility, there were more economically inactive caregivers in registered facilities, 60%, than in unregistered facilities (55%). Since 57,5% of the caregivers in the sample did not earn an income through an economic activity, the implication is that they are dependent on social assistance and/ or other family members. The Fisher exact test (0.749) shows that the economic activity of the caregivers does not indicate that the child will be enrolled at a registered or unregistered facility.

8.4.3. Household Income

Household income measures the total income received by the entire household in the previous month from various sources. The total household income is a measure to partially gauge the quality of a child's life since a regular income increases the possibility of having better access to nutritious food, education, health care and other necessities. Children who live in households that do not lack income can be assumed to be better off than those who live in households with little or no income.

Total income was investigated in the following categories for households of children attending registered ECD facilities and for households of children attending unregistered ECD facilities:

- Total income from work, other economic activity during the past month;
- Total income from social grant during the past month;
- Total income from all sources (last month).

Table 8.4a: Household Income for children who attend registered ECD Facilities

	Caregiver 1a	Caregiver 1b	Caregiver 2a	Caregiver 2b	Caregiver3 a	Caregiver 3b	Caregiver 4a	Caregiver 4b	Caregiver 5a	Caregiver 5b	Caregiver 6a	Caregiver 6b	Caregiver 7a	Caregiver 7b	Caregiver 8a	Caregiver 8b	Caregiver 9a	Caregiver 9b	Caregiver 10a	Caregiver 10b
Total income from economic activities during the past month	R0	R900	R3,100	R9,000	R4,000	R1,500	R10,000	R0	R5,000	R3,000	R3,750	R10,100	R3,600	R1,800	R4,600	R10,500	R15,000	R22,000	R15,000	R4,000
Total income from social grant during the past month	R2,960	R420	R3,400	R840	R4,280	R420	R420	R420	R420	R1,260	R840	R420	R420	R0	R420	R0	R0	R0	R0	R2,140
Total income from all sources (last month)	R2,960	R1,320	R6,500	R9,840	R8,280	R1,920	R10,420	R420	R5,420	R4,260	R4,590	R10,520	R4,020	R1,800	R5,020	R10,500	R15,000	R22,000	R15,000	R6,140
Percentage change after grant	-	+46,7%	+109,7%	+9,3%	+107%	+28%	+4,2%	-	+8,4%	+42%	+22,4%	+4,2%	+11,7%	unchanged	+9,1%	unchanged	unchanged	unchanged	unchanged	53,5%

Source: Primary data.

Table 8.4b: Household Income for children who attend unregistered ECD Facilities

	Caregiver 11a	Caregiver 11b	Caregiver 12a	Caregiver 12b	Caregiver 13a	Caregiver 13b	Caregiver 14a	Caregiver `14b	Caregiver 15a	Caregiver 15b	Caregiver 16a	Caregiver 16b	Caregiver 17a	Caregiver 17b	Caregiver 18a	Caregiver 18b	Caregiver 19a	Caregiver 19b care	Caregiver 20a	Caregiver 20b
Total income from economic activities during the past month	R8,000	R4,100	R15,000	R5,500	R2,400	R1,500	R10,000	R2,900	R3,000	R10,000	R0	R4,100	R8,500	R9,000	R6,800	R5,000	R2,500	R3,200	R6,000	R3,500
Total income from social grant during the past month	R840	R420	R420	R1,680	R2,980	R1,260	R840	R1,260	R840	R840	R1,260	R1,260	R840	R420	R420	0	R2,120	R1, 260	R420	R840
Total income from all sources (last month)	R8,840	R4,520	R15,420	R7,180	R5,380	R2,760	R10,840	R4,160	R3,840	R10,840	R1,260	R5,360	R9,340	R9,420	R7,220	R5,000	R4,620	R4,820	R6,420	R4,340
Percentage change after grant	9,5%	9,3%	2,72%	23,4%	55,4%	45,7%	7,8%	30,3%	21,9%	7,7%	-	23,5%	9%	4,5%	5,8%	unchanged	45,9%	26,1%	6,5%	19,4%

Source: Primary data.

Table 8.4a shows that 10% of households of children attending registered ECD facilities did not earn any income from economic activity. In those households, no household member had any income. On the other hand, for households with children attending unregistered ECD facilities, as depicted in table 8.4b, only 5% had received no income from economic activities. During the preceding month, 85% of all the households received the child support grant (CSG) and/ or an old age grant. The CSG covered the children who constitute the sample size (preschoolers) and their siblings while their grandparents received the old age grant. For children in registered facilities (table 8.4a), 75% of the caregivers mentioned that their children received the CSG. In unregistered facilities, an overwhelming 95% of the children received the CSG. In total, 85% of the children were CSG beneficiaries. It follows that social grants are a significant source of income in most of these households. Hence, in about 35% of all the households, social grants accounted for more than a quarter of their household income. The overwhelming proportion of households who receive social grants indicates that these households are vulnerable to poverty.

Considering that 90% of the caregivers have less than matric as their highest educational attainment, 57,5% are not economically active, and 82,5% of the children are CSG recipients, it is concluded that these children come from low SES households. Unlike high SES, which transmits better opportunities in terms of schooling and labour outcomes to the next generation, low SES transmits a disadvantage to the next generation.

8.5 Poverty at Home

According to Statistics South Africa (2018b:5), South Africa adopted the following poverty lines from 2012 to measure the extent of poverty in the country: Food Poverty Line (FPL), Lower-Bound Poverty Line (LBPL) and Upper-Bound Poverty Line (UBPL). The FPL is the level of consumption at which individuals are unable to afford basic food that will provide them with an adequate diet. The LBPL refers to individuals who do not have enough money to purchase both adequate food items and non-food items so that they have to sacrifice food. The UBPL delineates people who are still poor but who at least can buy both food and non-food items. Selecting from the above, the thesis used the FPL and UBPL for 2018 as reflected in the Statistics South Africa (2018b:3) poverty lines.

2018 FPL per person per month: R547.

2018 UBPL per person per month: R1,183.

Using the income method, all households with an income per capita that falls below the respective poverty lines are classified as poor. Since the poverty lines were adjusted very recently in 2018, which means the poverty lines use recent prices, and the households' income figures were collected in 2019, the thesis did not adjust for inflation.

Table 8.5.1: Poverty at Home

Household factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Food Poverty Line	15%	5%	10%	0.605
Upper-Bound Poverty Line	40%	50%	45%	0.525

Source: Primary data.

Of the aforementioned poverty lines, FPL is the most severe measure of poverty. Of the children attending registered ECD facilities, 15% lived below the FPL while only 5% of the children attending unregistered ECD facilities lived below the FPL. The children who were already deemed poor under the FPL would certainly still be considered poor under the UPBL. For children who attended registered ECD facilities, the proportion of poor children increased from 15% to 40% of children under the UBPL. Likewise, among children attending unregistered ECD facilities, poverty increases under the UBPL from 5% poor under the FPL to 50% under the UBPL. Hall and Budlender (2016:35) point out that the UBPL is the most relevant poverty measure for child well-being. This is because the needs of a child far exceed what is captured under the FPL, which only measures a minimum required diet.

As reflected in the Fisher's exact test with p-values of 0.605 for FPL and 0.525 for UBPL, there is no dependency relationship between the poverty status of the children and the registration status of the facility. This means that the type of facility the child attends is not dependent on their poverty status. Under the UBPL, the incidence of poverty is almost equally prevalent in the registered facilities and unregistered facilities in Philippi. The poverty rate as measured by the UBPL is very significant, especially taking into account that most of the interviewed households received government transfers through social grants. The number would have been even higher without the social grant amounts.

Poverty significantly impacts the development and growth of children in various ways. This is because poverty is usually associated with a plethora of other negative experiences. Children growing up in poor households are also predisposed to low academic performance, inadequate health care, stressed parents, and other adverse social issues (Engle & Black, 2008:2). Further

to that, poor households are also characterised by unemployment, low levels of education, substandard living standards, and deleterious health outcomes (Omotoso et al., 2020:1168). The fight against poverty requires measures that are beyond financial remittance to the poor. The poor need empowerment, human capital. Thus, social grants may decrease the proportion of the poor. However, grants do not help families to escape poverty but rather to cope with poverty. These families remain vulnerable to economic shocks as they often lack both formal education and employment.

Introducing the Head Start programme in 1965, US President Lyndon Johnson called it a "war on poverty" (Sabol & Chase-Lansdale, 2015:136). In the South African NDP, early learning intervention is mooted as part of the strategy to eradicate poverty (National Planning Commission of South Africa, 2012:300). If the government sincerely wants to eradicate poverty through early learning intervention, high-quality interventions should be most available to poor children. The aims of the NDP in this regard are contradicted by the exclusion of poor children in unregistered facilities who are denied the subsidy by the onerous norms and standards stemming from the ECD Policy and related legislation.

8.6 Early Learning at Home

In addition to ECD facilities, the home environment can reinforce, mediate or hinder the entire process of early learning. For children who attend low-quality ECD facilities, the home can buffer or mediate the negative effects of attending a low-quality ECD facility, which is especially useful since the previous section showed that a majority of ECD facilities in Philippi are of poor quality. Early learning at home is examined below through the availability of learning materials at home and the frequency of stimulation activities at home.

8.6.1 Educational Toys at Home

The caregivers were asked if their children had (in their homes) toys that teach colour or size, puzzles, toys that help to teach numbers, children's books, toys that help to teach the names of animals as well as a ball or bat.

Table 8.6.1: Educational Toys at Home for All Children

Household factor	Registered facility	Unregistered facility	Total sample	Fisher's exact (Pr)
Colour/ Size toy	15%	10%	12,5%	0.078*
Puzzle	15%	15%	15%	0.669
Number toy	10%	10%	10%	1.00
Children's book	40%	35%	37,5%	0.744
Animal toy	10%	10%	10%	1.00
Ball/ Bat	40%	65%	52,5%	0.113

Source: Primary data.

Only 15% of the children in registered facilities have toys that teach colour or size, compared with 10% of children in unregistered facilities. Therefore, toys that teach colour or size are equally scarce in both groups of children. Overall, about 87,5% of the children do not have these types of toys at home. The same scarcity is found with educational puzzles in both the households of children who attend registered and unregistered facilities, with 85% of children in both registered and unregistered facilities not having puzzles at home. The proportion of children who do not have toys at home that help to teach numbers is significantly high, both for children who attend registered facilities and those in unregistered facilities, with 90%.

Only 40% and 35% of children in registered and unregistered facilities respectively have books at home. Toys that help to teach the names of animals are generally lacking for all the children. However, 10% of children in registered facilities and 10% of children in unregistered facilities have toys that help teach the names of animals. The proportion of children with balls and bats at home is considerably higher. About 40% of children in registered facilities have access to balls and bats at home while 65% of children in unregistered facilities have them at home. Balls and bats are thus the most common toys for children to have at home and particularly popular with boys, according to caregivers.

Overall, all the children lack educational toys at home and miss out on opportunities that assist to teach the basics of early learning such as colours, sizes and numbers. The overwhelming lack of educational toys at home does not mean the children will not be able to learn these concepts but it does affect their probability to succeed. Moreover, a relationship is only established between toys that teach colour/ size and the type of facility (registration status) at a 10% significance level. The Fisher exact test found no dependency between the registration status of the facility and any of the other educational toys. This means the lack of educational

toys does not significantly differ between children who attend registered facilities and those at unregistered facilities.

Zadeh, Farnia and Ungerleider (2010:586) established in their study that children who have access to learning materials at home achieve higher scores in mathematics problem-solving and reading. Therefore, learning materials such as toys positively influence a child's numeracy and literacy skills. It follows that, for this sample, lack of educational toys at home will possibly negatively affect children's cognitive development.

It is reasonable to assume that the time the children are at their respective ECD facilities is the only time some might have access to such toys. This was confirmed by one grandmother who mentioned that her grandchild did not have these toys at home but accesses them at the ECD facility. When the children are removed from the ECD facilities, the process of early learning is interrupted. Likewise, if the ECD practitioner does not teach colours at the facility, the children have limited opportunities to learn colours elsewhere. With families already deprived of resources, the ECD facilities must compensate for home deficits. This means that ECD facilities should have ample supplies of all these learning materials to ensure these children are not robbed of the opportunity to learn.

8.6.2 Frequency of Stimulation Activities at Home

Stimulation at home was measured using the following five questions:

Stimulation 1: How often is the child encouraged to do/ imitate daily activities with older children or adults at home, e.g. clean the house, prepare food, etc.?

Stimulation 2: If a child points to an object, how often is he/ she told its name and given an explanation of what the object does or is used for?

Stimulation 3: How often does someone in the household read/ tell stories to the child?

Stimulation 4: How often does someone in the household sing to, or with, the child?

Stimulation 5: How often does someone in the household have a conversation with or talk to the child?

The frequency of the above stimulation activities was measured using categorical scaling which enabled the responses of the caregivers to be rated as Never, Sometimes, Often and Every day.

Table 8.6.2a: Frequency of Imitation

	Never	Sometimes	Often	Every day
Children in registered facilities	35%	25%	20%	20%
Children in unregistered facilities	35%	15%	10%	40%
All children	35%	20%	15%	30%

Source: Primary data.

In both registered and unregistered facilities, 35% of the caregivers mentioned they never encouraged their child to imitate daily activities. Approximately 40% of the children in unregistered facilities are encouraged by their caregivers to imitate activities everyday, compared with only 20% of children attending registered facilities.

Table 8.6.2b: Frequency of Explained Objects

	Never	Sometimes	Often	Every day
Children in registered facilities	0%	25%	20%	55%
Children in unregistered facilities	5%	10%	15%	70%
All children	2,5%	17,5%	17,5%	62,5%

Source: Primary data.

Overall 62,5% of the children receive responses from their caregiver when they ask the names and functions of objects and 17,5% often receive feedback as well. The caregiver who mentioned "never' explaining the names and functions of objects to the child also mentioned the child hardly ever asked such questions.

Table 8.6.2c: Frequency of Reading

	Never	Sometimes	Often	Every day
Children in registered facilities	60%	30%	0	10%
Children in unregistered facilities	55%	40%	0	5%
All children	57,5%	35%	0	7,5%

Source: Primary data.

The frequency for someone in the household reading or telling stories to the child was generally low for all the children. More than half the children were never told or read stories by their caregivers or someone else in the house. Only 10% of the children in registered facilities and 5% in unregistered facilities were read or told stories in their homes. The low frequency of

reading/ telling stories in households may compromise the emergent literacy of the children. It was apparent that children greatly rely on the facilities to read or tell them stories. The availability of books in facilities was difficult to measure as most of the practitioners mentioned they did not give books to the children but only read to them and the children listened. The low frequency of reading at home could be related to the low educational attainment of the caregivers. One grandmother mentioned that she does not read to her grandchild but tells him stories. Another caregiver said she did not have time to read to her child because she comes home tired after work.

Table 8.6.2d: Frequency of Singing

	Never	Sometimes	Often	Every day
Children in registered facilities	10%	35%	5%	50%
Children in unregistered facilities	15%	15%	10%	60%
All children	7,5%	25%	7,5%	55%

Source: Primary data.

The frequency of singing at home was somewhat encouraging. About half of the children attending the registered facilities sang at home everyday while 60% of the children in the unregistered facilities also engaged in the same stimulation activity daily. Part of the reason that singing had relatively accepted frequency can be attributed to siblings in the house as some of the caregivers mentioned their child often singing with a sibling rather than the caregiver. Overall, only 7,5% of the caregivers never sang at home, with or to their children.

Table 8.6.2e: Frequency of Talking

	Never	Sometimes	Often	Every day
Children in registered facilities	0	0	5%	95%
Children in unregistered facilities	0	0	5%	95%
All children	0	0	5%	95%

Source: Primary data.

Talking to children received the highest levels of frequency for all the children. Most of the caregivers commented that their children 'did not stop talking'. Talking is critical for building the vocabulary of a child.

Both the GHS of 2016 and 2018 revealed at least two significant findings. The first finding is that stimulation in South African households is low, and second, it is even lower in black and low-income households (Statistics South Africa 2018a; 2018b).

In this thesis, early learning at home, which is represented by the availability of educational toys and stimulation at home demands to be understood in the context of household characteristics. It has to be understood in the forms of capital that these families lack, which includes economic capital, cultural capital, and social capital. In terms of economic capital, these households may not have the financial means to buy the educational toys measured. For cultural and social capital, most of the parents are poorly educated, and so is the majority of the population in Philippi. In a poorly educated community, information on the importance of stimulation and exposing one's child to educational material may not be known.

8.7 ECD Facility: Parental Involvement, Satisfaction, Concerns, Subjective Affordability

This section of the thesis addresses four issues; namely, parental involvement, satisfaction with the ECD facility, concerns over the ECD facility attended by the child and affordability.

8.7.1 Parental Involvement

Bronfenbrenner (1979:25) explains parental involvement in the ecological systems theory in terms of the mesosystem in which the interrelationships between the caregiver and child and the home environment play crucial roles in the child's development. The extent to which practitioners involve caregivers in their children's early learning process has a bearing on the learning experiences of the child. Alternatively, caregivers who are not actively involved in their children's early learning might negatively affect their learning development. Moreover, parental involvement is suggestive of how much the parents value early education and reflects their overall investment in their child's early education (Xu, Benson, Mudrey-Camino & Steiner, 2010:258). The degree of parental involvement was measured in the study by parental attendance of meetings and whether they were encouraged to participate in their children's early education by the facility.

8.7.1.1 Attendance of Parent Meetings

Parental attendance is one of the methods the ECD facilities employ to involve parents in their children's early education. Caregivers who tend to be involved in their children's education were assumed to know the number of parent meetings the facilities called. The principals were asked how many meetings were called each year, and the same question was then asked of the caregivers. The responses received from the caregivers were matched with the responses initially provided by the principals. Caregiver responses that do not correspond with that of the principals are highlighted in red in the following table.

Table 8.7.1.1a: Caregivers' Responses: How Many Meetings Does the Facility Call Each Year?

ECD Facility	Principal	Caregiver
ECD 1	Two meetings per term	1a: I do not know but this year so far they have called one meeting. 1b: More than two meetings a year.
ECD 2	Quarterly	2a: I do not know how many but they have called one this year. 2b: Four meetings.
ECD 3	Quarterly	3a: I do not remember them ever calling a meeting. 3b: Zero.
ECD 4	Quarterly	4a: I think they call meetings monthly. 4b: Last year if I am not mistaken the preschool called two or three meetings for the whole year.
ECD 5	Quarterly	5a: I am not sure how many, I do not count them. 5b: They probably call us once or twice a month.
ECD 6	Quarterly	6a: I am not sure, the mother sometimes goes to the meetings. 6b: They do call meetings I just do not know how many per year.
ECD 7	Quarterly	7a: I do not know how many meetings per year. My child attended last year but we did not finish the entire year then she started this year again. 7b: I do not know.
ECD 8	Quarterly	8a: They call too many meetings, I do not know how many for certain. 8b: I do not know how many per year. They called one this year.
ECD 9	Quarterly	9a: They have never called me to a meeting. I have never been called to any meeting there. 9b: I do not know, I have never received a letter about a meeting.
ECD 10	Quarterly	10a: I do not know. 10b: Three times a year.

Source: Primary data.

Table 8.7.1.1.b: Caregiver Responses: How Many Meetings Does the Facility Call Each Year?

ECD Facility	Principal	Caregiver
ECD 11	Three meetings per year	11a: I do not know, so far they have called one. They did not call any meetings last year. 11b: They called three meetings last year, nothing yet this year.
ECD 12	Quarterly	12a: I think three. 12b: They call one every month.
ECD 13	Three times a year	13a: Last year they only called one meeting, this year they have not called any meeting. 13b: They call a lot of meetings, I do not keep count, probably more than five or six meetings a year.
ECD 14	Twice a year	14a: Two meetings. 14b: Three meetings.
ECD 15	Quarterly	15a: I do not know. 15b: I do not know.
ECD 16	Three times a year	16a: Probably four meetings. 16b: More than three I think.
ECD 17	Quarterly	17a: They call four meetings in a year. 17b: Every month there is a meeting.
ECD 18	Quarterly	18a: Three meetings per year. 18b: Two meetings per term, I am not sure.
ECD 19	Quarterly	19a: I do not know. 19b: I do not know how many per year.
ECD 20	Quarterly	20a: The preschool is rather new so I do not know, they said they will inform us as to how many meetings they are going to call and they have not told us yet. 20b: I do not know, they are still new.

Source: Primary data.

The responses of the caregivers in registered facilities depicted in table 8.7.1.1.a reveal only two caregivers' responses that correspond with the principals' responses. The majority of the caregivers did not know the frequency of meetings, despite most of them saying that their four and five-year-old children had attended the same facility since they were babies. Apart from the caregivers who clearly did not know the frequency of the yearly meetings, 20% of the caregivers said their facility never called parent meetings. The fact that the response of one caregiver is consistent with another caregiver whose child attends the same facility lends some credibility to the versions of the caregivers. There is therefore some disparity between what the principals initially stated and the caregivers' versions of what was happening in their facilities regarding parent meetings.

The responses from the unregistered facilities depicted in table 8.7.1.1.b also show a mismatch between the responses of principals and caregivers and even between caregivers whose children attend the same facility. For instance, one caregiver said the ECD 13 facility only called one meeting in the previous year, while the other said they called as many as five or six meetings. It is obvious that the caregivers had limited information about the frequency of meetings. In the initial interviews with the principals of the ECD facilities, they were unanimously assertive in providing the precise frequency of their yearly parent meetings. Practitioners had also identified parent meetings as critical in achieving parental involvement. Many of the principals also reported the low attendance of parent meetings. The facilities seem consistently committed to parent meetings. A subsequent question was posed to the caregivers who mentioned their facilities do call parent meetings, about how many parent meetings they had attended since the beginning of that year. Many of the responses of the caregivers were consistent with the initial observation of the principals that parent attendance of meetings was low. Many caregivers from both registered and unregistered facilities admitted not attending any meetings for the year and offered various reasons.

Since they illustrate a crucial aspect of parental involvement in the early learning development of the child as well as reveal much about the household environment in Philippi impacting on ECD and early learning, the parents' responses are categorised and described at below.

I. Work

> Caregiver 8b: "I was at work, the meeting started early and I was still at work."

> Caregiver 19a: "They called one meeting. I did not attend the meeting because I was job-hunting that day."

A significant portion of the caregivers claimed to miss meetings due to work commitments. Given that employment provides an income for these families and the context of high unemployment and poverty, it is understandable that caregivers are unlikely to forfeit work for a meeting. It is apparent that when facilities schedule parent meetings, they should also consider the work schedules of the caregivers.

II. Church

Some caregivers prioritised church attendance over the parent meetings.

> Caregiver 2b: "So far they called one meeting. I did not attend because I had to attend a church service before the meeting, I was tired afterwards."

> Caregiver 4b: "No, I have not attended any meetings. The meetings always clash with my church gatherings. They hold the meetings on Saturday and we cannot attend because we attend church choir competitions. But I always report that I won't be coming and I make sure to receive feedback from the principals on the resolutions of the meeting."

The meetings are called on a weekend when most caregivers are likely to be off work, hence available to attend the meeting. From the above quotes, the caregivers have taken a position that parent meetings which are typically called once in a quarter cannot take precedence over church attendance. If caregivers are not available during the week due to work and they are not available on weekends due to attending church, there appears to be no day when they would be available for meetings.

III. "I Forgot/ I was Busy"

> Caregiver 4b: "Honestly, I just forgot there was a meeting".

> Caregiver 5b: "I was busy."

These reasons suggest that the low appreciation of caregivers of early learning and development; it is not a priority.

IV. Facility Administration Inefficiency

There were several instances of facilities' administrative capability failing them.

Caregiver 1a: “The preschool wrote a wrong date in the letter inviting parents to the meeting by mistake.”

8.7.1.2 Caregivers Encouraged to Participate in Early Learning

Possibly casting further light on the low attendance of parent meetings described above, 20% of the caregivers at the unregistered ECD facilities mentioned that their ECD facility did not encourage them to participate in their child’s learning.

Caregiver 13a: “No, they do not. That is why I want to take my child out of that preschool. All they do is watch our kids, that’s it.”

Some caregivers mentioned being encouraged but indicated some uncertainty as to how they were to participate.

Caregiver 15b: “I do not even know the teacher’s name. Because they keep changing, today it is this teacher and tomorrow it is another teacher. So I do not know which teacher is responsible for my child’s class. When I get there, I just say hi and drop off my child. I have never seen the teacher during the meetings or been introduced to the teacher.”

Caregiver 20a: “Yes, they encourage us. I do not know how. I have not spoken with the principal or the teacher.”

The issue of high staff turnover in unregistered ECD facilities was highlighted previously and the comment of Caregiver 15b shows that one of the consequences was the inability to foster a relationship between caregiver and practitioner.

Similarly, 20% of the caregivers at the registered ECD facilities also felt their respective ECD facilities did not encourage them to be involved in their children's early learning development.

Caregiver 3a: “No, we come in, we drop off our children, then we fetch them, they don’t say anything to us.”

Caregiver 10b: “No, I don’t want to lie to you, they don’t encourage us. It is up to you as a parent to decide what you want to do with your child.”

Other caregivers felt encouraged through parent meetings and WhatsApp groups that enabled the practitioner to actively engage the caregivers to revise school work with the child at home, as well as asking caregivers to assist on facility outings.

> Caregiver 17a: "They do encourage us to get involved a lot so that we can all understand our children's development. Because a child's development is about you as a parent and them helping you. When they call us for meetings they also encourage us to come and view our children's work; as a parent, you are then encouraged to see how the child is doing. When they have school, they ask us to be involved in the preparations so that we can know what they are teaching our children."

It is apparent that parental involvement depends on both caregivers and the facilities. It also appears that, although facilities claimed to be diligent in holding parent meetings and encouraging parents, to an extent they do not. A considerable proportion of the caregivers are not actively involved in their children's early learning. Parental involvement is critical in successful early development interventions as was shown in the successful High/Scope Perry Preschool Project, in which the programme cemented a strong working relationship between parents and caregivers through home visits that helped parents to provide the necessary support for their child to develop intellectually, socially and physically (Schweinhart et al., 1993:110). In poor communities in South Africa, due to costs and capacity, home visits may not be feasible. However, caregivers can participate in and add value to the learning experience of their children through the attendance of parent meetings and discussions with practitioners. A study by Xu et al. (2010:253) found that parental involvement explains about 24% of the variance in children's reading achievement.

The caregivers above mentioned a myriad of reasons explaining their low parental attendance. Low parental involvement, whether facility or home-based, has come to be expected in specific communities and households. In Kenya, Mukuna and Indoshi (2012:272) established that poor and uneducated parents were reluctant to be involved in their children's early education. The parents concluded that the teachers knew best. Illiteracy was also established as a factor that discourages parents from participating in Umdantsane, Eastern Cape (Shumba et al., 2014:460), and the Limpopo province (Selolo, 2018:65). The profile of parents most likely not to participate in their children's early learning reveals that the children of the poor and the uneducated are predisposed to passive parents. When parents are less involved, practitioners may be overburdened with the responsibility of individually cultivating child development, while caregivers may fail to timeously identify any learning and development delays that their children might experience.

8.7.2 Satisfaction with ECD Facility

The questionnaire asked if the main caregiver was satisfied with the ECD facility the child attended. The level of satisfaction or dissatisfaction with their respective facility reveals the expectations of caregivers concerning what constitutes an acceptable ECD facility in Philippi. For the registered ECD facilities, only 15% of caregivers mentioned dissatisfaction with the ECD facility.

> Caregiver 3a: "No, not really, I just don't have a choice. All the preschools in this area all the same."
>
> Caregiver 10a: "No, but it is nearby. The important thing is that my child is in a safe place."
>
> Caregiver 10b: "I am satisfied because I do not have a choice. It is the one that I can afford. If I were working I would take her to the one that I want."

These views are in line with Vandenbroeck who stated that caregivers tend to be satisfied with the facility they have chosen because of restricted care and education alternatives at their disposal (Vandenbroeck, 2010:82).

Only 10% of caregivers whose children attended the unregistered ECD facilities were dissatisfied.

> Caregiver 13a: "Nope. I wanted to enrol him at another preschool but it was full so they told me to apply for next year instead, on that one. I also could not apply to other preschools at Mitchell's Plain because we were going to struggle to find reliable and safe transport for him. But next year I am going to change him from this preschool."

Another caregiver mentioned being satisfied but also mentioned areas in which the facility could improve.

> Caregiver 15b: "Not really. The school is not safe, they need to fix the gate, it does not lock. I am not satisfied but I do not have a choice. The preschool she attended last year was bigger and safe but the teachers did not do their job and on this one, they are teaching them but it is not safe, they do not have enough space like big premises. There is some improvement but I am not satisfied."

Apart from the small proportion of caregivers who were strongly dissatisfied with their facilities, most of the caregivers attested to being satisfied with their respective ECD facilities. The caregivers praised the ECD facilities in question for how well they treated their children,

the cleanliness of the facility and the ability of the facility to impart knowledge to the children. Their satisfaction was also evident in the fact that most of them had been sending their children to the same ECD facility since they were infants.

The level of satisfaction of most of the caregivers at the unregistered ECD facilities was unexpected considering the prevalence of low-quality ECD facilities in the area. These unregistered facilities fail to adhere to the basic norms and standards that aim to ensure the learning, health and safety of the children. Considering that the caregivers are generally satisfied despite the low-quality service, it is likely that the caregivers do not judge or assess an ECD facility at the level of the norms and standards found in the ECD Policy. It follows that most of the caregivers either believe they are using what they perceive to be an acceptable ECD facility in Philippi or they are not satisfied but feel they do not have a practical alternative to obtain a better-quality service.

8.7.3. Concerns over ECD Facility

It is expected that caregivers would have some concerns over the shortcomings or areas of improvement at their respective facilities. Caregivers should be able to communicate their concerns to the facilities so that the overall early learning experience for children can be improved.

Concerns over the facilities were centred on easily observable issues such as insufficient space for children to play outside or the lack of stationery, while other issues involved dissatisfaction with the practitioner.

> Caregiver 3b: “If they would fire this one teacher, she’s abusive…”

The above caregiver refused to elaborate on her statement although another caregiver narrated what appeared to be a case of abuse in a different ECD facility. The caregiver's child had stepped on the wet floor while the teacher was busy mopping and the practitioner allegedly hit the child.

> Caregiver 9a: “The issue with meetings, they need to call a meeting right now, we do not know what is going on there, we do not know if our children are making progress or not. We would know all those things if they had meetings. Also, I have never seen anything they did at school, like for my child to show me this is where I had written down. All they do is sing Xhosa songs. Those are the very same songs and rhymes we sang when we were children. They are supposed

to be learning new rhymes. I am 47 years old and my child is learning the same rhymes I had learned growing up."

Caregiver 9a's concerns stemmed from not understanding the teaching approach or curriculum used at the facility, which caused her to feel there was little value added. Some of the practitioners had previously admitted to be developing the curriculum as they went along. The sentiments of Caregiver 9a were echoed by Caregiver 13a.

> Caregiver 13a: "They are not teaching our children, they are not learning anything. I also have concerns regarding hygiene in that preschool, it is not clean.
>
> "Even the teachers there are not well trained. I know I am not a teacher but I learn things on Google. For instance, children at this age, when they have misbehaved you put them in a naughty corner, you do not beat them. The teachers there use corporal punishment and corporal punishment was banned even at schools with older children. People who work there do not know anything about children. I wish they would go back to school and learn about child development..."

The above caregiver confirmed the alarming tendency by the practitioners to use corporal punishment or violence, also noted above. This may reflect a lack of practitioner competence, insufficient supervision or even the lack of parental involvement in the facility. Also of concern is that none of the above caregivers commented on the illegality of the abuse or mention reporting it to the authorities. From their responses, there is no indication that the caregivers ever reported their concerns about the curriculum or the practitioners' performance or qualifications either. This amounts to silent condonation and means that the facilities are not held accountable for unsatisfactory performance or conditions that are likely to continue.

8.7.4. Subjective Affordability

> ECD 15 Principal: "At the end of the day, we want our money in full because we did not close."

With most of the ECD facilities adopting the payment in advance method for the fees, the caregivers are required to pay the fees timeously if they want their children to continue attending the facility. Affordability differs by household as the fee constitutes only one of many expenses of the household and the child still has many other needs such as to be fed, clothed, and have access to health care and recreational activities. To assess whether the households could afford the ECD facility fees, the researcher asked the question outright of the caregivers.

Of the caregivers who had children at the registered ECD facilities, 35% of the caregivers said the fees charged were unaffordable. They also felt pricing should reflect the relative independence of older children.

> Caregiver 3a: "It is expensive. My child is at an age where he can go to the toilet by himself. They should be charging us R200 or something. At this age, my child can do everything by himself."

> Caregiver 5b: "It is expensive, my child is old, he can go to the toilet, he eats by himself. The only thing they have to do is to look after him."

Other caregivers also related affordability to their limited resources. In this sample, about 58% of the caregivers did not derive an income from any economic activity.

> Caregiver 3b: "It is not affordable, they are eating our money. It should be around R200 or less. My child is not a baby, he can do most things by himself. We contribute a lot as parents, for this amount they should also be giving them fruits and snacks. And some of us do not work, we are relying on the child social grant."

> Caregiver 8a: "It is not affordable because only one person is working here (home)."

> Caregiver 7b: "If I cannot manage to pay it…She will not go so sometimes I afford, sometimes I do not afford."

Due to unaffordability, caregiver 7b had resorted to sending her child to the facility when she knew she would be able to pay the fees for that month. At the unregistered facilities, 10% of the caregivers mentioned the fees were unaffordable.

> Caregiver 12b: "No, they are expensive because the preschool is here in the township."

The above caregiver argued that the fees should be lower because the facility is situated in the township while several caregivers felt they were not seeing their money's worth.

Caregivers who deemed the fees affordable had considered various factors before deciding the amount was justifiable. Some acknowledged that the ECD facilities have expenses to cover, they have to pay workers, buy food for the children and maintain the facility.

> Caregiver 4a: "Yes it affordable. You need to consider the work that these teachers do, it is a lot. I cannot complain, the amount is fine."

Some caregivers compared the fees they paid to those charged by neighbouring ECD facilities and said "their" ECD facility was the most affordable. Other caregivers related affordability to the CSG, saying that since the fees were below the CSG amount, they were therefore affordable.

The issue of the affordability of fees is critically important since ECD facility fees in the country are typically the burden of the caregivers. Although the government recognises that caregivers may not afford to pay primary and high school fees and heavily subsidises the cost of state schooling, caregivers who the government accepts cannot afford schooling are expected to afford early learning, which often costs more. Even registered facilities that receive subsidies are not in a position to completely scrap fees and unregistered facilities are even less able to do so. A considerable proportion of caregivers in the Philippi ECD facilities can ill afford the cost of early learning.

8.8 Parental Perception: Why Does Your Child Attend an ECD Facility?

The literature abounds with arguments and reasons for why children should attend ECD facilities. For instance, in Mozambique, Martinez, Naudeau and Pereira (2012) established that an ECD facility intervention improves a myriad of child development indicators such as cognitive, fine motor, and socio-emotional. Moreno Mínguez (2018) Malmberg et al., 2011 also established that children who had attended an early intervention programme were likely to perform better in subsequent grades. The researcher was interested in the reasons caregivers in Philippi had for sending their children to an ECD facility as these would reveal the perceptions of the caregivers on early learning. On the one hand, if the caregiver had a clear reason for the child attending an ECD facility, she would have a basis for assessing the impact or value of attending an ECD facility. On the other hand, if a caregiver had an incorrect view or expectation of what benefits children would derive from attending an ECD facility, the basis of assessing the results achieved would be incorrect or unrealistic. For example, if the caregiver perceives the role of the facility as babysitting their child, she will predominately measure the effectiveness of the facility in terms of babysitting.

To provide a clearer summary, the researcher organised the responses of the caregivers into themes and was mindful that the caregivers may use different words to communicate the same message. Extracting from their responses, the researcher identified the themes of early learning

and development, safety and babysitting. It is noted also that the caregivers often provided more than one reason for sending their child to an ECD facility. For instance, if the caregiver was motivated by both safety and development reasons this would be counted in both categories. Hence, the tally of the responses exceeds the number of caregivers.

8.8.1 Early Learning and Development

Responses on early learning and development included cognitive skills, which the caregivers often described as opening the minds of their children, learning and school readiness. Non-cognitive skills were also included under early development and caregivers emphasised social skills and communication. In all, the caregivers mentioned early development 28 times.

> Caregiver 2a: "I want him to get used to other children, be able to communicate with the other children. Also to develop or cultivate the values of sharing in him."

> Caregiver 2b: "I want her to be able to think. I do not want her to be dumb."

> Caregiver 4b: "To widen her mind, broaden it I guess. You know, so she will not only see the things that are happening in the township, like her understanding not to be confined to that. Preschool also prepares her for primary school, the knowledge she has learned there she can use it at primary school. She will know more as compared to a child who did not go to preschool."

8.8.2 Babysitting

The caregivers mentioned babysitting 12 times, which some needed to free them to go to work, look for work or work at home.

> Caregiver 9a: "He is a handful, he cannot stay in the house."

> Caregiver 12a: "I cannot stay with him in the house because he will disturb me when I am sewing. I will be busy sewing he will want food, constantly interrupting me."

Babysitting is common for parents who want to have ample time to complete chores in the house without being disturbed (Shumba et al., 2014:458). Moreover, it is noteworthy to mention that the children's age in this study ranges from four to six years old. One would expect that parents of children in this age group would not prioritise babysitting when they send their child to an ECD facility.

8.8.3 Safety

Finally, the caregivers mentioned safety 11 times, which is understandable in the context of the local crime rate and there being few safe outdoor spaces for children to play in.

> Caregiver 1b: "I do not want her to stay here in the house; if she is in the house she will want to go play in the street or go to the park on her own and I do not want that."

> Caregiver 13a: "I do not feel safe when he is here, he could go outside and I wouldn't know where to look for him. But when he is at the centre I am confident that he is safe."

8.9 Conclusion

This chapter showed, for the most part, that there is no socioeconomic difference between children who attend registered facilities and those who attend unregistered facilities. Households in Philippi share similar problems that impact on early childhood development such as poverty, low educational attainment and limited learning materials at home. Consequently, children in both registered and unregistered facilities are confronted with the same challenges when they go home. They are equally vulnerable to low stimulation, poverty and low parental involvement. While a home-based intervention would address the same issues, the homes of children in Philippi are not conducive to adequately advance early learning development in the household alone. It is in the interests of all the children of Philippi to have access to affordable high-quality ECD facilities as the literature shows that this is the best preparation for formal schooling. However, there are presently differences in the development of these children that would likely be explained by the difference in the quality of the ECD facility that they attended, which is, in turn, largely dependent on the registration status. In short, registered ECD facilities are subsidised, and having achieved the prescribed norms and standards to qualify for registration and subsidisation, are generally of a higher quality than unregistered ECD facilities.

Moreover, other household-level factors influence educational attainment and early learning, including household income, whether both parents are present in the home, the presence of educational toys, the presence of books and a culture of reading in the home and the level of education attainment reached by the caregiver. A lack of educational toys at home will not threaten successful early learning as much as the lack of educational toys at home combined with the lack of similar resources at the facility. Similarly, the lack of a safe outside play area

at home is exacerbated by a similar lack at the facility, the effect of an overcrowded home worsened by children crowded into a one-room ECD structure, the lack of guidance from uneducated parents compounded by unqualified ECD staff, and so on.

According to the literature reviewed, children living in socioeconomically deprived communities like Philippi are said to benefit the most from ECD interventions before they start formal schooling – the earlier the better – and will gain the highest returns from a quality ECD intervention. The concluding chapter expands on these aspects and brings together the findings of the research study and the lessons learnt.

CHAPTER NINE: CONCLUSION AND RECOMMENDATIONS

9.1 Introduction

This thesis evaluated the impact of facility and household level-factors on early learning in the township of Philippi, a generally poor, mostly black community situated in the City of Cape Town metropole in the Western Cape. Considering that the overarching research question was two-fold, the study was conducted using two study units, namely ECD facilities and households in Philippi. In investigating facility-level factors and the impact of the DSD registration status of ECD facilities, the researcher visited 20 ECD facilities in Philippi – 10 registered and 10 unregistered. Face-to-face interviews were conducted with the ECD principals and practitioners at the facilities. In addition to the interviews, the researcher employed an observation questionnaire at each facility. To address the second component of the research, which dealt with household-level factors, the researcher interviewed two caregivers associated with each of the facilities, 40 caregivers in total.

This final chapter of the thesis summarises the key findings derived from the analysis of data produced in the investigation and discusses their implications. The thesis further identifies key contributions made by the study and policy recommendations and concludes by suggesting areas for future research.

9.2 Key Findings

In response to the research objectives of undertaking this study, the researcher concludes that preschoolers in Philippi are indeed confronted by a myriad of negative ECD facility-level and household level factors. These factors are likely to compromise the early learning experience and achievement of preschoolers in Philippi. The key findings are divided into three groups: policy issues, facility-level factors and household-level factors.

9.2.1 Policy Issues

9.2.1.1 Inappropriate ECD Policy

Since the dawn of democracy in 1994, the policies of each successive South African government, from the RDP to the current NDP, had the overarching goals of poverty alleviation

and reduction in inequalities. Fiscal spending often emphasised pro-poor development and was utilised to achieve economic inclusiveness. The largest portion of every national budget is allocated to social capital expenditure on learning and culture, community development, social development and health – a total of 58,7% of the 2020/21 budget. Thus, it is all the more surprising that the current ECD Policy works against pro-poor development. Many children in informal settlements and other economically vulnerable communities are denied access to quality ECD and early learning by the registration process for ECD facilities devised under the ECD Policy and DSD ECD norms and standards. It is nearly impossible for facilities situated in informal settlements and other low-income areas to comply with the prescribed building, safety and health norms, which do not consider the spatial and environmental realities of informal settlements. For example, the spatial configuration of informal settlements makes it impossible to meet fire safety regulations since the ECD facility is powerless to move its neighbours' shacks to create space for fire breaks between buildings, to get neighbours to build with less-flammable materials or to supply water points if the local municipality has not installed a water supply.

Complying with the ECD norms and standards requires extensive financial, physical and human resources which are all lacking in poor communities. As shown in Chapter 8, the only form of income the unregistered ECD facilities receive is the low fees paid by caregivers, which barely cover basic operational costs and already stretch the budgets of many caregivers. These ECD facilities desperately need access to the government subsidy that registered facilities receive. Yet, without funding from an outside source, there is no prospect of an unregistered ECD facility meeting the requirements of upgrading and compliance for registration. As some parents in the study have done, parents residing in an informal settlement who wish to enrol their children at a registered facility have to look outside their residential area and possibly incur extra costs.

In trying to force facilities to meet the norms and standards, the Children's Act of 2007 prohibits unregistered ECD facilities from operating. But, with many children living in disadvantaged communities lacking registered facilities, numerous unregistered facilities remain operating while fully aware that they are flouting the law. One of the principals who runs an ECD facility at an informal settlement rhetorically posed a simple question to the researcher: "Should I chase these children away?"

Heckman (2006:1901) has noted that there are three opportunities for investment in human capital, namely preschool, formal school and post-school and, since the earliest interventions have been shown to have the highest returns, the most efficient investment is at preschool. Studies have also shown that poor children will likely struggle in formal schooling without a proper preschool foundation. ECD interventions like the High/Scope Perry PreSchool Programme and the Madrasa Programme demonstrated the positive returns of investing in ECD for disadvantaged children. The South African government's refusal to take responsibility for the whole of early learning and instead focus its funding efforts on the support of formal schooling, where many children already struggle for lack of a preschool foundation, makes no economic sense and only further disadvantages the already disadvantaged.

9.2.1.2 Lack of Social Mobility

Scholars agree that education is an instrument of social transformation as it enables poor and vulnerable groups to access the labour market and improve the state of their welfare and achieve social mobility (Barnett & Belfield, 2006:88; Olaniyan & Okemakinde, 2008:481; Rumberger, 2010:246). As a purported instrument for social transformation, the ECD Policy should not make it more difficult for poor children to receive quality early schooling and thereby reinforce inequalities between children who have and those who do not. If the government refuses to take responsibility for the full development of children, as it has done for primary and secondary schooling, the early learning needs of children will be delivered by the private sector. For low SES communities, that means low-quality provision through largely unqualified practitioners and principals at facilities lacking sufficient space and educational materials to achieve meaningful outcomes.

Low educational outcomes are linked to low employment opportunities and low earnings. The parents in this study were well aware that they were paying for a sub-standard early learning service but equally aware that they had few, if any, choices in the matter, and perhaps on that basis, many indicated themselves satisfied with their ECD service. Poor people cannot afford to lift themselves out of poverty and low SES. Until the government invests sufficiently in ECD to transform early learning in poor communities, the lack of social mobility underpinning South Africa's income inequality, said to be the highest in the world, will continue.

9.2.1.3 Poor Targeting of Subsidy

In South Africa, the most significant government investment in ECD facilities outside of Grade R provisioning in public schools is a conditional subsidy that an ECD facility may receive, subject to successful registration with the DSD. Facilities serving the poorest communities cannot access government funding until they upgrade to meet the DSD's standards, but also cannot raise the capital privately to upgrade to the required standards. This means that an unregistered ECD facility in a more privileged formal residential area has a much better chance of securing a subsidy than one in an informal area that needs the funding more. Even when an ECD facility enters the registration process, thus indicating to the government its serious intent to upgrade, the government stands at a distance until the ECD facilities are registered and offers no funding incentive to assist the process. Yet, in large public works, housing schemes and public-private partnerships, it is normal for the government to make partial payments at stages of project completion or partly subsidise partners' costs. This pragmatic approach would greatly assist ECD facilities in poor areas to improve quality.

Without a subsidy for operations, unregistered ECD facilities cannot afford to employ qualified practitioners, procure sufficient teaching and learning materials, improve infrastructure or provide more than a low-quality early learning experience. ECD subsidies are clearly poorly targeted if the facilities that need funding assistance the most are excluded by the current ECD Policy.

It should also be noted that the subsidy, being tied to registration, is the single government funding vehicle on offer for ECD facilities. Despite its pro-poor rhetoric, the government offers ECD facilities in poor communities none of the many alternatives in development finance, such as bridging finance, low-interest loans, bank guarantees, grant funding, matching challenge funding, equity partnerships and the like, nor is there any evidence that the DSD and government have even explored these mechanisms. The government does not even specifically target teacher training as an ECD intervention, which this study has shown is a crying need among existing practitioners and principals, most of whom are too old to qualify for funding through NSFAS support of TVET college ECD courses (NSFAS prioritises funding under-35s).

9.2.1.4. Barriers to Registration: ECD Norms and Standards

The main barriers to registration are issues related to infrastructure, land and finance. As explained, the registration process requires significant access to capital. Most of the unregistered facilities lack the building and spatial infrastructure outlined in the ECD guidelines. Some of the applicants do not even have the legal right of occupation of their current sites since many informal settlements result from land invasions. In other cases, the owner of the land faces bureaucratic and financial barriers in terms of rezoning the property from residential to business use.

Plainly put, the ECD norms and standards are more of a self-defeating hindrance than a help to low-income communities and its otherwise laudable quality measures are unrealistic in the context of ECD provision in poor informal settlements.

9.2.2 Facility Findings

9.2.2.1 Key Statistical Summary of Relationships

A Fisher exact test established an association between the quality of facilities and their registration status showing that the quality differences between the ECD facilities of Philippi are largely due to their registration status. It follows that unregistered facilities are likely to maintain their low-quality status quo because of limited resources. The study confirmed that registered facilities fared better in all the measured features of infrastructure compared with unregistered facilities. The research also established a statistical association between the registration status of the facility and the government subsidy. Regarding the subsidy, the test also showed at 5% significance, that the subsidy has an impact on the overall quality of the facility.

9.2.2.2 ECD Personnel Issues

Low Educational Attainment of ECD Principals

There is a general lack of ECD qualifications among the principals, half of whom did not have an ECD qualification. The lack of qualification is most severe in unregistered facilities, where 70% of the principals lack an ECD qualification and about a quarter had less than matric as their highest educational attainment.

Low Educational Attainment of ECD Practitioners

Overall, 65% of the practitioners did not have an ECD certificate. Eighty per cent (80%) of the practitioners in unregistered facilities and 50% of the practitioners in registered facilities had no ECD qualification. Moreover, 40% of the practitioners had less than matric as their highest educational attainment. The fact that most of the practitioners and principals are unqualified indicates a concerning lack of professional and sector knowledge, which was also observed in some interview responses.

Shallow Understanding of Curriculum

There was a poor understanding of the curriculum shown in the study by some practitioners at the registered ECD facilities and most at the unregistered facilities. Some of the practitioners at unregistered facilities were unaware that they were using a curriculum or could not explain how the curriculum employed in their facility ensured the holistic development of a child. These findings cast doubt on the practitioners' competence to effectively deliver a teaching programme.

Limited Working Experience of ECD Practitioners

The average working experience for practitioners in the registered ECD facilities was considerably higher than their counterparts in unregistered facilities, while the staff turnover was higher at unregistered ECD facilities. The limited experience of most of the practitioners who were working with children for the first time is a matter of concern.

9.2.2.3 Limited Creative Material

Unregistered facilities lacked arts and craft materials, puzzles and musical and movement instruments, whereas registered facilities severely lacked musical and movement instruments. Teaching quality was more likely to suffer at unregistered facilities in terms of the measured educational resources.

9.2.3 Caregiver Findings

9.2.3.1 Key Statistical Summary of Relationships

There is no statistical relationship between many of the household-level factors and the registration status of the facility. Consequently, households in Philippi face similar factors

irrespective of the facility their children attend. All the children in Philippi, irrespective of the ECD facility they attend, reside in households affected by vulnerability to poverty, high economic inactivity and low educational attainment. From the perspective of the household, because the children face common negative household factors, they are all in need of a high-quality early learning intervention, although it may be argued that the children attending unregistered facilities are most at risk of not developing their full potential.

High Dependence on Social Grants

An overwhelming 85% of the children receive the CSG. The dependence on social grants is such that in some households, income from social grants is higher than all other income, or the only income. Being dependent on social grants could leave some families exposed to economic shocks, as they do not generate enough income.

Low Educational Attainment of Caregivers

Irrespective of the registration status of the facility, only 2,5% (1 person) of the main caregivers had a tertiary qualification. Low educational attainment by caregivers is associated with a high probability of low educational attainment by their children.

High Unemployment and Poverty

More than a third of the caregivers are unemployed and actively seeking work. Moreover, 10% of caregivers are poor as defined by the FPL, and 45% are poor under the UBPL. This confirms that a significant proportion of children in Philippi are living in very poor households. The literature shows poverty in children is most associated with low test scores, used as a proxy for educational achievement.

Low Reading Stimulation at Home

Reading is crucial for literacy skills and vocabulary development. Reading had the lowest frequency of stimulation at home. More than half of the children had no one reading to them or telling them stories in their homes.

Lack of Educational Toys at Home

Regardless of the type of ECD facilities attended, most of the children from the registered and unregistered facilities did not have puzzles, toys that teach numbers, sizes and colours and children's books at home.

Burden of ECD Fees and Willingness to Pay

The caregivers see the necessity of early education. This is evident in the fact that, despite their limited funds and the significant effects of poverty and unemployment, they are willing to pay for their children to attend ECD facilities. About 35% of the caregivers in the registered facilities considered their fees to be unaffordable and 10% in the unregistered facilities held the same view.

Low Parental Involvement at ECD Facilities

Although the majority of the caregivers admitted that their facilities encouraged them to be involved in their children's early learning, a significant proportion of the caregivers did not attend parent meetings. The reasons given for not attending the meetings were typically that the meetings conflicted with the caregivers' plans or other commitments. Consequently, it is likely that most of the parents are not closely monitoring their children's progress in the facility. There was also some evidence that caregivers are not always informed of developments by the facility.

Limited Information on ECD Norms and Standards

Despite the over-representation of low-quality facilities as measured by their lack of compliance to the ECD norms and standards, most of the caregivers never mentioned these quality measures in their responses. For the most part, they were satisfied with their low-quality facility. Even caregivers who were dissatisfied with their facility accepted the low quality in the belief that all the facilities in their area were the same. Moreover, they did not mention the registration status of their facility and it is likely that caregivers are unaware of the ECD norms and standards or their significance.

Caregiver Perception of ECD Facility

Some of the caregivers admitted that their main reason for sending their children to an ECD facility was for babysitting and the assurance of their safety. Valuing babysitting and safety above child development might lead some caregivers to overlook the low educational attainment of the practitioners and lack of resources and the factors that directly affect early learning development. However, some caregivers mentioned their motives were school-readiness, early learning and non-cognitive skills (socialisation). These caregivers were likely to be more motivated to foster early learning development.

9.3 Key Contributions of the Study

- ECD is a fiercely debated topic in the education sector. This thesis contributes to the debate and body of literature in the field of ECD.
- Developing countries lag in the research of ECD policy and interventions are often mainly based on successful international programmes. This study contributes to ECD knowledge and policy development in the country and informs knowledge of ECD in developing countries.
- It casts light on the state of ECD in a typical low-income area in the Western Cape and the challenges facing this sector.
- A novel contribution is the combination of the study of two pivotal stakeholders in early learning, namely ECD facilities and households. The research was able to identify factors from these two environments that threaten the early learning development of children in a low-income area.
- This thesis further argues for the review of the current government ECD Policy and particularly the ECD norms and standards that are being used as a supposedly equitable and efficient basis for evaluating registration applications and subsidy allocations by the DSD and allied departments.
- In its investigations of conditions in the community of Philippi, the study reveals that the prevailing ECD policy and ECD norms and standards are anything but equitable and efficient. In fact, they are unrealistic in their disregard of the economic realities of poor communities and overly optimistic about poor communities' capacity to upgrade ECD facilities to the required levels for registration.
- This study might persuade the government to extend more material support to unregistered ECD facilities to enable them to improve quality.
- The study will contribute to a body of literature in support of persuading the government to invest more in social and specifically to accept that investment in the earliest intervention opportunity – preschool – will result in the greatest return to the formal schooling system and the future of the South African economy.
- The study contributes insights into the socioeconomic conditions and challenges of life in very poor communities and particularly in the community of Philippi, as well as the struggles of young caregivers to secure the best early learning and ECD opportunities for their children.

9.4 Recommendations

- **Review of the Current ECD Policy and Registration System**

The author strongly supports the recommendations (see section 5.6.3) of the Housing Development Agency (2014:11) that all facilities, including informal and unregistered facilities, be urgently identified and brought within a new categorisation system that would be the basis of a tiered funding system. This new system would be better incentivised, less punitive and sensitive to the impact of poverty on the design, operation and capacity of ECD facilities in poor communities.

- **Review of Subsidy and Extensive Investment**

The Fisher exact test employed in this study established that receiving a government subsidy impacts positively on the overall quality of the facility, the infrastructure and the employment of qualified ECD principals. It is impractical and unrealistic to expect unregistered ECD facilities in poor communities to find the resources to improve until they meet the minimum ECD norms and standards and qualify for a subsidy. Without a subsidy, unregistered ECD facilities cannot afford to employ qualified practitioners, cannot procure sufficient teaching and learning materials or improve the physical infrastructure. Therefore, the government should review and amend the system to enable more unregistered facilities in poor communities to receive government assistance.

- **Earmark Land for ECD Facilities in Developing Areas**

It is worthy for the government to assume greater responsibility for early learning by incrementally building government facilities and investing significantly in NPO facilities. ECD facilities should be included in the building plans when the department of Human Settlements establishes a new area. A specific portion of the land could be allocated for NPO's to build facilities. The conditional DSD subsidy can maintain those facilities as they will be built following the ECD requirements.

- **Support to Caregivers**

The ECD sector needs extensive investment from the government in ECD and early learning, not only to enable ECD facilities to pay for qualified personnel, infrastructure, materials and monitoring but some form of financial and educational support to poor caregivers to enable

them to assist early learning in the household, a role which has been completely ignored in ECD policy. It is apparent from the interviews in the study that caregivers require education and information on the importance of early learning, their role in it and how they can assist community-based ECD facilities to improve their outcomes. Such education initiatives should not be left to the ECD facilities to initiate but should be driven by the government, perhaps through the addition of household performance standards to the ECD norms and standards.

- **Increase ECD Qualification and Training Opportunities**

Previous ECD audits, both national and in the Western Cape, confirmed the low proportion of qualified ECD personnel seen in this study. There needs to be an urgent upscaling of the national ECD workforce, including more sponsored training and education opportunities aimed at unskilled practitioners and principals currently operating in low-income areas or willing to work there.

- **Stipend for Qualified ECD Practitioners**

Many of the ECD practitioners, with the majority being in unregistered facilities, are not qualified ECD practitioners. In this research, 40% of all the practitioners had less than matric as their highest educational attainment. The researcher recommends that the government introduces a stipend that would allow ECD facilities in low-income areas, which are typically unregistered and not receiving a subsidy, to afford qualified ECD practitioners. By making the stipend conditional on the recipient having an ECD qualification, it is envisaged that the stipend would incentivise existing unqualified ECD practitioners to study towards an ECD qualification as well as possibly stabilise human resources in the system by decreasing the high staff turnover of ECD facilities. Hence, the stipend is likely to attract qualified practitioners and simultaneously push out unqualified practitioners. This would also boost the morale of ECD practitioners as currently they are underpaid in comparison to Grade R primary school teachers.

- **ECD Facility Specialisation by Age Group**

In the past, the sector differentiated between nurseries and crèches. However, the government only wanted to fund crèches and exclude nurseries (Department of Education, 2001b:9). It is recommended that the government investigate reinstating a version of this model in the context of overhauling the whole system of private and public preschooling.

The experiences of Ghana and Spain, and others in the literature, indicate some value in differentiating ECD by age groups or phases. Specialisation by age group would enable poorly resourced ECD facilities with limited space, which seemed to affect both registered and unregistered ECD facilities in the study, to limit numbers by only taking specific age groups. Those that prefer babies can specialise as nurseries while specialising in older children will enable a better focus on school readiness. This will also enable ECD practitioners to specialise and upgrade skills in the care of specific age groups.

9.5 Areas of Future Research

One of the challenges in the ECD sector is the lack of evaluation and monitoring by the state. Despite the government's commitment to promoting effective early learning intervention, the national government has conducted only two post-democracy ECD national audits with the most recent being in 2014. At the provincial level, the Western Cape's last ECD audit was in 2008. Further national and provincial ECD facility audits should be undertaken, including on-the-ground surveys to map the existing facilities and person-to-person engagement with stakeholders, as in this study. Moreover, it would be beneficial to expand this research to include not only government officials at all three tiers and all relevant departments as stakeholders, but to survey and benchmark the ECD models operating in similar-sized developing economies to inform best practices in the sector.

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Appendices

Appendix A: Information Sheet for Interview

Project: Evaluating the Impact of Facility and Household-Level Factors on Early Learning Development in Philippi, Western Cape

Before you decide to participate, we would like you to understand the purpose of the research. Therefore, we encourage you to take the time to read the following information carefully and discuss it with others if you wish. If you are unclear about anything, we will be happy to answer your questions.

PURPOSE OF THE STUDY

You are invited to participate in a research project conducted under the auspices of the Economics Department at the University of the Western Cape. The data collected in this study will be used as primary data in a thesis that will be submitted for the doctoral degree of Siphe Madyibi. The objective of the thesis is to evaluate the impact of facility and household level factors on early learning development in Philippi, Western Cape. Hence, this study seeks to interview ECD facility principals, practitioners and to observe their facilities in Philippi. Moreover, this study will also interview caregivers who have children from the participating ECD facilities.

YOUR INVOLVEMENT

You have been identified by preliminary research and consultation as a key stakeholder with valuable knowledge and experience in this area. We would therefore like to request your participation in an interview.

ANONYMITY

Please be advised that the results of the study will not divulge the organisation's particulars nor the individual particulars. Any information that can connect the responses to an individual or organisation will remain confidential and will be disclosed only with your permission. The

researchers shall keep all records and recordings of your participation, including a signed consent form filed away in a secure facility at all times.

VOLUNTARY PARTICIPATION AND WITHDRAWAL

Your participation in this research is entirely voluntary, which means that you are free to decline participation. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also choose not to answer particular questions that are asked in the study. If there is anything that you would prefer not to discuss, please say so.

INFORMED CONSENT

Your signed consent to participate in this research study is requested before you take part in the research. We have included the consent form with this information sheet so that you will be able to review the consent form and then decide whether you would like to participate in this study or not.

RISKS

We do not foresee any significant risks associated with your participation in this project.

QUESTIONS

Should you have further questions or wish to know more, the Principal Investigator can be contacted as follows: Dr Amiena Bayat, Senior Lecturer, UWC, abayat@uwc.ac.za, Tel: 0849456603. Alternatively: Siphe Madyibi, PhD student, UWC, 3126232@myuwc.ac.za, Tel: 0659461419.

Appendix B: Consent Form for Interview

1. I confirm that I have read and understood the information sheet explaining the above research project and I have had the opportunity to ask any questions about the project. ☐
2. I understand that my participation in this study is voluntary. I am free not to participate and have the right to withdraw from the study at any time by advising the project leader. ☐
3. I understand my response and personal data will be kept strictly anonymous and that my identity will not be disclosed in any resulting publications. I give permission for members of the research team to have access to my responses. ☐
4. I agree that the data collected from me will be used in future research as well as academic publications such as research reports, academic journal articles and postgraduate student theses. ☐
5. I agree that this interview can be recorded. ☐
6. I agree to take part in the above research project. ☐

Name of the participant:……Signature…… …Date ……

Should you have further questions or wish to know more, the Principal Investigator can be contacted as follows: Dr Amiena Bayat, Senior Lecturer, UWC, abayat@uwc.ac.za Tel: 0849456603. Alternatively: Siphe Madyibi, PhD student, UWC, 3126232@myuwc.ac.za, Tel: 0659461419.

Appendix C: ECD Practitioner and Principal Questionnaires

UNIVERSITY of the WESTERN CAPE

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

DEPARTMENT OF ECONOMICS

ECD FACILITY QUESTIONNAIRE

Research Topic: Evaluating the Impact of Facility-Level and Household-Level Factors on Early Childhood Education in the Western Cape.

Questionnaire Number	
Research Area	
GPS Coordinates	
Name of ECD centre	
Date of Interview	
Researcher/s on site	

ECD PRACTITIONER QUESTIONNAIRE

PART A: TEACHER PARTICULARS

A1. Age (years)							
1. 18–25	2. 26–30	3. 31–35	4. 36–40	5. 41–45	6. 46–50	7. 51+	

A2. Gender		
1. Female	2. Male	

A3. Population Group				
1. Black	2. Coloured	3. White	4. Indian/ Asian	

A4. Highest Educational Attainment				
1. Less than Matric	2. Matric	3. ECD certificate	4. Diploma/ Degree	

A5. Number of years working in the ECD sector				
1. Less than a year	2. 1 year	3. 2–5 years	4. 6 years+	

Note for interviewer specify exact years here:

A6. Number of years working at this ECD centre				
1. Less than a year	2. 1 year	3. 2–5 years	4. 6 years+	

Note for interviewer specify exact years here

A7. Did you attend (a) training workshop(s) in the last 24 months?		
1. Yes	2. No	

A8. If YES to A7 - Who provided the training workshop(s)?

A9. If YES to A7 - What were the training workshop(s) about?

PART B: DESCRIPTION OF CLASS

B1. In what language do you teach your class?				
1. Xhosa	2. English	3. Afrikaans	4. isiZulu	
5. Tshivenda	6. Setswana	7. Xitsonga	8. Siswati	
9. Sesotho	10. Sepedi	11.isiNdebele	12. Other	

B2. What language does the majority of the children speak?				
1. Xhosa	2. English	3. Afrikaans	4. isiZulu	
5. Tshivenda	6. Setswana	7. Xitsonga	8. Siswati	
9. Sesotho	10. Sepedi	11. isiNdebele	12. Other	

B3. What is the age group of your class?				
1. 0–2 years	2. 3–4 years	3. 4–5 years	4. 5–6 years	

B4. Are you the only teacher for your class?		
1. Yes	2. No	

B5. Do you have an assistant in your class?				
1. Yes, one	2. Yes, two	3. Yes, more than 2	4. No	

B6. How many children do you have in your class?						
1. 1–10	2. 11–15	3. 16–20	4. 21–25	5. 26–30	6. 30+	

Part C: ECD Practice

C1. Do you use a defined curriculum to structure your learning programme?			
1. Yes	2. No	3. Don't know	

C2. Who defined this curriculum?				
1. ECD facility	2. Government	3. Other private institution	4. Other	

C3. How does the learning programme you use/ employ provide for the holistic development of the children in your class?

C4. In your opinion, what is the proportion of children who require more time to understand basic concepts taught in class?			
1. None (0%)	2. Less than half (25%)	3. Half (50%)	
4. More than half (75%)	5. All (100%)	6. Don't know	

C4.1. For those children who take longer to grasp basic concepts, what do you think is the reason(s)?

C5. What time are the children required to be at the ECD facility?

C5.1. In your opinion, what is the proportion of children in your class who arrive at the ECD facility:						
	1. None (0%)	**2. Less than half(25%)**	**3. Half (50%)**	**4. More than half (75%)**	**5. All (100%)**	**6. Don't know**
1. Before 8 am						
2. 08:00–08:30						
3. 08:31–09:00						
4. 09:01–09:30						
5. 09:31–10:00						
6. Later than 10 am						

C6. How would you describe general school attendance of the majority of children in your class?

Part D: Challenges and Successes

D1. What challenges do you experience in your everyday work at this facility?
1.
2.
3.
4.
5.
D2. What would improve the teaching conditions at this ECD facility?
1.
2.
3.
4.

D3. Do you try to involve the parents in the education of their children?		
1. Yes	2. No	

D4. If yes, how do you involve the parents, if no, why don't you involve the parents?

D5. What are the successes of the school?

1.

2.

3.

4.

5.

Part E: Access to resources in the classroom

E1. Does your class have arts and craft/ creative support material? **(paper, paint, paintbrush, play dough, crayons, scissors, glue, strings, sticks, seeds)**	
1. Yes	
2. No	

E1.2 If yes, does your class have ENOUGH Arts and craft/ creative support material? **(paper, paint, paintbrush, play dough, crayons, scissors, glue, strings, sticks, seeds)**	
1. For all children	
2. For most children	
3. For few of the children	

E2. Does your class have music and movement (drums, tambourines, triangles, cymbals, maracas, castanets, bells, shakers)?	
1. Yes	
2. No	

E2.1 If yes, does your class have ENOUGH Music and movement (drums, tambourines, triangles, cymbals, maracas, castanets, bells, shakers)?	
1. For all children	
2. For most children	
3. For few of the children	

E3. Does your class have educational games, puzzles (number, shape, colour, size)?	
1. Yes	
2. No	

E3.1 If yes, does your class have ENOUGH Educational games, puzzles (number, shape, colour, size)?	
1. For all children	
2. For most children	
3. For few of the children	

E4. Does your class have books (fiction/ storybooks, non-fiction book)?	
1. Yes	
2. No	

E4.1 If yes, does your class have ENOUGH books (fiction/ storybooks, non-fiction book)?	
1. For all children	
2. For most children	
3. For few of the children	

PRINCIPAL QUESTIONNAIRE

PART AA: PRINCIPAL PARTICULARS

AA1. Age (years)							
1. 18–25	2. 26–30	3. 31–35	4. 36–40	5. 41–45	6. 46–50	7. 51+	

AA2. Gender		
1. Female	2. Male	

AA3. Population Group				
1. Black	2. Coloured	3. White	4. Indian/ Asian	

AA4. Highest Educational Attainment				
1. Less than Matric	2. Matric	3. ECD certificate	4. Diploma/ Degree	

AA5. Number of years working in the ECD industry				
1. Less than a year	2. 1 year	3. 2–5 years	4. 6 years+	

Note for interviewer: specify exact years here:

AA6. Number of years working in this ECD centre as principal				
1. Less than a year	2. 1 year	3. 2–5 years	4. 6 years+	

Note for interviewer, specify exact years here:

AA7. Did you attend (a) training workshop(s) in the last 24 months?		
1. Yes	2. No	

AA8. If the principal attended a training workshop – Who provided the training workshop(s)?

AA9. If principal attended training workshop – What were the training workshop(s) about?

Part B: Facility Structure/ Management

BB1. How many children do you have in your school in each of these age groups?	
1. 0–1 year	
2. 2–3 years old	
3. 4–5 years old	
4. 5–6 years old	

BB2. What is the total number of staff?	
1. Teachers	
2. Assistants	
3. Non-teaching staff	
Notes pertaining to staff:	

BB3. Does the Centre keep a daily attendance register of the children?		
1. Yes	2. No	

BB4. Does the ECD Centre have a first-aid kit with enough supplies?			
1. Yes	2. No	3. Don't know	

BB5. Have any of the practitioners received first-aid training in the past 24 months?			
1. Yes	2. No	3. Don't know	

BB6. What are the official school fees for the different age groups?		
Age group	**Amount**	**No fee**
1.		
2.		
3.		
4.		

BB7. What is the school's policy on parents who are unable to pay the school fees or pay later than the due date?

Part C: Parental Involvement

CC1. Does the Centre have regular parent meetings?		
1. Yes	2. No	

CC1.1. if yes, how often does the ECD Centre hold parent meetings?

1. Monthly	2. Quarterly	3. Bi-annually	4. Annually	5. Other

CC2. How would you describe parents' attendance of these meetings?

CC3. In your opinion, what is the proportion of parents who attend the parent meetings?

1. None/ 0%	2. Less than half/ 25%	3. Half/ 50%	4. More than half/ 75%	5. All/ 100%	6. Don't know	

CC4.1 If parent attendance is less than 50%, please explain why you think the attendance is so low.

CC5. How often do you hold staff meetings?

CC.6 For the mentioned classes, do parents receive written feedback at the end of the year?			
CC.6.1 0–2yrs	1. yes	1. No	
CC6.2 3–4 years old	1. Yes	2. No	
CC6.3 4–5 years old	1. Yes	2. No	
CC6.4 5–6 years old	1. Yes	2. No	

Part D: Children's Progress

DD1. By what time are the children required to be in school?

DD2. In your opinion, what is the proportion of children in your school who arrive at school…?						
	1. None/ 0%	**2. Less than half/ 25%**	**3. Half/ 50%**	**4. More than half/ 75%**	**5. All/ 100%**	**6. Don't know**
1. Before 8 am						
2. 08:01–08:30						
3. 08:31–09:00						
4. 09:01–09:30						
5. 09:31–10:00						
6. Later than 10 am						

DD3. How would you describe general school attendance of the majority of children?

DD4. If the school has Grade R, how is school readiness for Grade R learners assessed?

Part E: Policy

EE1. Is the school registered?				
1. Yes	2. No	3. Don't know	4. Refuse	

EE2. If registered, how long did it take to complete the registration process?

EE3. If registered, what are the challenges you experienced when registering?
1.
2.
3.
4.
5.

EE4. If not registered, have you started the process to register yet?	
1. Yes	
2. No	

EE5. If you have started which the registration process, what challenges have you encountered with the process?

1.

2.

3.

4.

5.

EE6. If you have not started with the registration process, why not?

EE7. What type of support do you need from the Department of Social Development?

1.

2.

3.

4.

5.

Part F: Sources of Income

FF1. Does the ECD Centre receive a subsidy from the Department of Social Development?		
1. Yes	2. No	

FF1.1. If the ECD Centre receives a subsidy from DSD, what is the subsidy amount?
Amount: R_____

FF2. Does the ECD Centre receive a subsidy from other sources?		
1. Yes	2. No	

FF2.1 If ECD centre does receive a subsidy, state source and amount/ kind			
Source	**Source name**	**Amount**	**Frequency** 1. Regular 2. Once-off
Source 1			
Source 2			
Source 3			
Source 4			

FF3. Does the ECD Centre receive donations-in-kind such as food from other sources?		
1. Yes	2. No	

FF3.1 If the ECD centre does receive donations-in-kind, state source and kind.			
Source	**Source name**	**Kind/ what was donated?**	**Frequency** **1. Regular** **2. Once-off**
Source 1			
Source 2			
Source 3			
Source 4			

Part G: Successes

GG1. What are the successes of the school?
1.
2.
3.
4.
5

Appendix D: Observation Facility Questionnaire

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DEPARTMENT OF ECONOMICS

ECD FACILITY OBSERVATION QUESTIONNAIRE

Research Topic: Evaluating the Impact of Facility-Level and Household-Level Factors on Early Childhood Education in the Western Cape.

Questionnaire Number	
Research Area	
GPS Coordinates	
Name of ECD Centre child attends	
Date of Interview	
Researcher/s on site	

Part A: Description of environment in which ECD facility is situated.

A1. Type of area where ECD facility is situated	
1. Mostly formal	
2. Mostly informal	

A2. Type of dwelling of the ECD centre	
1. Formal separate house/ building	
2. Formal residential house (not separate)	
3. Informal dwelling separate from residential dwelling	

A3. Is the ECD facility fenced?	
1. Yes	
2. No	

A4. Is the gate locked during school hours?	
1. Yes	
2. No	

A5. Are there any hazardous obstacles outside that prevent children from playing freely and safely?	
1. Yes	
2. No	

If yes, describe these obstacles

A6. Does the ECD facility have a play area?	
1. Yes	
2. No	

A7. The play area has the following			
Grass	1. Yes	2. No	
Sandpit	1. Yes	2. No	
Swings	1. Yes	2. No	
Slides	1. Yes	2. No	
Jungle gym	1. Yes	2. No	
Other toys/implements	1. Yes	2. No	
	1. Yes	2. No	

A8. Are the children demarcated by age groups?	
1. Yes	
2. No	

A9. Language of learning and teaching is displayed on the wall (posters with numbers, colours, shapes, animals)	
1. Yes	
2. No	

A10. Type of toilet available for children	
1. Flush toilets	
2. Chemical toilets	
3. Bucket toilet	
4. Other	

A11. Number of toilets that are working

A12. The ECD facility is easily identifiable on the outside with painting and drawing	
1. Yes	
2. No	

Appendix E: Caregiver Questionnaire

UNIVERSITY of the WESTERN CAPE

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

DEPARTMENT OF ECONOMICS

CAREGIVER QUESTIONNAIRE

Research Topic: Evaluating the Impact of Facility-Level and Household-Level Factors on Early Childhood Education in the Western Cape.

Questionnaire Number	
Research Area	
GPS Coordinates	
Name of ECD Facility child attends	
Date of Interview	
Researcher/s on site	

PART A: DESCRIPTION OF LIVING ENVIRONMENT

A1. Type of area where dwelling is situated		
1. Mostly formal	2. Mostly informal	

A2. Type of dwelling where the child lives	
1. Formal brick house	
2. Formal brick house backyard (flat)	
3. Informal dwelling in informal settlement	
4. Informal dwelling in formal settlement/ backyarder	

A3. What is the total number of rooms that the household occupies in all structures in this dwelling, excluding bathrooms and toilets?	
1. 1 room	
2. 2–3 rooms	
3. Above 3 rooms	

A4. In the past four weeks, did the child go to bed hungry because there was not enough food to eat?	
1. No, never, there is always enough food	
2. No, but sometimes there is not enough food	
3. Yes, often	
4. Yes, every night	

Quest nr	C1	C2	C3	C4	C4.1	C5	C6	C7
Instruction	**Everyone**				**If RSA citizen**	**Everyone**	**Main caregiver**	
Person number *Child is 1* *Main Care Giver is 2*	**Indicate the sex of every household member.** 1. Female 2. Male	**Indicate the age of each person.** *Indicate age at last birthday*	**Relationship to child** 1. Biological mother 2. Stepmother 3. Biological Father 4. Stepfather 5. Brother/Sister 6. Grandparent 7. Other relative 8. Non-related person	**Nationality** 1. RSA citizen 2. Not RSA citizen (indicate country)	**Population group** 1. Coloured 2. Black 3. Indian 4. White 5. Other	**Home Language** 1. Afrikaans 2. English 3. isiNdebele 4. Sepedi 5. Sesotho 6. Siswati 7. Xitsonga 8. Setswana 9. Tshivenda 10. isiXhosa 11. isiZulu 12. other	**Who is the main caregiver to this child (it can be 2 persons)** 1. Biological mother/ 2. Stepmother 3. Biological Father 4. Stepfather 5. Brother/Sister 6. Grandparent 7. Other relative 8. Non-related person	**Marital status of Main Caregiver** 1. Single and have never married 2. Married in terms of SA civil law (magistrate/religious) 3. Married in terms of customary/ traditional law 4. Living together with partner 5. Divorced 6. Separated 7. Widowed
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

Quest nr	C8		C9	C10	C11	C12
Instruction	**Everyone 5 years or older: Highest educational level completed**		**15 years +**	**If no to C7**	**If YES to C7 yes to previous question,**	
Person number *Child is 1 Main Caregiver is 2*	0. Preschool/Gr R/Gr 0 1. Gr 1 2. Gr 2 3. Gr 3 4. Gr 4 5. Gr 5 6. Gr 6 7. Gr 7 8. Gr 8/Form 1 9. Gr 9/ Form 2 10. Gr 10/ Form 3/NTC I	11. Gr. 11/ Form 4/NTC II 12. Gr 12 /Form 5/ NTC III 13. Tertiary training 14. No formal education 15. ABET 16. Other 17. Don't know	**Does X currently have a job or does X do something to earn money?** (including own business) 1. Yes 2. No	**Why does X not do anything to earn money?** 1. Unemployed (*and looking for work*) 2. Unemployed (***not*** *looking for work*) 3. Pensioner/ Retired 4. Dependent child/full-time student 5. Homemaker (not looking for work) 6. Disabled cannot work	**What is the main activity that X does to earn money?** 1. Regular paid work for one employee 2. Regular paid work for different employees during same month 3. Seasonal work 4. Temporary work/odd jobs 5. Own business 6. Other, specify	**Total income from work during the past month** 0=no income
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						

Quest nr	C13	C14	C15	C16
Instruction	**Everyone** **CSG against child beneficiary**	**CSG against person who receives the money**	**Everyone**	**Everyone**
Person number *Child is 1* *Main Caregiver is 2*	Does X receive a social grant: 1. No 2. OAG 3. DG 4. CSG 5. Grant in Aid 6. FCG **7.** War veteran	**Total income from social grant during the past month** 0=no income Indicate against person that receives the grant	**Total income from other source e.g. Rent income, remittance during the past month** 0=no income	**Total income from all sources (last month)** 1. No income 2. Below R 500 3. R500–R900 4. R1,000–R2,000 5. R3,000–R4,000 6. R5,000–R6,000 7. R7,000–R8,000 8. R9,000–R10,000 **9.** Above R10,000
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

PART C1: MAIN CAREGIVER AVAILABILITY

C1.1. Are you the only caregiver?		
1. Yes	2. No	

C1.2. How many days do you work per week?	
1. 1 day per week	
2. 2 days per week	
3. 3 days per week	
4. 4 days per week	
5. 5 days per week	
6. 6 days per week	
7. 7 days per week	

C1.3. What are the working hours for each of the days mentioned?	
1. Sunday	
2. Monday	
3. Tuesday	
4. Wednesday	
5. Thursday	
6. Friday	
7. Saturday	

Part C2: Second Caregiver Availability *(if applicable)*

C2.1. How many days do you work per week?	
1. 1 day per week	
2. 2 days per week	
3. 3 days per week	
4. 4 days per week	
5. 5 days per week	
6. 6 days per week	
7. 7 days per week	

C2.2. What are the working hours for each of the days mentioned?	
1. Sunday	
2. Monday	
3. Tuesday	
4. Wednesday	
5. Thursday	
6. Friday	
7. Saturday	

Part D: Early Child Education at Home

D1: Stimulation Activities

D1.1 How often is the child encouraged to do/ imitate daily activities with older children or adults at home e.g. clean the house, prepare food, etc.?

Activity					
Imitation	1. Never	2. Sometimes	3. Often	4. Every day	

D1.2. If a child points to an object, how often is he/ she told what's its name and given an explanation of what the object does or is used for?

Activity					
Explain objects	1. Never	2. Sometimes	3. Often	4. Every day	

D1.3. How often does someone in the household read/ tell stories to the child?

Activity					
Read/stories	1. Never	2. Sometimes	3. Often	4. Every day	

D1.4. How often does someone in the household sing to or with the child?

Activity					
Sing	1. Never	2. Sometimes	3. Often	4. Every day	

D1.5. How often does someone in the household have a conversation with or talk to the child?

Activity					
Talk	1. Never	2. Sometimes	3. Often	4. Every day	

D2: Learning Material at home

If any, how many:	1. If any (number)	2. No/None
D2.1. …toys has the child which teaches size or colour?		
D2.2. …puzzles does the child have?		
D2.3. …toys or games does the child have that help teach numbers?		
D2.4 …children's books does the child have?		
D2.5. …toys does the child have that helps to teach the names of animals?		
D2.6. …ball(s) or bats etc. does the child have?		

E: ECD Facility questions

E1. How much is paid to attend the ECD facility?		
1. No fee	**2. R…..**	

E2. If parent pays fees, are the fees affordable?

E3. How many parent meetings does the ECD centre call every year?

E4. How many parent meetings have you attended since the beginning of this year?

E5. If parent did not attend any meetings, why not?

E6. In your opinion, do you think parents are encouraged by the ECD Centre to participate in their children's learning

E7. Does the ECD Centre provide meals and/ or snacks for the children?		
1. Yes	2. No	

E8. If meals/ snacks are provided, please indicate the ones provided	
1. Breakfast	
2. Lunch	
3. Snacks and fruits	

E9. What time is the child dropped off at the ECD Centre

E10. What time is the child fetched from the ECD Centre?

E11. Describe the daily routine of the child, from fetching the child from preschool to the child sleeping.

E12. What is the reason that your child attends an ECD Centre?

E13. Are you satisfied with the ECD Centre your child currently attends (motivate answer)?

E14. What are your greatest concerns with the ECD facility your child currently attends (motivate answer)?

Researcher's note after the interview